



ADDENDUM

**TO THE FINAL ENVIRONMENTAL IMPACT REPORT
FOR THE CARSON CREEK SPECIFIC PLAN**

January 1997

El Dorado County Planning Department



EL DORADO COUNTY
PLANNING DEPARTMENT

PL 9004

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**NOTICE OF ADDENDUM
TO THE FINAL ENVIRONMENTAL IMPACT REPORT
FOR THE CARSON CREEK SPECIFIC PLAN**

Agency: County of El Dorado
2850 Fairlane Court
Placerville, CA 95667

Contact: Roger Trout, Senior Planner
Planning Department

Project Name: Carson Creek

Applicant: Palisades Development, Inc.

The County of El Dorado is the land use authority charged with the preparation and review of an Addendum to the Final Environmental Impact Report for the Carson Creek Specific Plan.

A copy of the Addendum (without Appendices) is provided with this notice. The Addendum, Appendices, and referenced documents are available for review or purchase from the Planning Department at the above address.

The Addendum is subject to public review and comment. A public hearing on the Addendum is scheduled before the Board of Supervisors on February 25, 1997, at 2:00 p.m. Any person or organization that desires to submit written comments that will be presented to the Board of Supervisors must submit said comments to the Planning Department no later than 5:00 p.m., February 18, 1997.

EL DORADO COUNTY PLANNING DEPARTMENT
CONRAD B. MONTGOMERY, Planning Director

Date: January 31, 1997

I. INTRODUCTION

The proposed Carson Creek Specific Plan ("CCSP" or the "Project") would establish comprehensive guidance and regulations for development of 710 acres in western El Dorado County. The CCSP Land Use Plan provides for 2,434 housing units, with densities ranging from 3 du/acre to 20 du/acre; 13.8 acres of commercial uses; 48.4 acres of research and development uses; up to two schools (elementary and possibly middle); 31.2 acres of parks; and 142.8 acres of open space. The proposed land uses are planned to complement each other and to create a traditional small town type of development with housing, employment, commercial, business/light industrial, and public uses. In addition, the CCSP includes a Circulation Plan, an Open Space Plan, a Grading Plan, an Infrastructure Plan, and plans for Environmental Management and Public Facilities and Services. Development Standards in the CCSP will regulate signage and permitted uses in the CCSP area.

Palisades Development, Inc., submitted applications for the CCSP in July 1994. After awaiting completion of the County's General Plan update process, which ended in January 1996 after six years of study and intense public debate, the County completed the preparation of a draft environmental impact report ("Draft EIR") on the CCSP and issued it for public review in May 1996. The Draft EIR revealed that the CCSP would have significant and unavoidable environmental impacts related to aesthetics, air quality, water consumption, and consistency with General Plan policies on water supply. (See Draft EIR for the Carson Creek Specific Plan, vol. I, pp. 7-22 to 7-24.) The public comment period on the Draft EIR closed on July 5, 1996. In August 1996, the County issued the original Final EIR, which consisted of the Draft EIR, comments on the Draft EIR, responses to comments, revisions to the Draft EIR text, and a Mitigation Monitoring and Reporting Program.

The County Planning Commission recommended certification of the Final EIR on September 12, 1996. The County Board of Supervisors ("Board") considered the CCSP on September 24, 1996, certified the Final EIR, and approved the Project. (See Resolution No. 224-96, pp. 1-3, attached as Appendix A to this Addendum.) In doing so, the Board also approved its findings of fact, a statement of overriding considerations, and a mitigation monitoring and reporting program. (Id.) On the same date, the Board also approved a tentative subdivision map for the northern Euer Ranch portion of the Project site. (Id.) The County Clerk issued a Notice of Determination for the Project on September 26, 1996. (See Notice of Determination, attached as Appendix B.)

On October 25, 1996, El Dorado County Taxpayers for Quality Growth (the "Taxpayers") and the Environmental Planning and Information Center of Western El Dorado County ("EPIC") filed a Petition for Writ of Mandate in the El Dorado County Superior Court, requesting the Court to order the County to void its certification of the EIR and its approval of the CCSP. (See Petition for Writ of Mandate, El Dorado County Superior Court No. PV 002200 (filed Oct. 25, 1996), attached as Appendix C.) In this special proceeding, the Taxpayers and EPIC alleged that the County failed to comply with the California Environmental Quality Act ("CEQA") (Pub. Resources Code, § 21000 *et seq.*) and the Planning and Zoning Law (Gov. Code, § 65000 *et seq.*) when it approved the CCSP. (See Id., pp. 6-7.)

An alternative writ of mandate was issued by the El Dorado County Superior Court on December 20, 1996, commanding the County to rescind its approval of the Project or to show cause why it should not be ordered to do so. Although the Board of Supervisors of the County, based on advice of County Counsel, believed and maintains that the EIR and related documentation and the project approvals were legally defensible, County Counsel nevertheless recommended that the Board rescind its approvals of the CCSP and Euer Ranch tentative map and direct County Staff to prepare an addendum to the Final EIR addressing discrete issues that could be discussed in greater detail than was found in the original Final EIR. The issues in question primarily involved water supply, and the extent to which the County General Plan required a showing of water availability at the time of approvals of specific plans and tentative subdivision maps. The Board accepted this advice. On January 14, 1997, in response to the alternative writ, the Board approved Resolution No. 8-97, by which it vacated Resolution No. 224-96. (See Resolution No. 8-97, attached as Appendix D.) The effect of this action was to rescind the Board's prior actions certifying the Final EIR, adopting findings, approving the Specific Plan, and approving the Euer Ranch tentative map.

This Addendum is intended to be part of an expanded Final EIR for the Project. The expanded Final EIR will consist of the Draft EIR, the original Final EIR, and this Addendum. These documents will serve as the environmental documentation for the following Project approvals:

- CCSP;
- pre-zoning and zoning of property within the specific plan area;
- development agreement for the CCSP;
- multi-family/commercial design review;
- tentative and final subdivision or parcel maps;
- conditional use permits;
- annexation/reorganization of special districts;
- grading permits;
- building permits;
- Department of Fish & Game 1600 agreement(s);
- Regional Water Quality Control Board Section 401 certification
- Regional Water Quality Control Board NPDES permit;
- Service District annexations; and
- School site acquisition and construction; and
- Public Facilities Financing Plan for the Carson Creek Specific Plan.

II. PURPOSE AND SCOPE OF THE ADDENDUM

County staff has prepared this Addendum at the request of the Board. The Addendum is intended to provide updated information regarding water service for the CCSP. Much of this information was available at the time the Board originally approved the CCSP in September 1996, but was not necessarily contained within the administrative record supporting the Board's action. Instead, such material had been created in proceedings initiated by the El

Dorado County Water Agency ("Water Agency" or "CWA") and the El Dorado Irrigation District ("EID") relating to the "El Dorado Project," which would provide EID with the right to divert 17,000 acre-feet of water from Folsom Reservoir for consumptive use. At the time of the Board's original action in September 1996, the Taxpayers already had much of this information, due to that organization's involvement in administrative and judicial proceedings relating to the El Dorado Project. Some of the information in this Addendum has been generated after the Board's action of September 24, 1996. In particular, on October 2, 1996, the State Water Resources Control Board ("SWRCB") issued a decision approving the water rights application filed by the Water Agency and EID. (See State Water Resources Control Board, Decision 1635, attached as Appendix E.)

This document, while labeled an "Addendum," is not being prepared under circumstances discussed in section 15164 of the CEQA Guidelines. Under that section, an addendum, as well as the subsequent and supplemental EIRs referenced in sections 15162 and 15163 of the CEQA Guidelines, are appropriate where an agency has certified an EIR but desires to provide additional information or address additional issues before acting on a project. Here, in contrast, the Board has rescinded the Project approvals and EIR certification in response to the lawsuit discussed above. Because the County has not yet recertified the EIR for the CCSP, this Addendum does not technically qualify as either an addendum, a subsequent EIR, or a supplemental EIR as defined in the CEQA Guidelines, but instead functions as a document that supplements a previously-issued proposed Final EIR prior to certification.

This document is referred to as an Addendum because the material contained in this document is not "significant new information" as defined by the CEQA Guidelines. Unless "new significant information" is added to an EIR, recirculation of the EIR or the added material for public review or comment is not required.¹

Section 15088(a) of the CEQA Guidelines states that:

"[a] lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification."

"Significant new information" includes information showing that:

- "(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

¹ If "new significant information" is added to an EIR prior to certification, recirculation of the EIR for a period of either 30 or 45 days typically is required for public review and comment.

- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.
- (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded."

(CEQA Guidelines, § 15088.5, subd. (a).)

The information included in this "Addendum" does not merit recirculation under the foregoing rules. As the discussion in sections III and IV of this Addendum will make clear, the information on water service does not reveal a new significant environmental impact or a new mitigation measure. Nor does the information reveal an increase in the severity of an impact, or a feasible mitigation measure or alternative that would lessen the Project's significant impacts, but that the Project proponent declined to adopt. Finally, the inclusion of additional information on potential water service for the CCSP does not render the draft EIR fundamentally and basically inadequate. The information in this Addendum clarifies, amplifies, and updates the information contained in the Draft and Final EIRs on water service. Accordingly, CEQA does not require the County to recirculate this Addendum. Nevertheless, pursuant to Resolution No. 8-97, the Board of Supervisors will accept public testimony on this Addendum and Final EIR, and on the CCSP and the Euer Ranch tentative, at a noticed public hearing. That notice will be given, and this Addendum will be available for public review, at least fifteen (15) days prior to the hearing. In addition, the County will accept written comments on the limited issues discussed in this Addendum, although County Staff will use its discretion in determining whether any comment(s) require any written or oral response for presentation to the Board.

A public hearing on the augmented Final EIR for the CCSP, and on the Project itself, will be scheduled before the Board of Supervisors. Any person or organization that desires to submit written comments that will be presented to the Board in advance of that hearing must submit such comments to Senior Planner Roger Trout, at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, California, 95667, no later than 5:00 p.m. on the date to be specified in the notice of the hearing.

The Board's decision to prepare an Addendum, while a reaction to the aforementioned lawsuit filed by the Taxpayers and EPIC, in no way constitutes an admission by the Board that the lawsuit was meritorious. Rather, the Board's decision was based, in large part, on its desire to fully and unambiguously comply with the requirements of CEQA and the Planning and Zoning Law, and to ensure that the administrative record for the CCSP includes a comprehensive discussion of water supply issues that includes the information identified above.

III. ADDENDUM TO DISCUSSION OF WATER SERVICE IMPACTS IN THE DRAFT EIR

A. Information On Potential Water Supplies For The CCSP

The Draft EIR for the CCSP was issued in May 1996. At that time, EID's entitlements to water included 23,000 acre-feet annually ("afa") from the Sly Park Reservoir (Jenkinson Lake), 15,080 afa from PG&E's El Dorado Forebay Reservoir, and 7,550 afa from Folsom Reservoir. EID also has rights to divert 15 cubic feet per second ("cfs") of water from the North Fork Cosumnes River into the Crawford Ditch between May 15 and October 15, and to divert 15 cfs from Clear Creek into the Crawford Ditch year round. The Draft EIR estimated this entitlement for Crawford Ditch to be approximately 5,562 afa. (See Draft EIR, p. 4.18-1.) The system firm yield from these four integrated sources, taken together, was approximately 37,150 afa in 1994. Total demand in EID's service area was estimated as approximately 34,600 afa, or roughly 2,500 afa less than available firm yield supplies. (Id.)

For 1995 and 1996, EID estimated its system firm yield as 41,700 afa; 1995 estimated total demand was 36,800 afa, or about 4,900 afa less than the system firm yield. (See El Dorado Irrigation District, 1996 Update to the 1991 Water Supply and Demand Report (May 29, 1996), p. 18, attached as Appendix F; El Dorado County Public Water Planning Ordinance Approved 1995 Update -- Water Supply and Demand Report (June 4, 1996), p. 1, attached as Appendix G.)

Buildout of the CCSP would require about 3,396 equivalent dwelling units ("EDUs") of water, or approximately 2038 afa. (Draft EIR, p. 4.18-4.)² Because the additional demand for water caused by the CCSP could outstrip existing reliable supplies at buildout, the Draft EIR labeled water consumption impacts significant until additional water sources are found to adequately serve the CCSP area at buildout. (Draft EIR, p. 4.18-3.)

The Draft EIR also explained that EID and the Water Agency had applied to SWRCB for rights to make consumptive use of 17,000 afa from water stored in and released from Silver, Caples, and Aloha Lakes, as well as natural flow in the South Fork American River, with diversion to occur at Folsom Reservoir. (Draft EIR, p. 4.18-1.)³ This water is available as a

^{2/} An EDU is the average annual single-family household water demand in the EID service area. (Draft EIR, p. 4.18-1.)

^{3/} As described in the environmental documents for the County Water Program and the El Dorado Project, EID and the Water Agency originally proposed to divert the El Dorado Project of water from Folsom Reservoir and three other points upstream within the South Fork American River basin. (See El Dorado County Water Agency Water Program and El Dorado Project for the El Dorado Irrigation District Service Area Draft Environmental Impact Report ("El Dorado Project Draft EIR"), pp. 3-9 to 3-17; El Dorado County Water Agency Water Program and El Dorado Project for the El Dorado Service Area Final Environmental Impact Report ("El Dorado Project Final EIR"), pp. 3-10 to 3-11 & Appendix C.) The Water Agency and EID subsequently revised their application so that diversion would be solely from Folsom Reservoir. (Draft Supplement to El Dorado County Water Agency: Water Program and El Dorado Project EIR ("El Dorado Project Draft Supplement"), pp. I-3 to I-4, II-1 to II-6, & Appendix C; see generally Final Supplement to El Dorado County Water Agency: Water Program and El Dorado Project EIR ("El

by-product at PG&E's historic operation of its El Dorado Hydroelectric Project, known as Project 184, for power purposes. The application was still pending before the SWRCB at the time the County issued the Final EIR for the CCSP in August 1996. Even when the County certified the EIR and approved the CCSP in September 1996, the SWRCB had not yet reached a final decision on the application, although a draft decision was then circulating.

On October 2, 1996, the SWRCB approved EID's and the CWA's application to divert 17,000 afa from Folsom Reservoir for consumptive use in the EID service area. (See State Water Resources Control Board, Decision 1635 (Oct. 2, 1996), pp. 126-127, attached as Appendix E.) In reaching its decision to approve the application, the SWRCB determined that water was available for appropriation. (Id., pp. 33-48.) The SWRCB considered the environmental documents prepared for the County Water Program and the El Dorado Project and explained how diversion of 17,000 afa would impact recreation, water quality, and fisheries resources in the lower American River and the San Joaquin-Sacramento River Delta and Bay Estuary, and on endangered or threatened species. (Id., pp. 104-122.) Moreover, the SWRCB conditioned its approval of EID's application on protections for the counties of origin (Alpine and Amador Counties), the public interest, and the environment. (Id., pp. 126-127, 133-142.) In particular, due to concerns expressed over how to measure PG&E's historical operation of Project 184, the SWRCB imposed conditions to limit EID's ability to alter the timing and amount of water released from Silver, Caples, and Aloha Lakes. (See SWRCB Decision 1635, pp. 108-112, 137-139 (conditions 13-18). Various parties subsequently filed petitions seeking the SWRCB's reconsideration of its decision. On November 21, 1996, the SWRCB accepted most of the petitioners. A decision on the merits of these petitioners is expected in February, 1997. While the SWRCB may alter its approval of the 17,000 afa, and its final decision could be challenged in court, this water is currently the most likely source of water to serve buildout of the CCSP. The environmental effects of supplying a portion of the 17,000 afa to the CCSP therefore merits further discussion.

The environmental impacts associated with EID diverting the entire 17,000 afa from Folsom Reservoir were evaluated in both the El Dorado Project Draft and Final EIRs and the El Dorado Project Draft and Final Supplements. The El Dorado Project Draft EIR provided a detailed assessment of the quality of water in Alder Creek, Weber Creek, the South Fork American River, tributaries of the Cosumnes River, portions of Camp Creek, and the lower American River and the Delta. (El Dorado Project Draft EIR, pp. 4-1 to 4-39.) Because water would be diverted only from Folsom Reservoir, there would be no water quality impact to waterways upstream from Folsom. (Id., p. 4-47 to 4-54.) Water quality effects on the lower American are expected to be minor, while the Delta could experience a slight increase in seawater intrusion from the San Francisco Bay. (Id., p. 4-53.) The Draft EIR labeled the impacts to water quality as less than significant. (Id. at 4-54.) The El Dorado Project Draft Supplement concurred with this conclusion. (El Dorado Project Draft Supplement, pp. III.A-7 to III.A-8.)

Dorado Project Final Supplement").) All environmental review documents for the County Water Program and El Dorado Project are available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667. The State Clearinghouse number for the EIRs and Supplements is SCH # 72012008.

Removal of 17,000 afa from Folsom would reduce discharge of water into the lower American River by 0.62 percent, into the Sacramento River by 0.10 percent, and into the Delta by 0.11 percent. (El Dorado Project Draft Supplement, pp. III.A-7, IV.C-5; see also El Dorado Project Draft EIR, pp. 6-28 to 6-29.) This reduction is too small to significantly impact fish productivity in these waterways. (El Dorado Project Draft Supplement, pp. IV.C-5 to IV.C-6; El Dorado Project Draft EIR, p. 6-29.) Moreover, existing minimum instream flow requirements would be maintained to protect chinook salmon, steelhead trout, and American shad. (Id. at IV.C-6.) Operations at Folsom Reservoir in response to diversion of 17,000 afa have the potential to reduce spawning success and fish productivity within the reservoir. (Id. at IV.C-4.) The decrease in reservoir surface area is expected to be minor, however, and is not expected to negatively impact fish productivity within the reservoir. (Id. at IV.C-5.) The impact is less than significant. (Id.)

The El Dorado Project EIRs and Supplements also provide a detailed analysis of the impacts to vegetation and wildlife from withdrawing 17,000 afa and distributing the water along a conveyance route yet to be constructed. (El Dorado Project Draft Supplement, pp. III.D-8 to III.D-20.) The diversion of 17,000 afa at Folsom Reservoir is not expected to have an impact on the vegetation and habitat in the lower American River below the reservoir. (Id. at III.D-2 to III.D-3, III.D-8.) Various impacts to habitat and vegetation associated with the conveyance system for distributing the water are described in the El Dorado Project Supplement at pages III.D-8 through III.D-20.

The impacts of withdrawing 17,000 afa at Folsom Reservoir on land use, geology and soils, cultural resources, recreation and aesthetics, transportation, air quality, noise, public health and safety, and growth inducement are described in the El Dorado Project Draft Supplement.

The El Dorado Project Draft Supplement also discusses the potential cumulative impacts from the El Dorado Project in conjunction with other water supply and water quality management projects. The other projects evaluated for cumulative impacts include: (1) development of the "Fazio Water" pursuant to Public Law 101-514; (2) management programs pursuant to the American River Watershed Investigation; (3) interim reoperation of Folsom Dam and Reservoir; (4) other water supply projects being explored by EID and the Water Agency (Texas Hill Project, Small Alder Project, and White Rock Project); and (5) mandatory instream flow requirements for the lower American River pursuant to SWRCB Decision 893. (El Dorado Project Draft Supplement, pp. IV-2 to IV-5.) The El Dorado Project, in conjunction with the foregoing other projects, would contribute to an overall decline in water levels in Folsom Reservoir. The El Dorado Project would also contribute to a decline in water quality and make it more difficult to meet instream flow and temperature requirements in the lower American River. Overall, however, these impacts are considered less than significant. (Id., pp. IV-5 to IV-7.) Cumulative impacts to vegetation and wildlife at Folsom Reservoir

and in the lower American River, as well as cumulative impacts to recreation resources, would not be significant. (*Id.*)⁴

Independent of its application to withdraw 17,000 afa from Folsom Reservoir, EID has also entered into negotiations with PG&E to acquire and repair PG&E's Project 184. Project 184 includes dams at Caples and Silver Lakes, and Lake Aloha and conveyance facilities that transport water through PG&E's El Dorado Canal. EID has committed to operate Project 184 in the same manner that PG&E has historically operated the project, and in compliance with the Federal Energy Regulatory Commission ("FERC") license for Project 184. (See El Dorado Project Draft Supplement, p. VI-2 and Appendices E thereto (Notice of Exemption for proposed acquisition and continued operation and repair of Project 184) and F thereto (Analysis of El Dorado Irrigation District Supplemental Water Requirements from PG&E Sources).)

In considering the environmental impacts associated with EID withdrawing 17,000 afa from Folsom Reservoir, it is important to recognize that the environmental impacts are caused by the exercise of that entitlement itself, as described in the environmental documents. The CCSP, while obviously creating a demand for additional water consumption, will use only a small portion of EID's new entitlement. The foregoing discussion of the El Dorado Project's environmental impacts is intended to the most likely potential source of water supply for the Project and to disclose the potential environmental impacts of supplying water for the CCSP partially from EID's new entitlement. The County does not, however, intend to suggest that the CCSP is the cause of such impacts. Nor does the County suggest that it is responsible for providing in this EIR a full environmental analysis of the El Dorado Project, which has been the subject of independent environmental review.

