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January 30, 2009

Via Overnight Delivery

Carl Holm County of Monterey – Planning Department RMA-Planning Salinas Permit Center 168 W. Alisal St., 2nd Floor Salinas, CA 93901

Re: 2007 Monterey County General Plan DEIR PLN070525, SCH2007121001

Dear Mr. Holm:

On behalf of LandWatch Monterey County we offer the following comments on the draft EIR for the 2007 Monterey County General Plan ("2007 General Plan"). We have reviewed the 2007 General Plan and its Draft EIR ("DEIR"), together with various documents and materials relating to the 2007 General Plan and its environmental analysis. TRA Environmental Sciences, Inc., assisted us in our review of biological resource issues. Autumn Wind Associates, Inc., assisted us in review of air quality issues. Comment letters from Autumn Wind Associates, Inc., and TRA Environmental Sciences, Inc., are enclosed as Exhibits 12 and 13. Also assisting us in preparing an analysis of mapping data and preparing various exhibits was The Nature Conservancy. Material prepared by The Nature Conservancy is attached to the comments by TRA Environmental Sciences, Inc.

Introduction & Overview

A General Plan is the constitution and blueprint for all future development in the County. *Lesher Communications Inc. v. City of Walnut Creek* (1990) 52 Cal. 3d 531; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553. An inadequate General Plan may void all subsequent land use approvals. A General Plan is invalid if it is not internally consistent, *e.g.*, if the data, assumptions, and projections used in its various parts are not consistent. Gov. Code § 65300.5; *Sierra Club v. Board of Supervisors* (1981) 126 Cal.App. 3d 698. In particular, the circulation element must correlate with the land use element. Gov. Code § 65302(b); *Concerned Citizens of Calaveras County v. Board of Supervisors* (1985) 166 Cal.App. 3d 90.

The 2006 General Plan does not meet the consistency requirements because the transportation element does not support the permitted or even the projected land uses. For example, there is no feasible plan to provide adequate transportation infrastructure to support permitted development. The provisions for supplying potable water also fail to support land uses because there is no plan to provide adequate water supplies.

The 2006 General Plan is fundamentally incomplete. Literally dozens of its policies are nothing more than the inter O-11g litess critical problems through future development of standards, regulations, and programs. These policies are vaguely written and contain no substantive performance standards or any real constraints on the standards, regulations, and programs to be developed at some unspecified time in the future.

A General Plan must undergo environmental review under CEQA. Gov. Code § 65350. "CEQA's fundamental goal [is] fostering informed decision-making." *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 402. "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." *Id.* at 392. "'[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. 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.

In order to fulfill 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; *Whitman v. Board of Supervisors* (1979) 88 Cal.App.3d 397; *People v. County of Kern* (1974) 39 Cal.App.3d 830.

This EIR falls far short of satisfying these information disclosure requirements. As will be shown in these comments, and in those from our technical experts, the EIR is fatally flawed in its identification, disclosure, evaluation, and mitigation of impacts to traffic, air quality, water resources and potable water supply, biological resources, and agricultural land. The DEIR must therefore be substantially revised to cure these deficiencies, and must then be recirculated for additional public review and comment in accordance with the recirculation requirements of section 15088.5 of the CEQA Guidelines.

LandWatch advised the Planning Commission in its comments in November that it remains concerned about a number of features of the 2007 General Plan and is concerned that the County has not adequately disclosed its environmental consequences in the DEIR

SLOPE DEVELOPMENT POLICY: The new plan proposes to abandon the County's policy that bars development on slopes over 25%. The new slope development policy contains vaguely worded exceptions that allow development even on slopes over 30%. Although the policy promises some form of discretionary permit for development on slopes over 25% or slopes that contain constraints, it postpones the identification of constrained slopes and provides no standards for allowable slope development or conditions to control erosion. Similarly, the policy proposes a system of discretionary and ministerial permits for agricultural development of uncultivated soils, but it does not identify criteria for the discretionary permit or conditions to constrain development for either permit.

This new slope development policy, together with the proposed exemption of routine and ongoing agricultural activities from discretionary permitting, would permit residential and agricultural development on hundreds of thousands of acres of existing open space and habitat. Conversion of habitat to agricultural land has been occurring at over 800 acres per year for the last decade. Agricultural development on slopes will be spurred by the elimination of discretionary permitting and by the proposed Winery Corridor, which will create incentives to substantially expand the County's viticulture industry.

EROSION AND SEDIMENTATION: The DEIR has not provided any meaningful analysis of the environmental effects of altering the existing rules to permit this kind of development. For example, in its evaluation of potential erosion and sedimentation effects, the DEIR provides no description of the baseline conditions for erosion and sedimentation, no description of the likely location and intensity levels of slope development, and no meaningful analysis of the actual erosion and sedimentation that would result. Instead of analysis, the DEIR simply concludes that impacts will be less than significant based on a mechanical recitation of a list of policies that have little or no substantive content and that evince a determination to postpone any actual regulation of activities that may cause erosion and sedimentation. The policies and proposed mitigation measures postpone the formulation of specific regulations without providing performance standards or examples of measures that might be required to address impacts. For example, the DEIR admits that vineyard development will cause cumulative sedimentation impacts, but identifies as mitigation a policy that requires only that a task force look into the problem at some unspecified point in the future. The General Plan policies and the DEIR's proposed mitigation measures do not provide the substantial evidence that impacts will be less than significant that CEQA requires.

BIOLOGICAL RESOURCE IMPACTS: Similarly, the DEIR fails to evaluate the impacts to biological resources from agricultural and residential development 4

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permitted under the 2007 General Plan. Once again, the DEIR's analysis consists of the recital of policies and mitigation measures that have no substantive content and simply postpone meaningful regulation. These policies call for activities, programs, or ordinances to be identified or developed later, but the policies do not contain performance standards or provide examples of these activities, programs, or ordinances. Policies calling for action by the County fail to identify responsible agencies, ensure that adequate resources will be available, specify schedules for implementation, or provide for alternative measures pending full implementation. And many policies are not enforceable because they call for voluntary action or merely call for encouraging and supporting beneficial activities. Again, these policies cannot provide assurance that CEQA requires that impacts will be avoided, minimized, or mitigated.

The DEIR fails to consider and mitigate the effects of uncontrolled agricultural conversions on habitat fragmentation and movement corridors. Movement corridors are inadequately identified without using the best available science. Proposed mitigation for these landscape-level impacts is inadequate, because it relies on future *project*-level CEQA reviews that would be conducted when the County no longer has the flexibility to restrict or condition development at the landscape scale. Furthermore, the County proposes to exempt the agricultural and winery development responsible for much of these impacts from future CEQA review.

WATER IMPACTS: The DEIR fails to comply with CEQA's basic requirement that an EIR evaluate aggregate cumulative water demand and supply for each affected basin. The analysis for the Salinas basin is flawed and no analysis of basin-wide supply and demand is provided for the other affected basins.

The DEIR's conclusion that there will be an adequate water supply in the Salinas Basin ignores the ongoing cultivation of previously uncultivated land and the expansion of the viticulture industry that the DEIR encourages through its slope development policy and Winery Corridor program; and it is not based on an analysis of all competing demands for water resources. For example, the DEIR relies on the out of date EIR for the Salinas Valley Water Project ("SVWP") to conclude that there will be no increase in agricultural water demand. But the SVWP assumed no net increase in farmland whereas the DEIR admits that at least 7,300 acres of new cultivation will occur through 2030. The DEIR postpones the development of criteria for determining the availability of a long term sustainable water supply for *individual* development projects, but mysteriously concludes that there will be a long term sustainable water supply in the Salinas Basin for *all* future projects taken together.

The DEIR's conclusion that salt water intrusion will be halted is not consistent with the most current evidence of salt water intrusion and depends on the assumption that surface diversions from the Salinas River for the Salinas Valley Water Project can be doubled. The effect on endangered steelhead of doubling these diversions has not been evaluated by the County or by any other agency. We present expert evidence that this would significantly impact steelhead recovery efforts.

TRAFFIC: The DEIR's traffic section provides a quantitative analysis of some major roadways and admits that there is no solution to the County's traffic problems on these facilities. Despite this admitted lack of resources, the DEIR concludes on the basis of yet another recitation of vague and unenforceable policies that impacts from future individual development projects will not be significant. There is simply no way to reconcile the DEIR's conclusion that cumulative impacts from future individual development projects will be mitigated with the DEIR's admission that most of the major facilities will suffer unavoidably significant impacts. Because there is no adequate proposal to meet circulation service standards, the 2007 General Plan does not meet the internal consistency requirements of the State Planning and Zoning Law. Numerous circulation policies are incomplete or inconsistent.

AGRICULTURE: The DEIR concludes that the loss of 2,571 acres of agricultural land redesignated by the 2007 General Plan to permit urban uses cannot be mitigated. It then mysteriously concludes that future *ad hoc* general plan amendments that convert agricultural land will be mitigated by an unspecified, to-be-devised mitigation program. If future loss of agricultural land can be mitigated, then the loss of the 2,571 acres should be mitigated too. Again, the deferral of the formulation of any substantive content to the policies that purport to mitigate growth impacts is improper.

AIR QUALITY: The DEIR purports to project demographic data for each Planning and Community Area based on the land use designations and policies in the 2007 General Plan. However, the DEIR does not document the details of the population, employment, and housing assumptions relied upon for the traffic and air quality analysis and the County failed to provide adequate documentation in response to LandWatch's requests. On its face, the 2007 General Plan is inconsistent with the 2008 Air Quality Management Plan because the DEIR projects more population. Because the DEIR simply "adjusted" its demographic assumptions to be consistent with the assumptions uses in the 2004 Air Quality Management Plan, the DEIR's finding of consistency with the 2004 Plan is meaningless.

The DEIR inconsistently states both that the 2007 General Plan will *reduce* mobile source emissions and that it will *increase* mobile source emissions. While mobile source emissions *rates* may decline, that rate decline is not due to the 2007 General Plan. It is clear that new emissions from growth will represent an increase in emissions, but the DEIR does not acknowledge or quantify this. Mobile source emissions projections and significance conclusions in the DEIR are essentially incoherent. Finally, the DEIR fails to present an adequate analysis or mitigation of construction emissions or diesel toxics.

In sum, the County must modify the 2007 General Plan to restrict harmful development and to provide substantive policies that will demonstrably mitigate development impacts. The County must then revise and recirculate the DEIR to provide meaningful analysis of the remaining impacts and to propose all feasible mitigation.

Our detailed comments follow.

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I. Unexplained and Inconsistent Demographic Data

A. Critical Data Not Supplied

The DEIR does not contain appendices that provide the assumptions and model outputs used to prepare the air quality and traffic analyses. Accordingly, LandWatch requested the source documents used to prepare the air quality and traffic analyses. See John Farrow, letter to Mike Novo, Sept. 18, 2008; John Farrow, letter to Carl Holm, September 18, 2008; John Farrow, letter to Mike Novo, Sept. 30, 2008.

RESUSAL TO SUPPLY TRAFFIC MODEL: In response to LandWatch's request for data used to prepare the traffic analyses, the County stated that there were no "source documents" for most of the tables in the traffic analysis. Leslie Girard, letter to John Farrow, Sept. 29, 2008. In response to LandWatch's request for the AMBAG traffic model, which was referenced as the source of the traffic analyses, the County simply stated that the model is proprietary with AMBAG. Wendy Strimling, letter to John Farrow, Oct. 3, 2008. In short, the public is asked to accept traffic output from a black box with no opportunity to review and challenge the methodology.

RAW TAZ DATA NOT EXPLAINED: In view of the fact that the AMBAG traffic model and its associated demographic data organized by Traffic Analysis Zone ("TAZ") are based on the land use assumptions in the existing Monterey County General Plan, the County has an obligation to explain how, if at all, those data were altered to reflect changes to land use assumptions in the 2007 General Plan. However, in response to LandWatch's request for the population, employment and household assumptions by Traffic Analysis Zone used to prepare the traffic analyses, the County provided unexplained, unmapped raw data by TAZ. Wendy Strimling, e-mail to John Farrow, Oct. 7, 2008. As set out below, LandWatch has identified numerous instances in which this TAZ data are inconsistent with the AMBAG 2004 forecasts on which it is purportedly based and/or inconsistent with land use constraints in the 2007 General Plan. The County failed to provide the data in a meaningful form, to explain how the TAZ data are consistent with AMBAG 2004 data, or to explain how the TAZ data were modified, if at all, to reflect changes in land use assumptions proposed in the 2007 General Plan. This failure substantially hampers the public's ability to understand and comment on the adequacy of the traffic and air quality analyses.

To address this failure, the DEIR must be revised to set out exactly how the traffic analyses' demographic assumptions were developed with reference to AMBAG forecast data and the land use constraints in the 2007 General Plan. This revision must address all of the inconsistencies noted below and explain how the proposed changes to existing land use designations have been reflected in the TAZ data.

SOURCES FOR TABLE 3-8 NOT PROVIDED: In response to LandWatch's request for the source document containing population, employment and household

assumptions by planning area used in preparing Table 3-8, the County simply referred LandWatch to the 2004 AMBAG Population, Housing Unit & Employment Forecasts at AMBAG's website. Wendy Strimling, letter to John Farrow, Oct. 3, 2008. As noted above and detailed below, LandWatch has identified instances in which the Table 3-8 data are inconsistent with AMBAG's 2004 data. Furthermore, as explained below, the DEIR fails to provide any hint of the methodology by which AMBAG's aggregate forecasted population and housing units were allocated to the various Planning areas, Community Areas, Rural Centers, AHO's, and unincorporated areas outside CA's, RC's and AHOs, either as constrained by the 2007 General Plan land use assumptions or otherwise. In view of the instances of inconsistency between Table 3-8 data and the land use constraints in the 2007 General Plan identified above, the omission was critical.

To address this failure, the DEIR must be revised to set out exactly how the Table 3-8 demographic assumptions were developed with reference to AMBAG forecast data and the land use constraints in the 2007 General Plan. Table 3-8 must be expressly reconciled with the TAZ data used in the traffic and air quality analyses. This revision must address all of the inconsistencies noted below.

B. Inconsistencies Between Table 3-8, New Growth by Planning Area, Community Area and Rural Center, 2006-2030 and 2092 Buildout, and Other Data Sources Purportedly Relied Upon

In its Project description, the DEIR provides projected population, housing, and employment data in various tables. The most detailed projection of demographic data is contained in Table 3-8, New Growth by Planning Area, Community Area and Rural Center, 2006-2030 and 2092 Buildout, which purports to be based on AMBAG's 2004 population forecast, adjusted to correct for traffic analysis zones (TAZ) that will be annexed into cities. DEIR, p. 3-8 to 3-12. The implication is that both the distribution and amount of growth were determined based on TAZ and AMBAG data. However, as discussed below, the Table 3-8 data are inconsistent with AMBAG 2004 data, with the TAZ data supplied by the County in response to LandWatch's request for the assumptions used in the traffic analyses, and with the land use constraints in the 2007 General Plan.

METHODOLOGY UNEXPLAINED: The DEIR states that AMBAG's 2004 population projections are "used as the basis for the 2030 growth assumptions used in this EIR's analysis." DEIR, p. 3-9. However, the DEIR does not explain how projections were made for growth in population, residential units, and employment for each Planning Area, Community Area, Rural Center, and Affordable Housing Overlay as set out in Tables 3-8 and 3-9. As set out below, there are a number of inconsistencies between the Table 3-8 data, on the one hand, and, on the other hand, the AMBAG 2004 projections, the Traffic Analysis Zone data provided by the County in response to LandWatch's request for the assumptions used in the traffic analysis, and the density constraints in the 2007 General Plan. In view of these inconsistencies, and in the interest of understanding how the Project description was prepared, we ask that the County explain how the DEIR preparers made projections for population growth for each Planning Area, Community

Area, Rural Center, and Affordable Housing Overlay as set out in Tables 3-8 and 3-9. This explanation must account for changes in proposed land use designations as they affect growth in each area.

MONTEREY PENNINSULA GROWTH INCONSISTENT WITH AMBAG: AMBAG's 2004 forecasts and the TAZ data used in AMBAG's traffic model show declining growth on the Monterey Peninsula for Carmel, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and most unincorporated areas between 2005 and 2030. Population in the cities alone is shown to decline by 1,784 between 2005 and 2030. However, Table 3-8 identifies growth in the Monterey Peninsula area, including 1,761 dwelling units that would be built in Carmel Valley, Mid-Carmel Valley AHO, the Greater Monterey Peninsula and the Highway 68/Airport AHO. Thus, the Table 3-8 growth on the Monterey Peninsula is inconsistent with the 2004 AMBAG population forecasts and data used for the traffic model. Please explain this discrepancy.

CVMP TRAFFIC ASSUMPTIONS NOT PROVIDED AND INCONSISTENT WITH AMBAG 2004 PROJECTIONS: It appears that the DEIR has evaluated traffic impacts in the CVMP area based on the assumption that substantially more growth will occur in this area than projected by AMBAG. The DEIR states that the CVMP 2030 Cumulative plus Project analysis is based on the July 2007 CVMP Traffic Study. DEIR, p. 4.6-61 to 62. The DEIR states that this assumed development of 1,188 housing units between 2000 and 2030. The source document for the 1,188 housing unit assumption is apparently Appendix F to the DSEIR for the Carmel Valley Traffic Improvement Program. However, Appendix F is not provided in the DSEIR document for which a URL link is provided in the revised Section 11, Additional documents. (See the link in Draft Subsequent Environmental Impact Report. Available:) Thus, the public has no way to understand the basis of the assumptions for the CVMP traffic analysis. The DEIR does state that the 1,188 housing units are "more units than assumed in the General Plan estimates to 2030." DEIR, p. 4.6-62. Indeed, Table 3-8 shows a total of only 251 units in Carmel Valley by 2030 (149 units for the mid-valley AHO and 101 units outside any CA, RC, AHO). DEIR, p. 3-16, 3-20. Table 3-8 data purport to be based on the AMBAG 2004 forecasts. DEIR, pp. 3-11 to 3-12. Please explain this discrepancy. A revised EIR must clearly provide the basis for the CVMP traffic analysis and reconcile demographic assumptions with the Project description.

COASTAL GROWTH: The DEIR references both AMBAG and DOF forecasts. DEIR, p. 3-9. These forecasts include coastal areas which are excluded from analysis in the DEIR. The Final EIR for GPU4, Tables 3-2, 3-5, 3-8, identified 2,589 Coastal Zone Legal Lots of Record, so some coastal development is likely. AMBAG 2004 forecasts in the TAZ data supplied for the traffic analysis also assume some coastal development – 309 units.¹

¹ AMBAG's forecast is actually low. Based on the County's on-line permitting data, between 2004 and 2008, 18 units were approved annually in the coastal zone. From 2006 to 2030, this rate of approval would result in a total of 432 new units by 2030.

Table 3-5 shows that 2030 buildout of GPU5 would be 10,015 new units based on using an adjusted 2006 number minus AMBAG 2030 dwelling unit number (48,670 minus 38,655). Since AMBAG's 2030 forecasts include some growth in coastal areas, the 10,015 figure in Table 3-5 presumably also includes some coastal units. However, *Table 3-8 does not allocate any units to the coastal zone, but it also shows a total of 10,015 new units*. Thus, in effect, Table 3-8 projects greater population growth than AMBAG's 2004 data. Please explain how growth in coastal areas is accounted for in the Table 3-8 2030 buildout number of 10,015 new units and its relationship to AMBAG's 2030 forecasts.

In this regard, in its traffic analysis, the DEIR indicates that new development is not expected to occur in coastal areas under general plan buildout. DEIR, p. 4.6-27. Please identify how coastal units were accounted for in the traffic model.

AWCP UNITS OMITTED FROM TABLE 3-8: Table 3-8 does not include any units identified as attributable to residential development in the AWCP. The DEIR admits that by 2030 there would be 50 full-time residences and 150 employee residences spread across the AWCP area, but then states that winery workforce housing would be accommodated in cities, community areas, and Rural Communities. DEIR, p. 4.15-16. These statements are inconsistent and call into question the allocation of AWCP residential units in Table 3-8. The 2007 General Plan states in AWCP Section 3.3(G) and (H) that 4 residential units would be permitted by right on each of 50 wineries, of which 3 are for workforce housing, and that additional workforce housing would be permitted through discretionary permitting. Thus, there is no question that the AWCP would permit at least 200 housing units (4 units times 50 wineries) in the AWCP area. These units are not accounted for in Table 3.8.

HIGHWAY 68 AREA INCONSISTENCIES FOR 2030: Comparison of the TAZ data used to prepare the DEIR's traffic analyses to the data in Table 3-8 reveals that Table 3-8 shows substantially more development by 2030 in areas affecting Highway 68 than was assumed in the traffic analysis. The discrepancies are set out in the table below:

	TAZs (New Units)	Table 3-8 (New Units)
GMP Unincorporated	595	1510
Toro Area Plan	360	1046
Fort Ord	12	3295

Thus, it appears that the analysis of traffic impacts substantially understates the impacts to Highway 68 since it assumes many fewer new units by 2030. Please explain the discrepancies.

Furthermore, the DEIR text at page 3-34 identifies 1,470 units for the Fort Ord Community Area. Table 3-8 shows a total of 3,295 units as of 2030. GPU4 identified a buildout number of 3,184 units. As noted, the TAZ data used to prepare the DEIR's traffic analyses show only 12 units of growth. Please explain these inconsistencies.

Finally, Table 3-8 shows for Toro that there are only 251 vacant residential lots, but projects 541 new potential units. However, only one unit is allowed per legal lot of record in the Highway 68 portion of the Toro Area, i.e., that portion of the Toro area outside the River Road RC and the Highway 68/Reservation Road AHO. Toro Area Plan, Policy T 1.7. Please explain the basis of projecting more units in 2030 than legal lots of record.

BUILDOUT ESTIMATES INCONSISTENT WITH PLAN: Table 3-8 also identifies full buildout estimated to occur by 2092. Buildout should be based on land use designations identified in GPU5. Please explain the following inconsistencies between Table 3-8 buildout data and the controlling constraints in the various land use plans:

- Buildout for North County is identified as 3,260 new units, exclusive of Community Areas; however, only one unit is allowed per legal lot of record outside the Community Areas. NCAP, Policy NC 1.5. Table 3-8 shows there are only 577 residential lots outside the Community Areas.
- Buildout for Toro is identified as 4,046 new units; however, only one unit is allowed per legal lot of record in the Highway 68 portion of the Toro Area, i.e., that portion of the Toro area outside the River Road RC and the Highway 68/Reservation Road AHO. Toro Area Plan, Policy T 1.7. Table 3-8 shows there are only 251 residential lots.
- Buildout for Carmel Valley is identified as 758 new units outside of the AHO; however, the Carmel Valley Master Plan limits buildout to 266 new units. CVMP, Policy CV 1.6.

BUILDOUT ESTIMATES INCONSISTENT WITH GPU4 ASSUMPTIONS: Table 3-8 identifies buildout estimates for a number of areas that are inconsistent with the buildout assumptions used in GPU4, despite the fact that there appear to have been no changes in assumptions or constraints. Please explain the following inconsistencies in buildout assumptions between GPU4 and the 2007 General Plan. If assumptions or constraints have changed since GPU4, please identify the changes.

- Buildout for Fort Ord is identified as 8,610 new units; however GPU4 identified buildout as 3,184 news units within the same boundary.
- Buildout for Pine Canyon is identified as 1,704 new units; however GPU4 identified buildout as 550 new units within the same boundary.

- Buildout for Pajaro is identified as 676 new units; however GPU4 identified buildout as 100 new units within the same boundary.
- Buildout for Bradley is identified as 800 new units; however GPU4 identified buildout as 295 new units within the same boundary.
- Buildout for Lockwood is identified as 221 new units; however GPU4 identified buildout as 160 new units within the same boundary.
- Buildout for Pleyto is identified as 221 new units; however GPU4 identified buildout as 75 new units within the same boundary.
- Buildout for San Ardo is identified as 480 new units; however GPU4 identified buildout as 70 new units within the same boundary.

BASIS FOR PROJECTING UNITS IN UNINCORPORATED AREA: Table 3-8 and Table 3-9 show 2,003 units as of 2030 in the unincorporated County outside Community Areas, Rural Centers, and the AHOs. Please explain for each area how many of the projected units are single residences on legal lots of record and how may are attributable to subdivision activity. How was this determined? Please explain how proposed Policy LU 1.19 (permitting rural subdivisions in accordance with a Development Evaluation System that has yet to be devised) was interpreted and applied in projecting units in the unincorporated area. In particular, please explain how each of the various proposed "evaluation criteria" in Policy LU 1.19 were applied in each of the planning areas to constrain or permit rural subdivision activity.

Note in this regard that the GPU4 DEIR assumed that 1,200 units would be built through subdivisions in areas outside Community Areas and Rural Centers. Since the 2007 General Plan projects a different level of subdivision activity outside Community Areas and Rural Centers, please explain any change in assumptions that would justify a different projection.

TREATMENT OF UNITS IN DEVELOPMENT PIPELINE: Please explain how subdivisions that have been approved but not built have been accounted for, e.g., Morisoli (319 units) and Spreckels (77 units). Please explain how projects with completed applications before October 7, 2007 would affect buildout numbers.

C. Unexplained Aggregate Population Data In Traffic and Air Quality Analyses

In Table 4.7-3, the air quality analysis presents aggregate population data for various scenarios in its evaluation of consistency with the Air Quality Management Plan. The same data are presented in Table 4.6-11, purporting to summarize the population, housing, and employment data used to prepare the traffic analyses.

Table 4.6-11 states that "Existing plus Project 2030 and Cumulative 2030 land uses were adjusted to match the published AMBAG 2004 Population, Employment and Housing Unit forecasts." DEIR, p. 4.6-22. It is unclear what this statement means. Please explain what land use and population data were "adjusted." Please explain with what other land use data the adjusted data are not consistent as a result of the "adjustment."

Please also explain whether this "adjustment" to match the published AMBAG 2004 data was also made to Table 4.7-3, which was used to determine consistency with the MBUAPCD Clean Air Plan. Since consistency with the MBUAPCD Clean Air Plan was found based on the fact that population in Table 4.7-3 was no larger than in the Clean Air Plan, and the Clean Air Plan itself used AMBAG data, it appears that the finding of consistency does not actually reflect any actual consideration of the ways in which the land use designations in the 2007 General Plan may affect population growth. In short, it appears that the consistency finding is nothing more than a reflection of the County's use of the same AMBAG growth assumptions.

Please explain whether the TAZ data supplied in response to LandWatch's request for the assumptions used in the traffic analysis are or are not consistent with Table 4.6-11. The DEIR must be revised to demonstrate how the TAZ data used in the traffic analysis correlate with the aggregate data in Table 4.6-11. If the data are not consistent, then the discrepancies must be corrected.

Please reconcile Table 3-8 with Table 4.7-3. For example, Table 3-8 shows that 10,015 residential units will be added in the unincorporated area between 2006 and 2030, whereas Table 4.7-3 shows that 13,483 units will be added between 2000 and 2030. Please explain whether the 3,468 unit difference in growth is attributable to development between 2000 and 2006. Please explain whether Table 4.7-3 includes or excludes coastal units, units in the development pipeline, and AWCP units.

II. THE DEIR IMPROPERLY RELIES ON POLICIES AND MITIGATION MEASURES WITH NO SUBSTANTIVE CONTENT OR THAT ARE UNENFORCEABLE; AND THE DEIR DOES NOT JUSTIFY DEFERRAL OF MITIGATION PROGRAMS AND ORDINANCES

The 2007 General Plan DEIR bases its significance conclusions in many areas on its recitation of policies and mitigation measures intended to mitigate the impacts of future development. However, as discussed in sections below, these policies and mitigation measures frequently defer the formulation of any substantive programs, activities, or regulations. This deferral is only acceptable if the policy or mitigation measure specifies performance standards, lists exemplary measures, and avoids delegation away from the legislative body. The County must provide a justification for the deferral in the first instance. CEQA also requires that policies and mitigation measures be enforceable and feasible.

As discussed in the sections below, many of the DEIR's significance conclusions are unsupported because the substantive content to policies and mitigation measures has been improperly deferred or because these policies and mitigation measures are not enforceable or feasible. In the sections below, we provide detailed comments and questions regarding the policies and mitigation measures of particular concern to LandWatch, including those offered in support of significance conclusions regarding water supply, erosion and sedimentation, and traffic. TRA Environmental has also provided detailed comments and questions regarding the policies and mitigation measures intended to address impacts to biological resources. However, the DEIR's failures to identify meaningful substantive policies or mitigation measures is pervasive and affects its analysis and conclusions in other areas as well.

We ask that in addressing the comments and questions on the policies and mitigation measures the County revise the policies and mitigation measures to provide the required substantive content.

We briefly set forth some relevant law.

A. Requirements For Policies And Mitigation Measures Identified As The Basis Of A Significance Conclusion

Mitigation measures may be incorporated into plans, including general plans and specific plans. Pub. Resources Code, § 21081.6(b); CEQA Guidelines, § 15126.4(a)(2); *Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 358. Where this is done, however, the policies are subject to CEQA's rules regarding deferral of the formulation of mitigation. In particular, where policies defer the formulation of specific mitigation measures, they must include performance criteria. For example, in *Rio Vista Farm Bureau Center v. County of Solano* (1992) 5

Cal.App.4th 351, 377 the Court upheld a hazardous waste facility siting plan because the plan provided "specific performance criteria" for future siting decisions.

The County cannot evade CEQA's requirements for deferred mitigation formulation simply by calling the measures "policies" instead of "mitigation." An agency may not use a first tier document to avoid coming to terms with the key environmental issues associated with a project. *Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 197. When an agency adopts a plan that will permit growth and development, it must actually evaluate the impacts that can be anticipated at that time, regardless of future tiers of review. *Koster v. County of San Joaquin* (1996) 47 Cal.App.4th 29, 39-40.

CEQA is clear that an agency may only defer the formulation of mitigation measures when it "recognizes the significance of the potential environmental effect, commits itself to mitigating its impact, and articulates specific performance criteria for the future mitigation." *Gentry v. City of Murietta* (1995) 36 Cal.App.4th 1359, 1411, citing *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1028-1029; CEQA Guidelines § 15126.4(a)(1)(B). In *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 794 the Court set out the standard for deferred formulation of mitigation measures:

"Deferral of the specifics of mitigation is permissible where the local entity commits itself to mitigation and lists the alternatives to be considered, analyzed and possibly incorporated in the mitigation plan. [Citation.] On the other hand, an agency goes too far when it simply requires a project applicant to obtain a biological report and then comply with any recommendations that may be made in the report. [Citation.]' (*Defend the Bay v. City of Irvine, supra*, 119 Cal.App.4th at p. 1275, 15 Cal.Rptr.3d 176.) If mitigation is feasible but impractical at the time of a general plan or zoning amendment, it is sufficient to articulate specific performance criteria and make further approvals contingent on finding a way to meet them. (*Id.* at pp. 1275-1276, 15 Cal.Rptr.3d 176.)" *Id.* at 794.

The Court then rejected proposed mitigation because "[n]o criteria or alternatives to be considered are set out. Rather, this mitigation measure does no more than require a report be prepared and followed, or allow approval by a county department without setting any standards." In addition to identifying performance criteria, an agency should identify alternatives or exemplary measures. *Id.* As set out in the sections below, many policies purporting to mitigate impacts entirely fail to provide any performance criteria or to identify alternatives and examples of mitigation strategies.

An agency must have, and must articulate, a good reason for deferring the formulation of mitigation. *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670, 684. Absent such a reason, deferral is simply not acceptable. And the fact that the County is engaged in first-tier review CEQA review is not, in itself, sufficient reason to evade CEQA's demand for meaningful information. *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007)

40 Cal.4th 412, 431. The California Supreme Court made it clear that an agency may not evade its responsibility to provide meaningful information and analysis simply because it is undertaking first tier review:

"While proper tiering of environmental review allows an agency to defer analysis of certain details of later phases of long-term linked or complex projects until those phases are up for approval, CEOA's demand for meaningful information "is not satisfied by simply stating information will be provided in the future." (Santa Clarita, supra, 106 Cal.App.4th at p. 723, 131 Cal.Rptr.2d 186.) As the CEQA Guidelines explain: "Tiering does not excuse the lead agency from adequately analyzing reasonably foreseeable significant environmental impacts of the project and does not justify deferring such analysis to a later tier EIR or negative declaration." (Cal.Code Regs., tit. 14, § 15152, subd. (b).) Tiering is properly used to defer analysis of environmental impacts and mitigation measures to later phases when the impacts or mitigation measures are not determined by the firsttier approval decision but are specific to the later phases. For example, to evaluate or formulate mitigation for "site specific effects such as aesthetics or parking" (id., § 15152 [Discussion]) may be impractical when an entire large project is first approved; under some circumstances analysis of such impacts might be deferred to a later tier EIR.[footnote] But the future water sources for a large land use project and the impacts of exploiting those sources are not the type of information that can be deferred for future analysis." Id.

Yet the DEIR here entirely evades the requirement to provide any meaningful information about the content of the future programs and ordinances that are supposed mitigate environmental impacts – and the DEIR does not explain why these policies have not been fleshed out. Even a cursory examination of many of the policies recited as the basis of the DEIR's conclusions demonstrates that they simply have no content: no performance criteria, no exemplary measures, and no enforceable mandates.

The County may not delegate the formulation and approval of programs to address environmental impacts because an agency's legislative body must ultimately review and vouch for all environmental analysis mandated by CEQA. *Sundstrom v County of Mendocino* (1988) 202 Cal.App.3d 296, 306-308. Thus, the DEIR may not rely on programs to be developed and implemented later without approval by the Board of Supervisors. Yet many of the policies cited by the DEIR call for programs without specifying what agency will develop, approve, and implement the program and what role the Board of Supervisors will play. The passive voice is pervasive, *e.g.*, OS 3.1 (BMPs shall be established and enforced), OS 3.3 (criteria shall be established), and PS 2.5 (regulations shall be considered).

CEQA also requires that policies and mitigation measures be enforceable and feasible. CEQA Guidelines, § 15126.4(a)(1), (2). Policies that have no standards cannot be enforced against development projects. Policies calling for future "programs" that do not identify a responsible agency, a deadline, or any substantive content are not enforceable by the public. Policies that call for future ordinances without identifying

performance standards are also not enforceable, in the sense that the public will not be able to hold the County to any standards in enacting these ordinances. And policies that call for future projects and programs that the County is apparently unable to fund are not feasible.

A mitigation measure or policy is insufficient when it embodies nothing more than a hope that a solution will be found and fails to establish a method that will actually mitigate impacts. *King County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 728 (fatal flaw to rely on "mitigation agreement" where EIR presented no evidence that it was feasible). CEQA requires an agency to take steps to be sure that mitigation measures are actually implemented as a condition of development, not merely adopted and then neglected or disregarded. *Federation of Hillside & Canyon Associations v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261. Here, however, many policies call for development of future programs or activities with no deadline or provision for interim measures. And many policies have so little content and contain so many exceptions that there can be no certainty that implementation of a conforming program or activity will actually have any real effect on the impacts at issue.

Finally, the empty policies violate the Planning and Zoning law requirements for completeness and consistency. Where the policies and programs that are supposed to achieve general plan goals are deferred without content or are vague and unenforceable, then they do not constitute a complete or consistent general plan. *Murietta Valley Unifed School District v. County of Riverside* (1991) 228 Cal.App.3d 1212 (general plan must actually contain appropriate financing mechanisms or other arrangements that implement policies mandating the provision of school facilities).

B. Future CEQA Review Will Be Required To Adopt Ordinances and Programs Implementing Empty Policies Or to Approve Individual Projects

The County may not defer the formulation of substantive mitigation to address environmental impacts, that is, policies, programs, and ordinances that are enforceable and feasible and that contain clear performance standards. And even if it provides clear performance standards, the County must give a reason for deferring the formulation of mitigation measures. But even if it could legally defer mitigation formulation, it makes no sense to do so because the County will eventually have to come to terms with environmental consequences through CEQA review of the programs and ordinances that are yet to be adopted. Where the DEIR provides no real analysis of the inadequately specified programs and ordinances that are supposed to address environmental impacts, the County will have to conduct CEQA review before it adopts any such specific programs and ordinances.

Many of these ordinances will be permissive as well as restrictive, *e.g.*, the slope development ordinance under OS 3.5 and the Routine and Ongoing Agricultural Activities ordinance under AG 3.3 will permit some activities while restricting others. Because these ordinances will permit activities that may degrade the environment, they

will not be eligible for the Class 7 or 8 categorical exemptions for activities to maintain, protect, or restore natural resources. CEQA Guidelines, § 15307 and 15308; *Mountain Lion Foundation v. Fish and Game Commission* (1997) 16 Cal.4th 105, 124-126; *International Longshoremen's and Warehousemen's Union v. Board of Supervisors of San Bernadino County* (1981) 116 Cal.App.3d 265.

Where there is no substantive content to these future programs and policies, the County will not be able to assert that the environmental consequences have already been addressed in a first tier review. Where potentially significant impacts of later projects were not "examined at a sufficient level of detail" in a first-tier document, a subsequent CEQA document may not dispense with analysis. Pub. Resources Code, § 21094(a). Where a later project may cause significant effects that were not adequately addressed in the prior EIR, including cumulative effects, an EIR will be required. CEOA Guidelines, § 15152(f). Thus, if the County does not adequately evaluate impacts in this first-tier document, it will inefficiently have to address these impacts in program EIRs for every implementing ordinance and program and/or in project EIR's for every future project level review for specific development projects. For example, the County defers both the analysis and mitigation of cumulative erosion and sedimentation impacts caused by conversion of hillside land for agricultural cultivation through Policy OS 3.9, which simply calls for a committee to develop a "Program" – with no performance standards to guide it. Until such a program has been evaluated under CEQA and adopted by the County, each individual project will have to undertake a cumulative impact analysis.

In sum, by adopting a series of empty policies and mitigation measures, the County is not actually obtaining the benefits of tiered environmental review. Instead, the County is just postponing environmental review and making it more complex.

III. EROSION AND SEDIMENTATION ISSUES

A. Background and Overview

Adoption of the 2007 General Plan will permit development that causes erosion and sedimentation. A number of programs and policies in the 2007 General Plan are implicated.

- NEW SLOPE DEVELOPMENT POLICY - Policy OS 3.5: 2007 General Plan, p. C/OS-7. Policy OS 3.5 is a complex new policy modifying the current County policy reflected in Zoning Ordinance 21.66.030, which bans conversion of uncultivated land over 25% and requires a use permit for conversions between 15-25% in the North County Area Plan, Central Salinas Valley Area Plan and Cachagua Area Plan areas. Policy OS 3.5 is supposed to lead to a new permitting process applicable to both agricultural and other development on slopes. As discussed below, it has a number of defects: 1) it contains vaguely worded exceptions that would allow development on slopes over 30%; 2) it provides for a discretionary permit for residential/commercial development on slopes over 25% or slopes that contain constraints, but defers the identification of constrained slopes and provides no criteria for allowable slope development or conditions to control erosion; 3) it proposes a system of both discretionary and ministerial permits for agricultural development of uncultivated soils, but does not identify criteria for the discretionary permit or conditions to constrain development for either permit. See discussion below in connection with unfounded significance conclusions and inadequate mitigation.
- ROUTINE AND ON-GOING AGRICULTURE ("ROAA"): DEIR, pp. 3-46 ff. Various policies are proposed in order to permit ROAA without a discretionary permit, including conversion of previously uncultivated land, pursuant to Policy AG-3.3. Policy AG 3-3 exempts ROAA from a list of policies to the extent specified by those policies. One critical exemption is the partial exemption of conversion of uncultivated land on slopes under Policy OS 3.5. While there is an exception to the exemption in Policy AG 3.3 for projects "that create significant soil erosion impacts or violate adopted water quality standards," there are no criteria for determining what those projects are. Policy AG 3.3 calls for an ordinance to identify county permit requirements for specific ROAAs consistent with these exemptions.
- AGRICULTURAL WINERY CORRIDOR PLAN ("AWCP"): DEIR, pp. 3-39 ff. The AWCP establishes incentives for up to 50 wineries and visitor serving uses in a long corridor by exempting most activity from discretionary permits.

Table 3-16. As discussed below, the wineries will encourage the recent trend toward conversion of uncultivated land to vineyards.

• CONVERSION OF UNCULTIVATED LAND: The 2007 General Plan will permit and encourage conversion of previously uncultivated land in order to make up for agricultural land lost to urban uses and to foster the trend toward viticulture on sensitive sloped land. While the DEIR contains cursory and fragmented references to the likely conversion of uncultivated land, a set forth below, these references fail to establish relevant baseline conditions and fail to provide a realistic projection of the extent and location of future conversions that will cause erosion and sedimentation.

The DEIR contains a brief discussion of erosion from agriculture and hillside development in the geology section. DEIR, 4.4-15. The DEIR addresses erosion and sedimentation impacts in a number of its impact analyses and significance findings. As discussed below, the DEIR does not provide any modeling or quantitative analysis and does not even qualitatively review different regions, activities, and conditions to support its conclusions that impacts will be less than significant. The relevant impact analyses in the DEIR include:

- WR1 Non-point Pollution. DEIR, pp. 4.3-90 ff. This impact is found less than • significant based on a list of policies and one new mitigation measure, which the DEIR states is not actually necessary. However, several of the rivers and streams in Monterey County are substantially impaired by sediment, and excessive erosion has the potential to continue to effect channel destabilization, habitat degradation and declines in water quality. Erosion from land development and road drainage activities have been shown to have substantial impacts on these resources, and as shown on Exhibit 4-4-5, most of the County is prone to high erosion hazards. As the letter from TRA Environmental demonstrates, continued sedimentation significantly impacts steelhead in the Salinas River and its tributaries. As discussed below, to demonstrate that the policies and mitigation measure would result in less than significant impacts, the County should provide an analysis of the expected areas of impacts, and their location relative to sensitive aquatic environments. The County should also demonstrate that the aquatic communities with the Monterey County are not sensitive to increased non-point source pollution or provide substantive policies to address the problem.
- WR2 Construction-related Erosion and Sedimentation. DEIR, pp.4.3-99 ff. This impact is found less than significant based on a list of policies.
- WR3 Agricultural and Resource Extraction Caused Sedimentation and Nutrient Loading. DEIR, pp. 4.3-107 ff. This impact is found less than significant based on a list of policies.
- WR10 Increased Runoff Leading To Streambed Erosion. DEIR, pp. 4.3-173 ff. This impact is found less than significant based on a list of policies.

- GEO5 Soil Erosion Hazards. DEIR, p. 4.4-37. Impact found insignificant based on extensive list of policies and one additional mitigation measure (requirement that a stream setback ordinance be developed).
- Cumulative Impacts Related To Soils. DEIR, p. 6-6. The DEIR concludes with essentially no analysis that project-specific mitigation will avoid any cumulative impacts.
- CUM-2 Surface Water Quality. DEIR, p. 6-10. The DEIR concludes that RWQCB regulations and proposed policies, including the entirely undefined future program to evaluate and address cumulative impacts through Policy OS 3.9, will ensure that contributions to significant cumulative impacts are not considerable.

As discussed below in detail, the neither the DEIR nor the 2007 General Plan provides meaningful description and discussion of activities that may cause erosion and sedimentation. Neither provides any meaningful baseline information. And the DEIR's conclusions that impacts will be less than significant are based on a mechanical recitation of a list of policies that have little or no substantive content and that evince a determination simply to postpone any actual regulation of activities that may cause erosion and sedimentation. For the most part, the cited policies and proposed mitigation measures defer the formulation of specific regulations without providing performance standards or examples of measures that might be required to address impacts.

B. DEIR Fails to Provide An Adequate Description Of Erosion And Sedimentation Activity Permitted By the 2007 General Plan

CEQA requires an adequate project description, including a general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service services. CEQA Guidelines, § 15124. As noted above, the 2007 General Plan proposes to permit a number of activities that will cause erosion and sedimentation. Unfortunately, the DEIR fails to describe these activities with sufficient specificity to support the DEIR's conclusion that they will not cause significant impacts.

1. The DEIR does not describe the extent or location or, or the applicable constraints on, slope development for non-agricultural purposes

The proposed new slope development policy, Policy OS 3.5, would permit development on slopes of various steepness in accordance with a new permitting structure, which is to be devised later. The DEIR fails to describe the extent and location of likely slope development. The DEIR does not provide a map identifying sloped areas of the County, with or without an overlay of land use designations.

Nor does the DEIR describe in meaningful detail the constraints to be imposed on future slope development through the permit processes to be devised later. (See discussion of inadequate mitigation policies below.)

Without this information, the project description is insufficient to support an analysis of likely impacts. The DEIR must be revised and recirculated to provide this information.

2. The DEIR fails to provide realistic projection of future conversions of uncultivated land for agricultural purposes

The AWCP is described as a program to establish a winery corridor including 50 wineries (40 artisan wineries and 10 full scale wineries), 10 off-site tasting rooms, 3 restaurants, 5 delis, and 8 inns. DEIR, pp. 3-39 to 40; see also 2007 General Plan, Chapter 9-J. However, neither the DEIR nor the 2007 General Plan provides any estimate of the amount of new vineyard capacity that would be induced. For example, although the DEIR's water supply analysis estimates wine production from the 50 wineries and estimates the water required to grow the grapes, it does not estimate how much land would be newly cultivated to support vineyards. DEIR 4.3-121. Instead, it states that the land required for the wineries themselves would be only 142 acres. DEIR 4.3-121.

The discussion of impacts associated with agricultural land conversion states that most of the area within the AWCP boundaries contains cultivated fields or grazing land. DEIR, 4.2-8. However, the discussion does not disclose how much previously uncultivated land (e.g., grazing land) would be converted to new vineyards. Some estimate of this must be provided.

Although the General Plan states that 65-70% of the County's grape production is shipped out of the County to wineries elsewhere, implying that there is an imbalance between vineyards and wineries (2007 General Plan, p. AWCP-1), there is no effort made to forecast how much additional vineyard development will occur – either in response to newly developed local winery production capabilities or in order to continue and expand what is apparently a profitable grape export business. No evidence is provided that grape harvests from existing vineyards would be diverted away from external wineries to local wineries, foregoing existing external markets. There is simply no reason to suppose that the existing external markets will be abandoned. A much more likely scenario is that additional vineyards will be created to support new winery capacity. The DEIR must be revised to project the extent and location of new vineyard development induced by the expansion of winery facilities, as the DEIR acknowledges will occur. DEIR, 4.4-41 ("Implementation of the AWCP could induce property owners to change crop cover to vineyards or to plant vineyards on uncultivated slopes, thereby increasing the potential for soil erosion.")

It is evident that the AWCP is likely to result in substantial conversion of uncultivated land located on slopes and on the Valley edge. As discussed below, data in the DEIR and common sense suggest that significant and concentrated new vineyard development will occur in the AWCP corridor, proximate to the new wineries, as a direct result of the incentives for winery development in the AWCP. Data in the DEIR also indicate that additional conversions of uncultivated land to agriculture will occur throughout the County.

The DEIR states that adoption of the 2007 General Plan will remove 2,571 acres of important farm land from agricultural land use designation. DEIR, p. 4.2-12, Table 4.2-9; p. 4.2-18. The DEIR then observes that that new vineyards are likely to be established on lands currently devoted to grazing, thereby partially mitigating the loss of farmland to other land uses. DEIR, 4.2-19. However, the DEIR fails to quantify this. Please provide an estimate.

The discussion of potential impacts to biological resource movement corridors states that conversion of previously uncultivated land to new farmland is not expected to result in significant impacts because it is projected to be only 450 acres per year and is expected to occur in a "sporadic and discontinuous pattern," based on the pattern of historic conversion. DEIR, p. 4.9-95. This conclusion is based on historic habitat conversion data from 1982 to 2006. DEIR, p. 4.9-46, Table 4.9-6 (habitat conversion 1982-2006); p. 4.9-57, Table 4.9-7 (impacts on natural vegetation communities due to development); p. 4.9-64, Table 4.9-8 (agricultural habitat conversions to 2030 and to buildout). However, as set out below, this conclusion is not supported by data in the DEIR itself, which establishes that conversions are accelerating and concentrated in sloped locations.

Data in the DEIR demonstrate that the trend in conversion of habitat to agriculture of all kinds is accelerating, with conversions in the most recent 10 years proceeding at a rate 4 times higher than in the 14 years prior to that – from 212 acres per year in 1982-1996 to 820 acres per year in 1996-2006. DEIR, Table 4.9-6. Furthermore, the DEIR states that conversions for vineyards in particular are also accelerating: 700 acres of vineyard conversions occurred in 1982-1996 representing only 24% of the 2,976 total acres converted in that period, whereas 3,300 acres of vineyard conversions occurred between 1996-2006 representing 40% of the 8,209 total acres converted in that period. DEIR, p. 4.9-63; p. 4.9-46, Table 4.9-6. *Thus, the data in the DEIR support a projection that conversion of habitat to agriculture will continue at the rate of 820 acres per year based on the recent trend, not just the 450 acres per year that the DEIR projects by diluting the recent data with older data. The data also support the conclusion that a growing percentage of that land conversion will be for new vineyards.*

The only basis the DEIR provides for its conclusion that there will be no net expansion in agricultural acreage is the observation that AMBAG does not forecast an increase in agricultural employment. DEIR, p. 4.9-63. However, the DEIR offers no evidence that AMBAG forecasts took into consideration the County's as yet unadopted

plan to create substantial incentives for new vineyard production through the AWCP, and there is no reason to suppose that AMBAG has done so.

Furthermore, the DEIR acknowledges that one driver of agricultural conversion is the need to replace the land lost to development due to urban use; thus, even if there were no net change in agricultural acreage, the increase in urban uses proximate to Monterey County cities and Community Areas will result in conversion of existing natural habitat distant from urban development to replace lost agricultural land. DEIR, p. 4.9-63. The DEIR states 2,571 acres of "important farm land" will be removed from the agricultural land use designation to accommodate urban development through enactment of the 2007 General Plan. DEIR, p. 4.2-12, Table 4.2-9; p. 4.2-18. The DEIR does not disclose how much other farmland (e.g., grazing land) will be redesignated, but data in the DEIR show that historically the conversion of grazing land has occurred at a rate at least half that of the conversion of important farm land. DEIR, p. 4.2-7, Table 4.2-7. Furthermore, the DEIR acknowledges that additional, but not quantified, agricultural land will be converted to urban use through subsequent development pressure. DEIR, pp. 4.2-25 to 4.2-28. Thus, it is reasonable to conclude that conversion of previously uncultivated land will occur to replace agricultural land lost to urban land use, and that this conversion will occur in fringe areas such as the Valley edge and slopes.

And, in fact, the DEIR states that "spatial analysis of the vineyard development indicated that most of the recent vineyard expansion is at the valley edges and upslope." DEIR, p. 4.9-63. It goes on to state that "the dominant locales of recent conversions are along the eastern and western slope of the Salinas Valley. It is expected that these slopes of the Salinas Valley along with the slopes of tributary valleys to the Salinas Valley will be the likely focus of future conversions of habitat to agriculture." DEIR, p. 4.9-63. Exhibits 4.9-6 through 4.9-9 show that land conversions are in fact concentrated on sloped areas.

In short, it is reasonable to conclude based on data in the DEIR itself that at least 820 acres of uncultivated land will be converted to agriculture annually, that at least 40% of that will be for vineyard development located primarily on sloped land and on the valley edges proximate to the winery corridor. Comments and mapping data provided by TRA Environmental demonstrate that there are thousands of available acres of land designated to permit agriculture on the sloped edges of the Salinas Valley. The removal of the ban on slope development over 25% would open up thousands of additional acres. Substantial increases in erosion and sedimentation may result from new cultivation of this land.

The DEIR must be revised to provide a reasonable estimate of the location and extent of conversion of previously uncultivated agricultural land that is consistent with recent data. This estimate should be used to project erosion and sedimentation impacts, particularly cumulative impacts, analysis of which the DEIR simply postpones. DEIR, p. 6-10 (Policy OS 3.9 postpones development of a program to address cumulative hydrologic impacts of the conversion of hillside rangeland areas to cultivated croplands.) The estimate should then be used to develop effective, substantive policies and mitigation

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measures to prevent erosion and sedimentation and to demonstrate in the EIR how those policies and mitigation measures would in fact be effective.

C. DEIR Fails To Provide Baseline Information On Erosion And Sedimentation

CEQA requires that an EIR provide a description of a project's environmental setting that is sufficient to support an analysis of the significance of the project's effects. CEQA Guidelines, § 15125(a). The cursory discussion of erosion and sedimentation in the DEIR identifies common causes of erosion and sedimentation, but does not provide any systematic baseline information about conditions that would lead to erosion and sedimentation, including soil types, slopes, and vegetative cover of the areas in the County that are likely to be subject to development or newly cultivated for agriculture; rainfall; surface water flows; dams and weirs; roads; gullies and landslides; and channel incision. For example, the 2007 General Plan proposes to permit development on slopes over 25%, but the document fails to present a map showing the areas in the County that will be permitted to be developed under this policy. Policies calling for the preparation of databases related to soil conditions at some unspecified time in the future are not an adequate substitute for presentation of baseline data in this first tier CEQA document. Baseline data must be presented now to support the DEIR's impact analyses.

The only information provided about existing sedimentation effects is a list of 303d impaired streams. DEIR, pp. 4.3-54. The DEIR does not characterize the sedimentation conditions in other streams. The DEIR provides no information about existing erosion or identifying erosive soils or other conditions that may contribute to erosion. Thus, the DEIR provides no basis for evaluating the likelihood or extent of soil erosion from development activity permitted by the 2007 General Plan, including future cumulative effects.

A reasonable approach to addressing baseline conditions affecting erosion and sedimentation would require preparation of a baseline data report, such as the report prepared by Jones and Stokes for Napa County, which is intended to be used for future planning efforts, including the Napa County General Plan update. Jones and Stokes/EDAW, Napa County Baseline Data Report, Nov. 2005, chapters 15-17.² Absent this kind of information, the DEIR fails CEQA's information disclosure requirements.

D. The Impact Analysis Is Predicated On Avoidance, Minimization, And Mitigation Through Policies And Mitigation Measures That Cannot Support The Conclusions That Impacts Will Be Less Than Significant

The DEIR evaluates erosion and sedimentation impacts and finds them to be less than significant in the context of General Plan policies that for the most part call for programs and ordinances to control erosion that are not specified in any meaningful detail, that contain no performance criteria, that identify no exemplary measures, that

Available at http://www.co.napa.ca.us/gov/departments/29000/bdr/index.html.

propose no deadline for implementation or interim mitigation, or lack any enforceable mandates for action. The DEIR's impact analyses do not provide any information about the likely extent of erosion-causing activities or explain with any specificity how the recited General Plan policies or proposed additional mitigation measures would prevent significant impacts. For both of these reasons, the DEIR's discussion of significant impacts cannot support its conclusions that impacts will be less than significant.

For a discussion of the requirements for policies identified as the basis of a significance conclusion, please see Section II above. Generally, such policies are subject to CEQA's rules on deferral of the formulation of mitigation, including the requirement to specify performance standards, to list exemplary measures, to avoid delegation away from the legislative body, and to provide a justification for the deferral in the first instance. CEQA also requires that policies identified as mitigation be enforceable and feasible. In addition, the Planning and Zoning Law requires that policies completely and consistently implement general plan goals.

1. Slope Development Policy OS 3.5 Is Inadequate

Policy OS 3.5, the proposed new slope development policy, embodies most of the possible defects in general plan policies that are offered as the basis of a significance conclusion under CEQA or that purport to implement a general plan goal under the State planning and Zoning law. The following defects must be addressed and resolved.

UNJUSTIFIED RELAXATION OF BAN ON DEVELOPMENT OVER 25%: Zoning Ordinance 21.66.030(C) bans conversion of uncultivated land over 25% and requires a use permit for conversions between 15-25% in the North County Area Plan, Central Salinas Valley Area Plan and Cachagua Area Plan areas. This ordinance was adopted consistent with Policy 21.1.3 in the 1982 General Plan, which requires the County to *maintain* the erosion control ordinance and update it as new information becomes available. Policy 21.1.3 was specifically identified as mitigation for impacts to soils, hydrological, and water quality resources. 1982 GP. P. 196. Policy OS 3.5 proposes to relax the existing slope development ordinance to permit development on slopes up to 30% (and even to permit development of steeper slopes under vague and unenforceable exception provisions).

CEQA requires that an agency explain and provide substantial evidence to justify its decision to abandon previously adopted mitigation measures. *Napa Citizens v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 364. No new information is offered in the DEIR to justify relaxation of the existing ordinance, and by extension, relaxation of the existing mitigation measure embodied in Policy 21.1.3. The DEIR does not offer any information suggesting that development on slopes over 25% will not contribute to erosion and sedimentation problems. Nor does the DEIR offer any information suggesting that the slope development policy should be relaxed for any other reasons despite the erosion and sedimentation consequences. For example, the DEIR contains no analysis that demonstrates any need to accommodate demand for development on steep slopes. Indeed, the DEIR claims that the demand for cultivation of previously uncultivated land will be relatively modest based on weighting recent data showing accelerating agricultural conversions with historic data. The DEIR cannot logically claim that there is modest demand for cultivation of steep slopes and that the slope development policy must be relaxed.

Policy OS 3.5 must be revised to continue the current ban on development of slopes over 25%, or the DEIR must provide substantial evidence to justify relaxing this ban. Such evidence would have to consist of precisely the fact-based analysis of erosion and sedimentation impacts that the DEIR fails to provide, including identification baseline conditions and likely development, and an analysis of erosion and sedimentation from that development.

VAGUE AND UNENFORCEABLE EXCEPTION TO THE BAR ON DEVELOPMENT OVER 30%: Although Policy OS 3.5 bars development on slopes over 30%, it contains vaguely worded exceptions that make this bar unpredictable and unenforceable. The policy would permit development on slopes over 30% when, after a hearing, there is finding that there is no "alternative" or that the development is "better:"

"The exception may be granted if one or both of the following findings are made, based upon substantial evidence:

A) there is no alternative which would allow development to occur on slopes of less than 30%; or,

B) the proposed development better achieves the resource protection objectives and policies contained in the Monterey County General Plan, accompanying Area Plans and Land Use Plans, and all applicable master plans." Policy OS 3.5.

The wording of the first exception ("A") does not present any genuine constraint. The lack of any "alternative" must be determined with reference to some objectives, but the policy does not explain how those objectives would be determined, by whom, or in what context. Since the *developer's* objective is usually to develop a particular piece of property with a particular use, the developer would simply point out that there is no alternative. As worded, the first exception provides no meaningful constraint on exceptions, which could be granted on an *ad hoc* basis to any project proponent.

The second exception ("B") is equally wide open. This exception would permit development over 30% when the proposed development "better achieves resource protection objectives and policies in applicable plans." Determining whether a proposal "better achieves" some goal requires that it be compared to some alternative. The second exception does not explain how the alternative for comparison is to be formulated, by whom, in what context, and with reference to what goals. Again, a developer would apparently be free to identify a straw man alternative that causes much more adverse effects, and then argue his proposed development project on the steep slope is "better."

Both exceptions must be eliminated from the policy. If exceptions are to be permitted, they must be justified and meaningfully constrained.

UNSPECIFIED AND UNENFORCEABLE DISCRETIONARY PERMIT FOR NON-AGRICULTURAL DEVELOPMENT ON SLOPES OVER 25%: OS 3.5 proposes that a discretionary permit be required for non-agricultural development on slopes over 25% or slopes that contain geologic hazards as shown on the databases of geologic and hydrologic hazards, which are to be prepared under Policies S1.2 and PS 2.7 [sic, PS 2.6].

"A discretionary permit process for development on slopes greater than 25percent (25%) or that contain geologic hazards and constraints shown on the County's GIS Geologic (*Policy S-1.2*) or Hydrologic (*Policy PS-2.7*) Hazard Databases shall be established. The process shall be designed to: a. evaluate possible building site alternatives that better meet the goals and policies of the general plan.

b. identify development and design techniques for erosion control, slope stabilization, visual mitigation, drainage, and construction techniques.
c. minimize development in areas where potentially unstable slopes, soil and geologic conditions, or sewage disposal pose substantial risk to public health or safety." Policy OS 3.5.

The County has not even identified the areas where a discretionary permit would be required. As noted below, although Policies S 1.2 and PS 2.6 provide for doing so at some point, neither policy contains a deadline or any interim measures pending completion of the databases. This must be addressed. Also as noted below, neither Policy S 1.2 nor PS 2.6 provide any criteria by which areas to be subject to discretionary permits will be identified. Until the County has identified areas where development of slopes greater than 25% should be allowed, and has provided a defensible technical justification for allowing such development, no development on such slopes should be permitted.

There is no excuse for the County's failure to identify areas containing geologic hazards. The information could have been developed in the general plan update process, which has now gone on for years, and which has consistently identified the need to develop this information. This information should be part of the DEIR's baseline information, and it should have been used to identify and limit land use designations.

Neither S1.2 nor PS 2.6 contains performance criteria for key terms such as "highly erodible soils" or "moderate and high erosion hazards," so the public has no idea what terrain would require a discretionary permit. These terms must be defined and justified with reference to a technical analysis that considers the actual effects of allowing development.

Although Policy S1.2 requires mapping impaired water bodies on the State Water Resources Control Board 303d list, there is no indication how that information would be used to constrain development. Nor is it clear why only 303(d) listed streams are the primary focus of the County's policies, since sedimentation to any stream has the potential to impact aquatic communities, water quality, and sensitive species. As noted

below, the County has not developed or meaningfully specified criteria for the proposed Stream Setback Ordinance under BIO-2.1, DEIR p. 4.9-86 either.

OS 3.5 states that the discretionary permit process is to be designed to "evaluate possible building site alternatives that better meet general plan goals and policies." However, again, this language will be in practice unpredictable and unenforceable because it would require formulation of "alternatives" for comparison with reference to unspecified objectives (*e.g.*, there would be no alternative to a project meeting the proponent's narrowly defined objective to develop a particular use on a particular site). This language must be clarified to explain under what conditions development would not be permitted because of the existence of better "alternatives."

The discretionary permit process calls for identifying techniques for erosion control, but it fails to provide any performance specifications or to identify any exemplary measures. The vague and generic language in OS3.5 that requires that "permit processes shall be designed to require that an erosion control plan be developed and implemented that addresses slope stabilization, and drainage and flood hazards" does not contain performance criteria or exemplary measures. The policy must provide a performance specification and exemplary measures that are based on meeting the water quality and soil retention goal OS 3.5.

In sum, this portion of Policy OS 3.5 purporting to set up a discretionary permit process is simply a hollow shell that would permit essentially any kind of nonagricultural development on steep and erosive slopes. As written, the discretionary permit process for non-agricultural development does not provide any substantial evidence to support a finding that erosion and sedimentation effects of the 2007 General Plan would be less than significant. And it does not actually implement Goal OS-3, to prevent soil erosion and enhance water quality.

UNSPECIFIED AND UNENFORCEABLE DISCRETIONARY PERMIT FOR AGRICULTURAL DEVELOPMENT ON SLOPES OVER 25%: OS 3.5 calls for both a discretionary and a ministerial permit for agricultural slope conversions over 25%:

"The County shall develop and implement an Agricultural Permit process for the conversion, for agricultural purposes, of previously uncultivated lands on slopes in excess of 25-percent (25%). An Agricultural Permit shall recognize unique grading criteria for agricultural purposes and the process shall include criteria when a discretionary permit is required. Projects that are subject to a State Agricultural Waiver Program, Agricultural Registration Program, or other similar program that regulates irrigation of agricultural land on steep slopes or projects where only a small portion of the affected area has slopes in conflict with this policy shall be allowed with a ministerial permit that requires compliance with the criteria developed for the following resource areas: a. Water Quality/Water Supply

- a. water Quality/water Suppl
- b. Biological Resources
- c. Cultural Resources

d. Erosion Controle. Drainagef. Flood Hazards." Policy OS 3.5.

The policy refers to, but does not specify, "criteria when a discretionary permit is required." As written, projects subject to the "State Agricultural Waiver Program, Agricultural Registration Program, or other similar program that regulates irrigation of agricultural land on steep slopes" would require only a ministerial permit. The policy also requires only a ministerial permit for "projects where only a small portion of the affected area has slopes in conflict with this policy." It is not clear whether *all* other projects would require a discretionary permit, and, if not, *what* other projects would require a discretionary permit. This must be clarified.

Please identify the "State Agricultural Waiver Program, Agricultural Registration Program, and other similar program that regulates irrigation of agricultural land on steep slopes." Please explain how these programs would address erosion and sedimentation effects from cultivation of steep slopes. We note that the current RWQCB Basin Plan identifies only two waivers of Waste Discharge Requirements and reporting requirements applicable to agriculture: #20, for irrigation return water where sediment meets turbidity objectives and discharge is not toxic; and #16, for agricultural commodity wastes. RWQCB, Central Coast Region, Water Quality Control Plan, Appendix A-23. Neither of these waivers appears to be focused on regulating irrigation on steep slopes in particular. Sedimentation from storm water-caused erosion would not be controlled by the irrigation return water waiver.

The criteria for permitting conversion with a ministerial permit is not clear because the term "small portion" is undefined. Is this term to be defined in a to-be-developed program, or will it be left for *ad hoc* determination as permits are requested? Is "small portion" to be evaluated in absolute (e.g., ¹/₄ acre) or percentage (e.g., 2% of proposed conversion) terms or with reference to the actual erosion and sedimentation potential (*e.g.*, contributing a specified sediment load)? This must be clarified.

Furthermore, assuming it can be determined what projects are not eligible for a ministerial permit and therefore must be evaluated through a discretionary permit process, Policy OS 3.5 contains no criteria whatsoever for deciding *whether* a discretionary permit should be issued, and if so, *what conditions* should attach to such a permit. An adequate policy must provide both. The vague and generic language in OS3.5 that requires that "permit processes shall be designed to require that an erosion control plan be developed and implemented that addresses slope stabilization, and drainage and flood hazards" does not contain performance criteria or exemplary measures. Conditions on development must be justified with reference to attaining the water quality and soil retention goal OS 3.5, and must include performance specifications and exemplary measures.

In sum, this portion of Policy OS 3.5 purporting to set up a discretionary permit process for agricultural conversions is also a hollow shell that would permit essentially

any kind of agricultural development on steep and erosive slopes. As written, the discretionary permit process for agricultural development does not provide any substantial evidence to support a finding that erosion and sedimentation effects of the 2007 General Plan would be less than significant. And it does not actually implement Goal OS-3, to prevent soil erosion and enhance water quality

MINSTERIAL PERMIT CONDITIONS UNSPECIFIED FOR CONVERSION OF UNCULTIVATED LAND TO AGRICULTURE ON SLOPES OVER 25%: Policy OS 3.5 permits agricultural conversions on land sloped over 25% subject only to an unspecified ministerial permit:

"Projects that are subject to a State Agricultural Waiver Program, Agricultural Registration Program, or other similar program that regulates irrigation of agricultural land on steep slopes or projects where only a small portion of the affected area has slopes in conflict with this policy shall be allowed with a ministerial permit that requires compliance with the criteria developed for the following resource areas:

- a. Water Quality/Water Supply
- b. Biological Resources
- c. Cultural Resources
- d. Erosion Control
- e. Drainage
- f. Flood Hazards." Policy OS 3.5.

No conditions are specified for permits to cultivate previously uncultivated land other than language stating that the permit shall require "compliance with *the criteria* developed for the flowing resource areas," followed by a list of "resource areas" including "Water Quality/Water Supply," "Erosion Control," and "Drainage." These references are not meaningful since they do not identify "the criteria" or any applicable constraints with any specificity. What are these criteria? The vague and generic language in OS3.5 that requires that "permit processes shall be designed to require that an erosion control plan be developed and implemented that addresses slope stabilization, and drainage and flood hazards" does not contain performance criteria or exemplary measures.

Again, this portion of Policy OS 3.5 purporting to set up a ministerial permit process for agricultural conversions would permit essentially any kind of agricultural development on steep and erosive slopes. As written, this unspecified ministerial permit process for agricultural development does not provide any substantial evidence to support a finding that erosion and sedimentation effects of the 2007 General Plan would be less than significant. And it does not actually implement Goal OS-3, to prevent soil erosion and enhance water quality.

MINSTERIAL PERMIT CONDITIONS UNSPECIFIED FOR DEVELOPMENT, INCLUDING AGRICULTURAL CONVERSION, ON SLOPES UNDER 25%: The policy requires a ministerial permit for agricultural and nonagricultural development on slopes between 15-24% or between 10 and 15% on highly erodible soils:

"A ministerial permit process shall be developed and implemented for proposed development, including for purposes of this policy conversion of previously uncultivated lands, on slopes between 15- and 24-percent (15-24%), and 10- to 15-percent (10-15%) on highly erodible soils." Policy OS 3.5.

Again, no performance criteria or exemplary measures are provided for the conditions on such a ministerial permit other than that it must require an unspecified erosion control plan to address slope stabilization, and drainage and flood hazards. Again, this unspecified ministerial permit process for agricultural development does not provide any substantial evidence to support a finding that erosion and sedimentation effects of the 2007 General Plan would be less than significant. And it does not actually implement Goal OS-3, to prevent soil erosion and enhance water quality

ROUTINE AND ONGOING AGRICULTURAL ACTIVITIES EXEMPTED: All Routine And Ongoing Agricultural Activities ("ROAA") other than slope conversions are exempt from the permit process and conditions to be developed under Policy OS 3.5. ROAA includes many activities that may contribute to erosion and sedimentation, including grazing; conversion to other agricultural uses; planting, harvesting, cultivation, tillage, irrigation, and soil preparation activities; maintenance of sediment, drainage, and erosion control systems; and maintenance of roads, trails, and parking. See Policy AG 3.3. For example, the DEIR admits that agricultural practices related to growing strawberries and grapes cause erosion and sedimentation, independent of the conversion of previously uncultivated land for these purposes. DEIR, pp. 4.3-20 to 21, 4.3-107. And the table of 303d water bodies identifies range grazing, both upland and riparian, as a source of sedimentation. DEIR, 4.3-56.

Because the DEIR presents no justification for exempting ROAA from the permit process, the DEIR does not provide any substantial evidence to support a finding that erosion and sedimentation effects of the 2007 General Plan would be less than significant. And Policy OS 3.5 does not actually implement Goal OS-3, to prevent soil erosion and enhance water quality with respect to ROAA.

2. Cumulative Impacts Not Adequately Addressed

The DEIR concludes that sedimentation and erosion impacts will be less than cumulatively considerable, based on RWQCB regulations and proposed policies, including the entirely undefined future program to evaluate and address cumulative impacts from agricultural land conversions through Policy OS 3.9. DEIR, p. 6-10.

Cumulative impact analysis must answer two questions: 1) is the impact of past, current and foreseeable future projects cumulatively significant, and 2) does the project under review make a considerable contribution to the cumulative impact. CEQA

Guidelines, §§ 15130(a), 15065(a)(3). The DEIR's answers to these questions are not clear or adequate.

Since the DEIR lists a number of water bodies that the RWQCB has identified as suffering from sedimentation, there should be no doubt about the answer to the first question: sedimentation impacts are already cumulatively significant. DEIR, pp. 4.3-54. The EIR must clarify whether its conclusion rests on the assumption that *only* the water bodies listed as impaired for sediment suffer cumulatively significant impacts, or will suffer sediment impacts in the future. If not, please identify each water body that was considered that *may* suffer cumulatively significant sedimentation impacts as a result of past, present, or probable future development.

The EIR must also identify which areas will suffer cumulatively significant erosion impacts.

Despite identification of 303d impaired water bodies, the DEIR claims that "[t]he RWQCB's conditional agricultural waiver program is preventing sediment-laced runoff from agricultural land." The claim that RWQCB's conditional agricultural waiver program is preventing sediment-laced runoff from agricultural land appears to suggest that the County does not acknowledge that cumulative impacts are already significant. Please clarify this. Please identify the referenced RWQCB's conditional agricultural waiver program. Please reconcile the admission that there are numerous stream segments on the 303d list that are impaired by agriculturally-caused sediment with the claim that the RWQCB's conditional agricultural waiver program is preventing sediment-laced runoff from agricultural land. Again, we note that the current RWQCB Basin Plan identifies only two waivers of Waste Discharge Requirements and reporting requirements applicable to agriculture: #20, for irrigation return water where sediment meets turbidity objectives and discharge is not toxic; and #16, for agricultural commodity wastes. RWQCB, Central Coast Region, Water Quality Control Plan, Appendix A-23. Neither of these waivers appears to be focused on regulating irrigation on steep slopes in particular.

The DEIR also appears to be relying on the RWQCB TMDL program. The DEIR identifies only one water body for which a sedimentation TMDL has been adopted. TMDLs for other sediment impaired water bodies are not expected for years, *e.g.*, for Elkhorn Slough the estimated completion of a TMDL is 2015 and for Moro Cojo Slough and Moss Landing Harbor a TMDL will not be completed until 2019. The DEIR cannot reasonably base a finding that cumulative impacts will not be significant on TMDL programs that has not yet been formulated, and which will take years to work even when they are implemented.

The other bases for the DEIR's conclusion that the future development under the 2007 General Plan will not make a considerable contribution to significant cumulative erosion and sedimentation impacts are Policies OS 3.5 and 3.6 regulating slope development; Policy 3.8 requiring the county to cooperate with appropriate regional, state and federal agencies to provide public education/outreach and technical assistance programs on erosion and sediment control; Policy OS 3.9 to establish a program to

address cumulative impacts of agricultural conversion; and Policy OS 5.7 requiring that forestry projects prepare a Timber Harvest Plan. As set out below, these policies are not a sufficient basis for this conclusion.

Policies OS 3.5 and 3.6 regulate individual development projects and do not even purport to consider cumulative impacts. Mitigation of a particular project's individually significant impacts does not ensure that cumulative impacts will be avoided because a project may make a considerable contribution to a significant cumulative impact even if its own impacts are not individually significant. CEQA Guidelines, §§ 15355(b) (cumulative impacts can result from individually minor but collectively significant projects), 15065(a)(3) (impacts may be individually limited but cumulatively considerable). Furthermore, as discussed above, there is essentially no content to Policy 3.5, which calls for future development of a complex permitting system but which does not contain any performance specifications or proposed conditions on development. And there is no basis identified in Policy 3.6 to conclude that cumulative impacts would be avoided.

Policy 3.8 does not mandate any specific program, and does not require the County to do anything other than "cooperate" with technical assistance programs. Policy OS 5.7 does not mandate anything that is not already mandated by other regulations and only addresses timber harvesting.

Please explain how each of the cited policies can be expected to address cumulative impacts in light of the defects identified in the discussion of OS 3.5 above and the discussion of the other policies in the Table of Erosion and Sedimentation Policies below. Please address all sources of erosion and sedimentation, including slope development and conversion of previously uncultivated agricultural land.

Policy OS 3.9 is the only policy explicitly addressing cumulative erosion and sedimentation impacts. However, this policy cannot constitute a meaningful basis for the DEIR's conclusion that the contributions from future development will not be cumulatively considerable because the policy has no actual substantive content:

"The County will develop a Program that will address the potential cumulative hydrologic impacts of the conversion of hillside rangeland areas to cultivated croplands. The Program will be designed to address off-site soil erosion, increased runoff-related stream stability impacts and/or potential violation of adopted water quality standards. The County should convene a committee comprised of county staff, technical experts, and stakeholders to develop the Program, including implementation recommendations." Policy OS-3.9, 2007 General Plan, p. C/OS-9.

The policy calls for an entirely unspecified "program" to be developed at some unspecified point in the future. There is no *hint* of the measures that might be considered and implemented, or the performance standards that might be imposed, through the to-bedeveloped program. The policy as written calls for conducting a study and then

following its recommendations – exactly the kind of mitigation measure that CEQA does not permit. *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 794. No provision is made for interim measures pending completion of this program. Thus, the policy as written cannot form the basis of a conclusion that future impacts will not be cumulatively considerable.

Policy OS 3.9 implicitly acknowledges that unless the County takes some action, the conversion of hillside rangeland areas to cultivated croplands *will* result in considerable contributions to cumulatively significant erosion and sedimentation. Accordingly, the County is obliged to provide some substantive program or policies to address this impact or to admit that it remains significant and unavoidable.

3. Other Policies And Additional Mitigation Measures Purporting to Address Erosion And Sedimentation Are Inadequate

The remaining policies and additional mitigation measures cited by the DEIR do not provide substantial evidence that erosion and sedimentation impacts will be less than significant. Essentially all of the policies and additional mitigation measures identified as the basis for the conclusion that impacts will be less than significant suffer from one of more to the following defects:

- deferred without any performance criteria or examples of potential measures, thus failing to meet CEQA's requirements for deferred formulation of mitigation measures (e.g., OS3.1 calling for future establishment and enforcement of unspecified BMPs, making no reference to any performance standards and providing no examples)
- deferred without deadline for completion or interim measures (e.g., OS 3.3 development of criteria for studies to evaluate and address hydrologic constraints and hazards conditions shall be established for new development)
- non-mandatory and unenforceable measures (e.g., OS 3.2 support soil conservation and restoration programs and encourage voluntary efforts)
- exceptions that make policies unpredictable or unenforceable (e.g., OS 3.5, as discussed above or see comments on exceptions to AG 3.3's exemptions below)
- exemptions that render the policy inapplicable to development that will cause impacts (e.g., AG 3.3 exempts Routine and Ongoing Agriculture from a list of GP Policies to the extent specified by those policies, including the partial exemption of conversion of uncultivated land on slopes under OS 3.5).

The table set forth below lists each policy or mitigation measure cited as the basis of the conclusion in WR-1, WR-2, WR-3, WR-10, GEO-5, and CUM-2 that erosion and

sedimentation impacts would be less than significant. The table identifies and discusses the specific inadequacies of each policy.

We ask that the comment responses address <u>each</u> identified policy deficiency.

We ask that the responses explain with reference to <u>each</u> listed policy how, in light of the deficiencies identified, the policy can support the DEIR's conclusions that future development projects will not result in significant erosion and sedimentation impacts and that future development will not make a considerable contribution to cumulatively significant erosion and sedimentation impacts.

DOLLGIES AND MURICAPION MEASURES OFFEN IN DELD AS THE DASIS FOR

CONCLUDING THAT EROSION AND SEDIMENTATION IMPACTS WILL BE LESS		
THAN SIGNIFICANT		
POLICIES AND MITIGATION CITED IN WR-2, WR-3, WR-10, GEO-5, AND CUM-2 PURPORTING TO AVOID, MINIMIZE, OR MITIGATE EROSION AND SEDIMENTATION	COMMENTS	
POLICIES APPLICABLE COUNTY-WIDE	GENERAL COMMENT: For each policy, please address the identified concerns by revising the policy and/or explaining how, in light of these concerns, the policy can provide a foundation for the DEIR's conclusion that erosion and sedimentation impacts will be less than significant.	
Goal AG-3 Assure that the County's land use policies do not inappropriately limit or constrain "routine and ongoing agricultural activities"	 At page 4.3-108, the DEIR states that "Goal AG-3 and its policies exempt routine and ongoing activities from many County permit requirements that would otherwise be interpreted as applicable, except for activities that create significant soil erosion impacts or violate adopted water quality standards." The individual policies that purport to implement Goal AG-3 are listed below. 	
AG–3.1 "Routine and Ongoing Agricultural Activities" shall be allowed pursuant to the policies in this plan. Activities that may have significant impacts are subject to a greater level of review.	• This policy is not coordinated with Policy AG 3.3 creating exemptions from General Plan policies so it is not clear how "activities that may have significant impacts" will be subject to a "greater level of review." If this policy actually adds any meaningful additional constraint to Policy AG 3.3, the DEIR should explain what that constraint is. For example, does this policy purport to provide for individual, farm-by-farm review and permitting of activities that would otherwise be exempted under Policy 3.3? If so, how will this be implemented and monitored, e.g., how will individual farms with 'significant impacts" be made subject to a greater level of review? If the policy does not add any additional review of individual farms or activities, then what does this policy actually add to Policy 3.3?	

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT EROSION AND SEDIMENTATION IMPACTS WILL BE LESS THAN SIGNIFICANT

AG-3.2 In order to encourage the continuation and	• This policy does not contain any substantive
economic viability of the agricultural industry, the County	content related to erosion and sedimentation – it
shall work with the agricultural industry and state and	merely evinces an intent to streamline permitting,
federal agencies to streamline permit procedures for	which can only have the effect of increasing the
"Routine and Ongoing Agricultural Activities" as	chance that erosive practices would not be
enumerated in policy.	regulated.
AG-3.3 In lands with a Farmlands, Permanent Grazing, or	• The policy calls for a general exemption, but also
Rural Grazing land use designation, farming and ranching	states that certain activities will be excepted from
activities that are "Routine and Ongoing Agricultural	that exemption. Does the County plan to identify
Activities" should be exempted from the General Plan	the to-be-excepted "activities that create
policies listed below to the extent specified in those	significant soil erosion impacts or violate adopted
policies except for activities that create significant soil	water quality standards" on an individual basis
erosion impacts or violate adopted water quality	(farm-by-farm) or on a categorical basis (e.g.,
standards. The County shall, after consultation with the	new cultivation on land sloped over 15%)?
Agricultural Commissioner and with appropriate review	• If exceptions are to be identified individually
by the Agricultural Advisory Committee, establish by	(farm-by-farm), in what context will these
ordinance a list of "Routine and Ongoing Agricultural	exceptional impacts be identified? If ROAA are
Activities" that can, in harmony with General Plan goals	not required to obtain any permits, it would be
and in accordance with State and Federal law, be	necessary to monitor individual farming activity
exempted from the listed General Plan policies as	to determine whether it should or should not be
described. Activities to be considered for inclusion in the	treated as exempt. What monitoring and
list of "Routine and Ongoing Agricultural Activities" may	enforcement program will be implemented to
include, but are not limited to:	identify "exceptional" activities on a farm-by-
a. pasture and rangeland management;	farm basis?
b. conversion of agricultural land to other agricultural	• The listing of activities potentially to be
uses;	exempted suggests that the exceptions for
c. preparation of product for market, and delivery of	activities that create significant soil erosion
product to market;	impacts or violate water quality standards will
d. planting, harvesting, cultivation, tillage, selection,	also be categorical rather than individual. If so,
rotation, irrigation, fallowing, and all soil preparation	how will the policy take into account the
activities;	geographic differences in erosion potential? For
e. raising of livestock, poultry, fur bearing animals,	example, cultivation on slopes may be highly
dairying, or fish;	erosive in some areas but acceptable in others.
f. maintenance of sediment basins, stock ponds, irrigation	 No performance standards are provided to
and tail water return systems, stream bank and grade	determine which activities would "create
stabilization, water retention and pumping facilities,	significant soil erosion impacts or violate adopted
erosion control and surface drainage activities;	water quality standards." What are "significant
g. maintenance of farm access roads, trails, and parking	soil erosion impacts?" Will this be determined
h fancing correls enimel hendling facilities:	with reference to a soil loss metric or with
i. renching, corrars, annual handning facilities;	reference to particular categories of activities?
i. Emergency activity that protects the health and safety of	• The policy states that the to-be-developed
J. Emergency activity that protects the health and safety of	ordinance will also specify "County permit
the general public.	requirements for specific 'Routine and Ongoing
"Routine and Ongoing Agricultural Activities" are exempt	Agricultural Activities' consistent with these
from the following General Plan policies to the extent	exemptions, General Plan goals, and State and
specified by those policies: C-53 (Scenic Highway	Federal Law." This implies that some (but
Corridors) C-54 (Scenic Highway Corridors) OS-19	perhaps not all) ROAA will be subject to some
(views), $OS-1.12$ (scenic routes) $OS-3.5$ (slope) $OS-3.6$	form of permitting, despite their exemption from
(erosive soils), $OS-5.4$ (native vegetation), $OS-6.3$	the enumerated General Plan policies. This
(archaeological), OS-7.3 (paleontological), OS-8.3 (burial	would appear to create a more complex
sites). OS-10.8 (air quality). S-2 3 (floodplain) Further	permitting structure. What will be the basis of
	the permitting requirements for ROAA under this
modifications may be made in Area Plans as part of this	policy? What resource areas will be protected by
---	--
process	these permitting requirements? What
The ordinance to be enceted by the County will also	nese permitting requirements: what
identify County a smith a suinements for an acidia "Deutina	performance standards will have to be met?
identify County permit requirements for specific Routine	• Are these permit requirements intended to be in
and Ongoing Agricultural Activities" consistent with	lieu of permit requirements that would be
these exemptions, General Plan goals, and State and	applicable to activities that are not included in the
Federal Law.	to-be developed list of ROAA? How do these
	permit requirements relate to the to-be-developed
	discretionary and ministerial permit requirements
	mentioned in Policy OS 3 5? That is are the
	nermit requirements that are to be developed
	under this policy distinct and applicable only to
	formation of the state of the s
	farming activity that is not subject to any
	permitting under Policy OS 3.5, or would the
	permitting requirements overlap somehow? How
	can the DEIR conclude that this complex and to-
	be-developed permitting structure will streamline
	and simplify permitting?
	• Will there be a class of farming activities that are
	not subject to <i>any</i> permitting requirements under
	this policy? How will they be identified?
	• In sum, the policy entirely defers the
	identification of ROAA that will be exempted
	from general plan policies, the basis for that
	exemption, and the "permit requirements" that
	would be imposed. Because these activities have
	not been identified, because no standard has been
	identified for "significant soil erosion impacts."
	because no basis whatsoever is specified for
	future "permit requirements" and because no
	consideration is given to cumulative impacts the
	DEIR cannot reasonably rely on this policy to
	accordude that there will in fact he as significant
	conclude that there will inflact be no significant
	son erosion impacts from KOAA or that KOAA
	will not result in a considerable contribution to
	cumulatively significant soil impacts.
AG-5.1 Programs that reduce soil erosion and increase	• Does not identify or mandate any program.
soil productivity shall be supported	 Policies that "support," "promote," or
	"encourage" activities and programs do not
	create any enforceable constraints on
	development projects.
	• No performance criteria for "programs" are
	specified.
	• No exemplary measures for "programs" are
	identified.
AG-5.2 Policies and programs to protect and enhance	• Does not identify or mandate any policies or
surface water and groundwater resources shall be	programs.
promoted, but shall not be inconsistent with State and	• Policies that "support," "promote," or
federal regulations.	"encourage" activities and programs do not
	create any enforceable constraints on
	development projects.

