

TO: Dave Pastizzo, Calaveras County Planning Department

**FROM: Tom Infusino, Facilitator,
Calaveras Planning Coalition T.I.
(295-8866) tomi@volcano.net**

RE: Data Analysis in General Plan Update EIR

DATE: September 14, 2010

Thank you for discussing data analysis with me during our brief phone conversation on July 29, 2010. As you recommended, I am providing you with copies of the impact analysis tables, and the questions I have about them. Please answer the questions you can. I understand that ultimately these decisions are made by higher ranking county officials. I have sent copies of this memo (without attachments 3 & 4) to some of them for their consideration.

At the Board of Supervisor's meeting on June 1, a Planning Department representative explained that there were insufficient funds budgeted to complete a quantitative comparative analysis of alternatives in the General Plan Update EIR. At that point, the CPC offered to find grants to fund the analyses. After we notified the Planning Department that we had found promising grant opportunities, we were told that the Planning Department had neither the time to apply for the grants, nor the inclination to delay the General Plan Update to do such analyses. When I called you on July 29, you indicated that the County had been advised that such analyses are not required by CEQA.

To date, the County has been committed to producing a legally valid and defensible General Plan Update and EIR. The CPC has consistently supported that commitment. **A key component of a defensible EIR is the quantitative comparative analysis of alternatives. (If you like, see Exhibit 2 legal analysis.)**

I have attached two additional exhibits for your review. Exhibit 3, is a set of tables from the draft program EIR for the 2004 Eldorado County General Plan Update. Because this EIR survived judicial review, it would be useful to use as a guide. Exhibit 4 is a set of tables from the draft program EIR on a major 2010 general plan amendment in the City of Sutter Creek. That EIR was prepared by ESP Inc., under supervision by Mintier-Harnish.

First note that the tables in Exhibit 3 reflect useful analyses:

- They provide a quantified baseline condition that serves as the basis for impact analysis.
- They provide quantitative estimates of impacts for each alternative.
- They provide impact estimates at two relevant points in time, after 20 years of implementation, and at full buildout.

Second, note that the tables in Exhibit 3 do not involve complex, site specific, models, but often are very simple functions: multiplying countywide population projections under each alternative to a per capita impact figure.

My first question: Is Calaveras County willing and able to do the basic quantitative analyses identified in the tables in Exhibit 3 for the General Plan Update EIR? If not, why not?

Third, note that the tables in Exhibit 4 reflect a useless analysis of alternatives:

- They are not based upon any quantitative analysis, but only upon subjective opinions of the impact analyst. In many cases, the listed significance of the impacts is not linked to any quantitative analysis of the impact and/or the effectiveness of the mitigation.

- Impacts of the alternatives that could have easily been evaluated in quantitative terms are qualitatively judged by subjective rankings.

- The impact comparisons of alternatives are limited to one alternative's impacts being less than, equal to, or greater than another's. There is frequent use of vague terms including "similar", "lower", "greater", "lesser".

My second question: Do the tables in Exhibit 4 reflect the sort of analysis that the County intends to do in the General Plan Update EIR? If so, please explain why.

I understand that the County feels unable to do quantitative analysis of alternatives for issues like noise and traffic that use complex models, that rely on site specific data, and that are expensive to run.

My third question: Would the County prevent its noise and traffic consultants from doing quantitative analyses of general plan alternatives for other paying clients?

Conclusion:

We believe the County is sincere in its desire for a good and defensible general plan and EIR. We at CPC have been helping to fill the gaps we can. We have helped to gather background data. We have helped to publicize public workshops. We have helped communities with their planning efforts. We have participated in public efforts to craft the Water Element, the Agriculture Element, and the Housing Element. We have consistently advocated for a good and defensible general plan. Now, we are willing to help the county by preparing impact analyses needed in the administrative record. Your answers to the questions above will help us to determine the feasibility and necessary scope of our efforts.

P.S. Please retain a copy of this document and attachments for the General Plan Update administrative record.

**Exhibit 2: The Need for Quantitative Comparative Analysis of Alternatives
in a General Plan Update Program EIR.**

Conclusion: For all the reasons noted below, Calaveras County must complete a quantitative comparative analysis of the alternatives in the General Plan Update EIR. Failing to thoroughly analyze alternatives withholds from the Board of Supervisors the critical information they need to make a fair and responsible choice among real alternatives that reflect different points of view in the county. It also steals from the Board the flexibility to timely adopt the combination of General Plan maps and programs they find most appropriate. Trying to sensibly pick among general plan options with no quantitative analysis is like trying to save money while shopping at a supermarket where there are no prices posted.

A) CEQA Requires a Discussion of the Significant Environmental Impacts of a Proposed Program.

CEQA requires a discussion of the significant environmental impacts of a project or program. This includes the direct and indirect impacts, as well as the short-term and long-term impacts. The discussion includes resources involved, physical changes to an area, changes in ecological systems, changes in population distribution, changes in population concentration, changes in land uses, health and safety problems, and effects on the resource base including water, historical resources, scenic quality, and public services. This discussion includes significant impacts that cannot be avoided, significant irreversible changes, and growth inducing effects. These impacts are measured against the baseline condition that exists at the time of the Notice of Preparation of the EIR is published. (CEQA Guidelines, sec. 15126.2, subd. (a).) "The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data." (CEQA Guidelines, sec. 15064, subd. (b).)

B) CEQA also Requires a Meaningful Evaluation, Analysis and Comparison of Alternatives to the Proposed Program.

An EIR also evaluates the impacts of alternatives. Alternatives are designed to accomplish most of the basic objectives of the program, and to "avoid or substantially lessens" one or more of the significant impacts of the project. (15126.6, subd. (a).) Thus, one reason to quantitatively analyze impacts of an alternative is to demonstrate that it "substantially lessens" the impact of the program.

The EIR shall include enough information about each alternative to allow for "a meaningful evaluation, analysis, and comparison with the project." (15126.6 (d).) Thus the second need to quantitatively analyze the impacts of alternatives is to provide a meaningful comparison with the proposed program.