Finally, due to the SWRCB's approval of diversion of 17,000 afa from Folsom Reservoir, this water will be available for use within EID's service area, including the CCSP area. Appeals of the SWRCB's decision may occur, and if they do they may affect the amount and time of availability of this new water source. Furthermore, EID will allocate its new water sources on a first come, first served basis. The approval of the EID's application thus does not guarantee that water will be available to serve the CCSP to buildout.

Because of EID's "first come-first serve" policies, the actual source of water supply for the Project, or portions of it, cannot be determined with absolute certainty until actual development occurs. Therefore, for CEQA purposes, the County continues to consider the

^{4/} The SWRCB disagreed with the conclusion in the Draft Supplement that the El Dorado Project would not make a significant cumulative contribution to water quality and fisheries impacts in the lower American River. (See El Dorado Project Final Supplement, comment letter C.) In Decision 1635, the SWRCB discusses the potential for the El Dorado Project to make significant cumulative contributions to water quality and fisheries impacts below Folsom Reservoir. (Addendum Appendix E, pp. 113-116.) The SWRCB was entitled to reach a different conclusion. Statements in the environmental impact report are not determinative of whether an project's impact is significant. (Pub. Resources Code, § 21082.2, subd. (e).) Ultimately, the SWRCB determined that protections for water quality and flow imposed in the 1995 Bay/Delta Water Quality Control Plan and Water Right Order 95-6 adequately protect fisheries resources and water quality below Folsom Reservoir. (Addendum Appendix E, p. 115.)

potential impact of increased water demand from the CCSP to remain significant, even with the availability of 17,000 afa from Folsom Reservoir, in that it remains unclear whether an adequate supply of water will be available to serve full buildout of the CCSP. Nevertheless, this discussion identifies, to the extent possible given current information, the most likely, if not certain, source of water supply for the Project and the environmental analysis performed with respect to that source.

Even granting in theory, however, that EID's newly approved entitlement to divert 17,000 afa from Folsom Lake may be reduced, withdrawn in its entirety or consumed by other projects, such an event would not invalidate the County's approvals of the CCSP, if granted which would be based on the best currently available information. Furthermore, because of the lack of absolute certainty regarding water sources for future development, the County has enacted policies in the General Plan, which are discussed below, to ensure that development within the CCSP can only proceed as secure water supplies become available.

B. Clarification Of Water Service Impacts 4.18-1 (Water Consumption), 4.18-3 (Fireflow Demand), and 4.18-4 (General Plan Consistency)

General Plan Consistency

In Section 4.18 of the Draft EIR, conclusions were reached that approval of the Project would have certain significant impacts related to water service. The Draft EIR concluded that until additional water supply sources are found that can adequately serve the Project, the impacts on water consumption and fireflow demand would be considered significant. (Draft EIR, pp. 4.18-3 to 4.18-5). In addition, under Impact 4.18-4, the Draft EIR concluded that the CCSP was inconsistent with General Plan Policies 5.2.1.2, 5.2.1.3, and 5.2.1.4. (Draft EIR, p. 4.18-5 to 4.18-6). This was also determined to constitute a significant impact. These findings were adopted by the Board of Supervisors in Resolution No. 224-96.

The Draft EIR was prepared by consultants who worked with County staff. The consultants concluded in the Draft EIR that the CCSP was inconsistent with General Plan Policies 5.2.1.2, 5.2.1.3, and 5.2.1.4 because "insufficient water is currently available to supply the Project site at Buildout." (Draft EIR, pp. 4.18-5 to 4.18-6.) While the County stands by the consultant's technical work on the Draft EIR without hesitation, the consultant's assessment of the three General Plan water policies and the manner in which they are intended to operate is, in County Staff's opinion, regrettably incorrect. Staff believes this to have been the case at the time of the prior certification of the Final EIR. It is even more true now in light of SWRCB's recent approval of water rights for the El Dorado Project. While the above-referenced General Plan policies, of course, must ultimately be interpreted by the Board, in Staff's view the consultant's interpretation does not account for the legal context in which the three General Plan policies exist, which includes a General Plan policy on concurrency and the County Public Water Planning Ordinance, No. 4325. The following discussion revises and supersedes the previous discussion of Impact 4.18-4 to accurately describe the purpose and intent of the General Plan's policies on water supply, and explains that, in Staff's view, approval by the

Board of the CCSP and a tentative map for Euer Ranch would be consistent with these policies.

Policy 5.2.1.2 states:

"An adequate quantity and quality of water for all uses, including fire protection, shall be provided for with discretionary development."

Policy 5.2.1.3 states:

"All medium-density residential, high-density residential, multifamily residential, commercial, industrial and research and development projects shall be required to connect to public water systems when located within Community Regions and to either a public water system or to an approved private water system in Rural Centers."

Policy 5.2.1.4 states:

"Rezoning and subdivision approvals in Community Regions or other areas dependent on public water supply shall be subject to the availability of a permanent and reliable water supply."

Policy 5.2.1.8 states:

"The preparation and approval of specific plans may occur without the availability of water guarantees. The timing of water guarantees shall be established within the policies of each specific plan consistent with Policy 5.2.1.4."

(See El Dorado County General Plan ("General Plan"), chapter 5, available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667.

County Staff concludes that, taken together, General Plan policies 5.2.1.2, 5.2.1.3, and 5.2.1.4 require that, in granting approvals of General Plan amendments, specific plans, rezones, use permits, tentative subdivision maps, tentative parcel maps, or similar discretionary approvals in Community Regions or other areas dependent on a public water supply, the Board of Supervisors must require, as mitigation measures or conditions of approvals, that the affected landowners or applicants, or their successors in interest, obtain water meters or equivalent water guarantees from EID or other water purveyors prior to receiving final subdivision maps, or, in the case of projects not requiring final maps, prior to receiving building permits from the County. Such mitigation measures or conditions of approval will ensure that no new physical development can be completed in such areas without the affected landowner or applicant receiving a guarantee of available water from the applicable water provider.

As Policy 5.2.1.8 expressly states, approval of *specific plans* may occur without the availability of water guarantees as long as water guarantees will be required under the specific plan for final subdivision maps and for building permits. The reference to "discretionary development" in Policy 5.2.1.2 must be read consistently with the other policies to allow early plan approvals to occur without a guaranteed water supply, as long as a supply becomes available prior to the issuance of final subdivision maps or building permits. The Board's approval of specific plans and similar discretionary development proposals serves to put EID or any other affected water provider on notice of the fact that development will eventually occur in certain areas, and that water must ultimately be provided to such areas.

This reading of the foregoing policies is consistent with, and gives effect to, the more generic "Concurrency Policy" contained in General Plan Policy 5.1.2.1, and is consistent with the County Public Water Planning Ordinance No. 4325. The Concurrency Policy requires project proponents to demonstrate that they have planned to meet future water demand prior to receiving discretionary development approvals. (Findings of Fact for the El Dorado County General Plan ("General Plan Findings"), p. 159, excerpts from the General Plan Findings are attached hereto as Appendix H.) The County Water Planning Ordinance requires a project proponent to purchase a water meter for all new final parcel maps or final subdivision maps or for other development projects requiring public water service. (See Ordinance No. 4325, El Dorado County Public Water Planning Ordinance, attached hereto as Appendix I.) To be consistent with the Concurrency Policy and the County Water Planning Ordinance, General Plan policies 5.2.1.2, 5.2.1.3, and 5.2.1.4 must be read to require a permanent and reliable water supply only at the final subdivision map and building permit stages.

This reading of the General Plan policies is also consistent with practical considerations for water supply development. These considerations were aired at length during the proceedings leading to the adoption of the General Plan. Water purveyors may not have firmly identified the ultimate sources of water for all development contemplated over the life of a general plan. Over time, water purveyors identify and analyze potential sources, perform environmental and other necessary review, and finalize plans for delivery of the water. Where possible sources of water are known at the time of specific project approvals, that source may be discussed in the context of the project approval, as was done in the Draft EIR and Final EIR for this Project, and in this Addendum. But final responsibility for full analysis of the impacts of such water use typically is the responsibility of the water purveyor proposing to make that particular water source available. Furthermore, water purveyors generally will not make the capital investments necessary to obtain water supplies for new development until the County's planning process has advanced to the point where the water purveyor realizes that it will have a paying customer in the not-too-distant future. Early in the planning process (i.e., at the specific plan stage), landowners will commit to creating funding mechanisms to allow the purveyors to make the necessary investments, but such investments typically cannot be made in advance of such preliminary planning approvals. Upon the granting of preliminary planning approvals, capital is created for the purveyors to build the physical facilities needed to obtain and deliver water. By the time that the County is ready to grant later approvals, such as final subdivision maps or building permits, the water purveyors will have had sufficient time and funding to build the infrastructure necessary to guarantee a supply through a water meter.

(See Addendum Appendix H, pp. 159-160; see also El Dorado Irrigation District Policy Statement 22 (attached as Appendix J) and Policy Statement 41 (attached as Appendix K) (describing procedures for obtaining water service to new projects).) The General Plan Policies on water supply are intended to recognize the practicalities of the water development process by allowing water supply development to occur while development planning moves from the plan- and zoning-level towards the ministerial issuance of final subdivision maps and building permits.

Based on what County Staff believes is the correct interpretation of the County's General Plan policies on water supply, approval of the CCSP and the Euer Ranch tentative subdivision map would be in conformance with the policies. The CCSP is part of the El Dorado Hills Community Region, as designated in the General Plan. (General Plan, p. 12, Policy 2.1.1.1.) In conformance with Policy 5.2.1.3, all development within the CCSP area will be served by public water systems. (See CCSP, pp. 42-43.)

The General Plan expressly allows approval of specific plans such as the CCSP without a guaranteed supply of water. Policies 5.2.1.8, 5.2.1.4, the Concurrency Policy, and the County Water Ordinance all require, however, that a guaranteed supply be available prior to final planning approvals for Project buildout. (See General Plan, Policies 5.1.2.1, 5.2.1.4, 5.2.1.8; County Public Water Planning Ordinance, § 1.) The Project applicant will have to demonstrate a guaranteed supply of water at the final parcel map, final subdivision map, and building permit stages. EID's pending entitlement to withdraw additional water from Folsom strengthens the likelihood that the Project proponent will be able to comply with these policies later in the Project approval process. Nevertheless, in Staff's view, the CCSP itself is consistent with Policies 5.2.1.4 and 5.2.1.8, as well as the Concurrency Policy and the Public Water Planning Ordinance, even though an adequate supply of water for CCSP buildout is not yet guaranteed through water meters. Contrary to the conclusion in the Draft EIR, the CCSP is consistent with the General Plan policies. Therefore, project approval would not result in any significant impact for Impact 4.18-4 as a result of the analysis of the consistency of the Project with these General Plan policies. No mitigation measures are required. Because of the purpose and manner of operation of these General Plan policies, the same conclusion would hold even if, for some reason, the SWRCB reconsidered or vacated its Decision 1635, or if a court set that decision aside. The prohibition on approvals of final subdivision maps and/or building permits without water meters from EID precludes the possibility that the CCSP will build out with EID first having obtained an adequate water supply.

Water Consumption and Fireflow Demand Impacts

The Draft EIR and Resolution No. 224-96 also concluded that, despite mitigation measures imposed, the Project would have impacts in these two areas which are considered significant. However, these potential impacts must be considered in light of the entire regulatory scheme enacted by the County and in light of the General Plan Concurrency Policies discussed above. In fact, in adopting the General Plan, the Board of Supervisors adopted a finding that adoption of the General Plan would not have a significant impact on water service. (Findings of Fact, Ex. H hereto, p.163). This finding was made based specifically upon policies incorporated in

the General Plan to mitigate water service impacts which would "reduce impacts associated with an increased demand for public water services to a less-than-significant.) These changes included the various policies adopted above.

Because of these policies and their effect, staff concludes that the original findings of significant impacts on water consumption and fireflow demand (Impacts 4.18-1 and 4.18-3) proposed in the Draft EIR and adopted in Resolution No. 224-96 were, and are, incorrect. Therefore, if the Board of Supervisors certifies the revised Final EIR, including this Addendum, and determines to approve the Project, staff recommends that the Board of Supervisors find that through application of the General Plan Concurrency Policies, through the imposition of mitigation measures discussed in the Draft EIR, and for the other reasons discussed in this Addendum, the impacts on water consumption and fireflow demand have been reduced to a level less-than-significant. This recommendation is made for the following reasons, individually and collectively:

1. The County incorporated in the General Plan various policies intended to address potential issues concerning the availability of water service for development which may occur consistent with the General Plan, referred to as the Concurrency Policies which are described above.
2. The Board of Supervisors found that incorporation of the Concurrency Policies in the General Plan would reduce the impacts of adoption of the General Plan on water service to a level less-than-significant.
3. The Project is consistent with the General Plan and does not raise any issues specific to the Project concerning impacts on water service which were not considered in the EIR prepared for the General Plan.
4. Since adoption of the General Plan, potential sources of water supply for the Project and other development under the General Plan have been more firmly identified, further mitigating potential impacts on water service.

IV. ADDENDUM TO RESPONSES TO COMMENTS ON WATER SUPPLY CONTAINED IN THE FINAL EIR

The Taxpayers provided the County with extensive comments on the Draft EIR for the CCSP, including detailed comments and questions related to water supply. In the original Final EIR, the County responded in writing to all significant environmental points raised in those comments. In an effort to provide as much information as possible about water supply for the CCSP, however, the County has included in this Addendum additional information from a variety of sources to amplify its previous responses to the Taxpayers' comments on water supply issues. The discussion does not trace the comments point-by-point, but rather provides information addressing specific general topics, with some cross-references to the comments as delineated in the Final EIR Responses to Comments Addendum. Where relevant, the discussion incorporates supporting documentation by reference.

A. Water Required For Buildout Of The CCSP

EID has estimated that the CCSP would require 3,396 EDUs at buildout based on proposed land uses. (Draft EIR, p. 4.18-4.) This figure translates to about 2038 afa and is higher than the estimate contained in the text of the CCSP of 1,750 afa. As explained in the Final EIR, EID's estimate of the required EDUs was based on the originally proposed level of residential and non-residential uses, which has since been reduced. For purposes of the environmental analysis, however, the County retained the original figure of 3,396 EDUs. (Final EIR, p. 3-331 to 3-332.)

The Project proponent has reserved 300 EDUs for Phase 1 of the CCSP by paying annual assessments into EID's Assessment District No. 3. The remaining approximately 3,096 EDUs needed for the remainder of Phase 1 and for Phase 2 of the CCSP is expected to become available from existing sources and EID's pending entitlement to withdraw 17,000 afa from Folsom Reservoir. The timing and availability of these supplies will depend on approval by the El Dorado County Local Agency Formation Commission ("LAFCO") of the annexation of the Phase 2 area into EID, and the formation of a new assessment district for the Phase 2 area. The financing necessary to fund infrastructure improvements to deliver water to the CCSP will be described in more detail in the forthcoming Carson Creek Specific Plan Public Facilities Financing Plan. (See Comments 15-168 and 15-176 on the Draft EIR.)

B. EID's Average Unit Consumption Figure

For planning purposes, EID uses a "normal usage" figure of 0.60 af/du. This amount is based on EID's records of actual average unit consumption between 1993 and 1995. EID uses this conservative figure for planning purposes, although it maintains records showing that actual average unit consumption rates in the western, central, and eastern parts of EID's service area are lower. The eastern service area three-year average unit consumption for active meters is 0.25 af/du. The three-year average unit consumption for active meters in the central service area is 0.44 af/du and 0.56 af/du for the western service area, where the CCSP is located. (Addendum Appendix F, p. 15 [Table 6B].)

EID utilizes the 0.60 af/du figure because its water metering program has allowed it to establish the range of water uses in its various service areas and develop its average consumption figures based on actual usage data. Other jurisdictions often use 1 af/du annually as average use per household as a conservative figure for planning purposes in the absence of data from water meters. Because EID has accurate data on actual water usage, it can rely on this data for planning purposes rather than on estimates.

It is appropriate to use the 1993-1995 period as a base for calculating "normal" usage for three reasons. First, the 1993-1995 period had a normal amount of precipitation. Second, this period was available for EID to identify water usage data for all active single family residential meters for determining average annual consumption. In comparison, for the 1984-1986 period, EID used a sampling of accounts to estimate average water use for active single family residential meters. Finally, using a three-year averaging allows EID to stabilize any

abnormalities in system operations when it calculates "normal" usage. (See Addendum Appendix F, pp. 12, 14, 15.)

One Draft EIR comment from the Taxpayers questioned whether there was a trend in the region toward younger families with children, and whether such a trend would affect the normal household water usage. The County does not have information regarding the existence of such a trend. To the extent that younger families represent additional persons per household, the trend could potentially lead to a higher water use per household. (See Comments 15-164, 15-166, 15-167, 15-173 on the Draft EIR.)

C. Potential Effect on Owners of Existing Approved Parcels Of Allowing The CCSP To Go Forward

Where supply is available, EID provides water service to new consumers on a first-come, first-served basis. The owners of existing approved parcels that have obtained water meters, even if the meters have not yet become active, will not be detrimentally affected by EID providing water service to the CCSP. Their supply is already reserved. As explained above, the Project proponent has paid annual assessments into EID's Assessment District No. 3 ("AD-3") and has an allocation of 300 EDUs from AD-3 for Phase 1. Remaining EDUs necessary for the remainder of Phase 1 and all of Phase 2 of the CCSP will be available from additional unreserved supplies or as EID develops new supplies, including the recently approved entitlement to withdraw 17,000 afa from Folsom Reservoir.

EID finances the infrastructure required to use new water sources through assessment districts and connection fees, which are borne by new users. Costs associated with improvements necessary for existing customers are borne by the existing customers. A detailed description of the financing process for Assessment District No. 3 is contained in Chapter 6 of "Supplement No. 2 to the Preliminary Design Report for El Dorado Irrigation District Assessment District No. 3 (January 1991), which is available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667. (See Comments 15-170, 15-192 on Draft EIR.)

D. Information on EID's Existing Water Supply and Demand

Calculation of System Firm Yield

In its 1996 Update to the 1991 Water Supply and Demand Report, EID defines "safe yield" as the maximum annual quantity of water that can continuously be made available without deficiency, each and every year, under hydrologic conditions similar to the most critical dry period of record. (Addendum Appendix F, p. 6.) "System firm yield" is defined as the annual quantity of water that a source or project can make available with no shortages in 95 years out of 100, based on historic hydrological conditions and restrictions. In the remaining 5 years out of 100, shortages of up to twenty percent are accepted. (Id.) "Entitlement" refers to existing water rights and contracts, and is defined as the maximum current legal opportunity for EID to take water supplies.

EID's entitlements to water are: 15,080 afa from El Dorado Forebay; 7,550 afa from Folsom Reservoir; and 23,000 afa from Sly Park Reservoir. In addition, EID has a right to divert 15 cubic feet per second ("cfs") from the North Fork of the Cosumnes River into the Crawford Ditch from May 15 to October 15, and 15 cfs from Clear Creek into the Crawford Ditch year round. The Draft EIR quantified this right as 5,562 afa. (Draft EIR, p. 4.18-1.) EID voluntarily allows a bypass of 2 cfs in the North Fork Cosumnes River to maintain fisheries.

According to EID's 1996 Update to the 1991 Water Supply and Demand Report, the current system firm yield from its integrated sources, including Sly Park Reservoir, the El Dorado Forebay, Folsom Reservoir, and the Crawford Ditch was 41,700 af. (Addendum Appendix F, p. 2.) EID calculates the system firm yield using the Abraham Model. The Abraham Model does not establish firm yields by individual water source. Rather, it uses numerous input parameters to calculate the firm yield for the entire integrated system of water sources. Some of the parameters that the model uses include estimates of withdrawals from the El Dorado Forebay and Folsom Reservoir, the potential supply of treated water from the Crawford Ditch through EID Reservoir 7, the minimum required pool in Sly Park Reservoir, and various conservative assumptions. (Id., pp. 17-18; see also Agenda Item Summary for March 27, 1995, El Dorado Irrigation District Board Meeting, pp. 1-4 [the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667].)⁵

Notably, the Abraham Model uses actual hydrological data from 1908 through the current year to calculate the system firm yield. The hydrologic data accounts for climate conditions in El Dorado County because the amount of runoff into reservoirs is influenced by precipitation, temperature, and soil conditions. Accordingly, the Abraham Model is highly responsive to the actual climate conditions in El Dorado County. (Pers. comm., Sharon Fraser, EID (Jan. 1997); see also Addendum Appendix F, pp. 17-18.)

Sly Park Minimum Pool

Sly Park Reservoir is owned by the U.S. Bureau of Reclamation ("USBR") and operated by EID for water supply and recreational purposes. EID operates the Reservoir in accordance with USBR's requirements. By contract with USBR, EID is entitled to withdraw up to 23,000 afa. According to EID's 1996 Urban Water Management Plan, average use from Sly Park over the last ten years has been about 19,000 afa.