	 No performance criteria for "policies and programs" are specified. No exemplary measures for "policies and programs" are identified.
OS-3.1 Best Management Practices (BMPs) to prevent and repair erosion damage shall be established and enforced.	 Formulation of BMP is deferred. No exemplary BMPs are identified. No performance criteria for BMPs are specified. No interim measures are required prior to formulation of the BMPs. No deadline for formulation of BMPs is specified.
OS-3.2 Existing special district, state, and federal soil conservation and restoration programs shall be supported. Voluntary restoration projects initiated by landholders, or stakeholder groups including all affected landowners, shall be encouraged.	 Does not identify or mandate any programs. Policies that "support," "promote," or "encourage" activities and programs do not create any enforceable constraints on development projects.
OS-3.3 Criteria for studies to evaluate and address through appropriate designs and BMPs geological and hydrologic constraints and hazards conditions such as slope and soil instability, moderate and high erosion hazards, and drainage, water quality and stream stability problems created by increased stormwater runoff shall be established for new development and changes in land use designations.	 Formulation of criteria is deferred. No performance criteria for the content of this policy are provided, which is unsurprising since the very object of this policy is to defer the formulation of criteria to the future. The apparent object of the policy is to formulate criteria for future <i>studies</i> to evaluate hydrologic constraints and hazard conditions for new development. Thus, the policy does not require formulation of any criteria for the actual designs and BMPs that would be required actually to <i>address</i> these constraints and hazard conditions. It is not clear who would be required to <i>use</i> the criteria that are to be developed in conducting studies "to evaluate and address through appropriate designs and BMPs geological and hydrologic constraints and hazards conditions." Is the point of this policy to establish criteria to be used in future studies for site-specific designs and BMPs in connection with individual development projects? Or is the point to establish criteria for studies that will lead to "designs and BMPs" of wider applicability? Who must conduct these studies and in what context? No deadline for formulation of the criteria is specified. No criteria are specified to identify what slopes
OS-3.4 Those areas where slopes pose sever constraints for development shall be mapped in the County's GIS. The information shall be updated at least every five (5) years.	 No criteria are specified to identify what slopes would pose "severe constraints for development." No use is identified for the information to be developed. For example, this policy is not

referenced by Policy S-1.2 calling for even development and maintenance of a "Geolog Constraints and Hazards Database," Policy 3.5 regulating slope development, or Policy 2.6 calling for development and maintenance	tual 3ic
 Discuting for development and maintenant "Hydrologic Resources Constraints and Ha Database." Merely collecting the information we constrain development permitting is of no v on the constrain development permitting is of no v. No deadline for mapping this data is specified pending completion of the mapping. OS-3.5 The County shall prohibit development on 	OS- PS- ze of a zards on uld value. ied.
slopes greater than 30%. It is the general policy of the	
• Reference to Poncy PS-2.7 makes no sense	, since
county to require dedication of scenic easement on a that Policy refers to incentive programs to	. 1
exception to allow development on slopes of 30% or	
greater may be granted at a noticed public hearing by	lling
the approving authority for discretionary permits or by	mig
the Planning Commission for building and grading	,
permits. The exception may be granted if one or both	
of the following findings are made, based upon	
substantial evidence:	
A) there is no alternative which would allow development	
to occur on slopes of less than 30%; or,	
B) the proposed development better achieves the resource	
protection objectives and policies contained in the	
Monterey County General Plan, accompanying Area Plans and L and Use Plans, and all applicable master	
plans	
A permit process will be established as follows:	
1. A discretionary permit process for development on	
slopes greater than 25-percent (25%) or that contain	
geologic hazards and constraints shown on the	
County's GIS Geologic (<i>Policy S-1.2</i>) or Hydrologic	
(Policy PS-2.7) Hazard Databases shall be established.	
The process shall be designed to:	
a. evaluate possible building site alternatives that better	
meet the goals and policies of the general plan.	
b. identify development and design techniques for	
erosion control, slope stabilization, visual mitigation,	
dramage, and construction techniques.	
unstable slopes, soil and geologic conditions, or sewage	
disposal pose substantial risk to public health or safety	
2. The County shall develop and implement an	
Agricultural Permit process for the conversion, for	
agricultural purposes, of previously uncultivated lands	
on slopes in excess of 25-percent (25%). An Agricultural	
Permit shall recognize unique grading criteria for	
agricultural purposes and the process shall include	
criteria when a discretionary permit is required. Projects	

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR		
CONCLUDING THAT EROSION AND SEDIMENTATION IMPACTS WILL BE LESS		
THAN SIGNIFICANT		
THAN SIGNIFICANT that are subject to a State Agricultural Waiver Program, Agricultural Registration Program, or other similar program that regulates irrigation of agricultural land on steep slopes or projects where only a small portion of the affected area has slopes in conflict with this policy shall be allowed with a ministerial permit that requires compliance with the criteria developed for the following resource areas: a. Water Quality/Water Supply b. Biological Resources c. Cultural Resources d. Erosion Control e. Drainage f. Flood Hazards 3. A ministerial permit process shall be developed and implemented for proposed development including for		
uncultivated lands, on slopes between 15- and 24-percent (15-24%), and 10- to 15-percent (10-15%) on highly erodible soils.		
 4. The permit processes shall be designed to require that an erosion control plan be developed and implemented that addresses slope stabilization, and drainage and flood hazards. 5. All Routine and Ongoing Agricultural Activities, except for conversion of previously uncultivated lands as 		
described in this policy above, are exempt from the above		
 OS-3.6 Except in Community Areas where Community Plans or Specific Plans are adopted (<i>Policy LU-10.4</i>), areas designated as Medium Density Residential or High Density Residential, or in areas designated as commercial or industrial where residential use may be allowed, a formula based on slope shall be established to calculate the maximum possible residential density for individual parcels. a. Those portions of parcels with cross-slope of between zero and 19.9-percent shall be assigned one (1) building site per each one (1) acre. b. Those portions of parcels with a cross-slope of between 20 and 29.9-percent shall be assigned one (1) building site per each two (2) acres. c. Those portions of parcels with a cross-slope of 30- percent or greater shall be assigned zero building sites. d. The density for a particular parcel shall be computed by determining the cross-slope of the various portions of the parcel applying the assigned densities listed above according to the percent of 	 Nothing in the DEIR explains how this policy relates to erosion and sedimentation impacts. Nothing in the policy takes into account the site-specific constraints other than slope, including vegetative cover and soil types. The EIR must explain how specifically the policy was developed to address erosion and sedimentation impacts and how it supports a finding that erosion and sedimentation impacts will be less than significant, if it does support such a finding. Policies that "support," "promote," or "encourage" activities and programs do not create any enforceable constraints on development projects. The EIR should explain why clustering is merely "encouraged" rather than mandated to control development on slopes over 25%. The policy would allow extremely low density development or a single family home despite non-compliance with unspecified "plan policies." The EIR must explain how permitting 	
cross-slope and by adding the densities derived from this process. The maximum density derived by the procedure shall be used as one of the factors in final	development on parcels on which it would otherwise be barred by other policies purporting to control erosion and sedimentation is consistent	

determination of the actual density that shall be allowed on a parcel.Clustering is encouraged as a technique to avoid development on slopes over 25-percent (25%). Where an entire parcel would not be developable because of plan policies, an extremely low density of development or single family home will be allowed, as appropriate.	 with a finding that erosion and sedimentation impacts will in fact be controlled. This policy would allow some development to occur on any parcel, regardless of slope, soil conditions, and other hazards. No criteria are specified to determine whether an extremely low density of development or a single family home will be allowed, as "appropriate." This policy appears to relate only to residential uses, but the language in Policy AG 3.3 indicates that it is at least potentially applicable to agricultural activities. How will this policy be applied to constrain agricultural activities that are not included in the to-be-developed list of routine and ongoing agricultural activities that are specifically exempted from this policy under Policy AG 3.3? That is, what agricultural activities
OS-3.7 Voluntary preparation and implementation of a coordinated resources management plan shall be encouraged in watersheds of State designated impaired waterways.	 Does not identify or mandate any program Policies that "support," "promote," or "encourage" activities and programs do not create any enforceable constraints on development projects
OS-3.8 The County shall cooperate with appropriate regional, state and federal agencies to provide public education/outreach and technical assistance programs on erosion and sediment control, efficient water use, water conservation and re-use, and groundwater management. This cooperative effort shall be centered through the Monterey County Water Resources Agency.	 Does not identify or mandate any program "Cooperation" does not commit County to any specific efforts
OS-3.9 The County will develop a Program that will address the potential cumulative hydrologic impacts of the conversion of hillside rangeland areas to cultivated croplands. The Program will be designed to address offsite soil erosion, increased runoff-related stream stability impacts and/or potential violation of adopted water quality standards. The County should convene a committee comprised of county staff, technical experts, and stakeholders to develop the Program, including implementation recommendations.	 See discussion of cumulative sediment impacts, above. The policy has no substantive content and formulation of the program it calls for is entirely deferred with no performance standards or examples. The policy provides no substantive basis to support a conclusion that cumulative impacts will be less than significant or that development allowed by the 2007 General Plan will not make considerable contributions to that impact.
OS-5.7 Proposals for harvesting commercially valuable timber or as a part of a Timberland Conversion Project (as defined by the California Department of Forestry) shall: a. include filing of a Timber Harvest Plan that provides for selective, sustained yield harvesting and reforestation, and erosion control; b. consider opportunities for concurrent and subsequent use of publicly owned timber land for public recreation; c. require approval by the California Department of	 Policy does not mandate any controls on erosion and sedimentation that are not already in effect through the CDF regulations. Policy only applies to timber operations, which are not identified by the DEIR as a substantial potential source of erosion and sedimentation.

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT EROSION AND SEDIMENTATION IMPACTS WILL BE LESS THAN SIGNIFICANT Forestry; e. complete environmental review by the County and other appropriate agencies; and f. comply with the resource protection goals and policies of this General Plan **PS-2.5** Regulations shall be considered for water quality • Policy does nothing to prevent or control erosion testing for new individual wells on a single lot of record and sedimentation. to identify: Policy does not actually require that regulations • be adopted, only "considered." a. Water quality testing parameters for a one-time Policy does nothing to prevent other water • required water quality test for individual wells at the time quality problems; it simply calls for some of well construction. unspecified testing program to see if the aquifer b. A process that allows the required one-time water has been polluted. quality test results to be available to future owners of the well. c. Regulations pursuant to this policy shall not establish criteria that will prevent the use of the well in the development of the property. d. Agricultural wells shall be exempt from the regulation. **PS-2.6** A Hydrologic Resources Constraints and Hazards This policy is apparently to be used to identify Database shall be developed and maintained in the County areas that would require discretionary permits Geographic Information System (GIS). The GIS shall be under Policy OS 3.5, although this is not stated used to identify areas containing hazards and constraints here. Please clarify. (see *Policy S-1.2*) that could potentially impact the type or • Policy S 1.2 calls for developing a "Geologic level of development allowed in these areas (Policy OS-Constraints and Hazards Database." It is not 3.5). Maps maintained as part of the GIS include: clear how the "Hydrologic Resources Constraints and Hazards Database" called for under Policy a. Impaired water bodies on the State Water Resources 2.6 differs, particularly since Policy 2.6 Control Board 303d list. references Policy S 1.2 in connection with b. Important Groundwater Recharge Areas identifying areas containing hazards and c. 100-year Flood Hazards constraints. d. Hard rock areas with constrained groundwater No criteria are provided to identify areas • e. Areas of septic tank leachfield unsuitability containing hazards and constraints, including Hydrologic Resources Constraints and Hazards. Although Policy S 1.2 requires mapping impaired water bodies on the State Water Resources Control Board 303d list, there is no indication how that information would be used to constrain development. Nor is there any indication how identification of other Hydrologic Resources Constraints and Hazards would constrain development. The EIR must explain how this policy would be implemented to regulate development. No deadline for completing the database is • provided and no interim measures are specified. **PS-2.7** As part of an overall conservation strategy and to • Does not identify or mandate any program. Area improve water quality, Area Plans may include incentive Plans may or may not include incentive programs that encourage owners to voluntarily take programs. cultivated lands on slopes with highly erosive soils out of • Policies that "support," "promote," or production "encourage" activities and programs do not

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT EROSION AND SEDIMENTATION IMPACTS WILL BE LESS THAN SIGNIFICANT create any enforceable constraints on development projects • No explanation of the nature of allowable incentives is provided. If incentives require expenditure of County resources, they will not be demonstrably feasible unless the EIR identifies the source of those resources. If incentives are to include development or land use concessions, the concessions should be identified and the secondary environmental effects should be evaluated. **S-1.1** Land uses shall be sited and measures applied to No criteria are provided to identify high and reduce the potential for loss of life, injury, property moderate hazard susceptibility areas. damage, and economic and social dislocations resulting It is unclear that this policy relates at all to • from ground shaking, liquefaction, landslides, and other erosion and sedimentation hazards. geologic hazards in the high and moderate hazard • No explanation is provided as to how land uses susceptibility areas. should be "sited" or what "measures applied" to control risk. The policy does not create any enforceable mandate. S-1.2 A Geologic Constraints and Hazards Database shall This policy is apparently to be used to identify • be developed and maintained in the County Geographic areas that would require discretionary permits Information System (GIS). The GIS shall be used to under Policy OS 3.5, although this is not stated identify areas containing hazards and constraints (see here. *Policy PS-2.6*) that could potentially impact the type or S 1.2 does not contain criteria for key terms such level of development allowed in these areas (Policy OSas "highly erodible soils," "moderate and high 3.5). Maps maintained as part of the GIS include: erosion hazards," "steep slope constraints," or a. Active Regional Faults "relative landslide susceptibility," so the public b. Relative Seismic Shaking Hazards has no idea what terrain would require a c. Relative Landslide Susceptibility discretionary or ministerial permit. These terms d. Relative Earthquake Induced Liquefaction must be defined and justified with reference to a Susceptibility technical analysis that considers the actual effects e. Steep Slope Constraints (see *Policy OS-3.5*) of allowing development. f. Coastal Erosion No criteria are provided to identify areas g. Moderate and High Erosion Hazards containing hazards and constraints, including A h. Highly Erodible Soils Geologic Resources Constraints and Hazards. There is no indication how information in the database would be used to constrain development. The EIR must explain how this policy would be implemented to regulate development. No deadline for completing the database is provided and no interim measures are specified. **S-1.3** Site-specific geologic studies may be used to verify The policy does not mandate uses of site-specific the presence or absence and extent of the hazard on the geologic studies; it merely provides that they property proposed for new development and to identify "may" be used. mitigations for any development proposed. An ordinance The policy adds nothing more than should including permit requirements relative to the siting and already be done under CEQA review. design of structures and grading relative to seismic the development of the ordinance is deferred and • hazards shall be established. no performance standards or exemplary measures

	are provided. The public has no idea what perm
	requirements might be developed under this
	policy.
S-1.6 New development shall not be permitted in areas of	 No criteria are provided for key terms including
known geologic or seismic hazards unless measures	"High relative provided for Key terms including
recommended by a California cortified angineering	Moderate on high relative londalide
recommended by a Camorina certified engineering	Moderate or high relative landshoe
geologist or geotechnical engineer can be implemented to	susceptibility," and ". Coastal erosion and
reduce the hazard to an acceptable level. Areas of known	seacliff retreat."
geologic or seismic hazards include:	• No criteria are provided for an "acceptable level
a. Moderate or high relative landslide	of hazards.
susceptibility.	• The areas of "known geologic or seismic
b High relative erosion susceptibility	bezerde" are not identified and no procedure for
c. Moderate or high relative liquefaction	nazards are not identified and no procedure for
eussentibility	identifying them is provided. If they are to be
susceptionity.	identified via Policies S 1.2 and PS 2.6, then not
d. Coastal erosion and seacliff retreat.	that these policies in turn lack any criteria for
e. Tsunami run-up hazards.	hazard areas.
S-1.7 Site-specific reports addressing geologic hazard	• The only portion of this policy that may relate to
and geotechnical conditions shall be required as part of	erosion is the provision requiring a report for
the planning phase and review of discretionary	aroas of "high landslide suscentibility" but
development antitlements and as part of review of	areas of high failusing susceptionity, but
development entitlements and as part of review of	no criteria are provided for the term mgn
ministerial permits in accordance with the California	landslide susceptibility."
Building Standards Code as follows:	• The requirement for "appropriate site-specific
a. Geotechnical reports prepared by State of	mitigation" lacks any performance standards and
California licensed Registered Geotechnical Engineers are	no exemplary measures are provided.
required during building plan review for all habitable	
structures and habitable additions over 500 square feet in	
footprint area Additions less than 500 square feet and	
non-habitable buildings may require geotechnical reports	
as determined by the pro-site inerpetion	
as determined by the pre-site inspection.	
b. A Registered Geotechnical Engineer shall be	
required to review and approve the foundation conditions	
prior to plan check approval, and if recommended by the	
report, shall perform a site inspection to verify the	
foundation prior to approval to pour the footings.	
Setbacks shall be identified and verified in the field prior	
to construction.	
c. All new development and subdivision	
applications in State- or County-designated Farthqueka	
Fault Zones shall provide a geologic report addressing the	
raut zones shan provide a geologic report addressing the	
potential for surface fault rupture and secondary	
tracturing adjacent to the fault zone before the application	
is considered complete. The report shall be prepared by a	
Registered Geologist or a Certified Engineering Geologist	
and conform to the State of California's most current	
Guidelines for evaluating the hazard of surface fault	
rupture.	
d Geologic reports and supplemental	
geotechnical reports for foundation design shall be	
required in group with moderate or high landslide or	
required in areas with moderate or high landslide or	
Inquefaction susceptibility to evaluate the potential on-	
and off-site impacts on subdivision layouts, grading, or	
building structures.	

 e. Where geologic reports with supplemental geotechnical reports determine that potential hazards effecting new development do not lead to an unacceptable level of risk to life and property, development in all Land Use Designations my be permissible, so long as all other applicable General Plan policies are complied with. f. Appropriate site-specific mitigation measures and mitigation monitoring to protect public health and safety, including deed restrictions, shall be required. S-1.8 As part of the planning phase and review of discrete protect public health and safety. 	• The critical terms are not defined with reference
discretionary development entitlements and as part of review of ministerial permits in accordance with the California Building Standards Code, new development may be approved only if it can be demonstrated that the site is physically suitable and the development will neither create nor significantly contribute to geologic instability or geologic hazards.	to any performance criteria. The EIR must explain what "physically suitable" and "significantly contribute to geologic hazards" mean in the context of erosion and sedimentation.
S-1.9 A California licensed civil engineer or a California licensed landscape architect can recommend measures to reduce moderate and high erosion hazards in the form of an Erosion Control Plan.	 The measure is permissive ("can recommend") not mandatory ("shall recommend") so it creates no enforceable mandate. The term "moderate and high erosion hazards" is not defined. No criteria are identified for an acceptable Erosion Control Plan and no exemplary measures are identified. Civil Engineers are appropriate for structural mitigations, but there are several other approaches to address erosion hazards that include process-based solutions, or the use of specific best management practices. Experts familiar with these other approaches include hydrologists, geomorphologists, and erosion control specialists.
S-3.1 Post-development, off-site peak flow drainage from the area being developed shall not be greater than pre- development peak flow drainage. On-site improvements or other methods for storm water detention shall be required to maintain post-development, off-site, peak flows at pre-development levels, where appropriate, as determined by the Monterey County Water Resources Agency.	 The policy <i>sounds</i> like it creates a binding standard in the first sentence, but that standard is undercut by the phrase "where appropriate" in the second sentence. Will the standard identified in the first actually have to be met by all development? If not, why not? What criteria would be used to make exceptions where "appropriate?" Furthermore, it is unclear how the policy will relate to the "runoff performance standards" that are to be developed under Policy S 3.5. Will the runoff performance standards to be developed under Policy S 3.5 be permitted to relax the requirement that post-development, off-site peak flow drainage from the area being developed shall not be greater than pre-development peak flow drainage? No procedure is specified to implement this policy. Will a hydrological study be required for

	every project? How will the policy be implemented for ministerially permitted projects? How will it be implemented for agricultural projects, including conversion of previously uncultivated land and routine and ongoing agricultural activities?
S-3.2 Best Management Practices to protect groundwater	• Formulation of BMP is deferred.
and surface water quality shall be incorporated into all	• No exemplary BMPs are identified.
development.	• No performance criteria for BMPs are specified.
	• No interim measures are required prior to
	formulation of the BMPs.
C 22 Determined for the second state of the se	• No deadline for formulation of BMPs is specified
S-3.3 Drainage facilities to mitigate the post-development	• It is unclear what the runoff standards would be.
concurrent with new development	See comments on S 5.1 and S 5.5.
concurrent with new development.	• It is unclear to which projects this policy applies. Will it apply to agricultural projects, including
	conversion of previously uncultivated land and
	routine and ongoing agricultural activities? If
	residential development on any slope? Will it
	apply where no discretionary permit is required?
	How will it be implemented?
S-3.5 Runoff Performance Standards that result in an	• This policy explicitly defers formulation of a
array of site planning and design techniques to reduce	performance standard to be used for future
storm flows plus capture and recharge runoff shall be	mitigation of development impacts, so it
developed and implemented, where appropriate, as	necessarily fails to include a performance
determined by the Monterey County Water Resources	standard.
Agency.	• If this policy would permit a runoff performance
	standard weaker than requiring that "post-
	development, off-site peak flow drainage from
	pre-development peak flow drainage " then it
	conflicts with Policy S 3.1. If it would permit
	more stringent runoff standards, then that should
	be clarified.
	• If the intent of this policy is to require not just the
	development of runoff performance standards but
	also the development of "an array of site
	planning and design techniques to reduce storm
	flows plus capture and recharge runoff," then the
	or examplery measures for those "cite planning
	and design techniques "
S-3.6 An inventory of areas where there is a high	 No criteria are provided to identify "areas where
probability of accelerated erosion, sedimentation, and/or	there is a high probability of accelerated erosion.
chemical pollution shall be maintained as part of the	sedimentation, and/or chemical pollution."
County's GIS mapping database.	• The policy is not referenced by OS 3.5, PS 2.6,
	or S 1.2 so it is unclear how it would be
	coordinated with those policies, if at all.
	• No explanation as to how this policy would
	constrain future development policies is

	provided.
S-3.7 The Monterey County Water Resources Agency shall prepare a Flood Criteria or Drainage Design Manual that established flood plain management policies, drainage standards and criteria, stormwater detention, and erosion control and stormwater quality protection measures in order to prevent significant impacts from flooding and ensure that development does not increase flooding risk over present conditions. The manual will include, as appropriate, hydrologic and hydraulic analysis procedures, procedures to assess stream geomorphology and stability, potential development impacts on streams and design guidelines for channel design, including biotechnical bank stabilization. Until the Drainage Design Manual is prepared, the County shall continue to apply existing policies and ordinances to manage floodplains and minimize flood risk, erosion control and water quality impacts.	 This policy explicitly defers formulation of a performance standard to be used for future mitigation of development impacts, so it necessarily fails to include a performance standard or to identify any exemplary measures. No examples or constraints are provided for the to-be-developed "appropriate, hydrologic and hydraulic analysis procedures, procedures to assess stream geomorphology and stability, potential development impacts on streams and design guidelines for channel design, including biotechnical bank stabilization." Application of "existing policies and ordinances to manage floodplains and minimize flood risk, erosion control and water quality impacts" in the interim is demonstrably insufficient to address erosion and sedimentation problems, in light of the 303d listings for sediment impaired water bodies. No authority under which "existing policies" could continue to be applied since the 2007 General Plan would supercede all existing policies. If this policy does purport to rely on continuation of a set of policies from the 1982 General Plan, it must specifically identify and reenact those policies as interim measures, and must ensure that these interim measures are consistent with allother policies in the 2007 General Plan.
S-3.8 To assist planners in determining potential inundation hazards for existing and future development, the County shall coordinate the periodic review, completion, and filing (with appropriate State and County Offices of Emergency Services) of inundation maps for all dams and levees whose failure could cause loss of life or personal injury within Monterey County. Where inundation maps indicate dam or levee failure could cause loss of life or property or personal injury, the corresponding responsible party shall investigate levee or dam stability and management, identifying emergency alert, evacuation, rehabilitation, and maintenance needs as appropriate.	The policy does not pertain to erosion or sedimentation.
Mitigation Measure BIO-2.1: Stream Setback Ordinance, DEIR p. 4.9-86 The county shall develop and adopt a county-wide Stream Setback Ordinance to establish minimum standards for the avoidance and setbacks for new development relative to streams. The ordinance shall identify standardized inventory methodologies and mapping requirements. A	• The DEIR asserts that proposed policies are sufficient and that no additional mitigation is necessary to address erosion and sedimentation caused by urban development or by agriculture and resource development in its discussion of water resources. DEIR, pp. 4.3-97 (WR-1), 4.3- 113 (WR-3). Apparently contradicting this conclusion, the DEIR then concludes that

stream classification system shall be identified to distinguish between different stream types (based on hydrology, vegetation, and slope, etc.) and thus allow application of standard setbacks to different stream types. The ordinance shall identify specific setbacks relative to the following rivers and creeks so they can be implemented in the Area Plans: Salinas, Carmel River, Arroyo Seco, Pajaro River, Nacimiento, San Antonio, Gabilan Creek, and Toro Creek. The ordinance may identify specific setbacks for other creeks or may apply generic setbacks based on the stream classification developed for the ordinance. The purpose of the ordinance will be to preserve riparian habitat and reduce sediment and other water quality impacts of new development.

The Stream Setback Ordinance shall apply to all discretionary development within the County and to conversion of previously uncultivated agricultural land (as defined in the General Policy Glossary) on normal soil slopes over 15% or on highly erodible soils on slopes over 10%.

additional mitigation in the form of a stream setback ordinance is needed to prevent erosion in its discussion of geological hazards: "However, the development and implementation of erosion control measures on steep slopes and areas of highly erodible soils can be challenging and often are only partially successful, and high erosion hazards are widespread throughout the County. Therefore, the potential remains for significant erosion hazards to occur from development on individual lots of record and new hillside agricultural cultivation projects. The 2007 General Plan policies and the existing federal, state, and local erosion control requirements do not adequately mitigate this potentially significant impact to a less-than-significant level. Mitigation Measure BIO-2.1 (see Section 4.9, Biological Resources) would reduce the significance of this impact." DEIR, p. 4.4-43. Please explain why DEIR deems the stream setback ordinance necessary to address erosion from hillside agricultural development but not to address sedimentation impacts from the same activity. These conclusions are inconsistent given that the primary focus of a stream setback ordinance is to prevent transport of sediment to streams as opposed to preventing the erosion itself.

- Setback ordinances only act to reduce surface erosion immediately adjacent to streams. However, sediment delivery to streams can occur whenever concentrated runoff associated with rills, gullies and ditches occurs, and such sources deliver sediment from sources far beyond setbacks. Extensive surface erosion processes associated with rills and gullies have been documented within the County.³
- This mitigation measure is deferred. Since the whole point of the measures is simply to postpone development of "minimum standards" for steam setbacks it violates CEQA's rules barring deferral without any performance standards.
- No reason is provided for deferring the formulation of this mitigation measure.
- The term "highly erodible soils" is not defined so there is no basis for determining to which development projects this ordinance would apply.

³ See e.g., Phillip Williams and Associates, Supplemental Carmel River Watershed Action Plan, prepared for The Planning and Conservation League Foundation in partnership with the Carmel River Watershed Conservancy.

considered in the Planning Area. Impacts on watersheds,

CACH-3.7 New development shall be sited to protect

local roads, flora and fauna shall be mitigated.

CONCLUDING THAT EROSION AND SEDI THAN SIGNIFICANT	MENTATION IMPACTS WILL BE LESS
	 No deadline for adoption of the ordinance is provided and no interim measures are required. As written the policy is not coherent because words appear to be missing. The policy refers to "minimum standards for the avoidance and setbacks for new development relative to streams." It is not stated what is to be "avoided." Because the policy does not identify what streams would be subject to the ordinance, other than 8 named streams, it is unclear to which steams it will apply. For example, will it apply to ephemeral streams? If not, why not? On what basis was it determined to which kinds of agricultural land conversions the mitigation measure would be applied? Absent a specific study, how did the DEIR conclude that streams setbacks need not be required for other agricultural conversions to prevent impacts? Furthermore, the terms "normal soils" and "highly erodible soils" are not defined, so there is no objective standard for applying or enforcing the policy.
POLICIES LIMITED TO SPECIFIC AREA PLANS	 GENERAL COMMENT: For each policy, please address the identified concerns by revising the policy and/or explain how, in light of these concerns, the policy can provide a foundation for the DEIR's conclusion that erosion and sedimentation impacts will be less than significant. For each policy, please explain why it is limited in application to a specific area plan and is not applied throughout the County.
CACH-3.3 Alteration of hillsides and natural landforms caused by cutting, filling, grading or vegetation removal shall be minimized through sensitive siting and design of all improvements and maximum feasible restoration. Where cut and fill is unavoidable on steep slopes, disturbed areas shall be re-vegetated.	 No criteria are provided for "sensitive siting and design of all improvements and maximum feasible restoration" The policy does not create an enforceable mandate because there are no criteria for "unavoidable" cut and fill (relative to what objectives?) and "maximum feasible restoration" (feasible within what constraints?)
CACH-3.5 Mining or commercial timber, or other resource production operations that include methods to screen areas, vehicle access, impacts on roadways, noise impacts, measures to control on site and off site drainage and reclamation plans for mined or quarried areas may be	• The policy is incoherent. What are "methods to screen areas, vehicle access, impacts on roadways, noise impacts, measures to control on site and off site drainage and reclamation plans for mined or quarried areas?"

•

•

•

the public.

Citing a policy that requires that "impacts . . .

The policy lacks any substantive content.

The term "minimize erosion" is not defined.

shall be mitigated" as the basis of a conclusion that impacts will be mitigated does not inform

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR С T

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riparian vegetation and threatened fish species, minimize erosion, and preserve the visual aspects of the Carmel and Arroyo Seco Rivers. Private property owners are encouraged to preserve the Carmel River in its natural state, to prevent erosion and protect fishery habitat. Fishery habitats located above the Los Padres and San Clemente Dams shall be maintained in a productive state accessible to fish populations, especially steelhead. CACH-4.1 Commercial mining, timber, and other	•	Unless the policy is to be implemented by banning development on the watershed, some criteria for acceptable levels of erosion must be specified. Policies that "support," "promote," or "encourage" activities and programs do not create any enforceable constraints on development projects No responsibility is assigned for ensuring that fishery habitats are maintained in a productive state accessible to fish populations, especially steelhead. Is this the responsibility of the County or of development proponents? Thus, there is no enforceable mandate. This policy should be implemented County-wide,
resource production operations shall be so designed that additional run-off, additional erosion or additional sedimentation will not occur off the project site.		but it should not be limited to commercial mining, timber, and other resource production operations. The DEIR should explain why this policy should not be applied globally, and specifically justify a recommendation not to apply it to any specific area with reference to information about the watershed's ability to absorb additional erosion and sedimentation.
CSV-1.1 Special Treatment Area: Paraiso Hot Springs - The Paraiso Hot Springs properties shall be designated a Special Treatment Area. Recreation and visitor serving land uses for the Paraiso Hot Springs Special Treatment Area may be permitted in accordance with a general development plan and other discretionary approvals such as subdivision maps, use permits and design approvals. The Special Treatment Area may include such uses as a lodge, individual cottages, a visitor center, recreational vehicle accommodations, restaurant, shops, stables, tennis courts, aquaculture, mineral water bottling, hiking trails, vineyards, and orchards. The plan shall address fire safety, access, sewage treatment, water quality, water quantity, drainage, and soil stability issues. (APN: 418- 361-004, 418-361-009, 418-361-021, 418-361-022)	•	This policy has no actual substantive content related to standards for erosion and sedimentation control. There are no performance standards or exemplary measures specified.
CSV-1.2 All recreation and visitor-serving commercial land uses shall require a use permit. Said uses on sites greater than 10 acres shall require a comprehensive development plan that addresses hydrology, water quantity and quality, sewage disposal, fire safety, access, drainage, soils, and geology.	•	This policy has no actual substantive content related to standards for erosion and sedimentation control. There are no performance standards or exemplary measures specified.
CSV-1.3 <u>Special Treatment Area:</u> <u>Spence/Potter/Encinal Roads</u> - The area generally along Potter, Spence and Encinal Roads, excluding large properties under cultivation located between Spence and Potter Roads, shall be designated as a Special Treatment Area to permit agricultural operations. The minimum parcel size in this area shall be 10 acres and subdivision of land may be approved only if the following	•	This policy has no actual substantive content related to standards for erosion and sedimentation control because the drainage management plan is not defined and because there are no standards for acceptable run-off to adjoining farmland. For example, how does this policy relate to policies S 3.1 and S 3.5 that apparently govern runoff standards County-wide?

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR		
CONCLUDING THAT EROSION AND SEDIMENTATION IMPACTS WILL BE LESS		
THAN SIGNIFICANT		
conditions are met:		
a. Residential uses are allowed only on parcels		
of 40 acres or more;		
b. A drainage management plan to mitigate		
run-off to adjoining farmlands must be prepared for the		
entire Special Treatment Area:		
c. One caretaker unit per 10 acres may be		
allowed; and		
d. That no uses other than agriculture,		
agricultural support services, labor contracting		
businesses, and agricultural equipment rental and		
maintenance businesses will be allowed on subdivided		
parcels.		
1		
(see also Policies GS-1.2 and CSV-1.4)		
CSV-5.1 Development shall be designed to maintain	٠	It is not clear how this policy relates to erosion
groundwater recharge capabilities on the property. To		and sedimentation. Please explain.
protect and maintain areas for groundwater recharge,		_
preservation of riparian habitats, and flood flow capacity,		
the main channels of the Arroyo Seco River and the		
Salinas River shall not be encroached on by development.		
CSV-5.2 Recreation and visitor-serving commercial uses	•	No criteria are provided for "levels of runoff
shall only be allowed if it can be proven that:		which will either cause erosion or adversely
a. areas identified by the Water Resources		affect surface water resources"
Agency as prime-groundwater recharge areas can be		
preserved and protected from sources of pollution as		
determined by the Director of Environmental Health and		
the Water Resources Agency;		
b. proposed development can be phased to ensure		
that existing groundwater supplies are not committed		
beyond their safe, long-term yields where such yields can		
be determined.		
c. floodways associated with the main channels		
of either the Arroyo Seco River or the Salinas River will		
not be encroached on by development because of the		
necessity to protect and maintain these areas for		
groundwater recharge, preservation of riparian habitats,		
and flood flow capacity as determined by the Water		
Resources Agency.		
d. the proposed development meets both water		
quality and quantity standards expressed in 11tle 22 of the		
California Code of Regulations and <i>Title 15.04</i> of the		
Monterey County Code as determined by the Director of		
Environmental Health;		
e. the proposed development meets the minimum		
standards of the Regional water Quality Control Basin		
Plan when septic systems are proposed and also will not		

adversely affect groundwater quality, as determined by the Director of Environmental Health; and f. the proposed development will not generate levels of runoff which will either cause erosion or adversely affect

surface water resources as determined by the Water	
Resources Agency.	
CSV-5.3 The Spence/Potter Road area, including the	• No performance standards or exemplary
Special Treatment Area described in <i>Policy CSV-1.3</i> is	measures are provided for "a drainage
designated a study area for alternative land uses to support	management plan to mitigate runoff to adjoining
the agricultural industry. Prior to new development, other	farmlands for the entire study area"
than those consistent with the underlying land use	
designation, in the Spence/Potter Road study area, the	
following must be completed:	
a A cumulative impact analysis of industrial	
build-out of the study area, including road capacity.	
highway access, drainage, and viewshed impacts from	
Highway 101;	
b. Recommended changes to the Special	
Treatment Area boundaries or allowable uses within the	
Special Treatment Area, as necessary, to address the	
impacts identified;	
c. A drainage management plan to mitigate	
runoff to adjoining farmlands for the entire study area;	
d. Amendments to the General Plan, as	
necessary, and ordinance amendments to address revised	
landscaping and screening standards; and	
e. An implementation plan to fund and construct	
the identified infrastructure improvements.	
The studies and plans identified in this policy may be paid	
CV 1 20 Design ("D") and site control ("S") eventer	
district designations shall be applied to the Carmel Valley	• No standards are identified to evaluate whether a
area Design review for all new development throughout	modification of landforms"
the Valley, including proposals for existing lots of record.	No enforceable mandate is created because
utilities, heavy commercial and visitor accommodations	minimization of erosion is merely one of many
but excluding minor additions to existing development	"guidelines" and there is no indication how the
where those changes are not conspicuous from outside of	guidelines will be weighed
the property shall consider the following guidelines:	8
a. Proposed development encourages and	
furthers the letter and spirit of the Master Plan.	
b. Development either shall be visually	
compatible with the character of the valley and immediate	
surrounding areas or shall enhance the quality of areas	
that have been degraded by existing development.	
c. Materials and colors used in construction shall	
be selected for compatibility with the structural system of	
net unding and with the appearance of the building's	
natural and man-made suffoundings.	
u. Suuciules should be controlled in height and hulk in order to retain an appropriate scale	
e Development including road cuts as well as	
structures should be located in a manner that minimizes	
disruption of views from existing homes	
f. Minimize erosion and/or modification of	
landforms.	
g. Minimize grading through the use of step and pole	

foundations.	
CV-2.9 No roads should cross slopes steeper than 30-	• No standards are provided to evaluate whether
percent (30%) unless factors of erosion and visible	"factors of erosion and visible scarring can be
scarring can be mitigated.	mitigated."
CV-3.4 Alteration of hillsides and natural landforms caused by cutting, filling, grading or vegetation removal shall be minimized through sensitive siting and design of all improvements and maximum feasible restoration including botanically appropriate landscaping. Where cut and fill is unavoidable on steep slopes, disturbed areas shall be revegetated.	 No criteria are provided for "sensitive siting and design of all improvements and maximum feasible restoration." The policy does not create an enforceable mandate because there are no criteria for "unavoidable" cut and fill (unavoidable relative to what objectives?) and "maximum feasible restoration" (feasible within what constraints?) No standard is provided to determine whether a minimum fraction and the section of the secc
vegetation, minimize erosion, and preserve the visual aspects of the Carmel River. In places where the riparian vegetation no longer exists, it should be planted to a width of 150 feet from the river bank, or the face of adjacent bluffs, whichever is less. Density may be transferred from this area to other areas within a lot	project will "minimize erosion."
CV-3.9 Willow cover along the banks and bed of the Carmel River shall be maintained in a natural state for erosion control. Constructing levees, altering the course of the river, or dredging the river shall only be allowed by permit from the Monterey Peninsula Water Management District or Monterey County.	 This policy should be implemented County-wide, but it should not be limited to the Carmel River. The DEIR should explain why this policy should not be applied globally, and specifically justify a recommendation not to apply it to any specific area with reference to information about the watershed's ability to absorb additional erosion and sedimentation. The criteria for "natural state" is difficult to define, and possibly undesired. Willows often occur in response to excessive sedimentation and may indicate problems that require mitigation.
CV-4.1 In order to reduce potential erosion or rapid runoff: a. The amount of land cleared at any one time shall be limited to the area that can be developed during one construction season. b. Motorized vehicles shall be prohibited on the banks or in the bed of the Carmel River, except by permit from the Water Management District or Monterey County. c. Native vegetative cover must be maintained on areas that have the following combination of soils and slope: 1. Santa Lucia shaly clay loam, 30-50% slope (SfF) 2. Santa Lucia-Reliz Association, 30-75% slope (Sg) 3. Cieneba fine gravelly sandy loam, 30-75% slope (ScG) 5. Sheridan coarse sandy loam, 30-75% slope	 Sections "a" and "b" of this policy should be implemented County-wide, and should not be limited to the Carmel River. The DEIR should explain why sections "a" and "b" this policy should not be applied globally, and specifically justify a recommendation not to apply it to any specific area with reference to information about the watershed's ability to absorb additional erosion and sedimentation. The DEIR should explain why native vegetative cover should not be maintained on slopes over 25%. Requirements for maintenance of native vegetative cover should be developed for all other areas of the County.

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(SoG)	
6. Junipero-Sur complex, 50-85% slope (Jc)	
CV-4.2 A comprehensive drainage maintenance program should be established by either sub-basins or valley-wide watershed zones.	 The policy calls for future action that is not constrained by any performance standard – what would constitute an adequate and comprehensive program? No responsibility for implementing the policy is identified, so there is no enforceable mandate. No deadline for developing the program is identified and no interim measures are proposed.
CV-6.2 Gardens, orchards, row crops, grazing animals, farm equipment, and farm buildings are part of the heritage and the character of Carmel Valley. This rural agricultural nature should be encouraged, except on slopes of 25-percent (25%) or greater or where it would require the conversion or extensive removal of existing native vegetation.	 The DEIR must explain why slope development for agriculture will not cause erosion and sedimentation impacts on slopes <i>less than</i> 25%. The DEIR must explain why the 25% slope limitation is encouraged in Carmel Valley but not County-wide. The policy does not create an enforceable mandate because it merely states that conversion and extensive vegetation removal on slopes over 25% should not be encouraged. Nothing in the policy actually bars such slope development.
Fort Ord Master Plan Soils and Geology Policy A-1 In the absence of more detailed site-specific information, the County shall use the Natural Resources Conservation Service's Soil Survey of Monterey County in determining the suitability of soil for particular land uses.	• The DEIR should explain why this policy is not proposed for application throughout the County.
Fort Ord Master Plan Soils and Geology Policy A-2 The County shall require developers to prepare and implement erosion control and landscape plans for development projects. Each plan shall be prepared by a registered civil engineer or certified professional in the field of erosion and sediment control and shall be subject to the approval of the Public Works Director for the County of Monterey. The erosion component of the plan must at least meet the requirements of Storm Water Pollution Prevention Plans (SWPPPs) required by the California State Water Resources Control Board.	The DEIR should explain why this policy is not proposed for application throughout the County.
Fort Ord Master Plan Soils and Geology Policy A-3 Through site monitoring, the County shall ensure that all measures included in the developer's erosion control and landscape plans are properly implemented.	• The DEIR should explain why this policy is not proposed for application throughout the County.
Fort Ord Master Plan Soils and Geology Policy A-4 The County shall continue to enforce the Uniform Building Code to minimize erosion and slope instability problems.	• The DEIR should explain why this policy is not proposed for application throughout the County.
Fort Ord Master Plan Soils and Geology Policy A-5 Before issuing a grading permit, the County shall require that geotechnical reports be prepared for developments proposed on soils that have limitations concerning slope and soils that have piping, low-strength, and shrink-swell potential. The County shall require that engineering and	 No criteria are provided to define "limitations concerning slope and soils that have piping, low-strength, and shrink-swell potential." These terms must be defined so that the policy can be objectively enforced. The DEIR should explain why this policy,

design techniques be recommended and implemented to address these limitations.	revised to define critical terms, is not proposed for application throughout the County.
Fort Ord Master Plan Soils and Geology Policy A-6 The County shall require that development of lands having a prevailing slope above 25% include implementation of adequate erosion control measures.	 No performance standards or exemplary measures are identified for "adequate erosion control measures." The DEIR must explain why development of slopes <i>under</i> 25% do not also require adequate erosion control plans.
Fort Ord Soils and Geology Program A-6.2 The County shall designate areas with extreme slope limitations for open space or similar use if adequate erosion control measures and engineering and design techniques cannot be implemented.	 The DEIR must explain why the County should not have already designated such areas. No criteria for "extreme slope limitations" are provided. No criteria or exemplary measures for "adequate erosion control measures and engineering and design techniques" are provided.
Fort Ord Master Plan Soils and Geology Policy B-1 The County shall identify areas of highly valuable mineral resources within the former Fort Ord, based on the State of California Division of Mines and Geology's mineral resource "classification-designation" system, and provide for the protection of these areas.	• This policy does not relate to erosion and sedimentation.
Fort Ord Master Plan Soils and Geology Policy B-3 Prior to granting permits for operation, the County shall require that mining and reclamation plans be prepared for all proposed mineral extraction operations.	 This policy contains no standards or exemplary measures for adequate mining and reclamation plans. The policy does not add anything to the existing mandate under SMARA.
Fort Ord Master Plan Hydrology and Water Quality Policy A-1 At the project approval stage, the County shall require new development to demonstrate that all measures will be taken to ensure that runoff is minimized and infiltration maximized in groundwater recharge areas.	 No standards are provided for determining if "is minimized and infiltration maximized." The DEIR must make clear whether this policy supercedes or supplements Policies S 3.5 (runoff performance standards are to be determined) and S 3.1 (related to runoff performance standards, but not containing a clear constraint). Why is a distinct policy specified for this area of the County? How will it differ from the global standards under S 3.1 and 3.5?
Fort Ord Master Plan Hydrology and Water Quality Policies A-2 To avoid adversely affecting groundwater recharge of surface water users in downstream areas, the County shall ensure that land use and drainage facilities on newly developed lands do not decrease the magnitude and duration of flows less than the mean annual flow in creeks downstream of the development sites.	 The policy sounds like a performance standard, but it is written backward. It should require that land use and drainage facilities on newly developed lands do not <i>increase</i> the magnitude and duration of flows <i>more</i> than the mean annual flow in creeks downstream of the development sites. No procedure for implementing this policy is specified. Who is responsible for implementation and in what context? Will each development project be required to provide a hydrological study to demonstrate compliance? If not, why not? If not, when will studies ever be required? Will the policy apply to ministerially permitted activities? Will the policy apply to

	conversion of previously uncultivated
	agricultural land and routine and ongoing
	agricultural activities?
	• The DEIR must explain why this policy, revised
	to address the above concerns, should not be
	applied County-wide.
Fort Ord Hydrology and Water Quality Program C-	• This policy does not create any constraints on
1.1 The County shall comply with the nonpoint pollution	development that were not already mandated.
control plan developed by the California Coastal	
Commission and the State Water Resources Control	
Board (SWRCB), pursuant to Section 6217 of the Federal	
Coastal Zone Management Act Reauthorization	
Amendments of 1990, if any stormwater is discharged	
into the ocean.	
Fort Ord Hydrology and Water Quality Program C-	• This policy does not create any constraints on
1.2 The County shall comply with the General Industrial	development that were not already mandated.
Storm Water Permit adopted by the SWRCB in	
November 1991 that requires all storm drain outfalls	
classified as industrial to apply for a permit for discharge.	
Fort Ord Hydrology and Water Quality Program C-	• Development of any substantive controls is
1.5 The County shall adopt and enforce a hazardous	deferred but no criteria define the subject matter
substance control ordinance that requires that hazardous	of this ordinance and no performance standards
substance control plans be prepared and implemented for	or exemplary measures are identified.
construction activities involving the handling, storing,	• This policy does not appear to relate to erosion
transport, or disposal of hazardous waste materials.	and sedimentation.
Fort Ord Hydrology and Water Quality Policy C-4	No criteria for "siltation" is provided. How
The County shall prevent siltation of waterways to the	much sediment deposition would constitute
extent feasible.	"silation?"
	• The critical term "to the extent feasible " is not
	defined. Do the constraints on feasibility include
	iust technological constraints are economic
	constraints included? How would this policy
	operate if a developer sought to implement a
	project that would cause "siltation" but claimed
	that control measures would render the project
	economically infeasible?
	• No plan for implementing this policy is provided.
	What measures will the County take? What
	measures would the County require others to
	take? In what context? How does the policy
	apply to activities that require only a ministerial
	permit or no permit at all?
Fort Ord Hydrology and Water Quality Program C-	• Development of information and BMPs is
4.1 The County, in consultation with the Natural	deferred without performance standards or
Resources Conservation Service, shall develop a program	exemplary measures.
that will provide, to owners of property near waterways	Provision of information does not create any
and other appropriate entities, information concerning	enforceable mandate. There is no provision to
vegetation preservation and other best management	make any of the to-be-developed BMPs
practices that would prevent siltation of waterways in or	mandatory.
downstream of the former Fort Ord.	
Fort Ord Biological Resources Policy A-4 The County	• "Degradation" is entirely unspecified.

shall protect the habitat corridor in the RV park/youth	• What authority does the County have to regulate
camp parcel from degradation due to the development in,	use of adjacent parcels?
or use of, adjacent parcels.	
Fort Ord Biological Resources Policy A-5 The County	• "Degradation" is entirely unspecified.
shall ensure that the habitat management areas are	• What authority does the County have to regulate
protected from degradation due to development in, or use	use of adjacent parcels?
of adjacent parcels within its jurisdiction.	
Fort Ord Biological Resources Program A-5.3 The	 No performance standards or exemplary
County shall require stormwater drainage plans for all	measures are identified.
developments adjacent to the habitat management areas to	• No definition of "minimizing the potential for
incorporate measures for minimizing the potential for	erosion" is provided. Minimize within what
erosion in the habitat management areas due to	constraints – economic or technological?
stormwater runoff.	
GMP-4.1 Redwood, pine, and oak forest and chaparral	• How does this policy related to the County-wide
habitat on land exceeding 25 percent slope should remain	Policies OS 3.5 and 3.6, which would permit
undisturbed due to potential erosion impacts and loss of	development on slopes over 25%? What policy
visual amenities.	governs in the GMP area?
	• The DEIR must explain why limitation of slope
	development to 25% is not warranted County-
	wide.
GS-1.2 Special Treatment Area: Spence/Potter/Encinal	• This policy has no actual substantive content
Road – Parcel generally located south of Potter Road	related to standards for erosion and sedimentation
and North of Spence Road between Old Stage Road,	control because the drainage management plan is
Highway 101, plus parcels along the Encinal Road	not defined and because there are no standards
extension, excluding large properties under cultivation	for acceptable run-off to adjoining farmland. For
located between Spence and Potter Roads, shall be	example, how does this policy relate to policies S
designated a "Special Treatment Area" to permit on-site	3.1 and S 3.5 that apparently govern runoff
soil dependent agricultural operations such as	standards County-wide?
greenhouses. Subdivision of land in this area shall be	
approved only under the following conditions:	
a. Minimum parcel size in this area shall be 10	
acres.	
b. Residential uses are allowed only on parcels	
of 40 acres or more;	
c. A Drainage Management Plan to mitigate	
run-off to adjoining farmlands must be prepared for the	
entire Special Treatment Area;	
a. One caretaker unit per 10 acres is allowed;	
e. No uses other than agriculture, agricultural	
support services, labor contracting businesses, and	
agricultural equipment remai and maintenance	
f Desidential development rights on percels;	
formed through subdivision approval shall be dedicated	
by means of an agricultural conservation assement to	
the County or a qualified organization such as that	
specified in Section $501(c)(3)$ of the Internal Revenue	
Code	
a Pertinent structures such as processing	
g. I crunch surveures such as processing,	
foundations no thicker than four inches and may be no	
larger than 4 000 square feet; and	
larger mail 4,000 square reer, allu	

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT EROSION AND SEDIMENTATION IMPACTS WILL BE LESS THAN SIGNIFICANT	
h. One mobile home only may be allowed for a caretaker or security personnel and not for residential purposes.	
(see also Policies CSV-1.3 and GS-1.7)	
GS-3.1 All vegetation on land exceeding 25 percent slope, particularly chaparral and broad leaf evergreen, should remain undisturbed to minimize erosion and retain important visual amenities.	 How does this policy related to the County-wide Policies OS 3.5 and 3.6, which would permit development on slopes over 25%? What policy governs in the GMP area? Will development, land cultivation, and/or routine and ongoing agricultural activities be permitted on land sloped over 25%? If this policy does in fact bar development, land cultivation, and routine and ongoing agricultural activities, the DEIR must explain why limitation of slope development to 25% is not warranted County-wide.
NC-1.3 Large acreages in higher elevations and on steeper slopes should be preserved and enhanced for grazing, where grazing is found to be a viable use.	 Both upland and riparian grazing may in fact contribute to soil erosion, as is evidence by the identification of grazing activity as a factor responsible for sedimentation to the Pajaro River in the list of 303d impaired water bodies. DEIR, p. 4.3-56. the DEIR must explain how this policy would not in fact aggravate sedimentation. No criteria are provided to identify "large acreages" or "higher elevations" or to determine whether grazing is a "viable use." This policy creates no enforceable mandate since it does not actually constrain future development. As written, the County could not actually bar development under the policy because it lacks any objective standards.
 NC-5.3 Cooperative soil conservation, water quality protection, and resource restoration programs within watershed basins shared with neighboring counties shall be pursued. SC-5.2 Cooperative soil conservation, water quality in the source of the source of	 No responsibility for "pursuing" these programs is assigned. No resources are identified that would make pursuing these programs feasible. No content for these programs is specified. No responsibility for "pursuing" these programs
protection, and resource restoration programs within watershed basins shared with neighboring counties shall be pursued.	 is assigned. No resources are identified that would make pursuing these programs feasible. No content for these programs is specified.
SC-5.3 New development may not encroach on the main channels and associated floodways of the Nacimiento, San Antonio, and Salinas Rivers in order to conserve groundwater recharge, preserve riparian habitats, and protect flood flow capacity.	 The extent of this bar on encroachment to "associated floodways" is not specified. E.g., does this include the floodways associated with 10 year or 100 year floods? How will this policy be coordinated if at all with the proposed Mitigation Measures Bio-2 calling for a stream setback ordinance?
SC-5.4 Stormwater facilities in new urban development shall be designed to mitigate impacts on agricultural lands located downstream.	No performance standards or exemplary measures are identified, so there is no basis to conclude what would constitute adequate

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	 mitigation of downstream impacts. How is this policy related, if at all, to policies purporting to control runoff volumes?
T-3.6 Large acreages in higher elevations and on steeper slopes shall be preserved and enhanced for grazing, where grazing is found to be a viable use.	 Both upland and riparian grazing may in fact contribute to soil erosion, as is evidence by the identification of grazing activity as a factor responsible for sedimentation to the Pajaro River in the list of 303d impaired water bodies. DEIR, p. 4.3-56. the DEIR must explain how this policy would not in fact aggravate sedimentation. No criteria are provided to identify "large acreages" or "higher elevations" or to determine whether grazing is a "viable use." This policy creates no enforceable mandate since it does not actually constrain future development. As written, the County could not actually bar development under the policy because it lacks any objective standards.
T-4.1 Land uses and practices that may contribute to significant increases of siltation, erosion, and flooding in the Toro Area shall be prohibited.	 No performance standards are identified for "significant increases of siltation, erosion, and flooding." No provision is made to address cumulative impacts.

Finally, Policy AG 5.2 states that "policies and programs to protect and enhance surface water and groundwater shall be promoted, but shall not be inconsistent with State and federal regulations." This Agriculture Element policy is intended to support the goal of ensuring compatibility between agricultural use and environmental resources. As written, the policy appears to impose a limitation on policies and programs to protect and enhance surface water and groundwater. If the purpose of the policy is to limit water protection policies and programs to the provisions of State and federal regulations, it is an apparent abdication of the County's own police power to protect its resource base. Please explain what constraint is meant to be placed on such policies and programs by the requirement that they not be inconsistent with State and federal regulations. Please also explain how this policy would be implemented and in what context.

IV. WATER ISSUES

A. Water Supplies Not Demonstrated for Development In The Salinas Basin

SVWP EXPANSION INFEASIBLE IN LIGHT OF UNMITIGATED IMAPCTS TO STEELHEAD, LIMITATION OF NOAA BIOLOGICAL OPINION, AND COST: The DEIR relies on the assumption that the Salinas Valley Water Project (SVWP) can be expanded from the 9,700 acre-feet per year (AFY) permitted by NOAA. This assumption is used to support findings that impacts on water supply in the Salinas Valley would be less than significant through 2030, that overdraft would be reversed, and that seawater intrusion would be halted. (DEIR, pp. 4.3-127, 130, 153, 162). As discussed below, the assumption that additional water can be diverted from the Salinas River through the SVWP underlies the DEIR's conclusions that sufficient water will be available for several community areas and other development. The environmental consequences of increased diversions to steelhead have not been addressed. As discussed below, the comments by TRA Environmental and the limitation of NOAA's Biological Opinion to a diversion rate of 9,700 AFY provide substantial evidence that these consequences will be significant.

At page 4.3-34, the DEIR claims, "Operation of the SVWP will divert an average of 9,700 AF and up to 12,800 AF of additional Salinas River water (available from reoperation of upstream reservoirs) to the CSIP during the peak irrigation season. This will provide a total yearly average of 12,000 AF and up to 25,000 AF to the CISP for injection into the groundwater aquifer (Monterey County Water Resources Agency 2003). Modeling undertaken by the MCWRA for the SVWP indicates that by 2030 seawater intrusion will be reduced to 2,300 AF with surface water deliveries only to the CISP. However, if an additional 14,300 AF of SVWP water is delivered outside the CSIP, modeling indicates that seawater intrusion would be halted (Monterey County Water Resources Agency 2001a)."

The DEIR's discussion relies on information contained in the 2001 SVWP DEIR.⁴ In particular, the DEIR relies on the preliminary, conceptual discussion of a "Potential Expanded Delivery System." SVWP DEIR, section 3.2.4. That section assumes, with no environmental analysis, that "diversion from the Salinas River would be increased from an average of 9,700 to 18,300 AFY" in order to provide additional water for delivery outside the CSIP delivery area. In addition, that section states that the delivery system expansion would cost \$40.8 million.

It is clear that the "expanded delivery system" is not just an unfunded \$40.8 million pipeline project, but also an increase in diversions from the Salinas River. This increased diversion would clearly affect steelhead and other aquatic resources, yet the

⁴ The reference to Monterey County Water Resources Agency 2003 is puzzling. The referenced document is 2003 floodplain management plan that does not even mention the SVWP or the CISP.

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DEIR presents no evidence that the SVWP diversions can be increased to 18,300 AFY with no environmental consequences.

The only discussion of environmental consequences related to the proposed "Expanded Delivery System" is provided in the discussion of potential impacts associated with water system infrastructure in section WR-5. This cursory discussion incorrectly claims that 1) the SVWP EIR has already disclosed all of the impacts of the SVWP, and 2) that the impacts related to the "Expanded Delivery System" would be primarily related to pipeline construction:

"The *impacts of the SVWP have been disclosed and mitigated* with adoption of the EIR/EIS prepared for that project by the MCWRA in 2002. As noted above, there will be certain significant and unavoidable impacts. Extension of distribution lines from SVWP supplies to new residential, commercial, industrial, and agricultural uses will also result in environmental impacts *due primarily to construction.*" DEIR, p. 4.3-143, emphasis added.

It is clear that the SVWP EIR did *not* evaluate the environmental effects of the Expanded Delivery System – either the effects of the additional pipeline project or the effects of additional diversions. The entire discussion of the Expanded Delivery System in the SVWP DEIR is as follows:

"Potential Expanded Delivery System

While the SVIGSM indicates that seawater intrusion will be halted by the project (in conjunction with the CSIP deliveries) based on current (1995) demands, with a projected increase in water demands (primarily associated with urban development) in the north valley area in the future, seawater intrusion may not be fully halted based on year 2030 projections.

For the year 2030, modeling indicates seawater intrusion may be 2,200 AFY with surface water deliveries only to the CSIP area. This is substantially less than the 10,500 AFY of intrusion that would occur without the project. It is important to note that, given the dynamics of the hydrologic system, the uncertainties of whether future demands will occur as projected, and the limitations of any modeling effort, it is not known if this level of seawater intrusion will occur. The project could potentially fully halt intrusion in 2030 with deliveries only within the CSIP system. As discussed in Section 3.2.7, a monitoring program will be implemented to determine the success of the project.

Given that the SVIGSM is used by MCWRA as a planning tool, it is prudent to consider the potential that additional deliveries may be needed in 2030. However, given the uncertainties expressed above, it is **only appropriate to conceptually consider and environmentally evaluate potential future delivery systems. If needed in the future, more precise planning and environmental analysis will be required**. However, SVIGSM modeling does demonstrate that delivery of an average 18,300 AFY of SVWP water in combination with recycled water to CSIP and agricultural uses outside of the CSIP area would fully halt seawater intrusion.

Diversion from the Salinas River would be increased from an average of 9,700 AFY to 18,300 AFY. Of this total diversion, 14,300 AFY would be delivered outside the CSIP delivery area. CSIP deliveries would shift in their composition. An average of 4,000 AFY would be provided by Salinas River diversions. Recycled water deliveries would increase to 16,000 AFY. [2] Supplemental pumping of groundwater wells up to 2,800 AFY would provide the balance of water needed to meet water use demands (approximately 23,000 AFY) in the CSIP area.

In order to deliver the additional water to areas outside of CSIP, a pipeline parallel to the existing CSIP pipeline would need to be constructed from the diversion dam to a new distribution area adjacent to the CSIP distribution area. For purposes of analysis, it is assumed that deliveries would occur to the southeast of the CSIP service area, as this is the area nearest the diversion dam that is not within the CSIP area. A 42-inch diameter new pipeline would be required, along with a distribution system to deliver diverted water to agricultural users in the expanded service area. A general route of a delivery pipeline is depicted on Figure 3-3. Specific alignment of the expanded distribution system would be developed to deliver agricultural water to turnouts for each affected property.

[] Construction & Cost

Use of the existing CSIP distribution pipeline would not require construction, and no additional expense is anticipated.

If expanded delivery is required in the future, costs would be determined at the time it is needed. For purposes of this analysis, it is assumed that 5 miles of transmission pipeline would be needed, at an estimated cost on the order of \$10.6 million. A distribution system from the transmission line would also be needed, at an estimated cost of \$30.2 million. The total estimated cost of the expanded distribution system is \$40.8 million. Section 3.2.4." SVWP DEIR, section 3.2.4, emphasis added.

As noted, the SVWP EIR's discussion is merely "conceptual" and does not in fact consider any environmental effects of either the increased diversions or the additional pipeline construction. The 2007 General Plan DEIR admits that "the pipeline and its impacts are discussed in concept in the SVWP EIR/EIS, but it has not been planned in detail." DEIR, p. 4.3-38. However, nowhere in the DEIR does the County acknowledge that increased diversions from the Salinas River would be required and that these diversions may cause significant impacts to steelhead.

In 2007, NOAA issued its Final Biological Opinion for the SVWP related to effects on the endangered steelhead. The Biological Opinion is expressly limited to the

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assumption that only 9,700 AFY will be diverted, and explicitly provides for reinitiation of consultation if diversion is increased beyond this limit. National Marine Fisheries Service, Southwest Region, Biological Opinion, SWR/2003/2080 (Admin. No.: 151422SWR2003SR8711), June 21, 2007, p. 66, Exhibit 1. The Biological Opinion makes it clear that the flow prescription based on 9,700 AFY was intended to minimize project impacts and benefit steelhead:

"The SRDF will operate seasonally from April 1 through October 31, if enough surface water is available. As currently proposed, maximum rate of diversion will be 85 cubic feet per second (cfs). The diversion facility will be built to support future expansion to a diversion rate of 135 cfs. *Future diversion rates above 85 cfs were not considered by NMFS in this opinion, because the flow prescription to minimize project impacts and benefit steelhead was jointly developed by MCWRA and NMFS based on an assumed maximum diversion rate of 85 cfs. With this assumption, the average diversion of the SRDF will be about 9,700 AF per year (AFY).*" *Id.*, p. 8, emphasis added, Exhibit 1.

Increasing diversions to support the Expanded Distribution System in addition to the 9,700 AF NOAA has permitted would require changes to the river flow regime that is supposed to protect steelhead and would require NOAA to change the project's permit. The DEIR provides no evidence that protection of steelhead is feasible if diversions from the Salinas River are doubled. As the California Supreme Court explained in *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 430-431, an EIR cannot ignore environmental problems or simply assume solutions. It must actually evaluate the impacts of providing water supply. Yet the DEIR here has simply failed to discuss the impacts to steelhead from increased diversions from the Salinas River. The DEIR must evaluate this impact since it assumes that these diversions will be available to support continued growth.

The express limitation of the Biological Opinion to diversions of 9,700 AFY evidences the potential for increased diversions to harm steelhead. Please explain on what basis the DEIR has concluded that, despite the NOAA limitation, additional supplies will be available from the SVWP without consequences to steelhead.

Furthermore, comments provided by TRA Environmental demonstrate that additional diversions would in fact have a significant impact on adult fish migration and to smolt out-migration.

Finally, mitigation must be feasible. In light of the difficulty funding the existing \$16 million SVWP, it appears unlikely that an additional \$40.8 million in funding could be provided for the expansion. Please explain on what basis the DEIR has determined it would be feasible to fund the \$40.8 million pipeline expansion that would be required. In particular, how would the cost be allocated to beneficiaries?

In light of the limitation imposed by NOAA on yields from the SVWP, the expert evidence that increased diversions would cause significant impacts to steelhead, and the apparent financial infeasibility of constructing the proposed Expanded Distribution

System for the SVWP, the DEIR's assumption that additional water supplies are available is not justified. For these reasons, the DEIR must be revised to acknowledge that water supply impacts within the Salinas River basin are significant and to propose all feasible mitigation.

NO EVIDENCE THAT RECYCLED WATER WILL BE AVAILABLE TO COMPLETE THE SVWP EXPANDED DELIVERY: In its discussion of the expanded delivery system, the SVWP EIR assumes that the entire capacity of the Monterey County Water Recycling Projects at 2030 (15,900 AFY) will be dedicated to the SVWP. However, the full amount may not be available for this purpose. The DEIR points out on page 4.3-46, "As constraints on local water supply increase, the use of treated wastewater (i.e. recycled water) and other subpotable supplies becomes a more significant component of the total water supply picture." And, as a matter of fact, the Water for Monterey County Coalition (WFMCC), a county-wide stakeholder group attempting to develop regional solutions to water supply problems, has targeted up to 5,000 acre-feet of recycled water per year as part of its plan. WFMCC, Water for Monterey County Program Elements, Exhibit 2.⁵ Please explain on what basis the DEIR assumes that sufficient recycled water will be available to implement the plan to expand SVWP deliveries.

Ironically, the DEIR identifies the WFMCC proposal as a possible alternative solution to the Coastal Water Project for the shortage of water for the Monterey Peninsula. DEIR, p. 4.3-128. In addition to assuming the availability of 5,000 AFY of recycled water, the WFMCC proposal includes an additional 5,000 AFY in diversions from the Salinas River, with no apparent consideration of the impacts to steelhead or of the SVWP plan to divert an additional 8,300 AFY from the Salinas River to address saltwater intrusion in the Salinas Valley basin. The WFMCC proposal also includes pumping 6,000 AFY of Salinas Basin groundwater from "additional wells to tap highest quality and lowest cost resource," with no apparent consideration of the effects on saltwater intrusion and overdrafting, and with no apparent consideration of the prohibition against exporting any groundwater for any purpose from the Salinas River Groundwater Basin. See Monterey County Water Resources Agency Act, 1990 Stats. 1159, 1991 Stats. 1130, 1993 Stats. 234, and 1994 Stats. 803, Water Code Appendix, Chapter 51, § 21. The DEIR's conclusion regarding the supply sufficiency of the Salinas Valley basin has already assumed that all of the MCWRA recycled water and an additional 8,300 AFY of Salinas River diversions will be used to solve the groundwater overdraft problem in the Salinas River basin, and apparently does not plan for exporting another 5,000 AFY of Salinas Basin groundwater to the Peninsula – although the absence of any comprehensive water balance analysis makes this difficult for the public to determine. It appears that the DEIR's failure to present a complete water balance analysis, discussed in detail below, results in double counting even the speculative future resources. Accordingly, please identify competing proposals for use of recycled water, Salinas River diversions, and Salinas Valley groundwater pumping beyond the level assumed by the DEIR in its evaluation of the sufficiency of the Salinas Valley basin.

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Available at [http://www.waterformontereycounty.org/solution.php.

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Please explain the effects these competing proposals would have on the DEIR's significance conclusions.

CONTINUED OPERATION OF NACIMIENTO AND SAN ANTONIO DAMS: The DEIR states that dams owned and operated by MCRA control flows of Nacimiento and San Antionio Rivers, the main tributaries to Salinas River. DEIR, 4.3-5. The flow regime is currently managed to maximize recharge and minimize ocean outflow. *Id.* Because clay underlies the river bed north of Chualar, managed outflows only maintain river flow as far north as SR68 bridge. *Id.* Most of the groundwater is used for agriculture. Id. Again, both the dams are operated to maximize percolation into the Salinas Valley aquifer. DEIR, p. 4.3-6.

The DEIR relies on the continued operation of these two dams to assure groundwater recharge. It expressly states that groundwater will continue to be available in the Salinas Valley basin to support planned growth under the General Plan without causing overdrafting and saltwater intrusion only by virtue of the continued operation and expansion of the SVWP. DEIR, pp. 4.3-127, 130, 153, 162.

The DEIR does not disclose the effects on steelhead of the continued operation of the two dams. Because the DEIR expressly assumes that Salinas Valley groundwater will be available to support continued growth, it is incumbent on the DEIR to evaluate these effects.

Expert evidence in comments by TRA Environmental demonstrates that continued operation of these dams will have a significant impact to steelhead. These impacts will be caused by loss of spawning and rearing habitat and lack of water for migration and emigration.

Note that there is no evidence that the effect of the continued operation of the two dams on steelhead has in fact been evaluated in other documents. In this connection, note that the NOAA biological opinion expressly disclaims any analysis of this effect:

"We are not analyzing ongoing dam operations and maintenance as a part of the proposed action because they are neither indirect effects nor interrelated or interdependent actions to the proposed action. Most dam operations and maintenance are a part of the environmental baseline to which the effects of the proposed action will be added. As a result, the Incidental Take Statement for this opinion does not exempt any incidental take resulting from those baseline operations. This includes the bulk of the flow released from the Nacimiento and San Antonio dams. One exception is modified operations of these reservoirs to meet the purposes of the proposed action. Those modified operations are considered interrelated with the Corps' proposed action and are considered in the Effects of the Proposed Action section of this opinion." NOAA Biological Opinion, p. 2.

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The SVWP EIR, although referenced in the EIR, also does not purport to evaluate the effects of the continued operation of the dams on steelhead. Indeed, there is no evidence in the General Plan DEIR that the continued operation and maintenance of the dams, which were built in 1957 and 1965, have ever been evaluated under the Endangered Species Act and no evidence that the continued operation of the dams is covered by an Incidental Take Permit under section 10 of the ESA or an Incidental Take Statement under section 7 of the ESA. If operation of these dams has not in fact been permitted under the EIR must disclose this fact and provide an analysis of the biological impacts of the use of their water supply to support continued growth under the 2007 General Plan.

Furthermore, the NOAA Biological Opinion states at pp. 5-6 that the Salinas River Channel Maintenance Biological Opinion issued to the Corps on July 23, 2003 is in conflict with the NOAA Biological Opinion. The EIR must explain this conflict and how it has been resolved.

Most fundamentally, the EIR must be revised to disclose and discuss the effect on steelhead of the operation of the MCWRA dams on Nacimiento and San Antonio Rivers to provide water for continued growth under the 2007 General Plan.

CASTROVILLE: At page 4.3-117 the DEIR states, "Castroville is in the 180foot/400-Foot subarea of the Salinas Valley basin, where any additional pumping from the local groundwater would result in further seawater intrusion." This statement is contradicted on page 4.3-118 where the DEIR concludes, "With operation of the SVWP, CSIP, and/or other measures, anticipated withdrawals from the 180-Foot/400-Foot subarea to meet water demands of the Castroville Community Area would avoid further lowering of water levels in the aquifer and further seawater intrusion."

Please explain this contradiction.

Please also explain what "other measures" besides the SVWP and CSIP will meet water demands of the Castroville Community Area. The SVWP is expected to expand the amount of water delivered to Castroville farmers through the CSIP system by 9700 acre-feet annually. However, CSIP water is not potable and is used exclusively for agricultural irrigation. As the DEIR states, "additional pumping from the local groundwater would result in further seawater intrusion," so what is the new source of potable water that will meet new water demands of the Castroville community?

Monterey County voters approved the SVWP in 2001. At page 4.3-9, the DEIR states that the "SVWP is currently underway; construction on the Nacimiento Dam Spillway Modification Component began in April 2008" with a completion date of fall 2009. The rubber dam "component will begin construction after completion of the Nacimiento Dam work." No completion date for the rubber dam, which will increase water deliveries to Castroville farmers, is given. Please explain what measures will be employed to avoid further seawater intrusion until that time.

BORONDA: The DEIR states at page 4.3-118 that increased water pumping in Boronda "would contribute to further seawater intrusion." The DEIR concludes that this concern is addressed by Cal-Water, the water purveyor for Boronda, which "has already begun shifting production further south and into the 400-foot aquifer (in response to seawater intrusion into the 180-foot aquifer within 1 mile of Cal-Water's closest well)."

As the DEIR points out on page 4.3-7, "According to the California Department of Water Resources (DWR), the Salinas Valley groundwater basin consists of one large hydrologic unit composed of four subareas (Exhibit 4.3.3)." The DEIR also acknowledges that "barriers to horizontal flow do not separate them and water can move between them (California Department of Water Resources 2004a-d)." Further, the DEIR states that surface recharge in the 180-Foot/400-Foot subarea does not occur. "Instead, recharge is from underflow originating from the Upper Valley and Forebay Subareas and, more recently, from seawater intrusion (California Department of Water Resources 2004b)."

Since the Salinas Basin is one large hydrologic unit and since recharge of the subarea is from underflow originating upstream, please explain how Cal-Water's moving its wells upstream within the same, interconnected basin will do anything to address seawater intrusion caused by increased pumping in Boronda.

CHUALAR: The DEIR states hat although Chualar is situated in a portion of the Salinas Valley groundwater basin, it is "not subject to seawater intrusion" (page 4.3-118). As noted above, the DEIR acknowledges that recharge of the 180-Foot/400-Foot Aquifer occurs through subsurface flow originating upstream. Although Chualar is not yet "subject to seawater intrusion" the DEIR seems to be claiming that increased pumping there has no impact on seawater intrusion. Please justify this conclusion.

Cal-Am supplies Chualar from "one of the company's six Highway 68 corridor systems, which are managed independently of the larger basin systems." Please explain how "independent management" of some water within the Salinas Basin leads the DEIR to conclude that increased water demand at Chualar will incur no significant water supply impacts.

FORT ORD: Development at Fort Ord is also constrained by seawater intrusion. The DEIR, on page 4.3-119 describes a number of projects that, if successful, will produce some new water supply for development there. However, the "Fort Ord Reuse Plan identified a need to augment available potable water supply by 2,400 AFY to accommodate future development. This projection assumed the availability of an additional 6,600 AFY under an agreement with MCWRA that includes Fort Ord as a beneficiary of the SVWP. Sources for both the 6,600 AFY and the additional 2,400 AFY remain uncertain, pending approval of Cal-Am's Coastal Water Project."

Please explain why, in the instance of Fort Ord development, the 6,600 acre-feet of water to be supplied by the SVWP is characterized as "uncertain" when there is no expressed "uncertainty" that the SVWP will provide sufficient water elsewhere.

SIGNIFICANCE CONCLUSIONS: As noted above, the DEIR relies on the SVWP to provide water for development in community areas within the Salinas Basin. The DEIR also claims that adequate water to meet new water demand for Rural Centers, Affordable Housing Overlays and existing lots of record within the Salinas Basin will all be provided by the SVWP. DEIR, p. 4.3-120. Again, as the DEIR acknowledges at page 4.3-7, the Salinas Basin is one large basin and water flows from one subarea to another. The DEIR also states that the 180-Foot/400-Foot Subarea depends upon subsurface recharge from water upstream.

The DEIR concludes at page 4.3-130, "Within the Salinas Valley, the SVWP will provide sufficient supply to reverse existing overdraft and seawater intrusion problems and to provide water for new development. No new or expanded water entitlements are contemplated to meet demand to 2030, and thus this is considered a less-than-significant water supply impact (see separate discussion below under Impact WR-5 regarding water supply infrastructure)."

The impetus behind the SVWP was to avoid adjudication of the Salinas Basin. Since the basin has not been adjudicated, water from the basin and from the SVWP has not been allocated among water users in the basin. No caps on water use have been imposed for any of the new water uses within the basin, which includes urban growth, wine grape processing, and, as discussed below, agricultural expansion, including expansion onto slopes 25% or greater. The DEIR simply assumes, without any evidence to support the assumption, that these new, unregulated uses will not use more water than the SVWP can provide. Downstream communities within the Salinas Basin north of Chualar must depend upon subsurface recharge for their water. Those communities have no control over the amount of groundwater consumed by uses and communities upstream, nor, absent basin adjudication, can they make any legal claim to protect the subsurface flow they depend upon. Although rate payers at the north end of the Salinas Basin pay the highest fees for the SVWP, the circumstances identified above make the project's benefits far from certain. This is of particular concern to residents living within the project's benefit zone who are currently out of water, for example residents in the Granite Ridge area of North Monterey County. Considering this uncertainty, please justify the DEIR's conclusion that new water demand in the Salinas Basin is considered a less-than-significant water supply impact.

As noted earlier, NOAA has limited SVWP surface diversion to 9,700 acre-feet per year. The entire surface diversion is committed to expanding water delivery to farmers in the Castroville area through the CSIP pipeline. This pipeline, which will deliver non-potable water for agriculture, is the only infrastructure in place to directly deliver benefits of SVWP. The DEIR acknowledged at page 4.3-35 that seawater intrusion would continue at 2,300 acre-feet per year unless "an additional 14,300 AF of SVWP water is delivered outside the CSIP." For purposes of analysis throughout the Water Resources element, the DEIR assumed the 14,300 acre-feet would be available.

That additional water supplies from the SVWP are at best uncertain, is evident from the DEIR's proposal of Mitigation Measure WR-2, which calls for the County to "pursue expansion of the SVWP by initiating investigations of the capacity for the Salinas River water storage and distribution system to be further expanded." DEIR, p. 4.3-133. If additional water supplies through the SVWP were reasonably certain, it would not be necessary for the County to *initiate investigations* as to whether there is any additional capacity. It is simply inconsistent for the DEIR to state that this water will be available while at the same time calling for an investigation into its availability as a mitigation measure.

We ask that the County revise and recirculate the DEIR to realistically evaluate the water supply for the Salinas Basin.

B. Water Demand In the Salinas Valley Is Understated

The DEIR projects new water demand associated with the 2007 General Plan in Tables 4.3-11 (AWCP demand) and 4.3-9. However, the information in these tables is incomplete and inaccurate. Water demand for wineries is not justified, water demand from non-winery development permitted by the AWCP is omitted, and, most critically, water demand from new agricultural development is omitted even though the DEIR admits that agricultural conversions will substantially increase irrigated lands.

AWCP WINERY PRODUCTION NOT JUSTIFIED: For example, calculation of new water demand for wineries in the AWCP is arbitrary and therefore questionable. Winery Corridor policies allow 40 new artisan wineries producing between 2,000 to 50,000 cases of wine per year and 10 full-scale wineries producing from 50,000 cases to 2,000,000 cases of wine per year.

At page 4.3-120 the DEIR states, "40 artisan wineries will be built by 2030, each averaging a production rate of 25,000 cases per year by that time." By definition an artisan winery can produce up to 50,000 cases per year. There is no data cited or rationale given for the assumption that they will average only *half* this size. The actual water demand for artisan wineries could be 103 acre-feet per year, not merely the 51.6 acre-feet per year that the DEIR assumes. Please provide the data and explain the rationale for this assumption.

Water use estimates for full-scale wineries are equally lacking in data and rationale. "The full-scale wineries will reflect the following numbers and production rates by 2030: 5 producing 75,000 cases per year; 2 producing 175,000 cases per year; and 1 each producing 375,000, 750,000 and 1.5 million cases yearly." Why, specifically, will they "reflect the following numbers?" Potential water use for each full-scale winery is approximately 103 acre-feet per year – or a total for all ten of 1030 acre-feet per year. This is six times more water use than the DEIR's total water demand – slightly less than 173 acre-feet per year for all 10 full-scale wineries. Please provide the data and the rationale for the calculation of water use at the 10 full-scale wineries.

AWCP WATER DEMAND PER UNIT OF PRODUCTION NOT JUSTIFIED: Furthermore, the DEIR relies on the assertion that "a typical winery uses 7 gallons of water to produce one gallon of wine," citing an October 19, 2005 technical memorandum from West Yost & Associates. West Yost provides no explanation or justification for the 7 gallon figure, which it does not in fact rely upon. West Yost (2005), p. 10. In fact, West Yost independently determined the winery water demand based on vineyard acreages and found it to be "*larger than* the more typical factor of approximately 7 gallons of water demand per gallon of bottled wine." *Id.* In view of the lack of any foundation for the 7 gallon figure in the West Yost report and the fact that West Yost does not rely on the figure, please explain how it can be justified.

AWCP WATER DEMAND FAILS TO ACCOUNT FOR PROCESSING EVEN THE EXISTING LEVEL OF GRAPE PRODUCTION: According to the DEIR and the Monterey County Vintners and Growers Association, the Monterey County wine industry lacks processing facilities for 70% to 80% of the county's wine grape harvest. This, they claim, is the motivation behind the winery corridor policies.

According to the DEIR's assumptions about the scale of the new wineries, all the new wineries (full-scale and artisan) will process a total of 4,350,000 cases of wine annually. DEIR, p. 3.3-120. The average yield of wine per ton of wine grapes is 62.5 cases. Monterey County, Monterey County 21st Century General Plan Update Draft Environmental Impact Report, March 27, 2002, p. 5.2-56, Exhibit 3. Thus, according to the DEIR, in-County wine grape processing during the life of the General Plan will increase by a mere 69,600 tons (4,350,000 cases divided by 62.5 cases per ton).

However, existing grape production is well in excess of 69,600 tons. The 2007 Monterey County Crop Report indicates that Monterey County growers and vintners produced 224,000 tons of wine grapes during 2007. Monterey County Agricultural Commissioner, Monterey County Crop Report 2007, p. 13, Grape Production, Exhibit 4. With a 70% to 80% shortfall in processing capability, this would translate into an *immediate need* for processing facilities to handle between 157,000 and 179,000 tons of grapes grown in Monterey County (9,812,500 cases to 11,187,500 cases). At 16.8 gallons of water per case (DEIR, p. 4.3-120), local processing or Monterey County's entire 2007 wine grape harvest would immediately boost water use in the Salinas Basin by between 506 acre-feet per year and 577 acre-feet per year.

Furthermore, the 2007 crop report also shows that 3,068 non-bearing acres of grapes have been planted. At maturity, if processed locally, this acreage will further increase winery water use in the Salinas Basin by 56 acre-feet per year.

Thus, just increasing processing capacity to handle 2007 vineyard acreage will increase water demand in the Salinas Basin by between 562 acre-feet per year and 633 acre-feet per year. In light of the stated purpose of the AWCP to provide local winery capacity sufficient to accommodate local grape production, please explain why the DEIR analysis estimates that by 2030 wine processing will not increase enough to handle even the 2007 wine grape production. In particular, please explain why the DEIR projected

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that the 40 artisan wineries would be built at only half their allowable capacity and why the DEIR projected that the full-scale wineries would not fully accommodate the rest of the local grape production, in light of what vintners have characterized as pent-up demand for local processing of 70% to 80% of the County's harvest.

DEIR OMITS AWCP WATER DEMAND FOR PERMITTED NON-WINERY DEVELOPMENT: The DEIR also admits on page 4.3-121, "This estimate does not include other uses allowable in the AWCP. They would add to the demand, but would have less demand than the wineries." Please explain this conclusion given the fact than no analysis was conducted to determine water demands of those other allowable uses. At page 4.2-19 the DEIR states, "The potential impacts of any future restaurants, inns, or the business cluster cannot be determined at this time because their sizes, intensities, and locations are unknown." How can the DEIR conclude other allowable uses will have less water demand than wineries when there has been no effort to quantify that demand?

DEIR FAILS TO INCLUDE DEMAND FOR IRRIGATION OF NEW AGRICULTURAL LAND: The DEIR concludes that water use for agriculture will "remain relatively stable, with a small decline." DEIR, p. 4.3-115. Thus, the DEIR includes no new water demand from agriculture in Table 4.3-9.

The DEIR's conclusions regarding agricultural water use were based on the fact that AMBAG did not project an increase in agricultural employment and that the SVWP EIR forecast a slight decline for agricultural water use in the Salinas Valley. DEIR, p. 4.3-114.

However, as noted elsewhere in these comments, there is no evidence that the AMBAG agricultural employment forecast was based on assumptions consistent with the 2007 General Plan, including the assumptions that the County would create substantial incentives for wineries and grape production and that conversion of previously uncultivated land to farmland would continue to add farmland.

The SVWP EIR is internally inconsistent in projecting agricultural water use. It states at page 3-22, Section 3.2.4, "Agricultural needs, which make up a far greater share of water use, are projected to decrease by approximately 51,700 AFY." However, this statistic is contradicted at page 7-5, Section 7.2.1. Here, the SVWP DEIR states that agricultural water use "would result in a net reduction of 60,000 acre-feet per year (AFY) by 2030." The SVWP DEIR states that a 60,000 AFY reduction in agricultural water use would be countered by an increase in urban water use of 40,000 AFY. The projected result would be a reduction in overall water demand in the Salinas Basin of 20,000 AFY (4%). However, if that same demand were calculated using the earlier 51,700 AFY figure, overall demand in the Basin would only decline by 11,700 AFY. The 2007 General Plan DEIR cannot rely on the SVWP EIR without reconciling this inconsistency.

Furthermore, it is clear that the SVWP EIR did not make assumptions about the continuing growth of farming that are consistent with the data and conclusions in the

2007 General Plan DEIR or the facts on the ground through 2007. The SVWP draft EIR states that agricultural land use will remain unchanged:

"Agricultural land uses would shift, with a large increase in relative acreage devoted to vineyards (a 25% increase between 1995 and 2030 was assumed), and a decrease to all other uses (truck crops, field crops, pasture, and orchards). Conversion of agricultural acreage to urban uses is also assumed to occur, but would be generally replaced by land not currently in agricultural use. *Net agricultural acreage would remain effectively unchanged*." SVWP DEIR, § 7.2.1, emphasis added.

However, as the DEIR points out repeatedly on pages 4.2-6 to 4.2-7 of the Agricultural Resources chapter, despite conversion of agricultural land to urban uses, new land is brought into cultivation to replace it.

Indeed, the 2007 General Plan DEIR projects that at least 450 acres of previously uncultivated land will be converted to agriculture annually. DEIR, pp. 4.9-45, 95. Over the next 22 years, this would add 9,900 acres of irrigated farmland. The DEIR states that only 2,571 acres of existing agricultural land will be converted to urban uses by the 2007 General Plan. DEIR, p. 4.2-11. *Thus, the DEIR projects a net increase of 7,329 acres of irrigated farmland through 2030.* The DEIR's projection of at least 7,329 acres of new irrigated farmland is simply inconsistent with the assumption in the SVWP DEIR that agricultural acreage would remain unchanged.