In general, "The courts have favored specificity and use of detail in EIRs." (Whitman v. Board of Supervisors (2d Dist. 1979) 88 Cal.App.3d 397, 411 [151 Cal.Rptr. 866].) In Whitman, the Court found that the discussion of cumulative impacts lacked "even a minimal degree of specificity or detail" and was "utterly devoid of any reasoned analysis." The document relied on unquantified and undefined terms such as "increased traffic" and "minor increase in air emissions".

Specifically with regard to the comparison of alternatives, the courts have interpreted CEQA to require "quantitative, comparative analysis" of the relative environmental impacts and feasibility of project alternatives. (Kings County Farm Bureau et al. v. City of Hanford (5th Dist. 1990) 221 Cal.App.3d 692, 730-737; ["The absence of this comparative data renders the analysis of the natural gas alternative incomplete and precludes meaningful consideration of the natural gas alternative."].)

C) The need for thorough Analysis of Alternatives is especially Great with regard to a Program EIR.

The General Plan Update EIR is a program EIR. It looks at many broad countywide maps and programs, rather than at an individual development project. It provides a countywide review of cumulative impacts and their mitigations that can be referenced in later project level EIRs and negative declarations. Coverage of countywide issues in one EIR and referencing them in later EIRs is a practice known as tiering, and can provide substantial time and cost savings during subsequent project-level reviews.

Despite its broad scope, a program EIR is not supposed to be a document devoid of detailed analyses of alternatives. A program EIR is supposed to, "Provide an occasion for a *more exhaustive consideration of effects* and alternatives than would be practical in an EIR on an individual action." A program EIR is supposed to, "*Ensure consideration of cumulative impacts* that might be slighted in a case-by-case analysis." A program EIR is supposed to, "Allow a Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts." (CEQA Guidelines, sec. 15168.)

D) The Provisions of CEQA that place limits on the need for detailed analysis are not helpful to entirely avoid a quantitative comparative analysis of alternatives.

There are only limited instances in which the CEQA Guidelines allows for a less detailed analysis of the impacts of an alternative.

One instance is when the impact of the alternative is not one shared by the proposed project, and thus there is no comparison to be made. (15126.6 (d).) This is a very narrow exception, because it does not apply to all of the potentially significant impacts of the project description.

It is also established that the level of specificity in an EIR is a function of the degree of specificity in the activity under analysis. (CEQA Guidelines, sec. 15146.) Thus level of specificity required is less for an EIR on a general plan than it would be on a site specific project. Again, this does not excuse failure to quantitatively evaluate the merits of alternatives. What it does is affect the scope and focus of the quantitative analysis. For example, a traffic analysis of a subdivision might evaluate all 10 intersections within 5 miles of the project, while the traffic analysis for a General Plan might evaluate 30 major intersections of the 120 intersections countywide.

Finally, the sufficiency of the analysis is reviewed in light of what is reasonable feasible. (CEQA Guidelines, sec. 15151.) Most often the feasibility arguments center on the technical or financial feasibility of an analysis, and the utility of the information gained.

Since all of the quantitative analyses in question can and will be done for the preferred alternative, there is really no issue regarding the utility of the information or the technical feasibility of the analysis. The only real question is can the County claim that the analyses are financially infeasible to do. Let's look at the facts.

First, the County started out with a budget of \$800,000 for the General Plan Update. Much of that money has been allocated and spent on optional public workshops that are not legally required, as opposed to technical impact analyses that are required. Thus it is not that the County didn't have the money, it's that it chose not to spend it on the required analyses.

Second, the County has demonstrated that when it wants to secure additional funds for optional planning exercises, it has been able to get them. The County was a partner in the \$250,000 Caltrans grant to update the community plan in Valley Springs. It also participated in the Caltrans grant to prepare a mobility plan for San Andreas. These publicly funded planning projects are not legally mandated. However, when approached to seek funds for legally mandated CEQA analyses of general plan alternatives, the County refused, on the grounds that it did not have staff time to apply for grants and did not want to delay the general plan update. However, at the same time, County Planning did agree to seek grant funding for a greenhouse gas inventory project. Contrary to the County's contention that it can't get the money to do the legally mandated analysis, the facts suggest that County simply does not want to get the money, since it has and continues to seek funding for other planning exercises. The County cannot demonstrate the financial infeasibility of doing the required analyses, simply by choosing not to seek to fund them.

If the County really wants to make the argument that it can't afford the technical analyses for the general plan EIR, the very least it should do is apply for the funds. If the County gets the grants, then it can do the analyses. If the County does not get the grants, then it has some facts to back up its claim that the analysis of impacts of alternatives is financially infeasible.

However, this is not the end of the analysis. The County will still have to justify the arbitrary decision to evaluate in great detail only the impacts of the project description, while not quantitatively evaluating the impacts of the alternatives at all. If money is a problem, it would better serve compliance with CEQA's requirement for a meaningful analysis of alternatives to do a less detailed quantitative comparative analysis, rather than to only analyze the impacts of one alternative. For example, if you only have the money to evaluate traffic impacts at 30 intersections, it would be better to compare 3 alternatives based upon the traffic impacts at 10 intersections countywide, than to evaluate only the impacts of the preferred alternative at 30 intersections.

E) The County must definitely do the simple and inexpensive quantitative comparative analyses of alternatives.

Not all the quantitative impact analyses are expensive. Many of the impact analyses are a function of differences in the buildout population of the various alternatives. In those instances, the impact analysis is just a simple multiplication of the buildout population with an impact factor. For example, if the buildout is an additional 30,000 homes, and the every home uses 1/3 of an acre foot of water per year, then the increased residential water need for that alternative is 10,000 acre feet per year. The County would be hard pressed to claim that completing these exercises in 5th grade mathematics is financially infeasible.

On the other hand, there are two types of geographically specific impact analyses that are expensive: traffic congestion and noise. Unfortunately for the County, there have been CEQA cases on the level of analysis required in program EIRs for noise and for traffic. In *Federation of Hillside and Canyon Associations v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, rehearing 126 Cal.App.4th 1180, the court vacated a General Plan approval because of an inadequate transportation analysis. In *Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners*, the court ruled that a long-range airport development plan EIR had an inadequate evaluation of noise impacts. Thus, it is essential that, at the very least, the General Plan Update ultimately selected by Supervisors must have a thorough quantitative analysis of traffic congestion and noise impacts.