Between 1991 and 1994, the minimum pool for Sly Park Reservoir was set by the EID Board of Directors at 4,000 af. The 4,000 af minimum pool had been established for planning

^{5/} For example, in calculating the system firm yield, the EID Board of Directors determined that the estimate of water available from Folsom Reservoir under EID's contract with the U.S. Bureau of Reclamation for 7,550 af should be reduced by 25 percent, to 5,660 af. This percentage reduction in the assumed available water from Folsom builds a conservative "cushion" into EID's estimate of the system firm yield. Moreover, the Abraham Model automatically reduces the amount of water assumed available from Folsom by an additional 25 percent in dry years, thus providing another layer of conservatism in estimating the system firm yield. (Pers. comm., Sharon Fraser, EID (Jan. 1997); see also Agenda Item Summary for March 27, 1995, El Dorado Irrigation District Board Meeting, p. 3 [available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667].)

purposes to retain a cushion in the volume of water to be maintained in the Sly Park Reservoir. Other considerations in establishing a 4,000 af minimum pool for Sly Park included maintaining water quality, providing carryover water from year to year, and ensuring EID's ability to serve local water demands that cannot be served from EID's other sources. By retaining a larger minimum pool in Sly Park, less water from the Reservoir was available for use. (See Agenda Item Summary for March 27, 1995, El Dorado Irrigation District Board Meeting, p. 2, available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667.)

In 1995, the EID Board lowered the required minimum pool for the Sly Park Reservoir to 2,000 af. The decision was based on the determination that a 2,000 af minimum pool provided an adequate level of cushion in the volume of water in the reservoir. Halving the minimum pool still protects local water users that cannot be served from other sources because the productivity of the Sly Park Reservoir is not affected, even if the Reservoir level were to drop to 2,000 af. Notably, EID uses water levels in Sly Park Reservoir for determining when to impose water conservation measures under its Four-Stage Water Supply Matrix. Under the Matrix, EID imposes mandatory conservation measures long before Sly Park Reservoir reaches 2,000 af. The Four-Stage Water Supply Matrix and Water Shortage Response Measures (June 12, 1995) is contained in EID's Urban Water Management Plan (February 26, 1996). The Urban Water Management Plan is available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667. (See Comment 15-173 on the Draft EIR.)

Crawford Ditch

The Crawford Ditch diverts water from the North Fork Cosumnes River, from natural flows in Clear Creek, and is also supplied water released from the Sly Park Reservoir by redirection to Clear Creek. EID serves customers along the Ditch with untreated irrigation water. In addition, EID has the potential to treat Crawford Ditch water at its Reservoir 7 Water Treatment Plant for domestic use. EID completed improvements to the Crawford Ditch in 1991. With improvements, the Crawford Ditch was expected to provide an increase in available water supply to Reservoir 7 by about 2,800 afa.

Between 1992 and 1994, EID assumed that no supply of water was available for domestic purposes from the Crawford Ditch, due to a challenge to EID's rights to this water before the SWRCB. For these years, the Abraham Model used a parameter of 0 af available from the Crawford Ditch in calculating the system firm yield. The SWRCB ultimately dismissed the challenge to EID's rights to water from the Crawford Ditch. EID then changed its assumption of the amount of water available from the Crawford Ditch to 200 af for purposes of calculating the system firm yield.

As explained above, EID has the right to divert 15 cfs of the North Fork Cosumnes River between May 15 and October 15 into the Crawford Ditch. In addition, EID has the right to divert 15 cfs of Clear Creek into the Crawford Ditch. The Draft EIR quantified the right as

5,562 afa. EID voluntarily allows a 2 cfs pass-through of water on the North Fork Cosumnes River for fisheries.

Additional details about the Crawford Ditch are contained in the Final Environmental Impact Report for the Crawford Ditch improvements, prepared by CH2M Hill for EID. A copy of the Final EIR is available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667. (See Comments 5-171, 5-172, 5-173, and 15-184 on the Draft EIR.)

El Dorado Forebay

Pursuant to a 1919 Agreement with PG&E, EID is entitled to withdraw 15,080 afa at the El Dorado Forebay. One comment suggested that EID's rights to this water source were the subject of ongoing litigation. Taxpayers dispute EID's rights to water from the El Dorado Forebay in their petition to the SWRCB for reconsideration of Decision 1635, which granted EID the right to withdraw 17,000 afa from Folsom Reservoir. In their challenge to the County's adoption of its new General Plan, Taxpayers have also generally alleged that EID's diversion of water from the Forebay is unlawful. As of the time County Staff prepared this Addendum, neither the Taxpayers nor any other group had directly challenged EID's rights to the 15,080 afa from the El Dorado Forebay before the SWRCB or in Superior Court. (See Comment 5-181 on the Draft EIR.)

Latent Water Demand

The County Water Agency's 1995 Update -- Water Supply And Demand Report includes in its "latent water demand" figures the combined anticipated demand for water by all inactive and uninstalled meters, if and when placed in service. (See El Dorado County Public Water Planning Ordinance Approved 1995 Update -- Water Supply and Demand Report, p. 2, fn. 2, attached to this Addendum as Appendix K.) EID does not assume that all parcels of 5 acres or more are on well water. (See Comment 15-177 on the Draft EIR.)

E. Information On EID's Potential Water Sources

Reclaimed Water

The CWA's Water Supply and Demand Summary, adopted on June 4, 1996, includes in potential supplies for EID approximately 5,680 afa of reclaimed water through the year 2015. (See Appendix K, p. 2.) EID has been at the forefront of using reclaimed water for landscape and industrial uses, in compliance with State water quality and health regulations. Reclaimed water represents a "supply" of water in that every landscape or industrial use relying on reclaimed water is a use that no longer requires treated potable water. Accordingly, the use of reclaimed water in lieu of treated water expands the total water supply. Currently, however, EID does not include reclaimed water in calculating the system firm yield via the Abraham Model.

In 1994, EID approved a Water Reclamation Master Plan that identified and evaluated potential water reclamation projects in EID's service area and developed a framework for implementing such projects. Of the various water reuse alternatives evaluated in the Master Plan, the Plan recommends a program that would reuse roughly 3,110 afa on a total of 33 sites in the El Dorado Hills area. The program is described in more detail in section 6 of the Master Plan. A copy of the Water Reclamation Master Plan (July 1994) is available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667. (See Comment 15-174.)

Fazio Water

The CWA, on behalf of EID and the Georgetown Divide Public Utility District, is pursuing a water supply service contract with USBR pursuant to Public Law 101-514. The so-called "Fazio Water" contract is expected to provide EID with an entitlement to half the contract amount, or about 7,500 afa.

When EID uses its share of the Fazio Water, EID will have the option of diverting the water either at Folsom Reservoir or upstream along the South Fork of the American River. EID does not currently contemplate an off-stream storage facility. EID's existing pumping facilities have available capacity to convey at least some of the Fazio water from Folsom Reservoir for use in EID's service area. New infrastructure for conveying the Fazio water may also be developed through the new Assessment District 12, described more fully below. (See Comments 15-164 and 15-182 on the Draft EIR.)

El Dorado Project Water

As discussed above, the SWRCB recently issued a decision granting EID's application to divert 17,000 afa from Folsom Lake for consumptive uses. (See Comment 15-183 on the Draft EIR.)

F. EID's Water Conservation and Leak Detection Programs and Reductions in Unaccounted-For Water

Water Conservation

The Central Valley Project Improvement Act of 1992 required all U.S. Bureau of Reclamation contractors, including EID, to prepare new water conservation plans that met established criteria. EID submitted its plan in December 1993. The Bureau approved the plan in November 1994 and has since selected EID's plan as a model for combination urban and agricultural districts in the western United States. EID implements all of the Best Management Practices ("BMPs") designated in the Memorandum of Understanding regarding Urban Water Conservation in California. These BMPs are described in Section V of EID's Urban Water Management Plan (Feb. 26, 1996).

The history of EID's water conservation efforts over the last twenty years is described in the Urban Water Management Plan at pages 3-7. EID's program of metering its entire system has resulted in substantial water savings. Other important conservation measures have included the Irrigation Management System, public education, monitoring by Water Patrol staff, adoption of the Four-Stage Water Supply Matrix and Water Shortage Response Measures, and adoption of the Urban Water Management Plan. The Urban Water Management Plan and the 4-Stage Water Supply Matrix and Water Shortage Response Measures are available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667. (See Comment 15-180 on the Draft EIR.)

Leak Detection

EID has conducted audits of its water system since 1990 and a leak detection and repair program since 1987. Both programs are ongoing, and have contributed to reducing unaccounted-for water from about 50 percent of system totals in 1986 to about 21 percent in 1995. (See Comment 15-179 on the Draft EIR.)

Unaccounted-For Water

Unaccounted-for water is defined as water that is taken into the EID's water system from all of its main sources, but which is not delivered to consumers or otherwise accounted for. Losses can occur from evaporation, spillage, and extremely dry soil conditions. EID estimated that unaccounted for water in 1995 was approximately 6,260 afa, less than the 1994 estimate of 7,663 af. The CWA's 1995 Update -- Water Supply and Demand Report does not, as the Taxpayers have suggested, predict that unaccounted for water will continue to decline. (See Addendum Appendix K, p. 1.) Rather, the Water Supply and Demand Report depicts EID's estimate of unaccounted for water for the foregoing year. EID evaluated the 1994 and 1995 figures to determine the cause of the drop in unaccounted for water in 1995. The evaluation indicated that a variety of factors contributed to the lower amount of unaccounted for water in 1995 than in 1994, including reduced operations of the EID Main Ditch in 1995, above normal precipitation in 1995 leading to reduced evaporation and losses from dry soils, and reduced operational spills in 1995. (See Addendum Appendix F, pp. 18-21.)

EID adopted a three-year average in calculating unaccounted-for water, as part of its water demand analysis. The three-year average of unaccounted-for water provides stability in the calculation year-to-year. (See Addendum Appendix F, pp. 21, 24; Addendum Appendix K, p. 1.)

As more water is taken into EID's water system (i.e., from additional water from Folsom Reservoir), there is a potential for the total amount of unaccounted-for water to increase. Unaccounted-for water as a percentage of total water in the system is expected to remain steady. EID's goal is to maintain unaccounted-for water at approximately 15 percent of water in the system. (See Comment 15-178 on the Draft EIR.)

G. Information On AD-3 And Formation Of The New AD-12

History of AD-3

In 1982, CH2M Hill prepared a Preliminary Design Report for EID's Assessment District 3, which serves portions of the El Dorado Hills area. The Report recommended formation of an assessment district encompassing 4,400 acres wherein EID would commit to provide water service to an additional 7,200 EDUs beyond the current service. Moreover, the Report recommended that all lands within the boundaries of AD-3 be assessed for initial improvements, and that funds for construction of future facilities be raised through supplemental connections fees.

After completion of the Preliminary Design Report, the project was delayed until financing could be arranged for the design engineering. Financing became available in the form of bonds in December 1993.

Between 1982 and December 1983, several events resulted in the expansion of the boundaries of AD-3 over those proposed in the Preliminary Design Report. The El Dorado Hills Business Park obtained 1,000 afa from Folsom Lake. EID also reviewed its water use and concluded that it has surplus gravity water that could be delivered to the El Dorado Hills area. Finally, a number of properties had petitioned to be included within the proposed assessment district. By the time AD-3 was formed in 1984, the first phase of AD-3 had grown to encompass 5,474 acres, an additional 9,234 EDUs of water service beyond existing levels, and an additional 9,225 EDUs in sewer service beyond existing levels. Phase 2 of AD-3 expanded it a total of 11,400 acres, an additional 10,701 EDUs in water service beyond existing levels, and an additional 11,063 EDUs in sewer service beyond existing levels. In combination with 2,563 committed water EDUs, 1,359 EDUs connected to the treatment plant, and 1,643 EDUs committed for sewer service in 1982, AD-3 Phase 2 had expanded the assessment district to include a total commitment of 13,264 EDUs in water service and 14,065 EDUs in sewer service.

EID prepared Supplement No. 1 to the Preliminary Design Report in 1984 to evaluate the water and sewer facilities required to serve the expanded area of AD-3. EID also established connections fees based on the facilities proposed in Supplement No. 1, as well as "buy-in" charges for properties wishing to increase their density over that for which they had been assessed, and for properties that had not participated in the assessment district but that wanted service. In 1989, EID imposed a prohibition to prevent properties outside of AD-3's boundaries from obtaining water service, or properties within AD-3 from increasing density, until additional sources became available.

EID prepared Supplement No. 2 to the Preliminary Design Report in 1991 to update information on future water and service needs in the El Dorado Hills/Salmon Falls Area Plan boundary, EID Service Zone 2, and the AD-3 Phase 2 boundary. The boundaries of the study area for Supplement No. 2 are included as Figure 1-1 of that document. Supplement No. 2

evaluated increasing AD-3 to 33,600 water EDUs and 33,100 sewer EDUs. The EID Board of Directors approved and adopted Supplement No. 2.

Supplement No. 2 to the Preliminary Design Report for El Dorado Irrigation District Assessment District No. 3 (January 1991) is available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667. The Preliminary Design Report for AD-3 (1982) and Supplement No. 1 to the Preliminary Design Report (1984) are available for review at the El Dorado Irrigation District, 2890 Mosquito Road, Placerville, CA 95667.

As explained in the Draft EIR, Phase 1 of the CCSP (Euer Ranch) is located within AD-3. The Project proponent has paid annual assessments into AD-3 to reserve 300 EDUs of water service. The Project proponent has applied to EID to transfer the additional EDUs necessary for Phase 1 pursuant to EID's established transfer processes. (See Draft EIR, pp. 4.2-23 to 4.2-24, 4.18-4.)

A question was raised regarding why original documentation on AD-3 in 1982 suggested that it could provide 6,550 afa, whereas documentation from 1988 stated that it could provide 7,550 afa. The 1,000 afa difference was due to the El Dorado Hills Business Park obtaining, through a contract between EID and USBR, 1,000 afa from Folsom Lake. (See Supplement No. 2 to the Preliminary Design Report for El Dorado Irrigation District Assessment District No. 3 (January 1991), p. 3-1.)

Formation Of New AD-12

The southern portion of the CCSP is outside of EID's existing service area. An application is now pending before the El Dorado County LAFCO for the annexation of Phase 2 of the CCSP into EID. EID has determined that it is necessary to create a new assessment district to accommodate the service needs of proposed new development in the El Dorado Hills area that was not anticipated when AD-3 was formed, including Phase 2 of the CCSP.

On October 7, 1996, the EID Board of Directors approved the El Dorado Hills Master Facilities Plan (November 1995). This Plan describes the facilities required to complete the original plans of AD-3 and those required to meet current demand in the El Dorado Hills area. Included in the Plan are specific proposed facilities and phasing for both water and sewer facilities. The EID Board directed its staff to begin the formation of a new district, now referred to as AD-12, to carry out the recommendations in the El Dorado Hills Master Facilities Plan.

The new AD-12 will be implemented in essentially the same way as AD-3. Annual assessments will be imposed on properties based on the planned number of EDUs required for the development of the property. The assessments will provide the income stream for issuance of bonds for "backbone" facilities to serve the area. Additionally, increased hookup fees will be collected at the time of final map approval to provide ongoing funding for future phases of facility development. (See Comments 15-165 and 15-169 to the Draft EIR.)

The El Dorado Hills Master Facilities Plan is available for review at the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, CA 95667.

V. CONSISTENCY OF CCSP DEVELOPMENT WITH SACRAMENTO COUNTY GENERAL PLAN

In their Petition for Writ of Mandate, Taxpayers and EPIC claimed that the EIR failed to address the conflict between uses contemplated by the CCSP and adjacent grazing uses in Sacramento County. In the Land Use section, the Draft EIR acknowledges that property west of the site in Sacramento County is designated as Agricultural 80-acre minimum. A map is provided that pictures the agricultural area abutting the western edge of the CCSP. (Draft EIR, pp. 4.2-3 to 4.2-4; see also Draft EIR, pp. 4.2-11 to 4.2-12.) While the Draft EIR provided a textual discussion of land use compatibility for the CCSP's northern, eastern, and southern boundaries, a specific discussion of compatibility with the agricultural area to the west was not provided. The following discussion is intended to render moot any claim that the prior EIR was deficient in its discussion of these issues.

The agricultural area to the west of the CCSP is used primarily for cattle grazing. To provide a buffer between uses in the CCSP and the grazing activities, the CCSP includes a 30-foot wide, landscaped easement in the residential rear yards along the western perimeter of the Project site. Where open space abuts Sacramento County grazing lands, a four foot high, open screen fence will be constructed to control the movement of cattle, and conflicts with cattle grazing are not expected in that grazing is a passive and generally quiet agricultural activity that does not involve aerial application of pesticides or fertilizer. The 30-foot landscaped buffer will alleviate odor and/or visual impacts on residents within the CCSP. The buffer and protective fence will also eliminate impacts on cattle grazing operations from residential and other uses within the CCSP. (Pers. Comm., William Snodgrass, January 21, 1997). Impacts along the CCSP's western border with Sacramento County are therefore less than significant. No mitigation is required. Furthermore, in light of the considerations discussed above, approval of the CCSP would not conflict with the policies of the Sacramento County General Plan, which, in any event, could not direct El Dorado County to permit or not permit any particular land uses within the boundaries of El Dorado County.

VI. APPENDICES

The following appendices are attached to this Addendum:

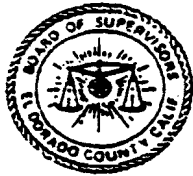
- Appendix A Resolution No. 224-96 of the Board of Supervisors of the County of El Dorado;
- Appendix B Notice of Determination, Carson Creek Specific Plan (September 26, 1996);
- Appendix C El Dorado County Taxpayers for Quality Growth, et al. v. County of El Dorado (Case No. PV 002200);
- Appendix D Resolution 8-97;
- Appendix E State Water Resources Control Board, Decision No. 1635 (October 2, 1996);
- Appendix F El Dorado Irrigation District, 1996 Update to the 1991 Water Supply and Demand Report (May 29, 1996);
- Appendix G El Dorado County Water Agency, El Dorado County Public Water Planning Ordinance, Approved 1995 Update -- Water Supply and Demand Report (adopted June 4, 1996);
- Appendix H Excerpts from Findings of Fact of the Board of Supervisors of El Dorado County for the El Dorado County General Plan (January 23, 1996, revised January 26, 1996);
- Appendix I Ordinance No. 4325, El Dorado County Public Water Planning Ordinance;
- Appendix J El Dorado Irrigation District, Policy Statement No. 22;
- Appendix K El Dorado Irrigation District, Policy Statement No. 41.

In addition, this Addendum includes citations to, or directly or indirectly relies on, the following documents, which will be part of the record of proceedings for any action taken by the Board with respect to the CCSP:

- Draft Environmental Impact Report, El Dorado County Water Agency Water Program and El Dorado Project for the El Dorado Irrigation District Service Area (September 30, 1992) (State Clearinghouse # 72012008);
- Final Environmental Impact Report, El Dorado County Water Agency Water Program and El Dorado Project for the El Dorado Service Area (March 1993) (State Clearinghouse # 72012008);
- Draft Supplement to El Dorado County Water Agency: Water Program and El Dorado Project EIR (July 1995) (State Clearinghouse # 72012008);
- Final Supplement to El Dorado County Water Agency: Water Program and El Dorado Project EIR (October 1995) (State Clearinghouse # 72012008);
- El Dorado County General Plan, Vol. I, Goals, Objectives, and Policies (adopted January 23, 1996);
- El Dorado County General Plan, Vol. II, Background Information (adopted January 23, 1996);
- Findings of Fact of the Board of Supervisors for the El Dorado County General Plan (adopted January 23, 1996, revised January 26, 1996);
- Draft Environmental Impact Report for El Dorado County General Plan (December 1994) (State Clearinghouse # 94012008);
- Supplement to the Draft Environmental Impact Report for the El Dorado County General Plan (September 1, 1995) (State Clearinghouse # 94012008);
- Final Environmental Impact Report for the El Dorado County General Plan (December 1995) (State Clearinghouse # 94012008);
- Supplement No. 2 to the Preliminary Design Report for El Dorado Irrigation District Assessment District No. 3 (January 1991);
- Agenda Item Summary for March 27, 1995, El Dorado Irrigation District Board Meeting;
- 1996 Urban Water Management Plan, El Dorado Irrigation District (February 26, 1996);

- **Final Environmental Impact Report for the Crawford Ditch Improvement Project (State Clearinghouse # 89022010, February, 1990);**
- **Water Reclamation Master Plan, El Dorado Irrigation District (July 1994);**
- **El Dorado Hills Master Facilities Plan (November 1995).**

All of these documents can be reviewed at the offices of the El Dorado County Planning Department, 2850 Fairlane Court, Placerville, California, 95667.



RESOLUTION No. 224-96

OF THE BOARD OF SUPERVISORS OF THE COUNTY OF EL DORADO

The Board of Supervisors of the County of El Dorado resolves as follows:

RECITALS

1. The Carson Creek Specific Plan area is located south of Highway 50 and generally east of the El Dorado Hills Business Park in the El Dorado Hills area of El Dorado County.
2. The application for the Carson Creek Specific Plan (hereinafter, "Specific Plan") was submitted in July 1994.
3. The Specific Plan text was submitted for staff review and was made available for public review. After County Planning Department review, staff concluded that, because the Specific Plan had the potential to adversely affect the environment, an Environmental Impact Report ("EIR") would be required pursuant to the California Environmental Quality Act ("CEQA").
4. A Notice of Preparation of the EIR was mailed to all responsible and affected agencies on June 30, 1994, pursuant to Public Resources Code Section 21080.4.
5. A draft EIR for the Carson Creek Specific Plan was prepared in accordance with CEQA, the State CEQA Guidelines, and the Environmental Review Guidelines of El Dorado County.
6. The County distributed copies of the draft EIR to the public agencies which have jurisdiction by law with respect to the project and to other interested persons and agencies and sought the comments of such persons and agencies.
7. Notice inviting comments on the draft EIR was given in compliance with CEQA Guidelines Section 15085.
8. On June 27, 1996, a public hearing on the draft EIR was held by the County Planning Commission.
9. Written and oral comments to the draft EIR have been received and responses to these comments have been prepared.
10. The public comment period for the draft EIR ended on July 5, 1996.