It is evident that the SVWP EIR substantially under-predicted vineyard conversion activity based on data that has already been reported. As cited above, the SVWP EIR assumed "a large increase in relative acreage devoted to vineyards," noting parenthetically that "a 25% increase between 1995 and 2030 was assumed." In 1995, Monterey County vineyard acreage was 30,483. Monterey County Vintners and Growers Association official website, Monterey Wine Country, Table: Monterey County Premium Wine Grape Production, Exhibit 5.⁶ A 25% increase would produce vineyard acreage totaling 38,104 acres. However, as the 2007 crop report reveals, current vineyard acreage has already reached 42,764. Thus, acreage *in 2007* already exceeded the SVWP EIR projected *2030* vineyard acreage by almost 5,000 acres. And as discussed below, the DEIR projects that agricultural conversions will continue at a rate of at least 450 acres annually; and a more reasonable projection would be at least 820 acres annually. These ongoing conversions after 2007 render the SVWP EIR's forecast even more out of touch.

The SVWP EIR projected a slight decline in net water use based on the assumption that urban land uses would replace agricultural uses and that lost agricultural land would be replaced by vineyards. However, as discussed above, the SVWP EIR grossly underestimated the amount of new agricultural land conversions. Furthermore, other assumptions have changed since the SVWP EIR was completed and certified. In 2001, Monterey County ordinance prohibits new cultivation on slopes of 25% or greater. "Conversion of uncultivated land to cropland shall not be permitted on slopes over 25%"

Available at http://www.montereywines.org/wineries_acreage.html.
Monterey County code, § 21.66.030 C-1. Under the 2007 General Plan, this prohibition would be eliminated for slopes of any steepness by 2007 General Plan Policy OS-3.5(2). It states, "The County shall develop and implement an Agricultural Permit process for the conversion for agricultural purposes, of previously uncultivated lands on slopes in excess of 25-percent (25%)." There are 496,432 acres of land with intact natural vegetation designated to permit agriculture (farmland, rural grazing, permanent grazing, or resource conservation) on slopes exceeding 25% in the County. See TNC, Analysis of Slope and Vegetation by Planning Area for Land Permitting Agriculture Under the 2007 Monterey County General Plan, Exhibit B to comments by TRA Environmental, Exhibit 13. The SVWP EIR had no way to evaluate this "bonanza" of potentially cultivated acreage that would be made available by the proposed change in slope development policy that would add thousands of acres of potential farmland to the County. And the DEIR fails to analyze the potential increase in water use resulting from this significant change in slope policy.

The SVWP EIR assumed that new acreage will be devoted exclusively to wine grape production. However, other high-profit crops must also be considered for cultivation on slopes that will become available under the new slope policy – strawberries, for example. According to the 2007 Monterey County Crop Report, in the decade from 1997 to 2007 the value of Monterey County's strawberry crop almost tripled, galloping from \$209,000,000 to \$605,000,000. As the crop report shows, strawberry acreage continues to expand, as does the acreage for many other high-value crops – citrus, raspberries, walnuts, tomatoes, etc. Many of these crops use much more water than wine grapes. There is no reason to assume wine grapes will be the only crop taking advantage of the new acreage available, especially since the 2007 General Plan policies regarding Routine and Ongoing Agricultural Activities apply to all growers. See Policy AG-3.3, 2007 General Plan, pp. AG-6 to AG-7 in the 2007 General Plan.

In sum, the DEIR must be revised and recirculated to provide a reasonable projection of water demand to support new agriculture in light of the facts that 1) the SVWP EIR, on which the DEIR relies, substantially underestimated agricultural conversions, 2) the SVWP EIR's assumption of no net change in agricultural land is inconsistent with the 2007 General Plan EIR's own projection that irrigated farmland will increase by at least 7,329 acres, and 3) the DEIR's policy changes that create incentives for new vineyards and other agricultural cultivation on sloped land.

How much additional water will be required for the new agricultural land? The DEIR's projection that 450 acres of new farmland will be converted annually is based on a 25 year period in which one third of the land was converted for vineyards.⁷ DEIR, p. 4.9-63. Thus, accepting the DEIR's 25-year sample (which, as discussed below, substantially understates the accelerating trend in conversions), 2,443 acres (one third of the net increase of 7,329 acres through 2030) would represent vineyards and 4,886 acres

⁷ The more recent data shows that 40% of conversion acreage is vineyards. However, as discussed below, this data also shows that the actual rate of conversion is 820 acres per year, rather than 450. DEIR, p. 4.9-63. To be consistent with the DEIR's choice to skew the conversion projection by including 25-years of data, we use the vineyard data for the 25 year period.

(two thirds of the net increase of 7,329 acres) would represent other more water intensive row crops. Conservatively assuming that wine grapes are irrigated at a rate of 1 acre-foot per year and that row crops are irrigated at 2 acre-feet per year, the additional water demand would amount to at least 12,215 acre-feet per year.⁸ The DEIR must be revised to include this 12,215 acre-feet of water demand water demand in Table 4.3-9. Obviously, this demand dominates the 6,123 acre-foot total new demand for non-agricultural purposes through 2030 that the DEIR presents in Table 4.3-9.

Because the basin has not been adjudicated, there are no constraints on groundwater pumping to support new agriculture. The 2007 General Plan does not have any policies that would prevent farmers from pumping to support new agriculture, particularly since the 2007 General Plan intends through Policy AG 3.3 to exempt Routine and Ongoing Agriculture from many otherwise applicable policies and since the Policies PS 3.1 to 3.3 requiring proof of long term sustainable water supplies do not apply to agricultural wells. Accordingly, recognition of the water demand for new agricultural uses renders unsupportable the DEIR's conclusions that water supply, overdrafting, and saltwater intrusion impacts will be less than significant through 2030.

In light of the inconsistencies in assumptions, we ask that the County reconcile the land and water use assumptions used to develop Table 1-2 in the SVWP EIR, on which the 2007 General Plan DEIR relies for its conclusions regarding overdrafting, saltwater intrusion, and agricultural water demand, with the land and water use assumptions in Table 4.3-11 in the 2007 General Plan DEIR. Please identify and compare the assumptions for both urban and agricultural use in both sources. Please explain why Table 4.3-11 omits any agricultural water use increases in light of the DEIR's projected increase of 450 acres of agricultural land annually.

AGRICULTURAL CONVERSIONS ARE UNDERSTATED IN THE DEIR: As discussed elsewhere in these comments, the DEIR substantially underestimates future agricultural conversions. Thus, the water demand from new agricultural land use will likely be greater than estimated above based on the DEIR's projection that only 450 acres will be converted annually.

On page 4.9-45, the DEIR uses a 25-year trend to project conversion to vineyard acreage. This severely dilutes recent trends as well as the stated objectives of the wine industry in Monterey County. The DEIR projects an average increase of 450 acres per year. This ignores the most recent trend data for 1996-2006 of conversions of approximately 820 acres per year. DEIR, p. 4.9-63.

⁸ Vineyard and row crop irrigation data is from 1) Kurt Gollnick, Chief Operating Officer of Scheid Vineyards, Inc. and 2001 President of the Monterey County Vintners and Growers Association, oral presentation to Office of Economic Development Commission Forum, October 25, 2001 and 2) West Yost Associates, 2005, Technical Memo No. 3, pages 9-16, Prepared for the Napa County 2050 Napa Valley Water Resources Study as part of the Napa County General Plan Update, October 19, 2005, cited by the DEIR. Row crop irrigation data is also based on Stop the Salt, Save Our Jobs, A "White Paper" on Pajaro Valley Water Issues, Prepared by the Research Office of the United Farm Workers of America, AFL-CIO, September 1999, Exhibit 9, available at

http://ufw.org/ board.php?mode=view&b code=res white&b no=83&page=&field=&key=&n=16.

Use of 25-year trend data is unsupportable in light of the fact that the most recent 10 years of that data shows an accelerating trend toward vineyard conversions and the fact that vineyard conversion estimates have not been able to keep pace with actual conversions. In 2001, Monterey County Vintners and Growers projected 5000-acre growth in vineyards over 5 years (Monterey County Wine Industry Conceptual Future Plan, April 2001). In 2002, "projections by the industry suggest an increase of about 9,700 acres" within 5 to 10 years (DEIR for GPU3 at page 5.2-56). The 2007 Monterey Crop Report shows total grape acres at 42,764, which is an increase of 1,455 acres over the 2006 total.

Furthermore, the winery capacity in the AWCP will create substantial incentives for additional grape production. If all of the wineries permitted within the corridor operate at full capacity, they would be able to process grapes harvested from 62,411 acres. ⁹ Since the 2007 Monterey Crop Report shows total grape acres at 42,764, winery capacity within the winery corridor alone could accommodate an additional 20,000 acres of wine grapes in Monterey County. The AWCP policies do not prohibit winery development outside the corridor, which could add further capacity and provide additional incentive to convert additional acreage to vineyard.

And there is no reason to assume that 100% of the grapes grown in Monterey County will be processed locally. It has been profitable for growers to export 70% to 80% outside the County for processing, and there is no evidence provided by the DEIR to conclude that it will not remain profitable, especially as out-of-County wineries compete for Monterey County wine grapes. The wineries in the winery corridor will have the capacity to process grapes harvested from 62,411 acres. If the wine grape exports remain profitable, and there is no reason to suppose that they will not, the new winery capacity could create demand for 62,411 acres of new vineyards.¹⁰

These data suggest that acreage conversion to vineyards and other agriculture should be evaluated at a rate of at least 820 acres per year – a conversion rate representative of the most recent 10-year trend, rather than the 450 acres per year the DEIR projects, a figure that is artificially weighted by historic data and which does not

⁹ Neither the DEIR nor the AWCP impose any capacity limits for Full-Scale *or* Artisan Wineries. The capacity limits assumed in our determination of the full capacity of AWCP wineries is based on the DEIR statement at 3-39 that full scale wineries would produce 2 million cases annually and the DEIR statement at p. 4.3-120 that an artisan winery could produce up to 50,000 cases annually. We calculated capacity as follows: 40 Artisan Wineries @ 50,000 cases = 2,000,000 cases, 10 Full-Scale Wineries @ 2,000,000 cases; total capacity = 22,000,000 cases. 22 million cases divided by 62.5 cases/ton = 352,000 tons. (Cases per ton source: Monterey County, Monterey County 21^{st} Century General Plan Update Draft Environmental Impact Report, March 27, 2002, p. 5.2-56, Exhibit 3.) 352,000 tons divided by 5.64 tons per acre = 62,411 acres (Tons per acre source: Monterey County Agricultural Commissioner, Monterey County Crop Report 2007, p. 13, Grape Production, Exhibit 4.

¹⁰ This conclusion is supported by comments made by Monterey County Agricultural Commissioner Eric Laurentzen in a Monterey County Herald article dated August 1, 2001. He said, "There is a potential of opening up 100,000 acres of land for vineyards." Monterey County Herald, "All signs point to help for wineries," August 1, 2001, Exhibit 10.

reflect the policy choices in the 2007 General Plan that create incentives for conversions and open up sloped land for expansion. In light of this, please explain why the DEIR chose a conversion rate of 450 acres per year.

With a conversion rate of 820 acres per year, there would be an additional 18,040 acres of new agricultural land by 2030. Assuming that 2,571 acres of existing land is lost to urban uses, the net increase in agricultural land would be 15,469 acres. We can assume that that 40% is for vineyards requiring 1 acre-foot per year and 60% is for row crops requiring 2 acre-feet per year.¹¹ DEIR, p. 4.9-63 (trend in last 10 years is 40% vineyards). Based on these assumptions, water demand for new agriculture will amount to 24,759 acre-feet per year. Table 4.3-9 should be revised to reflect this demand. Again, acknowledgement of this demand would negate the DEIR's significance conclusions with respect to water supply, overdrafting, and saltwater intrusion.

In sum, in view of the economic incentives for new agricultural conversions provided by significant deregulation and incentives for new conversions, including Policies OS 3.5 and AG 3.3 and the policies exempting wineries from discretionary permitting, we ask that the County justify the DEIR's assumption that conversion to cultivation will proceed at the languorous pace of 450 acres per year and explain why the DEIR failed to assume that newly converted land would require irrigation. Please also defend the DEIR's un-amended use of the SVWP EIR, a document prepared in 1998 and certified in 2001 under completely different General Plan assumptions and based on inconsistent assumptions about new agricultural uses.

C. Inconsistency In Analysis Of Monterey Peninsula Supply

At page 4.3-1 the DEIR states, "Supply on the Monterey Peninsula will be adequate to meet current demand, assuming that the Cal Am seawater desalination plant is permitted and operational by 2015 as currently expected, but will not be sufficient to meet additional demand up to the 2030 planning horizon without adversely affecting groundwater; thus additional water supply infrastructure will be needed."

However, at page 4.3-47 the DEIR states, "On January 15, 2008, the State Water Board issued a draft CDO (Order WR-228-00XX-DWR) requiring Cal-AM to stop diverting water from the Carmel River in excess of its legal rights, by reducing its unlawful diversion pursuant to a schedule set forth in the CDO. The draft CDO alleges that since 2000, Cal-AM has illegally diverted at least 7,164 AFY from the Carmel River

http://ufw.org/ board.php?mode=view&b code=res white&b no=83&page=&field=&key=&n=16.

¹¹ Vineyard and row crop irrigation data is from 1) Kurt Gollnick, Chief Operating Officer of Scheid Vineyards, Inc. and 2001 President of the Monterey County Vintners and Growers Association, oral presentation to Office of Economic Development Commission Forum, October 25, 2001 and 2) West Yost Associates, 2005, Technical Memo No. 3, pages 9-16, Prepared for the Napa County 2050 Napa Valley Water Resources Study as part of the Napa County General Plan Update, October 19, 2005, cited by the DEIR. Row crop irrigation data is also based on Stop the Salt, Save Our Jobs, A "White Paper" on Pajaro Valley Water Issues, Prepared by the Research Office of the United Farm Workers of America, AFL-CIO, September 1999, Exhibit 9, available at

and that Cal-Am's unauthorized diversions continue to have adverse effects on the public trust resources on the river."

The State Water Board's pending decision will impact the water supply available for current demand. The DEIR acknowledges that the board included a water demand reduction schedule in its cease and desist order. However, the DEIR did not include any of this information in its analysis. Please provide the water demand reduction schedule.

Absent this information and analysis, and given that the CDO will affect current demand, please explain the DEIR's conclusion that "supply on the Monterey Peninsula will be adequate to meet current demand."

D. Incomplete Information Regarding Carmel River Basin Demand

The DEIR fails to evaluate the acknowledged substantial increased new water demand from riparian users in the Carmel Valley. The DEIR acknowledges this problem:

"An additional water supply issue in Carmel Valley is the potential unquantified impacts of increased use and demand by riparian users along the Carmel River. No action by the SWRCB or the courts has evaluated the cumulative impacts on the public trust resources by individual well owners since the time of the MPWMD Water Allocation Program EIR (Monterey Peninsula Water Management District 1990). As the allocated water has been exhausted, an increase in claims of riparian rights has been observed. It is unclear whether these claims represent an increased demand on the water resource system and whether environmental impacts are associated with the potential increased demand." DEIR, p. 4.3-13.

If increased claims have been observed, and the allocated water has been exhausted, please explain why there's any question that these riparian claims are increasing water demand in the Carmel River Basin. This new water demand must be estimated and included in the analysis of the Carmel River Basin.

Until all of the above information is provided for the Carmel River Basin, it is impossible to conclude that the Carmel River Basin will be adequate to support current water use or future demand.

The same comments can be made about the DEIR's analysis of new water demand in the Seaside Basin, a basin whose use and welfare is inextricably linked to the Carmel River Basin. The DEIR makes this clear in its discussion at section 4.3.2.5 Carmel River Conflicts. DEIR, pp. 4.3-46 to 4.3-48.

It is not sufficient to simply acknowledge, as the DEIR does on page 4.3-120 that the Seaside aquifer is over-drafted and "future development there will exacerbate that significant effect. It is also the County's responsibility to mitigate significant impacts to

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the greatest extent possible. Unless potential impacts are quantified and fully analyzed, they cannot be fully mitigated.

E. DEIR Fails To Provide Meaningful Analysis Of Water Balance

OBLIGATION TO PROVIDE WATER BALANCE: In *Vineyard Area Citizens* for Responsible Growth v. City of Rancho Cordova (2007) 40 Cal.4th 412, 441 ["Vineyard Area Citizens"], the California Supreme Court held that an EIR for a large development project must provide some discussion of total supply and demand in order to evaluate the long-term cumulative impact of development of water supply. Through this discussion, the EIR must show a "likelihood" that water will be available – *i.e.*, an "approximate long-term sufficiency in total supply" in light of foreseeable long term demand. *Id.* Where an EIR cannot show that supply will be sufficient, it must acknowledge the degree of uncertainty involved, discuss the reasonably foreseeable alternatives and disclose the significant foreseeable environmental effects of each alternative, as well as mitigation measures to minimize each adverse impact. *Id.* at 434, 444, 446.

In *Vineyard Area Citizens*, the Supreme Court held that the EIR was invalid because it had failed to demonstrate the sufficiency of long-term water supply. The EIR at issue in *Vineyard Area Citizens* was inadequate because 1) it had provided no discussion of competing cumulative uses except for some inconsistent gross demand figures, 2) it had failed to present data so as to inform the public, providing only scattered data and data buried in appendices or referenced documents, and 3) it had relied on a prior environmental document without clarifying the relationship of the project to that project. *Id.* at 441-443. Ultimately, the Court held that the EIR had failed to provide substantial evidence of an adequate long-term supply:

"On the factual question of how future surface water supplies will serve this project as well as other projected demand in the area, the project FEIR presents a jumble of seemingly inconsistent figures for future total area demand and surface water supply, with no plainly stated, coherent analysis of how the supply is to meet the demand. *Id.* at 445.

The Supreme Court held in *Vineyard Citizens* that there is no substantial evidence of a long term water supply when there are factual inconsistencies or a lack of clarity with respect to long term demand or estimated supplies for the project and other projects competing for the same water supply. *Id.* at 439. It held that an EIR must reconcile differences between its supply and demand projections and the projections in documents it relies on. *Id.* at 439-440.

The Supreme Court also held that vague and unquantified references to a management technique like conjunctive use do not suffice to provide the requisite degree of certainty as to long term supply. *Id.* at 440. Thus the DEIR must actually quantify expected supply and demand, and, where it relies on management strategies like

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conservation and conjunctive use, it must quantify the expected yields from these strategies.

The principle question in *Vineyard Area Citizens* was the amount of uncertainty that can be tolerated in an EIR for a land use plan. *Id.* at 428. At issue in *Vineyard Area Citizens* was a master plan for a community that would ultimately contain 22,000 residential units. Thus, the *Vineyard Area Citizens* project was being planned at the same level of generality as the 2007 General Plan and it contained more than twice as many residential units as are contemplated by the 2007 General Plan through its 2030 planning horizon. The holding in *Vineyard Area Citizens* clearly required that water demand and supply be quantified and related to cumulative demand from other projects using the same supplies.

The DEIR fails to provide a comprehensive, quantitative water balance analysis for the Salinas Valley Basin, for which it nonetheless concludes that water supplies will be sufficient. Without a quantitative analysis, the DEIR cannot provide the required level of certainty as to the sufficiency of Salinas Valley Basin supplies.

The DEIR also fails to provide a comprehensive, quantitative water balance analysis for the basins for which it concludes there will be a deficit. Without this analysis, the DEIR fails to provide an adequate disclosure of the severity of the impacts.

DEMAND DATA IN TABLE 4.3-9 INVALID: As noted above, the conclusions with respect to groundwater availability from the Salinas Valley without causing saltwater intrusion impacts is not supported by any consideration of impacts to steelhead or the feasibility of providing a distribution system. The demand projections in Table 4.3-9 rely on the prior environmental review for the SVWP, which makes internally inconsistent assumptions about the growth of agricultural water demand. Furthermore, the SVWP assumptions about agricultural water demand are inconsistent with the DEIR's projection for the increase in cultivated agricultural land by 450 acres per year, and this projection is itself substantially understated. Thus, the demand data in Table 4.3-9 are invalid.

TABLE 4.3-9 AND THE DEIR FAIL TO PRESENT EXISTING DEMAND OR TO COMPARE DEMAND TO AVAILABLE SUPPLY: Even if the demand data were valid, Table 4.3-9 does not provide a useful picture of total demand because it omits existing demand and omits any information on existing and future demand from cities and from the unincorporated coastal areas drawing from the same water supplies. Most critically, Table 4.3-9 provides only demand information, failing to provide any information about long term supplies for each basin. There is simply no presentation of the balance between long-term demand and supply that reflects all competing demands from the water supplies at issue. The DEIR must be revised to provide some estimate of the long-term water balance for each affected basin.

TABLE 4.3-6 DOES NOT SUFFICE AS A WATER BALANCE ANALYSIS FOR THE SALINAS VALLEY BASIN: Although Table 4.3-6 purports to provide

projected 2030 conditions for the Salinas Valley Groundwater Basin in light of projected pumping, this table does not suffice to provide information about long-term sufficiency of supply. Table 4.3-6 is simply a reprint of Table 1-2 in the SVWP EIR, which was based on land use assumptions as of 1997. SVWP EIR, section 1.3, Table 1-2 (identifying source as "MCWRA 1997"). An EIR may only rely on a prior planning document for water supply analysis if the project's demand was actually included in that analysis. *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 434-435. As discussed above, the 1997 land use assumptions are inconsistent with the DEIR's assumptions for cultivated agricultural land, and the DEIR provides no evidence that the 1997 assumptions regarding 2030 urban demand are consistent with the DEIR's assumptions for the 2007 General Plan.

Furthermore, Table 4.3-6 does not actually show a water supply sufficiency and does not even assume that the SVWP would be built. The DEIR fails to restate the Salinas Valley Basin water balance based on the assumption that the SVWP will be built and/or expanded to include additional diversions.

NO WATER B ALANCE PRESENTED FOR OTHER BASINS: As noted, the DEIR does attempt to present a water balance for the Salinas Valley Basin, albeit unsuccessfully. However, no table or other clear presentation is provided showing the total projected demands and supply for the other basins.

For example, the discussion of the Carmel River watershed identifies storage capacity, demand in 2006, and a forecast of demand by 2026. DEIR, 4.3-38 to 4.3-39. However, these figures are not related to the demand growth assumptions in Table 4.3-9 and no quantitative conclusions are presented regarding the long term relationship of supply and demand in the DEIR's significance discussion. DEIR, p. 4.3-127-128.

And Table 4.3-9 does not even present a complete picture of the Carmel Valley demand from growth in the unincorporated area. According to the Table 4.3-9, at 2030, new, annual water demand from the Carmel River Basin will be 310 acre-feet – 88 acre-feet for the Carmel Mid-Valley Affordable Housing Overlay, 5 acre-feet for Cachagua, 60 acre-feet for Carmel Valley and157acre-feet for the Greater Monterey Peninsula. However, development on existing lots of record and other development outside of Community Areas, Rural Centers and Affordable Housing Overlays is not broken down by water basin, even though the DEIR estimates it will result in new water demand of 1,180 acre-feet – 20% of the new water demand. Some of this demand will occur in the Carmel Valley, but it is impossible to tell how much from Table 4.3-9.

Similarly, the discussion of the Pajaro groundwater basin fails to present a coherent or complete picture of future demand and supply. The DEIR does not relate the estimates of overdrafting by 2040 (DEIR, p. 4.3-41) to the demand from new growth in Table 4.3-9. Nor does the DEIR relate new demand to its discussion of significance or provide a water balance in that discussion. DEIR, pp. 4.3-128 to 4.3-129. Even though the DEIR concludes that water supply may not be sufficient in these basins, there is no reason that the projected deficiencies should not be presented.

CUMULATIVE DATA NOT PRESENTED: The DEIR also fails to assess the impacts, by water basin, of increased water demand due to urban growth in the county's incorporated cities. The cursory discussion of water supply impacts in the DEIR's cumulative impact section does not quantify demand or supply for any of the affected basins. DEIR, pp. 6-12 to 6-13. With respect to future water demand from cities, the DEIR simply states, "As discussed elsewhere in this EIR, residents of the unincorporated area will make up about 25% of the county's total population in 2030. Therefore, water demand in the cities would be expected to be roughly three times that shown above for the unincorporated areas." DEIR, p. 4.3-116. The DEIR does not actually quantify demand from cities, although using the DEIR's methodology it would amount to 18,369 acre-feet of water – 3 times the 6,123 AFY shown in Table 4.3-9.

Perhaps because the DEIR does not actually use its own projection of growth in city water demand to draw any conclusions regarding water supply sufficiency, the DEIR does not bother to justify its exclusively population-based forecasting methodology. Basing water demand only on population estimates fails to take into account water demand that is driven by industrial and agricultural needs, and fails to take account of the difference in urban residential demand and rural residential demand.

It is entirely unclear whether and how demand from unincorporated coastal areas has been included in the DEIR's analysis.

Not only does the DEIR fail to quantify the demand from growth of incorporated cities and unincorporated coastal areas, but it provides no information about how much new demand each basin will experience resulting from city growth. A meaningful analysis must project demand and supply for each basin, particularly since the DEIR evaluates the significance of water supply impacts, including overdrafting and saltwater intrusion, on a basin-by-basin basis.

Nor does the DEIR relate its methodology for projecting city water demand to the water plans prepared by the incorporated cities. It is likely that more precise estimates of water demand are available from the cities involved. This is critical information which needs to be provided. To the extent that the DEIR's conclusions with respect to future demand and supply differ from these plans, the DEIR should explain those differences.

In sum, the DEIR must be revised to provide a meaningful projection of future water demand from both the unincorporated and the incorporated areas of the County. Please provide information responsive the *Vineyard Area Citizens* mandate that an EIR provide data demonstrating the sufficiency of water supplies where the DEIR claims sufficiency, and demonstrating the magnitude of the deficiencies where the DEIR identifies a shortfall. Please ensure that this information reflects the best available information about demand from cities, coastal areas, and agriculture. Please reconcile the land use assumptions used in any source documents with the land use assumptions in the proposed 2007 General Plan. Please provide this information separately for each groundwater basin or watershed.

As discussed below, the County improperly defers the development of criteria for "long term sustainable water supplies" in Policy PS 3.3. However, in drawing the conclusions required by *Vineyard Area Citizens* regarding the long term sufficiency or insufficiency of water supplies, the County is required to make some determination *now* about the magnitude of "long term sustainable water supplies" in the various basins. Please make those assumptions explicit and explain their foundation with reference to the best available information.

F. DEIR Fails To Provide Required Certainty Of Water Supply, Particularly For The Portions Of the Project Exempted From Further Permitting And Environmental Review

The Supreme Court held in *Vineyard Area Citizens* that "water supplies must be identified with more specificity at each step as land use planning and water supply planning move forward from general phases to more specific phases." *Id.* at 433-434. This EIR will constitute the terminal environmental review for a host of future projects for which the 2007 General Plan expressly provides that there will be no future CEQA review because only ministerial permits will be required, including most of the wineries and related uses in the AWCP; Routine and Ongoing Agricultural Operations that include creation of thousands of acres of new irrigated farmland; and construction of thousands of residences on lots of record without any further discretionary review. For at least these uses, the County has an obligation to provide greater certainty as to water supply than is required in a program level EIR for which subsequent discretionary review will occur.

This requires that the DEIR actually identify the type, intensity, and location of development that will be permitted without any further discretionary review; determine its water demand; and identify adequate water supplies for this development. Please provide this information for the wineries *and* related uses in the AWCP; Routine and Ongoing Agricultural Operations that include creation of thousands of acres of new irrigated farmland; and construction of thousands of residences on lots of record without any further discretionary review.

G. DEIR Fails to Provide Water Supply Assessment For Project Level Approvals

In addition to the requirements of certainty based on case law, portions of this Project are subject to the statutory requirements to identify a water supply with the detail and certainty specified by the Water Supply Assessment requirements of Water Code sections 10210 *et seq*.

Water Code section 10912(a)(7) defines projects that are subject to the requirement to prepare a water supply analysis as including any project that will demand water equal to 500 dwelling units. The DEIR contemplates more than 500 units of residential development on existing lots of record, for which the DEIR assumes that no additional discretionary review will occur. The DEIR also contemplates water demand

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for wineries and associated uses, including process water for all of the artisan wineries and water for up to 200 residences. Thus, water demand from AWCP projects expressly exempted from future CEQA review will exceed the amount demanded by 500 residences. The DEIR contemplates permitting new cultivation of thousands of acres of land for irrigated agriculture with no discretionary permitting or CEQA review. The DEIR must be revised to provide a Water Supply Assessment for these categories of uses.

Recognizing that it was the terminal EIR for the AWCP, the DEIR for GPU4 expressly consisted of a program level EIR for the General Plan Update and a project level EIR for the AWCP. Although this DEIR does not acknowledge this, it clearly functions as a project level EIR for AWCP and other activities that are expressly exempted from future CEQA review and discretionary permitting. Thus, a Water Supply Assessment conforming to the requirements of Water Code sections 10910 *et seq.* must be prepared for 1) development on lots of record that are assumed to be exempt from discretionary permitting and CEQA review, 2) development of the AWCP that is expressly excepted from discretionary review and CEQA, and 3) Routine and Ongoing Agricultural Activities that are expressly excepted from discretionary review and CEQA.

H. The DEIR Does Not Adequately Disclose Impacts Of Providing Future Water Supplies

In *Vineyard Area Citizens*, the Supreme Court made it clear that the fundamental requirement is not just that an agency identify water supplies, but that the agency use its best efforts to find out and disclose all that it reasonably can about the *impacts* of providing water supply. *Id.* at 428, 429, 430-431. The Court found that the EIR was inadequate because the agency had failed to disclose impacts to salmonids in the DEIR and had attempted to tier from future environmental reviews. *Id.* at 440-441, 448-449. As discussed above, the DEIR here fails to disclose the effects of increasing Salinas River diversions on steelhead.

Also as discussed above, the DEIR fails to provide a complete and consistent water balance analysis for each basin based on the best available information about all demand sources and about the size of the long term sustainable supply. Without such an analysis, the DEIR's conclusions in sections WR-6 and WR-7 regarding the most critical impacts of water supply projects, overdraft and saltwater intrusion, lack an adequate foundation.

In section WR-5, which purports to evaluate the impacts of providing new water supply projects, the DEIR identifies some environmental reviews of various projects, but without incorporating them by reference, without formally stating that the DEIR is tiering from them, and without adopting their mitigation measures. See *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 443-444. The DEIR's actual discussions of the impacts of these previously-reviewed projects does not go beyond a cursory recap of the highlights of prior environmental reviews – thus the DEIR fails as an informational disclosure. DEIR, pp. 4.3-135 to 4.3-142.

With regard to those projects for which no CEQA review has yet been completed, the DEIR attempts to dispense with any new analysis of by referencing *future* environmental reviews. However, the California Supreme Court makes clear that the agency must either disclose the environmental consequences of future supply projects now, or wait until those projects have completed CEQA reviews:

"Instead of itself providing an analytically complete and coherent explanation, the FEIR notes that a full analysis of the planned conjunctive use program must await environmental review of the Water Agency's Zone 40 master plan update, which was pending at the time the FEIR was released. The Board's findings repeat this explanation. To the extent the FEIR attempted, in effect, to tier from a *future* environmental document, we reject its approach as legally improper under CEQA. If the environmental impact analysis the Water Agency expects to perform on its Zone 40 master plan update is important to understanding the long-term water supply for the Sunrise Douglas project, it should be performed in the Sunrise Douglas project FEIR even though that might result in subsequent duplication by the master plan update. If, as Rancho Cordova argues, such duplication would be an impractical waste of resources, the County could instead have deferred analysis and approval of the Sunrise Douglas project until the master plan update analysis was complete, then tiered the project FEIR from the programmatic analysis it performed there. What the County could not do was avoid full discussion of the likely water sources for the Sunrise Douglas project by referring to a not yet complete comprehensive analysis in the Zone 40 master plan update. CEQA's informational purpose 'is not satisfied by simply stating information will be provided in the future.' [citation]" Id. at 440-441.

Where no environmental review has yet been certified, the DEIR's "analysis" consists of nothing more than a laundry list of possible areas of impact, with no effort to obtain, evaluate, and disclose available information about the actual impacts. Most of the discussions consist of a single sentence listing generic impacts; many state that "impacts cannot be determined with certainty" and make no effort to disclose any site-specific information at all.

SALINAS VALLEY WATER PROJECT: As discussed above, the DEIR entirely fails to evaluate the effect on steelhead of the increased diversions necessary to support the assumed expansion of the SVWP. The DEIR also fails to incorporate the SVWP EIR by reference or to state that it is formally tiered from that document; thus, the DEIR impermissibly fails to provide a roadmap to the information it intended to convey. *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 443. This failure is particularly problematic given the apparent differences in land use and water demand assumptions, which the DEIR fails to reconcile, as discussed above. The DEIR also fails to incorporate applicable mitigation measures from the SVWP EIR, as is required. *Id.* at 444.

GRANITE RIDGE DISTRIBUTION FACILITIES: Without providing any specifics, the DEIR states that the County and other agencies are "assessing" new

delivery infrastructure. DEIR, p. 4.3-136. No information is provided about the infrastructure project being assessed, or about the source of water to be supplied. The "impact analysis" consists of a single sentence: "Pipeline construction would result in impacts on traffic, air quality, noise, soils and geology, and biological resources." This entirely generic conclusion conveys no real information about the impacts from such a construction project. And it is clear that there has been no consideration of the ongoing post-construction impacts associated with the use of whatever water supply will be distributed in the new delivery infrastructure.

COASTAL WATER PROJECT (DESALINATION): The DEIR admits that not even a draft EIR has been prepared and then provides a one-sentence, entirely generic list of possible impacts culled from the proponent's environmental assessment. DEIR, p. 4.3-136 to 4.3-137. Even if this generic one-sentence analysis were adequate, and it is not, an EIR may not rely unquestioningly on the applicant's unsupported representations. *Save Our Peninsula Committee v. Monterey County* (2001) 87 Cal .App.4th 99, 121 ("the only evidence that the terrace on the September Ranch property was irrigated pasture was the representation of the applicants themselves, who clearly had a vested interest" in the outcome of the application). The EIR must be revised to provide an independent and meaningful assessment of the effects of this water supply project based on available information.

WATER FOR MONTERY COUNTY'S REGIONAL WATER SUPPLY PROGRAM: Again, the DEIR admits that no environmental analysis has been completed and then provides a generic one-sentence analysis of the potential impacts, which includes the catch-all disclosure of "other impacts." DEIR, pp. 4.3-136 to 4.3-137. The EIR must be revised to provide an independent and meaningful assessment of the effects of this water supply project based on the best available information.

As discussed above, the WFMCC proposal includes 5,000 AFY in increased diversions from the Salinas River, additional groundwater pumping from the Salinas Valley basin, and use of 5,000 AFY of recycled water. It appears that other commitments for much of this water have already been assumed in the DEIR's analysis of the sufficiency of the Salinas Valley basin. Thus, the DEIR should conclude that the WFMCC is likely to aggravate saltwater intrusion and overdrafting, or vitiate the DEIR's conclusions regarding the sufficiency of the Salinas Valley basin and the significance of overdrafting and saltwater intrusion impacts. This possibility can only be disclosed through a regional water balance analysis and an analysis of likely environmental impacts.

Furthermore, as noted above, the Monterey County Water Resources Agency Act (the enabling legislation for the Agency), prohibits water exports from the Salinas River Basin except to serve Fort Ord:

"<u>Legislative findings; Salinas River groundwater basin extraction and recharge</u>. The Legislature finds and determines that the Agency is developing a project which will establish a substantial balance between extraction and recharge within the Salinas River Groundwater Basin. For the purpose of preserving that balance, no groundwater from that basin may be exported for any use outside the basin, except that use of water from the basin on any part of Fort Ord shall not be deemed such an export. If any export of water from the basin is attempted, the Agency may obtain from the superior court, and the court shall grant, injunctive relief prohibiting that exportation of groundwater." Monterey County Water Resources Agency Act, 1990 Stats. 1159, 1991 Stats. 1130, 1993 Stats. 234, and 1994 Stats. 803, Water code Appendix, Chapter 51, § 21.

Mitigation Measure WR-1 commits the County to supporting a regional solution for the Monterey Peninsula in addition to the Coastal Water Project. According to the WFMCC proposal, most of these additional supplies, other than desalination, will originate within the Salinas River Basin – 5,000 acre-feet per year from Salinas River diversions, 5,000 acre-feet per year from recycled water produced at the MRWPCA Salinas Valley plant and 6,000 acre-feet per year from Salinas Basin Groundwater. A fair argument can be made that all three categories are, in fact, groundwater that must not be exported. Recycled water is originally pumped from groundwater supplies; and surface diversions directly impact the amount of water that is recharged through stream percolation. Please reconcile MCWRA's enabling legislation with a regional solution largely based upon prohibited groundwater transfers. Please discuss the specific and cumulative environmental consequences of amending the transfer prohibition. Please also discuss the administrative, legal, fiscal and environmental consequences of violating the Monterey County Water Resources Agency Act.

PAJARO-SUNNY MESA DESALINIZATION PLANT: Again, the DEIR admits that no environmental analysis has been completed and then provides a generic one-sentence analysis of the potential impacts. DEIR, pp. 4.3-138. The EIR must be revised to provide an independent and meaningful assessment of the effects of this water supply project based on available information.

PVWMA's BASIN MANAGEMENT PLAN: The DEIR identifies an EIR for the Basin Management Plan, but fails to incorporate it by reference or to state that it is formally tiered from that document. DEIR, pp. 4.3-138 to 4.3-140; *see Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 443. The DEIR also fails to incorporate applicable mitigation measures from the EIR, as is required. *Id.* at 444.

COMMUNITY AREA INFRASTRUCTURE: The DEIR states that additional infrastructure is required for the Pajaro, Castroville, and Boronda Community Areas. DEIR, pp. 4.3-140 to 4.3-141. The DEIR states that site-specific and facility-specific information is not available and that the significance of impacts cannot be determined. DEIR, p. 4.3-140. However, it is apparent that information is in fact available about these new facilities. For example, the DEIR states that new wells and tanks are being planned in all three areas. Information about these plans should be provided and the DEIR should use the best available information to disclose the impacts of these projects.

For example, the DEIR should explain how the plan to replace a well contaminated by saltwater in Castroville can possibly avoid adding to saltwater intrusion.

I. DEIR Improperly Relies On Water-Based Development Ban

Vineyard Area Citizens holds that a development ban may not be used as a substitute for an adequate water supply analysis.

"Finally, where, despite a full discussion, it is impossible to confidently determine that anticipated future water sources will be available, CEQA requires some discussion of possible replacement sources or alternatives to use of the anticipated water, and of the environmental consequences of those contingencies. [citation] The law's informational demands may not be met, in this context, simply by providing that future development will not proceed if the anticipated water supply fails to materialize." *Id.* at 432.

Yet the DEIR implicitly relies on policies that purport to restrict development until water supplies are adequate in drawing its conclusions regarding the significance of impacts in the Carmel and Pajaro watersheds. The DEIR's significance conclusions state that "General Plan policies will constrain development until long-term water supplies are assured." DEIR, p. 4.3-120; *see also* p. 4.3-134. The DEIR concludes that impacts will be significant and unavoidable, *but only because* "[u]ntil then, non-discretionary development on legal lots of record will exacerbate existing water supply problems, and this is considered a significant and unavoidable water supply impact." DEIR, pp. 4.3-130; see also p. 4.3-135. The DEIR must be revised to reflect that impacts remain significant and have not been avoided by the General Plan policies or proposed mitigation *regardless* whether development occurs on legal lots of record.

As discussed below, the DEIR fails to provide any reasoned explanation why development on legal lots of record, or any other form of development proposed to be permitted without further discretionary review, should be permitted to occur when it will cause or exacerbate significant impacts.

Furthermore, where a development ban is proposed, the EIR must evaluate the impacts *caused by that ban itself*:

"A provision like WS-1 [ban on development without firm proof of available water supplies] could serve to *supplement* an EIR's discussion of the impacts of exploiting the intended water sources; in that case, however, the EIR, in order adequately to inform decision makers and the public, would then need to discuss the probability that the intended water sources for later phases of development will not eventuate, *the environmental impacts of curtailing the project before completion, and mitigation measures planned to minimize any such significant impacts.*" Id. at 444, emphasis added.

Here, the proposed limitation of development where water supply is not available would

likely result in displacing development from areas for which the DEIR projects inadequate water supply to other areas. The DEIR makes no attempt to evaluate the effects from policies that would displace development to other areas. For example, if water supplies do not become available in Pajaro and the Monterey Peninsula, development would be displaced to areas in the Salinas Valley where the DEIR purports to find the water supply to be sufficient. The DEIR must evaluate and disclose the effects of displacing the development projected for the Pajaro and Monterey Peninsula areas in Table 3-8 on resources and conditions in the Salinas Valley, including in particular water resources, biological resources, and traffic conditions.

J. Saltwater Intrusion Analysis Inadequate

The DEIR asserts that seawater intrusion will continue at a rate of 2300 acre-feet per year unless an additional water supply of 14,300 acre-feet are supplied from the SVWP outside the CSIP area. DEIR, p. 4.3-35. This conclusion is based on projections of groundwater pumping contained in the 2001 SVWP EIR, which was in turn based on MCWRA sources from 1997. Compare DEIR, Table 4.3-6, p. 4.3-34 to SVWP EIR, Table 1-2. Thus, on page 4.3-116, the DEIR states, "With implementation of the SVWP and CSIP, the Salinas Valley will have sufficient supplies to 2030, and seawater intrusion will be effectively halted in the Castroville area." And on page 4.3-162, the DEIR states that Seawater intrusion will be controlled in the Salinas valley through the SVWP to 2030."

First, please explain the conclusion that seawater intrusion will be halted in the Castroville area by 2030 when, in fact, seawater intrusion maps developed by MCWRA show that *by 2005* intrusion had already advanced *past* Castroville in both the 180-foot aquifer and the 400-foot aquifer. Monterey County Water Resources Agency, Historic Seawater Intrusion Maps, Pressure 180 foot aquifer and Pressure 400 foot aquifer, 500 Mg/L Chloride Areas, source MCWRA water quality data, Exhibits 7 and 8.¹²

Additionally, please define "effectively halted" and explain how this conclusion was reached. Please do so in light of the evidence provided above that 1) NOAA's 2007 Final Biological Opinion limits the SVWP's surface diversion to 9700 AFY and would therefore not permit additional diversions through the SVWP, and 2) the water demand for expansion of agricultural land discussed above was not assumed by the SVWP EIR, which projected water uses based on 1997 data.

The only certainty seems to be that by 2030 annual seawater intrusion into the Salinas Basin will continue at 2300 AF. Since seawater intrusion would continue, even at a declining rate, throughout the term of the 2007 General Plan, overdraft and seawater intrusion would remain a significant, unmitigated and irreversible impact of development in the Salinas Valley.

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¹² Available at <u>http://www.mcwra.co.monterey.ca.us/SVWP/01swi180.pdf</u> and http://www.mcwra.co.monterey.ca.us/SVWP/01swi400.pdf .

According to Table 4.3-9, 2030 new water demand in the Salinas Valley under the 2007 General Plan would be only 3,830 acre-feet per year. As discussed above, just increasing winery processing capacity to handle 2007 vineyard acreage will increase water demand in the Salinas Basin by between 562 acre-feet per year and 633 acre-feet per year. With seawater intrusion continuing at 2300 acre-feet per year, this increase in water demand represents at least one quarter of the water needed to halt seawater intrusion. As discussed above, we estimate that new agricultural water demand will be at least 12,215 acre-feet per year based on the DEIR's assumption that 450 acres of agricultural land will be added annually, and will more likely be at least 24,759 acre-feet per year based on the last 10 years of conversion data. If the demand in Table 4.3-9 is increased to include this new agricultural water demand, it is clear that saltwater intrusion will not be halted.

K. Proposed 2007 General Plan Policies And Mitigation Measures Are Inadequate

The DEIR recites a list of 2007 General Plan policies in support of its conclusions with respect to the significance of impacts to water resources, including impacts related to water supply, secondary impacts from infrastructure development, overdrafting, and saltwater intrusion. DEIR, pp. 4.3-122 to 4.3-126 (WR-4, water supply); 4.3-142 (WR-5, secondary impacts related to infrastructure); 4.3-4.3-149 to 4.3-153 (WR-6,overdrafting), and 4.3-158 to 4.3-162 (WR-7, saltwater intrusion). The DEIR states that these policies will help ensure that new or expanded potable water supplies and facilities would be provided for future growth." DEIR, pp. 4.3-122.

The DEIR also proposes a number of mitigation measures to address water supply and water supply impacts. DEIR, pp. 4.3-130.

As discussed in the detailed comments set out in the table below, the policies and mitigation measures recited do not provide substantial evidence that the water supply in the Salinas Valley basin will be adequate to future needs or that overdrafting and saltwater intrusion would be avoided in the Salinas Valley. Although the DEIR acknowledges that water supply in other basins cannot be said to be adequate, that some impacts related to infrastructure are significant, and that overdrafting and saltwater intrusion will be significant and unavoidable in other basins, the policies do not represent all feasible mitigation for impacts related to the provision of water supply. Nor do the policies support the DEIR's conclusions that impacts related to provision of water supply will be less than significant or that all feasible mitigation measures have been proposed.

Please address <u>each</u> of the comments in the table below separately, responding to each question or request for information.

<u>In addition to responding to each question or request for information</u>, for each policy or mitigation measure, please explain how it supports findings that significant water supply impacts have been avoided or minimized and/or findings that all feasible mitigation measures have been proposed. 33

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS		
FOR CONCLUDING THAT WATER SUP	PPLY IMPACTS WILL BE LESS THAN	
SIGNIFICANT		
Policies and Mitigation Cited in WR-4, WR-5,	Comments	
WR-6, WR-7, CUM-4 and CUM-5 Purporting to		
Avoid, Minimize, or Mitigate Water Supply,		
Water Supply Infrastructure, Overdrafting, and		
Salt Water Intrusion Impacts		
POLICIES APPLICABLE COUNTY-WIDE	GENERAL COMMENT: For each policy,	
	please address the identified concerns by	
	revising the policy and/or explaining how, in	
	light of these concerns, the policy can provide a foundation for the DEID's conclusion that	
	imposts will be avoided minimized or	
	mipacts will be avoided, minimized, or mitigated	
PUBLIC SERVIC	YES FLEMENT	
PS-1.1 Adequate Public Facility and Services (APFS)	The DEIR states that these policies set forth	
requirements shall:	general standards for the provision of	
a. Ensure that APFS needed to support new	adequate public facilities. DEIR. p. 4.3-122.	
development are available to meet or exceed the level	The only apparent relevance of these policies	
of service of "Infrastructure and Service Standards"	to the sufficiency of water supplies is the	
(Table PS-1, next page) concurrent with the impacts	provision in Table PS-1 permitting rural	
of such development;	development on public lands, agricultural	
b. Encourage development in infill areas where APFS	lands, and rural lands based on "individual	
are available, while acknowledging the rights of	wells in areas with a proven long term water	
property owner's to economically viable use of	supply." Individual wells would also be	
existing legal lots of record throughout the county;	allowed in Rural Centers, subject only to the	
and \mathbf{c} Sock to achieve accompted a level of complete $(\mathbf{L} \mathbf{O} \mathbf{S})$	requirement that lot size be at least 2.5 acres if	
c. Seek to achieve acceptable level of service (LOS)	(Table DS 1 simply provides that water for	
impact fees and planned capital improvements	(Table PS-1 simply provides that water for Community Areas shall be provided by public	
(CIFP)	systems)	
PS-1.2 The Adequate Public Facilities and Services	 Please identify performance standards for a 	
(APFS) standards established in <i>Table PS-1</i> .	"proven long term water supply." If the	
"Infrastructure and Service Standards" shall be used	reference to "proven long term water supply"	
to determine APFS appropriate for new discretionary	is intended to invoke Policy PS 3.3, please	
development.	note our comments below with respect to the	
PS-1.3 No discretionary application for new	absence of any performance standards in	
development shall be approved unless the County	Policy PS-3.3, which simply postpones	
finds that APFS for that use exist or will be provided	identification of "specific criteria for proof of	
concurrent with the new development.	a long term sustainable water supply for new	
PS-1.4 New development shall pay its fair share of	residential or commercial subdivisions."	
the cost of providing APFS to serve the development.	• Please also note that Policy PS 3.3 does not	
rs-1.5 Improvements shall be instaned concurrently with each phase of new development in accordance	apply to non-subdivision development,	
with an infrastructure phasing plan. An infrastructure	including residential development on lots of	
phasing plan if needed shall be approved in concept	DS 1 purports to establish a requirement for	
at the time of project approval.	"proven long term water supply" independent	
PS-1.6 Only those developments that have or can	of Policy PS 3.3 please explain how this	
provide adequate concurrent public services and	standard applies to lots of record and	
facilities shall be approved.	agricultural development. If any such	
	independent requirement for a "proven long	
	term water supply" does not apply to lots of	
	record and agricultural development, please	

FOR CONCLUDING THAT WATER SUI SIGNIFICANT	PPLY IMPACTS WILL BE LESS THAN	
	 explain why not. Please explain why Table PS-1 does not require that wells in Rural Centers be subject to the requirement that there be a "proven long term water supply." Please estimate the effect of these policies in protecting water supplies. 	3
PS-2.1 Coordination among and consolidation with those public water service providers drawing from a common water table to prevent overdrawing the water table is encouraged.	 Policies that "support," "promote," or "encourage" activities and programs do not create any enforceable constraints on development projects. Please explain who is responsible to implement this policy and in what context. Please estimate the effect of this policy in protecting water supplies. 	
PS-2.2 The Water Resources Agency shall assure adequate monitoring of wells in those areas experiencing rapid growth provided adequate funding mechanisms for monitoring are established.	 The policy calls for monitoring wells but without specifying what aspect of well performance will be monitored (water supply? water quality? impacts on neighboring wells?), what standards of performance will be required, and what action would be taken if those standards are not met. Please explain how the County proposes to establish funding mechanisms 	

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	 Please explain what action will be taken to achieve the goal of this policy if funding mechanisms are not established 	
PS-2.3 New development shall be required to connect to existing water service providers where feasible. Connection to public utilities is preferable to other providers.	 What difference will this policy make to ensuring that there is an adequate long term supply of water or that impacts from providing water supply are avoided or minimized? How <i>much</i> difference will it make, if any? How will feasibility of connecting to existing providers be determined? Will the determination include technical or economic factors or both? Who will make the feasibility determination and in what context? If the point of the policy is to subject water consumers to fiscal discipline from paying others for water, please explain what the cost difference would be to the consumers who are required to use existing water service providers versus consumers who obtain water from their own wells, taking into account the cost of drilling and maintaining a well and paying for energy. Why is connection to public utilities "preferable?" What difference does this make to water supply and water supply impacts? Stating that connection to public utilities is "preferable" does not create an enforceable mandate. Why not <i>require</i> connection to public utilities if it makes any difference? 	34
PS-2.4 Regulations for installing any new domestic well located in consolidated materials (e.g.; hard rock areas) shall be enacted by the County.	 The policy has no substantive content and formulation of the regulations it calls for is entirely deferred with no performance standards. Please explain how this policy is related to conclusions regarding the sufficiency of long term water supplies – it appears to be related to water quality issues. 	
 PS-2.5 Regulations shall be considered for water quality testing for new individual wells on a single lot of record to identify: a. Water quality testing parameters for a one-time required water quality test for individual wells at the time of well construction. b. A process that allows the required one-time water quality test results to be available to future owners of the well. c. Regulations pursuant to this policy shall not establish criteria that will prevent the use of the well in the development of the property. 	 The policy does not require that regulations actually be enacted, merely "considered." Why not? The policy has no substantive content and formulation of the regulations it calls for is entirely deferred with no performance standards. The policy does not even specify relevant parameters for well testing, much less specify actual performance standards, which would require that the policy identify both parameters and values for those parameters. For example, specifying both the parameter 	

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT WATER SUPPLY IMPACTS WILL BE LESS THAN SIGNIFICANT d. Agricultural wells shall be exempt from the "nitrate content" and the value "45 mg/L" are necessary to providing a performance regulation. standard. This policy does neither. What is the point of this policy? Who is to be protected by it? If the purpose is simply to provide information to subsequent buyers, then how can the policy have any effect on the sufficiency of the County's water supply? If regulations cannot bar the use of wells, they cannot effectively protect the water supply by preventing overpumping. Why is the policy not applicable to • agricultural wells? Please estimate the effect of this policy in • protecting groundwater supplies. PS-2.6 A Hydrologic Resources Constraints and This policy is apparently to be used to identify ٠ Hazards Database shall be developed and maintained areas that would require discretionary permits in the County Geographic Information System (GIS). under Policy OS 3.5, although this is not The GIS shall be used to identify areas containing stated here. Please clarify. hazards and constraints (see Policy S-1.2) that could • Policy S 1.2 calls for developing a "Geologic potentially impact the type or level of development Constraints and Hazards Database." It is not allowed in these areas (Policy OS-3.5). Maps clear how the "Hydrologic Resources maintained as part of the GIS include: Constraints and Hazards Database" called for a. Impaired water bodies on the State Water under Policy 2.6 differ, particularly since 34 Resources Control Board 303d list. Policy 2.6 references Policy S 1.2 in b. Important Groundwater Recharge Areas connection with identifying areas containing c. 100-year Flood Hazards hazards and constraints. d. Hard rock areas with constrained groundwater No criteria are provided to identify areas e. Areas of septic tank leachfield unsuitability containing hazards and constraints, including Hydrologic Resources Constraints and Hazards. Please explain the criteria that will be used to identify ". Important Groundwater Recharge Areas.' Although Policy S 1.2 requires mapping impaired water bodies on the State Water Resources Control Board 303d list, there is no indication how that information would be used to constrain development. Nor is there any indication how identification of other Hydrologic Resources Constraints and Hazards would constrain development. The EIR must explain how this policy would be implemented to regulate development. No deadline for completing the database is provided and no interim measures are specified. This policy does not apparently increase water supply or decrease water consumption over

baseline conditions. Please estimate the effect of this policy in protecting groundwater

	supplies.
PS-2.7 As part of an overall conservation strategy	• No criteria for "highly erosive soils" are
and to improve water quality, Area Plans may include	provided. The 2007 General Plan defines
incentive programs that encourage owners to	erosive soils, but not highly erosive soils.
voluntarily take cultivated lands on slopes with	Please identify the areas in the County with
highly erosive soils out of production.	"highly erosive soils." the extent of existing
	cultivation on those soils, and the expected
	increases in cultivation of highly erosive soils
	in the future
	 Please explain how this policy is consistent
	with policies permitting development on
	slopes in excess of 25% Since slope will
	increase erosion even if soils are not "highly
	areasing " places explain why the policy does
	not also call for incentives to take highly
	along d lond out of cultives to take highly
	Sloped land out of cultivation.
	• This policy has no obvious bearing on the
	sufficiency of water supply, impacts related to
	providing water supplies, overdrafting, or
	saltwater intrusion. Please explain how it is
	related to these issues. If the relevance of the
	policy to findings regarding the sufficiency of
	water supply is the expectation that it would
	reduce the overall extent of irrigated land in
	the County, please explain how much land
	would be retired and how much water would
	be saved.
	• The policy does not identify or mandate any
	program. Area Plans may or may not include
	incentive programs.
	 Policies that "support," "promote," or
	"encourage" activities and programs do not
	create any enforceable constraints on
	development projects
	• No explanation of the nature of allowable
	incentives is provided. If incentives require
	expenditure of County resources, they will not
	be demonstrably feasible unless the EIR
	identifies the source of those resources. If
	incentives are to include development or land
	use concessions, the concessions should be
	identified and the secondary environmental
	effects should be evaluated.
	• Please estimate the effect of this policy in
	protecting water supplies.
PS-2.8 The County shall require that all projects be	• Please explain whether this policy will apply
designed to maintain or increase the site's pre-	to "all projects," as its clear language
development absorption of rainfall (minimize runoff),	indicates, or just to projects for which the
and to recharge groundwater where appropriate.	County retains discretionary permitting
Implementation would include standards that could	authority. If it will not apply to all projects,
regulate impervious surfaces, vary by project type,	please explain why not.
land use, soils and area characteristics, and provide	· ·

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for water impoundments (retention/detention structures), protecting and planting vegetation, use of permeable paving materials, bioswales, water gardens, and cisterns, and other measures to increase runoff retention, protect water quality, and enhance groundwater recharge	 In particular, please explain whether this policy will apply to agricultural development, including cultivation of previously uncultivated land. If not, why not? Note that cultivation on slopes, particularly viticulture cultivation that removes armoring rock through deep ripping, can substantially increase runoff. Please explain how this policy will be implemented in practice. Through what system of project review and subsequent monitoring will the County ensure implementation? Will a hydrological study be required for every project? It is unclear how the policy will relate to the "runoff performance standards" that are to be developed under Policy S 3.5 and the drainage requirements under Policy S 3.1. Please clarify. For example, under what circumstances and based on what criteria will the County require that projects <i>increase</i> the site's pre-development absorption of rainfall? This policy does not increase water supply or decrease water consumption over baseline conditions. Please estimate the effect of this policy in protecting groundwater supplies, noting impermeable clay layers prevent surface recharge in many of the areas that overlaw software intension
 PS-2.9 Protect and manage groundwater as a valuable and limited shared resource. The County shall use discretionary permits to manage construction of impervious surfaces in important groundwater recharge areas. Potential recharge area protection measures at sites in important groundwater recharge areas include, but are not limited to the following: a. Restrict coverage by impervious materials. b. Limit building or parking footprints. c. Require construction of detention/retention facilities on large-scale development project sites overlying important groundwater recharge areas as identified by Monterey County Water Resource Agency. d. Recognize detention/retention facilities on small sites may not be practical, or feasible, and may be difficult to maintain and manage. 	 Please identify "important groundwater recharge areas." Please note that sections of the County are not susceptible to groundwater recharge due to a clay aquitard. Please explain whether this factor was considered in concluding that this policy would support a finding that water supply impacts would be avoided or minimized. This policy does not increase water supply or decrease water consumption over baseline conditions. Please estimate the effect of this policy in protecting groundwater supplies. Please explain whether this policy will be applied to cultivation of previously uncultivated land. If not, why not? Note that cultivation that removes armoring rock through deep ripping, can substantially increase runoff.
PS-3.1 No new development, except for the first single family dwelling and non-habitable accessory uses on an existing lot of record, for which a	• "Long-term <i>sustainable</i> water supply" is not defined in GPU5 or in the GPU5 DEIR.

discretionary permit is required shall be approved without proof, based on specific findings and supported by evidence, that there is a long-term, sustainable water supply, both in quality and quantity, to serve the development. Achieving or even "improving sustainability" (DEIR, p. 4.3-150) is impossible if the term isn't defined. Please explain what is meant by "long-term sustainable water supply" by identifying standards or criteria for the term.

- The 2007 General Plan Glossary does define "long-term water supply" as "an available supply of water that can be extracted from a basin or hydrogeologic sub-area to service the existing and projected development in that basin or hydrogeologic sub-area for a twenty year period without degrading water quality, damaging the economical extraction of water, or causing significant unavoidable adverse environmental impacts." Please explain how this definition is related to the term "long-term *sustainable* water supply."
- Because the Glossary definition of long-term water supply" is applied to either basins or hydrogeologic sub-areas, it would be possible for the County to ignore the fact that most of the County's water basins are composed of interconnected sub-areas which impact one another. Thus, the Glossary definition allows the assessment of impacts to be manipulated to ignore basin-wide effects. Findings could be made of long-term water supply within a sub-area, while at the same time ignoring cumulative impacts on the larger basin. Please explain how this problem will be avoided.
- The Glossary provides no criteria for determining whether water use will "damage the economical extraction" of water. Please identify these criteria. In the Salinas Basin, new water demand will require expanded water treatment, storage and conveyance facilities. These facilities, like new and deeper wells, will increase the cost of water. Would these increased costs represent "damage to the economical extraction of water?" If not, why not?
- The DEIR claims at p. 4.3-150 that this policy "encourages efforts to *improve* sustainability by reducing overdraft." Since a water supply is either sustainable or it is not, the reference to "improving sustainability" suggest that the policy will not in fact result in sustainable water supplies. Please explain whether the reference to "improving sustainability" is intended to countenance the possibility that projects would be approved merely on the

basis that they will use less water than existing
land use on the site. In this regard, please see
our comments on PS 3.2.
• Please explain why this policy will not be
applied to the first single family dwelling and
non-habitable accessory uses on an existing
lot of record.
• Please explain whether this policy will be
applied to agricultural development for which
a discretionary permit is required.
• Please explain why the policy is limited to
projects for which a discretionary permit is
required.
• If the County believes that it has no authority
to impose a requirement of proof of a long-
unless there is a discretionary permit plass
explain why
 If the County believes that it has no authority
to impose a requirement of proof of a long-
term sustainable water supply on projects
unless the project requires a discretionary
permit, please explain why the 2007 General
Plan proposes to exempt from discretionary
permitting a number of activities that will
consume substantial water resources,
including cultivation of previously
uncultivated land, development on slopes,
development of lots of record, and most
development in the AWCP. In view of
acknowledged water supply problems, any
decision to forego discretionary permitting
that would consequently exempt projects from the requirement to prove that there is an
adequate water supply makes no sense
 Please explain whether the DEIR's
conclusions in section WR4 that water supply
impacts in the Paiaro basin and on the
Monterey Peninsula will be unavoidably
significant (DEIR, p. 4.3-130) is solely
attributable to the inapplicability of this policy
to development on legal lots of record.
• Policy PS 3.3 calls for eventual definition of
criteria for proof of a long-term sustainable
water supply, but the criteria are only
applicable to new <i>subdivisions</i> . To the extent
that Policy PS 3.1 is applicable to any
development <i>other than</i> subdivisions, there
are no apparent plans to provide any formal
water supply Diagonidantify the criterio for
long_term sustainable water supply applicable
iong-term sustainable water supply applicable

	to development other than subdivisions.
PS-3.2 In determining whether there is a long-term	• The policy will not prevent a net increase in
sustainable water supply, credit may be given for a	water use from new development unless the
significant reduction in the historic water use on site.	water-using activity on the site (e.g,
For the purpose of calculating water supply, up to	agriculture) is not replaced with new water-
50% of the average annual water use of 10 of the	using activity (e.g.,., newly cultivated
previous 20 years may be credited toward the net	agricultural land) somewhere else in the basin.
demand of the project.	The DEIR claims agricultural land will be
	replaced and has remained constant over time.
	DEIR, p. 4.2-5 to 4.2-7.
	• This policy does not reflect the fact that in the
	long term the available sustainable water
	supplies are interconnected and that use of the
	common pool of water supplies is a zero sum
	game Sufficiency of the long term supply
	cannot be determined on a parcel by parcel
	basis because it depends on aggregate water
	use by all of these users drawing from a
	assessed and those users drawing from a
	future users based on the accident that their
	development site merricusly used water
	development site previously used water
	unsustainably will penalize all other water
	users drawing from that common pool. Please
	explain the rationale for this policy.
	• In light of the above comments, please
	estimate the effect of this policy on water
	supplies, based on data in the DEIR related to
	conversion of agricultural land for urban uses.
	This policy would permit continued
	unsustainable water use simply on the basis
	that the site of a proposed development
	project has historically used water
	extravagantly. Because those areas are likely
	to be areas previously used for agriculture, the
	policy creates an incentive for urbanization of
	agricultural land – the availability of water.
	Providing such an incentive is inconsistent
	with the goals of the Agriculture section of the
	2007 General Plan.
	• What data will be required to demonstrate
	historic water use? What independent audit of
	applicants' claims will be conducted?
	• Please explain how this policy will be
	coordinated with Policy PS 3.3.
PS-3.3 Specific criteria for proof of a long term	• Please explain why this policy is applicable
sustainable water supply for new residential or	only to subdivisions. In particular, please
commercial subdivisions shall be developed. Criteria	explain why it is not applicable to cultivation
shall include but are not limited to:	of previously uncultivated land, development
a. Water quality.	of lots of record and AWCP activities for
b. Production capability.	which no discretionary permit is required
c. Recovery rates.	 The policy provides no performance
d. Effect on wells in the immediate vicinity.	standards. The "criteria" listed are not in fact

e. Existing groundwater conditions.

f. Technical, managerial and financial capability of the water purveyor of the water system.

g. Cumulative impacts and planned growth in the area

h. Status and surety of planned new water supply projects including design, financing mechanism, and environmental review of the project. standards but empty parameters for which no values are specified. For example, what will be considered to be acceptable impacts to water quality? What will be considered acceptable cumulative impacts? These are issues that must be addressed now, in the aggregate, based on analysis of expected development and the available water sources if this policy is to meaningfully support the DEIR's significance conclusions.

- It appears that the DEIR's conclusions that there is an adequate water supply in the Salinas Basin and that, but for development of lots of record, there would be an adequate supply in other basins is based on this policy and PS 3.1. To the extent the DEIR relies on these policies to support its significance conclusions, the DEIR has simply postponed the development of any empirical basis for those conclusions. In effect, the DEIR claims that there will be enough water (or that there would be, but for lots of record) because the County will not allow development unless there is enough water, but the County will not actually decide what constitutes enough water until after the General Plan is approved. Because the criteria for long term sustainable water supply have not been stated, there can be no substantial evidence that there is in fact a long term sustainable water supply. Substantial evidence of a long term sustainable water supply would require that the DEIR determine the sustainable yields of the basins and demonstrate that long term total demand will be within that yield - which would require an overall water balance analysis for each basin. As discussed above, the DEIR does not provide this.
- It appears than none of the "criteria" or parameters identified in the policy actually stands for sustainable yield or would require determination of long term sustainable yield. Please explain which "criteria" would require the determination of the actual long-term sustained yield of each basin and/or hydrogeologic sub-areas.
- Please explain how in practice the to-bedeveloped criteria will be applied in determining whether to permit new development. Will each development project be required to provide a hydrological analysis that applies the criteria to demonstrate that

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POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT WATER SUPPLY IMPACTS WILL BE LESS THAN SIGNIFICANT

PS 3.4 Specific criteria shall be developed for use in	 there is sufficient water supply? Will the tobe-developed criteria specifically identify in terms of acre-feet per year the actual long-term sustained yield of each basin and/or hydrogeologic sub-areas? If not, will it be up to each project to determine this figure? Will the to-be-developed criteria specifically identify the demand from all other cumulative water users, or will it be up to each project to determine this figure?
FS-3.4 Specific criteria shall be developed for use in the evaluation and approval of adequacy of all new	• Please address the concerns identified in our comments on Policy PS 3.3 which are
wells. Criteria shall assess both water quality and	applicable to this policy as well.
quantity including, but not limited to:	 Will this policy apply to <i>all</i> new wells,
a. Water quality.	including wells for development on legal lots
b. Production capability.	of record? If so, please explain why this
d Effect on wells in the immediate vicinity as	policy does not ensure that there will be an
required by the Monterey County Water Resource	Peninsula and the Paiaro basin, areas for
Agency.	which the DEIR concludes that there would be
e. Existing groundwater conditions.	an adequate supply but for development on
I. Technical, managerial, and financial capability of the water purveyor of a water system	legal lots of record.
the water parveyor of a water system.	• Please explain now this policy will be coordinated with Policy PS 3.3 Will all new
	wells be required to demonstrate that their use
	will not interfere with a long term sustainable
	water supply for all other users in the basin?
	The policy appears to restate most of the same
	"criteria" contained in PS 3.3. Why is it
	wells and for new subdivisions?
	• Please explain why there are any differences
	"criteria" listed under Policy PS 3.3 Why
	does this policy not include as "criteria" the
	"cumulative impacts and planned growth in
	the area" and the "status and surety of planned
	new water supply projects including design,
	review of the project?"
PS-3.5 The County shall require that pump tests or	• Why is the policy limited to effects on
hydrogeologic studies be conducted for new high-	existing <i>adjacent</i> domestic or water system
capacity wells, including high-capacity urban and	wells?
potential to affect existing adjacent domestic or water	• A well may avoid local interference with "adjacent" wells but still contribute to long-
system wells adversely as determined by the	term overdrafting and saltwater intrusion.
Monterey County Water Resource Agency. In the	Please explain whether the DEIR relies on this
case of new high-capacity wells for which pump tests	policy in support of its significance
significant adverse well interference, the County shall	conclusions with respect to the sufficiency of water supplies overdrafting and saltwater
require that the well be relocated or otherwise	intrusion.

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT WATER SUPPLY IMPACTS WILL BE LESS THAN SIGNIFICANT mitigated to avoid significant well interference. This policy omits reference to policies AG-3.1 through AG-3.3, dealing with "Routine and Ongoing Agricultural Activities" (ROAA). The list of ROAA has not been finalized, and no timeframe has been given for finalization. Tentatively, however, it proposes irrigation as a routine and ongoing activity. Please explain whether ROAA will be exempt from the requirements of PS-3.5. Please explain how this policy will be administered. Will the policy require a discretionary permit for all new wells? How and in what context will MCWRA determine whether there may be a potential to affect existing adjacent domestic or water system wells adversely? **PS-3.6** The County and all applicable water • It appears that this policy is intended to avoid management agencies shall not allow the drilling or or minimize saltwater intrusion. However, operation of any new wells in known areas of basins and/or hydrogeologic sub-areas are saltwater intrusion as identified by Monterey County interconnected aquifers. Thus, wells inland of Water Resource Agency until such time as a program saltwater intrusion areas contribute to has been approved and funded which will minimize saltwater intrusion. Water agencies facing or avoid expansion of salt water intrusion into saltwater contamination have in the past useable groundwater supplies in that area. This policy simply moved production wells inland, shall not apply to deepening or replacement of drawing the saltwater toward them. Under existing wells. this policy they may continue to do so. Please explain how this policy could reduce saltwater intrusion. The policy assumes that a technically feasible program can be approved and funded to avoid expansion of salt water intrusion. Please explain what this program or programs would entail and identify any secondary impacts, taking into account our comments above on the apparent inadequacy of the SVWP to halt saltwater intrusion based on effects on steelhead and failure to account for all water demand, particularly agricultural water demand. To the extent that the DEIR relies on unidentified or infeasible programs as the basis of its conclusions regarding saltwater intrusion, it fails to provide substantial evidence to support those conclusions. **PS-3.7** A determination of a long term sustainable Please see our comments on PS 3.1 through • water supply: PS 3.5. a. shall not be based on hauled water. Does this policy require that proof of a long • b. should be determined on a basin-by-basin basis. term sustainable water supply identify total future water demands in the basin and compare these demands to a long term sustained yield for that basin? If not, why not? Does "hauled water" include any and all

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT WATER SUPPLY IMPACTS WILL BE LESS THAN SIGNIFICANT transfers of water from one basin to another? From any hydrogeologic sub-areas to another? Does hauled water include pumped • groundwater that is transferred for use on land that does not overlie the aquifer but which would drain to the aquifer? For example, does this policy prohibit pumping groundwater from the Salinas groundwater basin for use on adjacent hillside land that does not overlie the aquifer? If not, why not? **PS-3.8** The County shall coordinate and collaborate This policy has no substantive enforceable • with all agencies responsible for the management of mandate. existing and new water resources. **PS-3.9** A program to eliminate overdraft of water ٠ The policy assumes that a technically feasible basins shall be developed as part of the Capital program can be approved and funded to Implementation and Financing Plan (CIFP) for this eliminate overdraft. Please explain what this Plan using a variety of strategies, which may include program or programs would entail and but is not limited to: identify any secondary impacts, taking into a. Water banking; account our comments above on the apparent b. Groundwater and aquifer recharge and recovery; inadequacy of the SVWP to halt saltwater c. Desalination; intrusion based on effects on steelhead and d. Pipelines to new supplies; and failure to account for all water demand. e. A variety of conjunctive use techniques. The Supreme Court held in Vineyard Area ٠ The CIFP shall be reviewed every five (5) years in Citizens that vague and unquantified order to evaluate the effectiveness of meeting the references to a management technique like strategies noted in this policy. Areas identified to be conjunctive use do not suffice to provide the 34 at or near overdraft shall be a high priority for requisite degree of certainty as to long term funding. supply. Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova (2007) 40 Cal.4th 412, 440. Thus the DEIR must actually quantify expected supply and demand, and, where it relies on management strategies like conservation and conjunctive use, it must quantify the expected yields from these strategies • To the extent that the DEIR relies on unidentified or infeasible program as the basis of its conclusions regarding overdrafting, it fails to provide substantial evidence to support those conclusions. **PS-3.10** Systems that use grey water and cisterns for Policies that "support," "promote," or multi-family residential and commercial landscaping "encourage" activities and programs do not shall be encouraged, subject to a discretionary permit. create any enforceable constraints on development projects. Please explain why this policy is not made mandatory. **PS-3.11** A tentative subdivision map and/or vesting To what extent does this policy impose any tentative subdivision map application for either a additional constraints that are not already standard or minor subdivision shall not be approved imposed by SB 221? until: How will this policy be coordinated with a. The applicant provides evidence of an assured Policy PS 3.1 to 3.5? long-term water supply in terms of yield and quality • Please explain why this policy is applied only for all lots which are to be created through

 subdivision. A recommendation on the water supply shall be made to the decision making body by the Director of Health Services and the General Manager of the Monterey County Water Resources Agency, or their respective designees. b. The applicant provides proof that the water supply to serve the lots meets both the water quality and quantity standards as set forth in Title 22 of the California Code of Regulations and County water systems and well regulations (Chapters 15.04 and 15.08 of the Monterey County Code, as may be periodically amended), subject to the review and recommendation by the Director of Health Services to the decision making body. 	to subdivisions. Why is it not made applicable to all development projects that will require a water supply, including development of lots of record, AWCP activities that are proposed to be exempted from discretionary permitting, and cultivation of previously uncultivated agricultural land?	
PS-3.12 Maximize agricultural water conservation measures to improve water use efficiency and reduce overall water demand. The County shall establish an ordinance identifying conservation measures that reduce agricultural water demand.	 The policy provides no performance standards or exemplary measures that could support a finding that impacts are minimized or avoided. The policy calls for an ordinance "identifying" conservation measures. Please explain whether the policy will also require that these measures actually be implemented. If not, why not? If so, please explain how and in what context the County will ensure that the measures are implemented and enforced. 	34
PS-3.13 Maximize urban water conservation measures to improve water use efficiency and reduce overall water demand. The County shall establish an ordinance identifying conservation measures that reduce potable water demand.	 The policy provides no performance standards or exemplary measures that could support a finding that impacts are minimized or avoided. The policy calls for an ordinance "identifying" conservation measures. Please explain whether the policy will also require that these measures actually be implemented. If not, why not? If so, please explain how and in what context the County will ensure that the measures are implemented and enforced. 	
 PS-3.14 Maximize the use of recycled water as a potable water offset to manage water demands and meet regulatory requirements for wastewater discharge, by employing strategies including, but not limited to, the following: a. Increase the use of treated water where the quality of recycled water is maintained, meets all applicable regulatory standards, is appropriate for the intended use, and re-use will not significantly impact beneficial uses of other water resources. b. Work with the agricultural community to develop new uses for tertiary recycled water and increase the use of tertiary recycled water pumping. c. Work with urban water providers to emphasize use of tertiary recycled water for irrigation of parks, 	 The policy provides no performance standards that could support a finding that impacts are minimized or avoided. The policy does not create any enforceable mandate because it only calls for some unspecified agency to "work with" others. Without specifying the agency, the specific programs, the resources to be committed, and the standards to be met, the policy cannot support a finding that impacts will be avoided or minimized. Please estimate the effect of this policy in protecting groundwater supplies, noting that impermeable clay layers prevent surface recharge in many of the areas that overlay saltwater intrusion. 	

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POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT WATER SUPPLY IMPACTS WILL BE LESS THAN SIGNIFICANT playfields, schools, golf courses, and other landscape areas to reduce potable water demand. d. Work with urban water providers to convert existing potable water customers to tertiary recycled water as infrastructure and water supply become available. **PS-3.15** To ensure accuracy and consistency in the • Please see our comments on Policies PS 3.1 to evaluation of water supply availability, Monterey 3.5, 3.7, and 3.11. This policy calls for County Health Department, in coordination with the guidelines and procedures, but lacks any MCWRA, shall develop guidelines and procedures substantive content or performance standards. for conducting water supply assessments and It cannot support a finding that water supply determining water availability. Adequate availability impacts will be avoided or minimized. and provision of water supply, treatment, and Please explain why this policy is limited to • conveyance facilities shall be assured to the approval of subdivisions and changes in land satisfaction of the County prior to approval of final use or zoning. Why does it not apply to other subdivision maps or any changes in the 2007 General water using land use approvals? Plan Land Use or Zoning designations. Please explain whether all zoning designation changes made as a result of the adoption of the proposed new land use designations in the 2007 General Plan will be required to demonstrate adequate availability and provision of water supply, treatment, and conveyance facilities. PS-4.4 Groundwater recharge through the use of Policies that "support," "promote," or • reclaimed wastewater, not including primary treated "encourage" activities and programs do not wastewater, in accordance with federal, state, and create any enforceable constraints on local laws, regulations and ordinances shall be development projects. Please explain why encouraged. this policy is not made mandatory. Please estimate the effect of this policy in • protecting groundwater supplies, noting that impermeable clay layers prevent surface recharge in many of the areas that overlay saltwater intrusion. **PS-4.7** Specific criteria for new wastewater treatment The DEIR cites this policy as evidence that facilities and proof of the adequacy of existing recharge will occur. However, because there facilities to service new development shall be are in fact no performance standards in this developed as part of the implementation of this Plan. policy (the "criteria" are in fact *possible* Criteria may include but are not limited to: parameters with no values specified), there is a. Service area. no assurance that the policy will have any b. Demand for service. effect on recharge. In fact, the "criteria" are c. Wet weather storage. not even mandated since the policy provides d. Recycling of treated wastewater. that the "criteria may include . . . effect on e. Existing groundwater conditions. recharge." f. Effect of recharge on existing groundwater. Please estimate the effect of this policy in g. Technical, managerial and financial capability of protecting groundwater supplies, noting that the wastewater treatment provider. impermeable clay layers prevent surface recharge in many of the areas that overlay saltwater intrusion. **PS-4.8** Specific criteria for septic disposal systems to The DEIR cites this policy as evidence that • serve individual uses where connection to a recharge will occur. However, because there wastewater treatment facility is not feasible shall be

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POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT WATER SUPPLY IMPACTS WILL BE LESS THAN SIGNIFICANT developed as part of the implementation of this Plan. are in fact no performance standards in this Criteria may include but are not limited to (consistent policy (the "criteria" are in fact possible parameters with no values specified), there is with *Table PS-1*): a. Minimum lot size. no assurance that the policy will have any effect on recharge. In fact, the "criteria" are b. Location of wells. not even mandated since the policy provides c. Soils testing. d. Areas for backup and repair of leaching systems. that the "criteria may include . . . effect on e. Existing groundwater conditions. recharge." f. Effect of recharge on existing groundwater. Please estimate the effect of this policy in g. Consideration of alternatives systems (e.g. mound protecting groundwater supplies, noting that system, enhanced treatment systems) impermeable clay layers prevent surface recharge in many of the areas that overlay saltwater intrusion. SAFETY ELEMENT S-3.5 Runoff Performance Standards that result in an • This policy explicitly defers formulation of a array of site planning and design techniques to reduce performance standard to be used for future storm flows plus capture and recharge runoff shall be mitigation of development impacts, so it developed and implemented, where appropriate, as necessarily fails to include a performance determined by the Monterey County Water standard. Resources Agency. If this policy would permit a runoff • performance standard weaker than requiring that "post-development, off-site peak flow drainage from the area being developed shall not be greater than pre-development peak flow drainage," then it conflicts with Policy S 3.1. If it would permit more stringent runoff standards, then that should be clarified. If the intent of this policy is to require not just the development of runoff performance standards but also the development of "an array of site planning and design techniques to reduce storm flows plus capture and recharge runoff," then the policy lacks any performance standards for those or exemplary measures for those "site planning and design techniques." This policy does not increase water supply or decrease water consumption over baseline conditions. Please estimate its effect on protecting existing water supplies and/or avoiding or minimizing water supply impacts. MITIGATION MEASURES Mitigation for 2030 findings: Please explain why the County does not propose to disallow development of existing "The following measure is intended to reduce impacts lots of record, or to condition it on sufficient on the Monterey Peninsula during the 2030 planning water supplies, if that development would horizon to below a level of significance. However, for result in significant unmitigated impacts. the reasons discussed above, there are no feasible Please explain how many residential units will measures that would reduce the impacts of

development on existing lots of record in the North

County and the Pajaro River below a level of

be developed on existing lots of record in each basin and how much water the County expects

significance.

WR-1: Support a Regional Solution for the Monterey Peninsula in addition to the Coastal Water Project

The County will revise the draft 2007 General Plan to include the following new policy:

PS-3.16. The County will participate in the Water for Monterey County Coalition, or similar regional group, for the purpose of identifying and supporting a variety of new water supply projects, water management programs, and multiple agency agreements that will provide additional domestic water supplies for the Monterey Peninsula and Seaside basin, while continuing to protect the Salinas and Pajaro River groundwater basins from saltwater intrusion. The County's general objective, while recognizing that timeframes will be dependent upon the dynamics of the regional group, will be to complete the cooperative planning of these water supply alternatives within five years of adoption of the General Plan and to implement the selected alternatives within five years after that time." DEIR, p. 4.3-130.

that development to consume.

- If development of existing legal lots of record cannot for some reason be avoided or appropriately conditioned, please explain why the County does not propose to address this "unavoidable" water consumption by conditioning or barring other water consuming development over which the County does have discretion. For example, please explain why Policies PS 3.1 through PS 3.7, which purport to require that discretionary development be conditioned on an adequate water supply, would not take account of the expected water demands from lots of record. After all, Policy PS 3.3(f) requires that cumulative impacts and planned growth be considered in determining whether there is an adequate long term sustainable water supply.
- The DEIR's significance conclusions for the Monterey Peninsula and the Pajaro Valley assert that water supply would be sufficient but for development of lots of record, but that this development will result in significant impacts. DEIR, p. 4.3-130 to 4.3-131. The DEIR also states that "2007 General Plan policies will constrain other development until long-term water supplies are assured." DEIR, p. 4.3-130. The implication of these claims is that until long term supplies are secured that are sufficient to serve all expected development on legal lots of record, no other discretionary development will be permitted. Please confirm that this is the case or explain why not.
- PS 3.16 simply postpones the identification of essential water supply programs to support planned development on the Monterey Peninsula and postpones the identification and mitigation of impacts from providing that water supply.
- As comments above demonstrate, the regional group's (WFMCC's) current proposal is inconsistent with the proposed expansion of the SVWP on which the DEIR relies for its significance conclusion for the Salinas Valley basin. Furthermore, the DEIR admits that the County does not even support the regional solution currently proposed by the group. DEIR, p. 4.3-130.
- Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova (2007) 40 Cal.4th 412, 434 provides as follows: "If the

FOR CONCLUDING THAT WATER SUPPLY IMPACTS WILL BE LESS THAN SIGNIFICANT uncertainties inherent in long-term land use and water planning make it impossible to confidently identify the future water sources, an EIR may satisfy CEQA if it acknowledges the degree of uncertainty involved, discusses the reasonably foreseeable alternativesincluding alternative water sources and the option of curtailing the development if sufficient water is not available for later phases-and discloses the significant foreseeable environmental effects of each alternative, as well as mitigation measures to minimize each adverse impact. (§ 21100, subd. (b).) In approving a project based on an EIR that takes this approach, however, the agency would also have to make, as appropriate to the circumstances, any findings CEQA requires regarding incorporated mitigation measures, infeasibility of mitigation, and overriding benefits of the project (§ 21081) as to each alternative prong of the analysis." See also id. at 444, 446. Here, the DEIR admits that it has not identified adequate water supply for the Monterey Peninsula. Nonetheless, the DEIR proposes to find water supply impacts attributable to development on the Monterey Peninsula, other than development of lots or record, less than significant by virtue of the County's participation in a regional planning group. This does not meet the Vineyard Area Citizens mandate to identify alternatives, disclose impacts, and propose mitigation. Since the County has not even identified the water supply programs that might be adopted, it cannot reasonably conclude that impacts will be less than significant. (Nor, without weighing the actual environmental costs significant unavoidable impacts could the County adopt a statement of overriding considerations.) **Mitigation for Buildout findings:** Regarding PS 3.17, this mitigation is only identified as necessary with respect to WR-2: Initiate Planning for Additional Supplies Buildout conditions. However, any mitigation to the Salinas Valley calling for the expansion of the SVWP should be listed as essential to support the finding of The County will revise the draft 2007 General Plan to significance through 2030, not just through include the following new policies: buildout, because the DEIR and the SVWP both state that expansion will be required to PS-3.17. The County will pursue expansion of the address saltwater intrusion conditions that will SVWP by initiating investigations of the capacity for be in place by 2030. DEIR, p. 4.3-35; SVWP the Salinas River water storage and EIR, § 3.2.4 (9,700 AFY delivery will only

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS
distribution system to be further expanded. This shall also include investigations of expanded conjunctive use, use of recycled water for

groundwater recharge and seawater intrusion barrier, and changes in operations of the reservoirs. The County's overall objective is to have an expansion planned and in service by 2030.

PS-3.18. The County will convene and coordinate a working group made up of the Salinas Valley cities, the MCWRA, and other affected entities for the purpose of identifying new water supply projects, water management programs, and multiple agency agreements that will provide additional domestic water supplies for the Salinas Valley. These may include, but not be limited to, expanded conjunctive use programs, further improvements to the upriver reservoirs, additional pipelines to provide more efficient distribution, and expanded use of recycled water to reinforce the hydraulic barrier against seawater intrusion. The County's objective will be to complete the cooperative planning of these water supply alternatives by 2020 and have projects online by 2030.

Mitigation Measure BIO-2.3: Add Considerations regarding Riparian Habitat and Stream Flows to Criteria for Long-Term Water Supply and Well Assessment

Public Services Policies PS-3.3 and PS-3.4 establish the criteria for proof of a long-term water supply and for evaluation and approval of new wells. The following criteria shall be added to these policies:

Policy PS-3.3.i-Effects on instream flows necessary to support riparian vegetation, wetlands, fish, and other aquatic life including migration potential for steelhead.

Policy PS-3.4.g—Effects on instream flows necessary to support riparian vegetation, wetlands, fish, and other aquatic life including migration potential for steelhead.

POLICIES LIMITED TO SPECIFIC AREA	
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halt expansion based on 1995 water demand; expanded delivery system will be necessary to address continued saltwater intrusion under assumed 2030 conditions).