F) Lack of Quantitative Analysis of Alternatives Caused El Dorado County to lose its General Plan Case in 1999.

The 1996 General Plan prepared by El Dorado County was accompanied by an EIR and EIR Supplement that did not provide quantitative analyses comparing the project description to the "Low Growth" alternative. The Petitioners in the case challenged the range of alternatives as too narrow. Because there was no quantitative analysis of alternatives, the County could not demonstrate that the Project Description and the Low Growth Alternative have substantially different impacts. The court ruled that the County must reveal the analytical route it traveled to determine that the Low Growth Alternative provided substantial environmental advantages, or analyze another alternative that does

so. (*El Dorado County Taxpayers for Quality Growth et al. v. El Dorado County Board of Supervisors* (2005) Sacramento County Superior Court No. 96CS01290, *Ruling on Submitted Matter: Petition for Writ of Mandate*, pp. 85-90.) The County chose the latter approach.

Over the next five years the county repeated its General Plan Update process including the crafting of alternatives. The new EIR quantitatively evaluated the numerous impacts of the four alternatives at two relevant points in time: 20 years after plan adoption, and at plan buildout. The County adopted a new general plan and an EIR in 2004. The analyses of alternatives in the EIR were found legally compliant by the court. (*El Dorado County Taxpayers for Quality Growth et al. v. El Dorado County Board of Supervisors* (2005) Sacramento County Superior Court No. 96CS01290, *Ruling on Submitted Matter: Motion for Review of County's Return to Writ of Mandate*, pp. 7-10.)

During the five years it took the county to correct its mistake, **THE COUNTY WAS STRIPPED OF ITS AUTHORITY TO APPROVE NEW RESIDENTIAL DEVELOPMENT PROJECTS. The planning director responsible for the flawed environmental analysis was replaced. The outside law firm that was guiding the County through the General Plan Update was also replaced.**

In my very first presentation to the Calaveras County Board of Supervisors on the General Plan, on January 26, 2006, I encouraged the Board to improve upon what other Counties have done. One step toward achieving that is to avoid the mistakes that other County's have made. To consciously repeat the mistakes of another County's is to travel in the opposite direction on the policy spectrum. It will make no sense to any rational voter.

G) Not Quantitatively Analyzing the impacts of Alternatives Steals the Board of Supervisors' Flexibility to make a good General Plan Decision.

Throughout the General Plan Update process, many different people from the Planning Department and Mintier-Harnish have noted that the Board of Supervisors may choose a different alternative than the preferred alternative, or may mix and match components of different alternatives, when the Board makes its final decision on the General Plan Update. To facilitate that, the Board would have to have a quantitative analysis of the impact of each alternative under consideration at the time. The Board will not be able to choose one of the other alternatives if they are not analyzed in the EIR in the same detail as the project description. Similarly, it will be difficult to mix and match components of alternatives if they are not quantitatively analyzed in the EIR. For example, you can't expect to adopt a roadway system from one alternative if the impacts of that roadway system have not been evaluated in the EIR. Thus, at the end of the process, the Board will be stuck between adopting a preferred alternative they may not like, or delaying the process and spending additional funds they do not have.

For all the reasons noted above, Calaveras County must provide a quantitative comparative analysis of the impacts of the alternatives in the General Plan Update EIR.

Exhibit 3:

Proper
Analysis
of
Alternatives

**Table 5.4-5
2025 Comparison of Regional Transportation Performance Measures
for Each General Plan Alternative**

Performance Measure	Existing Conditions (1999)	General Plan Alternatives			
		No Project	Roadway Constrained 6-Lane "Plus"	Environmentally Constrained	1996 General Plan
Population	121,000	174,610	185,601	201,730	202,241
Employment	30,434	66,622	64,889	73,145	72,630
Daily Vehicle Trips	309,200	553,070	574,160	632,750	631,470
Daily VMT ¹	3,293,040	5,712,600	5,820,060	6,408,690	6,399,300
Daily VHD ²	4,950	35,640	41,720	50,150	50,510
Daily Vehicle Trips per Capita ¹	2.56	3.17	3.09	3.14	3.12
Daily VMT per Capita ²	27.22	32.72	31.36	31.77	31.64
Daily VHD per Capita ³	0.04	0.20	0.22	0.25	0.25

Notes:
¹ Includes external trips
² VMT = Vehicle Miles Traveled (within El Dorado County)
³ VHD = Vehicle Hours of Delay (within El Dorado County)
Source: Fehr & Peers 2003

The increase in daily vehicle trips per capita is the result of a combination of factors. Most new development will be very low density (less than one unit per acre) and will not be conducive to travel by bicycle, on foot, or via transit. This characteristic is included in the El Dorado County TDF model through a link to the regional SACMET TDF model. This link determines whether any reductions in vehicle trips should occur as a result of factors such as the availability of transit service or the design of land use as it relates to the potential for walking and bicycling. In addition, employment levels are projected to increase substantially in the Missouri Flat and El Dorado Hills areas. Employment in the Missouri Flat area is the result of new commercial projects such as Wal-Mart and El Dorado Villages. The nature of these projects is expected to capture regional shopping trips that would otherwise occur in Sacramento County. The employment growth in El Dorado Hills is mainly concentrated in the Town Center and the El Dorado Hills Business Park. The projected growth is high enough that workers will be attracted from neighboring counties, which will increase trips and travel within El Dorado County.

VMT will also increase as a result of three main factors:

- Trip lengths will increase as residential land use development occurs in areas further away from commercial services and the U.S. 50 corridor.
- Drivers will opt for longer distance alternative routes to avoid congested locations.