EXHIBIT A

11. On 9/12, 1996, the El Dorado County Planning Commission recommended the certification of the final EIR as adequate and complete in accordance with the provisions of the California Environmental Quality Act and local ordinances and forwarded its recommendation of approval of the Specific Plan to the Board of Supervisors.

12. The environmental record prepared in conjunction with the consideration and adoption of the Carson Creek Specific Plan includes the following:

- a. The Carson Creek Specific Plan application package;
- b. The draft and final EIR;
- c. All staff reports, public memoranda, maps, and minutes of meetings prepared by County staff relating to the project and presented to the Planning Commission and/or Board of Supervisors;
- d. All testimony and documents presented by the applicant or the applicant's agents relating to the project and presented to the Planning Commission and Board of Supervisors;
- e. The proceedings before the Planning Commission relating to the project and EIR, including testimony, oral and written, and documentary evidence introduced at the public hearings to the Planning Commission and the Board of Supervisors; and
- f. Matters of common knowledge to the Board which it considers including, but not limited to, the following:
 - i. The El Dorado County General Plan;
 - ii. The El Dorado County Zoning Code;
 - iii. The El Dorado County Code; and
 - iv. Other formally adopted policies and ordinances.

13. The Board of Supervisors of the County of El Dorado has reviewed the final EIR prepared for the Carson Creek Specific Plan, Planning Department staff reports pertaining to the draft EIR, and all evidence received by the Planning Commission at the duly noticed public hearings. All these documents and evidence are incorporated by reference into this Resolution.

14. The final EIR identified certain significant and potentially significant adverse effects on the environment caused by the Carson Creek Specific Plan project.

15. The Board of Supervisors is required, pursuant to CEQA, to adopt all feasible mitigation measures or feasible project alternatives that can substantially lessen or avoid any significant environmental effects.

16. The Board of Supervisors desires, in accordance with CEQA, to declare that, despite the occurrence of significant environmental effects that cannot be substantially lessened or avoided through the adoption of feasible mitigation measures or feasible alternatives, there exist certain overriding economic, social, and other considerations for approving the Specific Plan that the Board believes justify the occurrence of those impacts.

NOW, THEREFORE, the Board of Supervisors of the County of El Dorado does hereby resolve as follows:

1. It is hereby certified that the final EIR has been completed in compliance with CEQA.

2. It is hereby certified that the final EIR has been presented to the Board, which reviewed and considered the information and analysis contained therein before making the findings attached hereto, adopting the mitigation monitoring program as set forth in the final EIR, and issuing the statement of overriding considerations, all of which are on file with the County Clerk.

3. The Board finds that many of the impacts identified in the initial study for the Specific Plan involve matters which were studied in the final environmental impact report prepared for the County General Plan adopted in February 1996. In accordance with Public Resources Code Section 21083.3 and CEQA Guidelines Section 15083, the Specific Plan is consistent with the General Plan, and the level of impacts other than those peculiar to the Specific Plan are consistent with the level of impact identified in the General Plan EIR.

4. The Board further finds, pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15091, that many of the proposed mitigation measures described in the final EIR are feasible and therefore will become binding upon the County and affected landowners and their assigns or successors in interest when the Board approves the Specific Plan and that other proposed mitigation measures are infeasible.

5. To the extent that these findings conclude that various proposed mitigation measures outlined in the EIR are feasible and have not been modified, superseded, or withdrawn, the Board hereby binds itself, all landowners within the Carson Creek Specific Plan area, and their assigns and successors in interest to implement those measures. These findings are not merely informational but constitute a binding set of obligations that will come into effect when the County adopts this Resolution approving the Specific Plan.

6. The Board resolves this Resolution will become, upon adoption, incorporated into the Carson Creek Specific Plan. Thereafter, when any proposed specific project within the Specific Plan area is reviewed for its consistency with the Specific Plan, the conditions of said proposed project will have to be deemed consistent with the Specific Plan and the conditions and mitigations set forth herein prior to approval of the proposed project.

7. As set forth in its findings of fact attached as Exhibit C, the Board hereby finds that none of the proposed project alternatives set forth in the final EIR can feasibly substantially lessen or avoid the significant adverse environmental effects that will not be substantially lessened or avoided by the adoption of all feasible mitigation measures.

8. In order to comply with Public Resources Code Section 21080.6, the Board hereby adopts the mitigation monitoring and reporting program as set forth in the final EIR. The program is designed to ensure that, during project implementation, the County, affected landowners, their assigns and successors in interest, and any other responsible parties comply with the feasible mitigation measures identified in Exhibits A and B. The mitigation monitoring and reporting program identifies, for each mitigation measure, the party responsible for implementation.

9. Since the adoption of all feasible mitigation measures will not substantially lessen or avoid all significant adverse environmental effects caused by adoption of the Specific Plan, the Board hereby issues, pursuant to CEQA Guidelines Section 15093 and attached hereto as Exhibit D, a statement of overriding considerations that render those effects acceptable.

10. The County Clerk is directed, after the Board adopts this Resolution formally approving the Specific Plan, to post a Notice of Determination, together with a copy of this Resolution and its exhibits, in the Office of the County Clerk and shall file such Notice with the County Clerk of El Dorado County and, in accordance with Public Resources Code Section 21152, shall cause such Notice to be posted in the County Clerk's Office, all within five working days following adoption of this Resolution approving the Specific Plan.

11. The draft and final EIRs set forth environmental impacts that would be significant or potentially significant in the absence of mitigation measures. As to each such impact, the Board of Supervisors hereby finds that changes or alterations incorporated into the project mitigate or substantially lessen the significant or potentially significant environmental impacts as specifically set forth in Exhibit A attached hereto. Also set forth are impacts that are significant and unavoidable that cannot be substantially lessened or avoided through the adoption of feasible mitigation measures or feasible alternatives, as specifically set forth in Exhibit B attached hereto. As to these impacts, the Board of Supervisors hereby finds that there exist certain overriding economic, social, and other considerations for approving the Specific Plan that the Board believes justify the occurrence of those impacts.

12. The Board of Supervisors finds that the Specific Plan is consistent with the El Dorado County General Plan for all of those reasons set forth in the text of the Specific Plan and that the Specific Plan implements the goals and policies of the General Plan.

13. Based on all of the foregoing and on the facts set forth in the Statement of Overriding Considerations set forth in this Resolution, the Board of Supervisors hereby adopts the Carson Creek Specific Plan as submitted to this Board.

PASSED AND ADOPTED by the Board of Supervisors of the County of El Dorado at a regular meeting of said Board, held on the 24TH day of SEPTEMBER, 1996 by the following vote of said Board:

Ayes: SUPERVISORS: RAYMOND J. NUTTING, J. MARK NIELSE
WALTER L. SHULTZ, JOHN E. UPTON

ATTEST

DIXIE L. FOOTE
Clerk of the Board of Supervisors

Noes: SUPERVISOR: WILLIAM S. BRADLEY
Absent: NONE

By *Margaret Maddy*
Deputy Clerk

Raymond J. Nutting
Chairman, Board of Supervisors

I CERTIFY THAT:
THE FOREGOING INSTRUMENT IS A CORRECT COPY OF THE ORIGINAL ON FILE IN THIS OFFICE.

DATE _____

ATTEST: DIXIE L. FOOTE, Clerk of the Board of Supervisors of the County of El Dorado, State of California.

EXHIBIT A

Findings of significant or potentially significant impacts reduced to less than significant levels through mitigation [CEQA Guidelines Section 15091(a)(1)]. Each of the significant or potentially significant impacts are summarized below followed by the mitigation measure(s) identified in the draft and final environmental impact report.

I. LAND USE

A. **Significant Impact: General Plan Consistency.** The proposed project would be consistent with General Plan Strategies 1, 3, 6, 7, and 8; it would, however, be inconsistent with Strategy 4 with regard to fully funding its own services. The Specific Plan would be generally consistent with General Plan Concepts but inconsistent with one Plan Concept until annexation into special districts is approved. It would be consistent with land use element Goal 2.1, Objectives 2.1.1 and 2.2.2, and Policies 2.1.1.2, 2.1.1.3, 2.1.4.1, 2.1.4.2, 2.1.4.3, 2.1.4.4, 2.1.4.5, 2.1.4.6, 2.1.4.9, and 2.2.2.6; it would, however, be inconsistent with Objective 2.1.4 until annexations into special districts are approved.

Mitigation Measure 4.2-3: Apply Mitigation Measures 4.16-1, 4.18-1, and 5-3, and no further mitigation is required.

B. **Significant Impact: Consistency With Special Districts.** The southern portion of the project site is currently located inside CSA No. 9, Zone 17, and outside of EID and the El Dorado Hills County Water Fire District. It is outside, and discontiguous to, the El Dorado Hills CSD. Until LAFCO approval for de-annexation and annexations are complete, the site is not located within appropriate service districts.

Mitigation Measure 4.2-5: Apply Mitigation Measures 4.16-1, 4.18-1, and 5-3 and no further mitigation is required.

II. TRAFFIC

A. **Significant Impact: Daily Traffic Volume (Latrobe Road Between U.S. Highway 50 and White Rock Road).** Buildout of the proposed Specific Plan would increase daily traffic volumes on Latrobe Road resulting in a deterioration of LOS from C to F between U.S. Highway 50 and White Rock Road.

Mitigation Measure 4.5-1: The project developer shall be responsible for their "fair-share" cost of widening Latrobe Road from two lanes to six lanes with a median from White Rock Road to the U.S. Highway 50 eastbound ramps. These improvement projects are included in the El Dorado Hills Road Impact Fee (RIF); therefore, the project developer shall pay the RIF fee concurrently with the issuance of building permits. Implementation of this mitigation measure would improve the daily level of service on Latrobe Road to LOS B.

B. Significant Impact: Peak-Hour Traffic Volumes (U.S. Highway Interchange).

Buildout of the proposed Specific Plan would increase peak hour traffic volumes along U.S. Highway 50 at the El Dorado Hills Boulevard/Latrobe Road interchange.

Mitigation Measure 4.5-5: The project developer shall be responsible for contributing their "fair-share" of the cost to reconstruct the El Dorado Hills Boulevard/Latrobe Road interchange and widen U.S. Highway 50 to six lanes. Reconstruction of the interchange is included in the RIF; therefore, the project developer shall pay the RIF fee prior to the issuance of building permits. A separate impact fee program has been established to fund the mainline widening of U.S. Highway 50 through the western portion of El Dorado County. A fair-share contribution of this fee shall also be paid by the project developer prior to the issuance of building permits. Implementation of this mitigation measure will improve the ramp intersection and ramp junction levels of service as follows:

- a. El Dorado Hills Boulevard/U.S. Highway 50 westbound ramps intersection - LOS from F to B during the a.m. peak hour and from E to C during the p.m. peak hour;
- b. Latrobe Road/U.S. Highway 50 eastbound ramps intersection LOS from F to B during the a.m. peak hour and from F to B during the p.m. peak hour;
- c. Latrobe Road/U.S. Highway 50 eastbound ramps - LOS A during the a.m. peak hour and LOS D during the p.m. peak hour;
- d. U.S. Highway 50 eastbound loop off-ramp - LOS B during the a.m. peak hour and LOS D during the p.m. peak hour;
- e. U.S. Highway 50 westbound diagonal on-ramp - LOS C during the a.m. peak hour and LOS B during the p.m. peak hour; and
- f. U.S. Highway 50 westbound diagonal off-ramp - LOS C during the a.m. peak hour and LOS B during the p.m. peak hour.

Reconstruction of the interchange may also include the addition of eastbound diagonal off-ramp and westbound loop off-ramp. Both of these new ramps would also operate at LOS D or better during both peak hours.

C. Significant Impact: Peak-Hour Traffic Volumes (Latrobe Road Intersection).

Build out of the proposed Specific Plan would increase a.m. and p.m. peak-hour traffic volumes along Latrobe Road resulting in levels of service that exceed the County LOS E standard at four intersections.

Mitigation Measure 4.5-6: The following mitigation measures address the four intersections along Latrobe Road that are projected to operate at unacceptable (worse than LOS) levels of service with buildout of the Specific Plan.

a. In addition to Mitigation Measure 4.5-1, the project developer shall be responsible for their "fair-share" cost of signalization and turn lane improvements at the White Rock Road/Latrobe Road intersection. These improvement projects are included in the El Dorado Hills RIF; therefore, the project developer shall pay the RIF fee concurrently with the issuance of building permits. Implementation of this mitigation measure would improve the White Rock Road/Latrobe Road intersection LOS from F to B during the a.m. peak hour and from F to C during the p.m. peak hour.

b. The project developer shall be responsible for their "fair-share" of the signal and turn lane improvements at the Latrobe Road/Golden Foothill Parkway North intersection. These improvement projects will be included in the El Dorado Hills RIF at the 1998 update; therefore, the project developer shall pay the RIF fee concurrently with the issuance of building permits. Implementation of this mitigation measure would improve the Latrobe Road/Golden Foothill Parkway North intersection LOS from F to B during the a.m. peak hour and from F to D during the p.m. peak hour.

c. The project developer shall be responsible for their "fair-share" of the signal and turn lane improvements at the Latrobe Road/Golden Foothill Parkway South intersection. These improvement projects will be included in the El Dorado Hills RIF at the 1998 update, therefore, the project developer shall pay the RIF fee concurrently with the issuance of building permits. Implementation of this mitigation measure would improve the Latrobe Road/Golden Foothill Parkway South intersection LOS from F to B during the a.m. and from F to C during the p.m. peak hours.

d. The project developer shall be responsible for their "fair-share" of the following improvements:

1. Modifying turn lanes at the Latrobe Road/Investment Boulevard intersection;
2. Signalizing the Latrobe Road/Investment Boulevard intersection.

These improvement projects will be included in the El Dorado Hills RIF at the 1998 update; therefore, the project developer shall pay the RIF fee concurrently with the issuance of building permits. Implementation of this mitigation measure would improve the Latrobe Road/Investment Boulevard intersection LOS from F to B during the a.m. and p.m. peak hours.

The Latrobe Road/Investment Boulevard intersection operates at LOS B during the p.m. peak hour with one left-turn lane on the eastbound approach. The left-turn volume is 600 vehicles per hour during the p.m. peak hour. Occasional queuing of vehicles on the left-turn lane could occur on the eastbound approach. The County should monitor the queues and design the left-turn pocket for this movement to accommodate the volumes. If the County decides to provide dual left-turn lanes for this left-turn movement, an additional northbound lane would be required on Latrobe Road between Investment Boulevard and Golden Foothill Parkway South.

D. Significant Impact: Peak-Hour Traffic Volumes (White Rock Road Intersections). Buildout of the proposed Specific Plan would increase traffic volumes along White Rock Road, resulting in peak-hour levels of service that exceed the County LOS E standard at two additional intersections.

Mitigation Measure 4.5-7: The following measures address the two intersections along White Rock Road (west of Latrobe Road) that are projected to operate at LOS F with buildout of the Specific Plan.

a. The project developer shall construct turn lane improvements at the White Rock Road/Project Access Road intersection. DOT will, at the next update of the RIF, determine the cost of signalization and turn lanes at this intersection and determine the "fair-share" cost of the project developer. The RIF will reimburse the project developer the difference between the cost of the improvements and the project developer's "fair-share" portion. Implementation of this mitigation measure would improve the White Rock Road/Project Access Road intersection LOS from D to B during the a.m. peak hour and from F to C during the p.m. peak hour.

E. Significant Impact: Peak-Hour Traffic Volumes (White Rock Road Intersection). Buildout of the proposed Specific Plan would increase demand for public transit service and facilities in western El Dorado County, including fixed route service, commuter service, dial-a-ride service, and park-and-ride lot spaces. To accommodate these trips, Policy 9.2.3 and other policies of the El Dorado County General Plan require new development to install bus turnouts, bus shelters, and other public transportation related improvements where appropriate.

Mitigation Measures 4.5-8: The project developer shall be responsible for the construction of a bus turnout and transit shelter along the project site frontage on White Rock Road when fixed route transit service or commuter service is extended to serve the project. The project developer shall also reserve the land area for the proposed mass transit station and parking area as identified in the Carson Creek Specific Plan.

F. Significant Impact: Bicycle/Pedestrian Facilities. Buildout of the Specific Plan would generate walking and bicycling trips within the project site and vicinity. Although the proposed Specific Plan identifies on-site bicycle and pedestrian facilities, it does not include bike lanes along the project frontage on White Rock Road as proposed in the El Dorado County Bikeway Master Plan and required by El Dorado County General Plan Policy 3.11.1.1.

Mitigation Measure 4.5-9: The project developer shall be responsible for the construction of Class II bike lanes along the project site frontage on White Rock Road prior to the issuance of building permits. Implementation of Mitigation Measure 4.5-2 includes the construction of Class II bike lanes.

G. Significant Impacts: Consistency With Relevant General Plan Provisions. The Specific Plan would be required to comply with relevant El Dorado County General Plan objectives and policies related to transportation and circulation. The Specific Plan would be

generally consistent with General Plan provisions except, as previously discussed, in relation to projected roadway levels of service and the Specific Plan's failure to provide bicycle/pedestrian paths along White Rock Road and bus turnouts/shelters.

Mitigation Measure 4.5-10: Apply Mitigation Measures 4.5-1, 4.5-5 through 4.5-9, and no further mitigation is required.

Those mitigation measures set forth in the Final Environmental Impact Report as Mitigation Measure 4.5-7 and 7-2 which require the project applicant to enter into an agreement with Sacramento County for roadway improvements are hereby rejected as provided by CEQA Guidelines Section 15091(a)2 as the changes or alterations are within the responsibility and jurisdiction of another public agency and such changes can and should be adopted by that agency. In addition, the proposed mitigation is uncertain and cannot be quantified in a reasonable manner at this time or in the near future because of the uncertainty of the future development of the affected portion of Sacramento County. The factual basis for this finding is that the need for such mitigation is largely based on cumulative impacts and the rate, density, and timing of development in Sacramento County is uncertain and completely within the discretion of the County. Further, the subject area has been under study by the City of Folsom as a potential area for annexation and urbanization within its City Limits. At such time as the affected portion of Sacramento County is planned for development, either by the City or County, improvements to White Rock Road, which is the only major east-west collector road in the vicinity, can or should be made apart of such development plans. Finally, with respect to Payen Road (Mitigation Measure 4.5-7), the Specific Plan has been revised to eliminate Payen Road as an access to the project.

III. NOISE

A. Significant Impact: Short-Term Construction Noise Impacts.

Construction activities in the Euer Ranch portion of the project site could potentially cause short-term significant noise impacts to residences north of the project site.

Mitigation Measure 4.7-1: Construction activities shall be conducted in accordance with the County noise regulation or limited to the following hours and days:

- a. Between the hours of 7:00 a.m. and 5:00 p.m. on any weekday;
- b. Between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays;
- c. Prohibited on Sundays and holidays.

At the time of the letting of the construction contract, it shall be demonstrated that engine noise from excavation equipment would be mitigated by keeping engine doors closed during equipment operation. For equipment that cannot be enclosed behind doors, lead curtains shall be used to attenuate noise.

B. **Significant Impact: Increased Traffic Noise:** Traffic noise impacts at existing noise-sensitive receptor locations are anticipated. The increased traffic noise levels could result in exceedances of the 60dBA CNEL residential standard at existing off-site and proposed on-site residential uses.

Mitigation Measure 4.7-2: Where the development of a project could result in the exposure of noise-sensitive land uses to existing or projected future traffic noise levels in excess of the applicable County noise standards, the County shall require an acoustical analysis to be performed prior to the approval of such projects.

Where acoustical analysis determines that the project would contribute to traffic noise levels in excess of applicable County noise standards at proposed on-site or planned future off-site noise sensitive uses, the County shall require the implementation of noise attenuation measures such as setbacks, sound barrier walls, or noise berms, as necessary, to reduce traffic noise levels at proposed noise sensitive uses to conform with the applicable County standards.

C. **Significant Impact: Railroad Noise.** Implementation of the proposed Specific Plan could allow for the establishment of future light rail service to the project site. Railroad noise could exceed the 60 dBA CNEL standard recommended by El Dorado County for transportation noise exposure at proposed residential units R(10) which would be adjacent to the SPRR tracks.

Mitigation Measure 4.7-3: Where the development of a project could result in the exposure of noise-sensitive land uses to projected future railroad noise levels in excess of the applicable County noise standards, the County shall require an acoustical analysis to be performed prior to the approval of such projects.

Where acoustical analysis determines that railroad noise levels would exceed applicable County noise standards at proposed on-site noise sensitive uses, the County shall require the implementation of noise attenuation measures such as setbacks, sound barrier walls, or noise berms, as necessary, to reduce traffic noise levels at proposed noise sensitive uses to conform with the applicable County standards.

IV. BIOLOGICAL RESOURCES

A. **Significant Impact: Loss of Wetlands.** On Carson Creek Ranch, 9.14 acres of the existing 27.43 acres of wetlands would be lost if the proposed project is implemented. The Specific Plan includes a Wetland Preservation and Compensation Plan that includes measures that would reduce impacts on wetlands to a less-than-significant level. On Euer Ranch, unverified 1.08 acres of wetland could be lost although these wetlands appear to fall within areas of the project site proposed for preservation. Wetlands on Euer Ranch are not included under the Wetland Preservation and Compensation Plan.