- Regarding PS 3.17, please see comments • regarding the sufficiency of the proposed expansion of the SVWP above.
- Regarding PS 3.18, the DEIR admits that it has not identified adequate water supplies for development permitted under the 2007 General Plan through buildout. Since the County has not identified the water supply programs that might be adopted or the severity of their impacts, it has not weighed the actual environmental costs from the admitted significant unavoidable impacts. Without doing so, the County cannot adopt a statement of overriding considerations.
- Regarding policies PS 3.3i and 3.4g, this "mitigation" amounts to nothing more than an admission that the DEIR has not evaluated effects on instream flows caused by water supply projects. In this regard, please see our comments regarding the DEIR's failure to acknowledge significant impacts on steelhead from the proposed expanded delivery system for the SVWP. The DEIR must be revised to provide information about impacts attributable to changes to flow regimes due to water supply projects.
- Furthermore, even if it were permissible to defer the analysis of impacts (and it is not), neither PS 3.3i and 3.4g contain any performance standards (the "criteria" are simply parameters without values that would, as written, permit any degree of adverse effects on instream flows as long as those effects were considered), so they do not meet CEQA's requirements for deferral of
- mitigation. PS 3.3i and 3.4g are proposed as mitigation measures only to address significant effects after 2030 through buildout. Please explain why the DEIR does not propose PS 3.3i and 3.4g as necessary mitigation measures to address adverse effects prior to 2030.
- **GENERAL COMMENT:** For each policy, please address the identified concerns by revising the policy and/or explain how, in light of these concerns, the policy can provide a foundation for the DEIR's conclusion that erosion and sedimentation

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT WATER SUPPLY IMPACTS WILL BE LESS THAN SIGNIFICANT impacts will be less than significant. For each policy, please explain why it is ٠ limited in application to a specific area plan and is not applied throughout the County NORTH COUNTY AREA PLAN **NC-5.1** New developments shall be designed to There is no definition in GPU5 or its DEIR of • maximize prime groundwater recharge capabilities "prime groundwater recharge capability." and to minimize runoff from the property. Please explain this phrase. Surface recharge does not occur in most of • north Monterey County, so a policy requiring maximizing recharge in North County can do nothing to improve or protect water supply. The DEIR points out on page 4.3-7, according to the California Department of Water Resources, "because of the impermeable nature of the clay aquitard above the 180-foot aquifer, surface recharge (including that from precipitation, agricultural return flows, and river flow) does not occur. Instead, recharge is from underflow originating from the Upper Valley and Forebay Subareas." This policy does not increase water supply or decrease water consumption over baseline 34 conditions. Please estimate its effect on water supplies and water supply impacts. NC-5.2 Water development projects that can offer a This policy lacks any enforceable mandate. ٠ viable water supply to water-deficient areas in North Please explain how it will be implemented, by County shall be a high priority. whom, and with what resources. Please estimate its effect in securing water supplies and addressing water supply impacts. GREATER SALINAS AREA PLAN GS-1.1 Special Treatment Area: Butterfly Village -The DEIR cites this policy as evidence that Approximately 671 acres located north of San Juan adequate infrastructure for potable water will Grade Road and east of Harrison Road shall be be required. Without evaluating the designated as a "Special Treatment Area" to permit a development's proposed sources and uses of planned development in substantial conformance water in the context of a regional water with the Butterfly Village Land Use Plan (Figure balance analysis, merely citing this policy *LU7*) including: does not support the conclusion that water a. Approximately 345 acres of neighborhood and supply impacts from the overall development community parks and open space uses such as hiking permitted by the 2007 General Plan will be trails, recreation, public parking, storm water avoided or minimized. detention ponds and lakes for drainage control and water recharge as well as areas preserved for sensitive habitat. b. 71 hospitality units. c. A 20,000 square foot Community Health and Wellness Center that offers a variety of health, fitness and nutrition uses. d. Public facilities, including a fire station, sheriff substation. maintenance yard, independent

SIGNIFICANI		
wastewater treatment facility, 200 square foot library,		
and a 10-acre site for a potential elementary school		
site with athletic fields.		
e. Neighborhood Commercial (approximately 90,000		
sq. ft.) including mixed use development, to help		
provide jobs within the project.		
f. Development on slopes exceeding 25% and		
ridgeline development.		
g. Up to 1,147 residential units for various income		
levels ranging from 0.9 units/acre to 20 units/acre.		
h. A minimum of 32% inclusionary/workforce levels		
including but not limited to senior living facilities.		
i. Agriculture buffers ranging form 30 feet to 100		
feet.		
j. Vehicular access from the west via Harrison Road		
and from the east via San Juan Grade Road.		
k. A dedicated easement to accommodate the		
realignment of the Highway 101 future Prunedale		
Bypass.		
A Community Plan is not required for development		
of the Butterfly Village STA. The Butterfly Village		
STA shall be entitled to the exemptions in the		
General Plan provided for Community Areas and for		
areas for which a community Plan or Specific Plan		
has been adopted. However, the areas adjoining the		
Butterfly Village STA shall not be entitled to rely		
upon LU-2.12(d) and OS-9.2. Except as provided for		
in this General Plan, development shall be guided by		34
the principles and standards contained in Chapters 3-		
8 of the document entitled "Rancho San Juan		
Specific Plan" dated November 7, 2005, which are		
otherwise consistent with the Butterfly Village STA		
and the Butterfly Village Land Use Plan (Figure		
LU7). (APNs: 113-271-014-000, 113-212-043-000,		
113-212-044-000, 113-212-004-000, 113-212-003-		
000, 113-212-055-000, 113-212-056-000, 113-212-		
057-000 and 113-212-058-000)		
GS-1.8 The land near the town of Spreckels	• The policy provides no performance standards	
designated as industrial may also be developed	for protection and enhancement of the riparian	
partially or wholly as agriculturally related	corridor or for protection of water quality.	
commercial uses provided said agriculturally-related	• The "feasibility" qualification of the	
development complies with the following conditions:	obligation to protect the riparian corridor is	
a. A comprehensive development plan as a planned	not explained (technically feasible?	
general commercial project shall be prepared.	economically feasible?) and renders the	
b. Development shall be designed to protect and,	policy essentially unenforceable.	
where feasible, enhance the riparian corridor along	• Please estimate the effect of this policy on	
the Salinas River.	ensuring adequate water supply and explain	
c. Proposed development would not deteriorate water	how it will avoid or minimize water supply	
quality in the Salinas River or area ground water.	impacts.	
d. Walnut trees along Spreckels Boulevard shall be		
preserved.		
e. Development will be compatible with the		

agricultural activities on the adjoining parcel.	
 GS-5.1 Portions of Gabilan Creek shall be evaluated for a linear park as defined by the County's Parkland Classification System at such time when the County can support another regional park. Until such time, Gabilan Creek shall be: a. Maintained in a natural riparian state; b. Kept in a free-flow state devoid of dams; c. Allowed its natural flood capacity through required setbacks conforming to the 100 year flood plain; and d. Kept free from urban encroachment by residential development through required dedication of land in the floodplain corridor. 	• Please estimate the effect of this policy on ensuring adequate water supply and explain how it will avoid or minimize water supply impacts.

CENTRAL SALINAS AREA PLAN

CSV-1.1 <u>Special Treatment Area: Paraiso Hot</u> <u>Springs</u> - The Paraiso Hot Springs properties shall be designated a Special Treatment Area. Recreation and visitor serving land uses for the Paraiso Hot Springs Special Treatment Area may be permitted in accordance with a general development plan and other discretionary approvals such as subdivision maps, use permits and design approvals. The Special Treatment Area may include such uses as a lodge, individual cottages, a visitor center, recreational vehicle accommodations, restaurant, shops, stables, tennis courts, aquaculture, mineral water bottling, hiking trails, vineyards, and orchards. The plan shall address fire safety, access, sewage treatment, water quality, water quantity, drainage, and soil stability issues. (APN: 418-361-004, 418-361-009, 418-361-	 This policy permits development as long as some future plan "addresses" water supply. There are no performance standards or exemplary measures that would support a finding that the policy meaningfully contributes to avoidance or minimization of impacts. Please estimate the effect of this policy on ensuring adequate water supply and explain how it will avoid or minimize water supply impacts. 	34
021, 418-361-022) CSV-1.2 All recreation and visitor-serving commercial land uses shall require a use permit. Said uses on sites greater than 10 acres shall require a comprehensive development plan that addresses hydrology, water quantity and quality, sewage disposal, fire safety, access, drainage, soils, and geology.	 This policy permits development as long as some future plan "addresses" water supply. There are no performance standards or exemplary measures that would support a finding that the policy meaningfully contributes to avoidance or minimization of impacts. Please estimate the effect of this policy on ensuring adequate water supply and explain how it will avoid or minimize water supply impacts. 	
CSV-5.1 Development shall be designed to maintain groundwater recharge capabilities on the property. To protect and maintain areas for groundwater recharge, preservation of riparian habitats, and flood flow capacity, the main channels of the Arroyo Seco River and the Salinas River shall not be encroached on by development.	This policy does not increase water supply or decrease water consumption over baseline conditions. Please estimate the effect of this policy on ensuring adequate water supply and explain how it will avoid or minimize water supply impacts.	
CSV-5.2 Recreation and visitor-serving commercial	• There is no definition in GPU5 or its DEIR of	

uses shall only be allowed if it can be proven that: a. areas identified by the Water Resources Agency as prime-groundwater recharge areas can be preserved and protected from sources of pollution as determined by the Director of Environmental Health and the Water Resources Agency;

b. proposed development can be phased to ensure that existing groundwater supplies are not committed beyond their safe, long-term yields where such yields can be determined.

c. floodways associated with the main channels of either the Arroyo Seco River or the Salinas River will not be encroached on by development because of the necessity to protect and maintain these areas for groundwater recharge, preservation of riparian habitats, and flood flow capacity as determined by the Water Resources Agency.

d. the proposed development meets both water quality and quantity standards expressed in Title 22 of the California Code of Regulations and *Title 15.04* of the Monterey County Code as determined by the Director of Environmental Health;

e. the proposed development meets the minimum standards of the Regional Water Quality Control Basin Plan when septic systems are proposed and also will not adversely affect groundwater quality, as determined by the Director of Environmental Health; and

f. the proposed development will not generate levels of runoff which will either cause erosion or adversely affect surface water resources as determined by the Water Resources Agency.

a. A cumulative impact analysis of industrial buildout of the study area, including road capacity, highway access, drainage, and viewshed impacts "prime groundwater recharge capability." Please explain this phrase.

• Preservation of existing recharge areas does not increase water supply or decrease water consumption over baseline conditions. Please estimate its effect on water supplies and water supply impacts.

- Please explain how section "b" of the policy will be coordinated with Policies PS 3.1 through 3.7, which purport to condition development on proof of a "long-term sustainable water supply."
- Please explain whether there is any difference between proof of a "long-term sustainable water supply" and ensuring "that existing groundwater supplies are not committed beyond their safe, long-term yields where such yields can be determined."
- Please explain how and whether Policies PS 3.1 through 3.7 would be applied in the Central Salinas valley where safe, long-term yields cannot be determined.
- Preservation of recharge areas does not increase water supplies or decrease consumption over baseline conditions. Please estimate the effect of section "c" this policy on water supply and water supply impacts.
- Please explain whether and how this policy will be applied to recreation and visitorserving commercial use projects in the Winery Corridor that do not require discretionary permits. If not, why not? If not, how will the impacts this policy is intended to avoid be addressed for recreation and visitor-serving commercial use projects in the Winery Corridor that do not require discretionary permits?
- Please explain why this policy is limited to recreation and visitor-serving commercial uses. Why is this policy not applied to residential projects and to cultivation of previously cultivated land?

CSV-5.3 The Spence/Potter Road area, including the Special Treatment Area described in *Policy CSV-1.3* is designated a study area for alternative land uses to support the agricultural industry. Prior to new development, other than those consistent with the underlying land use designation, in the Spence/Potter Road study area, the following must be completed:
 Prevention of increased runoff does not increase water supplies or decrease consumption over baseline conditions. Please estimate the effect of this policy on water supply and water supply impacts

POLICIES AND MITIGATION MEASUR FOR CONCLUDING THAT WATER SUP SIGNIFICANT from Highway 101; b. Recommended changes to the Special Treatment Area boundaries or allowable uses within the Special Treatment Area, as necessary, to address the impacts identified; c. A drainage management plan to mitigate runoff to adjoining farmlands for the entire study area; d. Amendments to the General Plan, as necessary, and ordinance amendments to address revised landscaping and screening standards; and e. An implementation plan to fund and construct the identified infrastructure improvements. The studies and plane identified in this policy may be	ES CITED IN DEIR AS THE BASIS PLY IMPACTS WILL BE LESS THAN	
paid for by the County or interested property owners.		
		ļ
CARMEL VALLEY	MASTER PLAN	ł
CV-5.1 Pumping from the Carmel River aquifer shall be managed in a manner consistent with the Carmel River Management Program. All beneficial uses of the total water resources of the Carmel River and its tributaries shall be considered and provided for in	 The DEIR does not discuss the Carmel River Management Program. Please explain the program. Please explain how this policy will be implemented in practice. 	
CV-5.2 Water projects designed to address future growth in the Carmel Valley may be supported.	• This policy has no enforceable mandate.	34
CV-5.3 Development shall incorporate designs with water reclamation, conservation, and new source production in order to: a. maintain the ecological and economic environment; b. maintain the rural character; and c. create additional water for the area where possible including, but not limited to, on-site stormwater retention and infiltration basins.	• Please explain whether the possibility of creating additional water will be determined with reference to technical or economic feasibility or both. Please estimate how much additional water this policy will create.	
CV-5.4 The County shall establish regulations for Carmel Valley that limit development to vacant lots of record and already approved projects, unless additional supplies are identified. Reclaimed water may be used as an additional water source to replace domestic water supply in landscape irrigation and other approved uses provided the project shows conclusively that it would not create any adverse environmental impacts such as groundwater degradation.	 Please explain why the County does not prevent development on lots of record unless sufficient water is available. For example, please explain why the County does not 1) condition issuance of building permits on demonstration of sufficient water supply, 2) re-designate allowable land uses to bar development without adequate proof of long term sustainable water supply, or 3) condition issuance of well permits for lots of record on demonstration of an adequate long term water supply. Please explain why the County does not seek adjudication of the Carmel Valley aquifer in order to ensure that development impacts. 	
CV-5.5 Parts of the Carmel Valley aquifer are susceptible to contamination from development in areas not served by public wastewater systems.	• This policy would not increase supplies or reduce demand compared to baseline conditions. Please estimate the effect this	

rapid percolation rates shall require more strict

such areas should be maintained to preserve

groundwater quality.

enforcement of this policy. Agricultural land uses in

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT WATER SUPPLY IMPACTS WILL BE LESS THAN **SIGNIFICANT** Development projects that include an on-site septic policy has on water supplies and water supply system shall provide geologic and soils surveys that impacts. assess if conditions could preclude or restrict the possibility of satisfactorily locating such a system where it would not pose a threat of contamination to the aquifer. New development shall be carefully reviewed for proper siting and design of on-site sewage disposal systems in accordance with the standards of the Carmel Valley Wastewater Study. CV-5.6 Containment structures or other measures This policy would not increase supplies or shall be required to control the runoff of pollutants reduce demand compared to baseline from commercial areas or other sites where chemical conditions. Please estimate the effect this storage or accidental chemical spillage is possible. policy has on water supplies and water supply impacts. CACHAGUA AREA PLAN CACH-3.5 Mining or commercial timber, or other • This policy would not increase supplies or resource production operations that include methods reduce demand compared to baseline to screen areas, vehicle access, impacts on roadways, conditions. Please estimate the effect this noise impacts, measures to control on site and off site policy has on water supplies and water supply drainage and reclamation plans for mined or quarried impacts. areas may be considered in the Planning Area. No performance standards for mitigation of ٠ Impacts on watersheds, local roads, flora and fauna watershed impacts are provided. shall be mitigated. CACH-5.1 The Planning Area should not be This policy would not increase supplies or deprived of water reasonably required for the reduce demand compared to baseline beneficial needs of its inhabitants. Groundwater shall conditions. Please estimate the effect this not be exported to points outside the Planning Area policy has on water supplies and water supply boundaries. impacts. • Please explain whether and how this policy adds any constraints on development not already included in Policy PS 3.7. SOUTH COUNTY AREA PLAN SC-5.1 New development shall not diminish the This policy would not increase supplies or • groundwater recharge capabilities in the South reduce demand compared to baseline County Planning Area where the following resources conditions. Please estimate the effect this have been identified: policy has on water supplies and water supply a. Valuable natural groundwater recharge areas, or impacts. b. Artificial groundwater recharge projects. This policy implies that some new • Areas that are highly susceptible to water quality development would be allowed to diminish degradation because of either high water tables or recharge capabilities. Please reconcile this

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with Policies PS 2.8, which appears to require

that all new development maintain or increase

uncultivated land. If not, why not? Note that cultivation on slopes, particularly viticulture cultivation that removes armoring rock through deep ripping, can substantially

Please explain whether this policy will be applied to cultivation of previously

recharge.

	increase runoff.]
SC-5.3 New development may not encroach on the main channels and associated floodways of the Nacimiento, San Antonio, and Salinas Rivers in order to conserve groundwater recharge, preserve riparian habitats, and protect flood flow capacity.	• This policy does not increase water supply or decrease water consumption over baseline conditions. Please estimate the effect of this policy on ensuring adequate water supply and explain how it will avoid or minimize water supply impacts.	
	STER PLAN	$\frac{1}{2}$
Hydrology and Water Quality Policy A-1: At the	• Please explain how this policy is different in	ł
project approval stage, the County shall require new development to demonstrate that all measures will be taken to ensure that runoff is minimized and infiltration maximized in groundwater recharge areas.	effect than Policy PS 2.8, which appears to require that all new development maintain or increase recharge. If this policy is more stringent, please explain why it should not be adopted County-wide.	
Hydrology and Water Quality Policy A-2: To	• Please explain how this policy is different in	1
avoid adversely affecting groundwater recharge of surface water users in downstream areas, the County shall ensure that land use and drainage facilities on newly developed lands do not decrease the magnitude and duration of flows less than the mean annual flow in creeks downstream of the development sites.	effect than Policy PS 2.8, which appears to require that all new development maintain or increase recharge. If this policy is more stringent, please explain why it should not be adopted County-wide.	
Hydrology and Water Quality Policy B-1: The County shall ensure additional water to critically deficient areas.	• Please identify the critically deficient areas and explain how this policy will be implemented.	34
Hydrology and Water Quality Policy B-2: The County shall condition approval of development plans on verification of an assured long-term water supply for the projects.	• Please explain how this policy is different in effect than Policies PS 3.1 through 3.7, which purport to require that all new development demonstrate a long-term sustainable water supply. If this policy is more stringent, please explain why it should not be adopted County-wide.	
Hydrology and Water Quality Policy C-1: The County shall comply with all mandated water quality programs and establish local water quality programs as needed.	• Please estimate the effect of this policy on water supply and water supply impacts.	
Hydrology and Water Quality Policy C-3: The MCWRA and the County shall cooperate with the MCWRA and the MPWMD to mitigate further seawater intrusion, based on the Salinas Valley Basin Management Plan.	• This policy does not apparently add any enforceable mandate since it does not commit the County to a definite course of action.	
Program C-3.5: The County shall carry out all actions necessary to ensure that the installation of water supply wells comply with the State of California Water Well Standards and well standards established by the Monterey County Health Department.	• Please estimate the effect of this policy on water supply and water supply impacts.	
Program C-3.6: The County shall carry out all	• Please estimate the effect of this policy on water supply and water supply imports	
storage of potable and non-potable water comply	water suppry and water suppry impacts.	

Title 22.

POLICIES AND MITIGATION MEASURES CITED IN DEIR AS THE BASIS FOR CONCLUDING THAT WATER SUPPLY IMPACTS WILL BE LESS THAN SIGNIFICANT with the State Health Department regulations through

O-11g

L. Cumulative Impact Analysis Is Inadequate; and No Mitigation Is Proposed for Cumulative Impacts

As noted above, the DEIR fails to provide an adequate water balance analysis: it fails to quantify projected County water use and supply by basin, and if fails to project water use by other users of the same supplies, in particular, the incorporated cities within the County. Nonetheless, despite the absence of any quantitative basis for the conclusion, the DEIR concludes that County water use will make a considerable contribution to a cumulatively significant water supply impact. DEIR, p. 6-13. The DEIR fails to clarify whether this impact will occur by 2030 or only upon buildout, and whether it will occur in all basins. The DEIR also fails to explain whether the finding of cumulative significance in CUM-4 "Water Supply" is intended to reflect a finding that overdrafting and salt water intrusion impacts will be significant.

Please clarify the basis for this conclusion by providing a water balance analysis that compares all projected water uses, including projected city use, to projected water supplies by basin. Please explain whether the cumulatively considerable conclusion applies to all basins, including the Salinas River basin. Please explain whether the impact will occur by 2030 or only later. Please explain whether the finding of cumulative significance includes a finding that overdrafting and salt water intrusion will be cumulatively significant.

Despite the finding that impacts will be cumulatively considerable, the DEIR proposes no additional mitigation. CEQA requires that all feasible mitigation be proposed when impacts are found to be significant.

In particular, the DEIR must propose all feasible mitigation for cumulative impacts to the Salinas river basin. This is particularly critical because the DEIR concluded (albeit erroneously) that water supply impacts attributable to development in the unincorporated areas of the County within the Salinas Valley basin would be less than significant and, accordingly, proposed no mitigation to address water supply impacts in the Salinas River basin. Feasible mitigation for impacts in this basin are available, including restrictions on conversion of land for agricultural use, mandatory conservation measures, and limitations on all forms of development (including development of lots of record) without proof of adequate long term sustainable water supply.

V. TRAFFIC ISSUES

A. Assumptions For Scenarios Evaluated Are Not Clearly Stated

The DEIR's traffic analyses include eight cases that purport to evaluate impacts under various planning horizons (2030 conditions and 2092 buildout conditions) and roadway network assumptions (with and without the roadways assumed to be built through the TAMC impact fee and the proposed County impact fee) for both projectspecific and cumulative impacts.

The DEIR's methodology section identifies various analysis scenarios. These differ with respect to three variables: *land use assumptions* (current land use, current land use plus growth only in the unincorporated County, current land use plus growth in both the unincorporated areas and cities); *planning horizon* (2008, 2032, 2092); and *transportation network* (existing 2008 network, 2008 network plus the roadways assumed to be built through the TAMC impact fee and the proposed County impact fee). Although the narrative discussion identifies only "five analysis scenarios" (DEIR, p. 4.6-19), Table 4.6-10 actually sets out six scenarios. Some of these scenarios are also apparently used for the air quality analysis, although, as discussed in comments on air quality, the DEIR fails to state the assumptions reflected in the air quality "scenarios" and "conditions" as well. See Tables 4.7-3, 4.7-5, 4.7-6. The DEIR should clarify the relationship between the five analysis scenarios set out on pp. 4.6-19 to 20, the six scenarios identified in Table 4.6-10, and the scenarios set out in the air quality analysis in Tables 4.7-3, 4.7-6.

More problematically, the DEIR's actual traffic impact analyses include not 5 or 6 but 8 purportedly distinct scenarios: TRAN 1A, 1B, 2A, 2B, 3A, 3B, 4A, and 4B. Unfortunately the text of the DEIR does not clearly set out the land use assumptions, the planning horizon, and the network assumptions for each of these scenarios. It is possible to discern some of the assumptions for TRAN 1B, 2B, 3B, and 4B (the "B scenarios") based on comparisons of the scenario descriptions and impact analyses, but the DEIR should be revised to clearly state these assumptions.

Neither the land use assumptions nor the roadway network assumptions are stated for TRAN 1A, 2A, 3A, and 4A (the "A scenarios"). While it is possible to discern some of the assumptions, the DEIR should be revised to clearly state these assumptions.

The table below sets out the apparent assumptions in the eight scenarios evaluated and summarizes the DEIR's conclusions regarding the significance of impacts. Please clarify whether this table accurately reflects the assumptions used in the traffic analyses and supply the missing information.

Number Name Horizon Assumptions Impacts on	Scenario	Scenario	Planning	Land Use	Network	Evaluates	Finding
	Number	Name	Horizon	Assumptions		Impacts on	

Scenar	io Scenario	Planning	Land Use	Network	Evaluates	Finding]
Numbe	er Name	Horizon	Assumptions		Impacts on		ļ
1A	Existing plus Project Development to 2030 – Project- Specific Impacts of the Project	2030	Not specified – apparently assumes growth in unincorporated area of County but no growth in Cities, which would be consistent with scenario 1B	Not specified	"roadway or intersection operations in the immediate proximity of the development"	Less Than Significant based on Policies C1.3 and 1.4	
18	Existing plus Project Development to 2030 – County and Regional Roadway LOS Impacts	2030	This is the "project level analysis required by CEQA" and so it considers only growth in the unincorporated County (p. 4.6- 38)	Not specified, but may assume 2008 network	Specific major County and Regional Roadways	Significant and Unavoidable. 6 County segments operating at D or below will drop one LOS level; DEIR states that 2 [sic, 4] Regional Roadway Segments operating at D or below will drop one LOS level, but Table 4.6-15 shows that 4 will.	36
2A	Project Specific Impacts of the Development under 2030 Cumulative plus Project Conditions	2030	Not specified, but apparently assumes growth to 2030 in unincorporated County and Cities	Not specified	Purportedly evaluates both "project- specific impacts" that are "exclusively attributable to the development" <i>and</i> "impacts to the public roadway system in the immediate vicinity of the development site [that] are <i>cumulative</i> with other development in the area" (p. 4 6-57)	Less Than Significant, based on same policies cited in TRAN 1A	

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Scenario	Scenario	Planning	Land Use	Network	Evaluates	Finding
Number	Name	Horizon	Assumptions		Impacts on	
2B	County and	2030	"Development	Not	Specific major	Significant and
	Regional		and land use	specified,	County and	Unavoidable.
	Roadway		allowed under	but may	Regional	Cumulative
	LOS Impacts		the 2007	have	Roadways	development to
	(2030		General Plan	assumed		2030 will
	Cumulative		cumulatively	2008		increase the
	plus Project)		with	network		number of
			development in	plus the		County roadway
			incorporated	roadways		segments
			Cities and	assumed		operating below
			aujacent	to be built		LOS D by 17, from 17 to 24
			4.6-68	the		and will cause 2
			4.0-00)	TAMC		new LOS
				impact fee		deficiencies to
				and the		County roads in
				proposed		Carmel Vallev.
				County		(p. 4.6-59.)
				impact fee		Cumulative
						development to
						2030 will
						increase the
						number of
						Regional
						roadway
						segments
						operating at
						deficient LOS
						$\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$
						64)
						Four external
						segments will be
						cumulatively
						impacted. (p.
						4.6-67).
						DEIR finds that
						impacts will be
						SUI due to
						funding shortfall
						and that the rate
						of development
						growth will
						completion of
						nlanned roadway
						improvements
						(p, 4.6-68 to 69)
						Note that CVMP
						fully mitigates
						impacts in CV
						except for one
						segment where it
						is concluded that

Scenario Number	Scenario Name	Planning Horizon	Land Use Assumptions	Network	Evaluates Impacts on	Finding	
						there may not be community consensus or funding to correct an existing deficiency.	
3A	Project- specific Impacts of the Development under Existing plus Project Buildout	2092	Not specified, but apparently assumes buildout as of 2092 in unincorporated County but not any growth in Cities, based on distinction between 3A/B cases and 4A/B cases	Not specified	Apparently evaluates both "project- specific impacts" that are "exclusively attributable to the development" and "impacts to the public roadway system in the immediate vicinity of the development site [that] are <i>cumulative</i> with other development in the area" (p. 4.6-79)	Less Than Significant, based on policies C1.4 and C1.3	36
3B	County and Regional Roadway LOS Impacts (Existing plus Project Buildout)	2092	Not specified, but apparently assumes buildout as of 2092 in unincorporated County but not any growth in Cities, based on distinction between 3A/B scenarios and 4A/B scenarios	Not specified, but may have assumed 2008 network plus the roadways assumed to be built through the TAMC impact fee and the proposed County impact fee	Specific major County and Regional Roadways	Significant and Unavoidable. Through 2092, buildout traffic impacts to County roadways results in 16 additional LOS deficiencies plus 2 additional deficiencies in CV. (p. 4.6-80). It causes 10 additional LOS deficiencies to regional roadways. (p. 4.6-83.) It causes 4 additional LOS deficiencies in external	

Scenario Number	Scenario Name	Planning Horizon	Land Use Assumptions	Network	Evaluates Impacts on	Finding	
						roadways. (p. 4.6-86.) Although the DEIR states that mitigation for TRAN 2B is applicable, no additional mitigation is proposed and the impact is found SUI.	
4A	Project- Specific Impacts of the Development under Buildout Cumulative plus Project Conditions	2092	Apparently assumes cumulative growth in County and Cities	Not specified	Not specified. Apparently evaluates the same impacts as in 2A and 3A	Less Than Significant, based on unspecified General Plan policies, presumably C1.3 and C1.4	•
4B	County and Regional Roadway LOS Impacts (Buildout Cumulative plus Project)	2092	"forecast year 2092 conditions with full implementation of the allowed uses in the 2007 General Plan and projected growth in incorporated cities through the year 2092" (p. 4.6-93)	Not specified, but may have assumed 2008 network plus the roadways assumed to be built through the TAMC impact fee and the proposed County impact fee	Specific major County and Regional Roadways	Significant and Unavoidable. Results in 25 additional LOS deficiencies on County roads. (p. 4.6-95.) Results in 20 additional LOS deficiencies to County roads in CV. (p. 4.6-98.) Results in unspecified number of LOS deficiencies on regional segments – all segments are at LOS F in table 4.6-25, which is not discussed in the text. (p. 4.6- 98 to 99). Results in 7 external segment LOS deficiencies. (p. 4.6-100.) Finds that impact remains SUI	36

Scenario	Scenario	Planning	Land Use	Network	Evaluates	Finding	I
Number	Name	Horizon	Assumptions		Impacts on		
						because of funding shortfall despite development fees. (p. 4.6- 102.)	36

B. No Evaluation Of The Project's Impacts Based Only On Planned County Roadway Improvements

Table 4.6-10, p. 4.6-21, sets out land use and transportation network assumptions for each scenario evaluated. The Existing plus Project 2030 scenario does not modify the existing network to include either the TAMC or proposed County projects, whereas the Cumulative 2030 scenario includes both the TAMC and proposed County projects.

Thus, it appears that there is no scenario that evaluates the impacts of development in the unincorporated County allowed under the 2007 GP and assuming only the proposed County roadway network improvements. The DEIR states that scenario 1B constitutes the "project level analysis required by CEQA" and so it considers only growth in the unincorporated County. DEIR, p. 4.6-38. Since the proposed County roadway improvements are the only set of improvements actually under County control, and, as discussed below, funding for all of the proposed TAMC improvements is speculative at best, one essential scenario should have assumed growth in the unincorporated areas to 2030 *and* assumed only the proposed County roadway improvements.

C. Ambiguity In Use Of Terms "Cumulative" And "Project Specific"

There is an ambiguity in the DEIR's use of the terms "Project-specific" and "cumulative" in its discussions of the eight traffic scenarios it evaluates. Because this ambiguity must be understood to evaluate the DEIR's claims regarding the significance of traffic impacts, we discuss it here.

Typically, the term "project-specific" describes an impact analysis that considers only the effects of the project at issue and the term "cumulative" describes an impact analysis that considers the effects of the project at issue together with other past, present, and foreseeable future projects. However, the DEIR uses the term "project" to refer to both the pending decision whether to adopt the 2007 General Plan *and* to future individual development projects that might be build consistent with the 2007 General Plan. Thus, even though the DEIR's non-quantitative traffic analysis scenarios TRAN 1A, 2A, 3A, AND 4A (the "A" scenarios) are termed "project-specific" they actually

purport to evaluate both the project-specific and cumulative effects of future individual development projects.

First, note that the "B" scenarios distinguish "cumulative" and "project level" impacts based on whether future development in incorporated Cities and adjacent counties is assumed. In its "B" scenarios, all of which quantitatively evaluate impacts to a set of major County and Regional roadways, the DEIR evaluates two scenarios that assume *only* the development allowed in the unincorporated County, with no growth assumed in the cities and adjacent counties (1B – to 2030, and 3B – to 2092), and it evaluates two "cumulative impact" scenarios that assume growth in *both* the County and in incorporated cities and adjacent counties (2B – to 2030, and 4B – to 2092). The DEIR explains that the 1B scenario is the "project level analysis required by CEQA" and thus it considers only the growth in the unincorporated County. DEIR, p. 4.6-38. It appears that the 3B scenario is also a "project level" analysis. Thus, in the context of the "B" scenarios, the "project" is the adoption of the 2007 general plan, not the development of any specific development project.

The "A" scenarios purport to evaluate the "project-specific" impacts from future individual development projects that are permitted by the 2007 General Plan. In the context of the "A" scenarios, the term "project" refers to those future individual development projects, *and* to the Project that consists of the currently pending decision whether to adopt the 2007 General Plan itself. Thus, the DEIR uses the term "project-specific" to describe all of the "A" scenarios, even though the DEIR's analysis and conclusions for each of these scenarios actually purports to consider both the individual or "direct" impacts of future development projects *and* those project's contributions to cumulatively significant impacts – impacts that will be considered, and for which mitigation will be required when these individual development projects are approved in the future.

For example, the DEIR states that scenario 2A, "Project Specific Impacts of the Development under 2030 Cumulative plus Project Conditions," evaluates both "project-specific impacts" that are "exclusively attributable to the development" *and* "impacts to the public roadway system in the immediate vicinity of the development site [that] are cumulative with other development in the area." DEIR, p. 4.6-57. Similarly, the DEIR states that scenario 3A, "Project-specific Impacts of the Development under Existing plus Project Buildout," also evaluates both "project-specific impacts" that are "exclusively attributable to the development" *and* "impacts to the public roadway system in the immediate vicinity of the development" *and* "impacts to the public roadway system in the immediate vicinity of the development site [that] are cumulative with other development in the area." DEIR, p. 4.6-79.

Thus, the discussion of scenario 2A uses the term "cumulative" to refer both to the fact that development in incorporated Cities is assumed, *and* to refer to the fact that the impacts that are at evaluated include "impacts to the public roadway system in the immediate vicinity of the development site [that] are cumulative with other development in the area."

Conversely, the discussion of scenario 3A uses the term "project-specific" to refer both to the fact that development in the incorporated cities and adjacent counties is not assumed *and* to distinguish "project-specific impacts" that are "exclusively attributable to the development" from "impacts to the public roadway system in the immediate vicinity of the development site [that] are cumulative with other development in the area."

D. Evaluation Of Tran 1a, 2a, 3a, And 4a Fails To Identify The Extent Of Areas For Which Impacts Are Found To Be Less Than Significant

The DEIR's discussion of impacts at TRAN 1A, 2A, 3A, and 4A concludes that "project-specific deficiencies in roadway or intersection operations in the immediate proximity of the development" (DEIR, pp. 4.6-31) will be fully mitigated, primarily through Policies C1.3 and 1.4. However, the DEIR's conclusion that localized impacts will be fully mitigated is so vague as to be meaningless because neither the DEIR nor the General Plan define the critical terms that refer to the geographic *scope* of the impacts that are purportedly avoided or mitigated through General Plan policies. These terms include "project-specific deficiencies in roadway or intersection operations in the immediate proximity of the development" (DEIR, p. 6.6-31), "project-specific localized development impacts" (DEIR, p. 6.6-31), and "tier 1" impacts (DEIR, p. 3.6-29 and 30).

Contrary to the DEIR's claim at p. 4.6-29 and 30, the three "tiers" of roadway level of service impacts were not "described earlier." There *is* no earlier description of the tiers of impacts in the transportation section.¹³ The only hint at the meaning of Tier 1 is provided in the DEIR's discussion of significance criteria. The DEIR explains that LOS is determined with reference to the V/C ratio based on ADT rather than peak hour volumes in its evaluation of some, but not all, impacts. It states that "[t]his measure is applied to two of the three tiers of impacts described earlier; Tier 2: county roads and Tier 3: regional roads and major roads in incorporated cities. This measure is not applied to the first tier of impacts-direct impacts-which are impacts specific to individual developments related to access and localized impacts." DEIR, p. 4.6-29. This contextual definition is no help because the scope of "localized impacts" remains unclear.

It appears that Tiers 2 and 3 may refer to impacts to *types of roadways*, whereas Tier 1 refers to impacts that are *within some unspecified distance* of an individual development project. If that is in fact the way these terms are used, then there is a fundamental ambiguity with respect to impacts on County roads, regional roads, and major roads in incorporated cities that happen to be within the "localized area" included in a particular individual project's Tier 1 area. Are these impacts Tier 1 or Tier 2 and 3 impacts? Are the County roads included in Tier 2 just those major County roads that are quantitatively evaluated in the DEIR's "B" scenarios, or are all County roads included in Tier 2? The DEIR must be revised to explain what geographic area and what roads are

¹³ The term "Tier 3" is used in Policy C1.11, referring to mitigation of regional transportation impacts, but neither the DEIR nor the GP actually define what roadways are included in Tiers 1, 2, and 3 or, if Tier 3 refers to a certain geographic scope around an individual project, what the extent of that scope is.

included in the localized areas for which the DEIR concludes in the "A" scenarios that impacts will be less than significant.

A meaningful definition of the geographic scope of the "localized area" would be the study area required for a project traffic analysis under ITE's procedures. ITE, Transportation Impact Analyses for Site Development, 2006, Table 2-3, Suggested Study Area Limits for Transportation Impact Analyses, p. 10, Exhibit 11. For example, under ITE's recommended procedure, a traffic study for a project generating 200 to 500 peak hour trips would consider all signalized intersections within 0.5 miles and all major unsignalized intersections and access drives within 0.25 miles.

Referencing ITE's study area definition as the basis of the DEIR's claims that general plan policies will mitigate "localized" traffic impacts would be consistent with the implication in the DEIR's discussion of the "A" scenarios that future project-specific CEQA reviews will identify individual and cumulative impacts and require mitigation.

This definition is also required if the DEIR purports to present a complete analysis of *all* future traffic impacts. The DEIR's approach to traffic impact analysis whereby it quantitatively evaluates impacts to a specific set of major roadways and then qualitatively evaluates impacts to all other unspecified roadways would not be complete unless the roadways subject to the qualitative analysis included all of the roadways potentially affected by future development. The ITE procedure for identifying facilities subject to a traffic study is intended to ensure that all relevant impacts are evaluated.

However, if the DEIR were to use the ITE traffic study criterion as the geographic scope of the localized impacts evaluated in the "A" scenarios, then, as discussed below, its significance conclusion would have to be revised because 1) the DEIR admits that impacts to many specific County and regional roadways evaluated under the "B" scenarios, which will be included in the ITE study area for at least some projects, cannot feasibly be mitigated, and 2) no policies actually ensure that cumulative impacts to all other facilities will be mitigated.

If the DEIR is not revised to define the "localized" area evaluated in the "A" scenarios with reference to the ITE study area, then it must be revised to provide some explanation of the geographic scope implicit in its claim that general plan policies will ensure that localized impacts will not be significant.

E. DEIR's Conclusion Of No Significant Impact In TRAN 1A, 2A, 3A, and 4A Is Invalid Because The Localized Areas Contain The Roadways Found To Suffer Degraded LOS In The DEIR's Evaluation Of TRAN 1B, 2B, 3B, And 4B

The geographic scope of "localized impacts" for many future development projects would include portions of the roadways evaluated in the "B" scenarios and found to suffer significant unmitigated impacts. Thus, the conclusion in TRAN 1A, 2A, 3A, and 4A is not be valid for projects whose scope includes those roadways because the

DEIR admits in its analysis of TRAN 1B, 2B, 3B, and 4B that impacts to these roadways will remain significant and unavoidable. The DEIR admits in its discussion of the "B" scenarios that numerous impacts to County and Regional roadways cannot be mitigated, primarily due to lack of available funding. DEIR, pp. 4.6-44 to 45, 69, 87 to 88, 103. If the "localized area" is defined so narrowly as to exclude all County and regional roadways, then the conclusion in the "A scenarios" is essentially nothing more than the trivial requirement that future projects provide driveway access. Presumably the DEIR is making a broader claim than that.

The DEIR must be revised to provide a meaningful definition of so-called Tier 1 or localized impacts. Since the area included in any meaningful definition would contain County or regional roadways for which the DEIR finds any significant unmitigated impacts under the "B" scenarios, the significance conclusion must be revised to find that there will in fact be significant unmitigated impacts.

F. DEIR's Conclusion Under TRAN 1A, 2A, 3A, And 4A That Localized Impacts Will Be Fully Mitigated Is Unfounded Because The Policies Recited As The Basis For The Conclusion Do Not Support The Conclusion

The DEIR's discussion of impacts in the "A" scenarios concludes that "projectspecific deficiencies in roadway or intersection operations in the immediate proximity of the development" (DEIR, pp. 4.6-31) will be fully mitigated through Circulation Policies C1.3 and 1.4 and Land Use Policy 1.4.¹⁴ DEIR, pp. 4.6-31 to 33, 57 to 58, 78 to 79, and 93 to 94. The DEIR's discussion of impacts in the "A" scenarios concludes that "projectspecific deficiencies in roadway or intersection operations in the immediate proximity of the development" (DEIR, pp. 4.6-31) will be fully mitigated through Policies C1.3 and 1.4. DEIR, pp. 4.6-31 to 33, 57 to 58, 78 to 79, and 93 to 94. The DEIR states that these impacts include "impacts to the public roadway system in the immediate vicinity of the development site [that] are *cumulative* with other development in the area." DEIR, pp. 4.6-57 and 79.

There is no substantial evidence that Policies C 1.3 and C 1.4 will ensure that cumulative impacts are mitigated. In fact, as set forth in the discussion below, it is evident that Policy C1.3 and C1.4 would permit unmitigated cumulative impacts.

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¹⁴ Reference is also made to policies C2.1, 2.2, and 2.7. DEIR, p. 4.6-32. These policies are limited in scope, applying to concentrated commodity movements (C1.1), protecting transportation facilities from encroachment (C2.2) and requiring new development to be located with access to transportation (C2.7). These Policies do not require mitigation of prospective impacts to roadways. Similarly, the referenced Policies C3.5, 4.3, 4.5, and 4.9, requiring accommodation of pedestrians, bicycles, and transit, do not require mitigation of prospective impacts to roadways, even if they may somewhat attenuate those impacts. DEIR, p. 4.6-32. The reference to Policy LU 1.7 is also somewhat oblique: this Policy calls for encouragement of clustering residential development onto portions of a given piece of property most suitable for development where infrastructure exists or can be provided. This Policy does not require but merely encourages clustering, and it does not require future development to mitigate transportation impacts. Significantly, while these policies are recited in the discussion of TRAN 1A, none of these policies are mentioned in the discussions of TRAN 2A, 3A, and 4A, which mention only Policies C1.3 and 1.4.

Policy C1.3 provides that projects that "are found to result in reducing a County road below LOS D," or the applicable LOS per Policy C1.1, will be required to be phased so that LOS D is maintained concurrent with development. The implication on a casual reading is that development will be barred until there is an assurance that acceptable LOS would be maintained concurrently. This reading is also suggested by the reference to Policy LU 1.4, which states that "growth areas shall be designated only where an adequate level of services and facilities such as . . . transportation . . . exists or can be assured concurrent with growth and development." However, a closer reading of Policy C1.3 and 1.4 demonstrates that their language would 1) permit development that makes cumulatively considerable contributions to unacceptable LOS as long as LOS were not pushed from LOSD to E or E to F by that project alone, and 2) permit development to go forward on the basis of fair share payments even though those payments would not in fact result in acceptable LOS.

1. Mitigation of all cumulatively considerable contributions to significant impacts is not required by Policy C1.3 because the policy can be construed to require phasing only when LOS is pushed from D to E or E to F and because Policy C1.3 does not address cumulative impacts

Policy C1.3 can be construed to require phasing development projects only when the project at issue is the straw that breaks the camel's back by pushing LOS from D to E or from E to F. This construction is evident from the impact analyses at TRAN 1B, 2B, 3B, and 4B which treat an impact as significant only if it pushes LOS from D to E or from E to F. Under this approach, where LOS is already at F, the DEIR treats impacts as less than significant by definition. This approach also treats substantial degradation of V/C ratios as insignificant where the existing LOS is at D or E but does not degrade to the next level.

The DEIR's significance criteria is ambiguous in this regard, stating that a significant impact occurs if the project will "add any traffic to a County roadway or State Highway that operates below LOS D without the project *and* the project worsens the LOS based on the measure of performance." DEIR, pp. 4.6-29 to 30. The construction of the phrase "degraded further" in Policy C1.1b is similarly ambiguous. Policy C1.1b states that "County roads operating at LOS D or below at the time of adopting this General Plan shall not be allowed to be *degraded further* except in Community Areas where a lower LOS may be approved through the Community Plan process."

The DEIR must be revised to clarify whether, in these contexts, "degraded further" means driven from D to E or from E to F, or whether a considerable contribution to an increase in the V/C ratio that did not itself result in a change from D to E or E to F would be considered to be "further degradation?" If "degraded further" does include a cumulatively considerable contribution short of a change from D to E or E to F, then the DEIR must be revised to clarify how much degradation in LOS would be considered cumulatively considerable contribution.

Under the "final straw" reading of "further degraded" that is permitted by the existing wording of the general plan policies, Policy C1.3 would permit approval of projects that make cumulatively considerable contributions to degraded intersections without any assurance of mitigation. Individual projects could be serially approved based on project-level CEQA analyses that show that the LOS is not pushed downward a full LOS level (i.e., from D to E or from E to F) until finally some project does have that result. While the County could conceivably cease all discretionary approvals affecting the roadway at that point, external growth and ministerial permitting would likely result in the eventual unmitigated degradation of the LOS to the next level. Furthermore, it would be irrational to require mitigation of cumulative impacts only from the last straw project.

Furthermore, Policy C1.3 does not itself address cumulative impacts. Its phasing requirement applies only to "projects that are found to result in reducing a County road below LOS D." Only Policy C1.4 explicitly addresses cumulative impacts. If Policy C1.3 is intended to address cumulative impacts, the EIR must explain how its language will be so construed.

Thus, Policy C1.3 should be rewritten and clarified to require phasing all of those projects (i.e., conditioning project approval on the actual construction of mitigating facilities) that make any cumulatively considerable contributions to significant traffic impacts. This requires that the County rewrite the policy and define a cumulatively considerable contribution so as to ensure that unmitigated impacts do not eventually result in degraded LOS without any project being required to address the impact. An appropriate definition would be *any* increase in the V/C ratio of a facility that is already at LOS D.

The fact that, as written, C1.3 cannot be readily construed to require phasing projects with cumulatively considerable impacts means that C1.3 cannot be the basis of a conclusion that cumulative impacts will be mitigated on either the major County and Regional roadways evaluated in the "B" scenarios (which the DEIR admits will have unmitigated impacts) *or* the other unspecified County and city roadways affected by future individual development projects purportedly evaluated in the "A" scenarios.

2. Policy C1.4 permits projects to proceed on the basis of fair share payments toward mitigation of cumulative impacts even though the DEIR admits that cumulative impacts to numerous specific roadways cannot feasibly be mitigated by these payments

Policy C1.4 provides that "direct on-site and off-site circulation improvements that mitigate project impacts shall be constructed concurrently," but permits new development merely to make fair share payments toward off-site improvements that "mitigate cumulative impacts," pursuant to Policies C1.8 and C1.11. Policy C1.4 does *not* assure that cumulative impacts to those specific County and regional roadways specifically evaluated in the DEIR's "B" scenarios will be mitigated. As noted above, the DEIR admits in its discussion of the "B" scenarios that numerous

impacts to County and Regional roadways cannot be mitigated, primarily due to lack of available funding.¹⁵ DEIR, pp. 4.6-44 to 45, 69, 87 to 88, 103. Thus, Policy C1.4 cannot be the basis of a conclusion that cumulative impacts will be mitigated on the major County and Regional roadways evaluated in the "B" scenarios, which the DEIR admits will suffer unmitigated impacts from future development that cannot feasibly be mitigated.

3. Policy C1.4 permits projects to proceed on the basis of fair share payments toward mitigation of cumulative impacts even though the DEIR provides no substantial evidence that cumulative impacts to these unidentified roadways will be mitigated

The DEIR's conclusion in the "A" scenarios that all cumulative impacts will be mitigated for a set of unspecified roadways cannot be supported on the basis of Policy C1.4 either, even if the claim is limited to roadways other than those that were specifically evaluated in the DEIR's "B" scenarios and found to suffer unmitigated impacts. There are numerous county roadways, arterial and smaller, that were not included in the set of roadways evaluated under the "B" scenarios, and these roadways will be affected by cumulative future development. Policy C1.4 states

"Direct on-site and direct off-site circulation improvements that mitigate project impacts shall be constructed concurrently with new development. Off-site circulation improvements which mitigate cumulative impacts either shall be constructed concurrently with new development, or a fair share payment pursuant to Policies C-1.8 and C-1.11 shall be made."

Presumably the terms "direct on-site" and "direct off-site circulation improvements" are intended to reference improvements that are necessary to mitigate a future project's impacts that are individually significant. With regard to *cumulative* impacts (as opposed to "direct" or individually significant impacts), Policy C 1.4 is disjunctive: mitigation is supposed to occur through 1) some unspecified mechanism whereby "off-site circulation improvements which mitigate cumulative impacts either shall be constructed concurrently with new development," or 2) "a fair share payments pursuant to Policies C-1.8 and C-1.11." The inability of these two disjunctive prongs of Policy C1.4 to mitigate all cumulative impacts is addressed in two parts immediately below.

First, Policies C-1.8 and C-1.11 pertain to the proposed County Traffic Impact Fee Policy and the adopted TAMC Regional Traffic Impact Fee, both of which are programs that are targeted to support a defined set of roadway improvements. See 2008 General Plan Update Errata/Addendum, Sep. 3, 2008, Table C-1, 2008 Regional Development Impact Fee – Project List; DEIR, p. 4.6-24, Table 4.6-12, TAMC Regional Traffic Impact Fee Program Projects. As discussed above, the DEIR admits in its analysis of the "B" scenarios that, despite the assumed construction of these

¹⁵ Although TRAN 1B and 3B evaluate "project-specific" impacts to these roadways, the "project" referred to is the approval of the 2007 General Plan, and the development impacts evaluated include the essentially cumulative impact of all development that occurs in the unincorporated area of the County.

improvements through these impact fee programs, significant unmitigated impacts will remain. DEIR, pp. 4.6-44 to 45, 69, 87 to 88, 103.

The language of Policy C 1.8 does not even apparently apply to development projects within the unincorporated County, since the first sentence of the Policy states that "[d]evelopment proposed in cities and surrounding jurisdictions shall be carefully reviewed to assess the proposed development's impact on the County's circulation system." 2008 General Plan Update Errata/Addendum, Sep. 3, 2008. Thus, Policy C1.8 appears to be intended to ensure that the County take steps to see that development outside the County's jurisdiction be reviewed so as to require extra-territorial development to mitigate impacts on County facilities. It is unclear how this relates, if at all. to the proposed¹⁶ County Traffic Impact fee program since it is unlikely that development projects outside the County's jurisdiction could be required to make contributions to a County impact fee program. At any rate, assuming that projects do make fair share contributions to the proposed County Traffic Impact fee program identified in Policy C1.8, those contributions would only fund a specific set of improvements. Therefore, this program cannot be the basis of the DEIR's conclusion that cumulative impacts to *all* of the unidentified facilities that the "A" scenarios purport to address will be mitigated.

The language of Policy C1.11 cited by Policy C1.4 is apparently restricted to the mitigation of so-called "Tier 3 impacts" (although that language is not defined in the General Plan) through construction of the specific facilities designated through the TAMC Countywide Traffic Impact Fee Program. Again, this mitigation is limited to a specific set of facilities to which TAMC proposes to dedicate its proceeds (and, which require substantial amounts of additional funding that has yet to be identified, as discussed below). Thus, neither Policy C 1.8 nor C 1.11 would ensure concurrent mitigation of cumulative impacts to 1) unidentified facilities not included on the specific list of roadway improvement projects for which these fee programs were designed, or 2) the identified facilities that *are* included on the specific list of projects but to which the DEIR nonetheless concludes that impacts will remain significant and unavoidable.

Second, while Policy C-1.4's first prong states that "off-site circulation improvements which mitigate cumulative impacts either shall be constructed concurrently with new development", there are no programs or implementation measures that would ensure that cumulative impacts to the unidentified roadway facilities not included on the TAMC or County impact fee project list are actually mitigated through concurrent construction paid for by fair share fees, or otherwise. Policy C 1.4 simply does not identify any mechanism that would actually be put in place through the General Plan that would ensure that this occurred. Murietta Valley Unifed School District v. County of Riverside (1991) 228 Cal.App.3d 1212 requires that a general plan actually contain appropriate financing mechanisms or other arrangements that implement

¹⁶ The September 3, 2008 Errata/Addendum revises the text of Policy C1.8 to state that the "County . . *has adopted* a County Traffic Impact fee." It is unclear whether the County has in fact adopted the Traffic Impact fee since the Errata continues to refer to "*Proposed* Transportation Facilities" to be funded by a County Traffic Impact Fee. The EIR must clarify the status of this program.

policies mandating the provision of facilities. As noted, neither the County's proposed Traffic Impact Fee program nor TAMC's Regional Traffic Impact Fee program address all of the unidentified County roadways purportedly evaluated in the DEIR's "A" scenarios, so these programs do not qualify as the essential implementing mechanism.

Furthermore, the previously proposed language in Policy C 1.8 calling for *ad hoc* fees pending adoption of a County Traffic Impact Fee program was eliminated in the September 3, 2008 Errata/Addendum to the General Plan; thus, even if there were some evidence that *ad hoc* exactions of fair share payments could mitigate cumulative impacts, this provision has been excised. See 2008 General Plan Update Errata/Addendum, Sept. 3, 2008, revised Policy C-1.8. And, as discussed below, there are no *other* policies that will ensure that all cumulative impacts are addressed.

4. No other policies will ensure that cumulative impacts are mitigated before development occurs

a. <u>Policy C1.1 does not ensure that cumulative impacts are mitigated before</u> <u>development occurs</u>

Policy C1.1, allowing Community Plans, Area Plans, and Land Use Plans to redesignate a LOS lower than D, is not identified by the DEIR as the basis of its conclusion in the "A" scenarios that the impacts, including cumulative impacts to roadways in the vicinity of specific future projects, will be less than significant. If the DEIR's conclusion does rest on the assumption that cumulative impacts can be "mitigated" by adopting a lower LOS, the County has an obligation to disclose this. A "policy" of simply lowering the announced LOS standard whenever it cannot be met does not meet the Planning and Zoning law's requirement that a circulation element support the land use element. And an EIR whose conclusions rest on the undisclosed intention to define away impacts by *ad hoc* reclassification of the acceptable LOS for a set of unidentified but affected facilities would not meet CEQA's good faith disclosure requirements.

> b. <u>Policy C1.2 does not ensure that cumulative impacts are mitigated before</u> <u>development occurs</u>

Policy C1.2, requiring achievement of LOS standards through adoption of as yet unspecified Capital Improvement and Financing Plans ("CIFP"), is also not identified by the DEIR as the basis of its conclusion that the impacts under the "A" scenarios are less than significant. Even if it were cited, it would not suffice. Policy C1.2 does not require that acceptable LOS be achieved *until 2027*. The DEIR states that the General Plan's planning horizon is 20 years. DEIR, p. 3-8. Thus, as written, Policy C1.2 permits deficient LOS for the duration of the General Plan's planning horizon, which, as discussed below, is fundamentally inconsistent with the correlation requirement under Government Code Section 65302(b). And Policy C1.2 does not explain what the consequence of failing to meet the LOS standard would be, *e.g.*, it does *not* require phasing development until an adequate LOS is achieved.

c. <u>The "APFS" policies cannot ensure that cumulative impacts are mitigated</u> <u>before development occurs</u>

Conceivably, the DEIR's conclusions in the "A" scenarios intended to reference the undefined and speculative Capital Improvement and Financing Plan ("CIFP") process by reciting Land Use Policy 1.4, which provides that "growth areas shall be designated only where an adequate level of services and facilities such as . . . transportation . . . exists or can be assured concurrent with growth and development." Policy LU 1.4 may in turn conceivably be intended to invoke Public Service Policies PS1.1 through 1.6, which purport to require that no new discretionary development be allowed unless Adequate Public Facilities and Services ("APFS") requirements are met. See e.g., PS1.3. If this is the basis of the DEIR's conclusions with respect to the significance of cumulative impacts in the "A" scenarios, the DEIR must be revised to say so.

However, even if the APFS Policies were cited as the basis of the DEIR's conclusion in the "A" scenarios (and they were not), these policies would not support the DEIR's finding that cumulative impacts of individual development projects will be avoided by concurrent construction of improvements for the following reasons, which are discussed more fully in the sections immediately below:

- There will be enormous administrative and financial burdens associated with implementation of CIFPs as the CIFP idea is sketched in Policies C1.2 and PS 1.1 to 1.6 burdens which the DEIR has not made a good faith effort to disclose;
- Although the APFS requirements include addressing *existing* LOS deficiencies, there are no policies that would require this before 2027;
- Policies permitting exceptions to the LOS D standard are incomplete, inconsistent, and uncontrolled, and, if relied upon, would render the General Plan LOS standard meaningless; and
- Like Policy C1.2, Policies PS1.1 through 1.6 fail CEQA's requirements for payment of impact fees as mitigation: there are in fact no funded and adopted CIFPs in place, the necessary improvements are not identified, the proposed benefit areas are not specified, there is no evidence that funding necessary capital improvements is feasible and substantial evidence to the contrary, and there is no provision for interim measures pending completion of the CIFPs.

Thus, the undefined CIFP program does not provide a basis to conclude that future cumulative impacts in the area of individual development projects will be mitigated.

i. Administrative burden of completing CIFPs is not disclosed and will lead to development moratorium or violation of policies requiring CIFPs

It is not clear how many CIFPs will be required, what areas they will cover, and whether they will overlap. It *appears* that the CIFPs referenced in C1.2 may be the same CIFPs that are required under PS 1.1, but this is not at all clear. For example, the 20 year planning horizon for attaining acceptable LOS under the CIFPs required by Policy C1.2 is not compatible with the requirement that APFS standards be met concurrent with new development. This inconsistency must be explained.

Policy C1.2 states that CIFPs may cover a benefit area consisting of a Planning Area, a Community Area, or the County as a whole. Note 4 to Table PS-1 mentions Rural Centers as well, so it appears that CIFPs are required for Rural Centers. See also DEIR, p. 3-44. A CIFP will be required for the AWCP. GP, p. AWCP-19; DEIR, p. 4.6-116 to 117. The scheme for meeting APFS requirements in PS 1.1-1.6 contemplates that a CIFP be in place before any development occurs that may create LOS deficiencies. Thus, there could be as many as 23 CIFPs required to be developed (or perhaps as few as one impossibly comprehensive County-wide CIFP). Twenty-three CIFPs would be required if there were one County-wide CIFP and also a CIFP for each of the 8 Area Plans, the Carmel Valley Master Plan, the AWCP, each of the 5 Community Areas, and each of the 7 rural centers.

If the CIFPs referenced by Policies PS1.1 through 1.6 and AWCP section 4.5 are the same CIFPs referenced by Policy C1.2, it should be noted that Policy C1.2 requires that *all* of these plans be developed within 18 months, but it does not say who will be responsible for preparing these CIFPs. For example, it is not evident that development proponents are standing by ready to shoulder this burden. The coordinated development of this many plans within 18 months is a formidable administrative task – for either the County or development proponents.

Preparation of a CIFP would require identification and costing of necessary improvements, which in turn would require traffic studies, which in turn would require a specific proposal for future development.

CEQA analysis would be required before the County committed itself to construction of a specific set of improvements through the adoption of a CIFP, because the construction of those improvements would potentially cause environmental impacts. While this CEQA analysis might be undertaken in connection with the CEQA analysis required for adoption of plans for Community Areas or Rural Centers, plans for all of these development areas are unlikely to be proposed or completed within the next 18 months. Because there are presumably no current plans to revise the Area Plans after adoption of the 2007 General Plan, independent CEQA analysis would be required for CIFPs for which the benefit area is a Planning Area.

The DEIR states that "development of Rural Centers is supposed to be a secondary priority after the development of Community Plans for the Community Areas," so it is unclear how and why the 18 month deadline would have to be met for the rural center CIFPs. DEIR, p. 3-43.

Policy C1.2 and Policies PS1.1 to 1.6 must be clarified to explain 1) whether the CIFP's identified in Policy C1.2 are the same as those identified in Policies PS1.1 to 1.6, 2) how many CIFPs will be required, 3) whether and how they will overlap, 4) who will pay for their development, 5) how they will be completed timely, 6) whether CEQA analysis for CIFPs will be undertaken separately or in conjunction with plans for Community Areas and Rural Centers, and 7) why and when CIFPs will be required for Rural Centers.

In view of the substantial magnitude of the administrative task of preparing adequate CIFPs (independent of the task of obtaining funding), and in view of the lack of clarity about the CIFP process itself, it is unreasonable for the DEIR to conclude that future development will proceed unimpeded by this administrative burden.

Thus, the DEIR should acknowledge that the administrative process to complete CIFPs will constitute a development moratorium, and should explain how that process could be achieved within 18 months, particularly in view of the enormous delay in adoption of TAMC's Regional traffic impact fee and the County's own proposed traffic impact fee. If development is to be permitted in Community Areas and Rural Centers despite the absence of a CIFP, the General Plan should clarify under what conditions this would be permitted and how that would be consistent with Policies C1.2 and PS 1.1 through 1.6.

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ii. Existing LOS deficiencies must be corrected

Policies PS1.1 through 1.6 require that no new development be allowed unless APFS requirements are met. See e.g., PS1-3. Policy PS1.1 states that APFS requirements shall "ensure that APFS needed to support new development are available" concurrent with the impacts of development and shall "seek to achieve acceptable level of service (LOS) standards through improvements funded by fair share impact fees and planned capital improvements (CIFP)." Thus, a CIFP must be in place that ensures correction of *existing* LOS deficiencies and prevents future cumulative impacts before any new development can be permitted in the CIFP's benefit area. This conclusion is reinforced by the reference to CIFPs in Policy C1.2 that are apparently intended to correct existing LOS deficiencies.

This conclusion is also reinforced by CEQA definition of cumulative impacts, which are caused by *past and present development*, not just foreseeable future development. CEQA Guidelines, § 15355(b). The General Plan and DEIR should make it clear that any delay in preparation of the required CIFPs and any delay in correction of *existing* LOS deficiencies will result in a development moratorium. In view of the 20 year period allowed by Policy C1.2 to achieve acceptable LOS, it appears that the enforcement of the APFS requirement may effectively bar development for a substantial period of time.

If the County does not intend to correct existing LOS deficiencies before permitting additional development, then it must clearly explain under what circumstances this development will be permitted. As discussed immediately below, the proposed General Plan Policies do not do this.

Exception to requirement to meet LOS D where LOS is already below D must be clarified

Policy C1.3 provides that projects that "are found to result in reducing a County road below LOS D," or the applicable LOS per Policy C1.1, will be required to be phased so that LOS D is maintained concurrent with development. Policy C1.3 provides two exceptions, one of which is apparently intended to permit development to go forward even though existing LOS degradations have not been rectified. The language of the Policy must be clarified, and the DEIR must be revised to explain to what extent its conclusions that cumulative impacts will be mitigated rest on this exception.

Under its first exception, Policy C1.3 provides that if LOS is already below D *and* the roadway has been identified as a top priority in the CIFP, then Policy C1.4 (calling for fair share payments toward mitigation of cumulative impacts) applies. Based on this language, if the LOS is below D and 1) there *is* no CIFP (e.g., before a CIFP is developed) *or* 2) the CIFP has not identified the road as a top priority, then development will have to be phased, i.e., not permitted, until LOS meets LOS D. In effect, the policy would bar most development where the existing LOS is below D until a CIFP makes improvement of the affected facility a top priority. If this is the case, the EIR must so state.

If it is not the case, then the EIR should explain under what circumstances development would be permitted before there is a CIFP or if a CIFP has not identified the affected facility as a top priority.

Policy C1.3 apparently qualifies the requirement that LOS D be achieved with the phrase "or the applicable LOS per Policy C-1.1," which allows a lower LOS to be designated in Community Areas or through Area Plans and "Land Use Plans." If Policy C1.3 does *not* require meeting LOS D and only requires meeting the applicable LOS per Policy C1.1, then the DEIR must disclose whether the conclusion in TRAN 1A, 2A, 3A, and 4A that there will be no LOS impacts depends on the assumption that LOS will be permitted to degrade below LOS D through Policy C1.1. If the DEIR's conclusion in the "A" scenarios does depend on wholesale re-designation of LOS standards, the LOS designations in the General Plan are essentially meaningless since they are infinitely malleable and the DEIR's analysis amounts to the claim that new development can meet LOS standards because the County can change them whenever it wants to for whatever reason it chooses. And if the County plans wholesale re-designation of LOS standards, then it is entirely unclear why Policy C1.2 permits a 20-year period to achieve acceptable LOS.

As discussed above, if the DEIR's conclusion does depend on the assumption that LOS standards will be relaxed, then the DEIR must disclose where LOS designations will be relaxed and what constraints will be imposed on such re-designations. Policy C1.1 references entirely unspecified "benefits" that must be cited to justify re-designation of LOS standards for Area Plans, but it imposes no "benefit" requirement on re-designations by Community Plans or "Land Use Plans." "Benefit" requirements for re-designations of LOS standards must be explained and meaningfully constrained. For example, the DEIR must explain whether the "benefits" test would include considerations unrelated to transportation.

Furthermore, the term "Land Use Plan" is not defined. This term should be dropped, because it apparently would permit *ad hoc* re-designation of LOS standards by developers' plans for specific projects. Only Community Plans and Area Plans – plans that are less likely to be driven by individual developers' interests – should be allowed to specify lower LOS standards. Otherwise, the LOS designations will be meaningless in practice since they could be evaded by any and all individual development projects.

The County must clarify what "top priority" means in the context of Policies C1.3 and 1.4. The term is entirely undefined and obviously presents a substantial loophole to allow development to aggravate existing LOS deficiencies on the basis of an entirely unconstrained act of announcing good intentions. A reasonable construction of "top priority" would require that a CIFP include a planned, approved, and fully funded improvement project that is scheduled for completion by the time the development project is completed that would ensure 1) that existing deficiencies in the LOS are corrected and 2) cumulatively considerable contributions to reductions in V/C ratios are avoided. Any construction of "top priority" short of this would not ensure that cumulative impacts are avoided, and the DEIR's conclusion that cumulative impacts are avoided lack any foundation. Merely designating an improvement as a "top priority" without such a requirement is meaningless.

Under its second exception, Policy C1.3 excepts a list of projects including "first single family dwelling," second units, and non-discretionary use for commercially designated properties. The DEIR and General Plan must clarify whether this policy excepts only a single unit development of a "first single family dwelling" on a single lot of record, or whether it excepts a residential subdivision containing multiple "first single family dwellings?" Do non-discretionary uses in commercially designated properties include ministerial winery permits? If so, these uses have the potential to generate substantial traffic, which will not be mitigated. This must be disclosed.

iv. Funding not identified or likely to be available for CIFPs

When impact fees are proposed as mitigation, the record must contain evidence that the necessary infrastructure improvements will actually be constructed when needed. *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 728; *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1189. An agency must provide substantial evidence that the impact fees will be used to implement

a "reasonable, enforceable plan or program." Anderson First Coalition v. City of Anderson (2005) 130 Cal.App.4th 1173, 1189.

Because the CIFPs have not been developed, because there is substantial uncertainty as to their requirements, and because there is no evidence that the CIFPs can be developed timely, much less funded timely, it is clear that here is no enforceable plan or program.

Furthermore, there is substantial evidence that funding for the CIFPs is not and will not be available. The 2007 General Plan does not identify funding sources. Instead, it states that "[m]eeting transportation needs in an era of limited funding presents a significant challenge" 2007 GP, p. Circ-1. It discusses the need to link circulation strategies to growth and land use plans and then goes on to say that "[d]eveloping and implementing funding solutions are also necessary." 2007 GP, p. Circ-2. Acknowledging the need to develop a plan is not a plan.

The 2007 General Plan mentions development impact fees in Policies C1-2(d) (unspecified TIF), C1.4 (unspecified "fair share payments"), C1.8 (proposed county TIF), and C1.11 (TAMC TIF). However, as discussed above, the TAMC and proposed County fees are admittedly insufficient to mitigate future impacts, even to the limited set of roadways to which their proceeds will be devoted.

The only policies that address funding other than development impact fees are vague policies to "support and encourage" TAMC's efforts to find funding (Policy C1.6), to seek funding from "TAMC and other available resources" (Policy C1-7), to use "all available public and private sources" of funding (Policy C1.9). Plans to beg for funds from other agencies have been specifically found to be an inadequate foundation for a circulation element. *Concerned Citizens of Calaveras County v. Calaveras County Board of Supervisors* (1985) 166 Cal.App.3d 90, 103.

Payment of impact fees for improvements that are infeasible does not constitute the necessary commitment to mitigation: where the cost of highway improvements necessary to mitigate impacts are clearly beyond the means of the local jurisdiction, it cannot be reasonably argued that mitigation is feasible. *Napa Citizens v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 364. The record must show how the balance of necessary funds over and above development impact fees would be obtained so that the agency has substantial evidence in support of its expectation that needed improvements will be built. *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1189; *see also Endangered habitats League v. County of Orange* (2005) 131 Cal.App. 4th 777, 785 (regardless of reasonableness of developer's contribution, a fee program is insufficient mitigation where agency will not have sufficient funds).

Nor does the DEIR identify an adequate source of funding for the improvements necessary to address future cumulative impacts. Indeed, as discussed below, neither the 2007 General Plan nor the DEIR even identify all of the improvements that would have

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to be funded in order to attain adequate LOS. The DEIR's admission that funding is not available to address the impacts to the specific facilities evaluated in the "B" scenarios is substantial evidence that there will not be sufficient funding to address all of the other cumulative impacts purportedly evaluated in the "A" scenarios. Indeed, the DEIR *admits* that the rate of growth will outpace construction of new transportation facilities. DEIR, p. 4.6-44 to 45.

Experience demonstrates that funding will not be available to maintain roads, correct existing LOS deficiencies, and complete the funding of planned improvements. For example, development impact fees represent only \$328 million of the \$1.18 billion required for the projects identified in TAMC's Regional Impact Fee Nexus Study Update. Kimberly Horne, Regional Impact Fee Nexus Study Update, March 26, 2008, p. iii to iv. The balance of funding, corresponding to the contributions of existing and out-of-county traffic, must come from other sources, which the Nexus Study does not identify. TAMC's current investment plan calls for \$1.8 billion in spending, but is critically dependent on raising \$1 billion from a 25-year ½ cent sales tax, a measure that has repeatedly been defeated by the voters, most recently in November 2008. TAMC, Investment Plan for transportation Sales Taxes in Monterey County, available at http://www.tamcmonterey.org/programs/plan/tip.html. The TAMC investment plan also depends on obtaining \$410 million in matching state and federal funding – which will not be available without the sales tax passage. Thus, the funding that is necessary actually to complete the identified improvements remains speculative.

If TAMC has been unable to identify complete funding for a *partial* set of the necessary regional improvements despite its efforts over many years, it would be pure speculation to assume that the County will be able to obtain funding for an undefined set of improvements through a CIFP mechanism that has yet to be planned, much less adopted.

The DEIR does not contain any substantial evidence that the County's own proposed limited traffic impact fee program identified in the revised Policy C1.8 is itself a feasible means to construct the proposed improvements. As noted, this program purports to address only a limited set of improvements to certain County roads. Although the revised Policy C1.8 states that the County's traffic impact fee program has been adopted, there is no evidence that it has in fact been adopted. LandWatch requested information about this program and was advised by County staff that 1) the County Impact Fee is still being developed; 2) the list of roadways identified in GPU5 and the DEIR are the draft candidates; and 3) the program will probably be taken to the Board of Supervisors after GPU5 is adopted. If the County fee program has been adopted, or even developed past the draft stage, the DEIR must be revised to include information about its approval status, its sources of funding, the adequacy of that funding, the specific roadway improvement projects to be constructed, the timing of those improvements, and responsibility for implementation. Without this information, there is no evidence that this program is feasible. Even if this proposed County program were fully funded, these improvements would not mitigate all of the impacts identified under the "B" scenarios, much less all of the impacts to unspecified roadways purportedly addressed under the "A" scenarios. There is simply no available information about funding for improvements necessary to mitigate cumulative impacts to all of the unspecified roadways purportedly evaluated in the "A" scenarios. In view of the evidence that even limited roadway improvements are beyond to financial capability of the County, it is entirely unreasonable to assume that the vaguely sketched CIFP process will be adequately funded. The DEIR must be revised to acknowledge this fact, and to acknowledge that thee is no substantial evidence that cumulative impacts in "localized areas" will be less than significant.

G. Lack of Full Analysis

The DEIR purports to provide a full quantitative analysis and specific proposed mitigation of impacts to Carmel Valley Master Plan and to the area included in the AWCP, but fails to do so for all other areas of the County. This level of analysis should have been provided for other areas instead of the incomplete qualitative analysis under the "A" scenarios. There is no justification for ignoring the details of roadway impacts in other areas of the County, particularly in areas where the location and level of future development intensity is substantially constrained.

H. Inadequate First Tier Cumulative Analysis

CEQA permits future project-level EIR's to tier from a cumulative impact analysis in the first tier, and partially exempts a project consistent with a general plan from cumulative impact analysis. The DEIR's "A" scenario impact analysis purports to find that future cumulative impacts to roadways proximate to a project will not be cumulatively considerable, but it contains no assumptions about localized cumulative conditions and no analysis of specific roadway segments. Without such information, the conclusion in the "A" scenarios does not fulfill CEQA's requirements for an adequate first tier cumulative impact analysis that could permit future projects to dispense with cumulative impact review of localized impacts. In fact, there is no real content to this "analysis" since it is not based on anything more than a recitation of policies without applying them to any facts or assumptions.

The DEIR should be revised to provide detailed quantitative analysis of cumulative impacts to all roadways for which future impacts can reasonably be predicted based on the 2007 General Plan's constraints on the intensity and location of development. Where specific quantitative analysis is not provided, the DEIR must be revised to acknowledge that future projects will not be able to "tier" from the 2007 General Plan DEIR's cumulative impact analysis.

I. Failure to Propose All Feasible Mitigation

For the reasons set out above, the DEIR's conclusion that general plan policies will avoid all cumulative impacts from future development projects in localized areas

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evaluated under the "A" scenarios is not based on substantial evidence. Furthermore, the DEIR admits that future development will cause significant unmitigated impacts to the County and regional roadways evaluated in the "B" scenarios. DEIR, pp. 4.6-44 to 45, 69, 87 to 88, 103.

Accordingly, the DEIR must be revised to propose all feasible mitigation to address cumulative impacts. In light of the apparent inability of the County to fund future roadway improvements, the key mitigation must be an enforceable ban on future development projects that make a considerable contribution to a significant cumulative impact until there is an adopted, funded program that will result in the construction of necessary improvements prior to occupancy of the project. The policies in the 2007 General Plan do not accomplish this.

J. Significance Criteria For Transportation Impacts Not Specified

The discussion of significance criteria states that the measure of significance for Tier 2 and 3 impacts is LOS, determined by the V/C ratio using ADT rather than peak hour traffic. DEIR, p. 4.6-29. It states that "this measure is not applied to Tier 1 impacts" and it makes clear that it employs the VC ADT method only because the DEIR is a program level or first tier EIR.

From this discussion, it is not clear what criteria are assumed by the DEIR in its evaluation of the impacts purportedly evaluated under the "A" scenarios. Because there are no actual quantitative analyses of Tier 1 impacts, this cannot be determined from context. Furthermore, neither the DEIR nor the 2007 General Plan state what significance criteria will be used in evaluating future projects and in devising future CIFPs to attain acceptable LOS. Conceivably, future projects might be evaluated with reference to V/C ratios (ADT or peak hour), signal delay, or density.

The DEIR and the 2007 General Plan must be revised to identify the significance criteria the County will use for CIFPs and future project level traffic analyses.

K. Circulation Plan Inadequacies Under Planning and Zoning Law

1. Lack of correlation

Government Code Section 65302(b) requires that the circulation element identify "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan." The consistency doctrine *also* requires that a General Plan be internally consistent. Gov. Code, § 65300.5. The statutory requirement that the circulation element correlate with the land use element of a general plan (Gov. Code, § 65302(b)) effectively requires the circulation element to set forth service standards as well as proposals to address changes in roadway demand caused by changes in land use. *Concerned Citizens of Calaveras County v. Calaveras County Board of Supervisors* (1985) 166 Cal.App.3d 90, 100. 45

Specifically, growth must not impair circulation standards. *Id.* at 99-103. In *Concerned Citizens of Calaveras County* the court held that achieving the mandatory correlation of the circulation and land use elements required that a county actually identify funding sources and a real plan to address deficient levels of service before allowing additional growth. *Id.* at 103.

Goal C-1 and Policy C1.2 do not require that acceptable LOS be achieved *until* 2027, which is admittedly the end of the 2007 General Plan's planning horizon. On its face, this policy fails to make the necessary commitment to correlating the circulation and land use elements.

Furthermore, neither the DEIR nor the 2007 General Plan (through Figure 6 in the 2007 General Plan, Highways and Roads, or otherwise) identifies the improvements that would be necessary to mitigate all cumulative impacts of future development projects and meet an acceptable level of service . In *TwainHarte Homeowners Assn. v. County of Tuolumne* (1982) 138 Cal.App.3d 664, 701-702, the Court held that a circulation element was invalid because "the circulation element does not attempt to describe or discuss the changes or increases in demands on the various roadways or transportation facilities of the County as a result of changes in uses of land which will or may result from implementation of the decision system and the general plan." The Court noted that "it seems apparent from a review of the general plan, the supporting MEIR, and the MEIR documentation that there is no way to determine whether in fact the circulation element is correlated with the proposed land use element." *Id.* And that is the case here too, because the circulation element simply does not propose an adequate roadway system or a plan to get one.

As discussed above, the roadway network assumed in the DEIR's "B" scenarios are admittedly inadequate to attain LOS standards. No additional improvements are even identified, much less proposed, that would attain LOS standards. No specific roadways were evaluated and no specific improvements were proposed in the DEIR's "A" scenarios. Thus the 2007 General Plan simply fails to identify "the general location and extent of existing and proposed major thoroughfares, [and] transportation routes" that would support and be correlated with the proposed land use.

And, as discussed above, neither the General Plan nor the DEIR identify a sufficient funding source for those limited improvements that are identified, much less the unidentified improvements that will be necessary to attain adequate LOS in the future.

2. Incomplete and inconsistent policies

The 2007 General Plan fails to put forth coherent and consistent circulation policies. The discussion above identifies the following deficiencies:

• Policies C1.3 and C1.4 do not clearly require phasing development projects unless the project is the straw that breaks the camel's back, pushing LOS

from D to E or E to F. The policy will not support the goal of acceptable LOS unless they are rewritten to require phasing when a project makes a considerable contribution to any LOS deficiency.

- If Policy C1.3 is intended to require phasing projects that make considerable contributions to cumulative impacts, it must be revised to say so. If it is not revised, then it does not support the goal of acceptable LOS.
- Cumulative impacts in Policy C1.4 (and C1.3, if revised) must be defined so that a project that makes a considerable contribution to a degraded LOS must be phased. This requires that the County rewrite the policy and define a cumulatively considerable contribution so as to ensure that unmitigated impacts do not eventually result in degraded LOS without any project being required to address the impact. An appropriate definition would be *any* increase in the V/C ratio of a facility that is already at LOS D.
- The term "degraded further" in Policy C1.1(b) must be defined to include any increase in the V/C ratio of a facility that is already at LOS D.
- Policy C1.4 must be revised to identify a specific mechanism whereby "offsite circulation improvements which mitigate cumulative impacts either shall be constructed concurrently with new development" for those cumulative impacts that will not be completely mitigated by the proposed County TIF and the TAMC TIF.
- The language of Policy C1.8 must be revised so that the proposed County TIF is clearly applicable to projects in the unincorporated area, not just development proposed in cities and surrounding jurisdictions.
- If policy C1.8 is intended to apply to development in cities and surrounding jurisdictions, then the General Plan must explain the basis of the County's jurisdiction to impose its development impact fees.
- The language of Policy C1.4 is apparently restricted to the mitigation of socalled "Tier 3 impacts. The policy must provide a definition of Tier 3.
- The General Plan does not explain the relation of the CIFPs required under Policy C1.2 and Policies PS 1.1 to 1.6. The requirement that the CIFPs identified under C1.2 be developed within 18 months is infeasible and inconsistent with the APFS scheme under PS 1.1 through 1.6, which implies that CIFPs will be prepared only when new development is actually proposed, and is inconsistent with the low planning priority for Rural Centers.

- The deferral of the implementation plan to meet LOS standards through unspecified CIFPs, including the identification of necessary changes to the circulation system, renders the 2007 General Plan incomplete and internally inconsistent. Murrieta Valley Unified School Dist. v. County of Riverside (1991) 228 Cal.App.3d 1212, 1236-1238 (Government Code Section 65300.5 requirement for internal consistency violated when general plan lacks implementation measure that would actually ensure coordination of school facility provision with development). The administrative process for developing the CIFP scheme under Policy C1.2 and Policies PS 1.1 to 1.6 is insufficiently defined. Policy C1.2 and Policies PS1.1 to 1.6 must be clarified to explain 1) whether the CIFP's identified in Policy C1.2 are the same as those identified in Policies PS1.1 to 1.6, 2) how many CIFPs will be required, 3) whether and how they will overlap, 4) who will pay for their development, 5) how they will be completed timely, 6) whether CEQA analysis for CIFPs will be undertaken separately or in conjunction with plans for Community Areas and Rural Centers, and 7) why and when CIFPs will be required for Rural Centers.
- A policy to address existing LOS deficiencies caused by past development, development currently in the entitlement process but not subject to the 2007 General Plan, and development for which no further entitlements are required must be developed that identifies actual funding sources. Development impact fees cannot be used for this purpose due to nexus and proportionality requirements.
- The exceptions to requirement to meet LOS D where LOS is already below D must be clarified as discussed above.
 - Policy C1.4 must explain under what circumstances development would be permitted before there is a CIFP or if a CIFP has not identified the affected facility as a top priority. ."
 - "Benefit" requirements for re-designations of LOS standards must be required whenever LOS is re-designated.
 - Benefit requirements must be explained and meaningfully constrained.
 - "Land Use Plans" should be defined so as to preclude ad hoc redesignation of LOS standards for individual development projects, or eliminated from Policy C1.1.
 - The term "top priority" in the context of Policies C1.3 and 1.4 must be defined to require that a CIFP include a planned, approved, and fully funded improvement project that is scheduled for completion by the time the development project is completed that would ensure 1) that existing deficiencies in the LOS are corrected and 2) cumulatively considerable contributions to reductions in V/C ratios are avoided.
- Policy C1.3's exceptions for a "first single family dwelling" should be clarified to make it clear that it applies only to a single unit development of a on a single lot of record and that non-discretionary uses in commercially designated properties do not include ministerial winery permits.
- The basis for determining LOS standards must be identified, e.g., whether measures are to be based on V/C ratio, density, or delay, and whether measures are to be based on peak hour or ADT.

In addition, the following problems must be addressed:

- Policy C1.1b is identified as an exception to the basic requirement that LOS D be maintained. It provides that an existing LOS below D may not be "degraded further," except for "County roads . . . in Community Areas," which may be further degraded through the Community Plan process. There is substantial ambiguity in the use of the word "except" in the basic statement of policy (LOS D shall apply "except as follows") and within the following language of Policy C1.1b (where LOS is already below D it shall not be degraded further "except in community Areas where..."),. This ambiguous language which might be argued to mean that there are two exceptions to the LOS D standard: 1) if the existing LOS is already degraded below LOS D and 2) if a lower LOS is designated through the Community Plan process. The policy must be clarified to make it clear that the only exceptions to requiring LOS D are situations in which Community Plans or Area Plans designate a lower LOS. If the intent of the General Plan were to accept all existing LOS designations that are lower than LOS D as acceptable, then Policy C1.2 calling for attainment of acceptable LOS by 2027 would make no sense, since all roadways would already be, by fiat, at an acceptable LOS. Since Policies C1.1(a) and (c) make clear that Community Plans, Area Plans, and "Land Use Plans" may designate an acceptable LOS below LOS D, Policy C1.1b is unnecessary. The requirement that existing LOS below D should not be "further degraded" should be restated as a separate policy, not an exception to the basic requirement that LOS D be maintained.
- Table PS-1 note 4 states that an LOS standard may be less than D for "rural roads directly serving Community Centers and Rural Centers," referencing Policy C 1.1. It also provides that Community Area development may proceed even if the LOS on "adjacent rural roads" is lower than D. Based on note 4 to Table PS-1, it is not clear whether the General Plan will allow LOS below D for *any* County road or just 1) rural roads directly serving Community Centers and Rural Centers and/or "rural roads" that are "adjacent" to Community Centers. The language of note 4 and Policy C1.1 must be clarified to identify just which roads may be redesignated and whether they must be "in" Community Areas (per Policy C1.1(a)),

"adjacent" to Community Centers (per note 4 to Table PS-1), or "directly serving Community Centers and Rural Centers (per note 4 to Table PS-1)." The term "rural road" must be clarified as well since it is also stated as a limiting condition. The language of Policy C1.1 makes no reference to Rural Centers in its specification of areas for which lower LOS designations are permitted, so the reference in Table PS-1 note 4 to Rural Centers should be eliminated as inconsistent.

- The language of Policy C1.1 must be clarified to ensure that it applies only to County roads under the County jurisdiction since the County has no authority to reduce LOS standards for regional roadways not under its jurisdiction.
- Policy C1.2 must be clarified to require that existing deficiencies below LOS D be addressed by CIFPs unless a lower LOS is designated through Policy C1.1. (See comment above re Policy C1.1(b) explaining that Policy C1.1(b) cannot be construed to except such roadways from the LOS D standard as long as they are not further degraded.)
- PS1.1 through 1.6 requires that no new development be allowed unless APFS requirements are met. See e.g., PS1-3. Policy PS1.1 states that APFS requirements shall "ensure that APFS needed to support new development are available" concurrent with the impacts of development and shall "seek to achieve acceptable level of service (LOS) standards through improvements funded by fair share impact fees and planned capital improvements (CIFP)." Thus, it appears that a CIFP must be in place that ensures correction of *existing* LOS deficiencies before any new development can be permitted in the CIFP's benefit area. If this is not the case, then the reference to CIFPs in Policy PS1.1(c) makes no sense. If it is the case, then the General Plan should make it clear that the delay in preparation of the required CIFPs will result in a development moratorium. If development is to be permitted in Community Areas despite the absence of a CIFP, the General Plan should clarify under what conditions this would be permitted and how that would be consistent with Policy C1.2.
- Policy C1.4 provides that "direct on-site and off-site circulation improvements that mitigate project impacts shall be constructed concurrently," but permits new development merely to make fair share payments toward off-site improvements that "mitigate cumulative impacts," pursuant to Policies C1.8 and C1.11. Policy C1.4 must provide an unambiguous set of criteria for determining which impacts are "direct" and therefore must be mitigated by concurrent construction and which impacts are "cumulative" and therefore eligible for mere fair-share payments.
 "Direct impacts" should be considered to be all impacts to intersections and roadway segments which ITE requires to be included in a traffic study

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where the project's traffic by itself results in a degradation of LOS standards.