Table 5.5-1

West Slope Water Demand and Supply Conditions (acre-feet per year)

	EID				GDPUD				GFCSD		Other County Areas - West Slope		Total West Slope	
	Water Demand ²	Available Firm Supply ³	Related Surplus (& Shortages) ⁴	Water Demand	Available Firm Supply	Related Surplus (& Shortages)	Water Demand	Available Firm Supply	Related Surplus (& Shortages)	Water Demand	Surplus (& Shortages) ⁵	Water Demand	Surplus (& Shortages) ⁵	
Baseline/Existing Conditions (1999/2000)	37,095 to 37,806	43,280	6,185 to 5,474	10,956 to 11,068	12,200	1,244 to 1,132	157	144	(13)	7,406	55,614 to 56,437	7,416 to 7,416	6,593	
No Project Alternative	56,543 to 65,049	43,280	(13,263 to 21,769)	12,030 to 15,277	12,200	170 to (3,077)	197	144	(53)	13,498 to 16,358	82,268 to 96,881	(13,146 to 24,899)	24,899	
Roadway Constrained Alternative	61,645 to 70,151	43,280	(18,365 to 26,871)	13,619 to 18,270	12,200	(1,419 to 6,070)	499	144	(355)	17,263 to 26,948	93,026 to 115,868	(20,139 to 33,296)	33,296	
Environmentally Constrained Alternative	58,682 to 67,188	43,280	(15,402 to 23,908)	12,115 to 15,362	12,200	85 to (3,162)	204	144	(60)	14,326 to 17,186	85,327 to 99,940	(15,377 to 27,130)	27,130	
1996 General Plan Alternative	66,442 to 74,948	43,280	(23,162 to 31,668)	14,736 to 19,387	12,200	(2,536 to 7,187)	848	144	(704)	19,739 to 29,424	101,765 to 124,607	(26,402 to 39,559)	39,559	
	62,131 to 70,637	43,280	(18,851 to 27,357)	12,540 to 15,787	12,200	(340 to 3,587)	241	144	(97)	14,913 to 17,773	89,825 to 104,438	(19,288 to 31,041)	31,041	
	69,652 to 78,158	43,280	(26,372 to 34,878)	15,764 to 20,415	12,200	(3,564 to 8,215)	800	144	(656)	18,730 to 28,415	104,946 to 127,788	(30,592 to 43,749)	43,749	
	62,331 to 70,837	43,280	(19,051 to 27,557)	12,496 to 15,743	12,200	(296 to 3,543)	205	144	(61)	15,386 to 18,246	90,418 to 105,031	(19,408 to 31,161)	31,161	
	80,262 to 88,768	43,280	(36,982 to 45,488)	17,418 to 22,069	12,200	(5,218 to 9,869)	1,066	144	(922)	25,053 to 34,738	123,799 to 146,641	(43,122 to 56,279)	56,279	

¹ "Other County Areas - West Slope" are the portions of the west slope outside the service areas of the three water purveyors. These areas are served by smaller water companies (that depend upon springs and wells) and by private wells. Only water demand is shown because total groundwater supply available for new development is not known due to a lack of available groundwater data (see Sec. 5.5.1). The range in water demand is explained in the next note.

² All water demand estimates are from the related and more detailed material provided in Appendix E (EPS 2008 and Wood Rodgers 2008). The Wood Rodgers estimates were conducted for agricultural water demands only and are included in the upper end of the demand estimate ranges shown above. The initial EPS agricultural demand estimates are included in Fig. 21 of EPS 2008 in Appendix E and are included in the lower end of the water demand ranges above. The Wood Rodgers agricultural water demands are based on a land suitability and slope constraints analysis that does not take into account potential financial, institutional and environmental constraints that could limit the expansion of the EID and GDPUD surface water facilities. Such facilities may be needed to serve much of the EID and GDPUD agricultural water demand estimated by Wood Rodgers.

³ Available supply assumes no new additions to water purveyor systems as they exist under existing/baseline conditions. The available supply estimates for EID and GDPUD are their total system firm yields, and the GFCSD available supply is its total system safe yield. How these purveyors define their firm and safe yields is defined in Sec. 5.5.1.

⁴ Shortages and surpluses are the differences between estimated water demands and available supply. The range in estimated shortages is due to the range in estimated water demands discussed in note 2. Some of the shortages may be met with groundwater but most of the shortages will need to be met with surface water delivered by the three west slope water purveyors.

⁵ Total west slope surplus and shortages are derived by adding the EID, GDPUD, and GFCSD surplus and shortages together.

Source: EDCWA 2003a, EPS 2003, Wood Rodgers 2003, and EDWA, 2003

**Table 5.5-13
Potential Groundwater Demand Increases in West Slope Areas
Not Served by Public Water Purveyors**

	Existing Conditions (1999 Baseline)	2025 Conditions	Difference Between 2025 and Existing Conditions	Buildout Conditions	Difference Between Buildout and Existing Conditions
No Project Alternative					
Total Residential Groundwater Demand (afy)	10,218	16,352	6,134	19,486	9,268
Total Employment Groundwater Demand (afy)	5,043	14,563	9,520	27,424	22,381
Total Agricultural Water Demand (afy)	—	2,860	2,860	9,685	9,685
Total Groundwater Demand (afy)	15,261	33,775	18,514	56,595	41,334
Roadway Constrained 6-Lane "Plus" Alternative					
Total Residential Groundwater Demand (afy)	10,218	17,639	7,421	23,042	12,824
Total Employment Groundwater Demand (afy)	5,043	14,036	8,993	27,549	22,506
Total Agricultural Water Demand (afy)	—	2,860	2,860	9,685	9,685
Total Groundwater Demand (afy)	15,261	34,535	19,274	60,276	45,015
Environmentally Constrained Alternative					
Total Residential Groundwater Demand (afy)	10,218	18,199	7,981	23,194	12,976
Total Employment Groundwater Demand (afy)	5,043	16,308	11,265	21,795	16,752
Total Agricultural Water Demand (afy)	—	2,860	2,860	9,685	9,685
Total Groundwater Demand (afy)	15,261	37,367	22,106	54,674	39,413
1996 General Plan Alternative					
Total Residential Groundwater Demand (afy)	10,218	19,103	8,885	31,650	21,432
Total Employment Groundwater Demand (afy)	5,043	15,427	10,384	27,549	22,506
Total Agricultural Water Demand (afy)	—	2,860	2,860	9,685	9,685
Total Groundwater Demand (afy)	15,261	37,390	22,129	68,884	53,623
<p>Note: The data provided above are for residential, employee, and agricultural water demand outside the service areas of EID, GDPUD, and GFCSD and on the county's west slope. It is assumed that major additions to the service-area boundaries of these purveyors would not occur during the General Plan's planning horizon; therefore, the water demand estimates presented above would need to be served by groundwater. The agricultural water demands, summarized above and estimated by Wood Rodgers (see Wood Rodgers 2003 in Appendix E), represent the maximum amount of agricultural water demand that may need to be met by groundwater. As explained in Section 5.5.1, the Wood Rodgers estimates are based on the suitability of available land to be used for agricultural purposes and it is not known how much groundwater is available to meet related agricultural water demand.</p>					
Sources: EPS 2003, Wood Rodgers 2003					