Mitigation Measure 4.8-2:

a. Prior to issuance of a grading permit, the wetland delineation completed for the Euer Ranch shall be verified by U.S. Army Corps of Engineers. After verification, any wetlands that would be lost or disturbed shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with USACE mitigation guidelines. El Dorado County has also supported the protection of wetlands as specified in the County's General Plan under Objective 7.4.2. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to USACE.

b. Prior to issuance of a grading permit, a Streambed Alteration Agreement shall be obtained from the California Department of Fish and Game (CDFG), pursuant to Section 1600 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank, or associated riparian vegetation of the stream. If required, the project applicant shall coordinate with CDFG in developing appropriate mitigation and shall abide by the conditions of any executed permits.

c. Grading activities shall incorporate appropriate erosion control measures as provided in the El Dorado County Grading Ordinance. Appropriate runoff controls such as berms, storm grates, detention basins, overflow collection areas, filtration systems, and sediment traps shall be implemented to control situations and the potential discharge of pollutants into drainage.

B. Significant Impact: Special-Status Plants. Implementation of the proposed project could affect populations of the Bogg's Lake hedge-hyssop (state-listed endangered).

Mitigation Measure 4.8-3: Prior to issuance of a grading permit, habitat on the Euer Ranch that is suitable to support Bogg's Lake hedge-hyssop shall be surveyed. If any significant populations of this species are found in areas proposed for development, a mitigation plan designed to result in a no-net-loss of the species shall be prepared by the project proponent and approved by State Department of Fish and Game. The plan may include measures such as transplantation or revegetation in protected areas on-site.

V. EARTH RESOURCES

A. Significant Impact: Liquefaction. Liquefaction is not likely to occur within most of the project site due to the presence of a thin mantle of soil developed upon firm bedrock. There is a low potential for liquefaction to occur within the Carson Creek drainage. This impact would be considered potentially significant to uses (flood control and recreational trials) proposed within the area.

Mitigation Measure 4.9-1:

a. The El Dorado County Department of Transportation (DOT) shall consult with the El Dorado County Planning Department during the grading permit approval process to ensure that earth resources impacts related to development in the Carson Creek Specific Plan area are sufficiently addressed.

b. Prior to the approval of a grading permit for development in the Carson Creek drainage, the applicant shall submit to, and receive approval from, the El Dorado County Department of Transportation (DOT) a soils and geologic hazards report meeting the requirements for such reports provided in the El Dorado County Grading Ordinance. If proposed improvements to the Carson Creek drainage would be located in areas identified as susceptible to soils or geologic hazards, proposed improvements to the Carson Creek drainage shall be designed to prevent failure or damage due to such hazards.

B. Significant Impact. Differential Compaction/Seismic Settlement. The thin soil mantle developed on bedrock of relatively strong slightly weathered material over much of the site would not be prone to differential compaction or seismic settlement. Differential compaction and seismic settlement is possible, however, within the on-site drainage areas which would be designated as open space. This impact would be considered significant to proposed improvements (i.e., flood control and recreational) in these areas.

Mitigation Measure 4.9-3: Apply Mitigation Measure 4.9-1, and no additional measures are required.

C. Significant Impact: Ground Rupture. Due to the project site's proximity to the West Branch of the Bear Mountains Fault Zone (4,000 feet) and the presence of the Mormon Island Fault Zone on the project site, ground rupture on the project site is possible.

Mitigation Measure 4.9-4: Prior to the issuance of building permits, all structures shall be designed in accordance with the Uniform Building Code (UBC), Chapter 23. Although wood frame buildings of not more than two stories in height in unincorporated areas are exempt under the California Earthquake Protection Law, structures shall adhere to the design factors presented for UBC, Zone 3, as a minimum. Final design standards shall be in accordance with the findings of detailed geologic and geotechnical analyses for proposed building sites.

Prior to the approval of subdivision tract maps in the vicinity of the Mormon Island Fault Zone, the location and age of displacements associated with the fault zone shall be determined by geologic mapping and trench logging. Critical structures such as schools shall not be located within the zones of active faulting.

D. Significant Impact: Ground Shaking. Because the potential exists for ground accelerations as high as 0.7 g from strong earthquakes along the Bear Mountain Fault Zone near the project site, a low to moderate potential for severe ground shaking exists at the site. The presence of the Mormon Island Fault Zone also creates a potential for ground shaking to occur on the project site.

Mitigation Measures 4.9-5: Prior to the issuance of building permits, all structures shall be designed in accordance with the Uniform Building Code (UBC), Chapter 23. Although wood frame buildings of not more than two stories in height in incorporated areas are exempt under the California Earthquake Protection Law, structures shall adhere to the design factors presented for UBC, Zone 3, as a minimum. Final design standards shall be in accordance with the findings of detailed geologic and geotechnical analysis for proposed building sites.

Prior to the approval of subdivision tract maps in the vicinity of the Mormon Island Fault Zone, a ground acceleration analysis shall be conducted for the Mormon Island Fault Zone. All structures shall be designed in accordance with the ground acceleration analysis for the Mormon Island Fault Zone and the on-site ground accelerations anticipated from the Bear Mountain Fault Zone.

E. Significant Impacts: Topographic Alteration (Ground Stability and Erosion Potential). Construction activities resulting in ground disturbance could result in a moderate potential for ground instability and erosion.

Mitigation Measure 4.9-7: Prior to the issuance of grading permits, grading design plans shall incorporate the findings of detailed geologic and geotechnical investigations. These findings all include methods to control soil erosion and ground instability. Some potential methods include:

a. Cut slopes and drainage ways within native material shall be protected from direct exposure to water runoff immediately following grading activities. Any cut or fill slopes and their appurtenant drainage facilities shall be designed in accordance with the El Dorado County Grading Ordinance and the Uniform Building Code guidelines.

b. Drainage facilities shall be lined as necessary to prevent erosion of the site soils immediately following grading activities.

c. During construction, trenches greater than five feet in depth shall be shored, sloped back at 1:1 (horizontal to vertical) slope angle, or reviewed for stability by the Geotechnical Engineer in accordance with the Occupational Safety and Health Administration regulations if personnel are to enter the excavations.

d. Erosion control measures shall be implemented during and after construction to conform with National Pollution Discharge Elimination System, Storm Drain Standards, and El Dorado County Standards.

e. Rainfall shall be collected and channeled into an appropriate collection system designed to receive the runoff, minimize erosion, and convey the runoff off site. Conduits intended to convey drainage water off site shall be protected with energy dissipating devices as appropriate and in some areas potentially lined with an impermeable, impact proof material.

f. Parking facilities, roadway surfaces, and buildings all have impervious surfaces which concentrate runoff and artificially change existing drainage conditions. Collection systems shall be designed where possible to divert natural drainage away from these structures, to collect water concentrated by these surfaces, and to convey water away from the site in accordance with the National Pollution Discharge Elimination System, Storm Drain Standards, and El Dorado County Standards.

VI. HYDROLOGY AND WATER QUALITY

A. **Significant Impact: Increased Surface Runoff.** Project development would increase runoff quantity and peak discharge from the project site resulting in potential increased water levels in Carson Creek. Although the Specific Plan proposes improvements designed to ensure that downstream flows are not substantially increased over existing levels, an increase in downstream peak flows could occur during 100-year storm events.

Mitigation Measure: 4.10-1:

a. Prior to the issuance of a grading plan, the project applicant shall submit and obtain approval of final drainage plans by the El Dorado County Department of Transportation. These final drainage plans shall demonstrate that future post-development stormwater discharge levels derived by the project will remain at existing stormwater discharge levels and that detention basins will be permanently maintained. The drainage plan shall be prepared by a certified Civil Engineer and shall be in conformance with the El Dorado County Drainage Manual adopted by the Board of Supervisors in March 1995. The project applicant shall form a drainage zone of benefit (ZOB) or other appropriate entirety to ensure that all stormwater requirements are met. The drainage plan shall include, at a minimum, written text addressing existing conditions, the effects of project improvements, all appropriate calculations, a watershed map, potential increase in downstream flows, proposed on-site improvements, and drainage easements, if necessary, to accommodate flows from the site and implementation and maintenance responsibilities. The plan shall address storm drainage during construction and proposed Best Management Practices (BMP's) to reduce erosion and water quality degradation. All on-site drainage facilities shall be constructed to El Dorado County Department of Transportation satisfaction. BMP's shall be implemented throughout the construction process.

b. Maintenance of the detention basin and drainage facilities shall include periodic inspections (e.g. annual) to ensure facility integrity and debris removal as necessary.

B. Significant Impact: The 100-Year Flood Event. The Specific Plan proposes to provide 100-year flood protection by raising proposed development areas above the 100-year flood plain. However, at present, insufficient drainage plan specificity is available to determine whether proposed residential, commercial, and other uses would be afforded 100-year flood protection.

Mitigation Measure 4.10-2: Prior to the approval of a grading permit, the applicant shall submit a final drainage plan that clearly identifies the 100-year flood zone following project development to the El Dorado County Department of Transportation for approval. Project development shall not occur in areas within the 100-year flood zone shown in the final drainage plan. The final drainage plan shall be prepared by a registered civil engineer and contain a hydrologic study that outlines the 100-year flood zones associated with the project and proposed flood control measures such as detention basins. Alternatively, 100-year flood protection improvements, approved by the El Dorado County Department of Transportation, can be implemented to allow development in these areas. All storm drainage facilities and embankments shall be designed in compliance with the County Drainage Manual.

C. Significant Impact: Flooding Associated with the Failure of Dams and Levees. Several flood containment ponds are planned for construction within the Carson Creek drainage. The height of the dams for these ponds is intended to be less than five feet. The banks of Carson Creek are planned to be reinforced with levees. There is a potential for flooding due to failure of dams and levees.

Mitigation Measure 4.10-3: Apply Mitigation Measure 4.10-2, and no further mitigation is required.

D. Significant Impact: Short-term Construction-Related Water Quality Impacts. Water quality would be degraded during construction activities associated with buildout of the proposed Specific Plan due to the area and quantity of potential grading activities.

Mitigation Measure 4.10-5:

a. Prior to issuance of a grading permit, the developer shall obtain from the Central Valley Region Water Quality Control Board a General Construction Activity Stormwater Permit under the National Pollutant Discharge Elimination System (NPDES) and comply with all requirements of the permit to minimize pollution of stormwater discharges during construction activities.

b. Prior to issuance of a grading permit, the project applicant shall submit to the El Dorado County Department of Transportation and the Resource Conservation District for review and approval an erosion control program which indicates that proper control of siltation, sedimentation, and other pollutants will be implemented per NPDES permit requirements.

E. **Significant Impact: Long-Term Water Quality Impacts.** Water quality would be degraded following site development by the introduction of urban pollutants including vehicle oil and grease, heavy metals on parking lots and driveways, fertilizers and pesticides used on site landscaping, toxic compounds released from commercial and industrial areas, and the potential use of reclaimed water on the project site.

Mitigation Measure 4.10-6:

a. On-site detention basins shall be constructed and maintained through the construction period to receive stormwater runoff from graded areas to allow capture and settling of sediment prior to discharge to receiving waters. Periodic maintenance of detention basins, such as debris removal, shall occur as needed to ensure continued effectiveness.

b. Prior to issuance of a grading permit, the project applicant shall develop a surface water pollution control plan (i.e., parking lot sweeping program and periodic storm drain cleaning) to reduce long-term surface water quality impacts. The plan shall also include the installation of oil, gas, and grease trap separators in any project parking lot. These grease trap separators will be cleaned annually. The project applicant shall develop a financial mechanism, to be approved by the El Dorado County Department of Transportation, that ensures the long-term implementation of the program.

F. **Significant Impact: Consistency with Relevant General Plan Provisions.** The Specific Plan would be required to comply with relevant El Dorado County General Plan objectives and policies related to hydrology and water quality. Although the Specific Plan proposes to maintain the natural drainageways, incorporate detention basins, and provide 100-year flood protection, mitigation measures are required to ensure that proposed Specific Plan provisions are successful. The Plan would not be consistent with General Plan policies related to hydrology and water quality.

Mitigation Measure 4.10-7: Apply Mitigation Measures 4.8-2, 4.10-1, 4.10-2, 4.10-5, 4.10-6, and no further mitigation is required.

VII. CULTURAL RESOURCES

A. **Significant Impact: Archaeological Sites CC-2, CC-3, CC-4, CC-5, CC-6, and Archaeological Linear Features CC-LF-1, CC-LF-2, and CC-LF-3.** All of these sites are located within areas planned for construction disturbance, infrastructure or recreational improvements, or urban land use development. Implementation of project features could result directly or indirectly to the disturbance or destruction of one or more of these archaeological resources. These impacts are considered to be potentially significant.

Mitigation Measure 4.11-1:

a. Prior to grading and construction activities, significant cultural resources found on the project site shall be recorded or described in a professional report and submitted to the North Central Information Center at California State University at Sacramento.

b. During grading and construction activities, the name and telephone number of an El Dorado County approved, licensed archaeologist shall be available at the project site. In the event a heritage resource is encountered during grading or construction activities, the project applicant shall insure that all activities will cease in the vicinity of the recovered heritage resource until an archaeologist can examine the find in place and determine its significance. If a find is authenticated, the archaeologist shall determine proper methods of handling the resource(s) for transport and placement in an appropriate repository. Grading and construction activities may resume after the resource is either retrieved or found to be not of consequence.

B. Significant Impact: Other Heritage Resources. Areas on the project site that were subject to a general reconnaissance, cursory coverage, or not inspected during the field survey may contain heritage resources that were not detected during the field survey. In addition, heritage resources may be buried or undiscovered during the field survey. Due to this potential, the project may impact these other heritage resources.

Mitigation Measure 4.11-3: Apply Mitigation Measure 4.11-1, and no further mitigation is required.

C. Significant Impact: Traditional Cultural Properties. Although no Native American cultural properties were identified within the project site, sites of ethnic/religious significance to descendants of the County's Native American population may be presented on the site.

Mitigation Measure 4.11-4: Apply Mitigation Measure 4.11-1, and no further mitigation is required.

VIII. SCHOOLS

A. Significant Impact: Latrobe School District Elementary School. It is uncertain whether or not the Carson Creek elementary school would be available in time to accommodate project-generated students due to time requirements for processing, approving, and constructing a new school.

Mitigation Measure 4.12-1:

a. The project applicant shall enter into a written agreement with the affected school district for the mitigation of impacts to school facilities or the demand therefor in accordance with General Plan Policy 5.8.1.1. School mitigation fees shall be the amount in effect at the time building permits are issued.

b. The applicant shall also ensure that proposed school facilities are in place prior to issuance of occupancy permits. Assurances can be made in various ways such as the following:

1. Creation of Mello-Roos district or other financing entity/arrangement to finance construction of the elementary school prior to final map approval.

2. Provisions for temporary school facilities to accommodate additional students, provided necessary core facilities are in place consistent with the applicable school district or state policies. Temporary facilities may include, but are not limited to, portable classrooms, lease of commercial space in the El Dorado Hills Business Park, and other temporary facilities if such facilities comply with State construction standards for school buildings;

3. Any combination of the aforementioned, or other arrangement, financial agreement, and/or inter-district agreement between the applicant and relevant school district(s), and with evidence of appropriate approvals filed with the El Dorado County Planning Department.

B. **Significant Impact: Latrobe School District Middle School.** It is uncertain whether or not the Carson Creek elementary/middle school would be available in time to accommodate project-generated students due to time requirements for processing, approving, and constructing a new school.

Mitigation Measure 4.12-2: Apply Mitigation Measure 4.12-1, and no further mitigation is required.

C. **Significant Impact: El Dorado Union High School District.** Sufficient capacity may not be available at EDUHSD facilities to accommodate students generated by Specific Plan buildout. Depending on the timing of Carson Creek development, EDUHSD facilities may not be available to serve project-generated students.

Mitigation Measure 4.12-4: Apply Mitigation Measure 4.12-1(a), and no further mitigation is required.

D. **Significant Impact: General Plan Consistency.** School facilities are proposed under the Specific Plan to accommodate students generated by the project at buildout. However, the proposed Specific Plan does not provide for a written agreement between the applicant and the school district as required by Policy 5.8.1.1 or contain a funding mechanism for site acquisition and construction of on-site school facilities as required by Policy 5.8.2.4.

Mitigation Measure 4.12-5: Apply Mitigation Measure 4.12-1 and the following measure: Prior to the approval of Specific Plan, the applicant shall provide a funding mechanism for site acquisition and construction for incorporation into the Specific Plan in accordance with General Plan Policy 5.8.2.4.

IX. LAW ENFORCEMENT

A. **Significant Impact: Law Enforcement Services.** The Sheriff's Department's existing personnel and equipment would not be able to provide adequate level of service to the proposed project. Additional personnel and equipment are funded through tax revenues allocated by the County Board of Supervisors. Due to the project's net fiscal deficit on the County, the proposed Specific Plan may not be able to provide adequate funding to meet the Department's service goal of one sworn officer per 1,000 residents.

Mitigation Measure 4.14-1: The project applicant shall ensure adequate law enforcement personnel and equipment to serve the Specific Plan area through one of the following mechanisms:

a. Prior to the issuance of each building permit, the project applicant will be required to obtain a service letter from the El Dorado County Sheriff's Department identifying that law enforcement staff and equipment are available to serve the proposed land use upon occupancy and the Department has reasonably estimated that annual funding is available to provide adequate staff and equipment in the future.

B. **Significant Impact: General Plan Consistency - Response Times.** Existing law enforcement services could be unable to regularly respond to emergencies in the Specific Plan site within the eight-minute standard for Community Regions. The response time to the project site from existing law enforcement could be inconsistent with General Plan Policy 5.1.2.2.

Mitigation Measure 4.14-2: Apply Mitigation Measure 4.14-1(a), and no further mitigation is required.

Those mitigation measures set forth in the Final Environmental Impact Report as Mitigation Measures 4.14-1(b) and 4.14-2 which may result in the project applicant forming an assessment district to fund Sheriff's services is hereby rejected as provided by CEQA Guidelines Section 15091(a)2 since there is evidence that the economic impacts of the project on the County General Fund are not as significant as previously entertained, and that the Sheriff's Department services are funded by the County General Fund, subject to Board of Supervisors approval. In addition, the formation of an assessment district for Sheriff's services may be legally inappropriate for the Carson Creek Specific Plan area. Further, the Sheriff's Department may benefit in efficiencies inherent in serving the proposed high density residential development of the Carson Creek Specific Plan, like fully improved County roads and concentrated residential development located adjacent to an area currently served adequately by the Sheriff's Department.

X. PARKS, RECREATION, AND COMMUNITY SERVICES

A. Significant Impact: Active Parks and Recreational Facilities. Development of the proposed Specific Plan would result in the demand for 38 acres of active parkland based on the El Dorado Hills Community Service District's (EDHCSD) (also set forth in General Plan Policy 9.1.1.1) requirement of five acres of developed or active parkland for every 1,000 population. The Specific Plan designates 31.2 acres for active parkland which would result in up to seven fewer acres of active parkland than required by the EDHCSD depending on the densities proposed in each phase of development.

Mitigation Measure 4.16-1: The project applicant shall pay in-lieu fees for the purchase and development of approximately seven acres of active parks and recreation facilities in addition to the 31.2 acres the applicant shall dedicate for such purposes. Actual land dedication and in-lieu fees will vary based on the final densities proposed in each phase of development.

XI. RISK

A. Significant Impact: Work Shed and Barn Areas. A potential exists for individuals to be exposed to contaminated soils in the vicinity of the work shed and barn during construction of the project and on-going landscaping activities.

Mitigation Measure 4.22-1: If on-site contamination resulting from the storage and use of hazardous substances within the area of the work shed and barn is discovered during grading or construction, the appropriate local, State, and/or Federal agencies shall be contacted. Remediation of any unauthorized release of hazardous substances shall be undertaken in accordance with all existing local, State, and Federal regulations/requirements and guidelines established for the treatment of hazardous materials.

B. Significant Impact: Historical Mining. Due to previous on-site mining activities, there is a potential for mining-related chemicals such as mercury to have been deposited within on-site drainage (i.e., Carson Creek and unnamed tributaries) and/or shallow groundwater. Implementation of the proposed project may result in the potential for individuals to be exposed to these chemicals during development of the site.

Mitigation Measure 4.22-4: Prior to the issuance of a grading permit, shallow groundwater and on-site drainage area shall be sampled to determine the potential presence of on-site contamination (mercury, etc.). If contamination is found, the appropriate regulatory agency shall be contacted.

If deemed necessary by the appropriate regulatory agency, remediation shall be undertaken in accordance with all existing local, State, and Federal regulations/requirements and guidelines established for the treatment of hazardous substances.

C. **Significant Impact: Underground Storage Tanks (UST).** Although the UST's previously located on the project site are unlikely to have released hazardous substances on the project site, a UST currently in use at the adjacent Wetsel-Ovaitt site could potentially release hazardous substances. Contamination could occur on-site if hazardous substances released from the Wetsel-Ovaitt UST are carried on-site through groundwater.