L. Basis for Identification of External Roadways Incomplete

The basis of the DEIR's selection of roadways external to the County for analysis not clear because the disjunctive sentence purporting to explain this is not finished. DEIR, p. 4.6-10 ("These external regional roadways were selected because they either represent extent of AMBAG model [or what?]). The DEIR must be revised to explain this.

M. No Significance Conclusion Or Mitigation Proposed For Impacts Of AWCP Under Existing Plus Project Conditions

The DEIR fails to provide a significance conclusion for traffic impacts associated with the AWCP under the Existing plus Project conditions. DEIR, p. 4.6-110 to 113. Table 4.6-27 indicates that there will be unacceptable LOS on Reservation Road/River Road/ Ft. Romie Road/Arroyos Seco Road between Las Palmas Road and Las Palmas Parkway (LOS D going to LOS F) and on County road G14 between US-101 and San Lucas road (LOS D gong to LOS F). Despite this, no significant impact is identified and no mitigation is proposed. It appears that the DEIR text is simply incomplete.

The DEIR must be revised to acknowledge the significance of both impacts and to propose adequate mitigation. Note that the proposed Mitigation Measure TRAN-5A for impacts under 2030 Cumulative plus Project Conditions does not address the impact at Reservation Road/River Road/ Ft. Romie Road/Arroyos Seco Road between Las Palmas Road and Las Palmas Parkway.

N. Mitigation Of AWCP Impacts Inadequate

The DEIR states that mitigation for impacts caused by the AWCP in the 2030 Cumulative plus Project conditions and the Existing plus Project Buildout of the General Plan is to be improvements funded through 1) project-specific mitigation for individual projects, and 2) funding improvements through CIFP for AWCP. DEIR, p. 4.6-116, 119-120. However, because most of the AWCP projects will not require CEQA review, project-specific mitigation for those projects will not be required. And as discussed above, there is no evidence that a CIFP program will in fact mitigate cumulative impacts because the CIFP does not exist and cannot likely be funded

Section 3.3 of the AWCP exempts the following uses from CEQA review: artisan wineries, tasting rooms, visitor-serving uses, and food service facilities. See also DEIR, pp. 3-40 to 3-41. The DEIR's finding that AWCP projects may have a significant impact on roadways and that mitigation measures may be required, calls into question the CEQA exemptions proposed in AWCP Section 3.3.

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To the extent that the 2007 General Plan proposes to permit most of the AWCP projects without CEQA review, this DEIR constitutes the first and final tier of environmental review for those projects. Thus, it is critical that the DEIR meet CEQA's requirements for the sufficiency of impact fees as mitigation. This requires that the EIR provide evidence that the necessary infrastructure improvements will actually be constructed when needed by identifying a "reasonable, enforceable plan or program" and showing that the necessary funds will be available. *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1189; *see also Endangered Habitats League v. County of Orange* (2005) 131 Cal.App. 4th 777, 785.

The 2007 General Plan's discussion of the Financing Plan for the AWCP CIFP acknowledges that benefit areas have yet to be defined, improvements have yet to be identified and costed, funding sources and mechanisms have yet to be identified, and a schedule for completion of improvements has yet to be adopted. 2007 GP, pp. AWCP-19 to 20. References to a CIFP plan that has not yet been developed will not suffice, particularly when, as discussed above, there is substantial uncertainty as to the administrative structure and feasibility of funding the CIFP program.

The DEIR itself states with respect to the necessary improvements to mitigate AWCP traffic impacts that there are various triggers that would result in implementation of improvements:

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"These improvements would be implemented when:

1. A proposed development's project-specific assessment identifies a direct impact to the facility in terms of either LOS or safety.

2. A proposed development gains access from an intersection within the segment.

3. A corridor-wide nexus study prepared for the required Capital Improvement and Financing Plan identifies the level of development that can occur before triggering the improvements." DEIR, p. 4.6-116.

There appears to be no bases for these claims in the 2007 General Plan's discussion of the AWCP or its Circulation policies. If there are, the DEIR should identify them.

More fundamentally, these triggers that the DEIR suggests would result in timely mitigation are not a sufficient basis to conclude that impacts will be mitigated for the following reasons:

• As noted, most projects in the AWCP will not require CEQA review and so will not have occasion to generate a "project-specific assessment [that] identifies a direct impact." Furthermore, nothing in this language would address cumulative as opposed to "direct" impacts.

- A project without a CEQA assessment and that does not gain access on the segment (i.e., does not have a driveway on the segment) may nonetheless cause, or make cumulatively considerable contributions to impacts.
- There are no policies that would require a project that does gain access from an intersection within the segment to ensure that improvements are timely implemented.
- Unmitigated impacts may occur if development occurs before the nexus study is complete; nothing in the AWCP requires that a nexus study be completed at any particular time.
- A project may make an unmitigated considerable contribution to a cumulatively significant impact because there is nothing in any identified policy that requires that improvements be constructed before reaching some specified "development level that can occur before triggering improvements." As discussed above, the circulation policies are written so as to require only the "last straw" project that pushes LOS from D to E or from E to F to be phased until improvements are provided. Under these policies traffic conditions may be permitted to deteriorate until LOS deficiencies cannot be rectified by fair share payments made by the straw that breaks the camel's back.

The DEIR must be revised to propose a specific, enforceable program of mitigation for impacts in the AWCP. If the proposed mitigation depends of fair share payments, then the DEIR must meet CEQA's requirement for payment of impact fees as mitigation.

O. Inconsistency And Uncertainty of Proposed Improvements

The proposed improvements to County roads to be funded by the proposed County traffic impact fee are not consistently identified. Table 4.6-13 includes widening Espinosa Road. DEIR, p. 4.6-26. This improvement is not identified on Table C-2 of the Errata/Addendum. The DEIR must be revised to clarify this inconsistency. If the quantitative traffic analyses in the "B" scenarios evaluated in the DEIR incorrectly assume this improvement, they must be revised.

This inconsistency points out the fundamental defect in predicating the quantitative traffic analysis on a network of roadway improvements that have not in fact been adopted and for which funding has not bee identified. Instead of assuming the existence of the roadway improvements that may or may not be adopted by the County and assuming the funding of TAMC and County improvements for which adequate funding has yet to be identified, the traffic analysis should evaluate impacts based on a network that is reasonably certain to be in place. This analysis should be used to identify all of the necessary improvements, which should then be required as mitigation measures before additional development is permitted.

P. Transit Policy Conflicts Not Acknowledged

The DEIR finds that the 2007 General Plan would not conflict with the provision of alternative transportation since the Plan would concentrate development in Community Areas, Rural Centers and Affordable Housing Opportunity overlays. DEIR, pp. 4.6-53, 4.6-77, and 4.6-107. The analysis assumes that these areas can readily be served by alternative modes of transportation. It fails to account for communities such as Pajaro and the seven rural centers dispersed throughout the county at densities and locations that are not readily serviced by public transit (over 1,000 units). Furthermore, the 2007 General Plan allows for subdivisions outside any of the areas described above as well as sprawl development of over 2,000 units in the planning areas, not to mention the potential development of over 2,000 units dispersed throughout coastal areas.

The DEIR must be revised to acknowledge that the inability to support these areas with transit will constitute a conflict with policies supporting transit. This is a significant impact and an inconsistency between the land use and circulation elements.

Q. AWCP Safety Issues

The DEIR fails to address safety issues related to the conflict between agricultural vehicles which use County roads and visitors to wine tasting facilities. Slow moving and wide-load agricultural vehicles on narrow roads are intrinsically inconsistent with such visitors.

R. Maintenance Impacts

The DEIR does not address the impact of new development on deteriorating roads 53 and highways. The County has a deferred maintenance cost of \$800 million. At current annual expenditures and with proposed development, the roadways will continue to degrade increasing safety hazards and more and more potholes.

S. Inexplicable Improvements In LOS

On page 4.6-27, the DEIR indicates that a minimum growth rate of 0.1% has been used on State Highways to ensure that traffic volumes do not decrease. However, the DEIR does not specify whether such an adjustment has been made to other roadways. Examination of LOS tables within each scenario indicates that traffic conditions are projected to improve on many segments in the future, which is generally inconsistent with projected population increases. For example, there are 11 segments in Table 4.6-14 that operate better in 2030 with project traffic than under existing conditions. There are 15 segments in Table 4.6-15 that get better, and 9 in Table 4.6-16. While a few of these may be caused by road improvements, there is no reason to suggest that this is caused by changes in traffic patterns that will occur "...in the future caused by the redistribution of jobs and housing." DEIR, pp. 4.6-33 to 34. Each of the other scenarios show some

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segments operating better in the future than they do today, but there are more in the 2030 plus project scenario than in any other.

Please explain for each roadway segment for which the traffic analysis projects improvement whether the improvement is due to changes in the roadway network, or whether it is due to some other factor. If the other factor is a purported redistribution of jobs and housing, please explain specifically where those changes will occur.

While a better jobs-to-housing balance *may* result in less congestion, it is not obvious that jobs in particular locations will be filled by residents from that location. Accordingly, please explain how the traffic model assigns particular job opportunities to particular housing units.

T. Truck Traffic Understated After 2030

Truck trips do not increase proportionally as they should throughout the years. Page 4.6-4 indicates there were 10,800 daily truck trips in 1995 that increased to 12,800 in 2006, an increase of 11% (about 1% per year). Page 4.6-39 assumes an increase of 6,000 trucks from 2006 to 2030, an increase of 48% (about 2% per year). Page 4.6-87 assumes a 20% growth in truck traffic over 62 years from 2030 to buildout in 2092, an increase of 0.33% per year. With one truck equivalent to several cars (on the order of 3 to 5), there appears to have been a substantial understatement of the congestion effects of truck trips in the years after 2030.

U. AWCP Weekend Traffic Assumptions Not Justified

It is not clear why the DEIR uses Napa's Highway 29 to predict AWCP weekend traffic. DEIR, p. 4.6-109. The methodology section states that the traffic forecast applies the ratio of weekday to weekend traffic in Napa to the AMBAG model's weekday forecasts for roads within the AWCP. First, it is unclear whether and how the AMBAG model was updated to reflect the weekday traffic from the AWCP. Since the model was based on AMBAG's 2004 forecasts and the AWCP land use was not planed at that time, it would be surprising if the AMBAG model included weekday traffic from 50 wineries. Please explain whether and how the AMBAG was updated to reflect weekday winery traffic.

Even if the AMGAG model was manually updated to include weekday traffic from 50 wineries and all other development projected in the 2007 General Plan, there is still no *a priori* reason to assume that the relation between weekday and weekend traffic in a fully developed winery community like Napa predicts the relation between weekday traffic in Monterey's winery corridor and future weekend traffic in that corridor. For this prediction to be justified, the DEIR must supply information about the mix of non-winery related traffic, likely visitor origins, and density of wineries. Please also explain how the weekday/weekend ratio assumed compares to the ratio along the Silverado Trail in Napa, with the wineries in Paso Robles, in Temecula, or at other locations. 54

VI. AGRICULTURAL ISSUES

The 2007 General Plan DEIR concludes that loss of important farmland will be a significant unavoidable impact. AG-1, DEIR, p. 4.2-11 to 4.2-21. It concludes that conversion of farmland to non-agricultural use will be significant and unavoidable. AG-3, DEIR, p. 4.2-25 to 4.2-28. It concludes that the 2007 General Plan will make a considerable contribution to the loss of farmland, which is a significant cumulative impact. CUM-1, DEIR, p. 6-9 to 6-10.

The DEIR distinguishes Impact AG-1 and AG-3. AG-1 is the loss of farmland through the 2007 General Plan's direct re-designation of land for urban uses, which the DEIR identifies as 2,571 acres. DEIR, p. 4.2-11. Impact AG-3 is the future conversion of farmland due to indirect economic pressure. As distinguished from the conversions at issue in Impact AG-1, these future conversions would require a General Plan amendment to change the land use designation.

AS WRITTEN, POLICY AG-1.12 DOES NOT APPLY TO IMPACT AG-1: In connection with its discussion of Impact AG-1, loss of important farmland, the DEIR admits that 2,571 acres will be lost to urban development based on direct land use redesignations. DEIR, p. 4.2-11. The DEIR then recites a list of policies that it claims will "minimize adverse effects on conversion to the maximum extent practicable." DEIR, pp. 4.2-12. One of the policies recited is AG 1.12, which "requires the County to establish a program to mitigate the loss of Important Farmland *when a proposed change of land use designation* would result in the loss of Important Farmland (as mapped by the California Department of Conservation), including annexation of agricultural land to an incorporated area." DEIR, p. 4.2-13, emphasis added. As written, Policy AG 1.12 would not avoid, minimize, or compensate for Impact AG-1: none of the 2,571 acres at issue in AG-1 would require a change of land use designation because all of these acres are designated for non-agricultural use by the 2007 General Plan itself. Please explain why this policy is listed as a means of avoiding, minimizing or compensation for Impact AG-1.

IF MITIGATION FOR FUTURE LAND USE CHANGES IS FEASIBLE, THEN IT SHOULD BE APPLIED TO THE CURRENTLY PROPOSED LAND USE CHANGES: The DEIR provides no reason that the to-be-devised mitigation program under Policy AG 1.12 cannot be applied to the agricultural lands at issue in impact AG-1. There is none. Although the to-be-devised program is entirely unspecified, such a program might require, for example, conservation easements to protect other farmland or designation of permanent buffers. These measures could be imposed on the 2,571 acres of re-designated land at issue in Impact AG-1 as a condition of any actual change in use through future development. The DEIR should be revised to require this since it is feasible mitigation.

POLICY AG 1.12 MUST BE REVISED: Policy AG 1.12 lacks both performance specifications and meaningful exemplary measures. The policy mentions "ratios, payment of fees, or some other mechanism," but does not explain what a "ratio" might

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be, much less provide an actual value for that ratio. Nor are values provided for fee payments. The proposed reliance on *ad hoc* mitigation approved by the Board of Supervisors pending completion of the Policy AG 1.12 mitigation program constitutes an entirely standardless deferral of mitigation – the 2007 General Plan does not even hint at the types of mechanisms or standards that might be required in the interim. Indeed, the DEIR itself admits that policy AG 1.12 is essentially meaningless because the program has not been specified:

"The requirements of the prospective mitigation program to be developed under Policy 1.12 to protect remaining Important Farmland permanently would partially reduce the significance of this impact. However, *because the requirements are yet to be determined, the effectiveness of that program cannot be known at this time.*" DEIR, p. 4.2-18, emphasis added.

The DEIR cannot conclude that all feasible mitigation has been identified when this policy has no actual content. No reason is provided for the deferral of the development of the requirements for this program. The DEIR must be revised to propose meaningful mitigation; if the mitigation must be deferred then performance standards must be specified and a reason for deferral must be articulated.

Furthermore, the exemption from Policy AG 1.12 of Community Center Plans and Rural Center Plans that include any kind of mitigation programs makes no sense. As written, Policy AG 1.12 would permit an entirely toothless mitigation policy to be devised for a Community Center Plan or Rural Center Plan as an alternative to whatever program the County eventually devises.

AGRICULTURAL BUFFERS SHOULD BE PERMANENT: As the DEIR admits, the buffer policy in 1982 General Plan (Policy 30.0.2) was more stringent because it requires permanent buffers. DEIR, p. 5-10. However, the 2007 General Plan Policy AG 1.2 no longer requires that buffers be permanent. CEQA requires that an agency explain and provide substantial evidence to justify its decision to omit previously adopted mitigation measures. *Napa Citizens v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 364. Since permanent buffers self-evidently provide better protection of agricultural land, the County must justify relaxing this requirement.

OTHER POLICIES CITED ARE INADEQUATE: The DEIR cites various Policies from the Agricultural Element as evidence that all feasible mitigation has been proposed. Many of these policies lack substantive performance standards and exemplary measures, are unenforceable, or are so vague as to provide no real assurance that agricultural land will be protected.

Policy AG 1.2 regarding buffers purports to identify "criteria" for buffers, but the factors listed are not standards. They are merely parameters for which the policy specifies no values. For example, the policy states that factors such as drainage and crop types shall be "considered," but, as written, the Policy provides no actual standards that would create an enforceable obligation to provide a particular buffer.

Policy AG 1.3 barring subdivision of Important Farmland excepts subdivisions in Community Plan and Rural Center areas as long as there is an entirely unspecified "alternative farmland preservation strategy." As written, an entirely toothless alternative strategy could be adopted, which would avoid any meaningful control on subdivision of Important Farmland. The County must provide clear, enforceable standards for the "alternative farmland preservation strategy."

Policy AG 1.4 calls for "encouraging" large lot agricultural zoning and making agriculture a "top priority." This policy does not create any enforceable obligation for the County or for future developers.

Policy AG 1.5 calls for a future ordinance to provide tax and economic incentives for farming. No performance standards or exemplary measures are identified and no enforceable obligation is created.

Policy AG 1.7 "encourages" clustering of agricultural housing. It should be revised to *require* this.

Policy AG 2.3 permits conversion of farmland for agricultural processing facilities for products grown *outside* the County. While limited processing facilities to accommodate local farm production may encourage retention of land in agricultural use, the conversion of farmland to process produce grown outside the County can have no beneficial effect on viability of local agriculture. Please explain why this provision has been added.

VII. AIR QUALITY ISSUES

Attached as Exhibit 12 are comments on the DEIR's air quality analysis provided by Autumn Wind Associates, Inc. Our comments below summarize some of these comments and make additional points. Please respond to both sets of comments separately.

A. Failure to Document Assumptions and Methodology

The DEIR's analysis of consistency with the Air Quality Management Plan is based on Table 4.7-3, purporting to list projected population and VMT growth in Monterey County. DEIR, p. 4.7-15. Its analysis of criteria pollutant emissions is based on emission calculations suing the EMFAC 2007 model. DEIR, p. 4.7-22. The DEIR states that "Appendix A describes the methodology and model inputs for existing year, future year, and buildout of the 2007 General Plan."

LandWatch requested documentation of these sources. John Farrow, letter to Carl Holm, September 18, 2008. In its request, LandWatch pointed out that Appendix A does *not* contain a description of the "methodology and model inputs for existing year, future year, and buildout of the 2007 General Plan" and requested this information. Land Watch specifically requested the following information:

- 1. The source document identified at Table 4.7-3, Projected population and VMT Growth in Monterey County (Kimberly-Horn (2008)).
- 2. "Appendix A" referenced at page 4.7-22, which "describes the methodology and model inputs" for the criteria pollutant emissions calculations. In this regard, please note that the DEIR table of Contents identifies Appendix A as the Notice of Preparation. Thus, there must be either an error in designation or two Appendices A.
- 3. The source document used to prepare Table 4.7-5, Criteria Pollutant Emissions form Mobile Sources. Note that the "Appendix A" requested above, describing "the methodology and model inputs" for the criteria pollutant emissions calculations, may or may not contain the EMFAC or URBEMIS model runs themselves. Please produce the output from the model runs used to calculate criteria pollutants.

On October 3, 2008 the County acknowledged that the reference to Appendix A was an error. Wendy Strimling, letter to John Farrow, Oct. 3, 2008. Ms. Strimling's October 3 letter explained that there is no source document supporting Table 4.7-3 and that it was prepared by Kimley-Horn and Associates. She explained that Table 4.7-3's population and employment projections were based on Section 4.6.3.1 and 4.6.3.2 of the DEIR (the sections describing the methodology and analysis scenarios for the traffic analyses), and that Vehicle Miles Traveled (VMT) for each scenario was developed using the AMBAG travel demand forecasting model.

As discussed above, LandWatch objects to the refusal to make the AMBAG model available. Comments above demonstrate that the demographic data provided in the DEIR is not consistent with the purported AMBAG sources. Comments above also point out that the DEIR fails to clearly state the assumptions reflected in the traffic and air quality "scenarios" and "conditions," including the assumptions in Tables 4.7-3, 4.7-5, 4.7-6 in the air quality section. The DEIR must clarify the relationship between the five traffic analysis scenarios set out on pp. 4.6-19 to 20, the six traffic analysis scenarios identified in Table 4.6-10, and the scenarios set out in the air quality analysis in Tables 4.7-3, 4.7-5, 4.7-5, and 4.7-6.

On October 7, the County provided documents purporting to respond to LandWatch's second and third requests, the requests for the methodology and model inputs used for criteria pollutant emissions calculations and the calculations themselves. Wendy Strimling, letter to John Farrow, Oct. 7, 2008. The County provided a document captioned "Air Quality Technical Information – Criteria Pollutant Modeling," a similar document related to Carbon Monoxide modeling, and two printouts from EMFAC 2007. Although the County updated the DEIR's reference list and extended the comment deadline, it did not correct the "typo" in the DEIR referring to Appendix A or provide the technical information to the rest of the public.

The document captioned "Air Quality Technical Information – Criteria Pollutant Modeling" contains a Table 1 that provides the same yearly VMT data as is contained in Table 4.7-6, but the document does not provide any explanation of the actual assumptions used to develop the scenarios. One of the datum is the clearly absurd representation that the project will result in only an annual increase of vehicle miles of only 369,679 miles. As Autumn Wind points out in the attached comments, this figure implies that each of the 36,166 new residents of the County will average only 10 vehicle miles per year. As discussed below, it is apparent that the Tables 4.7-6 projecting changes in criteria pollutants contain significant errors. However, the County's failure to provide documentation of the traffic and air quality analysis assumptions makes it difficult or impossible for the public to determine what the DEIR might have meant to claim.

As Autumn Wind points out, the document captioned "Air Quality Technical Information – Criteria Pollutant Modeling" and the employment, population, and housing data by Traffic Analysis Zone data provided by the County does not permit the public to trace the DEIR's analytic route from the General Plan land use designations and policies to demographic assumptions by TAZ, from that TAZ data to vehicle miles traveled, and from VMT to criteria emissions. Autumn Wind also demonstrates based on the data that was made available that the modeling for criteria pollutants was far too simplistic in its approach.

B. Inconsistency With 2008 Air Quality Management Plan

The DEIR concludes that the Project is consistent with the "Clean Air Plan" on the basis of finding that the projected 2030 countywide population in Table 4.7-3 of

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602,790 is no larger than the population assumed in the Clean Air Plan. DEIR, p. 4.7-16. As Autumn Wind demonstrates, the 515,549 population for 2030 assumed in the MBUAPCD 2008 Air Quality Management Plan is in fact smaller than that projected in the DEIR. Thus, on its face, the Project is inconsistent with the 2008 Air Quality Management Plan.

The DEIR's consistency determination is apparently based on the sterile and circular argument that the AMBAG 2004 population assumptions used by the DEIR are the same as the assumptions used in preparing the previous Air Quality Management Plan. Notes to Table 4.6-11, which was the source for table 4.7-3, state that "Existing plus Project 2030 and Cumulative 2030 land uses were *adjusted* to match the published AMBAG 2004 Population, Employment and Housing Unit forecasts." DEIR, p. 4.6-22, emphasis added. "Adjusting" the purportedly Project-specific population data in Tables 4.6-11 and 4.7-3 to make them consistent with AMBAG data renders the consistency finding nothing more than the empty observation that the DEIR has *assumed* consistency by adjusting the population data to make it consistent. There is no evidence that this consistency finding actually reflects any consideration of the effects of the 2007 General Plan on growth in the County.

LandWatch again asks that the County explain how it projects the effects of the 2007 General Plan on population growth. In particular, LandWatch requests that the County reconcile the purportedly bottom-up projections of growth in each Area Plan, Community Area, Rural Center, and Affordable Housing Overlay (See DEIR, Table 3-8) with AMBAG projections and with the proposed development constraints in the 2007 General Plan. The DEIR must be revised to base its consistency analysis on the actual effects of the 2007 General Plan on growth reflected in land use constraints, not on the sterile observation that the Project is consistent because the DEIR uses consistent assumptions.

C. Mobile Source Emissions of Criteria Pollutants

Impact AQ3 is captioned as "Net Change in ozone Precursor (ROG and NOx) and Particulate matter. (Significant and Unavoidable.)" DEIR, p. 4.7-21. It is difficult to determine what impact is being evaluated and what conclusion is reached. The discussion centers on two sources of ozone precursors, mobile sources and winery sources. The DEIR concludes with respect to impact AQ3 that that emissions from wineries will result in a significant impact. For mobile sources, the DEIR makes conflicting claims; in some places it asserts that mobile source emissions will increase and in other places it claims they will decrease:

• The DEIR states at page 4.7-22: "As Table 4.7-6 indicates, implementation of the 2007 General Plan would result in *net decreases* in ROG, Nox, CO, and PM2.5 emissions, while PM10 emissions would increase."

- The DEIR states at page 4.7-26: "Implementation of the 2007 General Plan *would result in increased emissions of criteria pollutants and VOCs*. Implementation of the 2007 General Plan would result in increased mobile and area source emissions due to increased vehicle trips and VMT, and increased development."
- But then the DEIR states at pp. 4.7-26: "As indicated in Table 4.7-5, 2030 conditions (2030 With Project 2000 conditions) would result in *a net decrease in ROG, Nox, CO, PM2.5, and PM10 emissions.* . . . Decreases in emissions rates are sufficient to offset the increases in VMT seen between 2000 and 2030 project conditions, resulting in the decreased ROG, Nox, CO, PM2.5, and PM10 emissions observed in Table 4.7-5."¹⁷
- The DEIR concludes at page 4.7-28: "In summary, implementation of the 2007 General Plan would result in a decrease in ROG, Nox, CO, PM2.5, and PM10 emissions."

These conflicting claims must be resolved in a revised and recirculated DEIR.

It appears that the basis of the conclusion that mobile source criteria pollutants will not create a significant impact is the row in Table 4.7-6 captioned "2030 Project Increase (2030 With Project – 2000)." However, as noted above, because the DEIR did not supply Appendix A and neither the DEIR nor the information subsequently provided by the County contain any clear explanation of the demographic assumptions for the air quality scenarios, it is difficult to identify the precise basis for the DEIR's various and conflicting claims regarding the effect of the project on criteria pollutants.

The DEIR's claim that implementation of the 2007 General Plan would result in decrease in emissions is not coherent. The proper baseline for evaluation of a new county general plan is existing conditions on the ground, not hypothetical conditions reflecting build-out under existing land use designations. *Environmental Planning and Information Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354. Given that the baseline for analysis must be existing conditions, it is difficult to understand how the unincorporated area of the County could grow by 10,015 or 13,438 new residential units by 2030 (depending whether the analysis is based on Table 3-8 or Table 4.6-11) and still result in a decrease in emissions compared to existing conditions without those 10,015 or 13,438 new units. As Autumn Wind points out, *any* increase in VMT attributable to growth in the County must result in increased emissions (unless the General Plan itself causes all incremental VMT to be produced by zero emission vehicles, which it does not).

¹⁷ Note that the references here may actually be to Table 4.7-6, not Table 4.7-5, but that is unclear too. Table 4.7-5 does not contain a row captioned "2030 conditions (2030 With Project - 2000 conditions." However, Table 4.7-6 contains a row captioned "2030 Project Increase (2030 With Project - 2000 conditions)." As discussed below, Table 4.7-6 contains a fundamental error in calculating the purported contribution of the project to baseline conditions.

As Autumn Wind indicates, the DEIR's repeated observation that increases in VMT will be offset by decreases in emissions rates (DEIR, pp. 4.7-22, 4.7-26) are irrelevant and misleading. Even if vehicle emission rates are projected to decline, that decline is entirely unrelated to the 2007 General Plan, and the increases in VMT due to new growth will still contribute *some* level of additional emissions over the baseline existing conditions. The Project could result in a decrease in emissions *only if VMT were actually reduced*, but the DEIR does not claim that VMT will be reduced. As long as VMT attributable to growth permitted under the general plan, emissions will increase by some amount over the baseline. This amount must be disclosed and compared to a significance threshold. Without this, the DEIR's analysis of criteria pollutants is meaningless.

Furthermore, the DEIR's Table 4.7-6, which is the source of the DEIR's claim that emissions will decrease, appears to contain or reflect some fundamental math error. The row captioned "2030 Project Increase (2030 With Project – 2000)" was calculated by subtracting the data in Table 4.7-5 for "2000" from the data in Table 4.7-5 for "2030 With Project." It appears that either 1) the "2000" data includes emissions from incorporated cities, which should not be subtracted from emissions from unincorporated areas only; or 2) the "2030 with Project" data in Table 4.7-5 does not include baseline emissions from existing development because it is *already* expressed as a net increase attributable to growth in the unincorporated area, in which case it makes no sense to subtract baseline 2000 data from it again. At any rate, it is simply not credible that emissions attributable to growth in the unincorporated area under the 2007 General Plan could be a negative number as is stated in Table 4.7-6.

Additional inconsistencies are apparent in the discussion of Table 4.7-6 and the data itself. First, Table 4.7-6 shows that yearly VMT for the row captioned "2030 Project Increase (2030 With Project – 2000)" will be 369,679 miles. This is the same number identified in Table 1 of the document provided to LandWatch captioned "Air Quality Technical Information – Criteria Pollutant Modeling." This comes to about 36 miles per year for each of the 10,015 new residential units identified in Table 3-8. This is not a credible figure. Second, even though the 369,679 mile increase in VMT is not a credible figure, it is a positive number, and therefore is inconsistent with the negative numbers given for emissions in the remainder of the row captioned "2030 Project Increase (2030 With Project – 2000)." Third, the DEIR states that "As Table 4.7-6 indicates, implementation of the 2007 General Plan would result in net decreases in ROG, NOX, CO, and PM2.5 emissions, while PM10 emissions would increase." DEIR, p. 4.7-22. There is no line on Table 4.7-6 (or Table 4.7-5) in which PM10 emissions have a different sign than other emissions. Fourth, it appears that the "2030 Cumulative Buildout" condition in Table 4.7-5 should have been labeled "Cumulative Buildout" since the data in this row are the same as the data with that caption in Table 4.7-6.

These inconsistencies must be explained and corrected. More importantly, the DEIR must be revised and recirculated to evaluate the project's actual increase in criteria emissions.

D. Construction Impacts Not Mitigated

Autumn Wind demonstrates that the DEIR unacceptably fails to quantitatively evaluate construction emissions or to support its qualitative claim that these emissions are less than significant after mitigation. Proposed mitigation for construction PM10 is either unrelated to construction (MM AQ-3) or may actually weaken air quality protections (MMAQ1 and 2). The DEIR's qualitative evaluation of construction PM10 emissions is based on the recitation of proposed policies. The DEIR purports to find impacts less than significant after adding the requirement that projects comply with the air district's PM10 requirements – but that requirement was already included in the list of proposed policies the DEIR purports to have considered in finding that PM10 impacts would be significant. The DEIR also claims that the winery corridor air quality impacts will be mitigated by air quality policies included in three Area Plan – after stating that these Area Plans do not contain air quality policies. This sloppy and formulaic discussion vividly demonstrates that the qualitative discussion of construction PM10 is simply vacuous.

The DEIR failed even to consider construction emissions of ozone precursors (ROG, NOx), based on their inclusion in the regional emission budget. If this were sufficient reason not to evaluate an emission class, no air quality discussion would be required at all, since virtually all categories of emissions are included in regional emission budgets.

CEQA requires that the DEIR present a substantive analysis of all potentially significant emissions.

E. Diesel Particulate Matter Health Risks Not Adequately Evaluated Or Mitigated

Autumn Wind explains that the DEIR's rationale for failing to evaluate the health risks from diesel particulate matter ("DPM") is flawed. The fact that exposure durations may be less than 70 years is irrelevant in view of OEHHA's determination that this modeling parameter is appropriate. The other rationale offered by the DEIR – that exposure will be minimal due to the types of proposed projects – is simply not coherent. The DEIR's failure of analysis cannot excuse future projects from analysis of this risk.

Autumn Wind also demonstrates that the qualitative analysis of regional DPM exposure is not adequate and that that the proposed mitigation will not render impacts less than significant. The DEIR must be revised to provide a meaningful discussion and adequate mitigation.

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VIII. BIOLOGICAL RESOURCES ISSUES

Enclosed as Exhibit 13 are comments provided by TRA Environmental Sciences, Inc. As TRA Environmental summarizes its comments:

- The DEIR does not provide substantive analysis of impacts to biological resources based on correlating the expected location and intensity of development and the affected resources. Most of the impact analyses consist of recitations of lists of policies from the 2007 General Plan without any meaningful discussion linking those policies to impact avoidance, minimization, or compensation. Many of the policies lack any substantive content, *e.g.*, lack any performance standards or examples of the content of implementing programs. Many of the policies defer the formulation of mitigation without deadlines for completion or interim measures. No reasons are given for these deferrals. Many of the policies lack any enforceable mandate. We have provided detailed comments on most of the policies cited as the basis for the DEIR's impact analyses.
- Mitigation measures that are proposed to supplement the 2007 General Plan policies suffer from the same defects as the policies themselves.
- Substantial new agricultural cultivation, especially vineyard development, is projected in the County, but the DEIR fails to describe this activity accurately. The description of winery corridor is inconsistent and incomplete. Because these activities will have significant effects on biological resources, they must be accurately described.
- Impacts to movement corridors and habitat fragmentation were not adequately evaluated because the DEIR did not develop or consider available empirical information about important conservation areas, movement corridors, and habitat linkages.
- Mitigation of habitat fragmentation and interruption of movement corridors and habitat linkages is inadequate. The mitigation of these landscape-scale impacts must be formulated in a first-tier EIR, not postponed to future project-level CEQA reviews, particularly since much of the development activity that will affect these resources is to be exempted from future CEQA review.
- The DEIR failed to evaluate steelhead impacts from increased diversions from the Salinas River, continued operation of the Naciemento and San Antonio Dams to support growth, and sedimentation.
- Although the DEIR acknowledges that growth will make a considerable contribution to cumulatively significant impacts, it proposes no mitigation to address this.

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We ask that the County respond to the comments by TRA Environmental Sciences, Inc., in full.

Thank you for the opportunity to submit these comments.

Yours sincerely,

M. R. WOLFE & ASSOCIATES, P.C.

John H. Farrow

JHF: ms Enclosures

EXHIBIT 1

Enclosure

BIOLOGICAL OPINION

ACTION AGENCY:	U.S Army Corps of Engineers, San Francisco District Monterey County Water Resources Agency, Salinas Valley Water Project in Monterey County, California.	
ACTION:		
CONSULTATION CONDUCTED BY:	National Marine Fisheries Service, Southwest Region	
FILE NUMBER:	SWR/2003/2080 (Admin. No.: 151422SWR2003SR8711)	
DATE ISSUED:		

I. INTRODUCTION

Section 7 of the Endangered Species Act (ESA) of 1973, as amended, requires Federal agencies to insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of threatened or endangered species or destroy or adversely modify critical habitat. The section 7 regulations define "jeopardize the continued existence of" as "to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, number, or distribution of that species." The regulatory definition of critical habitat has been invalidated by Federal courts. This biological opinion does not rely on the regulatory definition of "destruction or adverse modification" of critical habitat at 50 CFR §402.02. Instead, we have relied upon the statutory provisions of the ESA to complete the following analysis with respect to critical habitat (NMFS 2005a).

The National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) is conducting a formal consultation with the U.S. Army Corps of Engineers (Corps) on the issuance of a permit to the Monterey County Water Resources Agency (MCWRA). MCWRA proposes to control seawater intrusion, improve the efficiency of water delivery in the Salinas Valley for agriculture and urban uses and improve steelhead habitat through the construction of the Salinas River Diversion Facility (SRDF), modification of the spillway at Nacimiento Dam, and changes to the operation of Nacimiento and San Antonio dams. This diversion facility and operational changes, collectively, are known as the Salinas Valley Water Project (SVWP). The SVWP may adversely affect South-Central California Coast (SCCC) steelhead (*Oncorhynchus mykiss*) protected as threatened under the ESA and its designated

critical habitat, and, therefore, requires a formal consultation pursuant to section 7(a)(2) of the ESA.

Our task in this consultation is to provide a determination regarding jeopardy and adverse modification relative to the proposed action. This biological opinion also provides the analysis supporting our determination.

MCWRA water management activities in the Salinas basin are extensive and potentially have many impacts to steelhead and their habitat. It is, therefore, important, in light of our analysis, to be clear about what we are, and are not, consulting on. In this biological opinion, we analyze the effects of both the proposed construction/operation of the SRDF and Nacimiento Spillway modification and those changes in flow releases from the Nacimiento and San Antonio dams that would not otherwise occur without the operation of the SRDF. This includes any change in flows along the Salinas River mainstem as well as changes in flows to the Salinas River Lagoon.

We are not analyzing ongoing dam operations and maintenance as a part of the proposed action because they are neither indirect effects nor interrelated or interdependent actions to the proposed action. Most dam operations and maintenance are a part of the environmental baseline to which the effects of the proposed action will be added. As a result, the Incidental Take Statement for this opinion does not exempt any incidental take resulting from those baseline operations. This includes the bulk of the flow released from the Nacimiento and San Antonio dams. One exception is modified operations of these reservoirs to meet the purposes of the proposed action. Those modified operations are considered interrelated with the Corps' proposed action and are considered in the Effects of the Proposed Action section of this opinion.

In this document, we present our analysis and conclusions in the conventional format for biological opinions as described in the Endangered Species Consultation Handbook (U.S. Fish and Wildlife Service and NMFS 1998). It begins with a review of the consultation history and a description of the project. Following that is Status of the Species and Critical Habitat, Environmental Baseline, and Effects of the Proposed Action sections which provide our analysis of the project. The opinion concludes with NMFS' determination regarding the impacts of this proposed project on species survival and recovery, and the value of critical habitat. An Incidental Take Statement follows, which defines the amount or extent of harm to the species and/or their habitat. It also provides terms and conditions to minimize the take.

The Status of the Species and Critical Habitat Section portrays the condition of the species (and their habitat, including critical habitat) relative to the species' probability of survival and recovery and the conservation value of critical habitat by describing how the species is surviving and recovering given its life history strategy and the condition of its environment. The Environmental Baseline describes and analyzes the current and expected future condition of the species and its habitat, including critical habitat, in the action area. The Effects of the Proposed Action section describes and analyzes the effects of the proposed project on habitat, including critical habitat Primary Constituent Elements (PCEs) of critical habitat, given the species' and critical habitat's baseline condition, the exposure of critical habitat and steelhead to the physical, chemical, and biotic changes in the environment as a result of the proposed action, and the expected response of steelhead and critical habitat to these changes. Once the effects are

described, we assess the ramifications of the effects to critical habitat and listed species in the action area on the conservation value of critical habitat and the survival and recovery of the species at the Distinct Population Segment (DPS) scale given their status and the environmental baseline.

The issues NMFS is obliged to address in this opinion are wide-ranging, complex, and often not referenced in scientific literature. We base many of our conclusions on explicit assumptions informed by the available evidence. By this, we mean to make a reasonable effort to compile the best scientific and commercial empirical evidence related to the analysis and to then apply general and specific information on salmonid biology from the published literature to make inferences and establish our conclusions.

Second, when we address uncertainty in our analyses we apply that portion of section 7(a)(2) which dictates that Action Agencies are to "insure" that their actions are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitat. In other words, Action Agencies are charged with avoiding Type II errors (*i.e.*, concluding that there was no effect when, in fact, there was an effect). At times this can create a lack of understanding of section 7 determinations within the scientific community, which often focuses on minimizing the potential for Type I errors (*i.e.*, concluding that there was an effect); however, it is important to recognize that we have different purposes.

The need to minimize the potential for Type II errors results in providing the benefit of the doubt to the species. This approach is supported by the 1979 Congressional Record created when Congress amended the ESA to allow the Services to develop their biological opinions using the best information currently available or that can be developed during the consultation and concluded that the language "continues to give the benefit of the doubt to the species, and it would continue to place the burden on the action agency to demonstrate to the consulting agency that its action will not violate Section 7(a)(2)" (H.R. Conference Report No. 697, 96th Congress, 2d Session 12, 1979).

II. CONSULTATION HISTORY

MCWRA applied to the Corps for permits for two projects in the Salinas River; the Salinas River Mouth Breaching Program and the SVWP, in 2000 and 2002, respectively. NMFS recommended to the Corps and MCWRA to batch the two projects together as one consultation to simplify the analysis of impacts to listed species. The Corps agreed to combine the two consultations, although the Corps would still issue separate permits; one for the Breaching Program and one for the SVWP. At a meeting on April 1, 2005, MCWRA agreed to that plan. In the course of completing the biological opinion for the SVWP, the issue of batching this project with the river mouth breaching program was revisited. On March 28, 2006, NMFS decided to expedite completion of the consultation for the SVWP by separating the consultations for the SVWP and the lagoon breaching activities. This is reasonable because lagoon management and breaching activities have always been identified as a separate action from the SVWP, and the two actions were originally batched solely as a matter of convenience. The following is a timeline history of the SVWP consultation:

NMFS received the Corps' letter requesting initiation of section 7 consultation for the MCWRA's SVWP on June 4, 2002.

Prior to receiving the request for consultation, NMFS commented on two versions of the Draft Environmental Impact Report, by letters dated December 17, 1998, and September 6, 2001. These comment letters identified NMFS' concerns regarding potential effects of the project on threatened steelhead.

The biological assessment (BA) for SVWP was received on June 6, 2002. In a letter dated July 26, 2002, NMFS informed the Corps that MCWRA had requested a meeting to discuss and review the BA, and that after meeting and reviewing the BA, NMFS would determine if additional information would be needed to initiate section 7 consultation. NMFS and MCWRA's consultants met on September 18, 2002, October 3, 2002, and December 20, 2002, to discuss the proposed project and evaluate the completeness of the BA. Based on these meetings and review of the BA, NMFS determined the BA was incomplete. In a letter to the Corps dated January 24, 2003, NMFS requested additional information to support section 7 consultation for SVWP. The request sought: 1) information on streamflow regimes under four water management scenarios related to SVWP, 2) a formal response to proposed modifications for smolt outmigration, 3) a clarification of proposed water diversion rates, 4) a description of condition and availability of spawning and rearing habitat in Nacimiento and San Antonio rivers below the existing dams, 5) a description of current water conservation measures in the Salinas Valley, 6) a description of water quality in the Salinas River and action area, and 7) an assessment of potential predation by pinnipeds resulting from implementation of SVWP. NMFS' January 24, 2003, letter also defined the scope of the consultation to include all operations of the Nacimiento and San Antonio dams. MCWRA and NMFS met on February 5, 2003, to discuss this information request. MCWRA provided the information requested in the NMFS January 24, 2003, letter throughout 2003 and 2004.

In a meeting on June 2, 2003, NMFS notified MCWRA that flow criteria identified in the BA for steelhead migration were flawed, provided MCWRA with an analysis of the deficiencies of the information, and requested MCWRA work with NMFS to determine appropriate flows for steelhead migration. During a meeting with MCWRA and its consultants on July 24, 2003, NMFS proposed a field study to develop a flow/depth relationship specific to the action area in the Salinas River. NMFS provided *A Study Plan for Evaluating Passage Flows for Steelhead in the Salinas River* to MCWRA on August 7, 2003.

NMFS, MCWRA, and its consultants held further meetings through the end of 2003, to discuss the status of information requested by NMFS, evaluate the feasibility of completing the proposed flow study, and develop a timeline for initiating and completing section 7 consultation.

On January 13, 2004, NMFS received Water Resources and Information Management Engineering, Inc.'s (WRIME [MCWRA's consultant]) December 2003, *Hydrologic Analysis of Salinas River Flows in Response to NOAA Fisheries Requests for Further Information on the* *Biological Assessment for the Salinas Valley Water Project.* On March 4, 2004, another meeting was held with NMFS, MCWRA, and its consultants to discuss the hydrologic analysis report. It was agreed MCWRA would provide NMFS additional information regarding, among other issues, the statistical methodology to address the estimation error for unimpaired flows and a comparison of flow conditions among scenarios for 1949 to 1956 water years.

Between March 5-9, 2004, NMFS, with assistance from MCWRA and California Department of Fish and Game (CDFG) staff, conducted a single event flow study on the middle reach of the river above and below Soledad, based on the study plan from August 7, 2003.

On April 8, 2004, NMFS received the *Amendment to December 2003 Report Hydrologic Analysis of Salinas River Flows*, addressing NMFS' concerns from the March 4, 2004, meeting. In August, 2004, NMFS contracted with Natural Resources Consulting Engineers, Inc. (NRCE) to independently review WRIME's hydrologic analysis and estimates of unimpaired flows in the Salinas River. On October 29, 2004, NMFS, MCWRA, WRIME, and NRCE met to discuss how to determine passage flows and what other information was still needed to initiate consultation. MCWRA informed NMFS that preliminary engineering plans for both the fish screen and the fish ladder would not be completed for at least 3 to 4 months. At this meeting, MCWRA committed to meeting NMFS' fish ladder and fish screen criteria in its engineering plans in order for NMFS to initiate consultation. NMFS agreed to initiate consultation before passage flows were determined and a flow prescription developed; however, NMFS made clear that the biological opinion would not be able to be completed until this information was made available.

In a letter to NMFS dated November 30, 2004, MCWRA committed to meeting the standards outlined in the fish screening and fish ladder criteria for diversion facilities prepared by NMFS and CDFG. They also committed to modifying the slide gate structure at the Salinas River Lagoon to include a fish screen. NMFS initiated section 7 consultation for the SVWP with the Corps on December 9, 2004.

At a meeting on April 1, 2005, NMFS presented its *Salinas Valley Water Project Flow Proposal for the Biological Needs of Steelhead in the Salinas River* to MCWRA. From April through August, 2005, a technical working group made up of staff from NMFS and MCWRA, and its consultants, met on a regular basis to develop the final flow prescription. On September 21, 2005, NMFS received the *Draft Supplement to the Salinas Valley Water Project Biological Assessment* from MCWRA. On October 11, 2005, NMFS received the final *Supplement to the Biological Assessment for the Salinas Valley Water Project, Salinas River, California,* and the *Salinas Valley Water Project Flow Prescription for Steelhead Trout in the Salinas River* from MCWRA. After NMFS' review of the reports, MCWRA provided an *Errata to the Salinas Valley Water Project Flow Prescription for Steelhead Trout in the Salinas River* on November 8, 2005, December 19, 2005 and January 27, 2006. These errata provided corrections and clarifications resulting from NMFS' review.

The Salinas River Channel Maintenance biological opinion was issued to the Corps on July 23, 2003. The Corps 404 permit for this project allows landowners to perform channel maintenance in the Salinas River beginning on September 1 of each year. At that time, MCWRA currently shuts off flows to the river to allow maintenance in the dry river channel. The biological

assessment for a Corps permit for the SVWP provides for flows in the Salinas River through October 31, except in very dry years. Included in the *Supplement to the Biological Assessment for the Salinas Valley Water Project, Salinas River, CA*, it was stated the Salinas River Channel Maintenance Project permit would not be modified. This results in these two permits potentially being in conflict with each other. On December 15, 2005, the Corps regulatory biologist contacted MCWRA's assistant general manager to determine which project would take precedence. In a phone conversation on December 19, 2005, the Corps regulatory biologist informed NMFS the SVWP, according to MCWRA, would take precedence over the Channel Maintenance Project.

On July 28, 2006, NMFS issued a draft biological opinion to the Corps and MCWRA. On November 7, 2006, MCWRA provided written comments on the draft biological opinion; the Corps did not provide any comments. On February 6, 2007, NMFS met with MCWRA and their consultants (the Corps did not attend the meeting) to discuss the draft biological opinion and MCWRA's November 7, 2006, comments. This opinion incorporates MCWRA's written comments and those provided at the February 6, 2007, meeting.

A complete administrative record of this consultation is on file in the NMFS Santa Rosa Area Office.

III. DESCRIPTION OF THE PROPOSED ACTION

The Federal action under review in this ESA section 7 consultation is the proposal by the Corps to issue to MCWRA a Clean Water Act (CWA) section 404 permit authorizing the construction of a seasonal river diversion facility with a small dam and diversion structure to impound and distribute increased spring, summer, and early fall reservoir releases (aquifer conservation releases) to provide surface water deliveries for irrigation. Surface water for irrigation will help to offset current groundwater pumping in some areas of the coastal Basin, thereby reducing saltwater intrusion. The diversion facility and dam will be constructed 2008 or 2009 and are expected to take one year of construction to complete. In-channel work will occur during the summer (July 1 - October 31). Information included in the Description of the Proposed Action comes from EDAW 2001, ENTRIX and EDAW 2002, MCWRA 2005a, MCWRA 2005b, MCWRA 2005c, MCWRA 2005d, MCWRA 2006a, and MCWRA 2006b.

A. Background

Groundwater is the source for most of the urban and agricultural water needs in the Salinas River Valley Basin. An ongoing imbalance between the rate of groundwater withdrawal and recharge has resulted in overdraft conditions in the Basin that have allowed seawater from Monterey Bay to intrude inland approximately six miles in the 180-foot deep Aquifer and approximately two miles in the 400-foot deep Aquifer (MCWRA 2005). Since 1949, an average of 10,000 acre-feet (AF) of seawater per year has intruded into Basin aquifers and, by 1999, more than 24,000 acres of land were underlain by seawater intrusion. Previous to basin overdraft, the stratified coastal aquifers were supplied freshwater by the deeper, non-stratified upper valley's aquifer flows. Aquifers intruded with seawater are largely unusable for either agricultural or municipal

purposes and many wells have been abandoned or destroyed. The Nacimiento Dam and San Antonio Dam, and its reservoirs, were constructed, in part, to address the overdraft issues. Nacimiento and San Antonio reservoirs began operations in 1957 and 1967, respectively. The two reservoirs, built and operated by MCWRA, provide a total of just over 700,000 AF of storage for subsequent aquifer conservation release, *i.e.*, release of stored water throughout the dry season to recharge the Basin aquifer through the bed of the Salinas River. To halt further groundwater degradation and prevent seawater from moving further inland, aquifer pumping and recharge rates must be brought into balance.

B. Components of the SVWP

As objectives for the SVWP, MCWRA proposes to: halt the increase in seawater intrusion and eventually reduce the amount of seawater in the basin's freshwater aquifers, provide adequate water supplies to meet current and future water needs (the year 2030 was used for the future planning horizon), and improve the hydrologic balance of the groundwater within the Basin. To those ends, MCWRA proposes a series of structural and program-based (operational) components (the SVWP). Implementation of the SVWP would provide water for surface water deliveries and additional aquifer replenishment (aquifer conservation releases) by reoperating the Nacimiento and San Antonio reservoirs and modifying the Nacimiento Dam spillway. Also, the SVWP would offset current groundwater pumping in some areas of the coastal Basin by installing a seasonal river diversion facility with a small dam and diversion structure to impound and distribute increased spring, summer, and early fall reservoir releases (reoperated aquifer conservation releases) to provide surface water deliveries for irrigation. The SVWP does not provide a new source of water for the Basin. Rather it will release less stored water in the fall and winter and release more stored water during the late spring and early fall – a period with historically low precipitation.

All of the activities proposed by MCWRA, if undertaken, may affect ESA-listed species or designated critical habitat. Some of the activities proposed by MCWRA will require a discretionary CWA section 404 permit from a Federal agency – the Corps. Therefore, the Corps is consulting with NMFS to insure that issuance and implementation of the Corps permit is not likely to jeopardize the continued existence of ESA-listed species or result in the destruction or adverse modification of designated critical habitat. MCWRA has proposed some actions which, although they do not require Federal permits, are interrelated or interdependent to the Corps permitted activities. Interrelated activities are activities that are part of a larger action and depend on the larger action for their justification. Interdependent activities are activities that have no independent utility apart from the action under consultation. Interdependent and interrelated activities are analyzed under section 7 of the ESA along with the Federal action. These Federal and nonfederal activities are described in the following subsections.

1. Corps Permitted Activities

MCWRA proposes to install a surface water diversion facility with a small dam and intake structure, fish bypass facilities, a pump station, and a pipeline connection to the Castroville Seawater Intrusion Project (CSIP) system, collectively called the Salinas River Diversion Facility (SRDF). The SRDF will be located at river mile 4.8. When the Salinas River lagoon is

closed to the ocean and the lagoon is above approximately 2.0 feet (ft) water surface elevation, standing water will be present at the downstream side of the diversion dam of the SRDF. The SRDF will operate seasonally from April 1 through October 31, if enough surface water is available. As currently proposed, maximum rate of diversion will be 85 cubic feet per second (cfs). The diversion facility will be built to support future expansion to a diversion rate of 135 cfs. Future diversion rates above 85 cfs were not considered by NMFS in this opinion, because the flow prescription to minimize project impacts and benefit steelhead was jointly developed by MCWRA and NMFS based on an assumed maximum diversion rate of 85 cfs. With this assumption, the average diversion of the SRDF will be about 9,700 AF per year (AFY).

The proposed dam will be built with pneumatically controlled interlocking steel gates that will span the width of the Salinas River. The height of the spillway gate will be controlled by inflatable bladders. The foundation of the dam will be set at an elevation slightly below the existing river bed and will be constructed of reinforced concrete with vinyl coated sheet piles driven at the upstream and downstream ends. When in operation, the dam will maintain the upstream water surface elevation of the impoundment within an operating range of approximately 5.0 to 9.0 ft elevation. The total operational storage volume of the impoundment within this range is approximately 108 AF.

The SRDF will include a fish passage system, including intake screens and fish ladder, to provide upstream and downstream steelhead passage, and will be designed and maintained to comply with NMFS and CDFG criteria. For example, MCWRA will construct a trash rack to strain gross debris while allowing fish passage. Beginning April 1, the date when the dam is inflated, and continuing as long as the dam is inflated, the fish passage system will be functional; that is, it will facilitate efficient upstream passage of adult steelhead, as well as provide passive conditions for safely transporting returning adults and juvenile steelhead from the SRDF impoundment to the Salinas River lagoon. The fish ladder will be designed to function over the entire range of operating diversion dam headwater elevations and tailwater flows of 2 to 45 cfs. The entrance to the fish ladder will include orifices with manually operated slide gates, which can be manipulated to generate optimum fish attraction conditions at the entrance. The fishway will be constructed with an auxiliary water supply pipeline. The pipeline will supply water at the fish ladder entrance pool to maintain seasonally dependent bypass flow rates and sufficient attraction for upstream migrants. Bypass flows through the fish ladder will typically be 45 cfs for migration when the lagoon sandbar is open to the ocean, and 15 cfs for migration when the lagoon sandbar is closed and flow is routed to the Old Salinas River (OSR) channel. A minimum flow of 2 cfs will be maintained to the lagoon as long as SRDF irrigation diversions are occurring or aquifer conservation releases from Nacimiento and/or San Antonio reservoirs are being made to the Salinas River. See Description of the Proposed Action, Section III.B.2.c in this opinion, "Salinas Valley Water Project Flow Prescription for Steelhead Trout" for more information on flows to the lagoon.

Construction of the proposed instream surface diversion facility will take approximately 12 months. In-channel work will occur when there are no flows in the Salinas River or when flows are minimal and fish passage is not an issue, typically from the beginning of July to the end of

Based on its current condition and the loss of spawning habitat in the Nacimiento and San Antonio rivers, the Arroyo Seco River is the most important remaining steelhead habitat in the Salinas River watershed. The largest un-dammed tributary with steelhead habitat in the Salinas River watershed, the Arroyo Seco River is also the closest Salinas River tributary to the Pacific Ocean with suitable spawning and rearing habitat. The relatively close proximity of the Arroyo Seco River to the ocean is likely the primary reason the anadromous form of *O. mykiss* persists in the Salinas River watershed. The Arroyo Seco River also contains the majority of spawning habitat in the basin and half of the rearing habitat (Table 10). Anthropogenic manipulation of water flow in the Salinas River watershed has made successful migration into and out of the upper tributaries more difficult than migration opportunities to and from the Arroyo Seco River.

Table 10. Number of stream miles of designated critical habitat PCEs within the range of several sub-populations of SCCC steelhead in the Salinas basin. These data show the relative importance of the Arroyo Seco River in supporting steelhead in the Salinas River.

Sub-Population	Spawning	Rearing	Migration
Arroyo Seco	68.5	68.5	84.6
San Antonio/ Nacimiento	20.6	20.6	20.6
Upper Salinas	21.1	40.2	48.1
Lower Salinas	2.4	9.0	149.1

The complete loss of spawning and rearing habitat due to dams and the inaccessibility to spawning and rearing areas in the upper portions of the watershed during most years has increased the relative importance of remaining high quality habitats for SCCC steelhead in the watershed. The infrequent nature of flow events sufficient for migration to the upper portions of the Salinas River watershed, coupled with the distance adults must travel to reach them and smolts must travel to reach the ocean, has made the long-term persistence of steelhead in the river's upper tributaries tenuous. The conservation of steelhead habitats in the Arroyo Seco River watershed is critical for the persistence of this species in the Salinas River.

Based on watershed size, location, ecological context, and overall status of SCCC steelhead, the Salinas River has the potential (if it were to support a viable steelhead population) to prevent fragmentation in the distribution of SCCC steelhead, contribute to the genetic diversity of the species, and ameliorate the overall extinction risk of the DPS.

VI. EFFECTS OF THE PROPOSED ACTION

In this section, we analyze the direct and indirect effects of the proposed action, and the interdependent and interrelated actions, on threatened SCCC steelhead and its designated critical habitat. We approach the effects analysis by prioritizing effects, giving most attention to those having the greatest potential consequences to steelhead and their habitat. For the more substantial effects, we identify which PCE of critical habitat will likely be affected, and how the PCE will be affected given its baseline condition. For this project, the effects of flows on migration habitat received our highest priority. We quantified these effects using a flow model called the Salinas Valley Integrated Ground and Surface Model (SVIGSM) developed for MCWRA (WRIME 2003). Once this was done, we overlaid the effects on habitat on top of the biological requirements of steelhead and information about steelhead population abundance and

distribution of individuals to determine the extent to which individuals are exposed to the changes in critical habitat and what their response is expected to be to such changes.

We have categorized effects into those related to instream flows and those concerned with construction and maintenance-related effects. Because flow-related effects are the most significant due to their long-term consequences, we identify which PCE of critical habitat will be affected, how the PCEs are likely to be affected given their baseline conditions, and how those changes affect the conservation value of critical habitat in the action area. In the Integration and Synthesis, we then address effects at the larger scale of sub-populations and critical habitat within the Salinas basin given baseline conditions. Finally, we judge the effect of population and critical habitat.

It is important to note that NMFS analyzed changes in stream flows based on the maximum proposed diversion rate at the SRDF of 85 cfs. The SRDF is designed to divert water at up to 135 cfs. Diversions above 85 cfs may require reinitiation of consultation if they would result in changes to the effects on SCCC steelhead analyzed and described below.

A. Flow-Related Effects

1. Adult Migration

To assess the flow related effects of the project on adult steelhead migration, it is important to first establish what flows are needed to facilitate that migration. This is not simply a matter of identifying the minimum flows at which steelhead are able to pass upstream. It is also necessary to consider how often and for what duration these passage flow events must be present to facilitate successful annual migrations of the species. For example, we know that adult steelhead historically migrated upstream during winter and early spring. However, even before agricultural development in the Salinas Valley and construction of the major dams, steelhead were probably not able to migrate during the lowest flows of winter. Indeed, during dry years, opportunities for upstream passage were probably of limited duration. Thus, at least three questions need to be answered to address the question of properly functioning conditions for adult migrations in the Salinas River. Firstly, what are the flows at which fish are able to successfully and efficiently move upstream? Secondly, how often do those "passage flows" need to be present to sustain a viable steelhead population? Lastly, it is important to know when those "passage flows" occur with respect to other hydrologic events in the watershed (e.g., what is the relationship of passage flows in the mainstem with rainfall-runoff events in key tributaries). For this analysis, we defined properly functioning condition of adult migration corridors primarily as stream flow supporting depths and velocities conducive to upstream passage in shallow riffles at a frequency and duration comparable to years prior to the construction of the dams when steelhead runs were substantial in the Salinas River.

As described in the environmental baseline (Section V.C.2), NMFS (2005c) examined the issue of adult passage flows and determined that at least 260 cfs and 150 cfs are needed to facilitate safe and efficient upstream passage of steelhead at Chualar and Spreckels, respectively. NMFS (2005c) recommended that in the absence of further site-specific information, 260 cfs should be

EXHIBIT 2

Water for Monterey County An Affordable and Sustainable Water Supply Solution

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The Challenge

Proposed Solution

Public Involvement

Timeline

News



A Sustainable Water Supply through Responsible Management

Since January 2007, the California Public Utilities Commission <u>Division of Ratepayer</u> <u>Advocates</u> (DRA) has been working with the University of California, Santa Cruz (UCSC) <u>Center for Integrated Water Research</u> (CIWR) to consider a regional approach to Monterey County's water needs. The regional area is:

- The California American Water Company service area, including Carmel, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside, and the unincorporated areas of Pebble Beach, Carmel Valley, Monterey-Salinas Highway Corridor;
- The Marina Coast Water District (MCWD) service area, including Marina and the former Fort Ord;
- The City of Salinas; and
- Northern Monterey County rural and urban areas, including Castroville, Prunedale, Moss Landing, and Pajaro.

In cooperation with the DRA, UCSC/CIWR, the Monterey Regional Plan Work Group (Work Group), and the Water for Monterey County Coalition (WFMCC) developed a regional program — *Water for Monterey County* — that could provide up to 26,500 acrefeet of water per year.

Potential water production, as well as savings from conservation are shown in the following table:

Water for Monterey County Program Elements				
5,000 afy	Salinas River Diversions	 Winter diversions blended with recycled water Delivered to expanded Castroville Seawater Intrusion Projects, allowing available groundwater to be pumped for urban use 		
9,000 afy	Recycled Water — Agriculture	 Stored in winter months Distributed during peak summer months Blended with summer diversions to meet demand 		

"The Water for Monterey County plan could potentially provide a good alternative in the search for a sustainable water solution for the

O-11g

Monterey Peninsula. The plan is intriguing, because it could be less costly, use less energy, help to reduce seawater intrusion, and doesn't rely on drawing in water from the Monterey Bay National Marine Sanctuary."

> — Assemblymember John Laird, AD-27

13,000 afy	Desalination	 Uses intruded groundwater as basis of supply Results in brine discharge that meets California ocean plan
6,000 afy	Salinas Basin Groundwater	 Additional wells to tap highest quality and lowest cost resource Preserves reliability and sustainability
Up to 5,000 afy	Recycled Water — Urban	 Produced at MRWPCA Salinas Valley plant Distributed to urban users Advanced treatment for replenishment of Seaside Groundwater Basin
1,300 afy	Seaside Aquifer Storage	 Injecting treated Carmel River water into groundwater basin In-lieu recharge to be studied
500 afy	Stormwater	Local catchment cisternsPercolation ponds
300 afy	Conservation	 Regional p rograms to decrease water needs "Smart" irrigation controllers incentive programs Drought-tolerant landscaping education High-efficiency and low-flow device rebates

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A regional program would require significant electrical energy to meet daily operational needs. Therefore, an important element of such a program would be a sustainable energy supply. In addition to power from the Pacific Gas & Electric grid, the *Water for Monterey County* program also considers the following energy supply sources:

- Monterey Regional Waste Management District (MRWMD) Landfill-gas powered co-generation system (existing)
- Monterey County Water Resources Agency (MCWRA) hydroelectric power (existing)
- Biomass to energy power plant at MRWMD (proposed)
- Wind turbines located on the 220-acre parcel of Armstrong Ranch (proposed)
- Solar power (proposed)

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EXHIBIT 3

DRAFT



Monterey County 21st Century General Plan Update

ENVRONMENTAL IMPACT REPORT



VOLUME I

March 27, 2002

1.0 INTRODUCTION

1.1 THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

This document is a draft Environmental Impact Report (EIR) addressing adoption of a General Plan for the County of Monterey. The purpose of the EIR is to disclose potential environmental impacts that could result from implementation of the proposed General Plan. Preparation of the EIR and its availability for public review are required by the California Environmental Quality Act (CEQA).

The public, along with local, regional, state and federal agencies, are invited to review the EIR and to comment on its adequacy in identifying the potential environmental effects of the General Plan. Comments should be directed to the County of Monterey General Plan Update Office as identified below. Comments received during the mandatory 45-day review period will elicit a formal written response in a subsequent document (Response to Comments) which will also be available for public review. The Draft EIR, comments and responses will all be presented to the County Board of Supervisors for consideration as they review the proposed General Plan. Prior to approval of this or any version of the General Plan, the Board of Supervisors must certify that the EIR (complete with comments and responses) adequately addresses the General Plan's potential environmental impacts.

1.2 PURPOSE AND SCOPE OF EIR

Purpose of Environmental Impact Report

This Environmental Impact Report (EIR) assesses the environmental impacts of Monterey County's General Plan Update, a proposed update of the County's current General Plan adopted in 1982. The EIR has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA). The major purposes of the EIR are:

- To identify current environmental conditions within the County which may affect or be affected by growth projected for 2020;
- to disclose potential environmental impacts of the proposed General Plan;
- to inform the public and to foster public participation in the County's planning process;
- to inform County decision-makers as to potential effects of the proposed General Plan;
- to provide mitigation measures which could eliminate or reduce potentially significant environmental impacts; and
- to evaluate alternatives that might be environmentally superior to the General Plan as proposed.

Scoping Process

On May 10, 2001, the County (as Lead Agency) issued a Notice of Preparation of a Draft Environmental Impact Report in accordance with CEQA. A public scoping meeting was held on June 8, 2001 at the County Courthouse Building in Salinas, during which the proposed project was described and public comment was received on topics to be addressed in the EIR.

5.2.8 PROPOSED WINERY CORRIDOR DESIGNATION

The proposed Land Use Element designates three "winery corridors" in the Salinas Valley. These are (1) Central/Arroyo Seco/River Road Corridor, (2) Metz Road and (3) Jolon Road (Exhibits 5.2-6 and 5.2-7). Two categories of wineries would be allowed in these corridors. "Full-scale" wineries are defined as those with an annual production capacity of between 50,000 and 2 million cases. "Artisan" wineries produce less than 50,000 cases. Up to 50 new wineries would be permitted in the designated corridors. Full-scale wineries would be on lots that meet the minimum parcel size of the underlying zoning district in which they are located. A maximum of 10 full-scale wineries is allowed in the corridors, with 5 allowed in the Central/Arroyo Seco/River Road Corridor, 2 on Metz Road and 3 within the Jolon Corridor.

Forty artisan wineries are allowed. Forty new lots of 5 acres or larger may be created to develop the smaller, artisan wineries. Up to 24 of these new lots are proposed in the Central/Arroyo Seco/River Road Corridor; 12 are proposed in the Jolon Road Corridor; and 12 would be allowed on Metz Road. Presumably, artisan wineries could be developed on larger lots as well.

All new wineries would be allowed a tasting room with a maximum size of 2,500 square feet (150 person capacity). Up to three new wineries would be allowed restaurants on-site, with no more than one in each corridor. A total of five delicatessens (up to three in the Central/Arroyo Seco/River Road Corridor and one in the two other corridors) would be allowed, along with three Bed & Breakfast facilities (See Table 5.2-6). The General Plan proposes to allow winery-related uses identified in Table 5.2-6 under a General Plan designation, with future review and approval procedures limited to an Administrative Permit (in the case of artisan wineries and stand-alone tasting rooms) and a Use Permit (for full-scale wineries, restaurants and delicatessens).

According to the proposed General Plan, the intent of the winery corridor designation is "to promote the processing and marketing capabilities of the industry and to more fully utilize the wine grape production already existing in the County" (LU-7.24). There is currently a shortfall in the capacity of local wineries to process wine grapes produced in the county. Consequently, 75-80% of the county's grape production is exported to be processed into wine or grape juice in other counties. According to the Monterey County Vintners and Growers Association, this represents a lost opportunity not only in potential revenue that would be gained if the value-added processing were performed locally, but the inability to process wines inhibits the development and promotion of Monterey County labels and local appellations in the highly competitive global wine market. A major cause cited by the Vintners and Growers Association for the shortage of local wineries is the length of processing time for proposed projects to be reviewed and approved in the County.

There are about 45,300 acres of planted vineyards in Monterey County. Approximately 45,000 acres are in the Salinas Valley with another 300 in Carmel Valley. The present acreage has the potential to produce approximately 226,500 tons of grapes per year. Although some acreage may go out of production in the coming years in response to market conditions, long-range projections by the industry suggest an increase of about 9,700 acres to a total of 55,000 over the next 5 to 10 years. This would generate a total potential yield of 275,000 tons of grapes, or 17,187,500 cases of wine (1 ton yields 62.5 cases). To process 100% of this projected
Monterey County Crop Report 2007

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Monterey County Agricultural Commissioner's Office

1428 Abbott Street, Salinas, CA 93901 Phone: (831) 759-7325 Fax: (831) 422-5003 www.co.monterey.ca.us/ag

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In Memoriam Estrella Guzman 5/10/1961 – 11/13/2007

This year's crop report is dedicated to Estrella Guzman. Estrella worked for the department for 17½ years as an Agricultural Biologist and Deputy Agricultural Commissioner. She was a dedicated employee who took great pride in serving the local agricultural community. Her enthusiasm, tireless work ethic and compassion will be missed but not forgotten.

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Summary of Sustainable Agricultural Activities

MONTEREY COUNTY

AGRICULTURAL COMMISSIONER

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A.G. Kawamura, Secretary

California Department of Food & Agriculture and

The Honorable Board of Supervisors of Monterey County

Fernando Armenta	1 st District, Chairman
Louis Calcagno	2 nd District
Simón Salinas	3 rd District
Ila Mettee-McCutchon	4 th District
Dave Potter	5 th District

It is a pleasure to present the 2007 Monterey County Crop Report that is prepared pursuant to the provisions of Section 2279 of the California Food & Agriculture Code. This report reflects a production value of over \$3.8 billion for Monterey County, an increase of 9.5% over 2006. The increase is attributable to higher values for strawberries, head lettuce, grapes, broccoli, carrots, spinach, and a variety of other vegetable crops. However, decreases were noted in leaf lettuce, salad products, and a number of other crops. While the overall production value has again increased, it is important to note that the figures provided are gross values and do not represent or reflect net profit or loss experienced by individual growers, or by the industry as a whole. It does reflect the diversity and resilience of our agriculture industry.

The largest increase achieved was in the value of our strawberry crop, which increased by 38% or \$165 million on increased acreage, good production, and higher prices. For the second time, strawberries have surpassed head lettuce to become the County's second largest crop. Fittingly, this year's crop report features the strawberry industry, and we want to recognize the California Strawberry Commission for their contributions to this report and for the service they provide their growers.

Head lettuce, for many years our number one crop, posted a 15% increase of \$65 million on good prices. Leaf lettuce, which took over the top spot in 2002, declined slightly but still held on to its lead. Spinach also gained 15% or \$17 million following its \$77 million decline in 2006 on concerns over food safety outbreaks in 2005. Salad products, which also declined in 2006 over the same concern, showed a further 6% decline, but this is mostly attributable to more accurate data for specific commodities. Wine grapes also showed a strong increase of \$34 million or 15% with more bearing acres, higher prices, and increased yield. This puts our grape crop close to the record value established in 2005. The freeze of January 2007 resulted in a 45% loss of \$426,000 for avocados, while citrus actually showed a slight increase, despite the freeze damage, due to higher prices in a tighter market.

This report is our yearly opportunity to recognize the growers, shippers, ranchers, and other businesses ancillary to agriculture, which is the largest part of Monterey County's economy. As such, we would like to extend our thanks to the industry for their continued effort to provide vital information that enables the compilation of the Monterey County Crop Report. While we continually strive to improve upon this information, without their assistance, this report would not be possible.

Special recognition for the production of this report goes to Richard Ordonez, Juanita Adame and all the staff who assisted in compiling this information and improving the quality of the report.

Respectfully submitted,

Eric Lauritzen Agricultural Commissioner



GRAPE PRODUCTION

		PRODUCTION				VAL	.UE
CROP	YEAR	ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
BEARING ACRES	2007	39,636	5.64	224,000	TON	\$1,123.23	\$251,604,000
BEARING ACRES	2006	38,165	5.49	210,000	TON	\$1,038.01	\$217,983,000
NON BEARING/NOT HARVESTED	2007	3,068					
NON BEARING/NOT HARVESTED	2006	3,144					
TOTAL GRAPE ACRES	2007	42,764	2				
TOTAL GRAPE ACRES	2006	41,309					

TOTAL ACREAGE OF WHITE & RED GRAPES BY VARIETY

White Grape Varieties	Harvested Acres	Average Price Per Ton	Total Tons	Total Value	
Chardonnay	15,658	\$1,185	72,229	\$85,591,000	
Riesling	1,311	\$1,080	10,792	\$11,655,000	
Sauvignon Blanc	1,026	\$944	8,007	\$7,559,000	
Pinot Grigio	1,055	\$1,169	4,511	\$5,273,000	
Gewurztraminer	619	\$969	2,980	\$2,888,000	
Chenin Blanc	700	\$575	4,858	\$2,793,000	
Viognier	152	\$1,800	505	\$909,000	
Muscat Canelli	149	\$1,190	742	\$883,000	
Pinot Blanc	100	\$1,107	459	\$508,000	
Semillon	55	\$1,261	238	\$300,000	
Other Whites ¹	78	\$1,191	241	\$287,000	
Roussanne	70	\$1,697	158	\$268,000	
Marsanne	18	\$861	152	\$131,000	
Albarino	20	\$1,793	62	\$111,000	

Red Grape Varieties	Harvested Acres	Average Price Per Ton	Total Tons	Total Value
Merlot	5,255	\$1,017	39,373	\$40,042,000
Cabernet Sauvignon	4,153	\$951	40,699	\$38,705,000
Pinot Noir	5,663	\$1,806	18,874	\$34,086,000
Syrah/Shiraz	1,577	\$1,029	8,373	\$8,616,000
Cabernet Franc	990	\$958	5,664	\$5,426,000
Zinfandel, Red	189	\$1,060	1,023	\$1,084,000
Petit Verdot	134	\$1,193	843	\$1,006,000
Grenache	147	\$1,490	620	\$924,000
Petite Sirah	192	\$1,165	786	\$916,000
Sangiovese	113	\$1,163	579	\$673,000
Malbec	122	\$973	445	\$433,000
Valdiguie	48	\$800	369	\$295,000
Other Reds ²	44	\$1,794	130	\$233,000

¹ Grenache Blanc, Loureiro, Muscat Gaillo, Muscat Orange, Treixadura, and Zinfandel
² Aleatico, Alicante, Barbera, Dolcetto, Freisa, Mourvedre, Muscat Hamburg, Nebbiolo, Souzao, Tannat and Tempranillo

WINE COUNTRY	WINERIES & VINEYARDS	WINE EVENTS	MCVGA VIDEO	VISIT US	PRESS ROOM	MCVGA MEMBERS	MAP & GUIDE	
Join Our Email List								
Email:								
Acreage &	Varietals							

INTRODUCTION | DIRECTORY | WINERY MAP | VARIETALS | ACREAGE

Monterey County Premium Wine Grape Production

Year	Acreage	Tonnage	Total
2006	38,165	210,000	\$217,983,000
2005	38,179	269,000	\$254,615,000
2004	38,614	172,000	\$174,380,000
2003	34,287	151,344	\$160,219,000
2002	43,007	143,947	\$147,065,000
2001	44,986	184,082	\$207,945,000
2000	45,043	170,729	\$216,430,000
1999	41,415	119,143	\$157,926,000
1998	39,901	148,860	\$178,610,000
1997	36,114	167,488	\$203,412,356
1996	33,319	118,922	\$129,630,000
1995	30,483	82,320	\$79,309,000
1994	31,247	119,384	\$89,335,000
1993	31,998	134,407	\$101,973,000
1992	32,404	101,407	\$75,036,000

Total Acreage of White & Red Grapes by Variety

White Grape Varieties Harvested						
Variety	Acres	Ave. Price / Ton	Total Tons	Total Value		
Chardonnay	15,242	\$1,012	92,178	\$93,284,000		
Chenin Blanc	699	\$392	3,236	\$1,269,000		
Gewurztraminer	665	\$949	2,920	\$2,771,000		
Marsanne	15	\$727	91	\$66,000		
Muscat Orange	24	\$1,265	105	\$133,000		
Other Whites	69	\$1,270	257	\$326,000		

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				5
Pinot Blanc	79	\$1,076	337	\$363,000
Pinot Grigio	952	\$1,142	5,177	\$5,912,000
Riesling	1,181	\$1,073	4,681	\$5,023,000
Roussanne	67	\$1,784	80	\$143,000
Sauvignon Blanc	979	\$919	5,727	\$5,263,000
Semillon	55	\$1,138	315	\$358,000
Viognier	151	\$1,328	405	\$538,000
Zinfandel, White	47	\$533	377	\$201,000
	Red	Grape Varieties Harv	ested	
Cabernet Franc	992	\$972	5,350	\$5,200,000
Cabernet Sauvignon	4,342	\$990	24,140	\$23,899,000
Grenache	141	\$1,341	783	\$1,050,000
Malbec	129	\$985	885	\$872,000
Merlot	5,687	\$957	29,626	\$28,352,000
Other Reds	156	\$774	812	\$628,000
Petit Verdot	139	\$1,145	621	\$711,000
Petite Sirah	198	\$1,114	1,008	\$1,123,000
Pinot Noir	4,195	\$1,511	21,102	\$31,885,000
Sangiovese	121	\$1,070	514	\$550,000
Syrah/Shiraz	1,561	\$983	7,637	\$7,507,000
Zinfandel, Red	280	\$415	1,340	\$556,000

Information Compiled from the Monterey County Agricultural Commissioner Crop Reports (1992-2006)

WINE COUNTRY | WINERIES & VINEYARDS | WINE EVENTS | MCVGA VIDEO | VISIT US | PRESS ROOM MCVGA MEMBERS | MAP & GUIDE | GENERAL MEMBERS ONLY

MONTEREY COUNTY VINTNERS AND GROWERS ASSOCIATION

P.O. Box 1793, Monterey, CA 93942-1793 Phone: 831.375.9400 | Fax: 831.375.1116 | Email: info@montereywines.org © 1997-2008 MCVGA - All Rights Reserved - Design: Steven Gunnerson Design

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Historic Seawater Intrusion Map

Seawater Intruded Areas By Year

Legend:

Pressure 180-Foot Aquifer - 500 mg/L Chloride Areas





Legend:

Seawater Intruded Areas By Year

Historic Seawater Intrusion Map Pressure 400-Foot Aquifer - 500 mg/L Chloride Areas



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Cesar Chavez							
White Papers							
Photos							
Audio/Video			_				
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Quick Links	STOP THE A "White Pa Prepared by September,	SALT, SAVE OUR JOB per" on Pajaro Valley w the Research Office of 1999	S vater issues the United Farm V	Workers of America, A	FL-CIO		
E-cards	Preface: C	onservation Key to S	ustainable Agric	ulture			
Audio/Video/Photo	Five years a the Sacram the Bay-Del agencies.	ago, a group of state ar ento-San Joaquin Delta Ita Advisory Committee	nd federal agencies These governme , a consortium of r	s were asked to resolv nt agencies form the representatives from a	ve ecological dis CalFed Bay-Dela agriculture, the	asters building within ta program, along with environment and water	
UFW Label	CalFed has preferred ac interest gro is supposed groups.	proposed various alterr ction. This Preferred Alt ups have expressed co to expose the likely af	natives to resolving ernative is current ncerns about the F fects the Preferred	g the Bay-Delta crisis. Ily the subject of publi Preferred Alternative a I Alternative would ha	It has chosen o ic hearings. At t ind its environm ve on various e	one alternative as its the hearings, various hental impact report that ntities and interest	
Cesar Chavez Resource Center: Videos, Photos, Research Materials and Much More.	Conservatio Program tha in resolving by overdraf both be mir	on is key in all water ma at would implement gre two critical water prob t pumping, or pumping nimized through conserv	anagement models eater conservation lems facing Califor too much water o vation.	a. The Preferred Altern in urban and rural cor rnians: salinity and wa ut of the system. The	native includes a mmunities. Con ater shortages. refore, salinity a	a Water Use Efficiency servation is the first step Salinity is largely caused and water shortages can	
CHAVEZ HOLIDAY PETITION TODAY!	Measure K, Pajaro Valle water intrus other rural	a United Farm Workers y Water Management A sion in the coastal basir residents a greater voic	s-sponsored initiati Agency. It requires a around Watsonvi ce in water use and	ive on the Nov. 3, 199 greater emphasis on Ile. More importantly, d acquisition.	98 ballot, was a conservation ir Measure K give	oproved by voters in the solving serious salt s farm workers and	

The UFW has done more than advocate for conservation. The union has also been active in recent CalFed hearings held in Salinas and Visalia to alert all the parties that growers are not the only ones who would suffer from an unreliable agricultural water supply. The United Farm Workers strongly supports sustainable agriculture,



especially when conditions for working conditions in the agricultural industry dramatically improve through mutually-productive collective bargaining relationships between growers and farm workers.

This UFW White Paper was presented to the Pajaro Valley Water Management Agency on Sept. 15, 1999 in hopes the agency and public bodies like it will realize the inevitable necessity of conservation to achieve a reliable water O-11g supply and to solve salinity problems.

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1. Introduction 2. Summary of Findings Facing the Water Crisis 3. An overview of the water problems facing the Pajaro Valley 4. From Historical Problem to Current Crisis Understanding Current Water Use 5. Water Use in the Pajaro Valley 6. Comparison of Water Use and Conservation Possibilities by Sector Sector 1. Vegetables Sector 2. Strawberries Sector 3. Raspberries Sector 4. Municipal and Residential 18 Recommendations 7. The Voters Speak 8. Moving Forward, New Solutions for the Pajaro Valley 9. Appendix A: Sources and Methodology 10. Endnotes

Introduction: A New Look at Water

November of this year will mark the first year after the people of the Pajaro Valley Water Management Agency District supported the strong voter mandate for conservation and an end to overdraft. Water management entered a new era with the passage of Measure K.

We are living on the edge of a water crisis in the Pajaro Valley. We use almost twice as much water as our basin can provide. The state has the power to severely ration our water use if we don't bring our water use in line with our available supply. As an agricultural community, we want to avoid the mandatory fallowing of land. Farmers, farm workers and agriculture-related industry all share this interest. In order to protect agricultural land and thousands of farm worker jobs, we must do two things: halt seawater intrusion and end overdraft. If we fail to act now, we could face permanent environmental damage and the loss of local control.

A year ago the PVWMA chose to move forward with a \$36-\$38 million set of three projects that will bring water to select areas of the coast and help begin the recharge of our depleted aquifer. Unless alternative funding sources are discovered, financing these projects will absorb most of the agency's budget for the next 30 years. The local projects were intended to provide 10,000 acre-feet of water a year. It now appears that substantially less water will be developed and that the cost of each element of the projects is on the rise. Currently, our water deficit is 28,000 acre-feet, and this is predicted to increase another 10,000 over the coming years. The local project is not enough. But it is a start.

With the voter approval of Measures D and K in 1998, the PVWMA is now required to:

End overdraft by 2013 Hold and win a vote of the people before moving forward with an import pipeline project Prioritize conservation and local supply projects Investigate reclamation and tertiary treatment as other elements of the solution. Studies of these issues must be completed by December 1999. The PVWMA also faces the constraint that augmentation fees are capped at \$50 an acre-foot. This leaves the agency with very little room to maneuver.

To date, the water agency has focused on increasing the water supply, both within the district and by planning to

import water from the Central Valley. The Agency's Basin Management Plan is built around an import pipeline although the voters have twice shown deep reservations about this project. Before we look outside the district for solutions, we need to understand what is happening within the Pajaro Valley Water Management district. This report examines how we use water, and what the community and the water agency can do to reduce our water use. As a community, we enjoy one of the most beautiful areas in the country, with its fertile soils, coastal climate, and abundant agriculture. We are also faced with some of the most severe water problems in the state. Its time we take action to protect our future.

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This report provides an overview of the problems of overdraft and seawater intrusion that plague the Pajaro Valley. We have broken down the major water users into Agriculture, Industry and Residential groupings, and then further into the major water-intensive crops that use most of the area's groundwater. By examining the water use and irrigation practices of vegetable crops, strawberries, raspberries and the major non-agricultural sectors, we are able to offer each group suggestions on how to begin conserving water. Each use profile is followed by a series of suggestions for the user group and the report ends with a series of policy recommendations for the PVWMA. While this report does not offer a comprehensive solution to bringing the basin into balance, it takes the first step - educating residents, workers, growers, elected officials, regulators and others about the problem. Only by reaching out to a broader community can we hope to solve the crisis we face.

Summary of Findings

I. The Pajaro Valley is facing a water crisis which threatens thousands of acres of prime agricultural land and up to 5,800 jobs.

On an average year we pump more than twice the amount of water that this basin can safely yield. As the overdraft continues, seawater intrusion worsens. Well water is being contaminated so that some coastal wells can no longer be used for drinking water or for irrigating crops.

The problems of salt water intrusion and overdrafting the basin have been recognized for decades. The Pajaro Valley Water Management Agency was created 15 years ago in order to deal with these problems. To date, no project has increased the water supply.

If we do not end overdraft and stop the salt from contaminating well water, farms along the coast may be forced to close and thousands of jobs could be lost.

II. Analysis of Water Use and Recommendations for Conservation by Sector

Between 1966 and 1989, water use has risen dramatically. Agricultural water use accounts for approximately 76 percent of the total amount drawn from the basin's wells. The increase in agricultural water use over this time period is more than the amount used by all other water users combined.

Our crops can be irrigated more efficiently. 54 out of the 72 growers evaluated by the Pajaro Valley Water Management Agency's Mobile-Lab received a rating of fair or poor, corresponding to an irrigation efficiency below 80%.

While local crops are grown by a large number of people, a great deal can be accomplished if a handful of the largest growers alter their irrigation systems. Together, these growers could conserve thousands of acre-feet of water each year.

Vegetables also use approximately 20,000 acre-feet (a.f.)* of water, more than any other category, though less than berries on an acre by acre basis. Basic changes in irrigation practices can make a substantial difference to the water basin.

Because strawberries are extremely sensitive to salt, this crop is very vulnerable to seawater intrusion. Growers and workers alike have a mutual interest in stemming water waste in order to preserve agricultural land and jobs for the future.

Raspberries are among the most water intensive major crop in the Pajaro Valley with many growers using over a million gallons of water for each acre on an average year. Basic changes in irrigation practices can make a substantial difference to the water basin.