Table 5.7-7

Additional School Facilities Needed¹

Market #	Market Area	School Facility Needs (acres)									
		No Project		Roadway Constrained 6-Lane "Plus"		Environmentally Constrained		1996 General Plan			
		2025	Buildout	2025	Buildout	2025	Buildout	2025	Buildout		
1	El Dorado Hills	94	95	106	108	120	135	116	147		
2	Cameron Park/Shingle Springs/Rescue	22	31	28	43	43	85	41	112		
3	Diamond Springs	4	7	6	14	17	39	23	85		
4	Placerville	10	12	14	17	17	22	14	25		
5	Coloma/Gold Hill	3	5	5	8	3	5	4	10		
6	Follock Pines	3	8	4	16	7	19	6	28		
7	Pleasant Valley	3	8	4	13	3	7	5	17		
8	Latrobe	3	3	5	6	5	6	6	11		
9	Somerset	3	8	2	9	3	9	3	12		
10	Cool/Pilot Hill	2	6	3	15	6	25	6	42		
11	Georgetown/Garden Valley	2	14	3	24	5	24	6	39		
13	American River	2	11	2	19	3	17	2	24		
14	Mosquito	2	4	4	8	1	1	2	10		
Total Additional School Facility Needs (1999 to 2025/Buildout)		153	212	186	300	233	394	234	562		

¹ See Table 4-6 for dwelling unit forecasts. Totals assume 312 square feet of school facility (including classrooms, play areas, parking, and internal roads) per new dwelling unit.

Note: For this EIR, consideration was given to determining potential facility needs by market area and grade level. A further examination of this concluded that determining facility needs by grade level in each market level would suggest a greater level of precision in predicting the future (not only number of students, but their grade levels by market area) than is reasonable for a General Plan. Typically such analyses are conducted by school districts and are based on specific development proposals, local demographic trends, proposed housing sizes, etc. Thus, at the General Plan level it was determined that a better method would be to use an overall student generation rate for the County and equate this to classroom needs and the impacts of construction of these facilities.

Source: EPS 2002, EDAAW 2003

General Plan Alternatives	Acreages of Various Intensity Land Uses			
	High	Medium	Low	Total
No Project ²	72,606	86,794	173,668	333,068
Roadway Constrained 6-Lane "Plus"	56,607	63,014	213,447	333,068
Environmentally Constrained	40,638	77,490	214,940	333,068
1996 General Plan	72,606	86,794	173,668	333,068

¹ Consist only of State Responsibility Areas (SRAs).
² Although the land use designations for the No Project Alternative and 1996 General Plan Alternative are the same, the overall development density and the number of development projects under the No Project Alternative would be considerably less than under the 1996 General Plan Alternative due to restrictions on land subdivision.

Source: FRAP 1985, EPS 2002, EDAW 2003

No Project Alternative (Alternative #1)

Relevant Goals/Policies—No Project Alternative

The relevant policies of the 1996 General Plan that are applicable to the No Project Alternative are Policies 3.2.1.2, 5.7.4.1, 6.2.1.1, 6.2.2.1, 6.2.3.2, 6.2.4.1 and 6.2.4.2, and 6.2.5.1.

No Project Alternative (2025)—Impact Discussion

As shown in Table 5.8-11, the 1996 General Plan land use map, which would be applicable to this alternative, allows more parcels identified as high intensity within the High and Very High fire hazard areas to develop when compared to the land use maps for the Roadway Constrained 6-Lane "Plus" Alternative and the Environmentally Constrained Alternative. Given the Writ restrictions on residential subdivision (only one unit per legal parcel is allowed) aside from those within existing commitments, the No Project Alternative is expected to result in the lowest level of development. However, due to the restrictions on new subdivisions imposed by the Writ, more of the existing parcels in the rural regions will be developed with single-family dwellings. This would result in more development in the areas of high and very high fire hazard than in the Environmentally Constrained Alternative. The lower overall population growth would, however, reduce the number of wildfire incidents in areas located in the High and Very High fire hazard areas, resulting in the second lowest risk of exposure to wildland fire hazards.

The provision of adequate parkland to serve new population growth is an objective of all project alternatives. The definition of "adequate" parkland is based on countywide standards of 5 acre per 1,000 and projected levels of residential development. Table 5.7-10 shows the amount of parkland required to serve expected population growth in the county through 2025 and buildout, organized by project alternative. Other land uses, such as commercial development, can also contribute to the demand for park and recreation facilities.

Table 5.7-10 Parkland Needs (in acres)				
Alternative	2025		Buildout	
	Population Increase ¹	Additional Parkland Needed ²	Population Increase ¹	Additional Parkland Needed ²
No Project	53,610	268.1	73,829	369.1
Roadway Constrained 6-Lane "Plus"	64,601	323.0	104,137	505.7
Environmentally Constrained	80,730	403.7	137,688	688.4
1996 General Plan	81,241	406.2	196,692	983.5

¹ Based on EPS land use forecasts.
² Park ratios: 5 acres/1,000 population for the entire county. Based on CSD standards and county policy.
Source: EPS 2002a, 2002b, 2002c, 2002d; EDAW 2003

No Project Alternative (Alternative #1)

Relevant Goals/Policies—No Project Alternative

The relevant policies included in the 1996 General Plan that are applicable to the No Project alternative are Policies 5.1.2.2, 9.1.1.1 through 9.1.1.11, 9.2.2.1 through 9.2.2.7, and 9.2.3.1 through 9.2.3.5.