Mitigation Measure 4.22-6: Prior to the issuance of a grading permit, a soils report will be prepared by a licensed geotechnical engineer. In addition to providing recommendations regarding grading, the soils report will address the possibility of underground storage tank contamination from off-site properties. If contamination is discovered to affect the project, then the appropriate regulatory agencies shall be consulted in identifying the responsible party and initiating the development of a remediation program in accordance with all applicable local, State, and Federal regulations/requirements and a guidelines established for the treatment of hazardous substances.

XIV. OTHER CEQA REQUIRED SECTION (SECTION 7)

A. **Significant Impact: Project Contribution to Cumulative Transit Impacts.**

Mitigation Measure 7-3: Apply Mitigation Measure 4.5-8, and no further mitigation is required.

B. **Significant Impact: Project Contribution to Cumulative Bicycle and Pedestrian System Impacts.**

Mitigation Measure 7-4: Apply Mitigation Measure 4.5-8, and no further mitigation is required.

C. **Significant Impact: Project Contribution to Cumulative Mobile Source Noise.**

Mitigation Measure 7-6: Apply Mitigation Measure 4.7-2, and no further mitigation is required.

D. **Significant Impact: Project Contribution to Cumulative Biological Resources.**

Mitigation Measure 7-7: Apply Mitigation Measure 4.8-2 and 4.8-3, and no further mitigation is required.

E. **Significant Impact: Cumulative Hydrology and Water Quality Impacts**

Mitigation Measure 7-8: Apply Mitigation Measure 4.10-1 and 4.10-6, and no further mitigation measures are required.

F. **Significant Impact: Project Contribution to Potential Cumulative Cultural Resources Impacts.**

Mitigation Measure 7-9: Apply Mitigation Measure 4.11-1, and no further mitigation is required.

G. Significant Impact: Project Contribution to Cumulative Law Enforcement Impacts.

Mitigation Measure 7-10: Apply Mitigation Measure 4.11-1, and no further mitigation is required.

H. Significant Impact: Project Contribution to Cumulative Parks and Recreation Impacts

Mitigation Measure 7-11: Apply Mitigation Measure 4.16-1, and no further mitigation is required.

EXHIBIT B

Findings of significant or potentially significant and unavoidable impacts that, despite substantial mitigation, economic, social, or other considerations, make mitigation to less than significance infeasible (CEQA Guidelines, Section 15091(a)(3): These impacts will require Statements of Overriding Considerations as described by Section 15093 of CEQA Guidelines. The mitigation measures identified for each impact are found to lessen the impact but not to a level of less than significant.

I. AESTHETICS

A. Significant Impact: White Rock Road at Manchester Lane. Views of the project site along White Rock Road at Manchester Lane are unobstructed, and predominantly include gently sloping, undeveloped terrain. Views of undeveloped land would be substantially altered by proposed development. A 30-foot wide heavily landscaped greenbelt would reduce these impacts but not to a less-than-significant level.

Mitigation Measure 4.3-2:

a. Use a majority of native plant species in the proposed 30-foot greenbelt to maximize a compatible visual relationship with residential uses to the north and with the surrounding natural terrain and vegetation.

b. Require use of natural colored roof materials in project development to maximize consistency with the surrounding natural environment to minimize stark visual contrasts.

c. Use natural components in fencing materials (e.g., wood, stone, brick) that would be consistent with residential uses to the north and would enhance visual compatibility with the natural surroundings of the site.

d. A variety of fast-growing shrubs and trees will be provided in the 30-foot landscape easement to provide effective screening between the Carson Creek project and surrounding uses prior to occupancy of project residences.

B. Significant Impact: White Rock Road at El Dorado/Sacramento County Line. Open views of undeveloped, gently sloping land along White Rock Road near the Sacramento County border would be substantially altered by introduction of new project development. A 30-foot wide heavily landscaped greenbelt would reduce the visual effects of urban development, but obstruction of the site would occur.

Mitigation Measure 4.3-3: Apply mitigation measure 4.3-2, and no other mitigation is available.

C. **Significant Impact: Golden Foothills Parkway at Carson Creek.** The primary aesthetic feature, Carson Creek, would remain unaltered with the proposed project. Development on surrounding land would be a substantial and adverse change in existing conditions.

Mitigation Measure 4.3-5:

- a. Use native plant species as the majority of those planted in the proposed 30-foot greenbelt to maximize a compatible visual relationship with the surrounding natural terrain and vegetation.
- b. Require use of natural colored roof materials in project developments to maximize consistency with the surrounding natural environment and to minimize stark visual contrasts.
- c. Use natural components in fencing materials (e.g., wood, stone, brick) in developments along Carson Creek to enhance visual compatibility with the natural surroundings of the site.
- d. Use natural components in pedestrian trail features (e.g., fences, trail materials) to enhance visual compatibility with the natural surroundings of the site.
- e. Retain unobstructed views of Carson Creek from locations along Golden Foothills Parkway.

II. AIR QUALITY

a. **Significant impact: Phase I (Grading Phase) Construction Emissions.** Grading activities associated with the construction of Specific Plan land uses would generate individual, site-specific, short-term ROG, NO₂ and PM₁₀ emissions that would exceed applicable El Dorado County Air Pollution Control District thresholds. This would be considered a significant and unavoidable short-term impact.

Mitigation Measure 4.6-1:

a) The project applicant shall comply with El Dorado County APCD Rule 223 as required by the Air Pollution Control Officer. The project applicant shall prepare a fugitive dust control plan to be submitted to, and approved by, the APCD prior to the commencement of construction. Control measures to be outlined in the plan may include, but are not limited to, the following:

- Application of water or suitable chemicals or other specified covering on materials stockpiles, wrecking activity, excavation, grading, sweeping, clearing of land, solid waste disposal operations, or construction or demolition of buildings or structures (all exposed soil shall be kept visibly moist during grading);
 - Installation and use of hoods, fans and filters to enclose, collect, and clean the emissions of dusty materials;
 - Covering or wetting at all times when in motion of open-bodied trucks, trailer or other vehicles transporting materials which create a nuisance by generating particulate matter in areas where the general public has access;
 - Application of asphalt, oil, water, or suitable chemicals on dirt roads;
 - Paving of public or commercial parking surfaces;
 - Removal from paved streets and parking surfaces of earth or other material which has a tendency to become airborne;
 - Limiting traffic speeds on all unpaved road surfaces to 15 mph;
 - Suspending all grading operations when wind speeds exceed 20 miles per hour (including instantaneous gusts);
 - Alternate means of control as approved by the Air Pollution Control Officer.
- b) Construction equipment engines shall be maintained in proper operating condition.

B. Significant Impact: Phase II (Facilities Phase) Construction Emissions.

Construction activities associated with the construction of Specific Plan infrastructure and land uses would generate short-term ROG and NO emissions that would exceed applicable El Dorado County APCD thresholds.

Mitigation Measure 4.6-2:

- a. Low emission mobile construction equipment shall be used (e.g., tractor, scraper, dozer, etc.).
- b. Construction equipment engines shall be maintained in proper operating condition.
- c. Low-emission stationary construction equipment shall be used.

d. A trip reduction plan shall be developed and implemented to achieve 1.5 average vehicle occupancy (AVO) for construction employees.

e. Construction activity management techniques, such as extending construction period, reducing number of pieces used simultaneously, increasing distance between emission sources, reducing or changing hour of construction, and scheduling activity during off-peak hours shall be developed and implemented.

f. The project applicant shall comply with El Dorado County APCD
Rule 224.

g. The project applicant shall comply with El Dorado County APCD
Rule 215.

C. **Significant Impact: Stationary Source Emissions.** Buildout of the Specific Plan would result in an increase in long-term regional energy consumption. Projected emissions related to natural gas and residential fireplace emissions would result in exceedances of the El Dorado County APCD thresholds for ROG and NO.

Mitigation Measure 4.6-3:

a. The applicant shall incorporate energy-saving design features into future levels of project implementation as feasible and appropriate. These design features may include, but are not limited to the following:

- Solar or low-emission water heaters;
- Central water heating systems;
- Shade trees;
- Energy-efficient and automated air conditioners;
- Double-pane glass in all windows;
- Energy-efficient low-sodium parking lot lights;
- Adequate ventilation systems for enclosed parking facilities;
- Energy-efficient lighting and lighting controls.

b. The applicant, future successors in interest, or future homebuilders shall install only EPA-certified woodstoves and fireplaces.

D. Significant Impact: Regional Mobile Source Emissions. Buildout of the Specific Plan would result in increased vehicle trips and associated mobile source emissions. Vehicle emissions attributable to buildout of the Specific Plan would result in exceedances of the El Dorado County APCD's ROG, CO and NO significance thresholds.

Mitigation Measure 4.6-4: Implementation of Mitigation Measures 4.5-1, 4.5-2, and 4.5-4 through 4.5-8, in addition to the following measure, would reduce regional mobile source emissions, but not to a less-than-significant level.

The County shall coordinate with the Folsom/El Dorado/Cordova Transportation Management Association to consider including the project site within the TMA's jurisdiction.

III. WATER SERVICE

A. Significant Impact: Water Consumption. Buildout of the proposed Specific Plan would increase water demand on the project site. Currently, insufficient water rights are available to serve the Specific Plan.

Mitigation Measure 4.18-1: Project impacts cannot be reduced to a less-than-significant level until the EID procures new water supplies that are sufficient to meet water needs of the proposed Specific Plan at buildout in conjunction with existing planned growth or an alternative public water source is secured. Implementation of the following mitigation measures would reduce potential project impacts on water supply. The project applicant would be required to implement these measures before approval of building permits.

a. In accordance with EID Policy Statement No. 22, the project applicant shall prepare a Facility Plan Report (FPR) for the proposed project. The FPR shall address the expansion of the water and sewer facilities and the specific fire flow requirements for all phases of the project.

b. Low-volume and low-flow fixtures shall be installed to reduce water consumption.

c. Efficient irrigation systems shall be installed to minimize runoff and evaporation and maximize the water that will reach plant roots. One or any combination of the following methods of increasing irrigation efficiency shall be employed: drip irrigation, soil moisture sensors, and automatic irrigation systems. Mulch shall be used extensively in all landscaped areas. Drought resistant and native vegetation shall be used in landscaped areas.

B. Significant Impacts: Fireflow Demand. Buildout of the Specific Plan would result in increased fireflow demand. Because insufficient water supply is currently available to serve the project site, fireflow demand for the project site would not be met until an additional water supply source is found.

Mitigation Measure 4.18-3: Apply mitigation measure 4.18-1, and no further mitigation is available.

C. Significant Impact: General Plan Consistency. The proposed Specific Plan would be required to comply with relevant General Plan goals, objectives, and policies. Because insufficient water is currently available to supply the project site at buildout, the Specific Plan would be inconsistent with Policies 5.2.1.2, 5.2.1.3, and 5.2.1.4.

Mitigation Measure 4.18-4: Apply mitigation measure 4.18-1, and no further mitigation is available.

IV. CUMULATIVE

A. Significant Impact: Project Contribution to Cumulative Aesthetic Impacts

Mitigation Measure 7-1: Apply mitigation measures 4.3-2 and 4.3-5, and no further mitigation measures are available.

B. Significant Impact: Cumulative Roadway System Impacts

Mitigation Measure 7-2:

a) Widening Latrobe Road from two to four lanes between Golden Foothill Parkway South and Investment Boulevard would improve the daily roadway segment LOS to B or better. El Dorado County considers that additional widening may not be feasible due to cost and right-of-way constraints. Due to the uncertainty regarding feasibility, this cumulative impact would remain significant and unavoidable.

b) Widening White Rock Road from four to six lanes between Latrobe Road and the project access would improve the daily roadway segment LOS to B or better. El Dorado County considers that additional widening may not be feasible due to cost and right-of-way constraints. Due to the uncertainty regarding feasibility, this cumulative impact would remain significant and unavoidable.

c) Mitigation Measure 4.5-5 requires the project developer to contribute their "fair-share" cost of widening U.S. Highway 50 to six lanes through the western portion of El Dorado County. Although this would not improve the LOS to E or better, El Dorado County considers that additional widening may not be feasible due to cost and right-of-way constraints. However, widening certain sections to more than six lanes may be possible. Therefore, this cumulative impact would remain significant and unavoidable.

C. Significant Impact: Project Contribution to Cumulative Air Quality Impacts

Mitigation Measure 7-5: Apply Mitigation Measure 7-2, and no further mitigation measures are available.

D. Significant Impact: Cumulative Water Service Impacts.

Mitigation Measure 7-12: Apply Mitigation measure 4.18-1, and no further mitigation are available.

EXHIBIT C

FINDINGS REGARDING PROJECT ALTERNATIVES

The Board of Supervisor's findings relating to the alternatives described in the EIR are set forth in this section below.

As set forth elsewhere in this Resolution, the adoption of the Project as proposed will cause significant adverse environmental effects which cannot be substantially lessened or avoided with the adoption of all feasible mitigation measures (See Exhibit "B"). Because mitigation measures have failed to at least substantially lessen these effects, the Board of Supervisors has considered whether any of the project alternatives outlined in the EIR could feasibly substantially lessen or avoid those effects while satisfying the objectives of the Specific Plan. (See Citizens for Quality Growth v. City of Mount Shasta (1988) 198 Cal. App. 3d 433, 443-445 [243 Cal. Rptr. 727]; see also Public Resources Code, Section 21002.) As will be explained below, the Board of Supervisors concludes that none of the proposed alternatives could feasibly meet the Project's objectives and thus has decided to approve the Project as proposed with all feasible mitigation measures outlined above.

This Board of Supervisors makes the following findings regarding the alternatives to the Specific Plan discussed in the EIR.

No Project Alternative

Findings. This alternative does not promote the objectives of the project or of the County General Plan and is therefore rejected.

Discussion: It is a stated objective of the Specific Plan and a policy of the County General Plan that the County provide a wide range of housing opportunities as well as employment opportunities in order to broaden the County's economic base. The Specific Plan area is identified in the General Plan as a location for the provision of urban densities to complement the existing El Dorado Hills Business Park by providing housing for future employees with the growth of the area. The No Project Alternative is therefore fundamentally inconsistent with the General Plan and does not satisfy the objectives of the Specific Plan and on that basis is deemed to be infeasible.

Less Intensive Alternative

Findings: This alternative does not reduce any significant impacts of the proposed project to a level of insignificance and does not promote the objectives of the Specific Plan and County's General Plan policy of providing a diversity of housing opportunities in the County and on that basis is rejected.

Discussion: The analysis of impacts contained in the EIR shows that although the reduced densities of this alternative would have the effect of reducing to a minor degree the significant impacts associated with the project description, such impacts are not reduced to a level of less than significant. Further, a stated objective of the Specific Plan is the provision of housing which is more affordable than that within the vicinity of the project today. This alternative would less effectively meet the project objective of providing affordable housing.

Alternative Use Alternative

Findings. The Board finds that the Alternative Use Alternative discussed in the EIR is infeasible because it fails to meet the objective of the Specific Plan and General Plan to provide opportunity for affordable housing and on that basis this alternative is rejected.

Discussion. Although this alternative may have the effect of reducing some of the significant impacts associated with the project description, it fails to achieve the objectives of the Specific Plan. It is a stated objective of the Specific Plan as well as the County's General Plan to provide a variety of new housing which is affordable to the largest percentage of the housing market. The reduction of densities and the requirement for larger residential lots has the effect of increasing the unit cost of developing the residential lots and homes thus limiting or eliminating the ability to provide affordable housing within the Specific Plan.

Open Space Alternative

Finding. Although providing some reduction in impacts, this alternative does not reduce any significant impacts of the proposed project to a level of insignificance and does not promote the objectives of the Specific Plan of providing a balanced mix of land uses and employment opportunities in order to foster a jobs/housing balance and is therefore rejected.

Discussion. This alternative, although it reduces various impacts associated with the project description, does not mitigate those impacts to a level of less than significance with the possible exception of the level of service at some intersections. However, this alternative eliminates the employment generation possibilities of the Specific Plan which is inconsistent with the objectives of the Specific Plan and the General Plan. Elimination of the employment and shopping opportunities disturbs the balance of land uses necessary to promote pedestrian access to services and jobs and unbalances the jobs/housing mix sought to be achieved by the Specific Plan and the General Plan.

Alternative Site

Finding. The Alternative Site is rejected as an alternative because the significant impacts associated with the Alternative Site would, according to the EIR, be greater than those associated with the project description.

Discussion. As set forth in the EIR, although the Alternative Site analyzed would have the effect of reducing certain significant impacts associated with traffic and noise, it would have the effect of creating greater impacts in other areas such as land use compatibility, lack of rail service, aesthetics, and wildlife. Therefore, this alternative is not considered environmentally superior to the project description.

EXHIBIT D

STATEMENT OF OVERRIDING CONSIDERATIONS

As set forth in this Resolution, the Board of Supervisors' adoption of the Carson Creek Specific Plan as proposed will result in significant adverse environmental effects which cannot be substantially lessened or avoided with the adoption of all feasible mitigation measures.

Despite the occurrence of these effects the Board of Supervisors chooses to approve the Specific Plan because in its view, the economic, social and other benefits that the project will produce will render the significant effects acceptable. These benefits include:

Diversification of the County's Housing Stock. The adoption and implementation of the Carson Creek Specific Plan will result in the probable development of approximately 2,400 housing units. The housing types and sizes proposed combined with the amenities of the Specific Plan will enhance the Housing Element of the County General Plan by expanding the range and variety of housing opportunities in the County.

Fostering of the Jobs/Housing Balance. The Specific Plan is consistent with the goals and policies of the General Plan calling for the provision of a diverse housing stock and the concentration of housing opportunities in areas adjacent to employment centers. The proximity of the Specific Plan to the El Dorado Hills Business Park, together with the employment opportunities within the Specific Plan itself, will provide the housing needed for those employed in these employment centers. The Board of Supervisors have aggressively sought the relocation of business and clean industry into the County to provide employment and diversity to the County's economy. The Board believes that the provision of a quality project containing affordable housing in a community, such as that provided in the Specific Plan, will provide an inducement to business to relocate in the area.

Consistency with the County General Plan. As set forth elsewhere in this Resolution, the Specific Plan is consistent with the General Plan with respect to its land use designation and the policies and criteria for the development of land designated Planned Community (PC) in the General Plan and is therefore consistent with the assumptions made in the General Plan. Accordingly, the significant and unavoidable impacts identified in the Specific Plan EIR are consistent with those impacts identified in the General Plan EIR and for which the Board previously adopted a Statement of Overriding Considerations as part of the adoption of the General Plan. Based on the foregoing, the Board of Supervisors hereby incorporates and restates the Overriding Considerations (Section XII of the Findings of Fact of The Board of Supervisors of El Dorado County, January 23, 1996, revised January 26, 1996).

SP94-02

Findings - As adopted by the Board of Supervisors on September 24, 1996

1. The Carson Creek Specific Plan contains the required elements of Government Code 65451:
 - A. Sections 3 and 4 of the Specific Plan contain text and diagrams specifying the distribution, location, and land uses within the Specific Plan area.
 - B. Section 3 of the Specific Plan contains text and diagrams specifying the proposed distribution and location of transportation, sewage, water, and drainage facilities proposed within the Specific Plan.
 - C. Section 4 of the Specific Plan contains development standards for the future development of the Specific Plan area.
 - D. Sections 5 and 6 of the Specific Plan contain implementation measures and funding mechanisms to carry out Sections 3 and 4 of the Specific Plan.
 - E. Section 2 of the Specific Plan contains a discussion of the relationship of the Specific Plan to the General Plan.
2. An Environmental Impact Report has been prepared for the Carson Creek Specific Plan and has been certified as adequate, based on the findings contained in Attachment 1 of the staff report dated September 12, 1996.
3. The Carson Creek Specific Plan is consistent with the 1996 El Dorado County General Plan land use map designation of Planned Community.
4. The Carson Creek Specific Plan is consistent with the 1996 El Dorado County General Plan Policies as compiled and stated below.

Policy 2.1.4.2

Planned Communities should be designed with an emphasis on alternative modes of transportation to minimize the use of personal motorized vehicles to the maximum extent possible. Pedestrian/bicycle pathways shall be encouraged. These pathways should be separated from roadways whenever possible to allow for greater safety for the pedestrian and bicyclist and to allow vehicular traffic to move more freely.

Finding: The Carson Creek Specific Plan is consistent with Policy 2.1.4.2 because it has been designed to encourage pedestrian and bicycle traffic within the site while accommodating vehicular traffic on separate roadways with sidewalks on all streets and a separate linear parkway and trail system that meanders through the site, creating pedestrian connections from residential areas to parks, schools and commercial areas.

The trail system is separated from streets carrying vehicular traffic, creating a safe travel space for its users.

Policy 2.1.4.3

All planned communities are designated with the Planned Community (-PC) overlay designation and, except for the Missouri Flat Area Planned Community, which is governed by Policy 2.1.4.8, shall require the processing of a specific plan pursuant to Government Code Sections 65450-65457. The specific designation of such lands, as well as permissible densities and intensities of use, shall be consistent with applicable Land Use Summary Table. For these lands, the -PC overlay designation shall function as the General Plan designation governing the types and densities and intensities of allowed land uses and with which implementing planning actions such as adoption of specific plans and zoning must be consistent. Although these lands also have underlying land use designations (e.g., Low Density Residential), those designations will not control the allowed types and densities and intensities of land uses unless the -PC overlay designations and the Land Use Summary Table is removed through the General Plan amendment pursuant to Policy 2.1.4.6. Thus, for example, although the underlying designation (e.g., LDR) may seem to permit only residential uses at relatively low densities, the -PC overlay designation will allow the County to approve, without General Plan amendments, specific plans authorizing some residential densities and land use intensities greater than that permissible pursuant to the underlying designation.