Vegetable, strawberry and raspberry production is dominated by a small number of large growers. Farms controlled by 30 to 40 individuals use half of the basin's water. If these individuals adopted a conservation program that saved even 10 percent of the water they use, they could save thousands of acre-feet of water.

Residential, commercial and industrial water use make up roughly 20 percent of the total amount of water used in the Valley. Reclamation, the capturing of surface water and conservation offer hopes of significant improvement in water management in these sectors.

III. Policy Recommendations; Moving Towards Sustainable Water Use

According to water agency documents, conservation can yield 9,000 acre-feet. Nonetheless, the PVWMA has failed to make conservation a priority. The PVWMA currently allows inefficient water use as well as late and non-payment of augmentation fees and has failed to enforce requirements to destroy abandoned wells. The PVWMA has sought alter county policies so that they would permit increased well pumping without environmental review. These practices must be changed. The report outlines key elements that should be included in the agency's required conservation program including infrastructure, incentives and disincentive structures to encourage compliance, and innovative programs that have helped other California water districts.

While all water users in each category analyzed can reduce their water use, the PVWMA should focus its efforts on reducing the use of the largest, most intensive water consumers if it wants to see conservation make a big difference. An individual grower can use as much as several thousand households in any given year. It is only logical that individuals who use more than 100 acre-feet of water per year should be the first to participate in a conservation program.

A conservation program will only be effective if compliance is ensured and enforced. A system of incentives to make major cuts in water use, and disincentives or penalties for failure to meet conservation goals will be necessary to make conservation work for everyone.

Facing the Water Crisis

Introduction

The Pajaro Valley's water basin is in a state of severe overdraft. The groundwater which we depend upon for municipal and industrial use, as well as agricultural irrigation is being pumped out of the reservoirs faster than nature can return it. As a result, the levels of well water throughout the Valley are dropping and seawater from the Monterey Bay has begun to contaminate the basin's water supply.

Seawater intrusion was first detected in the Pajaro Valley as early as the 1950's. The problem has worsened in recent years through the addition of irrigated acreage throughout the Valley and the conversion of orchards to more water intensive crops. Seawater intrusion threatens to take thousands of agricultural acres out of production and eliminate thousands of farm worker jobs. As pumping increases, so does seawater intrusion (See Chart 1). Current pumping levels are approximately 68,000 a.f. a year. As a result over 9,000 acre-feet of seawater are moving into the basin on an average year.

Chart 1. Too much pumping results in seawater intrusion

The Valley faces a series of important choices regarding its use of water. It will take a comprehensive approach that considers all potential solutions, while also educating the public about the costs and benefits of different approaches.

The problem is large, and it cannot be solved by any single program. One of the most cost-effective and promising ways to stop seawater intrusion is through conservation. Conservation is the least expensive, the most environmentally sound and the most sustainable long-term solution. In addition to reducing water use, conservation helps keep nitrates and pesticides out of our surface and groundwater.

While conservation is a responsibility that rests on the entire community, it is important that the individuals and industries which use the most of the Valley's water be particularly vigilant in their conservation efforts. Agriculture uses roughly 76 percent of the Valley's groundwater. Moreover, though there are hundreds of growers in the Pajaro Valley, agriculture is dominated by a few dozen large growers who use the lion's share of the resources. If

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there is ever to be real change in the water use patterns of the Valley, these large growers must be the community leaders in pioneering conservation efforts.

From Historical Problem to Ongoing Crisis.

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Over 95 percent of the water used in the Pajaro Valley comes from well water. With the current pumping patterns including the use of coastal wells, roughly 31,000 a.f. of water can be safely pumped without a significant inflow of seawater from Monterey Bay. Unfortunately, agricultural use alone has long exceeded the safe yield of the basin. The Pajaro Valley Water Management Agency's most recent internal documents indicate that there are 30,120 acres under irrigation with an estimated total water demand of roughly 52,200 a.f.. The largest 10% of vegetable, strawberry and raspberry growers alone use roughly 31,000 a.f. annually. There are several reasons why agricultural water use has increased in the past 30 years.

Between 1966 and 1983 approximately 5,000 acres within the Valley have been converted to farm land and irrigated.

Orchards, which require relatively little irrigation, were once the mainstay of agricultural production in the Pajaro Valley. However, orchard acreage has been decreasing for over 50 years. The same period has seen a dramatic increase in the production of water-intensive crops such as raspberries, strawberries and vegetable crops (see charts 2 and 3).

Charts 2 and 3. Orchard acreage has plummeted While the strawberry acreage has expanded. Each acre of strawberries pumps up to four times as much water as an acre of apples.

As a result of these trends, agricultural water use has increased 17,500 acre-feet between 1966 and 1989. The same period has shown a slow increase in municipal water reflecting an increase in the population of the Pajaro Valley. Chart 4 shows that the increase in agricultural water use alone is greater than the amount of water used by all other sectors.

Chart 4. Agricultural water use has risen greatly over the past 30 years.

The current state of overdraft threatens some areas more than others; coastal areas bear the brunt of the impact of district-wide pumping, but we all stand to lose. If major steps are not taken, coastal farms may close, thousands of acres of productive land may be lost and as many as 5,800 jobs may disappear. Many coastal wells are already contaminated with salt, making several of them unusable for drinking water or irrigation. Strawberries are one of the most salt-sensitive of major local crops [see Chart 5]. Strawberry growers therefore have the most to gain by helping stop seawater intrusion by reducing overdraft. Farmers and harvesters alike share a mutual interest in protecting the land and the fruit from salt contamination. While strawberries currently thrive in coastal lands, they must be grown with an eye to the future; they must be grown sustainably.

Chart 5. As salt (chlorides) contaminates irrigation water, crop yields suffer.

Understanding Current Water Use

Water Use in the Pajaro Valley

Overdraft is a Valley-wide problem, but pumping along the coast has an immediate impact on seawater intrusion, as salt water moves inland to fill the vacuum. By shifting pumping patterns away from the coast and moving water from inland areas to the coast for irrigation and residential use, studies show that we can increase the sustainable yield of the basin by 40%, or almost 20,000 acre feet. Local supply projects are needed to produce the water which can be pumped to the coast. This transition should be made as soon as possible so that we can focus on using water in the most efficient way possible.

Efficiency should be the guiding principle for the Valley's water management, the PVWMA, each water using sector from industry to agriculture, and each individual water user.

In order to encourage efficient water use, we have completed an analysis of each of the major water users: commercial, industrial, urban and residential use and the three largest crops which make up the bulk of agricultural production in the Pajaro Valley. Chart 5 provides a comparison of the comparative use of each of the major water-using sectors.

Chart 5. Comparison of Water Use by Sector

The most recent studies indicate that agriculture uses roughly 76 percent of the basin's water or roughly 52,000 acre-feet. A detailed analysis of growing patterns with the Pajaro Valley indicates that for all significant crops, there are a few large growers that dominate production as well as the use of agricultural land and water. Raspberries, strawberries and vegetables are the three largest crops in terms of water use in the Pajaro Valley. Combined, these three crops use 45,000 acre-feet of water? more than 85 percent of the total agricultural use and almost two thirds of total water use in the Valley. While hundreds of growers farm these crops, the bulk of the acreage, and thus the water use for each of these crops, is controlled by a total of roughly thirty large growers. Even minor changes in irrigation practices could help restore the balance between water supply and demand. Table 1 compares the use of major water using sectors in the Pajaro Valley and highlights water-intensive crops which are controlled by relatively few individuals.

TABLE 1. Summary of Water Use by Sector

Water User by Sector	Estimated Total Water Use* (in acre-feet)	Estimated Portion of Total Water Use in the Valley	Estimated Water Use of Top 10% of Growers Within Each Crop
Vegetables	20,507 a.f.	30.1%	12 individuals use 80%
Strawberries	20,034 a.f.	29.5%	10 individuals use 50%
Raspberries	4,500 a.f.	6.6%	7 individuals use 67%
All other Crops	6,659 a.f.	9.8%	
19Residential and Commercial	12,200 a.f	18%	
Industry	4,100 a.f	6%	
Total	68,000 a.f.	100%	

*For the purposes of this report, we have assumed average water use patterns for the large and small growers alike, within each crop and use category. Average water use per crop is characterized in the PVWMA's 1998 Crop Water Use Study.

It is important to acknowledge that there are a variety of factors which can influence a grower's water use. Some are within a grower's control and some are not. Throughout the Valley growers face a variety of microclimates and soil types, which in addition to plant variety and plant density can greatly alter a grower's water needs.

The next sections of the report examine the water use trends for each of the major groups of water users. Each use profile is followed by a number of suggestions on how each group can reduce their water use. Growers, workers, residents, food processors, industrial users, the city and the PVWMA can all play a productive role by helping to turn this situation around.

Vegetables.

Estimated Yearly Water Use: 20,507 acre-feet

Percentage of Total Basin Demand: 30.1%

Local vegetable crops include a wide range of commodities such as leaf and head lettuce, broccoli, cauliflower and artichokes. Unlike raspberries and strawberries, it is typical for vegetables to be double or triple cropped-- that is for there to be two or three plantings of vegetable crops on the same land in a given year. In 1998 the PVWMA released a Crop Water Use Study. Vanessa Bogenholm, a local strawberry grower working under contract with the PVWMA compiled the report over the previous four years. This study calculates the average water use by vegetable crops to be 1.96 acre-feet per acre. This is not a value for a single crop, rather it is an average for one acre assuming that this acre is farmed with the typical cropping patterns within the Valley. Cropping pattern variation can result in a wide range of water demands. In the Springfield region, for example 30% of farms

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According to the crop water use study, there are slightly more than 10,000 acres of vegetables in the Valley and vegetables consume slightly more than 20,000 acre-feet of water-- more than all industrial and residential water use in the Valley combined.

The fact that vegetables can be double and triple cropped, compounded with different reporting systems in Santa Cruz and Monterey County makes it difficult to obtain an accurate assessment of the number of vegetable acres farmed or even the ratio of size between two vegetable growers. Despite this, it is clear from examinations of pesticide use permit data, that of the roughly 120 vegetable growers in the Valley, the largest 10 percent-- 12 growers? farm over four times as much as the combined production of the remaining 108 growers (see Chart 6).

Chart 6 Vegetable Production in the Pajaro Valley is controlled by a limited number of large growers

On average each of these large vegetable growers use nearly 1,000 acre-feet of water-- the water use of roughly 5,000 residents. Some growers use much more.

Vegetables; the potential to make a difference

Three central tenets guide conservation practices in irrigation: uniformity, delivering water directly to the root system, and proper scheduling. Together, reaching these goals will ensure the most efficient use of water possible while meeting the needs of the crop in its particular setting (soil type and microclimate).

Vegetable growers can accomplish a great deal of conservation through relatively simple steps. Many vegetable growers continue to irrigate with sprinkler systems, although conversion to drip irrigation can save significantly more water. Growers that continue to sprinkle should avoid sprinkling at high noon, when a significant amount of the water evaporates before reaching the plants. In Arizona, growers that irrigate during the day are fined for wasting water in such an easily avoidable way.

Those growers that do use drip irrigation should use one drip line for each row of vegetables, particularly if farming in heavier soils. Growers using drip irrigation should continually examine their fields for wet spots indicating leaks in the drip lines and should repair these leaks immediately. Leaking pipes and drip tape waste water and can create a hazard for workers who can slip and fall in the mud. All irrigators should be trained to use tensiometers to measure moisture in soil. Tensiometers cost roughly \$30 and are easy to use, but too often growers don't know how to use them. Growers should also level their fields on a regular basis in order to increase irrigation uniformity and reduce overall water use.

The PVWMA must do additional work to provide local vegetable growers with the tools that they need for conservation. The Crop Water Use Study, the PVWMA's most recent and thorough document on agricultural water use in the Valley, does not provide a great deal of guidance for vegetable growers. The document averages all vegetable growers, regardless of crop type or number of plantings. The PVWMA must work to provide growers with accurate estimates of the water needs of specific vegetable crops in specific regions. In addition, the PVWMA should conduct trainings to further the use of Evapo Transpiration (ET) data for irrigation scheduling. ET data can provide extremely accurate information about the actual water needs of a crop given irrigation efficiency, soil type and weather data. The PVWMA should work to bring additional weather stations into the Valley so that weather data in all of the Valley's microclimates is available.

Strawberries

Estimated Water Use: 20,034 acre-feet

Percentage of Total Basin Demand: 29.5%

Watsonville is known as the strawberry capital of the world, and indeed one third of the nation's strawberries come from the Pajaro Valley. As shown above, [Chart 3] Santa Cruz county strawberry acreage has increased steadily for the past 40 years. This is indicative of the trend in the greater Pajaro Valley where strawberry acreage has been between 6,500 and 7,000 acres in recent years.

The PVWMA's Crop Water Use Study states that strawberries use an average of of 2.86 acre-feet of water per

acre each year. Strawberry growers use roughly 20,000 acre-feet of water a year. This is nearly one-third of total water demand and almost equal to the water use of vegetable crops.

Chart 7. There are 103 strawberry growers in the Valley. The top ten growers are as large as the remaining 93 combined.

Assuming average production techniques, the top ten growers strawberry growers each use an average of 1,000 acre-feet of water annually. Average use may even exceed this estimate as many of the premier growers maintain large fields off of San Juan road where PVWMA data shows some of the most intensive water use by grower. As with large vegetable growers, an individual berry grower is often responsible for the same amount of water that can supply several thousand households for a year. This is a huge amount of water for an individual user to be withdrawing from a severely overdrafted basin, and every effort must be made to ensure that the water is being used responsibly and efficiently.

Strawberries: Towards Efficient Water Use

An examination of the crop water use study indicates that there is huge potential for water conservation in strawberries. In every region studied, at least one in four of the growers surveyed used less that 2.5 a.f. of water, yet in each region a substantial percentage of growers using more than 3.0 a.f. In the San Juan region 40 percent of growers used more than 3.0 a.f., in the San Andreas region, approximately 50 percent of growers were above 3.0 a.f.

Strawberry growers can take a number of concrete steps to greatly reduce water use. Full-field plastic mulching, where the entire field is covered with plastic tarp for the duration of the season, can save as much as one acrefoot per acre. According to PVWMA staff, roughly half of strawberry growers use full field mulch, the others only mulch the tops of the beds. Assuming 50 percent of strawberry growers already employ full-field mulch, changing the practice of the remaining 50 percent could mean a savings of 3,500 acre-feet.

It seems that almost all strawberry growers use drip irrigation, though with varying degrees of efficiency. Growers should establish one line of drip tape per row of plants, rather than one or two per bed. This change could reduce water use by 20-30 percent.

According to the author of the Crop Water Use Study, growers have been known to soak fruit destined for processing before it is harvested, in order to increase its weight. If growers were paid by volume of berries rather than by weight this wasteful practice would be discouraged.

Other programs, though applicable to all crops, could result in substantial conservation when applied to strawberries.

Growers should invest in laser leveling to ensure better uniformity of water distribution. Growers should have their irrigation system evaluated for efficiency on a regular basis The PVWMA should reintroduce its mobile lab services to assist growers in increasing their irrigation efficiency. These evaluations should be required for all growers who use more than 100 a.f. of water a year. The service should be updated and promoted to ensure that all growers take advantage of it.

Raspberries

Estimated Annual Water Use: 4,500 acre-feet

Percentage of Total Basin Demand: 6.6%

Raspberries are the most water intensive major crop grown in the Pajaro Valley. Many growers irrigate each raspberry acre with more than a million gallons of water per acre each year. In San Juan Rd region, some use two million gallons per acre. The Pajaro Valley is one of the largest producers of fresh raspberries in the U.S., with roughly 1,300 acres harvested annually. Pesticide use permits, while inaccurate for determining exact acreage, suggest that in 1998 Pajaro Valley raspberry fields may have covered more than 1500 acres.

According to the Crop Water Use Study, raspberry growers in the Valley used an average of 3.68 acre-feet of water per acre. Our examination of the numbers suggests that the study may have given disproportionate weight

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to one region of the Valley where raspberry water use greatly exceeds the Valley average. By weighting the water use by growing region, we estimate the average water use for raspberries is 3.1 acre-feet per acre. Even with this lower number, raspberries are still the most water intensive major crop in the Valley. Our more conservative estimate places average annual raspberry water use at roughly 4,500 acre-feet.

Chart 8. The largest 10% of Raspberry growers farm the majority of the acreage.

All raspberry growers do not use the same amount of water. There are 71 growers who control the raspberry production in the Pajaro Valley. The largest 10 percent of these growers? seven individuals? account for 67% of total raspberry acreage, or twice as much land as the remaining 64 growers. Overall, raspberry production, while practiced by many individuals, is dominated by a limited number of large growers who are organized into shipper groups. Changes made by this handful of growers and shippers would have a dramatic impact on total water use.

Raspberries: Towards Efficient Water Use

According to the crop water use study there is a wide range of water use on raspberry crops. In the region off San Juan road 13 percent of growers surveyed applied over 6 acre-feet of water to their crops annually, over a three year period. This is by far the most intensive agricultural use reported in the Crop Water Use Study, and highlights the need for the PVWMA to focus its conservation efforts on areas and individuals with extremely high water use records.

Raspberry growers often employ sharecroppers. The water agency's Crop Water Use Study of 1998 notes that the use of sharecroppers can result in inefficient water use as irrigation is scheduled according the needs of the sharecropper with the thirstiest portion of the land. Growers often employ many sharecroppers who harvest the same land. One large grower, for example, has employed more than a dozen sharecroppers to grow raspberries.

Raspberry production has changed in recent years with more dense planting resulting in greater water demand. Additional studies may be needed to find the most efficient means of meeting the real water demands of the plants. Because raspberries are such a water-thirsty crop in a region with little water to spare, extra care should be taken to irrigate as efficiently as possible.

Other common sense practices which could be used by all growers including:

Continual examination of drip tape for leaks. Irrigation applied during cooler periods or at night when water is less likely to evaporate before getting to the plant Use of ET scheduling to time irrigation Use of Tensiometers to test soil moisture.

Residential, Commercial and Industrial Use:

Residential and Commercial Water Use: 12,200 acre feet

Residential and Commercial percentage of Basin Demand: 18%

Industrial Water Use: 4,100 acre feet

Industrial Percentage of Basin Demand: 6%

The largest non-agricultural user of water is the City of Watsonville Water Service Area (WWSA) which provides water to Watsonville, Freedom, Corralitos and the Pajaro Dunes residential development. WWSA provides water primarily to residential users but also to commercial and industrial users as well as parks within the Watsonville city limits. In 1988 the WWSA pumped 7,832 a.f. of water.

In addition to the WWSA there are roughly 50 small water purveyors in the Pajaro Valley area which pump from private wells and are responsible for maintaining the safety and cleanliness of their water supplies. The Aromas Water District and Pajaro Community Service District both serve more than 1,000 residents. Most of the purveyors serve fewer than 100.

A significant percentage of residential water is consumed by rural residential users who typically operate their own wells. In 1989 there were roughly 23,700 rural residential water users consuming an estimated 4,100 a.f. annually. Because there are so many rural water users, most of the wells are not metered, making it difficult to get a very accurate assessment of rural residential demand.

Residential water use, both rural and municipal has been increasing slowly, but steadily as more people move into the Valley. Increased residential development will continue to spur additional water use. Compared to the increase in agricultural water use, however, this represents a relatively minor increase.

Industrial water users consume roughly 4,100 a.f. of water annually. About a quarter of this comes from the WWSA supply with the remaining amount from private wells. Almost 90 percent of industrial water demand comes from the food processing industry. Industrial water demand has been quite stable for the past 25 years and the PVWMA does not predict dramatic change in that sector.

Industrial, Residential and Commercial Conservation Potential

Significant conservation measures can begin in the home. The City of Watsonville has taken the lead on the only major conservation program taking place within the district and has made low-flow toilets and showerheads available at low cost. These measures have helped conserve 500 acre-feet so far and have kept urban water use down despite dramatic population growth. This program should be continued and expanded to subsidize low water use washing machines and dishwashers.

Students in local schools should continue to be instructed on the severity of the basin's ground water problems and conservation education should be incorporated into appropriate school programs starting from an early age.

The PVWMA should encourage local ordinances which prohibit the over-irrigation of lawns. The WWSA should join with the PVWMA to pursue a leak detection program to eliminate water loss within its own system.

There is the potential for a great increase in water demand through expanding development of residential and agricultural land. Low density residential and commercial land both use roughly 2 a.f. of water per acre, and higher density development can use significantly more. The city of Watsonville and the counties of Monterey, San Benito and Santa Cruz may consider changes in the zoning plan or the addition of impact fees to insure that new developments provide sufficient financing to purchase supplemental water through environmentally sound solutions.

As noted above, roughly 90% of the industrial water use demand comes from fruit and vegetable processors. There is potential for the reuse of food processing waste water for the irrigation of golf courses or other non-food needs. Because food processing is seasonal, with high demand during the summer, there is potential for large supplies of effluent during periods of high demand. The City of Watsonville should pursue the possibility of using reclaimed water and should expand its filtration plant in order to make use of local surface waters.

THE VOTERS SPEAK

The recently approved voter initiative Measure K requires that the PVWMA move quickly to promote conservation efforts and bring the Valley's water basin into balance. Measure K provides the agency with a mandate to deal with the problem of overdraft by 2013; it states that conservation should be a priority program towards this goal. The measure supports the enactment of local supply projects. It also emphasizes investigation into alternative sources of water such as reclamation and tertiary treatment.

Measures K and D set new priorities for the PVWMA; the agency must focus on local projects and conservation. The agency cannot build a pipeline until 2008 at the earliest, and is required to win voter approval to undertake the project. By passing two measures that placed restrictions on the PVWMA's ability to build the pipeline, and rejecting the Board's Measure L, voters have made it clear that they have deep reservations about the PVWMA's financial management plans.

MOVING TOWARDS NEW SOLUTIONS

This report has analyzed water use patterns within the Pajaro Valley as a first step towards finding the most efficient and cost effective solutions to our water problems. This analysis has demonstrated that the large growers of high water use crops have a great deal of responsibility for the basin overdraft. Small changes in the irrigation

practices of the largest growers have the potential to save thousands of acre feet of water. While we must all work towards finding solutions, real changes must come from the largest water users in the basin.

Many growers in the Pajaro Valley have made headway. Most growers now use drip irrigation and few if any growers in the Valley use such wasteful methods as furrow irrigation. Because most wells are now metered we can track water use and progress in conserving water. While these are positive steps, it is clear that an effective conservation program could have a substantial impact on the Valley's sizable water problems.

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According to the agency's 1990-94 Mobile Lab Report, the irrigation systems for 54 out of 72 growers (75%) who participated in the evaluations received a rating of "fair" or "poor". In a region with one of the most severely overdrafted basins in the state these low ratings are unacceptable. The 1998 Crop Water Use study demonstrates that even within small regions of the Valley there are large variations in the amount of water growers apply on a given crop, strongly suggesting that many growers over irrigate.

When the PVWMA was created in 1984, its charter declared conservation to be one of its primary projects. The agency has substantially neglected this fundamental principle. While much of the groundwork has been laid to begin an effective conservation program, the PVWMA has not implemented one. Apart from a city-led project which has saved approximately 500 a.f. each year since 1992, our water district has no substantial conservation program in place.

The agency has recently embarked upon a series of local supply projects, but has found that certain elements are delayed indefinitely, projected yields were overestimated, and cost estimates are already on the rise from \$36 million to \$38 million. While local supply projects are important, they are clearly expensive. The local projects are likely to cost almost as much money as the PVWMA will be able to generate through augmentation fees for several decades while only solving a fraction of the overdraft. This further illustrates the need for conservation? long recognized to be the most cost effective of local projects. PVWMA documents have shown for years that basic conservation measures can save 9,000 a.f. each year, and that conservation measures can be taken at a tiny fraction of the cost of other projects. Chart 9 shows that conservation comes out on top of a cost benefit analysis of solution projects.

Chart 9. Conservation Saves More Water Per Penny Spent than Local Supply Projects or an Import Pipeline

Unfortunately, the PVWMA's has not yet set specific conservation goals or attempted to yield measurable water savings through conservation.

MOVING FORWARD

NEW SOLUTIONS FOR THE PAJARO VALLEY

The PVWMA must follow the lead of other agencies throughout the state that realize that an effective water control plan is needed. To date, the Agency has generally focused on supply issues but has failed to manage growing demand. Because conservation is the right thing to do and because the people of the Valley demand it, the agency must now initiate a conservation program. Such a plan can combine many of these elements:

I. Infrastructure development

Local conservation coordinator. The first recommendation of state and federal advisors to local water districts is to appoint a full time water conservation coordinator. There are some signs that the PVWMA is moving in this direction, but it has not done so to date. It is unlikely that a PVWMA conservation plan will have any success without strong staff support.

Increased use of CIMIS. The PVWMA should bring CIMIS (California Irrigationddanagement Information System) weather stations to each of the Valley's microclimates. CIMIS stations are relatively inexpensive. The PVWMA should conduct trainings to ensure that growers know how to use CIMIS to their best advantage.

Understand local water use. The PVWMA should update and maintain publicly available information on water use in district. The agency should build a database which links water pumping patterns to cropping data. This could be accomplished largely through coordination with the Monterey and Santa Cruz County Agricultural Commissioner's offices which maintain these public records. This data would be vital in determining whether individual growers are meeting conservation goals.

Set baseline extraction and annual efficiency extraction allocations. Large water users need to be responsible and efficient with our public resource. Accountability mechanisms have been developed by other water districts. Water allocations based on historical use, cropping patterns and irrigation efficiency will develop increase responsibility and accountability of water users to the public. Reasonable goals for use reduction should be set, along with penalties for use levels above baseline.

Prioritize use reduction for the District's largest water users. Individual large water users often consume as much water as several thousand households in and around Watsonville. Because reducing the use of the largest water consumers will have much more beneficial impact that reducing the use of individual residents, the PVWMA should focus its energies on those individuals who use 100 a.f. of water or more per year.

Alternative Sources of Funding. Because Measure D capped the augmentation fees at \$50 per acre-foot, and the PVWMA's recharge project is predicted to absorb almost all of its budget for the next thirty years, the agency will have to look to alternative funding mechanisms including impact assessments for development or changes in land use that involve an increase in water use, fines and penalties for water wasters, and new hook-up fees. All fees should be paid promptly to the PVWMA or incur cumulative penalty charges.

II. Concrete program with enforcement

Concrete goals. Because wells are metered, the PVWMA will be able to measure the impact of specific conservation measures - but concrete goals must be set and met. The conservation coordinator should establish long term and short term goals to achieve high levels of conservation. Goals should include scheduled reasonable reductions in water use for the major water users in the Valley.

Individual conservation plans. The conservation coordinator should insure that all growers maintain an individual conservation plan. The plans should be reviewed periodically and annual irrigation efficiency audits should be used to ensure that the plans are being followed. These conservation programs and independent evaluations should be available to the public.

Penalties for wasteful practices. The PVWMA should establish a list of wasteful practices including maintaining leaky pipes, and using sprinklers during sunny days or windy conditions. Growers found to be engaged in wasteful water practices should face financial penalties.

Provide incentives for conservation. Growers should be given a baseline of how much water they should be using, given the crops they plant and climactic conditions (including soil type) that they face. Growers which exceed their baseline water use limits should receive financial penalties, while those whose water use falls below 80% of their baseline could receive financial incentives through reductions in their augmentation fee charges.

III. Technical support.

Reintroduction of the mobile lab. As noted above, in the past the PVWMA maintained a mobile lab to help growers increase irrigation efficiency. The lab was eliminated for lack of interest but has recently been reintroduced on a limited basis. The lab should be permanently reinstated and heavily promoted especially among the largest water users. A similar program should be made available to Pajaro Valley residents and businesses.

Local solutions. The PVWMA should conduct its own studies on farming practices specific to the Pajaro Valley's crops and climate to give growers all the information that they need to irrigate efficiently.

Work with state and federal agencies. The California Department of Water Resources (DWR) has established a list of Best Management Practices for agricultural irrigation which several local water agencies have signed on to. Many of these recommendations include the use of CIMIS and conversion to drip irrigation systems. The PVWMA should endorse these practices and seek to ensure that growers within the PVWMA district follow best management practices.

Several water agencies including Fox Canyon Groundwater Management Agency are achieving significant results by implementing strong conservation programs incorporating disincentives to waste water. These programs may be controversial, but this political battle will be much smaller than the environmental and economic crisis it will help us avoid. If an aggressive conservation program is not implemented now, then we can expect land fallowing and thousands of jobs lost in the future. While many difficult decisions remain, the Pajaro Valley has already made the most important choice. By approving Measure K the community has demonstrated the importance of acting now to preserve the unique characteristics of this special Valley. The PVWMA must move forward to follow the mandate of Measure K. Failure to act risks massive job loss and land deterioration as well as state intervention and adjudication of water rights which would be in no one's best interest. The problems we face are severe but we can make a difference in pursuing environmentally and economically sound solutions.

Appendix A

Sources and Methodology

We analyzed the relative size of growers within the Pajaro Valley Water Management Agency District through an examination of the 1998 pesticide use permits filed in the portions of Monterey and Santa Cruz Counties contained within the PVWMA district. Data for non-agricultural pesticide use was filtered out, as was uncultivated agriculture and all permit applications which expired prior to January 1, 1998. Crops were then grouped: Raspberry, Bushberry, Strawberry, Vegetable, Orchard, Outdoor Nursery and Greenhouse. For the purposes of this study "Undeclared Commodity" was assumed to be vegetables. According to discussions with the Santa Cruz County and Monterey County Agricultural Commissioner's office, this is true for almost all of the acreage in Santa Cruz County and much of the acreage in Monterey County. As noted above, different cropping patterns between vegetables and other crops, as well as different reporting standards for vegetables in Santa Cruz and Monterey Counties makes it difficult to use pesticide permits to compare acreage between vegetables and other crops. The information contained within the pesticide use permits is sufficiently reliable, however, to provide good estimates of the relative size of different growers within the PVWMA district and serves as a useful tool in furthering the understanding of the key water users within the district.

Several of the sources cited in this report are based upon data compiled in 1989. We used the most recent information provided to us by the PVWMA, and through extensive research, found the data to be as accurate as any available. These documents, including the 1993 Basin Management Plan continue to serve as the basis for the water agency and board's decision making. We therefore took the data to be adequate for the purposes of this analysis.

Endnotes

1. Pajaro Valley Water Management Agency Basin Management Plan, Main Report, Volume 1, 1993. (Figure 7-5).

2. Santa Cruz and Monterey County Pesticide Permit Data. (See Appendix A).

3. Historical and Future Water Use Pajaro Valley Water Management and Augmentation Study, James M. Montgomery, Consulting Engineers, July 1990. pp. 3-5. (Note: This is a draft document which was never finalized. Its results were incorporated into the PVWMA Basin Management Plan).

4. Santa Cruz County Crop Reports, 1960-1995; Pajaro Valley Water Management Agency Crop Water Use Study, Vanessa Bogenholm, March 1998 p. 5.

5. Historical and Future Water Use, Figure 5, Figure 8.

6. Based on analysis of recent cropping patterns in the coastal area of the Pajaro Valley. Uses EDD data to estimate peak labor requirement for each crop.

7. The Role of Leakage in the Seawater Intrusion of a Confined Coastal Aguifer, Linda Darlene Bond, August 1986, p. 381.

8. Basin Management Plan, 1993 Volume 1, p. 7-7, Figure 7-5.

State Water Conservation Coalition Agricultural Conservation Task Force, Policy Statement on Efficient Water Management for Conservation by Agricultural Water Suppliers, On Farm Practices, March 1994.

10. Historical and Future Water Use, Figure 3.

11. Crop Water Use Study.

12. Santa Cruz and Monterey County Pesticide Permit Data. (See Appendix A)

13. California Water Plan Update, Bulletin 160-98, Department of Water Resources, p. 4-16. Based on daily per capita use of 179 gallons for Central Coast residents.

14. Crop Water Use Study.

15. Santa Cruz and Monterey County Pesticide Permit Data. (See Appendix A)

16. Crop Water Use Study, pp. 15, 17, 22, 26, 29.

17. Ibid.

18. Ibid. p.35

19. Crop Water Use Study; analysis of cropping patterns based on Santa Cruz and Monterey County Pesticide Permit Data.

20. Santa Cruz and Monterey County Pesticide Permit Data. (See Appendix A)

21. Crop Water Use Study, pp. 28.

22. Ibid., 35-6.

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23. Historical and Future Water Use, Figure 3.
24. Ibid., Figure 5.
25. Ibid., p. 3-3.
26. Basin Management Plan, 1993 Volume 1, p. 5-6.
27. Historical and Future Water Use, p. 3-4.
28. Ibid., pp. 3-4, 3-5, 4-6.
29. Mobile Lab Report: Summary of Results, 1990-1994, Charles McNiesh and Vanessa Bogenholm, July 28, 1994

Additional Sources for Conservation Recommendations

MCWRA Water Conservation Program Summaries for 1995 and 1996.

PVWMA "Water Conservation Measures", 1990.

State Water Conservation Coalition Agricultural Conservation Task Force, Policy Statement on Efficient Water Management for Conservation by Agricultural Water Suppliers, On Farm Practices", March 1994

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MONTEREY COUNTY HERALD 8/1/01

All signs point to * help for wineries

VINTNERS APPLAUD CHANGES

By KEVIN HOWE khowedomontercyberald.com

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A package of goodies for Monterey County's wine industry was approved Tuesday by the Board of Supervisors.

With the backing of the county's hospitality industry, grape growers and vintners had sought changes in county policy on road signs and the permit process to help them promote the county as a wine production center.

"It bridges the hospitality and agriculture industries," said Kurt Gollnick of Sheid Vineyards, president of the Monterey County Vintners and Growers Association.

Wine-related tourism also would help provide year-round employment for agricultural workers, he said, and offer great potential for growth in winemaking, processing, packaging and sales.

In April, the wine growers pointed out that while Monterey County is the second-largest grape producer in the state, it lags far behind other wine regions in numbers of wineries, wine-tasting rooms and processing plants, Though the county is home to 45,000 acres of wine grapes and seven identified viticulture areas, it has only 21 wineries and 15 tasting rooms.

San Luis Obispo County, with less than half the acreage, has four times the number of wineries.

Wine revenues account for \$280 million of the \$380 million in annual grape receipts, according to Amanda Robinson, executive director of the Vintners and Growers Association.

The industry has gross assets in the county of \$870 million, and an \$81 million annual payroll.

The county ships 75 percent of its grapes elsewhere for processing, said county Agricultural Commissioner Eric Lauritzen, who added that the policy changes are intended to focus on developing more wineries rather than expanding wineyard acreage.

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There is a potential of developing up to 100,000 acres of land for vineyards, he said, but "that will be driven by water

Please see Winerles page E2



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O-11g **Transportation Impact Analyses for** Site Development Photo credit: Roundabout photo on cover an title page, Cindy Schwartz and George Pen ite= Institute of Transportation Engineers An ITE Proposed Recommended Practice

The Institute of Transportation Engineers (ITE) is an international educational and scientific association of transportation and traffic engineers and other professionals who are responsible for meeting mobility and safety needs. ITE facilitates the application of technology and scientific principles to research, planning, functional design, implementation, operation, policy development and management for any mode of transportation by promoting professional development of members, supporting and encouraging education, stimulating research, developing public awareness, exchanging professional information and maintaining a central point of reference and action.

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Table 2–3. Suggested	Study Area	Limits for	Transportation	Impact Analyses
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Development	Study Area
Fast-food restaurant	Adjacent intersection if corner location
Service station, with or without fast-food counter	Adjacent intersection if corner location
Mini-mart or convenience grocery with or without gas pumps	660 ft. from access drive
Other development with fewer than 200 trips during any peak hour	1000 ft. from access drive
Shopping center less than 70,000 sq. ft. or Development w/peak-hour trips between 200 and 500 during peak hour	All signalized intersections and access drives within 0.5 miles from a property line of the site and all major unsignalized intersections and access drives within 0.25 miles
Shopping center between 70,000 and 100,000 sq. ft. GLA Office or industrial park with between 300 and 500 em- ployees Or Well-balanced, mixed-use development with more than 500 peak-hour trips	All signalized and major unsignalized intersections and freeway ramps within 1 mile of a property line of the site
Shopping center greater than 100,000 sq. ft. GLA or Office or industrial park with more than 500 employees or All other developments with more than 500 peak-hour trips	All signalized intersections and freeway ramps within 2 miles of a property line, and all major unsignalized access (streets and driveways) within 1 mile of a property line of the site
Transit station	0.5-mile radius

SOURCE: Adapted from Stover and Koepke 2002 and Barbara M. Schroeder. GLA = gross leasable area

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References for Further Reading

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Keller, Richard, and Joe Mehra. Site Impact Traffic Evaluation Handbook. Washington, DC: Federal Highway Administration, 1985.



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25 Jan 2009

Mr. John Farrow M.R. Wolfe & Associates 49 Geary Street, Suite 200 San Francisco CA 94108

RE: Monterey County General Plan DEIR

Dear Mr. Farrow:

I am pleased to submit the following comments regarding the Draft Environmental Impact Report (DEIR) for the proposed Monterey County 2007 General Plan.

I. Misleading Analysis Scenarios (AQ-1 & AQ-3)

The analysis scenarios provided in the DEIR for two air quality impact analyses, AQ-1: Consistency with Air Quality Plans, and AQ-3: Criteria Pollutants, are unnecessarily confusing and poorly described, thus making it difficult to determine if any of the scenarios disclose the actual project specific impacts of the proposed General Plan relative to baseline conditions. The scenario descriptions contain errors that mislead the reader and further complicate any meaningful interpretation of the results. For example, in Table 4.6-11 the scenarios titled "Existing plus Project Buildout" and "Existing plus Project (2030)" would appear to be based on the same General Plan assumptions with results for two different years. However, only one scenario is actually based on the proposed General Plan. The "Existing plus Project (2030)" scenario is not based on the proposed General Plan, but instead on AMBAG development projections made in 2004 (DEIR, 4.6-23).¹ Since the two scenarios are not based on the same assumptions, the scenario names should not imply that they are. By doing so, the DEIR masks the implications of the data within each scenario.

¹ The scenario descriptions on pages 4.6-22 through 4.6-28 state that the 2007 General Plan is the basis for the "Existing plus Project Buildout", "Cumulative 2030", and "Cumulative Buildout" scenarios. The "Year 2000" scenario is the baseline, and the "Existing plus Project (2030)" scenario is based on an AMBAG 2004 forecast.
II. Flawed Air Quality Significance Determination Caused by Incomplete Analysis

To properly analyze and disclose the impacts of the proposed General Plan, the DEIR must identify the growth allowed by the proposed General Plan in the unincorporated area and must then disclose the emissions resulting from unincorporated area growth in 2030. The DEIR fails to provide this fundamental analysis scenario (see scenario descriptions at DEIR page 4.6-21 through 4.6-28). The only two scenarios that provide unincorporated area impacts while holding incorporated areas constant are the "Existing plus Project Buildout" scenario (which is not useful for determining 2030 growth), and the "Existing plus Project (2030)" scenario (which is based on 2004 AMBAG assumptions, not the General Plan). The DEIR does not include a 2007 General Plan growth scenario with incorporated areas held constant, therefore it fails to provide the most basic data necessary to determine General Plan impacts.

In fact, the DEIR does not explain which scenario supports the significance conclusion that Impact AQ-3 is less than significant for all but winery emissions. (DEIR, 4.7-29). The DEIR attempts to imply that emissions are reduced under the proposed General Plan by showing emissions reductions under the "2030 Project Increase" scenario in Table 4.7-6. Such a conclusion is flawed for at least two reasons: 1) the "2030 Project Increase" scenario is based on 2004 AMBAG growth projections, not the proposed General Plan, and 2) the apparent emissions reductions actually result from improvements in vehicle and fuel technology, not anything associated with the proposed General Plan (this flaw in claiming technology benefits is described in more detail later in this letter).

The flawed air quality analysis and significance determination is further evidenced by frequent inconsistent and contradictory statements in the DEIR. For example, the "Significance Determination" section of Impact AQ-3 states, "Implementation of the 2007 General Plan would result in increased emissions of criteria pollutants and VOCs." (DEIR, 4.7-26) But then the "Significance Conclusion" section of Impact AQ-3 states that, "…implementation of the 2007 General Plan would result in a decrease in ROG, NOx, CO, PM2.5, and PM10 emissions." (DEIR, 4.7-28)

III. Quantification Inconsistencies

Table 3-8 in the Project Description chapter of the DEIR shows that 10,015 new residential units are planned in unincorporated Monterey County by 2030. Table 4.6-11 in the Transporation chapter shows that under the "Cumulative 2030" scenario, housing units in the unincorporated area increase from 35,252 units to 48,690 – an increase of 13,438 dwelling units. Inconsistencies within the DEIR related to critical information such as housing growth should be corrected so that all analyses are based on the same assumptions.

Inconsistent information in the DEIR continues with the representation of existing conditions in Table 4.6-11. The DEIR states that existing conditions are based on 2008 roadway conditions. (DEIR, 4.6-22). But the only existing condition, or environmental

baseline, in Table 4.6-11 is for "Year 2000". The DEIR should have provided population, housing, and employment data specifically for the year 2008 baseline. The same 2008 baseline scenario should have been the basis for VMT and emissions estimates found in Table 4.7-3, 4.7-5, and 4.7-6. Travel modeling and emissions modeling specific to the 2008 environmental baseline should have been performed and consistently used throughout the DEIR. S₆₅ 'ehicle travel and emissions vary over time, the use of two different baseline years reads the DEIR to unreliable travel and emissions.

IV. Failure to Properly Substantiate Air Quality Analysis Assumptions and Methodology

The claimed emission impacts of the various analysis scenarios are not substantiated by evidence in the DEIR or supplementary information provided by Monterey County. Table 4.7-5 of the DEIR contains a summary of emissions modeling results for five analysis scenarios. It is impossible to verify the accuracy of these results since the DEIR does not include a complete description of the assumptions and methodology that directly result in the claimed emissions. Although the DEIR claims that Appendix A contains the necessary data and method descriptions, it does not. Appendix A is the Notice of Preparation.

An October 3, 2008 letter from Wendy Strimling, County of Monterey, to John Farrow, acknowledged that the reference to Appendix A was a "typo." Ms. Strimling's letter also responded that there was no source document for Table 4.7-3, that it was prepared by Kimley-Horn and Associates, that its population and employment projections were based on Section 4.6.3.1 and 4.6.3.2 of the DEIR, and that VMT for each scenario was developed using the AMBAG travel demand forecasting model. Then, on October 7, 2008, the County provided a two-page document titled "Air Quality Technical Information", a similar document related to Carbon Monoxide modeling, two printouts from the EMFAC 2007 emissions model, and summaries of population and housing for traffic analysis zones (TAZ) prepared by Kimley-Horn and Associates. Although this supplementary information improves on the DEIR's complete lack of substantiating data, it remains incomplete and still does not allow for independent review of the emissions estimate accuracy. There is no transparent connection between the data and explanation provided by the County during October 2008 and the emissions estimates claimed in Table 4.7-5.

Specifically, the supplementary information provided by the County in the "Air Quality Technical Information" document includes a general description of the EMFAC 2007 model and a two-paragraph description of modeling procedures. From the scant information provided, it appears that the traffic modeling was far too simplistic to provide meaningful results. For example, the modeling was based on the same average traffic speed assumption (23 mph) for each analysis scenario in both 2008 and 2030². Instead, traffic speeds should vary based on the type of roadway (such as residential street versus

² County of Monterey, "Air Quality Technical Information", Table 1, p. 2.

highway), roadway capacity during different analysis years, changes in the type and density of development, and other traffic and land use variables. Essentially, the General Plan would result in population and VMT growth, which should change the amount of congestion assumed in the traffic modeling, which in turn would be expected to change traffic speeds over time. According to the County's description, only "selected roadway segments" were adjusted to account for congestion. But there is no disclosure of which roadways were "adjusted" and no disclosure of the range of adjustments made. Were these adjustments limited in scope to just speed, or were other adjustments made such as vehicle volume (trips and VMT), roadway capacity, or were there other changes? Were the adjustments made for the 2008 scenario different than the adjustments made for the 2030 scenario? If so, how did they differ? Presumably, the traffic modeling performed by the County's consultant included more detailed assumptions, but that information is not provided in the record. Since emissions are directly related to traffic modeling, the vehicle emissions results claimed in the DEIR have not been adequately supported.

Similarly limited information provided by the County on October 7, 2008 appears in the four attachments showing population, housing, and employment in each traffic analysis zone (TAZ). Presumably, each of the four attachments corresponds to one of the DEIR analysis scenarios. But the attachments are not titled or described consistent with the DEIR scenario titles. As an example of the naming inconsistencies, one of the attachments is titled "Existing Buildout of Project LU Summary by TAZ-2". Is that attachment meant to document assumptions for the "existing" scenario or the "buildout" scenario? And there are only four attachments; one short of the five scenarios in the DEIR. Not only did the County fail to explain how the attachments correlate to the scenarios in the DEIR, there is no documentation of the source of the data. Upon what did the County base the population, housing, and employment projections in each of the four attachments? Are those sources consistent with sources for similar data claimed in the DEIR? The failure to substantiate these assumptions further calls into question the validity of the DEIR traffic modeling, as well as the resulting emissions impacts.

V. Inconsistency with Air Quality Management Plan

Impact AQ-1 of the DEIR claims that conflicts with the Air Quality Management Plan are less than significant (DEIR, 4.7-13). Impacts are evaluated separately for the 2030 Planning Horizon and for Buildout in 2092. The DEIR improperly concludes that 2030 Planning Horizon impacts are less than significant (DEIR, 4.7-17). In making this incorrect determination, the DEIR makes factual errors in reference to population projections in the Air Quality Management Plan (AQMP) adopted by the Monterey Bay Unified Air Pollution Control District (MBUAPCD).

The DEIR claims that the population projected in the MBUAPCD "Clean Air Plan³" is 602,371 in 2030. This claim is inaccurate and overstates the population projection in the MBUAPCD Plan. In fact, the MBUAPCD Plan projects a Countywide population of

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³ The DEIR refers to the MBUAPCD "Clean Air Plan", which more accurately is titled the "2008 Air Quality Management Plan."

only 515,549 in 2030⁴. The 2030 Cumulative population projection of 602,790 in Table 4.7-3 of the DEIR is significantly higher than the MBUAPCD Plan and therefore should have been identified as a significant impact. Note that the 2030 Cumulative population estimate in the DEIR is higher than the MBUAPCD Plan for both the Countywide estimate as well as the unincorporated area alone estimate.

VI. Improper Association of Vehicle and Fuel Technology Improvements with the General Plan Result in Faulty Criteria Pollutant Significance Conclusion

The DEIR concludes that impact AQ-3, the net change in ozone precursors and particulate matter, is less than significant except for winery emissions. (DEIR 4.7-29) The basis for this conclusion is summarized by the statement "... [I]mplementation of the 2007 General Plan would result in a decrease in ROG, NOx, CO, PM2.5, and PM10 emissions." (DEIR, 4.7-28) It is inaccurate to claim that the General Plan results in a net decrease in emissions. The General Plan would result in growth, and that growth would increase emissions. The emissions increase is virtually certain to be a significant impact not identified in the DEIR.

Population and VMT increase under the General Plan, therefore emissions from mobile sources must necessarily increase. Table 4.6-11 shows that under the "Cumulative 2030" scenario, housing units in the unincorporated area increase from 35,252 units to 48,690 – an increase of 13,438 dwelling units. Table 4.7-6 shows that annual VMT increases by 369,679 under the "2030 with Project" scenario.⁵ The only scenario under which mobile source emissions would not increase under growth conditions is if all incremental VMT were produced by zero emission vehicles (electric, fuel cell, or other future technology). Even under such unlikely conditions, emissions would not decrease because of the proposed 2007 General Plan. Emissions could only decrease if VMT were reduced, and the DEIR does not claim net VMT reductions.

The apparent reduction actually results from vehicle and fuel technology improvements that reduce emissions from the *existing* vehicle fleet. The proposed General Plan has no impact on vehicle technology benefits, and the emission reductions are completely independent of General Plan policy. State and federal motor vehicle emission standards are responsible for emission reductions resulting from vehicle and fuel technology improvements. Mobile source emissions are reduced within Monterey County as older vehicles are replaced with newer, less polluting models. It is inaccurate for the General Plan DEIR to claim emissions reductions from vehicle technology because those reductions will occur with or without approval of the General Plan. This is an especially

⁴ MBUAPCD, 2008 Air Quality Management Plan, August 20, 2008 Revision, Table 1-1, pg. 1-4.

⁵ Note that the "2030 with Project" scenario used in the DEIR to estimate the VMT increase of 369,679 is based on AMBAG traffic modeling from 2004. The VMT increase should have been modeled using conditions under the proposed General Plan. Since the DEIR does not identify VMT increases specific to the unincorporated area under the 2007 General Plan, the "2030 with Project" scenario is used in this comment.

important error since the significance determination for impact AQ-3 is based on these reductions.

To correct for this error, the DEIR should have modeled emissions from existing vehicles (baseline VMT) and new vehicles (VMT growth) in the same 2030 planning horizon. Specifically, the baseline emissions in Table 4.7-6 should have been calculated as the VMT from the year 2000⁶ occurring during the year 2030. The EMFAC 2007 model used for all the scenarios in the DEIR should be used to calculate this scenario. Using this modeling approach would "zero out" emissions reductions caused by vehicle technology improvements. This corrected baseline scenario would allow for the disclosure of emissions associated with VMT growth under the proposed General Plan, which is fundamental to understanding the specific emissions impacts of the proposed General Plan.

VII. Lack of Connection Between Growth Assumptions and Traffic Modeling

The DEIR concludes that "Implementation of the 2007 General Plan would result in the development of new urban areas and new infrastructure in the Community Areas, Rural Centers, and AHOs." (DEIR, 4.1-14). There is no transparent connection between the growth resulting from these specific land use changes and the traffic and emissions modeling described in the DEIR. Other than the data presented by Planning and Community Areas in Table 3-8, the DEIR does not disclose specifically where growth in employment and housing is projected to occur and how that growth was added to the assumptions used in traffic modeling, which forms the basis for the VMT estimates used in emissions modeling. In response to LandWatch's request for the assumptions used for the traffic and air quality analyses, the County provided the incomplete and inadequately described sets of population, housing, and employment data by TAZ discussed above. As noted, the information provided does not enable the public to determine how the DEIR actually projected growth as a consequence of the 2007 General Plan.

The specific location of planned new growth is critical information and is necessary to determine the emissions impact of the general plan, but this information is not provided in the DEIR. This is especially important because the DEIR describes the intent of the County to not perform project level CEQA analysis for projects that are consistent with the General Plan:

"Where projects are found to be consistent with the development density established by the 2007 General Plan and within the scope of the EIR certified for that Plan, additional environmental review will not be necessary..." (DEIR, 3-9)

The County will not be able to accurately determine consistency of future projects unless the General Plan DEIR detailed growth assumptions for each year through 2030 at the 69

⁶ The DEIR provides year 2000 VMT in Table 4.7-3. As explained previously, the DEIR should instead provide year 2008 data as the baseline.

parcel level, or at least TAZ level. By not providing this detail in the General Plan DEIR, there is not sufficient baseline data upon which to determine whether future development projects are consistent with planned development density.

Thus, the DEIR lacks the data necessary to properly evaluate project-specific impacts, and improperly concludes that future project-specific environmental review is not necessary.

VIII. Faulty VMT Assumptions

Comparison of the DEIR's estimates for VMT growth to the population growth estimates show that either the traffic modeling or population estimate is based on flawed assumptions. Table 4.6-11 shows that under the "Cumulative 2030" scenario, population increases from 95,047 to 131,213 – an increase of 36,166 people. Table 4.7-6 shows that annual VMT increases by 369,679 under the "2030 with Project" scenario.

If the population and VMT estimates are correct, this would mean that each new resident drives just over 10 miles per year. Clearly, this is unrealistic.

IX. Construction Impacts are Not Mitigated to Less Than Significant Level

Impact AQ-2 discusses construction related particulate and ozone precursor emissions. Despite the fact that construction emissions are a "large source of NOx and diesel particulate matter," (DEIR, 4.7-18) the DEIR does not provide a quantitative analysis of construction emissions and potential significant impacts. This is an unacceptable oversight especially in light of the County's intention to rely on this DEIR instead of performing project-specific environmental review for future development projects. Even the qualitative discussion in the DEIR does not adequately support the claim that construction related impacts are mitigated to less than significant.

First, the DEIR claims that only PM10 emissions are potentially significant (DEIR, 4.7-20). In addition to PM10, the DEIR should have identified ozone precursors (ROG and NOx) as a potentially significant impact. The DEIR states that ROG and NOx emissions have been included in the regional emissions budget, and presumably relies on this to exclude ozone precursors from the determination of potentially significant impacts. The apparent presumption is that emissions included in an emission inventory need not be analyzed. This is clearly inconsistent with CEQA requirements. Fundamentally, all emissions from all known sources are included in the emission inventory, and virtually every emission control program at the federal, state, and local level is designed to reduce emissions of ozone precursors are a critical component of the overall emissions impact of the proposed General Plan. If ozone precursor emissions cannot be mitigated to less than significant levels, those emissions must be identified as a significant impact.

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Regarding PM10 emissions, the DEIR relies on Mitigation Measures AQ-1 through AQ-3 to reduce impacts to less than significant. The determination of less than significant impacts is flawed for several reasons. First, Mitigation Measure AQ-1 proposes a "revision" to General Plan policy OS-10.5 to require implementation of MBUAPCD PM10 control measures. But this suggested mitigation is at best vacuous since General Plan policy OS-10.9 already requires implementation of MBUAPCD control measures.

The DEIR's treatment of the "revision" as an *additional* mitigation measure makes it clear that, despite the DEIR's recitation of proposed General Plan policies, *including Policy OS-10.9*, as the basis of its impact analysis (DEIR, pp. 4.7-18 to 19), consideration of these policies did not actually inform the DEIR's significance conclusion. Note also that the DEIR recites that "there are no policies applicable to air quality" in the South County, Toro, and Central Salinas Valley Area Plans, but then concludes that the South County, Toro, and Central Salinas Valley Area Plan air quality policies "would reduce air quality impacts in the AWCP area that overlays these Planning Areas (DEIR, p. 4.7-19). The inconsistencies and apparent failure to consider the content of the recited General Plan policies demonstrate the inadequacy of the DEIR's qualitative evaluation of construction impacts.

Furthermore, the "revision" of OS-10.5 proposed as Mitigation Measure AQ-1 could *increase* operational emissions since the change would replace an unrelated and otherwise beneficial policy related to encouraging mixed land uses that reduce VMT.

Second, Mitigation Measure AQ-2 proposes a revision to General Plan policy OS-10.6. But that policy already supports MBUAPCD "air pollution control strategies, air quality monitoring and enforcement activities". The proposed revision would actually weaken the policy by limiting its application to off-road and heavy equipment emissions.

Third, Mitigation Measure AQ-3 relates to operational emissions, not construction emissions, and therefore would not reduce construction impacts. In total, the proposed mitigation would do nothing to reduce construction emissions and might actually increase emissions.

X. Health Risk From Diesel Particulate Matter is Not Mitigated to Less Than Significant (Localized Risk)

The DEIR concludes that Impact AQ-4 related to the health risk from exposure to diesel particulate matter is less than significant after mitigation (DEIR, 4.7-30). The conclusion is not supported by any quantitative analysis, but rather by vague and unsubstantiated statements combined with misrepresentation of risk assessment protocols established by the State of California.

The DEIR correctly points out that risk assessments performed to determine cancer risk from diesel particulate exposure are typically based on a 70-year exposure period. But then the DEIR dismisses the localized risk because 1) the duration of individual construction projects is less than 70 years, and 2) "exposure will be minimal due to the types of proposed projects" (DEIR, 4.7-30). Both of these statements, intended to

support the less than significant determination, are insufficient. The 70-year exposure period is a health risk assessment modeling parameter established by the California Office of Environmental Health Hazard Assessment.⁷ The exposure period is meant to be consistent with an expected human lifetime, and should not be interpreted to limit applicability to sources that emit toxics for at least 70 years. In fact, most toxic sources affect an individual human receptor for less than the human's entire life, either because the source changes its location or emissions intensity, or the human receptor moves to a new location. Nevertheless, OEHHA recommends the 70-year exposure timeframe even if the impact duration is shorter. The second justification statement, that somehow the "types of proposed projects" will minimize exposure, is so vague that it is virtually meaningless. Does the DEIR mean to suggest that roadway or development projects will not emit diesel particulate emissions similar to other construction projects, or that construction will not occur in the vicinity of sensitive receptors such as residences, schools, hospitals, etc.?

The California Air Resources Board recognizes the importance of cancer risk from construction projects. According to an ARB analysis of a hypothetical construction project⁸, cancer risk from construction activity can exceed 10 cases in a million for an area of 26 acres surrounding a construction site.

Rather than dismiss the potential for localized health risk from diesel particulate matter, the DEIR should have performed a health risk assessment on a worst-case construction scenario to quantitatively determine the potential for significant impacts. The health risk assessment would be performed by using the U.S. EPA-approved dispersion model called AERMOD. The AERMOD model predicts the concentration of pollutants in the air, factoring in meteorological conditions such as wind speed, direction, temperature, and other factors such as proximity of sensitive receptors.

For additional modeling guidelines, the California Office of Environmental Health Hazard Assessment (OEHHA) has published guidance for the preparation of risk assessments. The OEHHA guide provides detailed modeling information as well as recommended cancer potency values that are used to determine cancer risk based on DPM concentration. The complete OEHHA guidance document is available for reference at http://www.oehha.ca.gov/air/hot_spots/HRAguidefinal.html.

The County should prepare a health risk assessment to determine potential health risk for a worst-case construction project or projects as permitted by the proposed General Plan.

XI. Health Risk From Diesel Particulate Matter is Not Mitigated to Less Than Significant (Regional Risk)

⁷ California Office of Environmental Health Hazard Assessment, http://www.oehha.ca.gov/air/hot_spots/HRAguidefinal.html

⁸ California Air Resources Board, <u>Staff Report: Initial Statement of Reasons for Proposed</u> <u>Rulemaking, Proposed Regulation for In-Use Off-Road Diesel Vehicles</u>, April 2007, p. 12

The DEIR acknowledges that the health risk from regional exposure to diesel particulate matter is a potentially significant impact (DEIR, 4.7-31). As discussed above regarding localized impacts, the DEIR fails to provide a quantitative analysis of potential health risk from regional impacts. Instead, the DEIR attempts to support a less than significant determination by identifying policies and mitigation measures that claim to reduce diesel emissions to less than significant levels. But the identified policies do not meaningfully relate to diesel toxic emissions. And the mitigation measures, while directionally beneficial, are not sufficiently comprehensive to reduce impacts to less than significant.

First, the DEIR identifies General Plan policies OS-10.6 and OS-10.9. These policies help to reduce emissions in general, but are primarily focused on reducing particulate matter from dust, which is not a toxic air contaminant. These policies do not substantially reduce diesel particulate matter. Next, the DEIR lists Area Plan policies that presumably reduce diesel particulate matter. But again, the Area Plan policies are simply general air quality policies. In fact, three of the Area Plans do not address air quality at all. Other Area Plans, such as the Central Salinas Valley Area Plan, reduce emissions from sources other than diesel particulate matter (in this case, reductions are from alternative sources of energy production which would otherwise be powered primarily by natural gas power plants – not a source a diesel particulate matter).

Mitigation Measures AQ-6 and AQ-7 are identified to specifically reduce the health risk from diesel particulate matter. But each measure is limited in scope and together are not sufficient to reduce impacts to less than significant. Measure AQ-6 requires that the County enter into contracts only with contractors who use "soot traps", ultra-low sulfur fuels, or take other actions to reduce PM10 emissions by 50 percent. First, this measure should not be limited to County contracts. It should apply to any public or private project in Monterey County, either as project-specific mitigation or as a condition of approval. Next, the term "soot traps" presumably refers to diesel particulate filters (DPF). The Measure should require the highest level of particulate reductions available. The California Air Resources Board administers a verification program for DPFs and other emissions control devices, and the highest level exhaust particulate reduction is 85 percent.⁹ At a minimum, the mitigation measure should require an 85 percent reduction in exhaust particulates, not 50 percent. However, even with these suggested improvements, the health risk from diesel particulate matter is not eliminated and remains potentially significant.

Finally, Mitigation Measure AQ-7 prohibits the location of some sensitive receptors to at least 500 feet away from high volume roadways. This measure has merit for reducing exposure to diesel particulate emissions from roadways, but it should not be limited to the identified land use types. In addition to schools, hospitals, and elderly facilities, the measure should include residential uses. In the CARB Air Quality and Land Use

⁹ DPFs that achieve 85 percent exhaust particulate reduction are classified by CARB as "Level 3" devices. For a complete list of verified Level 3 devices, see the CARB webpage at http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm

Handbook discussed on page 4.7-33 of the DEIR, residential uses are the most common sensitive receptor identified.

If you have any questions regarding these comments, please feel free to contact me.

Sincerely,

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Greg Gilbert

Greg Gilbert Autumn Wind Associates, Inc. P.O. Box 1030 Newcastle, CA 95658 (916) 663-2222 ggilbert@autumnwind.us

STATEMENT OF QUALIFICATIONS

Education

University of California, Santa Barbara; B.A., Env. Studies, 1982 Graduate and Professional Studies in Law, Planning, Emissions Modeling

Professional History

Greg Gilbert has consulted on air quality land use planning and mobile source issues and projects to private and public clients since forming Autumn Wind Associates in 2001. Previously, he was marketing director for a specialty emissions catalyst manufacturer. Between 1990 and 2000 Mr. Gilbert worked in two California air agencies, most recently as project manager in the Mobile Source Division of the Sacramento Metropolitan Air Quality Management District. While at the SMAQMD, Mr. Gilbert was responsible for implementing the District's heavy-duty vehicle low-emission incentive program that would later serve as a model for creation of the statewide Moyer Program. Air agency experience included evaluating land use-related air quality emission impacts and control strategies, developing CEQA mitigations and updating CEQA guidance, and creation of the first in-lieu air quality CEQA mitigation fee program.

Since leaving the SMAQMD he has provided consulting expertise to air agencies, provided input for revisions to the URBEMIS model, conducted research on construction practices and equipment emissions, and assisted with development of air district CEQA land use guidance documents and mitigation strategies. Mr. Gilbert has reviewed CEQA project-specific environmental documentation and provided expert written comments and testimony for public-, private-, and environmental-sector clients.

EXHIBIT 13



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January 29, 2009

John Farrow M. R. Wolfe & Associates, P.C. Attorneys-At-Law 49 Geary Street, Suite 200 San Francisco, CA 94108

RE: Comments on the Draft Environmental Impact Report for the 2007 Monterey General Plan

Dear Mr. Farrow:

At your request, TRA Environmental Sciences has reviewed the Draft Environmental Impact Report for the 2007 Monterey General Plan prepared by ICF Jones & Stokes dated September 2008.

As you know, our firm specializes in conducting biological analyses for CEQA and NEPA documents. We have been working in this field, as well as the field of habitat conservation planning and natural community conservation planning, for over twenty-five years. We are familiar with many of the special status species that occur in the greater San Francisco Bay Area including the Santa Cruz and Monterey County coast side. Please refer to our firm qualifications and professional biography, which are attached.

In sum, the DEIR does not adequately evaluate and mitigate impacts to biological resources for the following reasons:

• The DEIR does not provide substantive analysis of impacts to biological resources based on correlating the expected location and intensity of development and the affected resources. Most of the impact analyses consist of recitations of lists of policies from the 2007 General Plan without any meaningful discussion linking those policies to impact avoidance, minimization, or compensation. Many of the policies lack any substantive content, e.g., lack any performance standards or examples of the content of implementing programs. Many of the policies defer the formulation of mitigation without deadlines for completion or interim measures. No reasons are given for these deferrals. Many of the policies lack any enforceable mandate. We have provided detailed comments on most of the policies cited as the basis for the DEIR's impact analyses.

- Mitigation measures that are proposed to supplement the 2007 General Plan policies suffer from the same defects as the policies themselves.
- Substantial new agricultural cultivation, especially vineyard development, is projected in the County, but the DEIR fails to describe this activity accurately. The description of winery corridor is inconsistent and incomplete. Because these activities will have significant effects on biological resources, they must be accurately described.
- Impacts to movement corridors and habitat fragmentation were not adequately evaluated because the DEIR did not develop or consider available empirical information about important conservation areas, movement corridors, and habitat linkages.
- Mitigation of habitat fragmentation and interruption of movement corridors and habitat linkages is inadequate. The mitigation of these landscape-scale impacts must be formulated in a first-tier EIR, not postponed to future project-level CEQA reviews, particularly since much of the development activity that will affect these resources is to be exempted from future CEQA review.
- The DEIR failed to evaluate steelhead impacts from increased diversions from the Salinas River, continued operation of the Nacimiento and San Antonio Dams to support growth, and sedimentation.
- Although the DEIR acknowledges that growth will make a considerable contribution to cumulatively significant impacts, it proposes no mitigation to address this.

1. Policies identified to address impacts to biological resources are not adequate

The DEIR concludes on the basis of a list of policies and three new mitigation measures that impacts to special status species through 2030 will be less than significant. DEIR, pp. 4.9-64 to 4.9-76. Similarly, the DEIR concludes on the basis of reciting these policies and three additional mitigation measures that impacts to natural communities will not be significant through 2030. DEIR, pp. 4.9-79 to 4.9-89. The DEIR again recites these policies and one new mitigation measure as the basis of its conclusion that impacts to movement corridors and nursery sites through 2030 will not be significant. DEIR, pp. 4.9-89 to 4.9-99. And it recites them in support of its conclusion that impacts related to loss of protected trees will be less than significant. DEIR, pp. 4.9-99 to 4.9-102.

The policies recited do not provide a reasonable basis for this conclusion for a number of reasons, as detailed in the table below, including the following repeated deficiencies:

• Many of the policies call for activities, programs, or ordinances to be identified or developed later, but the policies do not contain performance standards or provide

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- Many policies calling for action by the County do not identify responsible agencies, ensure that adequate resources will be available, specify schedules for implementation, or provide for alternative measures pending full implementation.
- Many policies are not enforceable because they call for voluntary action or merely call for encouraging and supporting beneficial activities.

Set forth in the table below are detailed comments on the policies identified by the DEIR as the basis of its significance conclusions. (Comments on the proposed additional mitigation measures follow in Sections 2, 3, and 5.) Since CEQA requires the County to adopt all feasible mitigation, these policies must be strengthened, or additional mitigation measures must be proposed, to address the defects identified.

Policies Cited As The Basis of Significance Conclusions Related to Biological Impacts

LAND USE POLICIES. The DEIR states that "The 2007 General Plan Land Use Element emphasizes compact city-centered growth and discourages the encroachment of urban uses into undeveloped areas. Land Use Element Policies LU-1.1 through LU-1.9 promotes appropriate and orderly growth and development while protecting desirable existing land uses." DEIR, p. 4.9-67. The policies were also cited as the basis of the DEIR's conclusion that impacts to special status species, habitat, and movement corridors would be less than significant. DEIR, pp. 4.9-67, 4.9-80, 4.9-90.

- As noted below, these policies do address conversion of habitat for agricultural use.
- Furthermore, the DEIR's claim that 80% of development will be in focused growth areas (DEIR, p. 4.9-75) is irrelevant. The question is how much development will occur where there are biological resources. The DEIR does not provide any real description of the extent and location of rural development. Furthermore, the Policies creating disincentives for growth in focused growth areas (e.g., requirements for plans and infrastructure) actually create incentives for scattered sprawl development on legal lots of record and rural subdivisions.
- Policy LU 1.19 is in conflict with promotion of citycentered growth by LU 1.1 to 1.9. Policy LU 1.19 states that growth in designated growth areas is a "priority," but then proposes to permit rural subdivisions in accordance with a "Development Evaluation System" (DES) that has not yet been devised, and for which no standards are identified. The DES is supposed to "provide a systematic, consistent, predictable, and quantitative method" to evaluate rural subdivisions. The policy lists a number of "criteria" including "Site Suitability; Infrastructure; Resource Management; Proximity to a City, Community Area, or Rural Center; Mix/Balance of uses including Affordable Housing consistent with the County Affordable/Workforce Housing Incentive Program adopted pursuant to the Monterey County Housing Element; Environmental Impacts and Potential Mitigation; Proximity to multiple modes of transportation; Jobs-Housing balance within the community and between the community and surrounding areas; Minimum passing score." These "criteria" are actually vague parameters without any stated values. How will site suitability be assessed and quantified? How will environmental impacts and potential mitigation be assess and quantified? How will all of these considerations be weighed against each other? The "criteria" do not provide any performance standards or provide any real basis to determine how much rural development will be permitted, where it will be permitted, and what its effects will be. Under Policy LU 1.19, a DES could be devised that would permit essentially any development as long as some lip service is paid to each parameter. As it is written, Policy LU 1.19 cannot be said to control or limit rural development because the policy has no substantive content. Given this lack of content, it is apparent that the DEIR's conclusion that only 20% of future development will occur outside of focused growth areas (see Table 3-8) cannot have been based on any consideration of LU 1.19. Please explain on what basis the DEIR projected that only 20% of development would occur outside of focused growth

Policies Cited As The Basis of Significance	Conclusions Related to Biological Impacts	
	areas. Please explain how the undefined DES system can be said to control rural growth, if the DEIR so assumes. Please explain how growth in the focused growth areas will be made a "priority" other than through the to-be- devised DES.	
LU-1.1 The type, location, timing, and intensity of growth in the unincorporated area shall be managed.	 This policy has no substantive mandate related to biological resources. The policy is such a general statement that any action to manage growth would be consistent, even action that permitted substantial rural sprawl. There is no apparent program to manage growth of the conversion of habitat for agricultural use. 	
LU-1.2 Premature and scattered development shall be discouraged.	 If the policy is intended to be applied in evaluating individual projects, it is not enforceable because it contains no objective standards. If the policy is intended to direct some programmatic activity by the County other than permitting activity, it will not be effective because it lacks any standards for or examples of such programs. 	
LU-1.3 Balanced development of the County shall be assured by designating adequate land for a range of future land uses.	 This policy has no substantive mandate related to biological resources. No analysis is provided to demonstrate that the land use designations will in fact ensure sufficient habitat. Please provide evidence that land use designations will ensure sufficient habitat for each special status species. 	75
LU-1.4 Growth areas shall be designated only where an adequate level of services and facilities such as water, sewerage, fire and police protection, transportation, and schools exists or can be assured concurrent with growth and development. Phasing of development shall be required as necessary in growth areas in order to provide a basis for long- range services and facilities planning.	 Despite this policy, the DEIR's Table 3-8 projects that 20 percent of future development will occur outside designated growth areas. Furthermore, the basis of the Table 3-8 projection of future development in each area of the County is not evident. Please explain how this projection was made. The policy does not address or constrain the conversion of habitat to agricultural uses, which will have substantial consequences for special status species. See discussion below in Sections 4 and 5. 	
LU-1.5 Land uses shall be designated to achieve compatibility with adjacent uses.	 Please provide evidence that the proposed land use designations in the 2007 General Plan achieve compatibility with adjacent habitat. Please explain how this policy would ensure that future land use re-designations will achieve compatibility with adjacent habitat. What parameters and values related to habitat protection must be considered in future land use designations, i.e., what are the relevant performance standards to allow a particular land use to be adjacent to habitat? 	
LU-1.6 Standards and procedures to assure proper levels of review of development siting, design, and landscaping shall be developed.	 This policy does not actually identify the standards and procedures or explain what "proper levels of review" would be. Please identify the standards and procedures and explain what the proper level of review would be. Please explain in particular how the absence of 	

Policies Cited As The Basis of Significance	e Co	nclusions Related to Biological Impacts
		discretionary review of routine and ongoing agricultural activity, including cultivation of previously uncultivated land, will ensure that a proper level of review occurs to protect habitat.
LU-1.7 Clustering of residential development to those portions of the property which are most suitable for development and where appropriate infrastructure to support that development exists or can be provided shall be strongly encouraged. Lot line adjustments among four lots or fewer, or the re- subdivision of more than four contiguous lots of record that do not increase the total number of lots may be allowed pursuant to this policy without requirement of a general plan amendment. LU-1.8 Voluntary reduction or limitation of development potential in the rural and agricultural areas through dedication of scenic or conservation easements, Transfer of Development Rights (TDR), and other appropriate techniques shall be encouraged. The Transfer of Development Credit (TDC) in the Big Sur Land Use Plan is a separate program to address development within the critical viewshed. A TDR Program shall be established to provide a systematic, consistent, predictable, and quantitative method for decision-makers to evaluate receiver sites in areas of the unincorporated County with priority for locations within Community Areas and Rural Centers. The program shall include a mechanism to quantitatively evaluate development in light of the policies of the General Plan and the implementing regulations, resources and infrastructure, and the overall quality of the development. Evaluation criteria shall include but are not limited to: a. Site Suitability b. Infrastructure c. Resource Management d. Proximity to a City, Community Area, or Rural Center. e. Environmental Impacts and Potential Mitigation f. Proximity to multiple modes of transportation g. Avoidance of impacts to productive farmland	•	Policies that merely encourage clustering are not enforceable as to any particular development proposal, particularly in the absence of any enforceable, objective standards for identifying portions of the property that are "suitable" for development. Please explain how this policy could be enforced to protect habitat. The policy does not create any enforceable mandate because it depends on voluntary measures. Neither the TDR program nor the "other appropriate techniques" are spelled out. Please explain how protection of biological resources will be "quantitatively" evaluated and how these values will be weighed against other criteria. Please explain how, in the absence of any details, the DEIR determined that this program will meaningfully contribute to avoidance of impacts to biological resources.
LU-1.9 Infill of vacant non-agricultural lands in existing developed areas and new development within designated urban service areas are a priority. Infill development shall be compatible with surrounding land use and development.	•	This policy does not explain how infill will be made a priority. Please explain how this prioritization would work in the context of a decision whether to approve a specific proposed development project that is an infill project. Please also explain how this prioritization would work in the context of a decision whether to approve a specific proposed development project that is <i>not</i> an infill project.
	•	Please explain now, in the absence of any details about

Policies Cited As The Basis of Significance Conclusions Related to Biological Impacts			
	how prioritization is to work, the DEIR determined that this program will meaningfully contribute to avoidance of impacts to biological resources.		
The DEIR states at page 4.9-90 that "development on properties with residential land use designations location within the Toro Area Plan along the Highway 68 corridor, Greater Salinas Area Plan north of the City of Salinas between Williams Road and Highway 101, and the North County Area Plan are limited to the first single family home on a legal lot of record. Creation of new lots in the Carmel Valley Area is capped at 266 new lots."	 Table 3-8 shows for Toro that there are only 251 vacant residential lots, but projects 541 new potential units. Please explain this. 		
OPEN SPACE POLICIES RELATED TO GOAL OS-1, RETAIN THE CHARACTER AND NATURAL BEAUTY OF MONTEREY COUNTY BY PRESERVING, CONSERVING, AND MAINTAINING UNIQUE PHYSICAL FEATURES, NATURAL RESOURCES, AND AGRICULTURAL OPERATIONS. These policies were identified as one basis for the DEIR's conclusion that impacts to movement corridors and nursery sites would be less than significant through 2030. DEIR, pp. 4.9-90.	• Since the express purpose of these policies is primarily to protect viewsheds rather than biological resources, any benefits to biological resources would be incidental. See specific comments below.		
 OS-1.3 To preserve the County's scenic qualities, ridgeline development shall not be allowed. An exception to this policy may be made only after publicly noticed hearing and provided the following findings can be made: a. The ridgeline development will not create a substantially adverse visual impact when viewed from a common public viewing area; and, b. That the proposed development better achieves the goals, policies and objectives of the Monterey County General Plan and applicable area plan than other development alternative; or, c. There is no feasible alternative to the ridgeline development. Pursuant to Policy OS-1.6, in areas subject to specific plans, the ridgeline policies and regulations of the applicable specific plan shall govern. 	 This policy is focused on scenic rather than biological resources, including movement corridors. It permits exceptions based primarily on whether there are adverse impacts to scenic resources. The other criteria for exceptions are not enforceable because there are no objectives specified for identifying the relevant "development alternatives." Please explain how development alternatives would be identified for a project whose proponent seeks to develop a particular ridgeline parcel with a particular use. How will the County use this policy to ban any development alternatives if the proponent does not own or wish to develop alternative parcels or does not wish to consider alternative uses for a ridgeline parcel. Furthermore, there are no objective standards for determining whether "development alternatives" will "better achieves the goals, policies and objectives of the Monterey County General Plan and applicable area plan." As written, any such determination will be an exercise in standardless discretion and cannot be said to protect biological resources, including movement corridors. Please explain how "feasible alternatives" to ridgeline development would be determined. Would feasibility be determined with reference to a particular development proponent's economic situation? If so, how can the policy prevent ridgeline development by a proponent who 		

Policies Cited As The Basis of Significance	e Co	nclusions Related to Biological Impacts	
OS-1.4 Criteria shall be developed to guide the design and construction of ridgeline development where such development has been proposed pursuant to Policy OS-1.3.	•	Since the criteria have not been developed, there are no enforceable standards on the basis of which the DEIR can conclude that this policy would protect biological resources, including movement corridors.	
OS-1.5 New subdivisions shall avoid lot configurations which create building sites that will constitute ridgeline development. Siting of new development visible from private viewing areas may be taken into consideration during the subdivision process.	•	This policy is focused on scenic rather than biological resources, including movement corridors.	
OS-1.6 In areas subject to specific plans, the ridgeline policies and regulations of the applicable specific plan shall govern. Each specific plan shall address viewshed issues, including ridgeline development as part of the plan, including but not limited to provisions for setbacks, landscaping, height limits, or open space buffers.	•	This policy is focused on scenic rather than biological resources, including movement corridors. The policy contains no performance standards.	
OS-1.7 A voluntary, transfer of development rights program to direct development away from areas with unique visual or natural features, critical habitat, or prime agricultural soils shall be established.	•	Since the program has not been developed or specified in any detail whatsoever, there are no enforceable standards on the basis of which the DEIR can conclude that this policy would protect biological resources, including movement corridors. A voluntary program will not create an enforceable mandate to protect any particular resource.	75
OS-1.8 Programs to encourage clustering development in rural and agricultural areas to maximize access to infrastructure, protect prime agricultural land, and reduce impacts to designated visually sensitive and critical habitat areas shall be established.	•	Since the programs have not been developed or specified in any detail whatsoever, there are no enforceable standards on the basis of which the DEIR can conclude that this policy would protect biological resources, including movement corridors or critical habitat. Programs that merely encourage clustering will not create an enforceable mandate to protect any particular resource. Please explain how the unspecified programs would operate to bar development projects that impair movement corridors, giving examples of programs that may be developed. Please explain why the example programs should not be adopted as mitigation measures for the 2007 General Plan.	
OPEN SPACE POLICIES RELATED TO GOAL OS 3, PREVENT SOIL EROSION TO CONSERVE SOILS AND ENHANCE WATER QUALITY. These policies are identified as one basis for concluding that impacts to special status species (OS 3.5) and habitat (OS 3.1 to 3.9) would be less than significant.	•	Please see comments from M.R. Wolfe and Associates regarding erosion and sedimentation policies. Policies OS 3.1 to 3.9 lack enforceable performance standards and examples of measures that would be imposed on particular development projects. Some of the policies are not enforceable because they call for voluntary measures or merely for supporting, encouraging, or cooperating with unspecified programs and activities. Policy OS 3.9 postpones any action to address cumulative sediment impacts until a study is conducted and some unspecified program is developed. Please explain how the DEIR can conclude on the basis of this deferred program that cumulative sedimentation impacts will be	

Policies Cited As The Basis of Significance	onclusions Related to Biological Im	pacts
	avoided	
	avoided.	
Policies Related to Goal OS 4, PROTECT AND CONSERVE THE QUALITY OF COASTAL, MARINE, AND RIVER ENVIRONMENTS, AS APPLIED IN AREAS NOT IN THE COASTAL ZONE. These policies were identified as one basis for the DEIR's conclusion that impacts to special status species (OS 4.1 to 4.3), habitat (OS 4.2 and 4.3) and movement corridors and nursery sites (OS 4.3) would be less than significant through 2030.	As noted below, these policies do not actu County or development proponents to com regulations that would not otherwise be ap	ally require the ply with any plicable.
OS-4.1 Federal and State designated native marine and fresh water species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant shall be protected. Species designated in Area Plans shall also be protected.	No programs, specific activities, or permit are identified that would protect designate. Please explain what programs, specific act permitting constraints would be required o development proponents by this policy. Pl examples of programs, specific activities, o constraints.	ing constraints d species. ivities, or f the County or lease give or permitting
OS-4.2 Direct and indirect discharges of harmful substances into marine waters, rivers or streams shall not exceed state or federal standards.	This policy simply affirms the existence of regulatory programs over which the Count unlikely to have any jurisdiction. Please e action this policy requires the County to ta explain in particular how this policy would with respect to activities that do not requir including routine and ongoing agricultural development in the winery corridor.	Tother75y itself isxplain whatke. Pleasel be appliede permits,activity and
OS-4.3 Estuaries, salt and fresh water marshes, tide pools, wetlands, sloughs, river and stream mouth areas, plus all waterways that drain and have impact on State designated Areas of Special Biological Significance (ASBS) shall be protected, maintained, and preserved in accordance with state and federal water quality regulations.	This policy simply affirms the existence of regulatory programs over which the Count unlikely to have any jurisdiction. Please e action this policy requires the County to ta explain in particular how this policy would with respect to activities that do not requir including routine and ongoing agricultural development in the winery corridor.	other y itself is xplain what ke. Please l be applied e permits, activity and
Deliging related to Cool OS 5 CONSERVE		
DESIGNATED CRITICAL HABITATS FOR LISTED PLANT AND ANIMAL SPECIES DESIGNATED AS FEDERAL OR STATE		
THREATENED OR ENDANGERED SPECIES		
IN AREA PLANS. These policies were identified		
as one basis for the DEIR's conclusion that impacts		
to special status species (OS 5.1 to 5.18), habitat		
(OS 5.5, 5.6, 5.11 to 5.15) and movement corridors		
and nursery sites (OS 5.11, 5.13, 5.17) would be		
less than significant through 2030.		
US-5.1 The extent and acreages of the designated	No explanation is provided as to how the r	napped
or endangered plants or wildlife species shall be	Information will be used. Please explain.	tion monning
inventoried to the extent feasible and manned in	has not already been undertaken in connect	tion with the
GIS. Conservation of these threatened and	development of land use designations in th	tion with the the 2007 General

Policies Cited As The Basis of Significance	e Conclusions Related to Biological Impacts]
endangered plants shall be promoted.	 Plan. In the absence of a systematic review of this information, please explain how the land use designations can avoid authorizing development in areas that will result in impacts to special status species, loss of habitat, and impacts to movement corridors. Please explain what specific activities, programs, or permitting constraints would be required in order to "promote" conservation of threatened and endangered plants. Please explain why the policy does not require the promotion of the conservation of threatened and endangered wildlife species (as opposed to plants). 	
OS-5.2 The extent and acreages of the potentially suitable habitat for special status plant and wildlife species shall be inventoried to the extent feasible and mapped in GIS. Conservation of special status species shall be promoted as provided in the Area Plans.	 No explanation is provided as to how the mapped information will be used. Please explain. Please explain why suitable habitat designation mapping has not already been undertaken in connection with the development of land use designations in the 2007 General Plan. In the absence of a systematic review of this information, please explain how the land use designations can avoid authorizing development in areas that will result in impacts to special status species, loss of habitat, and impacts to movement corridors. Please explain what specific activities, programs, or permitting constraints would be required in order to "promote" conservation of threatened and endangered plants. 	75
OS-5.3 Development shall be carefully planned to provide for the conservation and maintenance of designated critical habitat of plant and animal species listed by federal agencies as threatened or endangered.	 Please explain whether and how the land use designations in the 2007 General Plan were developed in response to designated critical habitat. What specific mapping was conducted to ensure that land use designations did not conflict with critical habitat? If critical habitat designation was not considered and/or mapping was not conducted, why not? If critical habitat designations, please explain in light of Policy OS 5.4 (calling for avoidance of development in critical habitat areas) how the County determined that sufficient land would be available for development in appropriate places. Please explain how this policy would affect, if at all, future development activities that do not require discretionary permits or any permits at all, including development in the winery corridor and conversion of habitat to agriculture. 	
OS-5.4 Development shall avoid impacts to State and federally listed plant and animal species and designated critical habitat for federally listed species. Measures may include but are not limited to: a. clustering lots for development to avoid designated critical habitat areas,	 Please explain what measures may be taken when an entire development project is within a critical habitat area and clustering and conservation easements are not available measures. Please explain what measures this policy would require other than those required by regulations over which the 	

Policies Cited As The Basis of Significance	e Conclusions Related to Biological Impacts	
 b. dedications of permanent conservation easements; or c. other appropriate means. Where new development cannot avoid critical habitat, consultation with United States Fish and Wildlife Services (USFWS) may be required and impacts may be mitigated by expanding the resource elsewhere on-site or within close proximity off-site. Final mitigation requirements would be determined by USFWS. 	County has no jurisdiction. What, if anything, does this policy add to the existing regulatory regime?	
OS-5.5 Landowners and developers shall be encouraged to preserve the integrity of existing terrain and native vegetation in visually sensitive areas such as hillsides, ridges, and watersheds. Routine and On-going Agriculture shall be exempt from this policy.	Policies that encourage action do not create enforceable mandates. Please explain what activities, programs, or development limitations would be undertaken in response to this policy, giving examples.	
OS-5.6 Native and native compatible species, especially drought resistant species, shall be utilized in fulfilling landscaping requirements.	 Please identify the source of the "landscaping requirements" to which this policy refers. Does the policy require use of native and native compatible species, especially drought resistant species, for all landscaping for residential development or commercial development projects? Please explain how landscaping requirements would lead to protection of special status species, habitat, or movement corridors, giving examples. 	D
OS-5.7 Proposals for harvesting commercially valuable timber or as a part of a Timberland Conversion Project (as defined by the California Department of Forestry) shall: a. include filing of a Timber Harvest Plan that provides for selective, sustained yield harvesting and reforestation, and erosion control; b. consider opportunities for concurrent and subsequent use of publicly owned timber land for public recreation; c. require approval by the California Department of Forestry; e. complete environmental review by the County and other appropriate agencies; and f. comply with the resource protection goals and policies of this General Plan	 Please explain what measures this policy would require other than those required by regulations over which the County has no jurisdiction. What, if anything, does this policy add to the existing regulatory regime? Please identify the "resource protection goals and policies of this General Plan" with which timber harvesting proposals would have to comply. How does this provision add anything to those policies? 	
OS-5.8 Small-scale milling operations may be allowed subject to compatibility with resource protection policies and the peace of adjacent residences.	• Please identify the "resource protection policies" with which milling operations would have to comply and explain what constitutes "compatibility." How does this provision add anything to those policies?	
OS-5.9 Tree removal that requires a permit shall be established by Area Plans.	 Please identify any area plans that do not already contain a tree removal permitting requirement. Why have tree removal permitting policies not been established for all area plans as part of the 2007 General 	

	 Plan? What performance standards, if any, will tree removal policies have to meet? How will this policy be coordinated with Mitigation Measure BIO 2.2, calling for an Oak Woodlands Mitigation Program? In light of the absence of performance standards, on what basis does the DEIR identify this policy as a basis for concluding that impacts will be less than significant? 	-
 OS-5.10 Regulations for tree removal, including Timberland Conversion, shall be established and maintained by ordinance implementing Area Plan policies that address the following: a. Criteria when a permit is required including: 1. number of trees, 2. minimum size of tree, 3. Post Timberland conversion land-use b. How size is measured for each protected species of tree, and what constitutes a landmark tree depending on the rate of growth for that species. c. Hazardous trees d. Pest and disease abatement e. Replacement criteria. f. Ensure minimal removal 	 What performance standards, if any, will tree removal ordinances have to meet? (Note that the "criteria" listed in this policy are not in fact standards, but merely the identification of parameters without any value ranges specified. A parameter without values does not constitute a performance standard. It would be possible to devise regulations consistent with this policy that permit removal of every tree in the area.) How will this policy be coordinated with Mitigation Measure BIO 2.2, calling for an Oak Woodlands Mitigation Program? In light of the absence of performance standards, on what basis does the DEIR identify this policy as a basis for concluding that impacts will be less than significant? 	-
OS-5.11 Conservation of large, continuous expanses of native trees and vegetation shall be promoted as the most suitable habitat for maintaining abundant and diverse wildlife.	 Please explain what specific activities, programs, or development constraints would be required in order to "promote" conservation under this policy. Please identify the objective standards for determining whether an expanse of native trees and vegetation is sufficiently large and continuous to require that its conservation be promoted. Please explain whether and how this policy would be implemented to constrain or bar a particular development proposal. How will this policy be coordinated with Mitigation Measure BIO 2.2, calling for an Oak Woodlands Mitigation Program? In light of the lack of mandatory language or objective standards, please explain how this policy supports the DEIR's conclusion that impacts will be less than significant. 	. 75
OS-5.12 The California Department of Fish and Game shall be consulted and appropriate measures shall be taken to protect Areas of Special Biological Significance (ASBS) for State and federally listed species. OS-5.13 Efforts to obtain and preserve natural areas	 Please explain who will be required to initiate consultation and in what context. Please provide examples and standards for "appropriate measures." In light of the lack of examples or objective standards, please explain how this policy supports the DEIR's conclusion that impacts will be less than significant. Policies that merely encourage efforts do not create 	-

Policies Cited As The Basis of Significance	e Conclusions Related to Biological Impacts
interest and restrict incompatible uses from encroaching upon them shall be encouraged.	• Please explain how "natural areas of particular biologic, scientific, or educational interest" will be identified, by whom, and in what context. Who will bear responsibility for implementing this policy? What resources will be devoted to it?
OS-5.14 Policies and procedures that encourage exclusion and control or eradication of invasive exotic plants and pests shall be established. Sale of such items within Monterey County shall be discouraged.	 Who will establish policies and procedures? When will this occur? What steps will be taken in the interim? Please identify examples of and standards for policies and procedures that would encourage exclusion and control or eradication of invasive exotic plants and pests. Please explain how sale of such items would be discouraged.
OS-5.15 A fee waiver program for environmental restoration projects shall be established.	 According to what objective standard will fees be waived? To what extent will fee waivers actually result in environmental restoration projects that would not otherwise have occurred? Who is responsible to develop the fee waiver program and on what deadline?
OS-5.16 Any development project that could potentially disturb a special status species or its critical habitat identified by the County requiring analysis or identified for protection under an adopted Area Plan shall be required to conduct a biological survey of the site. Based on the findings of this report, additional focused surveys for certain species may be required. This report, and any mitigation measures recommended in the report, shall be used as a basis for CEQA documentation for the project except if the County, in the exercise of its independent judgment, requires additional analysis. If sensitive biological resources are found on the site, the project biologist shall recommend measures necessary to reduce impacts to a less than significant level. All feasible measures shall be incorporated as conditions of approval in any permit issued. An ordinance establishing minimum standards for a biological report shall be enacted.	 Except for the proposed ordinance setting minimum standards for biological reports, this policy does not appear to require anything other than what is already mandated by CEQA for review of development projects. Please explain what measures this policy would require other than those already required by CEQA. What, if anything, does this policy add to the existing regulatory regime? CEQA considers mitigation proposals that call for compliance with recommendations in a report that has yet to be undertaken and for which standards have not been specified to be improperly deferred. In view of the deferral of the only potentially substantive portion of the policy, the proposed standards for adequate biological studies, how does this policy support the DEIR's conclusion that impacts will be mitigated?
OS-5.17 The County shall prepare, adopt, and implement a program that allows projects to mitigate the loss of critical habitat. The program may include ratios, payment of fees, or some other mechanisms in consultation with responsible state and/or federal regulatory agencies. Until such time as the program has been established, projects shall mitigate the loss of critical habitat on an individual basis in consultation with responsible state and/or federal regulatory agencies. A Community Plan or Rural Center Plan that includes a mitigation program shall not be subject to this policy.	 This policy does not appear to require any action that is not already required by the ESA or the CESA. Please explain what additional requirements this policy would impose, if any. This policy does not propose and performance standards for habitat loss mitigation. At most, it identifies parameters that might be part of such a program, but without specifying values for those parameters. Without values, parameters are not standards. In view of the lack of any performance standards, how does this policy support the DEIR's conclusion that impacts will be mitigated?