No Project Alternative (2025)—Impact Discussion

Implementation of the No Project Alternative is projected to result in the development of 21,434 new dwelling units and the addition of 53,610 residents through the planning horizon (2025). Based on the level and distribution of anticipated residential development, the amount of parkland needed to serve new growth to meet County standards would be approximately 268 acres through 2025.

No Project Alternative (Alternative #1)

Relevant Goals/Policies—No Project Alternative

The relevant policies included in the 1996 General Plan that are applicable to the No Project Alternative are Policies 5.1.1.1 and 5.1.1.2, 5.1.2.2, and 5.9.1.1 and 5.9.1.2.

No Project Alternative (2025)—Impact Discussion

Under the No Project Alternative, new residential developments would occur throughout the west slope, and this population growth would generate a demand of 26,805 sf of new library space, as shown in Table 5.7-8. Including the current deficit of library space, the total deficit would increase to 38,155 sf of library space by 2025.

General Plan Alternative	Existing		2025		Buildout	
	Existing Capacity ¹	Existing Demand	Additional Demand ²	Total Deficit	Additional Demand ²	Total Deficit
No Project	66,800	78,150	26,805	38,155	36,915	48,625
Roadway Constrained 6-Lane "Plus"	66,800	78,150	32,301	43,651	52,069	63,419
Environmentally Constrained	66,800	78,150	40,365	51,715	68,844	80,194
1996 General Plan	66,800	78,150	40,621	51,971	98,346	109,696

¹ Includes new El Dorado Hills branch library.
² Based on 0.5 sf per capita standard (includes 2025 demand)

Source: Amos, pers. comm., 2002

Policies 5.1.1.1 and 5.1.1.2, 5.1.2.2, and 5.9.1.1 and 5.9.1.2 would ensure that the County would cooperate with the County Library System in developing level-of-service standards and capital improvement plans (e.g., facility master plans). Policy 5.9.1.1 would allow the County Library System to accommodate the additional demand for library services through a variety of means, including the construction of new facilities, the expansion and renovation of existing facilities, or the use of pre-existing building space through lease or purchase. Given these policies, it is expected that additional library space would be constructed, leased, or purchased in the county by 2025.

be expected in the low-intensity land uses areas; thus the risk is the least in these areas. The Table 5.8-6 shows the acreage in each category for each of the four alternatives.

General Plan Alternatives	Acreages of Various Intensity Land Uses			
	High	Medium	Low	Total
No Project ¹	2,026	2,202	3,875	8,103
Roadway Constrained 6-Lane "Plus"	1,984	1,275	4,845	8,103
Environmentally Constrained	1,753	1,870	4,480	8,103
1996 General Plan ¹	2,026	2,202	3,875	8,103

Although the land use designations for the No Project Alternative and 1996 General Plan Alternative are the same, the overall development density and the number of development projects under the No Project Alternative would be substantially less than under the 1996 General Plan Alternative due to restrictions on land subdivision imposed by the Writ of Mandate.

Source: EPS 2002a-d, EDAW 2003

The acreage reflected under each of the land use intensity categories contains both developed and undeveloped lands. Development in the 100-year floodplain may be subject to property damage and occupants to injury or death caused by flood conditions during an 100-year flood event. Also, if critical emergency response facilities, such as hospitals, are constructed within the floodplain, the ability of the County to respond to emergencies during a flood event may be compromised.

Flood hazards may be averted by requiring new development to incorporate design measures that would protect structures and occupants from flood-related damage. Such hazards may also be averted by prohibiting certain types of development within the 100-year floodplain.

The County's Flood Damage Prevention Ordinance has incorporated various requirements into the County Zoning Ordinance that are applicable to development within the floodplain. Building permits, which are required for both discretionary and ministerial development are reviewed for consistency with the Flood Damage Prevention Ordinance before construction or development begins within the FEMA-designated 100-year floodplain (FEMA Flood Hazard Zones A and AI-30).

Developments within the floodplain are required to comply with development standards designed to minimize onsite flood damage. Within the floodplain, new construction and substantial improvements to existing structures require that the lowest floor be elevated above

No Project Alternative (Alternative #1)

Relevant Goals/Policies—No Project Alternative

The relevant policies included in the 1996 General Plan that are applicable to the No Project Alternative are Policies 5.1.1.1 and 5.1.1.2, 5.1.2.1 through 5.1.2.4, 5.1.3.1 and 5.1.3.2, 5.5.2.1 and 5.5.2.2.

No Project Alternative (2025)—Impact Discussion

Policy 5.5.2.1 requires discretionary projects to provide evidence that capacity exists within the solid-waste system for the processing, recycling, and transportation of solid waste. While this does not address ministerial development, Policies 5.1.1.1 and 5.1.1.2 would require the County to work with its franchise operators to plan for and implement needed facilities and programs in order to meet all state mandates. In addition, there may not be sufficient MRF capacity to achieve the CIWMB-mandated 50% by 2025. Therefore, this impact is considered significant.

Table 5.6-2				
Estimates of Increase in Recyclable Materials Diverted from Solid Waste Stream				
(Tons per Year)				
Equal-Weight Alternatives	2025		Buildout	
	Solid Waste Increase¹	Recyclable Material Increase²	Solid Waste Increase¹	Recyclable Material Increase²
Alternative #1: No Project Alternative	49,263	24,632	94,304	47,152
Alternative #2: Roadway Constrained 6-Lane "Plus"	52,347	26,174	108,257	54,129
Alternative #3: Environmentally Constrained	65,151	32,576	107,181	53,591
Alternative #4: 1996 General Plan	64,961	32,481	145,418	72,709

¹ Based on generation rate of 2.2 pounds per resident and 4.2 pounds per employee. These generation rates are based on 1999 CIWMB data for the County.

² Based on diversion rate of 50%.

Source: CIWMB Jurisdiction Profiles for El Dorado County (unincorporated) 2003, CIWMB Annual Report for El Dorado County 2003, EDAW 2003

New and expanded electric-energy infrastructure needed to serve the future population growth could be developed anywhere in the county, or outside the county; the County has limited authority for the siting of public-utility infrastructure, because land use approval authority is preempted by FERC, CPUC, and CEC.