Finding: The Carson Creek Specific Plan is consistent with Policy 2.1.4.3, since it is designated PC on the General Plan land use map and is proposed as a specific plan consistent with, although lower in residential density, the Land Use Summary Table in the General Plan,

Policy 2.1.4.4

Specific plans for planned communities include negotiable design features for public benefit. Examples of these features are:

- A. Separate bicycle and pedestrian paths that connect residential areas to employment, retail, school, community facilities and recreation areas;
- B. On-street parking;
- C. Establish reduced mandatory building setbacks that encourage parking lots to the rear of commercial buildings or within the interior;
- D. Street landscaping within medians and along sidewalks;
- E. Bus and commuter transit stops, light rail station;
- F. Integration of open space amenities to protect environmentally sensitive features;
- G. Common parking structures within business areas;
- H. Pedestrian circulation from one retail site to another;
- I. Pocket parks and plazas and parklands as recommended in the Parks and Recreation Element;
- J. Bicycle parking and/or storage facilities conveniently located;
- K. Satellite job center sites for multiple employers/businesses;

- L. Neighborhood Service Centers;
- M. Outdoor art, statues, etc.;
- N. Town/community centers distinguished with major public buildings, parks/plazas or other focal points;
- O. A financial element that includes payment of all capital costs for infrastructure and ongoing operations and maintenance;
- P. A distribution of housing units to meet the needs of all income levels as specified in Policy 4.1.1.1 of the Housing Element;
- Q. Provide for Neighborhood Service opportunities with residential land uses in accordance with Policy 2.2.3.9 (page 29);
- R. Maintain significant historic sites, steep slope areas, and stream corridors in continuous and permanently dedicated open space;
- S. Provide on-site employee services such as restaurants, banks, etc.;
- T. A common continuous landscape program that includes planting and design guidelines consistent with the setting, including street landscaping that creates separate walkways and bicycle routes, where appropriate; and
- U. Shielded, low intensity and efficient lighting.

Finding: The Carson Creek Specific Plan is consistent with Policy 2.1.4.4 because it includes provisions for or opportunities to establish the design features listed in Policy 2.1.4.4.

Policy 2.1.4.5

To achieve a desired mix of uses within a planned community and emphasize the goal of improving the County's employment base, the following target acreage percentages shall be incorporated into the specific plan:

Residential	40-50 %
Commercial/Office	1-15 %
Research & Development/Industrial	0-15 %
Public Facilities/Parks/Open Space	20+ %

The actual mixture of uses will be refined and defined through the Specific Plan process. Where the mix of uses within a proposed planned community is substantially consistent with these target percentages, a specific plan for such a community may be approved without a General Plan amendment.

Finding: The mix of uses designated in the Specific Plan is substantially consistent with the targeted percentages as required. The residential percentage is 66 percent, Research and Development is 7 percent, Commercial is 2 percent, and Public Facilities/Open Space/Parks is 25 percent (31.3 acres, 4.3 percent, of schools are included in the residential category).

Policy 2.1.4.6

In areas designated Planned Community overlay, there will be no further land division until such time as the County adopts a specific plan. Development pursuant to the underlying land use designation shall not occur unless there is a General Plan amendment to remove the Planned Community designation.

Finding: The project is consistent with Policy 2.1.4.6 since no land division will occur until the zoning, land use designations, and development standards of the Carson Creek Specific Plan are adopted.

Policy 2.1.4.9

Parcels within a Planned Community shall not be subdivided below 40 acres until such time as a specific plan or other planning document specified herein is adopted by the County.

Finding: The Carson Creek Specific Plan is consistent with Policy 2.1.4.9 because the certification of the EIR and adoption of the Carson Creek Specific Plan, as proposed, would then allow the approval of a subdivision map for the project, consistent with this policy.

Policy 2.2.5.4

All development applications which have the potential to create 50 parcels or more shall require the application of the Planned Development combining zone district....

Finding: The Specific Plan is consistent with Policy 2.2.5.4 because the Specific Plan is a zoning ordinance permit and supersedes the need for the Planned Development combining zone district.

Policy 2.2.2.6

The purpose of the *Planned Community* (PC) overlay designation is to supersede underlying land use designations, as set forth in Policy 2.1.4.3 to:

- A. Identify lands suitable for new communities that require a specific plan in accordance with Government Code Sections 65450-65457, and common planning and funding for infrastructure and life cycle costs.
- B. Allow use of modern planning and development techniques, effect more efficient utilization of land, and to allow flexibility of development;
- C. Aid in the reduction of development costs, and provide for a combination of different land uses which compliment each other but which may not in all aspects conform to the existing zoning regulations;
- D. Encourage a more efficient use of public and/or private services;

- E. Place the primary emphasis on clustering intensive land uses to minimize impact on various natural and man-made resources, minimize public health concerns, minimize aesthetic concerns, and provide for the creation of open space lands and other community land uses.
- F. Provide for public benefit.

Finding: The Carson Creek Specific Plan is consistent with Policy 2.2.2.6 in that the plan proposes a mix of land uses which complement and support each other. The location and intensity of land uses recognize and respect the natural features of the site by clustering intensive land uses such as commercial and higher density residential units. The project design minimizes the impact of development on the site's natural resources and allows for the creation of open space areas and other uses which provide public benefit for the Carson Creek community.

Policy 2.2.5.8

The Neighborhood Service zoning district shall be permitted in all residential designations within Community Regions, Rural Centers, Medium Density and High Density Platted Lands. Uses within the Neighborhood Service Zone District should provide a direct service to the family and/or community, and may include educational facilities, day care services, places of worship, lodges, community or group meeting centers, fire stations, libraries, other public facilities, recreational facilities, and commercial uses.

Finding: The Carson Creek Specific Plan is consistent with Policy 2.2.5.8 in that the plan will allow the types of facilities included in the Neighborhood Services zones listed within the areas designated as residential in the Carson Creek Specific Plan.

Policy 2.2.5.9

The County recognizes the need to allow for certain types of extended family support services and institutional uses in areas in which residential uses are allowed on the General Plan Land Use Map. This policy recognizes the need to provide for support services to both the urban and rural residential areas throughout the County. While allowing for the establishment of such support services, this policy will protect the residential areas by only allowing the establishment of such support services with a special use permit. This will require a finding that the establishment of the uses will have no significant adverse effect on surrounding property or the permitted uses thereof.

Finding: The Carson Creek Specific Plan allows by special use permit those uses which are recognized to provide a direct service to the family and/or community including educational institutions, day care services, places of worship, cemeteries, community and group meeting centers, fire stations, libraries, public utility facilities, other public facilities, and recreational facilities.

Policy 2.5.1.1

Low intensity land uses shall be incorporated into new development projects to provide for the physical and visual separation of communities. Low intensity land uses may include any one or a combination of the following: parks and natural open space areas, special setbacks, parkways, landscaped roadway buffers, natural landscape features and transitional development densities.

Policy 2.5.1.2

Greenbelts or other means of community separation shall be included within a specific plan and may include any of the following: preserved open space, parks, agricultural districts, wildlife habitat, rare plant preserves, riparian corridors and designated Natural Resource areas.

Finding: The Carson Creek Specific Plan is consistent with Policies 2.5.1.1 and 2.5.1.2 in that separation from adjacent land uses is achieved through a combination of landscape areas and transitional development densities. A 30-foot-wide landscape buffer, together with single family densities provide for separation along the El Dorado/Sacramento County boundary on the western perimeter of the site. These same features provide separation from the existing residential area north of White Rock Road. Similarly, the landscape buffer, the mix of land uses and the densities adjacent to the El Dorado Hills Business Park on the eastern perimeter provide an effective separation from the business park.

Policy 2.5.2.1

Neighborhood commercial centers shall be oriented to serve the needs of the surrounding area, grouped as a clustered, contiguous center where possible, and should incorporate but not be limited to the following design concepts as further defined in the Zoning Ordinance:

- A. Maximum first floor building size should be sized to be suitable for the site;
- B. Residential use on second story;
- C. No outdoor sales or automotive repair facilities;
- D. Reduced setback with landscaping and walkways;
- E. Interior parking, or the use of parking structure;
- F. Bicycle access with safe and convenient bicycle storage area;
- G. On-street parking to reduce the amount of on-site parking;
- H. Community bulletin boards/computer kiosks;
- I. Outdoor artwork, statues, etc. in prominent places; and
- J. Pedestrian circulation to adjacent commercial centers.

Finding: The Carson Creek Specific Plan is consistent with Policy 2.5.2.1 because the commercial areas are located adjacent to community entries and are intended to serve the shopping and service needs of the Carson Creek community and surrounding areas. The design concepts of this policy are reflected in the commercial development standards of the Specific Plan.

Policy 2.5.2.3

New community shopping centers should also contain the applicable design features of Policy 2.5.2.1.

Finding: The Carson Creek Specific Plan is consistent with Policy 2.5.2.3 since the design features for commercial lands in the Carson Creek Specific Plan include the applicable design features.

Policy 3.2.1.1

Development proposals shall be reviewed to determine if significant traffic impacts or reductions in Level of Service (LOS) per Policy 3.5.1.1 will occur to existing public roads as a result of the proposed project. Project proponents shall be required to make necessary road improvements or to pay a traffic impact mitigation fee (TIM), or some combination of both, to accommodate increases in traffic caused by the proposed project.

Policy 3.2.1.2

Development review shall consider the adequacy of public and private roads for emergency vehicle access and for off-site traffic impacts. Inadequate roads shall be improved through such measures as "area of benefit" districts, fees, project approval conditions, assessment districts or other means.

Policy 3.2.1.3

All developments may be required to either improve street frontage, dedicate land for road right-of-way, provide road improvements, enter into a street improvement agreement, pay fees, provide appropriate mitigation for alternative transportation modes, or provide a combination of the above as may be appropriate for the project.

Finding: The Carson Creek Specific Plan is consistent with Policies 3.2.1.1, 3.2.1.2, and 3.2.1.3 since the Specific Plan Circulation Plan sets forth the location and design of the internal roadway system, streets and roads will be constructed concurrently with the development of the Plan area, and further review of traffic impacts will result as part of each tentative map review.

Policy 3.5.1.6

The County recognizes that Level of Service is a quantifiable factor which measures the volume of vehicles to the capacity of the roadway at a peak hour or peak period of traffic. The County recognizes that in developing its circulation system it has to consider such factors as topographical constraints, right-of-way considerations, and other jurisdictions' plans for adjoining road systems. The County recognizes that in certain situations it is not in the County's overall interest to develop a circulation system which is designed for a peak hour or peak period of traffic. These situations may include, but are not limited to, circumstances where the need to promote overall economic development or the need to protect the County's rural atmosphere, which is enhanced by two-lane roads, may outweigh the need to provide a circulation system based upon a peak hour or peak period of traffic. The County therefore recognizes that under certain

circumstances a Level of Service below that referenced in Policy 3.5.1.1 may be acceptable. The County makes the finding that the road segments listed below are acceptable at a lower Level of Service. While making this finding, the County will attempt to improve these road segments to a higher Level of Service by pursuing Goals 3.9 and 3.10 of the Circulation Element of the General Plan.

Policy 3.5.1.7

In order to ensure that Level of Service below that identified in Policy 3.5.1.1 occurs only during peak periods and not during more extended periods, the County will require project-specific traffic studies before granting discretionary approvals for projects that will add substantial amounts of traffic to the circulation system. This policy will apply even to projects that do not require General Plan amendments. If such traffic studies show that the projects in question will create, or significantly contribute to, non-peak period traffic congestion below the Level of Service specified in Policy 3.5.1.1, the County shall either condition such projects to eliminate any such impacts or will deny such projects until such time as the circulation system can absorb the traffic from the project without suffering non-peak period traffic congestion below the Level of Service specified in Policy 3.5.1.1. Alternatively, the County may approve the projects in question if such projects contribute their fair share of money or land toward planned future transportation improvements that can feasibly be constructed within a reasonably foreseeable time frame and will result in the ultimate avoidance of non-peak period traffic congestion below the Level of Service specified in Policy 3.5.1.1.

Finding: The Carson Creek Specific Plan is consistent with Policies 3.5.1.6 and 3.5.1.7 because the cumulative traffic impact is considered to be a significant unavoidable impact as described in Impact 7.2 of the Draft EIR. Traffic impacts for the Carson Creek project are otherwise fully mitigated as described in Section 4.5 of the Draft EIR. Carson Creek is also consistent with Policy 3.5.1.7 since a project-specific traffic study has been conducted and all feasible mitigation measures are recommended for incorporation into the project.

Policy 3.9.1.1

Transportation alternatives, which are cost-effective, shall be strongly encouraged. A public transit system linking employment, shopping areas, and schools with residential areas should be encouraged.

Policy 3.9.1.2

The County in cooperation with the El Dorado County Transportation Commission (EDCTC) shall cooperate with providers of transit, commercial bus, and taxi services in the planning and implementation of new or improved service.

Policy 3.9.1.3

The County shall continue to work with employers, residents, and other agencies to encourage increased carpools, vanpools, and park and ride lots.

Policy 3.9.1.5

Project review shall take into account all forms of transportation and circulation systems, including rail, bicycle trails, pedestrian paths, equestrian easements, off-site and on-site parking where appropriate.

Finding: The Carson Creek Specific Plan is consistent with Policies 3.9.1.1, 3.9.1.2, 3.9.1.3, and 3.9.1.5 since the plan is designed to accommodate a variety of transportation modes. The opportunity for a mass transit station and park and ride lot is provided adjacent to Payen Road and the potential light rail alignment along the existing Southern Pacific Right-of-Way. In addition, the extensive internal trail system will physically link the various land uses so that residents can walk or bike from their home to school, shopping or parks. On street parking will be allowed on residential streets.

Policy 3.9.1.7

New communities shall be designed to incorporate all of the measures under Goals 9 and 10 and provide for a greater mixture of land uses in closer proximity to better accommodate for alternative transportation modes.

Finding: The Carson Creek Specific Plan is consistent with Policy 3.9.1.7 because the plan incorporates all of the measures under Goals 9 and 10 by providing a mix of land uses in close proximity and linking them by means of an internal trail system, encouraging pedestrian and bicycle transit. The local convenience commercial areas have been located to allow pedestrian access from the adjacent residential areas along White Rock Road and the business park along the eastern perimeter of the site. Higher density residential uses have been located with convenient access to the potential mass transit station.

Policy 4.1.1.3

Specific plans need to address and provide for affordable housing.

Finding: The Carson Creek Specific Plan is consistent with Policy 4.1.1.3 by providing a range of densities and a variety of types of housing promoting the development of housing affordable to households of differing types, sizes, and income levels.

Policy 4.2.4.1

Boundaries delineating the location of Planned Development areas (PD), for new Communities, shall be shown on the General Plan Land Use Map. It is intended that these PD areas will contain a variety of high-intensity residential uses and housing types. Planned Developments shall be planned and developed through the specific plan process to ensure a variety of housing types and mixed uses.

Finding: The Carson creek Specific Plan is consistent with Policy 4.2.4.1 in that the plan provides for a wide range of housing types at various densities to meet the housing needs of diverse household types. The plan can accommodate up to 2,701 housing units,

ranging from single family detached to apartments. Residential may be incorporated into spaces above ground floor retail in all commercial areas. The mix of housing types and densities will provide moderately priced housing not now available to meet the needs of employees working in the adjacent business park and others who cannot afford other housing in the area. The development standards and design elements will allow flexibility in design and product type to reduce housing costs.

Policy 5.1.2.3

New development shall be required to pay its proportionate share of the costs of infrastructure improvements required to serve the project to the extent permitted by State Law. Lack of available public or private services or adequate infrastructure to serve the project which cannot be satisfactorily mitigated shall be grounds for denial of any project or cause for the reduction of size, density, and/or intensity otherwise indicated on the General Plan Land Use Map to the extent allowed by State Law.

Finding: The Carson Creek Specific Plan is consistent with Policy 5.1.2.3 since the Carson Creek Specific Plan includes a phasing plan and a financing plan which will ensure that needed infrastructure improvements are in place to serve the development as each phase proceeds, and that the new development pays a share of the costs of such improvements. The phasing will become effective and further defined through tentative map review and approval. The financing plan will be further specified in a development agreement.

Policy 5.3.1.1

High-density and multi-family residential, commercial, and industrial projects shall be required to connect to public wastewater collection facilities as a condition of approval except in Rural Centers.

Finding: The Carson Creek Specific Plan is consistent with Policy 5.3.1.1 since the plan area will be connected to public wastewater collection and treatment facilities. The El Dorado Hills Sewage Treatment Plant is located less than one-half mile to the east of the site, across Latrobe Road. A 14-inch sewer main follows the corridor of Carson Creek to the project boundary and a number of lateral lines surround the property. Pump stations are located along the edges of the site.

Policy 5.4.1.1

Require storm drainage systems for discretionary development that protect public health and safety, preserve natural resources, prevent erosion of adjacent and downstream lands, prevent the increase in potential for flood hazard or damage on either adjacent, upstream or downstream properties, and minimize impacts to existing facilities, meet the National Pollution Discharge Elimination System (NPDES) requirements, and preserve natural resources such as wetlands and riparian areas.

Finding: The Carson Creek Specific Plan is consistent with Policy 5.4.1.1 because the project site will accommodate storm drainage, stormwater runoff, and natural flooding using storm drainage lines, natural channels, detention ponds, culverts, and bridges. Detention ponds will be landscaped with native plants and trees to create a natural look.

Policy 5.4.1.2

Discretionary development shall protect natural drainage patterns, minimize erosion, and ensure existing facilities are not adversely impacted, while retaining the aesthetic qualities of the drainage way.

Finding: The Carson Creek Specific Plan is consistent with Policy 5.4.1.2 because it preserves much of Carson Creek and its tributaries in open space, thus preserving the natural drainage patterns.

Policy 5.5.2.1

Concurrent with the approval of new development, evidence will be required that capacity exists within the solid waste system for the processing, recycling, transformation, and disposal of solid waste.

Finding: The Carson Creek Specific Plan is consistent with Policy 5.5.2.1 because solid waste services will be provided by El Dorado Disposal.

Policy 5.7.1.1

Prior to approval of new development, the applicant will be required to demonstrate that adequate emergency water supply, storage, and conveyance facilities for fire protection either are or will be provided concurrent with development.

Finding: The Carson Creek Specific Plan is consistent with Policy 5.7.1.1 because a water plan has been prepared as part of this Specific Plan, showing how water service will be provided for the area.

Policy 5.7.4.1

Prior to approval of new development, the applicant shall be required to demonstrate that adequate medical emergency services are available and that adequate emergency vehicle access will be provided concurrent with development.

Finding: The Carson Creek Specific Plan is consistent with Policy 5.7.4.1 because street design will conform to County standards for emergency vehicle access.

Policy 5.8.1.1

School districts affected by proposed development shall be relied on to evaluate the development's adverse impacts on school facilities or the demand therefor, no development that will result in such impacts shall be approved unless:

1. The applicant and the appropriate school district(s) have entered into a written agreement regarding the mitigation of impacts to school facilities; or
2. The impacts to school facilities resulting from the development are mitigated, through conditions of approval, to the greatest extent allowed by State Law.

The County shall condition or deny a request for a quasi-legislative approval, including any such request necessary for a proposed development, if the development impact fees allowed by State law for development projects would not result in the full avoidance or reduction to an acceptable level of the impacts of the approval or development on school facilities or the demand therefor, or the County shall condition or deny such a request, unless the applicant or developer enters into a development agreement with the County requiring that the applicant or developer enter into a written agreement with the appropriate school district(s) for the mitigation of impacts to school facilities or the demand therefor.

Finding: The Carson Creek Specific Plan is consistent with Policies 5.8.1.1 and 5.8.2.4 because the Specific Plan provides a 10-acre elementary school site and a 20-acre middle school site to serve new residents and surrounding communities, and although a written agreement has not yet been entered into, the Specific Plan developers will be required to enter into an agreement prior to issuance of building permits.

Policy 5.8.1.3

Whenever feasible, develop joint (shared) school facilities, recreational facilities, and educational and service programs between school districts and other public agencies.

Finding: The Carson Creek Specific Plan is consistent with Policy 5.8.1.3 because the elementary school is located adjacent to a park to allow for joint use of facilities.

Policy 5.8.2.1

Where feasible, elementary schools shall be centrally located within the communities they serve.

Policy 5.8.2.4

Specific plans for Planned Communities shall identify and set aside land for new schools approvable under Title 5 Standards to serve new communities. A funding mechanism for site acquisition and construction shall be provided. School site dedication shall be considered as part of the funding mechanism.

Finding: The Carson Creek Specific Plan is consistent with Policies 5.8.2.1 and 5.8.2.4 because the Specific Plan identifies an elementary school and a middle school within the project and is required to enter into an agreement with the school district prior to issuance of building permits.

Policy 6.2.3.1

As a requirement for approving new development, the applicant must demonstrate that, concurrent with development, adequate emergency water flow, fire access and fire fighting personnel and equipment will be provided in accordance with applicable State and local fire district standards.

Finding: The Carson Creek Specific Plan is consistent with Policy 6.2.3.1 because a water plan has been prepared as part of this Specific Plan, showing how water service will be provided for the area. A planned fire station in the El Dorado Hills Business Park would serve the Carson Creek community.