Policies Cited As The Basis of Significance	e Conclusions Related to Biological Impacts	
	• Please identify the performance standards that must be met by mitigation program for a Community Plan or Rural Center Plan. If there are no such standards, how does this policy support the DEIR's conclusion that impacts related to critical habitat loss from Community Plan or Rural Center Plan will be mitigated?	
OS-5.18 Prior to disturbing any federal or state jurisdictional areas, all applicable federal and state permitting requirements shall be met, including all mitigation measures for development of jurisdictional areas and associated riparian habitats.	• This policy does not appear to require any action that is not already required by regulations over which the County has no jurisdiction. Please explain what additional requirements this policy would impose, if any.	
Policies related to Goal PS 11, MAINTAIN AND ENHANCE THE COUNTY'S PARKS AND TRAILS SYSTEM IN ORDER TO PROVIDE RECREATIONAL OPPORTUNITIES, PRESERVE NATURAL SCENIC RESOURCES AND SIGNIFICANT WILDLIFE HABITATS, AND GOOD STEWARDSHIP OF OPEN SPACE RESOURCES. These policies were identified as one basis for the DEIR's conclusion that impacts to special status species (PS 1.11, 11.12) and habitat (PS 11.11, 11.12) would be less than significant through 2030.		75
PS-11.11 Management plans for all County park and recreational areas and facilities, emphasizing protection of environmental resources and best management practices for open space on these lands, shall be prepared and adopted.	 Please identify examples of and standards for management plan elements. Who will prepare management plans and on what timetable? What measures will be taken in the interim to ensure that Goal PS 11 will be met? In light of the lack of examples or objective standards, please explain how this policy supports the DEIR's conclusion that impacts will be less than significant. 	-
PS-11.12 Parks for more active uses shall be distinguished from parks and open space areas rich in biological resources suitable for more passive enjoyment of those resources. Management Plans shall reflect these differences and specify appropriate management for each use.	 Please explain what standards will be used to distinguish active and passive use parks. Please identify examples of and standards for management plan elements that would be appropriate for active parks and passive parks. In light of the lack of examples or objective standards, please explain how this policy supports the DEIR's conclusion that impacts will be less than significant. 	-
Policies related to Goal PS 2, ASSURE AN ADEQUATE AND SAFE WATER SUPPLY TO MEET THE COUNTY'S CURRENT AND LONG-TERM NEEDS. This policy was identified as one basis for the DEIR's conclusion that impacts to habitat (PS 2.8) would be less than significant through 2030. PS-2.8 The County shall require that all projects be	 Please explain how this policy is related to the "runoff 	-
designed to maintain or increase the site's pre-	performance standards" that are to be developed under	

Policies Cited As The Basis of Significance	Conclusions Related to Biological Impacts
development absorption of rainfall (minimize runoff), and to recharge groundwater where appropriate. Implementation would include standards that could regulate impervious surfaces, vary by project type, land use, soils and area characteristics, and provide for water impoundments (retention/detention structures), protecting and planting vegetation, use of permeable paving materials, bioswales, water gardens, and cisterns, and other measures to increase runoff retention, protect water quality, and enhance groundwater recharge.	 Policy S 3.5. Will the runoff performance standards to be developed under Policy S 3.5 permit runoff to be increased despite this policy? Please identify the standards that could regulate impervious surfaces, vary by project type, land use, soils and area characteristics, and provide for water impoundments (retention/detention structures). Please explain how this policy supports the DEIR's conclusion that habitat impacts will be less than significant, particularly given the uncertainty as to the runoff performance standards.
Policies related to Goal AG 5, ENSURE COMPATIBILITY BETWEEN THE COUNTY'S AGRICULTURAL USES AND ENVIRONMENTAL RESOURCES. This policy was identified as one basis for the DEIR's conclusion that impacts to habitat (AG 5.1, 5.2) would be less than significant through 2030.	
AG–5.1 Programs that reduce soil erosion and increase soil productivity shall be supported.	 The policy does not identify or mandate any particular program. Policies that "support," "promote," or "encourage" activities and programs do not create any enforceable constraints on development projects. Please identify performance standards or and examples of programs to reduce soil erosion. In light of the absence of standards, examples, and mandatory action, please explain how this policy supports the DEIR's conclusion that habitat impacts will be less than significant.
AG–5.2 Policies and programs to protect and enhance surface water and groundwater resources shall be promoted, but shall not be inconsistent with State and federal regulations.	 The policy does not identify or mandate any particular program. Policies that "support," "promote," or "encourage" activities and programs do not create any enforceable constraints on development projects. Please identify performance standards or and examples of programs to protect and enhance surface water and groundwater resources. In light of the absence of standards, examples, and mandatory action, please explain how this policy supports the DEIR's conclusion that habitat impacts will be less than significant.
Policies related to Goal AG 4, SUPPORT THE DEVELOPMENT OF A FULLY INTEGRATED WINE INDUSTRY. This policy was identified as one basis for the DEIR's conclusion that impacts to movement corridors (AG 4.3) would be less than significant through 2030.	• Please identify the guidelines and standards to encourage

Policies Cited As The Basis of Significance	e Conclusions Related to Biological Impacts]
Winery Corridor Plan (AWCP) that establishes guidelines and standards to encourage development of the wine industry within the designated corridor.	 development of the wine industry within the designated corridor. Please explain whether and how the guidelines and standards to be developed under this policy will regulate conversion of habitat to vineyards or whether the policy will be directed only at winery and visitor serving development. Please explain whether and how the DEIR determined that encouraging the wine industry to develop within the designated corridor would beneficially affect movement corridors, particularly in light of the fact that the winery corridor interrupts the east-west movement corridor across the Salinas Valley. In light of the absence of standards, examples, and mandatory action, please explain how this policy supports the DEIR's conclusion that habitat impacts will be less than significant Please explain how this policy will actually have any significant effect of confining winery development within ay particular area in view of Policy AG 4.4, which provides that "these policies do not limit the development of wineries within or outside of the designated winery corridor." 	
Policies related to Goal S 2, REDUCE THE AMOUNT OF NEW DEVELOPMENT IN FLOODPLAINS, AND FOR ANY DEVELOPMENT THAT DOES OCCUR, MINIMIZE THE RISK FROM FLOODING AND EROSION. This policy was identified as one basis for the DEIR's conclusion that impacts to movement corridors (S 2.1 to 2.8) would be less than significant through 2030		- 75
S-2.1 Land use planning to avoid incompatible structural development in flood prone areas shall be the primary means of minimizing risk from flood hazards.	• Please explain how a policy designed to avoid structural development but that still permits agricultural use will act to preserve movement corridors.	-
S-2.2 Uses such as agriculture, passive to low intensity recreation, and open space/conservation are the most acceptable land uses in the 100-year floodplain to lessen the potential for loss of life, injury, property damage, and economic and social dislocations to the maximum extent feasible.	 This policy does not appear to authorize any activities, programs, or development constraints. Please explain how it would be implemented. For example, would this policy <i>bar</i> structural development in the flood-plain? If not, why not? How, and in what context (e.g., development review?), will the County determine whether proposed uses lessen the potential for loss of life, injury, property damage, and economic and social dislocations to the maximum extent feasible. How will feasibility be determined, technically or economically? Please identify the referenced ordinances established by 	-
grading, and construction, within designated 100- year floodplain areas shall conform to the guidelines	the County Board of Supervisors. If they have not been established, please explain what these ordinances will	

of FEMA and the National Flood Insurance Program and ordinances established by the County Board of Supervisors. With the exception of the construction of structures, Routine and On-going Agricultural activities shall be exempt from this policy.	 Provide. Please identify the specific provisions of the guidelines of FEMA and the National Flood Insurance Program and ordinances established by the County Board of Supervisors from which Routine and On-going Agricultural activities shall be exempt. Please explain how the exemption of Routine and On-going Agricultural activities will affect movement corridors. 	
S-2.4 Monterey County shall strive to improve its National Flood Insurance Program Community Rating System classification.	• Please explain how this policy will affect movement corridors.	
S-2.5 In Community Areas, the suitability of new development in the FEMA defined 100-year floodplain shall be addressed through the Community Plan process in consultation with the Monterey County Water Resources Agency. The County shall prioritize, support, encourage, and participate to the greatest extent feasible in collaborative efforts to address flooding in or around Community Areas in order to facilitate development identified in the Community planning process.	 Please identify standards for and examples of County activities to prioritize, support, encourage, and participate to the greatest extent feasible in collaborative efforts to address flooding in or around Community Areas in order to facilitate development identified in the Community planning process Please explain how this policy will affect movement corridors, particularly in view of the probability that movement corridors will not include Community Areas. 	75
S-2.6 Drainage and flood control improvements needed to mitigate flood hazard impacts associated with potential development in the 100-year floodplain shall be determined prior to approval of new development and shall be constructed concurrently with the development.	 Will this policy apply to agriculture? If not, why not? How will this policy affect movement corridors? 	
S-2.7 Outside Community Areas, subdivisions that create lots where the only developable sites for new structures are within the 100-year floodplain shall be discouraged.	• Policies that merely 'discourage" activities do not create an enforceable mandate. Please explain whether and how this policy could be used to deny a development permit.	
S-2.8 Alternative project designs and densities to minimize development in the floodplain shall be considered and evaluated.	 The policy does not specify who is responsible to implement it. Please explain what constraints, if any, this policy would impose on the development review process. Please explain whether this policy would be applied to projects fro which no discretionary permit is required, including wineries and conversion of habitat for agriculture. Please explain how the County or a development proponent would formulate the objectives to be satisfied by the "alternative" project designs and densities that are to be considered. If the County does not formulate these objectives, please explain how the County would avoid findings that there is no alternative to narrowly designed objectives. 	

Policies Cited As The Basis of Significance	Conclusions Related to Biological Impacts
Polices from the CACHAGUA AREA PLAN. These policies were identified as one basis for the DEIR's conclusion that impacts to special status species, habitat, and movement corridors would be less than significant through 2030.	
Ventana Wilderness shall not impact the purpose of the wilderness areas.	 Please identify standards and examples of allowable development. In light of the absence of standards and examples for allowable development, please explain how the policy supports the DEIR's conclusion that impact will be less than significant.
CACH-3.3 Alteration of hillsides and natural landforms caused by cutting, filling, grading or vegetation removal shall be minimized through sensitive siting and design of all improvements and maximum feasible restoration. Where cut and fill is unavoidable on steep slopes, disturbed areas shall be re-vegetated.	 Please identify objective standards for "sensitive siting and design of all improvements and maximum feasible restoration" The policy does not create an enforceable mandate because there are no standards to define "unavoidable" cut and fill (relative to what objectives?) and "maximum feasible restoration" (feasible within what constraints?) Please explain how this policy supports a finding of less than significant impacts in view of the lack of objective standards and enforceable mandates.
CACH-3.5 Mining or commercial timber, or other resource production operations that include methods to screen areas, vehicle access, impacts on roadways, noise impacts, measures to control on site and off site drainage and reclamation plans for mined or quarried areas may be considered in the Planning Area. Impacts on watersheds, local roads, flora and fauna shall be mitigated.	 Please explain what is meant by "methods to screen areas, vehicle access, impacts on roadways, noise impacts, measures to control on site and off site drainage and reclamation plans for mined or quarried areas." The sentence is not clear. What particular impacts are referred to in stating that "impacts on watersheds, local roads, flora and fauna shall be mitigated?" How will those impacts be mitigated? Please identify objective standards and examples of possible mitigation methods. Please explain how the policy supports a finding of less than significant impacts in view of the lack of standards and examples for mitigation.
CACH-3.6 In cooperation with the United States Forest Service and private property owners, work to ensure that Santa Lucia fir are protected due to their significance to the natural history of the Planning Area.	 No responsibility is assigned to implement this policy and no resources are identified. Please explain. No development constraints are identified. Please explain if this policy would constrain development at all. In view of the lack of any enforceable mandate, any assignment of responsibility, and any constraints on development, please explain how this policy supports a finding of less than significant impacts.
CACH-3.7 New development shall be sited to protect riparian vegetation and threatened fish species, minimize erosion, and preserve the visual aspects of the Carmel and Arroyo Seco Rivers. Private property owners are encouraged to preserve the Carmel River in its natural state, to prevent erosion and protect fishery habitat. Fishery habitats located above the Los Padres and San Clemente	 The term "minimize erosion" is not defined. Please specify the standards for acceptable levels of erosion. Policies that "support," "promote," or "encourage" activities and programs do not create enforceable constraints on development projects. No responsibility is assigned for ensuring that fishery habitats are maintained in a productive state accessible to fish populations, especially steelhead.

Policies Cited As The Basis of Significance	Conclusions Related to Biological Impacts	
Dams shall be maintained in a productive state accessible to fish populations, especially steelhead.	• In view of the lack of any standards for erosion, any assignment of responsibility, and any constraints on development, please explain how this policy supports a finding of less than significant impacts.	
Deliges from the CADMEL VALLEY MASTED		
Polices from the CARMEL VALLEY MASTER PLAN. These policies were identified as one basis for the DEIR's conclusion that impacts to special status species, habitat, and movement corridors would be less than significant through 2030.		
CV-3.4 Alteration of hillsides and natural landforms caused by cutting, filling, grading or vegetation removal shall be minimized through sensitive siting and design of all improvements and maximum feasible restoration including botanically appropriate landscaping. Where cut and fill is unavoidable on steep slopes, disturbed areas shall be revegetated.	 Please identify objective standards for "sensitive siting and design of all improvements and maximum feasible restoration" The policy does not create an enforceable mandate because there are no standards to define "unavoidable" cut and fill (relative to what objectives?) and "maximum feasible restoration" (feasible within what constraints?) Please explain how this policy supports a finding of less than significant impacts in view of the lack of objective standards and enforceable mandates. 	75
 CV-3.7 Areas of biological significance shall be identified and preserved as open space. These include, but are not limited to: a. The redwood community of Robinson Canyon; b. The riparian community and redwood community of Garzas Creek; c. All wetlands, including marshes, seeps and springs (restricted occurrence, sensitivity, outstanding wildlife value). d. Native bunchgrass stands and natural meadows (restricted occurrence and sensitivity). e. Cliffs, rock outcrops and unusual geologic substrates (restricted occurrence). f. Ridgelines and wildlife migration routes (wildlife value). When a parcel cannot be developed because of this policy, a low-density, clustered development (but no subdivision) may be approved on those portions of the land not biologically significant or on a portion of the land adjoining existing development so that the development will not diminish the visual quality of such parcels or upset the natural functioning of the ecosystem in which the parcel is located. 	 Please identify objective criteria for determining areas of biological significance. Please identify the boundaries of the areas identified in subsections a through f of the policy. If boundaries cannot be identified, please explain the criteria by which the areas will be designated. Please explain what is meant by the phrases in parentheses in subsections a through f, including restricted occurrence, sensitivity, and outstanding wildlife value. Please explain when the designation will occur and what agency will make the designation. Please explain what rights will be afforded to landowners in the designation process. Please explain what interim measures will be put in place to implement this policy pending designation of areas of biological significance. Please identify the basis on which it will be determined if a development will upset the natural functioning of the ecosystem. In view of the lack of standards and procedures to implement this policy, please explain how it supports a finding of less than significant impacts. 	75
CV-3.8 Development shall be sited to protect riparian vegetation, minimize erosion, and preserve the visual aspects of the Carmel River. In places where the riparian vegetation no longer exists, it should be planted to a width of 150 feet from the river bank, or the face of adjacent bluffs, whichever is less. Density may be transferred from this area to other areas within a lot.	 Please identify the objective standards for siting development to protect riparian vegetation, minimize erosion, and preserve the visual aspects of the Carmel River. Please explain under what circumstances this policy would be implemented to bar any development of a parcel. 	

Policies Cited As The Basis of Significance	Conclusions Related to Biological Impacts	
	• Please explain why a similar policy is not proposed for all other riparian corridors in the County	
CV-3.9 Willow cover along the banks and bed of the Carmel River shall be maintained in a natural state for erosion control. Constructing levees, altering the course of the river, or dredging the river shall only be allowed by permit from the Monterey Peninsula Water Management District or Monterey County.	 Please explain under what circumstances this policy would be implemented to bar any development of a parcel. What standards will be used by the Monterey Peninsula Water Management District or Monterey County in determining whether to issue a permit? Please explain why a similar policy is not proposed for all other riparian corridors in the County. 	
 CV-3.10 Predominant landscaping and erosion control material shall consist of plants native to the valley that are similar in habitat, form, and water requirements. The following guidelines shall apply for landscape and erosion control plans: a. Existing native vegetation should be maintained as much as possible throughout the valley. b. Valley oaks should be incorporated on floodplain terraces. c. Weedy species such as pampas grass and genista shall not be planted in the Valley. d. Eradication plans for weedy species shall be incorporated. e. The chaparral community shall be maintained in its natural state to the maximum extent feasible in order to preserve soil stability and wildlife habitat and also be consistent with fire safety standards. 	 Please explain why a similar policy is not proposed for all other areas in the County. Please explain what portion of landscaping and erosion control material will constitute the "predominant" portion. Please explain the basis for this determination. For example, why does the policy not require that all of landscaping and erosion control material comply? Please explain whether this policy will apply to residential development. If not why not. Please explain whether this policy will apply to developments for which no discretionary permit is required. If so, how will it be implemented. If not, why not? Please explain how "as much as possible" and "the maximum extent feasible" will be determined and whether feasibility and possibility will be determined technically or economically. 	75
CV-3.11 Removal of healthy, native oak, madrone and redwood trees in the Carmel Valley Master Plan Area shall be discouraged. A permit shall be required for the removal of any of these trees with a trunk diameter in excess of 6-inches (6") diameter breast height (d.b.h). Where feasible, trees removed will be replaced at a 1:1 ratio using nursery-grown trees of the same species that are a minimum of 1- gallon in size. Removal without a permit shall result in a minimum fine, equivalent to the retail value of the wood removed plus replacement of 1-gallon, nursery-grown trees at a 2:1 ratio. Exemptions to the above permit requirement shall include: a. tree removal by public utilities, as specified in the California Public Utility Commission's <i>General</i> <i>Order 95</i> , and by governmental agencies. b. emergencies caused by the hazardous or dangerous condition of a tree and requiring immediate action for the safety of life or property, provided the County is notified of the action within ten (10) working days.	 Please explain why a similar policy is not proposed for all other areas in the County. Please explain how the policy will be implemented to "discourage" tree removal. What standards will be used to determine whether to issue a permit to remove trees? What conditions will be imposed on such permits? Please explain how it will be determined whether replacement is feasible and whether feasibility will be determined technically or economically. How will this policy be coordinated with Mitigation Measure BIO 2.2, calling for an Oak Woodlands Mitigation Program? 	
CV-3.12 Open space areas should include a diversity of habitats with special protection given to areas where one habitat grades into another (these ecotones are ecologically important zones) and	 Please explain how, when, and by whom this policy will be implemented. Will this policy require re-designation of the land use 	

areas used by wildlife for access routes to water or feeding grounds. CV-4.1 In order to reduce potential erosion or rapid runoff: a. The amount of land cleared at any one time shall be limited to the area that can be developed during one construction season. b. Motorized vehicles shall be prohibited on the banks or in the bed of the Carmel River, except by permit from the Water Management District or Monterey County. c. Native vegetative cover must be maintained on areas that have the following combination of soils and slope: 1. Santa Lucia shaly clay loam, 30-50% slope (SfF) 2. Santa Lucia-Reliz Association, 30-75% slope (Sg) 3. Cieneba fine gravelly sandy loam, 30-75% slope (ScG) 5. Sheridan coarse sandy loam, 30-75% slope (SoG) 6. Junipero-Sur complex, 50-85% slope (Jc)	 classifications proposed in the 2007 General Plan? If not, how will this policy operate to constrain development and preserve open space? What standards will be used to determine which areas should be preserved in open space? In view of the lack of standards and plans for implementation, please explain how this policy supports a finding that impacts would be less than significant. Please explain why sections "a" and "b" of this policy are not required County-wide. Please explain why native vegetative cover should not be maintained on slopes over 25% or on slopes below 25%. Please explain why requirements for maintenance of native vegetative cover are not proposed for all other areas of the County.
 CV-5.3 Development shall incorporate designs with water reclamation, conservation, and new source production in order to: a. maintain the ecological and economic environment; b. maintain the rural character; and c. create additional water for the area where possible including, but not limited to, on-site stormwater retention and infiltration basins. CV 6.2 Gordens, orshards, row group grazing 	 Please identify standards for designs that will meet the objectives in subsections a through c. Please identify standards for determining whether the objectives in subsections a through c are met. Please explain how, in view of the lack of identified standards, the policy supports a finding that impacts are less than significant.
animals, farm equipment, and farm buildings are part of the heritage and the character of Carmel Valley. This rural agricultural nature should be encouraged, except on slopes of 25-percent (25%) or greater or where it would require the conversion or extensive removal of existing native vegetation.	 Please explain why slope development for agriculture will not cause erosion and sedimentation impacts on slopes <i>less than</i> 25%. Please explain why the 25% slope limitation is encouraged in Carmel Valley but not County-wide. The policy does not create an enforceable mandate because it merely states that conversion and extensive vegetation removal on slopes over 25% should not be encouraged. Nothing in the policy actually bars such slope development.
Polices from the CENTRAL SALINAS VALLEY AREA PLAN. These policies were identified as	

 Policies Cited As The Basis of Significance one basis for the DEIR's conclusion that impacts to special status species, habitat, and movement corridors would be less than significant through 2030. CSV-5.1 Development shall be designed to maintain groundwater recharge capabilities on the property. To protect and maintain areas for groundwater recharge, preservation of riparian habitats, and flood flow capacity, the main channels of the Arroyo Seco River and the Salinas River shall not be encroached on by development. CSV-5.2 Recreation and visitor-serving commercial uses shall only be allowed if it can be proven that: a. areas identified by the Water Resources Agency as prime-groundwater recharge areas can be preserved and protected from sources of pollution as determined by the Director of Environmental Health and the Water Resources Agency; b. proposed development can be phased to ensure that existing groundwater supplies are not committed beyond their safe, long-term yields where such yields can be determined. c. floodways associated with the main channels of aither the Arroyo Seco River or the Salinas River 	 Conclusions Related to Biological Impacts Please identify the geographic extent protected areas in the "main channels." Recharge areas, riparian habitat, and flood flows occur outside of the main channels of the rivers. The riparian habitat and flood flow areas are <i>primarily</i> outside the main channels. Please explain how barring development only from the main channels will be sufficient to meet the stated objectives of protecting and maintaining areas for groundwater recharge, preservation of riparian habitats, and flood flow capacity. Please explain why a similar policy is not proposed County-wide. Please explain why this policy is limited to recreation and visitor-serving commercial uses. Why is it not applied to all uses, including agriculture? Please identify the prime-groundwater recharge areas and the standards by which it will be determined that these areas can be preserved and protected. Please explain how and when safe-yields will be determined. Please explain under what circumstances it will be concluded that safe, long-term yields cannot be determined. Please identify the geographic extent of the floodways to be protected from development. If the geographic extent in the standards is the standards of the standards in the standards is the standard by the set of the floodways to be protected from development. If the geographic extent is the standards of the standards is the standards in the standards in the standards is the standards in the standards in the standards is the standards in the standards in the standards is the standards in the standards in the standards is the standards in the standards in the standards is the standards in the standa	75
for groundwater recharge, preservation of riparian habitats, and flood flow capacity as determined by the Water Resources Agency. d. the proposed development meets both water quality and quantity standards expressed in Title 22 of the California Code of Regulations and <i>Title</i> <i>15.04</i> of the Monterey County Code as determined by the Director of Environmental Health; e. the proposed development meets the minimum standards of the Regional Water Quality Control Basin Plan when sentic systems are proposed and	 Please identify the standards to be used to determine runoff levels that will not cause erosion or adversely effect surface water resources. Please explain why a similar policy is not proposed County-wide. 	
also will not adversely affect groundwater quality, as determined by the Director of Environmental Health; and f. the proposed development will not generate levels of runoff which will either cause erosion or adversely affect surface water resources as determined by the Water Resources Agency.		
I nese policies were identified as one basis for the		l

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Policies Cited As The Basis of Significance DEIR's conclusion that impacts to special status species, habitat, and movement corridors would be less than significant through 2030. Recreation Policy C-1: Monterey County shall establish an oak tree protection program to ensure conservation of existing coastal live oak woodlands in large corridors within a comprehensive open space system. Locate local and regional trails within this system.	 Please identify performance standards for the program, including standards for identification of trees to be protected and for identification of "large corridors within a comprehensive open space system." How will this policy be coordinated with Mitigation Measure BIO 2.2, calling for an Oak Woodlands Mitigation Program? 	
Recreation Policy C-2: All proposed recreational use should be reviewed for compatibility with an adopted Habitat Conservation Plan to insure long- term protection of sensitive resources. Recreational use shall be prohibited if the FORA Board finds that such use could compromise the ability to maintain and preserve an environmentally sensitive resource. Biological Resource Policies A-1 through A-9 together with implementing programs establishes a Habitat Management Plan for Fort Ord.	 Please identify standards for determining "sensitive resources." Please identify the performance standards on the basis of which the FOR A Board will determine if recreational uses compromise the ability to maintain and preserve an environmentally sensitive resource. Please explain why habitat management plans are not established or proposed with the same level of specificity and programmatic detail to protect other areas and resources within the County. See comments on the 	
Biological Resources Policies B-1 through B3 address preservation of sensitive species and habitats not included in the HCP; preservation of identified oak woodlands; and preservation of vernal ponds, riparian corridors, and wetland areas.	 Please explain why similar policies and programs are not proposed to protect sensitive species and habitats throughout the County. For example, please explain why the General Plan does not identify specific oak woodland corridors for protection and require specific mitigation ratios for wetlands and riparian forests in areas other than Fort Ord. 	75
 Biological Resources Policy C-1 through C-3 Biological Resources Policy C-1: The County of Monterey shall encourage grading for projects to be designed to complement surrounding topography and to minimize habitat disturbance. Program C-1.1: The County shall encourage the use of landform grading techniques for 1) projects involving major changes to the existing topography, 2) large projects with several alternative lot and roadway design possibilities, 3) projects with known geological problems areas, or 4) projects with potential drainage problems requiring diverters, dissipaters, debris, basins, etc. 	Programs that merely encourage activities do not create enforceable mandates. Please explain why the policy does not require certain grading techniques.	
Biological Resources Policy C-2: The County shall encourage the preservation and enhancement of native oak woodland elements in the natural and built environments. Refer to Fort Ord Reuse Plan Figure 4.4-1 for general location of oak woodlands of the former Fort Ord. Program C-2.1: The County shall encourage clustering of development wherever possible so that contiguous stands of oak trees can be maintained in	 Programs that merely encourage activities do not create enforceable mandates. Please explain why the policy does not <i>require</i> preservation and enhancement of native oak woodlands through mandatory clustering. Please explain whether the requirement to use oaks and other native plant species will apply to all development projects and whether it will extend to all of a project's landscaping. If not, please explain to which projects this will apply and to what extent. 	

Policies Cited As The Basis of Significance	Conclusions Related to Biological Impacts]
the non-developed natural land areas. Program C-2.2: The County shall apply certain restriction for the preservation of oak and other protected trees in accordance with Chapter 16.60 of Title 16 of the Monterey County Code (ordinance 3420). Program C-2.3: The County shall require the use of oaks and other native plant species for project landscaping. To that end, the County shall recommend collection and propagation of acorns and other plant materials from the former Fort Ord oak woodlands to be used for restoration or as landscape material. Program C-2.4: The County shall provide the following standards for plantings that may occur under oak trees; 1) planting may occur within the drip line of mature trees, but only at a distance of five feet from the trunk and 2) plantings under and around oaks should be selected from the list of approved species compiled by the California Oak Foundation (see Compatible Plants Under and Around Oaks). Program C-2.5: The County shall require that paving within the drip line of preserved oak trees be avoided wherever possible. To minimize paving impacts, the surfaces around tree trunks should be mulched, paving materials should be used that are permeable to water, aeration vents should be installed in impervious pavement, and root zone	How will this policy be coordinated with Mitigation Measure BIO 2.2, calling for an Oak Woodlands Mitigation Program?	75
 Biological Resources Policy C-3: Lighting of outdoor areas shall be minimized and carefully controlled to maintain habitat quality for wildlife in undeveloped natural lands. Street lighting shall be as unobtrusive as practicable and shall be consistent in intensity throughout development areas adjacent to undeveloped natural lands. Program C-3.1: The County shall review lighting and landscape plans for all development applications to ensure consistency with Policy C-3. Biological Resources Policy D-1: The County shall require project applicants to implement a contractor education program that instructs construction workers on the sensitivity of biological resources in the vicinity and provides specifics for certain species that may be recovered and relocated from particular development areas. Program D-1.1: The County shall participate in the preparation of a contractor education program with other Fort Ord land use jurisdictions. The education program should describe the sensitivity of 	 Please explain why this policy is not applied throughout the County. Please explain why these policies are not applied throughout the County. 	
Policies Cited As The Basis of Significance	Conclusions Related to Biological Impacts	
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hiological resources provide guidelines for		
protection of special status biological resources		
during ground disturbing activities at the former		
Fort Ord and outline penalties and enforcement		
actions for take of listed species under Section 9 of		
the Endangered Species Act		
Program D-1 2: The County shall provide project		
applicants with specific information on the protocol		
for recovery and relocation of particular species		
that may be encountered during construction		
activities.		
Biological Resources Policy D-2: The County shall		
encourage and participate in the preparation of		
educational materials through various media		
sources that describe the biological resources on		
the former Fort Ord, discuss the importance of the		
HMP, and emphasize the need to maintain and		
manage the biological resources to maintain the		
uniqueness and biodiversity of the former Fort Ord.		
Program D-2.1: The County shall develop		
interpretive signs for placement in habitat		
management areas. These signs describe resources		
present, how they are important to the former Fort		
Ord, and ways in which these resources are or can		
be protected.		
Program D-2.2: The County shall coordinate		
production of educational materials through the		
CRMP process.		
Program D-2.3: Where development will be		
adjacent to habitat management areas, corridors,		
oak woodlands, or other reserve open space, the		
County shall require project applicants to prepare a		
Homeowner's Brochure which describes the		
importance of the dajacent land areas and provides		
recommendations for tandscaping, and with fre		
wildlife and vegetation in the adjacent habitat		
withinge and vegetation in the dajacent habitat		
natives in the landscape etc.)		
Biological Resources Policy E-1 : The County shall	• Please explain why these policies are not applied	
develop a plan describing how it intends to address	throughout the County	
the interim management of natural land areas for	anoughout the county.	
which the County is designated as the responsible		
party.		
Program E-1.1: The County shall submit to the		
USFWS and CDFG, through the Coordinated		
Resource Management Planning (CRMP) program,		
a plan for implementation of short-term habitat		
management for all natural lands, including		
consideration of funding sources, legal mechanisms		
and a timetable to provide for prompt		
implementation of the following actions to prevent		

Policies Cited As The Basis of Significance Conclusions Related to Biological Impacts				
 degradation of habitat: Control off-road vehicle use in all undeveloped natural land areas. Prevent any unauthorized disturbance in all undeveloped natural land areas, but especially in designated conservation areas and habitat corridors. Prevent the spread of non-native, invasive species that may displace native habitat. Program E-1.2: For natural land areas under County responsibility with partial or no HMP resource conservation or management requirement, but which remain undeveloped, the County shall annually provide the BLM evidence of successful implementation of interim habitat protection measures as specified in Program E-1.1. Biological Resources Policy E-2: The County shall monitor activities that affect all undeveloped natural lands, including, but not limited to conservation areas and habitat corridors as specified and assigned in the HMP. Program E-2.1: The County shall conduct Land Use Status Monitoring in accordance with the methods prescribed in the Implementing Agreement for all former Fort Ord land under County responsibility that contains any natural lands identified by the baseline studies. This monitoring will provide data on the amount (in acres) and location of natural land (by habitat type) remaining undeveloped and the amount (in acres) and location of natural land (by habitat type) disturbed by development since the date of land transfer for as long as the Implementing Agreement is in effect. 		75		
Polices from the GREATER MONTEREY PENINSULA AREA PLAN. These policies were identified as one basis for the DEIR's conclusion that impacts to special status species, habitat, and movement corridors would be less than significant through 2030.				
GMP-3.4 Plant materials shall be used to integrate manmade and natural environments, to screen or soften the visual impact of new development, and to provide diversity in developed areas.	 Please explain how this policy supports the conclusion that impacts to species, habitat, and movement corridors will be less than significant. Please explain why this policy does not require the use of native plants. 			
GMP-3.5 Development in the Greater Monterey Peninsula area shall be designed to prevent, to the maximum extent feasible, the destruction of native oak, pine, and redwood forest habitat and wetlands in the Greater Monterey Peninsula Area Plan area.	 Please explain how the maximum extent feasible will be determined in practice. How would this policy be implemented to bar or substantially alter a proposed development project? Will feasibility be determined with reference to economic or technical constraints or both? 			

Policies Cited As The Basis of Significance Conclusions Related to Biological Impacts				
GMP-3.6 A 100-foot setback from all wetlands, as identified by a County-approved biologist, shall be provided and maintained in open space use. No new development shall be allowed in this setback area. No landscape alterations will be allowed in this setback area unless accomplished in conjunction with a restoration and enhancement plan prepared by a County-approved biologist and approved by the California Department of Fish and Game.	•	Please explain how this policy would be coordinated with Mitigation Measure BIO 2.1, Stream Setback Ordinance. Which requirements would govern? Please explain how the 100-foot requirement was determined.		
GMP-3.7 The County shall encourage other local agencies to take appropriate measures for the protection of wetlands under their jurisdiction.	•	Policies that merely encourage do not create enforceable mandates. Please identify the local agencies and the appropriate measures that would be encouraged and give examples of specific actions the County would take to encourage these agencies to act.	-	
GMP-3.8 Open space areas should include a diversity of habitats with special protection given to ecologically important zones such as areas where one habitat grades into another and areas used by wildlife for access routes to water or feeding grounds.	•	Please explain how, when, and by whom this policy will be implemented. Will this policy require re-designation of the land use classifications proposed in the 2007 General Plan? If not, how will this policy operate to constrain development and preserve open space? What standards will be used to determine which areas should be preserved in open space? In view of the lack of standards and plans for implementation, please explain how this policy supports a finding that impacts would be less than significant.	75	
GMP-3.9 Critical habitat areas should be preserved as open space. When an entire parcel cannot be developed because of this policy a low intensity, clustered development may be approved. However, the development should be located on those portions of the land least biologically significant so that the development will not upset the natural function of the surrounding ecosystem.	•	Please identify the basis on which it will be determined if a development will upset the natural functioning of the ecosystem. Please explain what measures may be taken when an entire development project is within a critical habitat area and it is determined that even a cluster development will upset the natural functioning of the ecosystem. The policy states that a low intensity, clustered development <i>may</i> be approved when an entire parcel cannot be developed because of this policy. <i>Must</i> a development project be approved under those circumstances? Even if any development will upset the natural functioning of the ecosystem? Will this policy be implemented to bar a proposed development project or to limit its scope?		
GMP-3.10 Work with appropriate state and federal agencies to ensure that oil transport activities near the Monterey County coast include adequate procedures to protect marine bird and mammal (particularly sea otter) populations and to clean up oil spills.	•	This policy is unrelated to the inland areas for which the 2007 General Plan and been prepared.		

Policies Cited As The Basis of Significance Conclusions Related to Biological Impacts			
GMP-4.1 Redwood, pine, and oak forest and chaparral habitat on land exceeding 25 percent slope should remain undisturbed due to potential erosion impacts and loss of visual amenities.	 Please explain how this policy would be coordinated with Policy OS 3.5. Doe this policy ban all development on land exceeding 25% slope containing redwood, pine, and oak forest and chaparral habitat? Please explain why this policy is not required County-wide. 		
Polices from the GREATER SALINAS AREA PLAN. These policies were identified as one basis for the DEIR's conclusion that impacts to special status species, habitat, and movement corridors would be less than significant through 2030.		75	
 would be less than significant through 2030. GS-1.1 Special Treatment Area: Butterfly Village - Approximately 671 acres located north of San Juan Grade Road and east of Harrison Road shall be designated as a "Special Treatment Area" to permit a planned development in substantial conformance with the Butterfly Village Land Use Plan (<i>Figure</i> <i>LU7</i>) including: a. Approximately 345 acres of neighborhood and community parks and open space uses such as hiking trails, recreation, public parking, storm water detention ponds and lakes for drainage control and water recharge as well as areas preserved for sensitive habitat. b. 71 hospitality units. c. A 20,000 square foot Community Health and Wellness Center that offers a variety of health, fitness and nutrition uses. d. Public facilities, including a fire station, sheriff substation, maintenance yard, independent wastewater treatment facility, 200 square foot library, and a 10-acre site for a potential elementary school site with athletic fields. e. Neighborhood Commercial (approximately 90,000 sq. ft.) including mixed use development, to help provide jobs within the project. f. Development on slopes exceeding 25% and ridgeline development. g. Up to 1,147 residential units for various income levels ranging from 0.9 units/acre to 20 units/acre. h. A minimum of 32% inclusionary/workforce levels including but not limited to senior living facilities. i. Agriculture buffers ranging form 30 feet to 100 feet. j. Vehicular access from the west via Harrison Road and from the east via San Juan Grade Road. k. A dedicated easement to accommodate the realignment of the Highway 101 future Prunedale Bypass. 	Please explain how this policy supports a finding that impacts will be less than significant.	75	

Policies Cited As The Basis of Significance Conclusions Related to Biological Impacts				
development of the Butterfly Village STA. The Butterfly Village STA shall be entitled to the exemptions in the General Plan provided for Community Areas and for areas for which a community Plan or Specific Plan has been adopted. However, the areas adjoining the Butterfly Village STA shall not be entitled to rely upon <i>LU-2.12(d) and OS-9.2</i> . Except as provided for in this General Plan, development shall be guided by the principles and standards contained in Chapters 3-8 of the document entitled "Rancho San Juan Specific Plan" dated November 7, 2005, which are otherwise consistent with the Butterfly Village STA and the Butterfly Village Land Use Plan (<i>Figure LU7</i>). (APNs: 113-271-014-000, 113-212-043-000, 113-212-044-000, 113-212- 004-000, 113-212-003-000, 113-212-055-000, 113-212-056-000, 113-212-057-000 and 113-212- 058-000)				
 GS-1.5 Development of commercial land uses designated near Highway 68 and the Salinas River shall be allowed only if such uses: a. Are planned general commercial rather than neighborhood serving; b. Will protect and, where feasible, enhance the riparian habitat along the Salinas River; c. Will not further deteriorate water quality in the Salinas River; d. Are adequately screened from viewpoints along Highway 68, Spreckels Lane, and Spreckels Boulevard by minimizing tree removal and by landscaping frontage areas. Because of the proximity to agricultural lands, commercial uses which support farm activities shall be encouraged. 	 Please explain how it will be determined whether it is feasible for a project to enhance the riparian habitat along the Salinas River. Please explain what measures would be taken to enhance this habitat. Please explain how it will be determined whether proposed development will further deteriorate water quality in the Salinas River. Please explain why these conditions apply only to development of commercial land uses designated near Highway 68 and the Salinas River and not to other types of development, including agricultural uses. 	75		
 GS-1.8 The land near the town of Spreckels designated as industrial may also be developed partially or wholly as agriculturally related commercial uses provided said agriculturally- related development complies with the following conditions: a. A comprehensive development plan as a planned general commercial project shall be prepared. b. Development shall be designed to protect and, where feasible, enhance the riparian corridor along the Salinas River. c. Proposed development would not deteriorate water quality in the Salinas River or area ground water. 	 Please explain how it will be determined whether it is feasible for a project to enhance the riparian habitat along the Salinas River. Please explain what measures would be taken to enhance this habitat. Please explain how it will be determined whether proposed development will further deteriorate water quality in the Salinas River. Please explain why these conditions apply only to development as agriculturally related commercial uses and not to other forms of development. 			

Policies Cited As The Basis of Significance Conclusions Related to Biological Impacts				
d. Walnut trees along Spreckels Boulevard shall be preserved.e. Development will be compatible with the agricultural activities on the adjoining parcel.				
GS-3.1 All vegetation on land exceeding 25 percent slope, particularly chaparral and broad leaf evergreen, should remain undisturbed to minimize erosion and retain important visual amenities.	 Please explain how this policy will be coordinated with Policy OS 3.5. Will any development be allowed on slopes over 25% in the Greater Salinas Area? Please explain why this policy is not applied County- wide. 			
GS-3.2 Native plant materials should be used to integrate the man-made environment with the natural environment and to screen or soften the visual impact of new development.	 This policy appears to be focused on visual impacts rather than biological impacts. Please explain how it supports a finding that impacts to biological resources will be less than significant. Does this policy apply to residential landscaping? If not , why not? What portion of landscaping must consist of native plants? How will this policy be implemented? In particular, how will it be implemented for projects that do not require discretionary review? 	75		
 GS-5.1 Portions of Gabilan Creek shall be evaluated for a linear park as defined by the County's Parkland Classification System at such time when the County can support another regional park. Until such time, Gabilan Creek shall be: a. Maintained in a natural riparian state; b. Kept in a free-flow state devoid of dams; c. Allowed its natural flood capacity through required setbacks conforming to the 100 year flood plain; and d. Kept free from urban encroachment by residential development through required dedication of land in the floodplain corridor. 	Please explain why this policy is not applied to other streams in the County.	75		
Polices from the NORTH COUNTY AREA PLAN. These policies were identified as one basis for the DEIR's conclusion that impacts to special status species would be less than significant through 2030.				
NC-3.3 Conservation of North County's native vegetation shall be given high priority to: a. Retain the viability of threatened or limited vegetative communities and animal habitats, b. Promote the area's natural scenic qualities, and c. Preserve rare, endangered and endemic plants for scientific study. Property owners shall be encouraged to cooperate with the County in establishing conservation easements over areas of native vegetation.	 Policies that merely encourage activities do not create an enforceable mandate. Please explain how areas of native vegetation for preservation will be identified and what County agency will be charged with contacting property owners regarding easements. 			

Policies Cited As The Basis of Significance Conclusions Related to Biological Impacts

NC-3.4 Removal of healthy, native oak and madrone trees in the North Monterey County Area shall be discouraged. A permit shall be required for the removal of any of these trees with a trunk diameter in excess of six inches diameter breast height (d.b.h). Where feasible, trees removed will be replaced at a 1:1 ratio using nursery-grown trees of the same species that are a minimum of one gallon in size. Removal without a permit shall result in a minimum fine, equivalent to the retail value of the wood removed plus replacement of one gallon, nursery-grown trees at a 2:1 ratio. Exemptions to the above permit requirement shall include: a. tree removal by public utilities, as specified in the California Public Utility Commission's General Order 95, and by governmental agencies. b. emergencies caused by the hazardous or dangerous condition of a tree and requiring immediate action for the safety of life or property, provided the County is notified of the action within ten working days. NC-3.5 Critical habitat areas should be preserved as open space. When an entire parcel cannot be developed because of this policy a low intensity, clustered development may be approved. However, the development should be located on those portions of the land least biologically significant so that the development will not upset the natural function of the surrounding ecosystem.	•	Please explain why a similar policy is not proposed for all other areas in the County. Please explain how the policy will be implemented to "discourage" tree removal. What standards will be used to determine whether to issue a permit to remove trees? What conditions will be imposed on such permits? Please explain how it will be determined whether replacement is feasible and whether feasibility will be determined technically or economically. How will this policy be coordinated with Mitigation Measure BIO 2.2, calling for an Oak Woodlands Mitigation Program? Please identify the basis on which it will be determined if a development will upset the natural functioning of the ecosystem. Please explain what measures may be taken when an entire development project is within a critical habitat area and it is determined that even a cluster development will upset the natural functioning of the ecosystem. The policy states that a low intensity, clustered development <i>may</i> be approved when an entire parcel cannot be developed because of this policy. <i>Must</i> a development project be approved under those circumstances? Even if any development will upset the natural functioning of the ecosystem? Will this policy be	75
		limit its scope?	-
Polices from the SOUTH COUNTY AREA			
PLAN. These policies were identified as one basis for the DEIR's conclusion that impacts to special status species, habitat, and movement corridors would be less than significant through 2030.			
SC-1.2 Clustered development shall be encouraged in all areas where development is permitted in order	٠	Policies that merely encourage actions do not create an enforceable mandate	
to make the most efficient use of land and to preserve agricultural land and open space.	•	Please explain how in practice clustered development will be encouraged. What specific actions will be taken by what County agency to encourage this?	
SC-5.2 Cooperative soil conservation, water quality	•	Please explain what agency will be responsible for	
protection, and resource restoration programs within watershed basins shared with neighboring counties	•	pursuing these programs Please identify resources that would make pursuing these	

Policies Cited As The Basis of Significance Conclusions Related to Biological Impacts			
shall be pursued.	 programs feasible. Please explain what cooperative soil conservation, water quality protection, and resource restoration programs would entail and give examples of such programs. 		
SC-5.3 New development may not encroach on the main channels and associated floodways of the Nacimiento, San Antonio, and Salinas Rivers in order to conserve groundwater recharge, preserve riparian habitats, and protect flood flow capacity.	 Please identify the geographic extent of the protected areas in the "main channels and associated floodways." Will floodways be determined with reference to 10-year floods, 100-year floods, or on some other basis. Please explain why a similar policy is not proposed County-wide. 		
Polices from the TOTO AREA PLAN. These policies were identified as one basis for the DEIR's conclusion that impacts to special status species and habitat would be less than significant through 2030.			
T-3.7 The preservation of oak trees within Toro Area Plan shall be promoted by discouraging removal of healthy trees with diameters in excess of 6-inches d.b.h.	 Policies that merely discourage do not create enforceable mandates. Please explain in what context and by what agency tree removal will be discouraged. Will this policy pertain to development and agricultural activity that does not require discretionary permits? How will this policy be coordinated with Mitigation Measure BIO 2.2, calling for an Oak Woodlands Mitigation Program? 		
T-4.1 Land uses and practices that may contribute to significant increases of siltation, erosion, and flooding in the Toro area shall be prohibited.	 Please identify performance standards for "significant increases of siltation, erosion, and flooding." Without such standards this policy will not be enforceable. Please explain how cumulative impacts from sedimentation would be addressed under this policy, if at all. 		
The DEIR references provisions in the Wine Corridor plan in support of the conclusion that impacts to species and movement corridors will not be significant: "Section 3 of the Wine Corridor Plan provides limits on the number of wineries in each segment. Section 3.4 (Permitted Uses) and 3.5 (Development Standards) is intended to reduce the footprint of a winery complex. Section 4 of the Agricultural Element includes policies that support the development of a fully integrated wine industry and encourage development along the designated corridor. Policy AG-4.2 designates segments of the corridor to achieve a balance between wine grape production and wine processing capacity." DEIR, p. 4.9-72.	 Please see discussion below related to the DEIR's failure to adequately describe new vineyard development and new agricultural cultivation that is already occurring and which will be accelerated in response to increased winery capacity. Reduced footprints of wineries does not reduce footprints of vineyards. Encouragement of additional vineyards will directly cause habitat conversion in sensitive sloped lands at the edges of the Valley. It is not clear that wineries will in fact be confined to the winery corridor. Policy AG 4.4 provides that Policies AG 4.1 through 4.3 "do not limit the development of wineries within or outside of the designated winery corridor. Wineries outside of the designated winery corridors and additional wineries within the corridors beyond those specifically listed are allowed, subject to conformance with all regulations of the underlying zoning district." Large wineries subject to discretionary permitting will not enjoy any permit streamlining by locating in the winery corridor area 		

Corridor Plan to encourage development of the wine	•	In view of the fact that the winery corridor interrupts the
industry within the designated corridor. The		key east-west movement corridor, a policy of
Corridor Plan establishes limits on the facilities that		concentrating development in this area will cause adverse
could be permitted under the Plan along with		effects on wildlife movement. Please explain how the
development criteria." DEIR, p. 4.9-91.		winery corridor policies support the conclusion that
		impacts to movement corridors and species will be less
		than significant.

2. Proposed mitigation measures for special status species are not adequate

<u>BIO 1.1</u>: Special status species (SSS) are defined more broadly under CEQA than they are in the 2007 General Plan. Thus, General Plan policies that are specifically targeted to protection of federal and state endangered and threatened species will not serve to mitigate all impacts to SSS. This shortcoming is acknowledged by the DEIR and is proposed to be addressed by Mitigation Measures BIO 1.1 and BIO 1.3.

BIO 1.1 calls for expanding the inventory of species and habitats required under Policies OS 5.1 and 5.2, which call for mapping species and habitat and promoting conservation, to include habitat for CEQA-defined SSS. However, as discussed in the table above, neither Policy OS 5.1 nor OS 5.2 constitute an adequate foundation for the conclusion that impacts to affected species and habitat will be less than significant. Simply expanding the numbers of species and types of habitat covered by these inadequate policies will not ensure protection of the additional species or habitats.

In particular, neither Policy OS 5.1 nor OS 5.2 explains how the mapped information will be used. It is difficult to understand why critical habitat designation mapping has not already been undertaken in connection with the development of land use designations in the 2007 General Plan. In the absence of a systematic review of habitat information, there is no basis for concluding that the land use designations have avoided authorizing development in areas that will result in impacts to special status species, loss of habitat, and impacts to movement corridors. We ask again that the EIR explain why mapping has not already been conducted and the results used to develop land use designations.

Furthermore, neither Policy OS 5.1 nor OS 5.2 explains what specific activities, programs, or permitting constraints would be required in order to "promote" conservation of threatened and endangered plants. Without more information about specific activities, development constraints, responsible agencies, and resources to be committed, there is no basis to conclude that a policy vaguely requiring the County to "promote" conservation will be effective.

Finally, Policy OS 5.1 unaccountable fails to include the promotion of the conservation of threatened and endangered *wildlife* species (as opposed to plants). This is no doubt a drafting error, but it is symptomatic of a carelessly framed set of policies with no real substantive content.

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<u>BIO 1.3</u>: The proposed additional mitigation measure BIO 1.3 calls for project-level surveys and mitigation for impacts to CEQA-defined SSS and sensitive natural communities. This additional measure will not suffice.

First, BIO-1.3 fails to provide any performance standards or examples of the mitigation that is to be required or any standards for the biological surveys that are to be required (which are to be developed later). BIO-1.3 amounts to a requirement that future projects obtain a report and follow its recommendations, which is precisely the kind of deferred mitigation that CEQA does not countenance. *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 794 ("an agency goes too far when it simply requires a project applicant to obtain a biological report and then comply with any recommendations that may be made in the report.").

Second, the project-level surveys and mitigation for impacts to CEQA-defined SSS and sensitive natural communities called for by BIO-1.3 are to be applied only to discretionary permit projects, large scale wineries, and development in focused areas. This list does not include conversion of previously uncultivated land for agriculture, *e.g.*, viticulture, despite DEIR's acknowledgement that these conversions may be source of significant impacts:

"The installation of new vineyards, row crops, and other actively managed agricultural uses (including routine and ongoing agriculture), mining extraction, and other activities could also result in the elimination of essential habitat for CEQA-defined special-status species. Even if the sensitive habitat is deliberately avoided at the project level, new development and intensively managed land practices would result in fragmentation of the existing habitat and leave the CEQA-defined special-status species population at risk of extirpation (local extinction). The exact amount of habitat conversion due to agricultural expansion onto uncultivated lands is not known." DEIR. P. 4.9-65.

The DEIR's subsequent claims that habitat conversions for agriculture would not cause impacts are inconsistent with this statement and not otherwise adequately founded. DEIR, pp. 4.9-76 and 4.9-95. As discussed in Sections 4 and 5 below, the DEIR underestimates both the extent and concentration of habitat conversions for agriculture because it dilutes the recent trends in conversion with out-of-date information and because it fails to observe that the winery corridor plan will concentrate conversions in sensitive habitat areas on sloped land at the edge of the Salinas Valley and along a north-south axis that will impede movement corridors.

Nor will BIO-1.3 be applied to any other projects that do not require discretionary permits, but which nonetheless have the potential to impact special status species and habitat. These include small-scale wineries and associated visitor-serving uses, development of residential units on lots of record, and development on slopes (which are particularly likely to contain valuable habitat) under the proposed but currently undefined "ministerial" permit conditions. Because no provisions for protection of biological

resources for development in these areas have actually been spelled out, there is no basis to conclude that these developments will not have impacts.

BIO 1.2: Mitigation measure BIO 1.2 calls for development of a kit fox conservation plan within four years. The focus area of the plan is to be the Salinas Valley area south of Chualar. DEIR, p. 4.9-75. This area contains extensive intact natural vegetation suitable for kit fox habitat, but, also suitable for agricultural cultivation. See TNC, Intact Natural Vegetation Designated for Agriculture in Southern Monterey County, 2009, Exhibit A.¹ As discussed below, this land is now, and will continue to be, subject to pressure for new cultivation. Conversion to row crops or viticulture will significantly impact its value as kit fox habitat.

Thus, the postponement of that plan for four years with no interim measures will permit unmitigated impacts in the interim. It will also create incentives to accelerate development in the interim to avoid the cost of mitigation.

BIO 1.2 contains no provision that would apply to projects in the event that the County fails to complete the conservation plan within 4 years. It also fails to identify the area affected with any specificity or to demonstrate that there will in fact be sufficient development to fund a plan through mitigation fees. Because only discretionary development projects would be included, it is entirely possible that development in the area such as vineyard or other agricultural conversions, or residential development on lots of record, would proceed without any contribution to the mitigation fees, causing unmitigated cumulative impacts.

<u>BIO 1.4 and 1.5</u>: The DEIR acknowledges the potential for impacts to special status species to be significant enough to warrant additional mitigation beyond 2030, but does not explain why impact will not occur sooner. The DEIR should explain how it can be determined with such precision that an NCCP and a revision to the General Plan would be necessary by 2030, but not before.

The DEIR proposes to mitigate impacts to special status species through buildout in part through BIO 1.4, calling for an update to the General Plan by 2030 to identify expansion of focused growth areas to accommodate at least 80% of future growth. This Board of Supervisors may believe that a new general plan should be created in 2030, but it cannot bind a future board to that opinion. Thus, this mitigation measure is not enforceable.

The DEIR also proposes that the County complete an NCCP "for all incorporated [sic, unincorporated] areas in Monterey County" by 2030 to address impacts to special status species. As discussed below in Section 5, an NCCP *is* needed to address landscape level

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¹ The Nature Conservancy prepared this analysis using GIS shape files of the 2007 General Plan land use designations for each Planning Area provided by the County of Monterey. Slope data was based on the 30m Digital Elevation Model from the National Elevation Dataset (NED), which was derived from USGS 24k contour lines. Vegetation data was based the CalVeg2000 dataset. Linkage data was based on the sources cited in the map legend.

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impacts, but the time to develop it is now. The DEIR states that the General Plan's planning horizon is 20 years. DEIR, p. 3-8. As proposed, BIO 1.5 permits unmitigated impacts for the duration of the General Plan's planning horizon.

3. Proposed mitigation measures for impacts to natural communities are not adequate

The DEIR correctly concludes that the 2007 General Plan does not provide a systematic approach to protection of all sensitive natural communities or guide implementation of development so as to avoid, minimize, or compensate for those impacts. DEIR, p. 4.9-85. Accordingly the DEIR proposes three additional mitigation measures. None of the three are adequate.

<u>BIO 2.1</u>: BIO 2.1 calls for future development and adoption of a stream-setback ordinance:

"Mitigation Measure BIO-2.1: Stream Setback Ordinance

The county shall develop and adopt a county-wide Stream Setback Ordinance to establish minimum standards for the avoidance and setbacks for new development relative to streams. The ordinance shall identify standardized inventory methodologies and mapping requirements. A stream classification system shall be identified to distinguish between different stream types (based on hydrology, vegetation, and slope, etc.) and thus allow application of standard setbacks to different stream types. The ordinance shall identify specific setbacks relative to the following rivers and creeks so they can be implemented in the Area Plans: Salinas, Carmel River, Arroyo Seco, Pajaro River, Nacimiento, San Antonio, Gabilan Creek, and Toro Creek. The ordinance may identify specific setbacks for other creeks or may apply generic setbacks based on the stream classification developed for the ordinance. The purpose of the ordinance will be to preserve riparian habitat and reduce sediment and other water quality impacts of new development.

The Stream Setback Ordinance shall apply to all discretionary development within the County and to conversion of previously uncultivated agricultural land (as defined in the General Policy Glossary) on normal soil slopes over 15% or on highly erodible soils on slopes over 10%." DEIR, p. 4.9-86.

Formulation of the content of this mitigation measure is deferred to some unspecified time in the future. No performance standards are identified – because the very purpose of the ordinance is to establish those "minimum standards." Thus, the mitigation has been improperly deferred.

The DEIR does not contain any substantive information about the actual conditions on the ground that this ordinance will seek to regulate, including soil types, streams affected, likely development patterns, hydrological conditions, or any other factors affecting

sedimentation and water quality impacts. The DEIR does not even try to evaluate the impacts of development with and without the proposed ordinance.

Agricultural cultivation and residential construction on steeply sloped land is a major source of erosion and sedimentation. Policy OS 3.5 is intended to require a new permitting system for such development, but the policy lacks any substantive content because it defers the future slope development rules without any performance standards. The policy would remove the current ban on development on slopes greater than 25%. Although the policy states that development would not be allowed on slopes over 30%, it permits exceptions that could be granted without any meaningful constraints. Based on mapping data attached as Exhibit B, we note that the change in the current slope development rules would open up 113,678 acres of land County-wide to agricultural cultivation, a figure that represents the number of acres of intact natural vegetation with slopes between 25% and 30% that is designated to permit agricultural use. See TNC, Analysis of Slope and Vegetation by Planning Area for Land Permitting Agriculture Under the 2007 Monterey County General Plan, Exhibit B.² Since the exceptions to the bar on development of slopes over 30% are so widely drawn, the change in policy effectively opens up areas with slopes over 30%, which total 382,753. While it is not likely that all 496,432 acres of intact vegetation sloped over 25% will be cultivated, as discussed below, there will be substantial pressure for new cultivation of agricultural land, and the data demonstrate that there is an abundance of steeply sloped land that will be subject to this new cultivation. Dramatic increases in erosion and sedimentation may result from this activity.

Unless the mitigation measure is revised to identify objective performance standards, it cannot reasonably be said to support a conclusion that impacts will be less than significant. Note also that key terms are undefined, including "normal soil" and "highly erodible soil."³

No deadline for completion of the ordinance is specified and there is no provision for ensuring adequate setbacks in the interim.

It is unclear how development of this ordinance will be coordinated with Policy OS 3.9, which calls for a future program to address potential cumulative hydrologic impacts of the conversion of hillside rangeland to cultivated croplands. Like the proposed development of a stream setback ordinance, the program to address cumulative impacts from converting habitat to croplands is improperly deferred without any performance standards.

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² The Nature Conservancy prepared this analysis using GIS shape files of the 2007 General Plan land use designations for each Planning Area provided by the County of Monterey. Slope data was based on the 30m Digital Elevation Model from the National Elevation Dataset (NED), which was derived from USGS 24k contour lines. Vegetation data was based on the CalVeg2000 dataset

The DEIR Glossary defines "erodible soil" but does not define "highly erodible soil."

It is unclear whether the County intends to conduct CEQA review of any future ordinance. If it does not conduct CEQA review, the County will have implemented a key program that will bar development of some areas, but permit it in others without any substantive CEQA review. If the County does intend to conduct CEQA review, it should do so now.

<u>BIO 2.2</u>: BIO 2.2 calls for future preparation of a program to mitigate loss of oak woodlands.

Mitigation Measure BIO-2.2: Oak Woodlands Mitigation Program.

The County shall prepare, adopt and implement a program that allows project to mitigate the loss of oak woodlands. The program would include ratios for replacement, payment of fees to mitigate the loss or direct replacement for the loss of oak woodlands and monitoring for compliance. The program would identify criteria for suitable donor sites. Mitigation for the loss of oak tree woodlands may be either on-site or off-site. The program would allow payment to either a local fund established by the County. Until such time as the County program is implemented, payment of a fee may be made to the State Oak Woodlands Conservation Program. Replacement of oak woodlands shall be on a minimum 1:1 ratio.

Again, the County has deferred the development of this program without providing meaningful performance specifications. It is unclear whether the minimum 1:1 ratio is intended to apply to the program to be developed or only to apply to interim mitigation. In any event, a 1:1 replacement ratio will not ensure adequate mitigation. Meaningful performance standards require that the replacement oaks be equivalent in ecological function, including provision of habitat and carbon sequestration. A 1:1 ratio will not even ensure adequate replacement since it has no allowance for disease and mortality. Note that Public Resources Code Section 21083.4(b)(2)(A) requires that mitigation via replacement planting include a requirement for maintaining plantings and replacing dead or diseased trees.

At a minimum, an oak woodland habitat conservation ordinance should follow the model identified by the California Oak Foundation:

Ordinance Intent and Objectives

The intent of this ordinance is to perpetuate oak habitat continuity over time. Objectives of the ordinance are:

- Maintain the maximum amount possible of oak woodland habitat in conjunction with the development process;
- Achieve habitat-level protection by recognizing oak woodland as a complex community of diverse vegetation, wildlife and associated biotic resources;
- Maintain oak species distribution and age diversity;
- Minimize activities that may result in oak woodland fragmentation; and

• Acknowledge that oak trees have an economic value in addition to their ecological, historical and aesthetic values.

Ordinance Definitions

"Biologically functional oak woodland" means the ecological relationships between both the oak woodland habitat components and needs of wildlife species which allows for all of the normal life cycle including, migration corridors, genetic pathways, food availability, temperature protection, moisture retention, nutrient cycling, denning, spawning, nesting, and other functions necessary to complete a life cycle. The habitat components must be in sufficient quantities and arrangement to support the diverse assemblage of wildlife species that are normally found on or use oak woodland.

"Ecologically sensitive oak woodland" means oak woodland containing the following habitat elements: (1) multiple or single layered canopy; (2) riparian zones; (3) burrows, caves and cliffs; (4) snags; (5) downed woody debris; and (6) wetlands. The greater the number of these habitat components present, the greater the oak woodland ecological sensitivity.

Oak woodland" means a tree habitat with over ten (10) percent oak canopy cover.

Ordinance Thresholds of Significance

A project's disturbance of oak woodland habitat or dependent species would be considered significant if any of the following occur:

- *Reduce or eliminate species diversity or abundance;*
- *Reduce or eliminate quantity or quality of nesting areas;*
- Fragment, eliminate or otherwise disrupt foraging areas or access to food sources;
- Limit or fragment range or movement of species; or
- Result in a loss of 25 percent or more of the existing tree canopy cover on the project site. For example, if a project site had 32 percent existing canopy cover the removal of more than 8 percent of the canopy cover would be considered significant.

Ordinance Habitat Mitigation Measures

Avoidance of significant oak woodland habitat impacts is the preferred method of mitigation. The general requirement for habitat mitigation is the preservation and replacement of oak woodland habitat. Replacement habitat will be at a minimum 3:1 area ratio. In cases of the most ecologically sensitively oak woodland habitat the replacement ratio may be greater. As necessary, habitat mitigation measures shall include the following actions individually or in combination:

(a) Dedicate in perpetuity for preservation in a natural condition contiguous and biologically functional oak woodlands on-site.

(b) Procurement of off-site oak woodland habitat, preferably in close proximity to the

project site, and dedicate it in perpetuity for preservation in a natural condition. Procurement includes either off-site land purchases or acquisition of conservation easements. Off-site oak woodland dedications shall be equivalent to the on-site oak woodland acreage and biological values impacted.

(c) In lieu fee payment to a natural resource agency or nonprofit organization for the purchase of local oak woodland habitat. Not more than five percent of in lieu fees collected by a natural resource agency or nonprofit organization for mitigation purposes shall be used for administrative costs.

The in lieu fee payment shall be equivalent to the total oak tree economic value. The economic value of oak trees shall be calculated by the applicant and approved by the local planning department in accordance with the most current edition of the International Society of Arboriculture's "Guide to Establishing Values for Trees and Shrubs." The total oak tree economic value shall be the sum of the ISA values for all oak trees impacted by development.

The DEIR fails to address the provisions of Public Resources Code Section 21083.4 governing oak woodlands mitigation programs. One critical question is whether the County intends to require mitigation for conversion of oak woodlands for agricultural land. Although this is not required by Public Resources Code Section 21083.4(d)(3), it is clear that this must be required by any mitigation program given the extent of the conversion activity projected to occur. Unless it is made clear that agricultural conversions must mitigate loss of oak woodlands, the County cannot reasonably find that the impact will be less than significant.

The DEIR does not explain how the to-be-developed oak woodlands mitigation program will be coordinated with other policies, including Policies OS 5.9, 5.10, and 5.11, CV 3.11, FO Recreation C-1 and C-2, NC 3.4, and T 3.7. This must be discussed and clarified. For example, CV 3.11 and NC 3.4 call for replacement of trees only when "feasible," whereas the proposed mitigation may be read to require replacement whenever trees are removed. Which provision would control?

<u>BIO 2.3</u>: Public Services Policies PS 3.3 and 3.4 call for developing "specific criteria" for proof of a long term sustainable water supply for new development and for evaluation and approval of new wells. BIO 2.3 calls for adding additional "considerations" to the Policies PS 3.3 and 3.4 related to riparian habitat and stream flows:

"Mitigation Measure BIO-2.3: Add Considerations Regarding Riparian Habitat and Stream Flows to Criteria for Long-Term Water Supply and Well Assessment.

Public Services Policies PS-3.3 and PS-3.4 establish the criteria for proof of a long-term water supply and for evaluation and approval of new wells. The following criteria shall be added to these policies:

Policy PS-3.3.i—Effects on instream flows necessary to support

riparian vegetation, wetlands, fish, and other aquatic life including migration potential for steelhead.

• Policy PS-3.4.g—Effects on instream flows necessary to support riparian vegetation, wetlands, fish, and other aquatic life including migration potential for steelhead." DEIR, p. 4.9-87.

Once again, the formulation of the ultimate mitigation is deferred without any performance standards.

Policies PS 3.3 and 3.4 themselves call for deferral of the formulation of specific criteria for various parameters related to water supply and well development, including water quality, production capability, effects on wells, and unspecified cumulative impacts. The listing of these parameters in PS 3.3 and 3.4 without specifying acceptable values for them does *not* provide performance standards. BIO 2.3 simply adds another empty parameter to the list – "effects on instream flows necessary to support riparian vegetation, wetlands, fish, and other aquatic life including migration potential for steelhead." Without specifying values for the parameters, neither PS 3.3 or 3.4 or Mitigation Measure BIO 2.3 actually provide substantive performance standards or criteria.

For example, nothing in BIO 2.3 would require that instream flows be maintained at a level *sufficient* to support *existing* riparian vegetation, wetlands, fish, and other aquatic life including migration potential for steelhead. Nothing in BIO 2.3 would require that instream flows be *increased* where necessary to support a recovery plan, e.g., for steelhead.

Telling the public that the County will eventually come up with a system to evaluate water supply sufficiency and that that system will *consider* effects on instream flows necessary for habitat is not an adequate disclosure under CEQA. Nor is it an adequate basis for concluding that effects will not be significant.

4. The DEIR does not adequately describe new vineyard development, new agricultural cultivation, or the winery corridor itself

CEQA requires an EIR to contain a description of the whole project, which is essential to accurately determine impacts. However, the Winery Corridor (AWCP) program is not adequately described because there is no estimate of the extent and location of new vineyard development that is likely to occur in response to the increase in winery demand for grapes. The fact that grapes are currently exported from the County does not logically mean that this export business will all be diverted to local wineries. Common sense suggests that if shipping grapes out of the County is profitable now, it will remain so, and new grape production will occur in response to new winery demand in the County.

Table 4.9-6 in the DEIR shows that habitat conversion, especially for vineyard development, has accelerated in recent years. Since 1996, habitat-to-agriculture conversions have proceeded at the rate of 820 acres per year, with 40% of that conversion

attributable to vineyards. See DEIR, pp. 4.9-63 and 4.9-46. The DEIR offers no reason to suppose that this trend will not continue and increase in response to increased winery demand. The DEIR's conclusion that habitat conversion will only proceed at the rate that occurred over a much longer period during which winery demand had not materialized ignores recent trend data and the likely effect of increasing winery demand for vineyard development.

Habitat conversions will also occur because there will be pressure to replace the 2,571 acres of important farm land that will be re-designated for non-agricultural use (DEIR, p. 4.2-12) and because there will be future pressure to convert agricultural land to urban uses (DEIR, p. 4.2-25 to 4.2-28).

The conversion of previously uncultivated land will not occur at random, as the DEIR suggests. The DEIR admits that the vineyard development has occurred in locations that are particularly sensitive biologically, both with respect to habitat value and with respect to movement corridors:

"Spatial analysis of the vineyard development indicated that most of the recent vineyard expansion is at the valley edges and upslope. As shown in Exhibits 4.9.6, 4.9.7, and 4.9.8, while there are scattered conversions of habitat to agriculture east and west of Prunedale and along the Salinas River north of Fort Ord, the dominant locales of recent conversions are along the eastern and western slope of the Salinas Valley. It is expected that these slopes of the Salinas Valley along with the slopes of tributary valleys to the Salinas Valley will be the likely focus of future conversions of habitat to agriculture." DEIR, p. 4.9-63.

This is consistent with Exhibits 4.9-6 through 4.9-9, which show that conversions have been occurring in these areas. Based on this evidence, it appears that 820 acres or more of habitat will be lost annually to agriculture and that this lost habitat will be particularly sensitive lands located on slopes on the edge of the Salinas Valley and especially around the winery corridor.

The DEIR's claim that agricultural conversions will not result in impacts because the pattern of conversions has been dispersed in the past (DEIR. pp. 4.9-76 and 95) is clearly inconsistent with the DEIR's finding that future conversions will be focused on slopes of the Valley. The claim is also suspect because it fails to recognize the recent acceleration of viticulture conversions and the fact that the winery corridor policies deliberately create incentives for vineyard development proximate to the winery corridor. There will now be a substantial incentive to focus development of vineyards in a long north-south strip that will affect movement corridors, particularly in southern Monterey County around the winery corridor.

The Nature Conservancy identifies expansion of wine grapes into grasslands, oak woodlands, and associated habitats as a key threat to conservation and biodiversity in Monterey County in particular. TNC 2006, p. 30. Vineyard development is identified as

major threat to key conservation targets including Toro Creek Flats, the Carmel River Watershed, the Arroyo Seco Uplands, the Salinas River Uplands, and Peachtree Valley. TNC 2006, App. J. The California Wilderness Coalition identifies agriculture, especially vineyards, as second only to urbanization in terms of threats to habitat connectivity in the Central Coast region. CWC 2001, p. 43.

The four Planning Areas in southern Monterey County contain 1,041,138 acres of land with intact natural vegetation that is designated to permit agricultural cultivation under the 2007 General Plan. TNC, Analysis of Slope and Vegetation by Planning Area for Land Permitting Agriculture Under the 2007 Monterey County General Plan, Exhibit B. This area is displayed in the attached map of intact vegetation subject to agricultural conversion in the southern portion of the County. See TNC, Intact Natural Vegetation Designated for Agriculture in Southern Monterey County, 2009, Exhibit A. As discussed below, this intact vegetation is valuable habitat and contains critical movement corridors, but it will be subject to concentrated pressure for new agricultural cultivation. The DEIR must accurately disclose the extent and location of this future agricultural conversion activity. Without this information, the EIR cannot evaluate the impacts to biological resources.

Neither the DEIR nor the Draft 2007 General Plan provides a consistent description of the location or extent of the winery corridor itself. Section 2.2 of the AWCP, "Winery Corridor Description," references a map of the Monterey County American Viticulture Areas (Figure AWCP-2, AVA map) and states that the "portion of the Monterey AVA [American Viticulture Areas] located south of Highway 68 plus the other seven AVAs shall be used for defining the boundary of the Agriculture and Winery Corridor." 2007 GP, p. AWCP-4, emphasis added. Section 2.2. goes on to state that the AWCP would consist of three segments shown on Figure AWCP-3 that extend through the Toro, CSV, and South County Planning Areas. However, the AVA regions depicted on Figure AWCP-2 are much larger than the area depicted on Figure AWCP-3. The AVA map includes appellations that are not included in segments depicted in Figure AWCP-3, e.g., San Antonio Valley, Santa Lucia Highlands, Chalone, Carmel Valley, and the appellation Monterey itself which consists of most of the Salinas Valley not otherwise designated. The AVA map also shows that the appellations that are partially included in the three segments depicted in Figure AWCP-3 are actually much more extensive in area than depicted, e.g., San Lucas, San Bernabe, and Arroyo Seco. Since the AWCP is not defined textually by metes and bounds, and since the two figures purporting to define it are inconsistent, the public has no clear idea where the AWCP development policies will in fact be applied. Based on the text of the 2007 General Plan itself, developers will be free to argue that the AWCP policies should be applied wherever the AVA appellations apply – essentially anywhere in the Salinas, Carmel, Haynes, or San Antonio Valleys.

Complicating this failure to produce consistent maps are Exhibits 4.9-2, 4.9-3, and 4.9-4 which purport to show the habitat in the winery corridor areas. These three exhibits depict a much smaller area than either Figures AWCP-2 or AWCP-3. These maps suggest that the DEIR has failed to consider the extent of the habitat that will in fact be placed at risk by the winery corridor.

The DEIR must accurately disclose the extent and location of the winery corridor. Without this information, the EIR cannot evaluate the impacts to biological resources.

5. Movement corridor and habitat fragmentation impacts will remain significant because analysis and mitigation of these impacts is deferred to project-level CEQA reviews and will not be effective

No systematic analysis of movement corridors and habitat fragmentation

The identification and establishment of adequate wildlife movement corridors should be considered at the onset of the general plan process. According to Ron Rempel, a former biologist for the California Department of Fish and Game, "animals need large blocks of habitat to sustain a robust population; if they lose access to adequate habitat, their populations can be wiped out."

Birds, plants, and other terrestrial life also suffer from habitat fragmentation. Wildlife deprived of an adequate gene pool become in-bred and lose genetic diversity, which gradually weakens and diminishes the ability of their species to adapt and survive. Reducing even a single species' population may upset the balance of biodiversity. If coyote habitat is fragmented, for instance, fewer will be left to control populations of skunk, possum, raccoon, and smaller animals they feed upon. Populations of their prey will increase, upsetting nature's balance all the way down the food chain. Corridors should be large enough so that deer and mountain lion can travel for miles and even cross highways to seek food, mates, and shelter from predators. Isolation of the species, a result of development, disrupts biodiversity and causes long-term consequences for survival of the species. Many birds will not fly to habitat they cannot see, and snakes, tortoises, and other slower-moving creatures cannot maneuver successfully in trafficked areas. Plants isolated from access to cross-pollination by insects also lose genetic diversity.

We agree with the conclusion in the DEIR that the General Plan does not provide a systematic approach to address impacts of development to key wildlife movement linkages. We further agree that the impact is significant because development under the 2007 General Plan could result in a reduction of linkage between wildlife species populations and reduction in migration of fish and other species along river corridors. However, the DEIR does not present any systematic, empirical analysis of the impacts that will be caused by development under the 2007 General Plan, including habitat fragmentation and interruption of movement corridors. Such an analysis must be performed before the County permits further development, while flexibility still remains to alter or condition that development.

For example, habitat lost to agricultural conversions will fragment habitat and interrupt movement corridors, particularly the east-west corridor across the Salinas Valley. However, the DEIR did not evaluate these impacts with reference to any actual data regarding particular habitat values, movement corridors, or proposed development

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patterns. Also contributing to these impacts will be the development of the winery corridor, associated visitor serving uses, and other induced growth. A study conducted by Kim Nicolas Cahill of Stanford University for the Nature Conservancy found that "vineyards may be an impediment to the movement of some large mammalian species, based on observed low levels of use and lack of some native species. Significantly more native mammalian predators were detected in wide corridors than in narrow or denuded corridors, and species richness was significantly higher in wide corridors." Again, the DEIR did not evaluate the effects of the winery corridor on actual habitat and movement corridors.⁴

According to The Nature Conservancy's 2006 report, California Central Coast Ecoregional Plan Update, over the last few decades the natural systems of the Central Coast ecoregion have been dramatically impacted by significant changes in land use. TNC, 2006. Most notable are: suburban and rural-residential (exurban) sprawl associated with nearly every city and town; conversion of thousands of acres of historic rangeland and other natural lands to vineyards; expansion of services such as transportation corridors, groundwater pumping, water diversions and commercial developments; spread of invasive, non-native species and global warming. These trends threaten the integrity of the regional landscape and its unique, heterogeneous biodiversity patterns.

These threats were also confirmed by the California Wilderness Coalitions 2001 report, Missing Linkages: Restoring Connectivity to the California Landscape, which was referenced but not discussed by the DEIR. CWC identified the following threats to habitat connectivity within the Central Coast ecoregion: urbanization, agriculture and roads, vineyard development, spread of invasive species, water diversions and changes in water flow regimes, and military activities. Vineyard development alone jeopardized 30% of the identified critical linkages.

The 2006 TNC study and the 2001 CWC study are examples of the kind of empirical analysis that the DEIR should have undertaken and/or relied upon to evaluate potential impacts. Although the DEIR references the 2001 CWC study and may have used it to prepare a list of six movement corridors, it contains no discussion of the study other than noting that future development could affect the listed corridors.

FRAGMENTATION OF CRITICAL CONSERVATION AREAS: For example, the 2006 TNC report identifies critical conservation areas within the central coast region of California on the basis of their potential to sustain biodiversity and habitat connectivity. Piecemeal development of these areas would substantially compromise these goals and would be a significant impact. By way of example, we list a few of the conservation areas that could be significantly impacted by General Plan growth and policies:

⁴ We note again that DEIR Exhibits 4.9-2, 4.9-3, and 4.9-4 purporting to show habitat in the winery corridor areas are inconsistent with 2007 General Plan Figures AWCP-2 or AWCP-3, which show a much larger area for the winery corridor.

Arroyo Seco Uplands. (Area ID: 99⁵). This area contains the extremely unique Arroyo Seco stream system as well as adjacent uplands supporting oak woodlands, lowland grasslands, wildflower fields and critical wildlife linkages. The Arroyo Seco supports one of few sycamore alluvial riparian woodlands in the ecoregion as well as very high quality alluvial sage scrub. The stream is the primary tributary in the Salinas River system that still sustains federally threatened steelhead and California red-legged frog. It also supports speckled dace and resident stickleback. According to TNC, the Arroyo Seco Uplands are threatened by reduced water flow resulting from surface diversions and groundwater pumping; gravel mining which removes unique sycamore riparian forest habitat and fundamentally alters the river channel; and vineyard development along the alluvial terraces that destroys key uplands and impedes wildlife passage to nearby habitat areas.

Carmel River Watershed - Sierra de Salinas (Area ID: 24). This conservation area includes the Carmel River as well as target-rich public and private lands within the watershed. The upper part of the watershed supports some of the most extensive valley oak savannahs remaining in the ecoregion, along with scattered vernal pools and wetlands located along the Tularcitos Fault. California fairy shrimp (Linderiella occidentalis) have been found in the vernal pools near the University of California Hastings Reservation. There are scattered small stands of maritime chaparral dominated by endemic Arctostaphylos and Ceanothus in the eastern portion of the site—the Sierra de Salinas. The eastern edge of the site in the Sierra de Salinas range is important as a regional ecological linkage between the Santa Lucia Range and the Salinas River. Major lands use threats are ranching and vineyards on private lands.

Salinas River Uplands (Area ID: 97). The Salinas River Valley once consisted of extensive annual grasslands, utilized as cattle rangeland. Rangelands on the valley floor have been converted to vineyards at a massive scale over the last decade. This small site encompasses the last major remnant of grassland habitat remaining along the Salinas River and is important to wildlife species associated with grasslands. It is extremely vulnerable to conversion. The conservation areas supports the federally threatened San Joaquin kit fox and steelhead. Major lands use threats are ranching and agricultural conversion, including vast areas of vineyards on private lands.

The DEIR should be revised and recirculated to evaluate the effects of permitted development on the specific resource areas identified by TNC. Alternatively, the County should undertake its own science-based, empirical identification of key conservation areas and evaluate the effects of the 2007 General Plan on those areas.

⁵ The areas are discussed in Appendix J and the areas are mapped by ID numbers on Figures 19 and 20 of the TNC report. TNC, 2006.

IMPACTS TO MOVEMENT CORRIDORS: TNC designed the Central Coast ecoregional portfolio to maximize connectivity between portfolio conservation areas, and, in some of these connections are embedded within conservation area site boundaries. However, TNC determined that, where significant gaps exist between areas within the portfolio, linkage corridors need to be maintained so that the full spectrum of native species will be able to move between natural areas in the regional landscape.