In addition to PG&E transmission infrastructure, additional power plants, which may be operated by a number of private suppliers that would then sell electricity to PG&E, may be required to supply electric energy to the county by 2025 and buildout. Again, power plants may be built anywhere in the county, subject to approval from FERC and/or the CEC. Estimates of future consumption of electricity and the potential need for additional power plants are provided in Table 5.6-5.

Table 5.6-5
Estimated Electric Energy Consumption Increases and Number of New Power Plants Needed

Equal-Weight Alternatives	Existing Electric Energy Consumption (MWh) ¹	2025		Buildout	
		Increase in Electric Energy Consumption (MWh) ²	Percentage of a New Power Plant Needed ³	Increase in Electric Energy Consumption (MWh) ²	Percentage of a New Power Plant Needed ³
No Project	136.53	46.83	13%	64.49	10%
Roadway Constrained 6-Lane "Plus"	136.53	56.45	16%	90.96	26%
Environmentally Constrained	136.53	70.52	20%	120.27	34%
1996 General Plan	136.53	70.96	20%	171.81	49%

MWH = megawatt hour

¹ Based on 2002 census population for entire county of 156,299.

² Based on 2000 County total electricity consumption rate of 0.0008735 MWh per person; consumption on the per-person basis includes consumption by residential, commercial, industrial, and all other energy users in the county.

³ Assumes available annual capacity is 70% of the installed capacity of a representative power plant, which may be built anywhere in the western United States and Canada with connection to the Western Grid. The representative power plant was based on the proposed SMUD Cosumnes Power Plant (1,000 megawatts) (CEC 2003b). This power plant was chosen because it would be one of the power plants nearest to El Dorado County, which currently does not have power plants aside from hydrological power generator; it would be a new power plant; and it uses natural gas as fuel, the most common type of fuel for electricity power plants in California. Assumes that population growth in the county would represent a growth in the population served by the Western Grid.

Source: CEC 2003a, U.S. Census 2002

Exhibit 4:

Useless

Analysis

of

Alternatives

alternatives to those of the Project. Each resource section concludes with a matrix which provides a numeric ranking comparison of the Project and alternative's impacts (impact severity is ranked "0" through "5", with "0" being minimal or no impact). The discussion emphasizes the key impacts identified for the Project and does not include a comprehensive listing of the Project impacts. The numeric ranking is for illustrative purposes in comparing the alternatives to each impact of the Project. As such, while a ranking of "5" represents the greatest degree of impact among the Project and alternatives for a given impact, the rankings cannot be used to compare the severity or importance of the various impacts with one another.

Many of the Project impacts could be either reduced or avoided through implementation of mitigation identified in Chapters 4 through 15. To the extent that Project alternatives will result in similar impacts, the same or similar mitigation measures will be available to reduce the impacts associated with the Project alternatives.

With implementation of the mitigation measures identified in Chapters 4 through 15, the Project will be consistent with the City General Plan. Each of the alternatives would also be required to be consistent with the General Plan and could require modifications or mitigation, similar to that identified for the Project, to ensure consistency. Therefore it is not necessary for the comparative analysis in this section to consider consistency with the City General Plan.

17.4.1 Population and Housing

As discussed in Chapter 4, the Project will result in a City residential population and population growth rate beyond that anticipated in the City General Plan growth projections and will result in the removal of two single-family residences from the Project site. With mitigation, both of these Project population and housing impacts will be less than significant and will not result in significant cumulative impacts. Table 17-1 provides a summary comparison of population and housing impacts of the Project and alternatives.

Impact	Project Impact Significance with Mitigation	Project	Alternative 1 (No Project)	Alternative 2 (Existing Land Use/Zoning)	Alternative 3 (Reduced Project)
Increase Population Growth	Less than Significant	5	0	2	4
Remove Two Existing Dwellings	Less than Significant	5	0	5	5
Cumulative Population and Housing Impacts	Less than Significant	5	0	2	4
Population and Housing Ranking	–	15	0	9	13
Qualitative numeric ranking. 5 is greatest impact magnitude and 0 is least or no impact. Source: ESP					

Impact	Project Impact Significance with Mitigation	Project	Alternative 1 (No Project)	Alternative 2 (Existing Land Use/Zoning)	Alternative 3 (Reduced Project)
Construction of New Government Facilities	Less than Significant	5	0	2	4
Increased Students and School Facilities	Less than Significant	5	0	1	4
Electric, Gas, Telephone, Cable, and Internet	Less than Significant	5	0	2	4
Raw and Potable Water Demand	Less than Significant	5	0	3	4
Water Supply Environmental Impacts and Effects of Climate Change	Less than Significant	5	0	3	4
Wastewater Treatment and Disposal	Less than Significant	5	0	3	4
Increased Use of Existing and Construction of New City Parks	Less than Significant	5	0	1	4
Solid Waste	Less than Significant	5	0	3	4
Cumulative Public Service and Utility Impacts	Less than Significant	5	0	2	4
Public Service and Utility Rank	--	45	0	20	36
Qualitative numeric ranking. 5 is greatest impact magnitude and 0 is least or no impact. Source: ESP					

Alternative 1 will not increase traffic on area roads and will not require roadway improvements. Table 17-3 shows projected trip generation among the development alternatives. Alternatives 2 and 3 will result in lower peak-hour (and total daily) trips when compared to the Project and will result in lower cumulative traffic impacts as compared to the Project.

Project construction will result in traffic delays and safety risks while work is performed within roadway rights-of-way and as a result of construction vehicles. Alternative 1 will not require construction activities or vehicles. Alternatives 2 and 3 will result in similar construction-related traffic impacts; however, as a result of anticipated fewer roadway intersections and less overall construction-related trips the impact under these alternatives will be less than that of the Project.

The Project includes golf cart, bicycle and pedestrian crossing of internal roads, and direct driveway access to roads having daily traffic volumes in excess of 4,000 ADT. Alternative 1 does not include these facilities. Alternatives 2 and 3 will have a similar potential for golf cart crossings; however, lower internal traffic volumes are anticipated under these alternatives and crossings and direct driveway impacts under these alternatives will be less than those of the Project.

reduce Project air quality impacts, impacts related to ozone emissions and GHG emissions will remain significant and unavoidable.

Alternative 1 will not result in emissions from construction or changes in the use of the site, as the site uses will continue as they presently occur.

Alternatives 2 and 3 will each result in construction emissions and operational emissions from sources similar to those of the Project; however, the magnitude of emissions will be relatively lower due to the decreased development area and land uses within the Project site. Development of light industrial uses under Alternative 2 consistent with the existing land use designation for the 112-acre northeastern portion of the site could result in emissions from industrial sources that will not occur under the Project or other alternatives. While Alternative 2 could result in fewer vehicle emissions as a result in reductions in vehicle miles traveled due to the potential for a more balanced mix of housing/jobs in the Sutter Creek area it could also result in greater diesel emissions from increased truck operations depending on the nature of light industrial uses developed under this alternative.

The Project's operational emissions at full buildout are projected to exceed the significance threshold for reactive organic gases (ROG), an ozone precursor. Operational emissions associated with development of Phase 1 of the Project, which is similar to the uses assumed under Alternative 3, determined that operational emissions will not exceed the significance threshold under Phase 1, and therefore, will not be expected to exceed the threshold under Alternative 3. (See Chapter 7, Tables 7-10 and 7-11.)

Table 17-5 provides a summary comparison of air quality impacts of the Project and alternatives.

Impact	Project Impact Significance with Mitigation	Project	Alternative 1 (No Project)	Alternative 2 (Existing Land Use/Zoning)	Alternative 3 (Reduced Project)
Construction Emissions	Less than Significant	5	0	3	4
Hydrogen Sulfide Emissions	Less than Significant	5	0	4	4
Diesel Emissions	Less than Significant	5	0	5	4
Ozone/PM10 Emissions	Significant and Unavoidable	5	0	3	4
CO Emissions	Less than Significant	5	0	4	3
Greenhouse Gas Emissions	Significant and Unavoidable	5	0	4	3
Cumulative Air Quality Impacts	Significant and Unavoidable	5	0	3	4
Air Quality Ranking	--	35	0	26	26
Qualitative numeric ranking. 5 is greatest impact magnitude and 0 is least or no impact. Source: ESP					

Table 17-8. Comparison of Alternatives – Hydrology and Water Quality

Impact	Project Impact Significance with Mitigation	Project	Alternative 1 (No Project)	Alternative 2 (Existing Land Use/Zoning)	Alternative 3 (Reduced Project)
Construction-related Erosion/Sedimentation	Less than Significant	5	0	3	3
Storm Runoff/Groundwater Quality	Less than Significant	5	0	3	4
Increased Arsenic in Surface Water	Less than Significant	5	0	3	3
Golf Course Turf Management	Less than Significant	5	0	5	5
Use of Recycled Water for Irrigation	Less than Significant	5	0	5	5
Increased Contaminated Runoff	Less than Significant	5	0	3	3
Increased Flooding	Less than Significant	5	0	3	3
Cumulative Hydrology and Water Quality Impacts	Less than Significant	5	0	3	3
Hydrology and Water Quality Ranking	—	40	0	29	29

Qualitative numeric ranking. 5 is greatest impact magnitude and 0 is least or no impact.
Source: ESP

17.4.8 Public Safety and Hazards

Project impacts associated with public safety and hazards include handling and disturbance of hazardous substances during construction, inadequate site access/evacuation routes, exposure of residential areas and other land uses to wildland fire risk, and exposure of workers and residents/visitors to arsenic in soils and water.

Alternative 1 (No Project) will not result in changes in public safety and hazards associated with the site. However, due to existing conditions and the occupancy of the two residences on the Project site, a potential for continued exposure to hazardous substances and wildland fire under the No Project alternative exists.

Alternatives 2 and 3 will have the potential for similar public safety and hazards issues as those identified for the Project. However, as a result of the more limited amount of development and the location of that development under Alternatives 2 and 3 as compared to the Project, the public safety and hazards issues will be of a lesser magnitude. Emergency vehicle access and public evacuation routes could be included within the design of Alternatives 2 and 3 that will provide for consistency with the requirements of the General Plan and provide adequate emergency access/evacuation. The reduced development that will occur under Alternatives 2 and 3 will serve to limit or avoid the placement of residential and other land uses in proximity to areas within the site more prone to wildland fire. Development within these areas could be

avoided under Alternative 2 and likely either be avoided or reduced under Alternative 3. Both Alternatives 2 and 3 will result in more limited potential for public exposure to arsenic soils and waters within the Project site, as a result of the more limited development, fewer people and greater land use location siting options than the Project.

Table 17-9 provides a summary comparison of public safety and hazards impacts of the Project and alternatives.

Impact	Project Impact Significance with Mitigation	Project	Alternative 1 (No Project)	Alternative 2 (Existing Land Use/Zoning)	Alternative 3 (Reduced Project)
Exposure to Lead-Based Paints and Asbestos	Less than Significant	5	1	2	4
Hazardous Substances Transport and Storage	Less than Significant	5	0	3	4
Exposure of Workers to Arsenic	Less than Significant	5	0	4	4
Exposure to Natural Hazards	Less than Significant	5	0	3	4
Emergency Evacuation	Less than Significant	5	0	2	3
Emergency Access	Less than Significant	5	0	2	4
Gated Access	Less than Significant	5	0	0	4
Wildland Fire Risk	Less than Significant	5	1	2	3
Cumulative Public Safety and Hazards Impacts	Less than Significant	5	0	3	3
Public Safety and Hazards Rank	–	45	2	21	33
Qualitative numeric ranking. 5 is greatest impact magnitude and 0 is least or no impact. Source: ESP					

17.4.9 Biological Resources

Potential project impacts to biological resources include loss of wetlands, waters of the U.S., riparian habitat, oak woodlands and wildlife habitat, as well as potential impacts to protected bird species, VELB, California red-legged frog, foothill yellow-legged frog, California tiger salamander, Northern Pacific pond turtle, bats and rare plants.

Alternative 1 (No Project) will not result in changes to the Project site or impacts to biological resources on the site.

Alternatives 2 and 3 will have the potential for similar biological impacts as those identified for the Project. However, as a result of the more limited amount of development and the location of that development under Alternatives 2 and 3 as compared to the Project, the impacts of these