Exhibit A, TNC, Intact Natural Vegetation Designated for Agriculture in Southern Monterey County, 2009 includes the linkages identified in the 2006 TNC report as well as linkages identified from other sources, including the California Wilderness Coalitions 2001 report. CWC, 2001. Exhibit C, TNC, Linkage Summary for the Central Coast, is a spreadsheet describing the linkages shown in Exhibit A. Although the linkage locations and boundaries are approximate and are not intended to be exhaustive, the map and linkage descriptions are based on the best available science. The County should undertake a thorough inventory of movement corridors that may be affected by development in a revised DEIR. At a minimum, the corridors identified by TNC should be evaluated. We note that the linkages in Exhibit A represent a substantial refinement and update the CWC 2001 data, which was apparently the sole basis of the DEIR's listing of potentially affected movement corridors. DEIR, p. 4.9-89 to 90.

Development of all kinds permitted under the 2007 General Plan, including residential, agricultural, and commercial projects, has the potential to interrupt these linkages. The DEIR must be revised to discuss these specific linkage impacts in relation to permitted development. Formulation of meaningful, substantive mitigation must be based on such an analysis in this first-tier CEQA document because, as discussed below, project-level analysis and mitigation will not be sufficient.

Development of wineries and vineyards in the Salinas Valley in particular will affect the critical linkages identified by TNC and the CWC. For example, Linkage 339 on Exhibit A connects TNC Conservation Area 24 (Carmel River Watershed – Sierra de Salinas) with TNC Conservation Area 57 (Southern Gabilan Range). Linkage 339 is needed to maintain permeability through agricultural lands so wildlife can move between valley floodplain and adjacent foothills (see Exhibit C).

Other examples of linkages that may be interrupted by agricultural conversions and wineries are Linkage 307 (Santa Lucia - Gabilan, Ventana Wilderness), Linkage 357 (Arroyo Seco-Salinas River), and Linkage 378 (Salinas River, Pinnacles National Monument), all of which provide critical connectivity between TNC Conservation Area 57 (Southern Gabilan Range) and TNC Conservation Area 99 (Arroyo Seco Uplands). See Exhibits A and C.

Linkage 307 is considered a choke point to east/west movement. The area contains grassland, scrub and oak woodlands. Highway 101 is a major impediment as are gaps in habitat cover, sand/gravel operations, agricultural, and residential development.

Linkage 357 is a key steelhead corridor as well as an important wildlife corridor between Salinas River and Santa Lucia Range. The linage needs native habitat restoration across the valley floor.

Linkage 378 includes the area along Salinas River where river floodplain has unobstructed connections to foothills of southern Gabilan Range. This linkage provides regional connectivity across the Salinas Valley floor.

Linkage 353 is one of few areas in this ecoregion where wildlife can move through natural habitat between the Salinas River and southern Sierra de Salinas.

These are just a few examples. There are additional linkages shown in Exhibit A and described in Exhibit C that require detailed analysis of the effects from agricultural conversion and the winery corridor in the DEIR, e.g., 316, 339, 354, 343, and 308. In particular the impact analysis must address the following:

- the type and land area of habitat that will be directly lost to development and agricultural conversion
- how and where the habitat will be fragmented,
- loss of connectivity between important natural open space,
- effects of increased human presence including more vehicles, increased levels of noise, trash, predatory pets (dogs and cats), and invasive plant species, and
- reduced water quality and increased sedimentation.

In order to establish and ultimately protect wildlife corridors the County must identify and evaluate each corridor area in a first-tier EIR *before* further piecemeal development is permitted. The development that is permitted must accommodate the wildlife corridors and linkages.

PROTECTION OF MOVEMENT CORRIDORS: There are a number of general principles for designing and monitoring the effectiveness of wildlife corridors. The following are taken from Bond (2003):

Six Step Corridor Evaluation

Step 1: Identify the habitat areas the corridor is designed to connect. *Step 2*: Select several target species for the design of the corridor (i.e., select "umbrella species").

Step 3: Evaluate the relevant needs of each target species.

Step 4: For each potential corridor, evaluate how the area will accommodate movement by each target species.

Step 5: Draw the corridor on a map.

Step 6: Design a monitoring program.

Evaluating how the potential corridor will accommodate movement by each species (*Step* 4) is a critical step in the process. The evaluation should include the consideration of how likely the animal will encounter the entrance to the corridor, actually enter the corridor, and follow it to the end. Additionally, it is important to consider whether there is sufficient concealing cover, food, and water within the corridor for the animal to reach the full length of the corridor, or whether such elements need to be created and maintained. Finally, specific impediments to movement within the potential corridor must be assessed, including topography, roads and type of road crossing, fences, outdoor lighting, domestic pets, noise from vehicle traffic or nearby buildings, and other human impacts.

For Monterey County at a minimum wildlife corridors must be determined in advance of siting development for larger more adventurous animal like deer, bobcats, mountain lions, fox, kit fox as well as for smaller more restricted species such as the California red-legged frog (CRLF), California tiger salamander (CTS), steelhead, and San Joaquin kit fox (SJKF). Both the CRLF and CTS require breeding habitat, upland retreat habitat, and dispersal corridors that connect suitable breeding habitats. In order to determine appropriate wildlife corridors for these species, as well as other species, a County-wide assessment should be conducted of potential breeding, foraging, and cover habitats for these species. Then, a slope, terrain, land use, and vegetation assessment should be conducted to determine how the species would disperse to nearby habitats. Dispersal between breeding, foraging and cover habitats is critical to these species as it provides for genetic mixing between populations and helps maintain viable populations. Roads and other high risk land uses should be considered when conducting dispersal modeling.

For the steelhead, a study must be conducted that assesses current use of creeks and rivers for spawning and rearing, and that identifies barriers to movement upstream to spawning grounds. Things such as down logs, fallen rip rap or discarded trash, heavy siltation, pollutants, mud slides, beaver dams, water diversions, etc. should be included in the assessment. Without knowing the existing conditions of steelhead spawning creeks and rivers, it is impossible to establish workable movement corridors for this species.

For the San Joaquin kit fox, the DEIR defers the preparation of a habitat conservation plan as follows:

"The County shall, in concert with the USFWS, CDFG, cities in the Salinas Valley, and stakeholders develop a conservation plan for the Salinas Valley to provide for the preservation of adequate habitat to sustain the San Joaquin kit fox population. The general focus area of the plan shall be the Salinas Valley south of the community of Chualar. The Conservation Plan, at a minimum, shall be adopted by Monterey County and shall be applied to all discretionary approvals (and their associated CEQA documents) with potential to affect the San Joaquin kit fox within the conservation plan area. The County shall complete the conservation plan within 4 years of General Plan adoption." We have been involved with the preparation of HCP's since the mid 1980's. We are currently working on a combined HCP/NCCP for Placer County. That effort has already taken more than six years, and is probably another two years from completion. That is double the four years identified for completion of a Monterey County Kit Fox HCP. In the meantime, scattered development could occur that forecloses the establishment of habitat corridors for the kit fox, especially in the wine corridor. Again, in accordance with principles of conservation biology, a regional study is needed to determine core kit fox habitat (including denning and foraging areas, areas of dispersal, and areas of risk (such as roads, fenced agricultural lands, areas with high red fox or coyote populations).

Mitigation is inadequate

The DEIR admits that the policies that it cites as partial mitigation will not systematically address impacts to movement corridors. DEIR, 4.9-93, 4.9-94. For example, policies that call for compact development apply to urban uses and do not constrain agricultural conversion and visitor serving uses in the winery corridor, which are encouraged. Thus, development in the winery corridor will result in habitat fragmentation and will constitute a significant block to the east-west movement corridor that the DEIR acknowledges to exist (DEIR, p. 4.9-93 to 94). As noted above, the DEIR admits that agricultural conversions and winery expansions could destroy and fragment habitat, which would interfere with movement corridors:

"The installation of new vineyards, row crops, and other actively managed agricultural uses (including routine and ongoing agriculture), mining extraction, and other activities could also result in the elimination of essential habitat for CEQA-defined special-status species. Even if the sensitive habitat is deliberately avoided at the project level, new development and intensively managed land practices would result in fragmentation of the existing habitat and leave the CEQA-defined special-status species population at risk of extirpation (local extinction). The exact amount of habitat conversion due to agricultural expansion onto uncultivated lands is not known." DEIR. P. 4.9-65.

The proposed mitigation, BIO-3.1, is to require discretionary permits at the *project*-level to consider wildlife movement:

"Mitigation Measure BIO-3.1: Project-Level Wildlife Movement Considerations.

The County shall require discretionary projects to retain movement corridors of adequate size and habitat quality to allow for continued wildlife use based on the needs of the species occupying the habitat. The County shall consider the need for wildlife movement in designing and expanding major roadways and public infrastructure projects to provide movement opportunities for terrestrial wildlife and to ensure that existing stream channels and riparian corridors continue to provide for wildlife movement and access." DEIR, p. 4.9-94.

This mitigation is inadequate to address impacts to wildlife movement and nursery sites for two reasons.

First, the assessment of impacts related to habitat fragmentation and movement corridors should be undertaken at the landscape level in a first-tier CEQA analysis, not deferred to later project-level reviews. The proposed mitigation measure admits that because the General Plan policies do not systematically address these issues, their analysis and mitigation will be postponed to later project-level reviews. However, it is against the principles of conservation biology to evaluate impacts to wildlife movement corridors on a project-by-project basis. That type of analysis forecloses the ability of the County to preserve and protect natural communities and corridors on a regional scale. The proposed project-level review of cumulative regional impacts violates the most basic tenets of conservation biology include the following:

- Species that are well-distributed across their native ranges are less susceptible to extinction than are species confined to small portions of their ranges. Maintaining appropriate habitat for these species within the context of broader ecological goals (e.g., improve or maintain desirable vegetation structure and hydrological regimes, eliminate invasive exotics) is the most important conservation action.
- Large conservation areas containing large populations of the special status species are superior to small conservation areas containing small populations. While the persistence of all populations is subject to the effects of normal random environmental events (environmental stochasticity) and catastrophes such as wildfires and severe drought, the persistence of small populations is additionally threatened by random variations in birth or death events (demographic stochasticity) and random changes in genetic composition (genetic stochasticity). Large areas with high quality habitat for species tend to mitigate the combined effects of these factors. Thus, for example, acquisition of conservation areas should preferentially add to existing protected areas.
- An arrangement of conservation areas that facilitates dispersal of individuals among these areas is necessary to encourage demographic rescue effects (whereby dwindling populations are supplemented by migrants), and continued genetic interchange. All else being equal, conservation areas that are close together are more likely to support sensitive species for longer time periods than will isolated areas; thus, if it is not possible to acquire new conservation areas that add to existing ones, acquisitions should be made in proximity of protected areas.
- Interpopulation dispersal is important for regional species persistence. Before allowing fragmentation of natural communities, it is critical to identify areas that can provide connections between communities to increase the likelihood of successful dispersal. Such dispersal not only enhances the persistence probabilities of sensitive species (Wiens et al. 1993), but it also helps maintain the overall diversity of plants and animals within a given area (Hansen and Urban

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1992) and allows the entire regional habitat network to function as a healthy ecological community.

- Habitat for a particular species within a conservation area that occurs in less fragmented, contiguous blocks is preferable to habitat that is fragmented. Conservation areas should minimize internal fragmentation and barriers to species movement. Viable populations of many species require large blocks of habitat where the presence of disruptive edge-dwelling species, such as cowbirds and house cats, is minimized. Habitat highly fragmented by disturbed or developed lands has relatively little conservation value for species that exhibit high habitat specificity.
- Efforts should be directed toward maximizing heterogeneity in conservation areas. Areas that have diverse topography, soils, and vegetation tend to capture a variety of different habitat types and thus support a richer biota than more homogeneous areas.

Large scale planning is critical because it is the only way to ensure protection of large blocks of contiguous habitat and linkages. Studies have consistently shown that the number of native species decreases as habitat area decreases. TNC 2006, p. 46.

The General Plan will determine the location and intensity of development at a regional scale. Accordingly, this EIR represents the County's final opportunity to develop mitigation or consider alternatives that would address impacts at a regional scale. Identification of affected habitats and species is critical early in the planning effort because many natural communities are restricted to one or a few ecoregions, *e.g.*, the valley, blue, and coast live oak woodlands of the foothills. TNC 2006, p. 24. For example, it may be appropriate to limit development in certain areas in order to minimize habitat fragmentation and preserve or even expand movement corridors. This can be done by increasing the width of riparian corridors, eliminating development next to existing open space, and preserving important topographic features including vegetated swales, plateaus, and ridgetops. The opportunity to do this will be lost if regional scale impacts are not considered now.

Second, most of the proposed development in the winery corridor and most habitat conversions for agriculture will not require discretionary permits, so this activity will not even be subject to further CEQA review. For example, conversion of previously uncultivated land to agricultural use is considered "Routine and Ongoing Agricultural Activity," and will be allowed without discretionary permits, unless it involves slopes in excess of 25%. DEIR, p. 3-47. If an agricultural conversion does involve slopes over 25%, it *may* require a discretionary permit, or it may not. DEIR, p. 3-47; GP, p. C/OS-8, Policy OS-3.5. Policy OS-3.5, addressing slope development, provides for a ministerial permit for conversion of previously uncultivated land on slopes over 25%, except for conversions meeting "criteria when a discretionary permit is required." Because these criteria are currently unspecified and are to be developed later, it is impossible to

determine whether these conversions will be subject to CEQA review. Policy OS-3.5 calls for a ministerial permit for all other conversions on slopes over 25%, which would therefore also not be subject to CEQA review. The ministerial permit is to require compliance with conditions for resource areas including water quality, biological resources, and erosion control; however, these conditions have not been identified and there can be no assurance that they will address regional scale impacts.

Indeed, in its cursory discussion of cumulative impacts, the DEIR admits that "nondiscretionary activities, such as the conversion of grassland to intensive agriculture, will also contribute to the larger impact on these [biological] resources." DEIR, p. 6-22. The DEIR concludes that there will in fact be considerable contributions to cumulatively significant impacts due to this activity. The DEIR must explain why the conversion of grassland should be treated as a non-discretionary activity through a policy related to routine and ongoing agriculture. Mitigation for impacts related to conversion is obviously available: those conversions can be regulated through land use restrictions, discretionary permitting, or, alternatively, through development of a Natural Communities Conservation Plan (NCCP). The NCCP program sets out to create regional conservation and development plans that protect entire communities of native plants and animals while streamlining the process for compatible economic development in other areas. The NCCP program was established by the California Department of Fish and Game (CDFG). In order to preserve large intact natural communities, rather than piece meal habitats related to a single listed species, CDFG, through funding and staff support, assists land use agencies with the preparation of a program to acquire and set aside natural communities that support multiple species. A NCCP has helped San Diego and Riverside Counties set aside large tracts of coastal sage scrub and other important natural habitats.

In short, most agricultural conversions will not be subject to future CEQA review. Furthermore, the criteria that will determine when discretionary review is required or what conditions will be included in a ministerial permit for conversion have not been developed. There can be no assurance that unspecified conditions on ministerial permits and uncertain future CEQA reviews will mitigate impacts involving habitat fragmentation and interruption of movement corridors.

And most of the winery related uses in the winery corridor will require only a ministerial permit and will thus be exempted from CEQA, including 40 artisan wineries, tasting rooms, winery-related food-facilities, winery events, unspecified "visitor serving uses," and up to 4 residences per winery. DEIR, p. 3-41, Table 3-16; 2007 General Plan, pp. AWCP-10 to AWCP-12. Only the 10 full-scale wineries, restaurants, lodging, and business clusters will require a permit subject to CEQA. Indeed, a key objective of the winery corridor plan is to streamline the review and permitting process. 2007 General Plan, pp. AWCP-1 and 2. The winery corridor plan states that this streamlining is to be achieved by providing "for the assessment of cumulative impacts early in the planning process." However, the proposed mitigation essentially puts off any consideration of quintessentially cumulative impacts – the impacts to movement corridors and nursery

sites – to subsequent project-level CEQA reviews that will not actually apply to most of the proposed uses. 2007 General Plan, p. AWCP-2.

The AWCP section of the 2007 General Plan calls for an unspecified "monitoring program" to be "conducted at five-year intervals in conjunction with the Monterey County Vintners and Growers Association or its successor. This program will assess if the impacts were correctly anticipated and mitigated in the environmental analysis conducted for this Plan, and, if not, what additional measures shall be taken." 2007 General Plan, pp. AWCP-18 to AWCP-19. This deferral of the analysis of actual impacts is no substitute for an adequate current analysis. The County will no longer have the discretion to condition the permitted development, even if the subsequent analysis demonstrates that it should have done so. And the involvement of the regulated community in this post hoc review is not likely to sharpen its focus, since that community will have little incentive to find problems or take action to address them.

The DEIR cannot reasonably conclude that Mitigation Measure BIO 3.1 will mitigate impacts involving habitat fragmentation and interruption of movement corridors. Additional feasible mitigation should be proposed, including the requirement that a county-wide wildlife corridor study using, at a minimum, the wildlife conservation principles contained in Bond (2003) or alternatively a combined HCP/NCCP be development and implemented, *before* any ministerial permit are allowed in the winery corridor and *before* any agricultural conversions are permitted on land in sensitive areas.

6. The DEIR does not evaluate steelhead impacts from increased diversions from the Salinas River to prevent salt water intrusion and overdrafting and these impacts will be significant

The DEIR assumes that diversions from the Salinas River through the Salinas Valley Water Project (SVWP) will be increased from 9,700 AFY to 18,300 AFY in order to prevent salt water intrusion and over-drafting. Although this proposal is outlined conceptually as the "Expanded Distribution System" in the SVWP Draft EIS/EIR (MCWRA (2002)), that document does not evaluate the impacts from this increased level of diversions, particularly the impacts to steelhead. Therefore, the DEIR's statement at p. 4.3-143 that "the impacts of the SVWP have been disclosed and mitigated with the adoption of the EIR/EIS prepared for that project" is not correct.

NOAA's 2007 Final Biological Opinion for the SVWP assumes that only 9,700 AFY will be diverted and requires reinitiation of consultation if diversion is increased beyond this limit. NOAA (2007), pp. 8, 66. The flow prescription based on 9,700 AFY was intended to minimize project impacts and benefit steelhead. Increasing diversions to support the Expanded Distribution System would require that NOAA approve substantial changes to the river flow. This is not disclosed by the DEIR.

An extensive status review and biological assessment of South Central California Coast (SCCC) steelhead was performed as part of NOAA's Biological Opinion for the SVWP. The opinion found that:

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- The steelhead populations of the Salinas basin are significant in the survival of the SCCC steelhead distinct population segment (DPS) because: a.) They represent a large portion of the DPS's range, approx. 48% of both acreage and stream miles;
 b.) They inhabit an "inland" habitat which, along with the habitat of the Pajaro, is considered ecologically distinct within the DPS; and c.) They exhibit unique life history traits (page 36).
- 2. Most of the Salinas River is designated Critical Habitat for SCCC steelhead including: the Salinas River from the mouth to 7.5 miles below Santa Margarita Lake, Arroyo Seco River, Nacimiento and San Antonio Rivers (below the dam), and a number of upper Salinas tributaries (page 57).
- 3. Most of the critical habitat within the watershed is of diminished quality due to: inadequate flows, increased water temperature, degraded habitat, lack of access to suitable habitat and degraded lagoon rearing habitat. This degradation is believed responsible for the decline in steelhead abundance and viability (pages 57 and 58).
- 4. Steelhead breeding and rearing habitats in the Salinas River watershed include: Arroyo Seco, the downstream portions of Nacimiento and San Antonio River Dams, and portions of the upper watershed, with Arroyo Seco having the only population that is considered moderately or somewhat "viable" (population viability is defined by McElhany et al. (2000) as having the potential to persist into the future 100 years) (pages 25-26). These occupied spawning and/or rearing habitats comprise 19 percent of the DPS in term of miles, making the Salinas River the most occupied habitat in the DPS (page 37).
- 5. The primary threats to the Arroyo Seco steelhead population, in order of importance, are flow-related passage, barriers, and summer base flow (page 29).
- 6. The Arroyo Seco's risk of extinction is "fairly high" (page 64).

Given the importance of the Salinas River system to the overall ecological health of the SCCC steelhead DPS, and the relative importance of the Arroyo Seco habitat, increased diversions have the potential to significantly impact steelhead populations. The significance of the impact varies primarily by the location, timing, and volume of a diversion, and how the character of a given water year impacts that timing and volume.

Assuming additional diversions are taken from the present location of the inflatable rubber dam near Highway 1, timing and volume and how they vary by water year are the primary concern. Under the current diversion plan stipulated by the SVWP and the Section 7 Incidental Take Statement, winter flows are somewhat reduced because of increased storage at Nacimiento Dam while spring and summer flows are increased. Any plans to store additional winter volume, particularly in December and January, for spring/summer release would likely have a significant impact on adult migration to suitable breeding habitat.

Currently, the SVWP release plan permitted by NOAA calls for increased spring and summer flows. As large portions of the Salinas typically dry up during this time, increased flows present an opportunity for an expanded smolt emigration period. Smolt emigration (generally occurring between March and July) often limits steelhead

production in "inland" systems, like the Salinas, that have hot, dry summers and dams that store any water that would typically trickle down from the upper watershed. Any change to the current dam flow rates during spring and summer would negate any improvements made to smolt outmigration and would be a significant impact.

7. The DEIR does not evaluate steelhead impacts from continued operation of Nacimiento and San Antonio Dams and these impacts will be significant

As noted, the DEIR assumes that groundwater will remain available in the Salinas Valley basin to support planned growth and states that groundwater pumping will not cause significant impacts from salt water intrusion or overdrafting. The DEIR relies on MCWRA's continued operation of the Nacimiento Dam and San Antonio Dam to maximize groundwater recharge in that basin. DEIR, pp. 4.3-5 to 4.3-6. However the DEIR does not evaluate the impacts to steelhead from the continued operation of these dams or reference any previous analysis of this.

We are aware of no such previous analysis of impacts from the continued operation of the two dams, *e.g.*, a Biological Opinion from a consultation under the ESA. The NOAA Biological Opinion for the SVWP expressly disclaims any analysis of what it characterizes as the baseline operations of these dams. NOAA (2007), p. 2. If there is such an analysis or opinion, the DEIR should disclose this, summarize its findings, and explain whether it was based on assumptions consistent with the 2007 General Plan. If there has not been any form of analysis or compliance with the ESA's requirement that continued operations of these dams are subject to the requirement to obtain an Incidental Take Permit or Statement, then the DEIR should disclose this. In any event, the DEIR must provide an analysis of the effects of continuing operations.

We believe that continued operation of these dams will significantly impact steelhead migration and reproduction. Beyond the permanent loss of spawning and rearing habitat that dams create, the greatest impact of dam operations to steelhead is the lack of water for migration and emigration. The storage of flood flows during the winter months not only reduces the volume, and therefore the flow of water, but also the geomorphology of the habitat downstream of the dam.

By muting flood flows, dams minimize migration "signals" to adults awaiting migration at the river/ocean interface. Reduced flows exacerbate anthropogenic barriers to adult migration and to a lesser extent juvenile emigration by lowering the volume of water provided to overcome a barrier. Dam storage limits aquifer recharge during winter months, leading to an increase in dry stream days that can trap and isolate migrating adults, especially in the beginning of the rainy season when rain may entice fish to migrate but not produce enough water to maintain refuge habitat. By maximizing dam release for aquifer recharge throughout the summer and fall, large portions of streams often become dry before the smolt emigration season (typically March to July) ends, leading to the stranding of fish. In many cases, successive years of dry stream reaches caused by dam operations will lead to the formation of a resident population. Resident

populations, although under the law are protected as naturally spawning steelhead, do not contribute to the overall genetic variability of a system.

By limiting flood flows, dams slowly and irrevocably change channel and substrate configuration. The muting of the highest peak flows creates smaller channels as vegetation once eroded by floods now flourishes. The number and size of boulders, cobbles, gravels and large woody debris is reduced. Channels become more shallow from the loss of erosive power that accompanies peak flood stage events, but also from the deposition of fine sediments that dams trap and release. Fine sediments also change the natural composition of river sediments, slowly displacing gravels and cobbles with sand and clay. Loss of complex stream habitat results in a loss of summer and winter steelhead refugia. Fine sediments clog interstitial spaces between gravels and cobbles, limiting oxygenation of steelhead egg and fry, but also severely altering the abundance and diversity of the invertebrate community, the juveniles steelheads main prey item.

8. The DEIR does not disclose the effects of sedimentation on steelhead and these impacts will be significant

As discussed above, the DEIR projects continued expansion in the cultivation of previously uncultivated land for agriculture, particularly for vineyard expansion. Most of this expansion will occur on sloped land at the edges of the Salinas Valley. The DEIR does not describe activities permitted by the 2007 General Plan that will cause erosion and sedimentation with any specificity, does not project actual erosion and sedimentation impacts, and does not propose any meaningfully substantive mitigation.

We believe that cumulative increases in sedimentation appear to be likely based on planned expansion of cultivation of previously uncultivated land and the absence of any substantive proposal for mitigation. For example, the DEIR postpones the evaluation and mitigation of cumulative sedimentation impacts, simply referencing Policy OS 3.9 that calls for a subsequent committee to develop a program. It is clear that increased sedimentation will adversely affect steelhead.

Any activities that require the moving or excavation of earth contributes to the sedimentation of natural environments, most notably creeks, streams, and rivers. Sediment is carried over impervious surfaces during rain events and then moved downstream by flood flows. The continued development of the Salinas River Valley will no doubt result in an increase in short-term, construction related sedimentation of aquatic habitats, but also in the creation of long-term sediment sources as previously undeveloped land is converted for agriculture and wineries. As noted above, there are thousands of acres of steeply sloped land that will be newly opened to development under the 2007 General Plan slope development policy. And, as noted, the EIR does not propose any substantive mitigation of the cumulative impacts of sedimentation from this development since Policy OS 3.9 defers this mitigation without any performance standards.

Long-term sources of sediment are those that are of principal concern to fisheries biologists. Fine sediments are mobilized from fields during rain or irrigation events, settling into nearby ditches, creeks or streams. Large rain events further mobilize this sediment into main stream and river routes, where impacts to steelhead occur.

Fine sediments impact steelhead in a number of ways. Most notably, over the long term sediment fills in complex foraging and refugia habitat, reducing the complexity and therefore the productivity of steelhead habitat. Sediment reduces the interstitial spaces needed for invertebrate productivity, limiting the diversity and abundance of the steelhead's main prey item. Sediment also reduces oxygenation of steelhead eggs and alevin, potentially causing the substantial lose of young. Sediment suspended in the water column can cause complications with respiration, foraging, prey avoidance, and even mortality.

9. Cumulative impact analysis is inadequate and no mitigation is proposed

The DEIR's cumulative impact analysis consists of the recitation of a list of policies relevant to biological resources, recitation of the list of additional mitigation measures and a single paragraph of analysis:

"Together, these [policies and mitigation measures] would reduce the 2007 General Plan's contribution to cumulative impacts, but in some cases these impacts would still remain considerable. As development continues toward buildout, particularly development of existing lots of record, low-intensity development will cover larger expanses of the county's jurisdiction (federal lands such as Fort Hunter Liggett and Los Padres National Forest and state parks, which provide substantial areas of habitat within the county would not be affected). Similarly, expansion of the cities, which is outside the control of Monterey County, will impact habitats adjoining urban areas. Non-discretionary activities, such as the conversion of grassland to intensive agriculture, will also continue to contribute to the larger impact on these resources. Because the extent and species coverage of the future NCCP is unknown, there is a potential for cumulative impacts on special status species not covered by the NCCP. As a result, there would be a considerable contribution to cumulatively significant biological impacts." DEIR, p. 6-22.

The DEIR's apparent conclusion is that considerable contributions will be made to cumulatively significant impacts due to three causes: 1) sprawl caused by low-intensity development, particularly development of lots of record, 2) expansion of cities, and 3) non-discretionary activities, such as the conversion of grassland to intensive agriculture. Because the first and third causes are within the County's control, the County is obligated to propose all feasible mitigation to address the acknowledged cumulative impact. Despite this, the cumulative impact discussion does not even consider additional mitigation to address the acknowledged impacts.

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The EIR must propose mitigation measures that would address either the causes of these cumulative impacts or their effects. The County may bar or condition low-intensity development, including development of lots of record, where that development threatens to contribute to cumulative impacts. And there is simply no reason that the County must treat conversion of grassland to agriculture, or development on slopes, or construction of wineries, as non-discretionary activities, when such development contributes to cumulative impacts. If the County nonetheless intends to permit this activity without restriction or conditions, then it must adopt other mitigation to address its effects, including *prompt* implementation of an NCCP that will address the cumulative impacts.

If there are any questions regarding these comments, please do not hesitate to contact me at (650) 327-0429, ext. 82, or harris@traenviro.com.

Sincerely,

Vat Harris

Victoria Harris Program Director

Exhibits:

Exhibit A: The Nature Conservancy, Intact Natural Vegetation Designated for Agriculture in Southern Monterey County, 2009

Exhibit B: The Nature Conservancy, Analysis of Slope and Vegetation by Planning Area for Land Permitting Agriculture Under the 2007 Monterey County General Plan

Exhibit C: The Nature Conservancy, Linkage Summary for the Central Coast, 2009

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The Nature Conservancy, California Central Coast Ecoregional Plan Update, October 2006.
Exhibit A

The Nature Conservancy, Intact Natural Vegetation Designated for Agriculture in Southern Monterey County, 2009

Map provided in separate mailing

Exhibit B

The Nature Conservancy, Analysis of Slope and Vegetation by Planning Area for Land Permitting Agriculture Under the 2007 Monterey County General Plan, January 2009

AREA_NAM_1	LAND_USE	Slope Class	Land Cover (from CalVeg)	Acres
Cachagua	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	2
Cachagua	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	2
Cachagua	Resource Conservation	25 - 30% Slope	Converted Vegetation	1
Carmel Valley Master Plan	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	1
Carmel Valley Master Plan	Resource Conservation	25 - 30% Slope	Converted Vegetation	1
Carmel Valley Master Plan	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	0
Central Salinas Valley	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	158
Central Salinas Valley	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	51
Central Salinas Valley	Resource Conservation	25 - 30% Slope	Converted Vegetation	11
Central Salinas Valley	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	9
Greater Monterey Peninsula	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	5
Greater Monterey Peninsula	Resource Conservation	25 - 30% Slope	Converted Vegetation	6
Greater Salinas	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	11
Greater Salinas	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	2
Greater Salinas	Resource Conservation	25 - 30% Slope	Converted Vegetation	6
North County	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	16
North County	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	6
North County	Resource Conservation	25 - 30% Slope	Converted Vegetation	11
North County	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	4
South County	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	22
South County	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	85
South County	Resource Conservation	25 - 30% Slope	Converted Vegetation	28
South County	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	7
Toro	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	2
Toro	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Converted Vegetation	1
Toro	Resource Conservation	25 - 30% Slope	Converted Vegetation	14
Cachagua	Farmlands 40 - 160 Ac Min	GT 30% Slope	Converted Vegetation	1
Cachagua	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	67
Cachagua	Resource Conservation	GT 30% Slope	Converted Vegetation	2
Carmel Valley Master Plan	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	1
Carmel Valley Master Plan	Resource Conservation	GT 30% Slope	Converted Vegetation	5
Carmel Valley Master Plan	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	3
Central Salinas Valley	Farmlands 40 - 160 Ac Min	GT 30% Slope	Converted Vegetation	240

AREA_NAM_1	LAND_USE	Slope Class	Land Cover (from CalVeg)	Acres
Central Salinas Valley	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	97
Central Salinas Valley	Resource Conservation	GT 30% Slope	Converted Vegetation	30
Central Salinas Valley	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	27
Fort Ord	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	0
Greater Monterey Peninsula	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	2
Greater Monterey Peninsula	Resource Conservation	GT 30% Slope	Converted Vegetation	43
Greater Salinas	Farmlands 40 - 160 Ac Min	GT 30% Slope	Converted Vegetation	11
Greater Salinas	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	12
Greater Salinas	Resource Conservation	GT 30% Slope	Converted Vegetation	8
North County	Farmlands 40 - 160 Ac Min	GT 30% Slope	Converted Vegetation	19
North County	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	15
North County	Resource Conservation	GT 30% Slope	Converted Vegetation	49
North County	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	0
North County LCP	Resource Conservation	GT 30% Slope	Converted Vegetation	0
South County	Farmlands 40 - 160 Ac Min	Farmlands 40 - 160 Ac Min GT 30% Slope Converted V		20
South County	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	129
South County	Resource Conservation	GT 30% Slope	Converted Vegetation	29
South County	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	20
Toro	Farmlands 40 - 160 Ac Min	GT 30% Slope	Converted Vegetation	2
Toro	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Converted Vegetation	1
Toro	Resource Conservation	GT 30% Slope	Converted Vegetation	18
Cachagua	Farmlands 40 - 160 Ac Min	LT 25% Slope	Converted Vegetation	111
Cachagua	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	15
Cachagua	Resource Conservation	LT 25% Slope	Converted Vegetation	5
Carmel LUP	Resource Conservation	LT 25% Slope	Converted Vegetation	0
Carmel Valley Master Plan	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	20
Carmel Valley Master Plan	Resource Conservation	LT 25% Slope	Converted Vegetation	36
Carmel Valley Master Plan	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	3
Central Salinas Valley	Farmlands 40 - 160 Ac Min	LT 25% Slope	Converted Vegetation	137137
Central Salinas Valley	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	2838
Central Salinas Valley	Resource Conservation	LT 25% Slope	Converted Vegetation	21
Central Salinas Valley	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	473
Coast Non-Coastal	Resource Conservation	LT 25% Slope	Converted Vegetation	4

AREA_NAM_1	LAND_USE	Slope Class	Land Cover (from CalVeg)	Acres
Fort Ord	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	1
Fort Ord	Resource Conservation	LT 25% Slope	Converted Vegetation	0
Greater Monterey Peninsula	Farmlands 40 - 160 Ac Min	LT 25% Slope	Converted Vegetation	301
Greater Monterey Peninsula	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	389
Greater Monterey Peninsula	Resource Conservation	LT 25% Slope	Converted Vegetation	75
Greater Salinas	Farmlands 40 - 160 Ac Min	LT 25% Slope	Converted Vegetation	46180
Greater Salinas	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	195
Greater Salinas	Resource Conservation	LT 25% Slope	Converted Vegetation	518
North County	Farmlands 40 - 160 Ac Min	LT 25% Slope	Converted Vegetation	7257
North County	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	272
North County	Resource Conservation	LT 25% Slope	Converted Vegetation	157
North County	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	33
North County LCP	Farmlands 40 - 160 Ac Min	LT 25% Slope	Converted Vegetation	0
North County LCP	Resource Conservation	LT 25% Slope	Converted Vegetation	0
South County	Farmlands 40 - 160 Ac Min	LT 25% Slope	Converted Vegetation	15944
South County	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	2588
South County	Resource Conservation	LT 25% Slope	Converted Vegetation	112
South County	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	73
Toro	Farmlands 40 - 160 Ac Min	LT 25% Slope	Converted Vegetation	4796
Toro	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	147
Toro	Resource Conservation	LT 25% Slope	Converted Vegetation	137
Toro	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Converted Vegetation	0
Cachagua	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	39
Cachagua	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	7077
Cachagua	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	1866
Cachagua	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	125
Carmel LUP	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	0
Carmel LUP	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	0
Carmel Valley Master Plan	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	25
Carmel Valley Master Plan	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	364
Carmel Valley Master Plan	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	307
Central Salinas Valley	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	2685
Central Salinas Valley	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	23575

AREA_NAM_1	LAND_USE	Slope Class	Land Cover (from CalVeg)	Acres
Central Salinas Valley	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	4612
Central Salinas Valley	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	1031
Coast Non-Coastal	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	434
Coast-Big Sur	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	0
Coast-Big Sur	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	0
Fort Ord	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	0
Fort Ord	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	3
Greater Monterey Peninsula	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	710
Greater Monterey Peninsula	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	2657
Greater Monterey Peninsula	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	22
Greater Salinas	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	120
Greater Salinas	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	3426
Greater Salinas	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	641
North County	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	14
North County	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	737
North County	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	117
North County	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	117
South County	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	2681
South County	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	48472
South County	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	4796
South County	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	4085
Toro	Farmlands 40 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	89
Toro	Permanent Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	1816
Toro	Resource Conservation	25 - 30% Slope	Intact Natural Vegetation	1000
Toro	Rural Grazing 10 - 160 Ac Min	25 - 30% Slope	Intact Natural Vegetation	37
Cachagua	Farmlands 40 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	51
Cachagua	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	28982
Cachagua	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	10416
Cachagua	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	480
Carmel LUP	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	0
Carmel LUP	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	0
Carmel Valley Master Plan	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	241
Carmel Valley Master Plan	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	1321

O-11g

AREA_NAM_1	LAND_USE	Slope Class	Land Cover (from CalVeg)	Acres
Carmel Valley Master Plan	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	1171
Central Salinas Valley	Farmlands 40 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	8770
Central Salinas Valley	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	93314
Central Salinas Valley	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	23097
Central Salinas Valley	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	4848
Coast Non-Coastal	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	2481
Coast-Big Sur	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	0
Coast-Big Sur	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	0
Fort Ord	Farmlands 40 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	0
Fort Ord	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	2
Greater Monterey Peninsula	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	4630
Greater Monterey Peninsula	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	14456
Greater Monterey Peninsula	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	313
Greater Salinas	Farmlands 40 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	404
Greater Salinas	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	14596
Greater Salinas	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	4397
North County	Farmlands 40 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	29
North County	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	1294
North County	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	127
North County	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	120
South County	Farmlands 40 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	4620
South County	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	119583
South County	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	19093
South County	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	9862
Toro	Farmlands 40 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	193
Toro	Permanent Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	10403
Toro	Resource Conservation	GT 30% Slope	Intact Natural Vegetation	3403
Toro	Rural Grazing 10 - 160 Ac Min	GT 30% Slope	Intact Natural Vegetation	56
Cachagua	Farmlands 40 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	578
Cachagua	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	21357
Cachagua	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	5081
Cachagua	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	672
Carmel LUP	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	0

O-11g

AREA_NAM_1	LAND_USE	Slope Class	Land Cover (from CalVeg)	Acres
Carmel LUP	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	0
Carmel Valley Master Plan	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	85
Carmel Valley Master Plan	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	872
Carmel Valley Master Plan	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	1393
Central Salinas Valley	Farmlands 40 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	40196
Central Salinas Valley	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	114713
Central Salinas Valley	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	15437
Central Salinas Valley	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	3742
Coast Non-Coastal	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	0
Coast Non-Coastal	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	1595
Coast-Big Sur	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	0
Coast-Big Sur	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	0
Fort Ord	Farmlands 40 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	0
Fort Ord	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	4
Fort Ord	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	0
Greater Monterey Peninsula	Farmlands 40 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	84
Greater Monterey Peninsula	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	3142
Greater Monterey Peninsula	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	8376
Greater Monterey Peninsula	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	72
Greater Salinas	Farmlands 40 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	4809
Greater Salinas	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	10710
Greater Salinas	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	1130
North County	Farmlands 40 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	465
North County	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	5061
North County	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	2303
North County	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	687
North County LCP	Farmlands 40 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	0
North County LCP	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	0
North County LCP	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	0
North County LCP	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	0
South County	Farmlands 40 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	67114
South County	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	270970
South County	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	15576

AREA_NAM_1	LAND_USE	Slope Class	Land Cover (from CalVeg)	Acres	
South County	Rural Grazing 10 - 160 Ac Min	zing 10 - 160 Ac Min LT 25% Slope Intact Natural Veget		33295	
Toro	Farmlands 40 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	2469	
Toro	Permanent Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	5000	
Toro	Resource Conservation	LT 25% Slope	Intact Natural Vegetation	3561	
Toro	Rural Grazing 10 - 160 Ac Min	LT 25% Slope	Intact Natural Vegetation	223	
TOTALS					
All Planning Areas	All land uses permitting agriculture	LT 25% Slope	Intact Natural Vegetation	640771	
All Planning Areas	All land uses permitting agriculture	25 - 30% Slope	Intact Natural Vegetation	113678	
All Planning Areas	All land uses permitting agriculture	GT 30% Slope	Intact Natural Vegetation	382753	
All Planning Areas	All land uses permitting agriculture	GT 25% Slope	Intact Natural Vegetation	496432	
Cachauga, CSV, Toro, South County	All land uses permitting agriculture	LT 25% Slope	Intact Natural Vegetation	599984	
Cachauga, CSV, Toro, South County	All land uses permitting agriculture	25 - 30% Slope	Intact Natural Vegetation	103984	
Cachauga, CSV, Toro, South County	All land uses permitting agriculture	GT 30% Slope	Intact Natural Vegetation	337171	
Cachauga, CSV, Toro, South County	All land uses permitting agriculture	All slopes	Intact Natural Vegetation	etation 1041138	

This table summarizes the amount of <u>Grassland/Oak Woodland*</u> within the		
four Landuse categories** designated		
for Agriculture		
		~ Acres of Grassland/Oak Woodland* in the following land use classes: Farmlands 40 - 160
		Ac Min, Permanent Grazing 10 - 160 Ac Min,
		Resource Conservation, Rural Grazing 10 - 160
AREA_NAME	SLOPECLASS	AC MIN
Cachagua	> 30% slope	27,221
	25-50% slope	0,000
	> 20% slope	22,238
	25-30% slope	0
Carmel LUP	< 25% slope	0
Carmel Valley Master Plan	> 30% slope	2 067
Carmel Valley Master Plan	25-30% slope	593
Carmel Valley Master Plan	< 25% slope	2.133
Central Salinas Valley	> 30% slope	72.139
Central Salinas Valley	25-30% slope	21,911
Central Salinas Valley	< 25% slope	140,186
Coast Non-Coastal	> 30% slope	361
Coast Non-Coastal	25-30% slope	103
Coast Non-Coastal	< 25% slope	769
Coast-Big Sur	> 30% slope	0
Coast-Big Sur	25-30% slope	0
Coast-Big Sur	< 25% slope	0
Fort Ord	> 30% slope	2
Fort Ord	25-30% slope	3
Fort Ord	< 25% slope	4
Greater Monterey Peninsula	> 30% slope	12,748
Greater Monterey Peninsula	25-30% slope	2,598
Greater Monterey Peninsula	< 25% slope	9,792
Greater Salinas	> 30% slope	14,426
Greater Salinas	25-30% slope	3,392
Greater Salinas	< 25% slope	14,861
North County	> 30% slope	1,569
North County	25-30% slope	985
North County	< 25% slope	8,496
South County	> 30% slope	98,922
South County	25-30% slope	45,40b
Tare	< 25% slope	337,035
Toro	> 30% slope	9,3/1
Toro		2,301
	< 23% slope	9,490
Totals		

*For our analysis, we used the dataset CalVegt2000 (http://www.fs.fed.us/r5/rsl/projects /mapping/). When we refer to Grassland/Oakwood we're talking about the following categories from the CalVeg dataset: "Annual Grassland", "Blue Oak Forest/Woodland", Coast Live Oak Forest/Woodland", "Valley Oak Forest/Woodland"	
**The Four landuse categories designated for Agriculture are "Farmlands 40-160 Ac Min", "Permanent Grazing 10 - 160 Ac Min", "Resource Conservation", "Rural Grazing 10 - 160 Ac Min"	

Exhibit C

The Nature Conservancy, Linkage Summary for the Central Coast, 2009

This ta	ble provides data sources and descriptions for the	linkages map	ped on TNC, Intact Nat	ural Vegetation Designated for Agriculture	in Southern Monterey County, 2009
L_ID	SOURCEDOC	AUTHOR	DATESCALE	Name	Notes
322	Hwy 68 Corridor Assessment 2005	TNC	Fine	Highway 68 western crossing	One of only two viable wildlife crossings across Highway 68 between the Santa Lucia Range and Ft. Ord Identified by TNC and BLM as part of Highway 68 review.
323	Monterey County Project Operations Plan	TNC	Coarse	Eastern Salinas Valley Foothills	Low foothills along the eastern edge of the Salinas Valley provide critical north-south connectivity as well as east-west connections from Salinas Valley to the interior Diablo Ranges. Vineyard are spreading in this important area
329	Mount Hamilton Focus Plan	TNC	Coarse	Santa Cruz Mtn-Gabilan Range	Broadly defined regional coarse-scale corridor to link major ranges
338	Monterey County Project Operations Plan	TNC	1/4/2002 Fine	Sierra de Salinas-Salinas River	Identified by TNC (Monterey Project). One of only areas where undeveloped benchlands abut high quality river and riparian habitats on the west side of the Valley
339	Monterey County Project Operations Plan	TNC	1/4/2002 Coarse	Salinas Valley floor	non-specific corridor - denotes need to maintain permeablility through agricultural lands so wildlife can move between valley, floodplain and adjacent foothills.
340	Monterey County Project Operations Plan	TNC	1/4/2002 Fine	Gabilan Creek -Aromas Hills	Links northern Gabilan Range to Santa Cruz Range via hills around Prunedale and Aromas -
343	Monterey County Project Operations Plan	TNC	1/4/2002 Coarse	Salinas Valley - Peachtree Valley	This corridor is generalized in location and is intended to maintain wildlife movement east-west between the Salinas Valley and interior Diablo Range through the San Lorenzo River watershed in the vicinity of lower Peachtree Valley
344	Monterey County Project Operations Plan	TNC	1/4/2002 Coarse	Salinas Valley - San Lorenzo Creek	This corridor is generalized in location and is intended to maintain wildlife movement east-west between the Salinas Valley and interior Diablo Range through the San Lorenzo River watershed south of the Salinas Valley-Peachtree Valley corridor
346	Monterey County Project Operations Plan	TNC	1/4/2002 Coarse	Camp Roberts - Ft. Hunter Liggett	Located between the reservoir and Jolon Hills, this series of low hills and valley need to be maintained to facilitate movement of wildlife between Camp Roberts and Ft. Hunter Ligget
347	CC Ecoregional Assessment 2006	TNC	8/1/2006 Coarse	Parkfield - Cottonwood Pass	Linkage spans area of private ownership in high quality, unprotected habitat in the interior Diablo Ranges
350	Monterey County Project Operations Plan	TNC	1/4/2002 Fine	Sierra de Salinas-Toro Peak	the north
353	Monterey County Project Operations Plan	TNC	1/4/2002 Fine	Southern Sierra de Salinas - Salinas R	One of few areas in this region where wildlife can move through natural habitat between the Salinas River and southern Sierra de liver Salinas

L_ID	SOURCEDOC	AUTHOR	DATE_	SCALE	Name	Notes
354	CC Ecoregional Assessment 2006	TNC	8/1/2006	Fine	Sierra de Salinas - Arroyo Seco	
						Key steelhead corridor as well as wildlife corridor between Salinas
357	Monterey County Project Operations Plan	TNC	1/4/2002	Fine	Arroyo Seco- Salinas River linkage	River and Santa Lucia Range. Needs restoration across valley floor
						Broad area providing critical permeability between the southern
359	CC Ecoregional Assessment 2006	TNC	8/1/2006	Coarse	Camp Roberts - Stockdale Mtn.	Salinas Valley and the interior in an area of large ranches
						Broadly defined corridor to link major ranges; overlaps with
						305,363,329 which are located along different elevations but
363	CWC- Central Coast Assessment	CWC	8/1/2002	Coarse	Santa Cruz Mtn-Gabilan Range	serve same purpose
						Identified by local experts; one of only connections between
373	CC Ecoregional Assessment 2006	TNC	1/20/2006	Fine	Tembladero Slough	Santa Cruz Mts.southward to Elkhorn Slough
						northernmost viable linkage connecting the northern Santa Lucia
376	Hwy 68 Corridor Assessment 2005	TNC	4/21/2005	Fine	Toro Peak Foothills-Salinas River	Range to the Salinas River northward
						narrow yet esssential corridor between lowland wildflower
						fieldsalong Highway 68 to preserve at west end of subdivision
375	Hwy 68 Corridor Assessment 2005	TNC	4/21/2005	Fine	Hwy 68 - Toro Creek	along Toro Creek
						Key areas to maintain connectivity between Salinas River,
						southern Gabilans and San Benito River Valley. Includes Toro
377	CC Ecoregional Assessment 2006	TNC	8/1/2002	Coarse	Salinas River - Chalone Creek	Creek
						Area along Salinas River where river floodplain has unobstructed
						connections to foothills of southern Gabilan Range ,providing
378	CC Ecoregional Assessment 2006	TNC	8/1/2006	Coarse	Salinas River - Pinnacles Nat'l Mon.	regional connectivity.

This table	nis table provides data sources and descriptions for the linkages mapped on TNC, Intact Natural Vegetation Designated for Agriculture in Southern Monterey County, 2009									
L_ID	SOURCEDOC	AUTHOR	DATE_	SCALE	Name	ТҮРЕ	KEY_SPP	HABITAT		
305	Missing Linkages: Restoring Connectivity in CA	CWC - South Coast Wildlands Project	11/2/2000	Coarse	Santa Cruz Mtn-Mt. Hamilton	Landscape Linkage, Choke- poin	mountain lion, medium sized carnivores	Mixed coniferous, oak woodland, serpentine grassland, chaparral, redwood		
307	Missing Linkages: Restoring Connectivity in CA	CWC - South Coast Wildlands Project	11/2/2000	Coarse	Santa Lucia - Gabilan, Ventana Wilderness	Choke point	mountain lion	grassland, scrub and oak woodlands		
308	Missing Linkages: Restoring Connectivity in CA	CWC - South Coast Wildlands Project	11/2/2000	Coarse	Fort Ord - Ventana	Missing Link	coyote, bear, bobcat, mountain lion	maritime chaparral, grassland, oak woodlands		
309	Missing Linkages: Restoring Connectivity in CA	CWC - South Coast Wildlands Project	11/2/2000	Coarse	Los Padres - Hearst Castle	Landscape Linkage	mountain lion, bear, spotted owl, red-legged frogs	oak woodlands/savanna, riparian, coast grasslands		
311	Missing Linkages: Restoring Connectivity in CA	CWC - South Coast Wildlands Project	11/2/2000	Coarse	S. Diablo - Carizzo	Landscape Linkage	large mammal, mountain lion, kit fox	oak woodland, grassland, riparian, Diablen scrub		
315	Missing Linkages: Restoring Connectivity in CA	CWC - South Coast Wildlands Project	11/2/2000	Coarse	Camp Roberts	Choke-point	kit fox, tule elk	grassland, oak woodlands		
316	Missing Linkages: Restoring Connectivity in CA	CWC - South Coast Wildlands Project	11/2/2000	Coarse	Salinas River Riparian Corridor	Landscape Linkage	riparian birds, neotropical migrants, steelhead, kit fox	riparian, grasslands		
319	Missing Linkages: Restoring Connectivity in CA	CWC - South Coast Wildlands Project	11/2/2000	Coarse	Lower N. Salinas River	Landscape Linkage	neotropical migrants, steelhead, large & small mammals	valley riparian forest, woodland, and scrub		
81	Missing Linkages: Restoring Connectivity in CA	CWC - South Coast Wildlands Project	11/2/2000	Coarse	Santa Cruz Mtn- Gabilan Range					
97	Missing Linkages: Restoring Connectivity in CA	CWC - South Coast Wildlands Project	11/2/2000	Coarse	Pajaro River					

L_ID	LAND_COVER	OTHER_OWNR	BARRIERS	FEATURES	RSRCH_NEED	DOCUMENTS	COMMENTS
305	Natural Vegetation, Agriculture	Sargent, Castro Valley Ranch	roads, gaps in habitat cover	riparian habitat, underpasses	document use of linkage, design, evaluate, purchase		evaluate underpass/overpass movement
307	Natural Vegetation, Agriculture, Residential		Hwy 101, gaps in habitat cover, sand/gravel operations		document use of linkage, design, evaluate, purchase	Steelhead documents	design successful under/overpass
308	Natural Vegetation, Agriculture, Residential	UC Hastings Research Reserve, CSUMB	roads, gaps in habitat cover	possibly bridges over Salinas	document use of linkage, design safe road crossings	BLM, CSUMB	
309	Natural Vegetation, Agriculture	Hearst Corporation, State Parks	Hwy 41, Hwy 46	contiguous habitat, riparian habitat	document use of linkage		presence of focal species north & south of corridor
311	Natural Vegetation	ranches, TNC	none but potential for fragmentation high	contiguous habitat, riparian habitat	land ownership, identification of large, connected ranches	anecdotal, USFWS recovery plans	core area that links existing public lands
315	Natural Vegetation, Agriculture	address overgrazing issues	roads, minor gaps in habitat cover	contiguous habitat	document use of linkage, design, evaluate, purchase	kit fox point occurrence	
316	Natural Vegetation	many	Hwy 101, railroad crossing, small towns	broad, undeveloped flood plain	land ownership patterns, design linkages	reserve design with Packard grants	
319	Natural Veg, Rural Residential, Agriculture	ag interests, public agencies at former Fort Ord	insufficient flow, dam, gaps in cover	contiguous riparian habitat, bridges	document use by neotropical migrants, evaluate restoring steelhead run	Roberson et al. 1993, RHJV 2000, Titus et al. 1999	Connects the Santa Lucia and Diablo Ranges via the Salinas River

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Experience and Qualifications for Biological Assessments and Conservation Planning



TRA ENVIRONMENTAL SCIENCES, INC.

QUALIFICATIONS SUMMARY

Established in 1972, TRA Environmental Sciences, Inc. (TRA) is a full-service environmental consulting firm specializing in environmental impact analysis and conservation planning. The firm has a wide range of in-house expertise and has prepared environmental documents on a variety of projects including recreational developments, trails, schools, subdivisions, quarries, landfills, wastewater treatment plants, and General, Specific, and Master Plans. TRA also prepares specialty analyses such as endangered species habitat conservation programs, constraints analyses, biological assessments, peer review of other environmental reports, mitigation monitoring, and computer-generated visual studies.

TRA Environmental Sciences, Inc. has a highly professional staff that works closely on each job. We consistently deliver large amounts of work, on time and at a reasonable cost. We have 34 years of experience in environmental review of complex and controversial projects, and have provided the highest level of support to lead agencies in public representation throughout the environmental review process. The senior staff has at least 17 years of experience in the field, and most have been with the firm for 15 years or more. When supplemental expertise is needed, we use a network of subcontractors that we have collaborated with over the years in various disciplines, such as traffic, air quality, cultural resources, geology, hydrology, bioengineering, fluvial geomorphology, and socioeconomics.

Our Areas of Expertise:

Biological Assessment and Wetland Delineation. TRA Environmental Sciences, Inc. prepares specialty analyses such as biological surveys and assessments, wetland delineations, endangered species habitat conservation plans, and constraints analyses.

The firm has authored or had major participation in more than 10 habitat conservation plans for endangered species in California and elsewhere, as well as the Southern California Coastal Sage Scrub NCCP and the Placer Legacy conservation project, which are regional programs. The firm also does many smaller scale biological assessments. This work is supported by mapping through the use of the firm's GIS and AutoCAD capabilities, which play a role in many of the firm's projects.

TRA has conducted many site specific biological assessments, special status species surveys, and impact studies throughout the greater Bay Area. These biological inventories often require specific knowledge of the California red-legged frog (CRLF), San Francisco garter snake, steelhead and several rare plants that occur on the coastside, in the Santa Cruz Mountains, or in creeks and tidal marshes in the Bay Area.

TRA has experience in the surveillance and identification of the following special status animals:

Common Name

Invertebrates

San Bruno elfin butterfly Mission blue butterfly Callippe silverspot butterfly Bay checkerspot butterfly Smith's blue butterfly

Vertebrates

Steelhead California red-legged frog California tiger salamander San Francisco garter snake Long-eared owl Northern spotted owl Burrowing owl Least Bell's vireo Willow flycatcher San Joaquin kit fox San Francisco dusky-footed woodrat

TRA has also completed habitat surveys for species such as the California least tern, California clapper rail, snowy plover, salt marsh harvest mouse, and various bat species in the San Francisco bay area.

TRA staff is experienced in conducting project-specific surveys following US Fish and Wildlife Service (USFWS) and CA Department of Fish and Game (CDFG) protocols for CRLF, California tiger salamander, burrowing owl, San Joaquin kit fox, and rare listed and protected plants. TRA also has experience conducting pre-construction surveys for nesting raptors, burrowing owls, and other species. When federally listed species are identified, TRA staff is also able to assist clients with USFWS Section 7 and Section 10a (HCP) permits.

TRA biologists are experienced in conducting surveys for special status plant species, especially in San Mateo County. TRA biologists are familiar with sensitive plant species within coastal prairie, coastal salt marsh, central coast riparian scrub, chaparral, deciduous and evergreen woodlands, and serpentine grassland communities. TRA annually monitors rare plants on San Bruno Mountain as part of the habitat management component of the San Bruno Mountain Habitat Conservation Plan. TRA staff is familiar with the taxonomy of the local flora and are experienced with local botanical references, as well as the Jepson Manual.

TRA has past experience conducting surveys for the following special status plant species (listed alphabetically by scientific name):

Common Name San Mateo thornmint Franciscan onion Coast rock cress San Bruno Mountain manzanita Montara manzanita Alkali milk-vetch Coastal bluff morning glory San Francisco bay spineflower Mt. Hamilton thistle Fountain thistle Western leatherwood Santa Clara Valley dudleya San Mateo wooly sunflower San Francisco wallflower Fragrant fritillary Hillsborough chocolate lily San Francisco gumplant Marsh gumplant Diablo helianthella Congdon's tarplant Crystal Springs lessingia San Francisco lessingia San Mateo tree lupine Dudley's lousewort White-rayed pentachaeta Hickman's cinquefoil San Francisco campion Most beautiful jewel-flower

Scientific Name

Acanthomintha duttonii Allium peninsulare var. franciscanum Arabis blepharophylla Arctostaphylos imbricata imbricata Arctostaphylos montarensis Astragalus tener var. tener Calystegia purpurata ssp. saxicola Chorizanthe cuspidata cuspidata *Cirsium fontinale campylon Cirsium fontinale fontinale* Dirca occidentalis Dudleya setchellii Eriophylum latilobum Erysimum franciscanum Fritillaria liliacea Fritillaria biflora var. ineziana Grindelia maritima Grindelia stricta angustifolia Helianthella castanea Hemizonia parryi congdonii Lessingia arachnoidea Lessingia germanorum Lupinus eximius Pedicularis dudleyi Pentachaeta bellidiflora Potentilla hickmanii Silene verecunda verecunda Streptanthus albidus peramoenus

TRA has developed hands-on expertise in revegetation and habitat restoration. Much of past restoration work has been in concert with efforts to preserve an endangered or threatened plant or animal species. TRA understands the complexities of developing a revegetation or restoration plan in a regulatory framework, as well as the complexities of implementing the plan in the field.

TRA is familiar with the range of revegetation and habitat restoration techniques. These include biological surveys, soil tests, methods of controlling or removing unwanted weedy species, collecting and preparing seed of desired species, providing an adequate substrate to grow desired species, applying seed or planting container plants, and monitoring the results.

TRA has extensive experience in implementing vegetation management and herbicide application programs. Exotic species control activities began in 1985 as part of TRA's long-term contract as Habitat Manager carrying out the activities of the San Bruno Mountain Habitat Conservation Plan. To re-establish and conserve habitat areas of protected butterfly species, TRA began herbicide spraying and mechanical removal of invasive plant species that were progressively encroaching on native habitat areas.

At the intersection of botanical services and aquatic resources, TRA staff can conduct wetland delineations to determine whether specific wetlands are covered under the jurisdiction of the U.S. Army Corps of Engineers, California Regional Water Quality Control Board, California and Local Coastal plans, or other regulatory agency jurisdiction. Our biologists are trained in the U.S. Army Corps of Engineers (USACE) routine method of wetland delineation, and have

conducted several wetland delineations in San Mateo County. TRA can assist clients with obtaining nation-wide permits from the USACE, Streambed Alteration Agreements with CDFG, and other necessary permits.

Several staff members at TRA are trained wetland delineators and have experience on several wetland delineation projects. We are familiar with the federal unified method, with the approach used by the California Coastal Commission in coastal areas of California, and with approaches identified in Local Coastal Programs. Project sizes range from square feet (San Juan Highway Bike Lane) to hundreds of acres (Kirby Canyon Landfill; Sand Creek Specific Plan).

TRA regularly completes biological assessments, most of which occur within a 50-mile radius of our Menlo Park office. Staff is familiar with all of the research methods and databases that the resource agencies expect to see in biological site assessments. These methods and databases include the California Natural Diversity Database, the Wildlife Habitat Relationships Database, the Manual of California Vegetation, state and federal survey protocols, California Native Plant Society protocols, and standard field guides and floras. We have expertise in assessing the potential occurrence of several sensitive species including, but not limited to: California red-legged frog, California tiger salamander, numerous butterfly species, birds such as Western burrowing owl, and mammals such as San Joaquin kit fox, dusky-footed wood rat, and bats.

Open Space and Recreation Plans. TRA Environmental Sciences, Inc. has completed a variety of tasks on different types of recreational projects including parks, trails, a marine reserve, open space district land acquisition, bike lanes, off-highway vehicle use, a hot springs resort and golf courses. We have done both formal and informal environmental review of master plans on trails and parks. On several master plan projects TRA has been hired early on in the process in order to identify the environmental impacts the master plan could be causing, and to make recommendations on how to avoid significant impacts.

Our project experience is primarily in the San Francisco Bay Area and on the central coast of California. Project settings range from urban to rural. Our clients have included cities, counties, water districts, and open space district planners, as well as private industry and professional master planning consultants.

Habitat Conservation Planning. TRA specializes in habitat conservation planning. The firm has authored or had major participation in dozens of habitat conservation plans for endangered species in California and elsewhere, including the regional programs: the Southern California Coastal Sage Scrub NCCP and the Placer Legacy conservation project. TRA prepared the first Habitat Conservation Plan completed under the Endangered Species Act, the San Bruno Mountain HCP. In addition, the firm continues to assist San Mateo County with the implementation of the San Bruno Mountain HCP since its approval in the early 1980's.

Mitigation Monitoring. The California Environmental Quality Act currently requires that mitigation monitoring plans be prepared prior to project approval. TRA has prepared several mitigation monitoring plans on several different types of projects. These plans specify mitigation measures, responsible parties, and in order to demonstrate that mitigation proposed during environmental review is actually implemented, expected work products are identified.

TRA also has experience in monitoring mitigation activities including operational compliance at quarries, restoration work at housing and public facility developments, and sensitive plant and animal species monitoring in a variety of habitats.

California Environmental Quality Act (CEQA)/National Environmental Policy Act

(NEPA). TRA was founded to prepare environmental documents during the early years of NEPA and CEQA and has remained in step with the evolution of the guidelines for environmental review of projects. We keep apprised of statutory and regulatory changes through journals, annual publications, conferences, and the California Office of Planning and Research (OPR) web site and other law websites.

TRA Environmental Sciences, Inc. has prepared all types of CEQA and NEPA documents, including environmental impact reports (EIR), environmental impact statements (EIS), combined EIR/EIS, environmental assessments (EA) combined EIR/EA, Biological Assessments (BA), Initial Studies (IS), Initial Study/Mitigated Negative Declarations (IS/MND), and Categorical Exemptions. We have also completed environmental review of several types of documents prepared by other firms or agencies.

Part of our conservation planning work entails preparing maps using GIS and AutoCAD. These capabilities have played a major role in many of the firm's recent projects. The maps have proven to be an important tool for describing conservation options and discussing these options with the landowners and the agencies that are involved.

When needed, TRA works with a network of subcontractors with special expertise in particular endangered species. Such individuals are selected based on their demonstrated ability and knowledge with particular species. Many have permits from the U.S. Fish and Wildlife Service to handle relevant listed species. The number of these permits is very limited, so if the species must be handled in order to do a survey, an individual or firm with the required permit must be used in the study.

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RECENT BIOLOGICAL ASSESSMENTS AND MITIGATION MONITORING

Revised Management and Remediation Plan for a Wetland Ecosystem Restoration Site, Pacifica, California, 2006

A Management and Restoration Plan for the Pacifica Police Station site was prepared in 2001 by L.C. Lee & Associates, Inc. TRA, at that time, had performed the initial biological assessment. In 2006, TRA was contracted to update the management and restoration plans for the five-year-old police station. This current Remediation Plan presents relevant portions of the 2001 Management Plan and contains remediation measures that further address regulatory issues at the site's riverine waters/wetlands ecosystem on Calera Creek, east of Highway 1 in Pacifica.

Lead Agency/Client: City of Pacifica

Biological Constraints Assessment, Lake Road Property, San Mateo County, 2006

In order to determine biological constraints on management activities performed by the water district, surveys were conducted to document vegetation, habitat types and functions, and wildlife observed or suspected to be present on the property. This report documented all sensitive species present and discussed sensitive species with the potential of using the site.

Lead Agency/Client: Los Trancos County Water District Board of Directors

California Red-legged Frog Surveys: Calero Dam, Almaden Dam and Guadalupe Dam Santa Clara County, California, 2006

California red-legged frog (Rana aurora draytonii) surveys were completed within wetland areas below Almaden, Calero, and Guadalupe Dams in Santa Clara County to meet the mitigation requirements included in the Initial Study/Mitigated Negative Declaration (IS/MND) for the Santa Clara Valley Water District Dam Instrumentation Project: Phase IB and II. Surveys were completed following USFWS Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (August 2005).

Lead Agency/Client: Santa Clara Valley Water District

Calera Creek Wetland and Riparian Ecosystem Restoration Site Compliance Monitoring Pacifica, San Mateo County, 2005 – Present

TRA performed compliance monitoring for the Calera Creek Wetland and Riparian Ecosystem Restoration Site in December of 2005 to satisfy Year 4 monitoring requirements as defined in the Draft Final Monitoring Plan for the Restoration of Lower Calera Creek and Adjacent Wetlands: Pacifica Wastewater Treatment Plant (LC Lee & Associates 1996). TRA completed vegetation monitoring, which included sampling fifteen, 10-foot wide belt transects running perpendicular to the channel. Measurements were taken of vegetation within the bankfull width of the channel. Within each transect, data collected include: (1) species present and percent cover of each, (2) canopy cover, (3) total vegetation cover, (4) percent cover of bare ground, (5) percent cover of litter, (6) percent cover of herbaceous vegetation, and (7) overall vegetation vigor and survival. TRA also compiled recent wildlife sightings and recorded wildlife observations and evidence of faunal use of the restoration area in order to evaluate the overall health and function of the ecosystem. Additionally, Balance Hydrologics completed the assessment of channel 'bankfull' geometry characteristics, evaluated overall geomorphic stability of the system, and analyzed water quality. TRA combined their findings with Balance Hydrologics in order to prepare the Year 4 Monitoring Report for the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, California Coastal Commission, and the San Francisco Bay Regional Water Quality Control Board.

Lead Agency/Client: City of Pacifica

Phragmites Removal Project, Baylands Nature Preserve Palo Alto, Santa Clara County, 2005-2006

The City of Palo Alto proposed the removal of non-native *Phragmites australis* from the floodbasin within the Baylands Nature Preserve. Due to the project setting within wetland habitat and the potential for special-status species including the federally endangered Salt marsh harvest mouse, environmental review of the project was required. TRA examined the project goals and site conditions, consulted with the U.S. Fish and Wildlife Service, and helped the City to devise a project description that would avoid potential impact to listed species. Considerations taken into account in project planning include special-status species potentially present within the project area, avoidance of wildlife and pickleweed habitat, potential recreational and water quality impacts, and Best Management Practices for the use of an aquatic herbicide (Imazapyr). TRA provided the supporting documentation for a Categorical Exemption on this project.

Lead Agency: City of Palo Alto

Bear Creek Bank Stabilization Project Woodside, San Mateo County, 2003 to Present

This is a bank stabilization and restoration project on Bear Creek in Woodside, California. The creek provides habitat for steelhead and non-breeding habitat for California red-legged frog (CRLF). TRA has completed the Biological survey, CRLF survey, and revegetation plan for this project. TRA is currently acting as Agency contact and liaison between the five agencies (US Fish and Wildlife Service, National Marine Fisheries Service, US Army Corps of Engineers, California Department of Fish and Game, and SF Bay Regional Water Quality Control Board) that have jurisdiction over the project. TRA biologist will move steelhead during cofferdam installation and survey for CRLF prior to construction activities. Client: Private

San Bruno Mountain Habitat Conservation Plan, Technical Assistance San Mateo County, 1982 to Present

TRA has performed the background biological data and authored much of the San Bruno Mountain HCP. Additionally, TRA has been performing the biological program of the HCP since 1982. This involves developing and implementing an annual work program in accordance with the San Bruno Mountain 5-Year Plan. The work program includes 1) managing subcontractors performing weed control and replanting, 2) coordinating prescribed burning and grazing projects, 3) conducting biological monitoring for the endangered species, 4) providing planning assistance to developers, 5) coordinating and sharing data with agencies and volunteer groups, and 6) submitting annual reports to the US Fish and Wildlife. The firm has also done community outreach to volunteer groups and by assisting the County with public workshops.

Lead Agency/Client: San Mateo County

Guadalupe Valley Quarry Mitigation Monitoring San Mateo County, 1995 to Present

This project involves monitoring operational compliance with mitigation measures imposed by San Mateo County as conditions of the mining permit renewal. Monitoring includes scheduled and unannounced site inspections of operating conditions, review of inspection findings by geologists, and annual inspection of revegetation efforts and progress. Of primary concern has been adequate control of dust emissions caused by quarry operations, control of surface water runoff and water quality, the import of recycled material, and noise impacts on the adjacent community from haul truck traffic during night time operations. Routine inspections and good management practices by the quarry operator have resulted in improved compliance with permit conditions and elimination of dust and noise complaints.

Carnegie Foundation Biological Resource Mitigation Program Stanford, Santa Clara County, 2003-present

Prepare and implement the Carnegie Easement Enhancement Plan. TRA prepared a management plan for a three-acre conservation easement adjacent to the new Carnegie Foundation Headquarters located in the foothills of Stanford University. The management plan included the installation of ten wood piles to

encourage ground squirrel use in the grasslands and a program to monitor ground squirrel use of the wood piles. The plan also included a mowing program to reduce weed growth within the easement over time and a program to monitor new native tree plantings within the easement.

Kirby Canyon Landfill Created Wetland Monitoring Study San Jose, Santa Clara County, 2000-2003

As a result of a Nationwide 26 permit granted by the Army Corps of Engineers for the Kirby Canyon Landfill, Waste Management built a wetland and an open water pond at the site. The Corps required five years of monitoring of the wetland and riparian vegetation. TRA took over the monitoring responsibilities the second year, which included a protocol survey for California red-legged frog. Monitoring methods follow criteria set forth in a wetland mitigation plan approved by the Corps in consultation with the US Fish and Wildlife Service.

Client: Waste Management

San Mateo County Youth Service Center Biological Assessment and Mitigation Plan San Mateo County, 2003

Biological assessment and mitigation plan for a new Youth Services Center that would be located in an area with serpentine grassland, which contains habitat for the rare fragrant fritillary (Federal species of concern and CNPS List 1B) and potentially five other rare species. Plan includes methods for salvaging rare plants and requirements for monitoring, reporting, and remediation if necessary.

Pescadero Cellular Antenna Installation, Local Coastal Plan Biological Assessment Pescadero, San Mateo County, 2000

TRA conducted a biotic assessment of the project area. Nearby pond supports probable red-legged frog breeding habitats. Biosearch prepared the follow-up assessment for the red-legged frog and recommended take avoidance and mitigation measures. Work also included project monitoring after construction.

STAFF BIOGRAPHIES

TRA

VICTORIA HARRIS SENIOR ASSOCIATE III

Ms. Harris is a natural resources specialist and biologist and has been at TRA since 1981. Since then she has managed over 100 CEQA Environmental Impact Reports (EIRs) and Initial Studies on diverse projects, including the construction of a recycled water project, stream improvement projects, small and large residential developments, office parks, road expansions, road bridges, landfill expansions, quarry operations, and general plan amendments. For the above studies she has acted as client liaison with the Lead Agency and researched and prepared the impact analysis sections for the following EIR or Initial Study disciplines: project description, plan consistency, land use, biology, noise, aesthetics, public services, socioeconomics, alternatives, and CEQA issues. In 2005 she was named Vice-President for Biological and Conservation Planning at TRA.

Ms. Harris also has expertise in preparing Habitat Conservation Plans (HCPs) and Natural Community Conservation Plans (NCCPs) for state and federally listed threatened and endangered species. She has participated in the preparation of several HCPs and HCP/NCCPs. The HCPs have ranged from small-single species HCPs to large multi-species HCP/NCCPs covering several hundred acres and involving multiple political jurisdictions.

In 2005, Ms. Harris was named Vice President of Conservation and Biological Studies. Her primary duties for these projects include project management and administration, attending task force meetings, coordinating biological studies for the covered species, and drafting HCPs. For most of these HCPs, Ms. Harris also directed the completion of the NEPA documentation required by the USFWS and the CEQA documentation required by land use agencies in California.

Selected Projects

- Prepared the Initial Study/Mitigated Negative Declaration for the San Mateo County Community College District Faculty/Staff Housing Project.
- Contributed to the preparation of the San Bruno Mountain HCP, which was the first HCP adopted by the U.S. Fish and Wildlife Service in 1982 and was the basis for the Incidental Take Permit provision (Section 10(a)(1)(B)) of the federal Endangered Species Act.
- Prepared numerous HCPs including: Placer County HCP/NCCP (vernal pool species), San Luis Obispo State Parks (snowy plover, Morro shoulderband snail), Kern Water Bank (San Joaquin kit fox and other species), Natomas Basin and Metro Air Park (giant garter snake and Swainson's hawk), Metropolitan Bakersfield (San Joaquin kit fox and other species), Seascape Uplands and Tucker Pond (Santa Cruz long-toed salamander), San Benito County (San Joaquin kit fox and other species), and Quail Hollow Quarry (listed insects)
- Conducted and overseen biotic surveys for four endangered butterflies in California: Mission blue, San Bruno elfin, callippe silverspot, and Smith's blue.
- Managed preparation of CEQA documents for several transportation related projects in the Bay Area including bridge replacements, highway widenings, roadway extensions, and bike and pedestrian pathways.
- Assists State Parks and Recreation Department with regulatory compliance at Off-highway Vehicles Areas; review of OHV fund grants for CEQA compliance, reviews OHV fund grants for wildlife habitat management plan compliance.

Educational Background

University of California, Berkeley

Bachelors of Science, Conservation of Natural Resources

AUTUMN MEISEL ASSOCIATE IV

Mrs. Meisel joined TRA in 2005 and is an ecologist specialized in habitat assessment and management. She earned a Master's degree in conservation ecology from San Francisco State University in 2002. She is competent in overall site and habitat assessment, biological monitoring, and landscape level planning and management. In the field, Mrs. Meisel has experience in plant and wildlife identification, nesting bird surveys and burrowing owl focused surveys, construction monitoring, red-legged frog surveys, California tiger salamander monitoring, reconnaissance-level site surveys, wetland delineations, hydrologic monitoring, and vegetation and wildlife monitoring. She has worked in both conservation and land development settings and is familiar with on-the-ground conditions and/or concerns that may arise. She also has expertise in CEQA analysis, and has written sections for many different projects.

Prior to joining TRA, Mrs. Meisel worked as an environmental analyst, providing start to finish consultation services related to Clean Water Act Section 401 and California Department of Fish and Game 1602 permits. She has performed numerous biological assessments and has experience in analyzing the potential for occurrence of special-status species in a variety of habitats. She has written numerous mitigation and monitoring plans for the creation and/or enhancement of wetland, riparian, and grassland habitats, and has provided monitoring and year-end reporting services for mitigation plans, applying adaptive management when needed to ensure that sites meet their performance standards.

Mrs. Meisel also has expertise in habitat restoration at degraded sites and has overseen invasive weed control efforts, native out-planting, and plant establishment maintenance. She has lead volunteer groups in restoration work and provided education to others about ecology and resource management. Mrs. Meisel has aided in prioritizing restoration needs when resources were limited and has designed experimental vegetation management methods to better understand how to best meet desired goals so that resources may be put to the greatest use.

Selected Projects

- Manager for the San Bruno Mountain Habitat Conservation Plan. Tasks include grassland and coastal scrub management, invasive plant control, endangered butterfly monitoring, education, and reporting to lead and regulatory agencies.
- Contributing author on numerous CEQA documents, and has prepared Categorical Exemptions, Initial Studies, and Mitigated Negative Declarations for a variety of projects.
- Has completed numerous biological assessments, restoration monitoring, and has worked on the preparation of Habitat Conservation Plans.
- Worked as an environmental analyst, providing start to finish consultation services related to Clean Water Act Section 401 and California Department of Fish and Game 1602 permits.
- Performed numerous biological assessments in a variety of habitats and has compiled lists of potentially-occurring special-status species. She has written numerous mitigation and monitoring plans for the creation and/or enhancement of wetland, riparian, and grassland habitats, and has provided monitoring and year-end reporting services for mitigation plans, applying adaptive management when needed to ensure that sites meet their performance standards.

Educational Background

California State University, San Francisco M.A., Conservation Biology University of California, San Diego Bachelors of Science, Biology. Ecology, Behavior, and Evolution

SARA KRIER ASSOCIATE IV

Ms. Krier joined TRA in 2006, and is an associate biologist with a background in environmental policy, ecology, and watershed science. She is an experienced project manager with skills in formulating project approach and in training and directing field crews. She has supervised field crews in data collection, species identification and data reporting on various biological elements such as wildlife, vegetation, and water quality.

One of Ms. Krier's areas of expertise is in watershed monitoring, assessment and analysis. Her responsibilities in this area have included lake and stream water quality sampling, shoreline and riparian assessments, and biological data collection. She has extensive experience collecting benthic macroinvertebrates and using backpack electroshock methods to voucher and tag fish. In her studies on watersheds, she has used ArcGIS, GPS and aerial photo interpretation in data analysis and in the production of figures for scientific reports. In conjunction with the University of Montana's Watershed Health Clinic, Ms. Krier spent four years performing field and laboratory work with the Montana Department of Environmental Quality using EPA assessment and monitoring protocols on Montana lakes and streams.

Ms. Krier's thesis work for her Master's degree investigated the chemical, riparian and land use changes along a tributary of the Clark Fork River in Montana. This tributary is known to be a principal contributor of phosphorus into the already nutrient rich Clark Fork River. These components were analyzed in comparison to a geologic study performed a decade previous.

Selected Projects

- Currently assisting with the preparation and management of a permit package application for a fuels management plan for a property owned by the Peninsula Open Space District (POST).
- Currently assisting with projects for the State Department of Parks and Recreation, Division of Off-Highway Vehicles including an EIS/EIR for the Habitat Conservation Plan for OHV parks in San Luis Obispo County.
- Experience with research and assessment of existing conditions and environmental impacts of activities to the natural and human environment; habitat assessments for rare and endangered species.
- Contributing author on numerous CEQA documents, and has prepared Initial Studies and Mitigated Negative Declarations for a variety of projects.
- Performed numerous biological assessments in a variety of habitats and has compiled lists of potentially-occurring special-status species. She has written mitigation and monitoring plans for the creation and/or enhancement of wetland, riparian, and grassland habitats, and has provided monitoring and year-end reporting services for mitigation plans. She has performed restoration and construction monitoring.
- Prior to joining TRA, spent four years performing water quality, riparian vegetation, fisheries and shoreline assessments for Montana lakes and streams.

Educational Background

University of Montana, Missoula, MT

Masters of Science, Environmental Studies University of Colorado, Boulder, CO Bachelor of Arts, Environmental, Population, and Organismic Biology and English Literature

BRIAN WILLIAMS ASSOCIATE III

Mr. Williams joined TRA in 2007, and is a biologist and planner specialized in habitat assessment. He earned a Master's degree in environmental studies from San José State University in 2004. He is competent in overall environmental impact assessment, including habitat, noise, geology and air quality assessment. In the field, Mr. Williams has experience in plant and wildlife identification, nesting bird and burrowing owl focused surveys, construction monitoring, reconnaissance-level site surveys, wetland delineations and noise monitoring. He has worked in both conservation and land development settings and is familiar with on-the-ground conditions and/or concerns that may arise. He also has experience in CEQA analysis, and has written initial studies as well as biological, air quality and geology sections of EIRs.

Prior to joining TRA, Mr. Williams worked as an assistant project manager and staff ecologist at Live Oak Associates, providing start to finish consultation services. He performed numerous biological assessments and analyzed the potential for occurrence of special-status species in a variety of habitats. He has provided monitoring and year-end reporting services for mitigation plans.

At TRA, Mr. Williams is responsible for completing biological surveys, wetland delineations, and CEQA documents. He has experience with the analysis of project impacts on biological resources under CEQA. Recently he has completed constraints analysis and impact studies for an estate home on the California coast, and two redevelopment projects in San Jose. These involved determining geology and soils constraints, including prime farmland, and addressing all of the CEQA Initial Study Checklist questions in detail.

Selected Projects

- Harbor Master's House: El Granada: Biological Assessment.
- 2550 Mission College Boulevard. Wrote the initial study checklist and air quality section for this EIR.
- City of Cupertino, Stevens Creek Restoration Project. Providing nesting bird survey and biological assessment for the restoration of Stevens Creek.
- Contributing author on numerous CEQA documents, and has prepared Initial Studies and differing sections of EIR documents for a variety of projects.
- Performed numerous biological assessments in a variety of habitats and has compiled lists of potentially-occurring special-status species.
- Experienced in plant and bird identification, nesting bird surveys and burrowing owl focused surveys, construction monitoring, reconnaissance-level site surveys, wetland delineations and vegetation monitoring.

Educational Background

California State University, San José Masters of Science, Environmental Studies George Mason University, Fairfax, VA Bachelors of Science, Decision Science/Management of Information Systems

Professional Training

Wetland Delineation, Wetland Training Institute, September 2006 Arid West Supplement, Wetland Training Institute, April 2007 CEQA, University of California at Davis, April 2008

REBECCA SLOAN ASSOCIATE II

Mrs. Sloan joined TRA in 2008, and is an associate biologist with a background in marine and aquatic sciences, coastal ecology and resource management. Prior to joining TRA she managed projects requiring skills in multiple-stakeholder facilitation, experimental design and field crew management. She has supervised field crews in data collection, species identification and data reporting on various biological elements such as wildlife, vegetation, and water quality.

One of Mrs. Sloan's areas of expertise is the monitoring and habitat assessment of aquatic ecosystems in Coastal California, specifically in San Mateo and Santa Cruz counties. Her responsibilities in this area have included: Discreet and continuous water quality monitoring; Biological surveys for steelhead trout, California red-legged frogs, San Francisco garter snakes and tidewater gobies; Aquatic habitat assessment for non-point source pollution, eutrophication and sediment toxicity; Hydrologic assessments; Chemical and manual weed eradication in coastal dune, scrub and chaparral habitats; and Management of invasive bull frog populations. She has extensive experience collecting, managing, analyzing and presenting continuous and discreet water quality data, including: dissolved oxygen, temperature, pH, salinity, turbidity, carbon, nitrogen, phosphorus, chlorophyll, biological oxygen demand, sediment grain size and chemical pollutants and toxins. As a coastal ecologist, she has used ArcGIS, GPS, aerial photos and LiDAR data as interpretive tools for resource management and information dissemination.

In conjunction with the Environmental Studies and Biology Departments of San Jose State University, Moss Landing Marine Laboratories and California State Parks, Mrs. Sloan is in the fifth year of performing water quality and fisheries monitoring in Pescadero Marsh Natural Preserve, CA. This is a continuation of Mrs.Sloan's thesis work, which focused on characterizing the water quality surrounding a sandbar breach-associated fish kill event at Pescadero Lagoon.

Selected Projects

- Currently assisting with the preparation of an Initial Study and Mitigated Negative Declaration for a new, 400-student charter high school development project.
- Currently assisting with the preparation of the biology section of an Initial Study for the California Department of Parks and Recreation, Division of Off-Highway Motor Vehicles.
- Experience with research and assessment of existing conditions and environmental impacts of activities to the natural and human environment; habitat assessments for rare and endangered species.
- Contributing author on a marbled murrelet management plan for a California State Parks parcel.
- Prior to joining TRA, spent four years performing water quality, fisheries and habitat assessments on the Central Coast of California.

Permits Held

- Currently possesses an ESA Section 10(a)(1)(A) scientific research permit for the collection of adult and juvenile steelhead and coho in San Gregorio, Pomponio and Pescadero Creek and Lagoon habitats (permit #10017 expires 11/2012).
- Renewal of California State Scientific Collecting permit SC-007802 for the sampling of juvenile steelhead in Pescadero Lagoon currently being processed.

Educational Background

California State University, San Jose Masters of Science, Environmental Studies Eckerd College, St. Petersburg, FL Bachelors of Science, Marine Science - Biology concentration and Chemistry minor

<u>AARON GABBE, Ph.D.</u> ASSOCIATE III

Mr. Gabbe joined TRA in 2008, and is an associate biologist with a PhD in Environmental Studies from the University of California, with an emphasis in conservation biology. Aaron's Masters and Ph.D work provided him with over 10 years experience conducting ecological research focused on interactions between plants and birds and applying science to conservation and restoration. Aaron has conducted ecological research from start to finish: from development of data collection methodology, to data analysis, to publication. Projects include those designed to assess habitats, monitor populations, and inventory species. Having conducted field research in California, Mr. Gabbe has an excellent knowledge of California ecosystems, flora, and fauna. Prior to joining TRA, he worked on field projects where he developed the experimental design, hired, trained, and managed field crews in data collection, species identification and data reporting.

Aaron's Ph.D. research focused on ecology, conservation and evolution of a pollination system between rufous hummingbird populations and their host plants in the Sierra Nevada Mountains. He designed and implemented the ecological experiments and population monitoring protocol and drafted a conservation plan for rufous hummingbird populations.

Other research work Aaron has participated in consisted of collaboration with the Cache River Restoration Project team in Illinois where research focused on the habitat relationships and foraging behavior of floodplain forest songbirds to inform land managers on how to best restore songbird habitat. Aaron was a Crew Leader with the Sustainable Ecosystems Institute in Boise, Idaho where he managed and coordinated the activities of research assistants on a project that analyzed the effects of timber harvest and forest habitat on avian communities and collaborated with team of natural resource professionals to develop and implement monitoring protocol.

Mr. Gabbe has numerous publications in journals such as *Conservation Biology, Restoration Ecology, Functional Ecology,* and *Ecology,* on topics ranging from tree species preference by foraging insectivorous birds and the implications for floodplain forest restoration, to the adaptive nature of dilute nectar: rufous hummingbird (*Selasphorus rufus*) concentration preference and constraints in nectar production patterns. Aaron has also refereed peer-reviewed articles for Ecology, Ecological Applications, The Auk, and The Wilson Bulletin

Educational Background

University of California, Santa Cruz Ph.D. in Environmental Studies, December 2007 University of Illinois, Urbana-Champaign M.S. in Natural Resources and Environmental Sciences, December 1999 University of Wisconsin, Madison B.S. in Wildlife Ecology, December 1992