Policy 6.2.3.2

As a requirement of new development, the applicant must demonstrate that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.

Policy 6.7.4.1

Reduce automobile dependency by permitting mixed land use patterns which locate services such as banks, child care facilities, schools, shopping centers and restaurants in close proximity to employment centers and residential neighborhoods.

Policy 6.7.4.2

Promote the development of new residential uses within walking or bicycling distance to the County's larger employment centers.

Policy 6.7.4.3

New development on large tracts of undeveloped land near the rail corridor shall, to the extent practical, be transit supportive with high density or intensity of use.

Policy 6.7.4.4

All discretionary development applications shall be reviewed to determine the need for pedestrian/bike paths connecting to adjacent development and to common service facilities (e.g., clustered mail boxes, bus stops, etc.).

Policy 6.7.4.5

Specific plans submitted for the development of lands designated Planned Communities (-PC) on the General Plan Land Use Map shall provide for the implementation of all policies contained under Objective 6.7.4 herein.

Finding: The Carson Creek Specific Plan is consistent with Policies 6.7.4.1 through 6.7.4.5 because the plan locates services including schools and shopping in proximity to residential and employment areas to allow the use of alternative transportation modes. The plan is designed to serve the residential and service needs of the employees of the business park. The plan provides pedestrian and bicycle access between the business parks and the service providing areas of the site. Higher density residential and higher

intensity commercial uses are located around the commercial areas which are linked to a potential mass transit station adjacent to the existing Southern Pacific Right-of-Way.

Policy 7.3.3.1

A site-specific wetland investigation shall be required on all development projects within those areas identified as wetlands on the Important Biological Resources Map. If it is determined by the presence of hydrophilic plants and wetland hydrology that a wetland may exist in an area not identified on the map, a site-specific investigation shall also be required. This study shall be conducted using the Corps of Engineers Wetland Delineation Program and Manual. The study shall determine the boundaries of all wetland areas that can be classified wetlands under the Corps of Engineers' definition.

Policy 7.3.3.2

All feasible project modification shall be considered to avoid wetland disturbance. Direct or indirect losses of wetlands and/or riparian vegetation associated with discretionary application review shall be compensated by replacement, rehabilitation, or wetlands habitat on a no-net-loss basis. Compensation may result in provision of wetlands habitat on- or off-site at a minimum of a 1:1 ratio as associated with the disturbed resource. A wetland study and mitigation monitoring program shall be submitted to the County and concerned State and federal agencies for approval prior to permit approval.

Finding: The Carson Creek Specific Plan is consistent with Policies 7.3.3.1 and 7.3.3.2 because a wetlands delineation has been prepared for the Carson Creek Specific Plan. Wetlands will be preserved, restored, and enhanced as natural open space. Where filling wetlands is unavoidable, mitigation will take place subject to a mitigation plan approved by the Federal and State agencies with jurisdiction. A preliminary wetlands delineation has been prepared for the Euer Ranch portion of the site, indicating that an additional 3.5 acres of wetlands are on the project.

Policy 7.3.4.1

Natural watercourses shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site without disturbance.

Finding: The Carson Creek Specific Plan is consistent with Policy 7.3.4.1: Carson Creek and its tributaries have been integrated into the plan to enhance the aesthetic and natural character of the site. A natural open space network has been created along the creek and its tributaries connecting residential areas to parks, schools, retail, and employment opportunities.

Policy 7.3.4.2

Modification of natural stream beds and flow shall be regulated to ensure that adequate mitigation measures are utilized.

Finding: The Carson Creek Specific Plan is consistent with Policy 7.3.4.2 because the natural channel of Carson Creek will be preserved and a riparian corridor will be

established to connect drainageways and open space areas with parks and provide habitat for a broad range of plants and animals.

Policy 7.5.1.3

Cultural resource studies shall be conducted prior to approval of discretionary projects. Studies may include, but are not limited to, record searches through the North Central Information Center at California State University, Sacramento, field surveys, subsurface testing and/or salvage excavations. The avoidance and protection of sites shall be encouraged.

Finding: The Carson Creek Specific Plan is consistent with Policy 7.5.1.3 because not only was a records search performed by the Archaeological Information Center at CSUS, but a cultural resource survey was conducted on the site as referenced in the project EIR.

Policy 8.1.4.1

The County Agricultural Commission shall review all discretionary development applications and the location of proposed public facilities involving agricultural district and Williamson Act Contract land, or lands adjacent to such lands, and shall make recommendations to the reviewing authority. Before granting approval, a determination shall be made by the approving authority that the proposed use:

- A. Will not intensify existing conflicts or add new conflicts between adjacent residential areas and agricultural activities; and
- B. Will not create an island effect wherein agricultural lands located between the project site and other non-agricultural lands will be negatively affected; and
- C. Will not significantly reduce or destroy the buffering effect of existing large parcel sizes adjacent to agricultural lands.

Finding: The Carson Creek Specific Plan, EIR, and Phase 1 tentative map have all been reviewed by the Agricultural Commission. The Commission determined that fencing and other buffering conditions could be added to the project to enable findings A, B, and C to be made.

Policy 9.1.1.2

Neighborhood parks shall be primarily focused on serving children's walk-to or bike-to recreation needs. When possible, neighborhood parks should be adjacent to schools. Neighborhood parks are generally 2 to 10 acres in size and may include a playground, tot lot, turf areas, and picnic tables.

Finding: The Carson Creek Specific Plan is consistent with Policy 9.1.1.2 because the plan provides for a neighborhood park adjacent to the elementary school site.

Policy 9.1.1.3

Community parks and recreation facilities shall provide a focal point and gathering place for the larger community. Community parks are generally 10–44 acres in size, are for use by all sectors and age groups, and may include multi-purpose fields, ballfields, group picnic areas, playground tot lot, multi-purpose hardcourts, swimming courts, tennis courts, and a community center.

Finding: The Carson Creek Specific Plan is consistent with Policy 9.1.1.3 because a Community Park and Regional Park are located within the project. Accessible from surrounding single family neighborhoods, these parks will provide playing fields for sports such as soccer, baseball, and softball.

Policy 9.1.1.5

Parkland dedicated under the Quimby Act must be suitable for active recreation uses and:

- A. shall have a maximum average slope of 10 percent;
- B. shall have sufficient access for a community or neighborhood park; and
- C. shall not contain significant constraints that would render the site unsuitable for development.

Finding: The Carson Creek Specific Plan is consistent with Policy 9.1.1.5 because the parks provided in this plan meet the criteria of this policy, since nearly all land in the Carson Creek area has less than a 10 percent slope, will have adequate access by road and trails, and will not be located in wetland areas.

Policy 9.1.1.6

The primary responsibility of the County as a recreation provider shall be the establishment and provision of a regional park system to serve the residents of, and visitors to, the County.

Finding: The Carson Creek Specific Plan is consistent with Policy 9.1.1.6 because the Carson Creek Specific Plan provides a location for a regional park. The park site, is located an appropriate distance from planned residential areas to permit unobtrusive lighting for nighttime activity. The park is accessible to the residents of Carson Creek and to citizens of El Dorado County.

Policy 9.1.2.5

All discretionary applications may be conditioned to prove an irrevocable offer of a trail easement dedication and construction of trails as designated on the *Trails Master Plan*, provided it can be shown that such trails will serve as loops and/or links to designated or existing trails, existing or proposed schools, public parks and open space areas, and existing or proposed public transit nodes (e.g., bus stops, park and ride lots). Parkland dedication credit shall be given where applicable for provision of land and trail improvements that aid in implementing the *Trails Master Plan*.

Finding: The Carson Creek Specific Plan is consistent with Policy 9.1.2.5 because a trail system has been designed in the Specific Plan to loop and link to schools, parks, open space areas, and proposed public transit nodes.

Policy 9.1.3.1

Linear parks and trails may be incorporated along rivers, creeks, and streams, wherever possible.

Finding: The Carson Creek Specific Plan is consistent with Policy 9.1.3.1 because the plan establishes a linear parkway along Carson Creek and its tributaries. The parkway corridor includes a pedestrian/bicycle trail connecting residential, park, and school areas.

Policy 9.2.2.2

Require that new development projects of 50 or more lots provide for the local recreation needs (e.g., primarily neighborhood parks) of its residents and provide mechanisms (e.g., homeowners associations, or benefit assessment districts) for the ongoing development and maintenance needs of these facilities.

Finding: The Carson Creek Specific Plan is consistent with Policy 9.2.2.2 because the Quimby Act requirements will be met through the dedication of land and the payment of in-lieu fees with the review and approval of tentative maps.

Policy 10.1.9.1

The County shall use appropriate land use, zoning, and permit streamlining strategies, and other financial incentives to provide for and encourage housing types that are compatible with wage structures associated with existing and forecasted employment.

Policy 10.1.9.2

Encourage specific plans and large planned developments in Community Regions and Rural Centers to include a mix of housing types and relate it to local wage structures to achieve balance with existing and forecasted resident household needs.

Policy 10.1.9.3:

The County shall actively promote job generating land uses while de-emphasizing residential development unless it is tied to a strategy that is necessary to attract job generating land uses.

Finding: The Carson Creek Specific Plan is consistent with Policies 10.1.9.1, 10.1.9.2 and 10.1.9.3 because it provides a mix of housing types that appears compatible with the adjacent El Dorado Hills Business Park. The future residential development may help attract more research and development business by providing housing for workers in close proximity to employment centers, like the existing El Dorado Hills Business Park.

Policy 10.2.1.3

Require that all costs of upgrading and/or constructing civic, public and community facilities, and basic infrastructure exclusively needed to serve new development be the responsibility of new development and not existing residents.

Finding: The Carson Creek Specific Plan is consistent with Policy 10.2.1.3 because the project developer is responsible to fund and provide for all on-site facilities and will contribute a fair share fee towards other impacts.

Policy 10.2.1.4

Require new discretionary development to pay its fair share of the costs of all civic and public and community facilities it utilizes based upon the demand for these facilities which can be attributed to new development.

Policy 10.2.1.5

A public facilities and services financing plan that assures that costs burdens of any civic, public, and community facilities, infrastructure, ongoing services, including operations and maintenance necessitated by a development proposal, as defined below, are adequately financed to assure no net cost burden to existing residents shall be submitted with the following development applications:

- A. Specific plans; and
- B. All residential, commercial, and industrial projects located within a Community Region or Rural Center which exceed the following thresholds:
 - 1. Residential: 50 units.
 - 2. Commercial: 20 acres or 100,000 square feet.
 - 3. Industrial: 20 acres or 250,000 square feet.

Finding: The Carson Creek Specific Plan is consistent with Policies 10.2.1.4 and 10.2.1.5 because the Specific Plan contains a generalized financing program (page 74 of the Specific Plan) and Section 5 of the Draft EIR contains a fiscal analysis consistent with the above policies.

SP94-02

Conditions - As modified by the Board of Supervisors on September 24, 1996

1. Agricultural fencing per County Resolution No. 98A-90 standards shall be required as a condition of approval of tentative maps along the southern boundary of Carson Creek, along the Southern Pacific Railroad Right-of-Way, and along the Sacramento/El Dorado County line, in any location not built with a 6-foot solid fence. Fencing is required to be maintained by the property owners or El Dorado Hills Community Services District, and shall be required in the CC&Rs.
2. As a condition of approval of all tentative maps, a minimum 6-foot-tall wood or other solid fence shall be required to be constructed for all parcels adjacent to the boundaries of the Specific Plan.
3. An open space management plan shall be prepared by the developer, subject to review and approval by the El Dorado Hills CSD. The plan will include wild fire management plans for the open space.
4. The development of the parcels within an Agricultural Preserve shall not occur until said parcels roll out (or are approved for immediate cancellation) of the Agricultural Preserve. To protect the potential agricultural use existing in Phase 2, from development in Phase 1, a 400-foot setback from Phase 2 shall be maintained for all residential units while land in Phase 2 is within an Agricultural Preserve. The buffer may be reduced or eliminated by the Agricultural Commission, upon presentation to the Agricultural Commission that the buffer is unnecessary or is substantially complied with in another fashion.
5. Prior to approval of tentative maps for Phase 2, the temporary or interim uses for the designated potential transit station/mass transit lot shall be determined.
6. Annexation into required districts shall be a condition of approval of tentative maps.
 - A. The developer shall pursue annexation of the entire Specific Plan area into the El Dorado Hills Community Services District (EDHCSD); however, in the event annexation to the EDHCSD is not approved by the appropriate public agencies, an alternative method of providing necessary services will be established prior to County approval of any final map. (Note: This statement is incorporated by reference and is/will be applicable to all subsequent conditions regarding required approvals by the EDHCSD.
 - B. Conditions, Covenants, and Restrictions (CC&Rs) and design guidelines for the Carson Creek Specific Plan and all tentative maps will be submitted to the EDHCSD for review and approval.

C. An Open Space Management Plan shall be prepared by the developer subject to review and approval by the EDHCSD and will include a funding mechanism for on-going maintenance of all open space. A Wild Fire Management Plan, subject to approval by appropriate agencies, will also be included as a component of this document.

7. A financing mechanism or mechanisms for parks, open space, landscaping, and schools shall be determined prior to recordation of the final map. Prior to issuance of building permits the financing mechanisms shall be in place (from Section 5.2 of the Carson Creek Specific Plan).

8. Parkland dedication requirements shall be calculated based on the standards and factors for development within the El Dorado Hills Community Service District (EDHCSD). An irrevocable offer of dedication (IOD) shall be made to the EDHCSD as a condition of approval of tentative maps within the Specific Plan area. Prior to County approval of any final map, the developer shall show evidence of a recorded agreement with the EDHCSD for the location, size, park improvements (including water meters and sewer hook ups), maintenance, and timing of dedication and acceptance of parks throughout the Specific Plan area.

The developer will be required to provide a Phase I environmental assessment of land to be dedicated to a public agency.

9. A financing mechanism or mechanisms, such as a Landscaping and Lighting District (LLAD) for development and maintenance of parks, and for maintenance of open space, landscaping, lighting, fencing, trails, walkways, corridors, signage, sound walls, entry monuments, and other common or public areas shall be determined prior to approval of the final map. Improvement plans for the above referenced items will be submitted to the El Dorado Hills Community Services District (EDHCSD) for approval, and the financing mechanisms shall be in place prior to issuance of building permits (Section 5.2 of the Carson Creek Specific Plan). Upon annexation of this project into the EDHCSD, the Carson Creek Specific Plan area shall be subject to the adopted park impact fee imposed for new development within the EDHCSD boundary and will be paid by the developer at the time a building permit is issued.

10. As a condition of approval of all tentative maps, a wood or other solid fence, at least six feet in height, will be constructed by the developer for all residential lots adjacent to the boundaries of the Specific Plan area.

Agricultural fencing per County Resolution No. 98A-90 shall be required along the Sacramento/El Dorado County line in any location not adjacent to a residential lot/parcel.

The CC&Rs will specify the fence design approval process. Fence design will be as approved by the El Dorado Hills Community Services District and the appropriate design review committee.

The developer will provide a funding mechanism, such as a homeowners association or a Landscaping and Lighting District, for the maintenance of fencing adjacent to open space.

11. The developer will be required to provide water meters for all residential lots, parks, landscaped corridors, and open space parcels. (Cost of water meters for parks may or may not be a credit to developer pending negotiations with EDHCSD Board of Directors).
12. All the mitigation measures of the Carson Creek Specific Plan EIR, as revised in August 1996, except 4.14-1b, 4.14-2 (formation of Sheriff's Department Assessment District), 4.5-7a, 7.2c (requiring separate agreement with Sacramento County), and 5-1a, b, and c which were optional fiscal mitigation, are incorporated as conditions of approval, and the mitigation monitoring program is incorporated into the Specific Plan.
13. A final Carson Creek Specific Plan document shall be submitted incorporating all the changes, conditions, mitigation measures, and mitigation monitoring plan included herein within 60 days of approval.
14. The filing of tentative map and recording of the final map will fix zoning.
15. Rezoning of the AE lands will not become effective until the subject land rolls out from Williamson Act or is approved for immediate cancellation and fulfills all requirements thereof.

From EIR:

4.3-2: White Rock Road at Manchester Lane

- a) Use a majority of native plant species in the proposed 30-foot landscape corridor along White Rock Road to maximize a compatible visual relationship with residential uses to the north, and with the surrounding natural terrain and vegetation, subject to review and approval of the El Dorado Hills Community Services District.
- b) Require use of natural colored roof materials in project development to maximize consistency with the surrounding natural environment to minimize stark visual contrasts.
- c) Use natural components in fencing materials (e.g., wood, stone, brick) that would be consistent with residential uses to the north, and would enhance visual compatibility with the natural surroundings of the site.
- d) A variety of fast-growing shrubs and trees will be provided in the 30-foot landscape easement to provide effective screening between the Carson Creek project and surrounding uses prior to occupancy of project residences.

4.3-5: Golden Foothills Parkway at Carson Creek

- a) Use native plant species as the majority of those planted in the proposed 30-foot greenbelt to maximize a compatible visual relationship with the surrounding natural terrain and vegetation.
- b) Require use of natural colored roof materials in project developments to maximize consistency with the surrounding natural environment and to minimize stark visual contrasts.
- c) Use natural components in fencing materials (e.g., wood, stone, brick) in developments along Carson Creek to enhance visual compatibility with the natural surroundings of the site.
- d) Use natural components in pedestrian trail features (e.g., fences, trail materials) to enhance visual compatibility with the natural surroundings of the site.
- e) Retain unobstructed views of Carson Creek from locations along Golden Foothills Parkway.

4.5-1: Daily Traffic Volume (Latrobe Road Between U.S. Highway 50 and White Rock Road)

The project developer shall be responsible for their "fair-share" cost of widening Latrobe Road from two lanes to six lanes with a median from White Rock Road to the U.S. Highway 50 eastbound ramps. These improvement projects are included in the El Dorado Hills RIF; therefore, the project developer shall pay the RIF fee concurrently with the issuance of building permits. Implementation of this mitigation measure would improve the daily level of service on Latrobe Road to LOS B.

4.5-5: The project developer shall be responsible for contributing their "fair-share" of the cost to reconstruct the El Dorado Hills Boulevard/Latrobe Road interchange and widen U.S. Highway 50 to six lanes as shown in Exhibit 7-1. Reconstruction of the interchange is included in the RIF; therefore, the project developer shall pay the RIF fee prior to the issuance of building permits. A separate impact fee program has been established to fund the mainline widening of U.S. Highway 50 through the western portion of El Dorado County. A fair-share contribution of this fee shall also be paid by the project developer prior to the issuance of building permits. Implementation of this mitigation measure will improve the ramp intersection and ramp junction levels of service as follows:

- El Dorado Hills Boulevard/U.S. Highway 50 westbound ramps intersection—LOS from F to B during the a.m. peak hour and from E to C during the p.m. peak hour;
- Latrobe Road/U.S. Highway 50 eastbound ramps intersection LOS from F to B during the a.m. peak hour and from F to B during the p.m. peak hour;

- U.S. Highway 50 eastbound diagonal on-ramp - LOS A during the a.m. peak hour and LOS D during the p.m. peak hour;
- U.S. Highway 50 eastbound loop off-ramp - LOS B during the a.m. peak hour and LOS D during the p.m. peak hour;
- U.S. Highway 50 westbound diagonal on-ramp - LOS C during the a.m. peak hour and LOS B during the p.m. peak hour; and
- U.S. Highway 50 westbound diagonal off-ramp - LOS C during the a.m. peak hour and LOS B during the p.m. peak hour.

Reconstruction of the interchange may also include the addition of an eastbound diagonal off-ramp and westbound loop off-ramp. Both of these new ramps would also operate at LOS D or better during both peak hours.

4.5-6: The following mitigation measures address the four intersections along Latrobe Road that are projected to operate at unacceptable (worse than LOS E) levels of service with buildout of the Specific Plan.

- a) In addition to mitigation measure 4.5-1, the project developer shall be responsible for their "fair-share" cost of signalization and turn lane improvements at the White Rock Road/Latrobe Road intersection as shown on Exhibit X-11 of Appendix B. Implementation of this mitigation measure would improve the White Rock Road/Latrobe Road intersection LOS from F to B during the a.m. peak hour and from F to C during the p.m. peak hour.
- b) The project developer shall construct the signal and turn lane improvements at the Latrobe Road/Golden Foothill Parkway North intersection as shown on Exhibit X-11 of Appendix B. DOT will, at the next update of the RIF, determine the cost of signalization and turn lanes at this intersection and determine the "fair-share" cost of the project developer. The RIF will reimburse the project developer the difference between the cost of the improvements and the project developer's "fair-share" portion. Implementation of this mitigation measure would improve the Latrobe Road/Golden Foothill Parkway North intersection LOS from F to B during the a.m. peak hour and from F to D during the p.m. peak hour. During the review of tentative maps for Specific Plan Phase 2, a traffic study will be required to determine what improvements are required as a result of that phase. If the traffic study indicates that the improvements listed in this mitigation measure are necessary then the developer shall construct the improvement and be entitled to a credit and/or reimbursement for improvements made beyond the subdivisions fair share.
- c) The project developer shall construct the signal and turn lane improvements at the Latrobe Road/Golden Foothill Parkway South intersection as shown on Exhibit X-11 of Appendix B. DOT will, at the next update of the RIF, determine the

cost of signalization and turn lanes at this intersection and determine the "fair-share" cost of the project developer. The RIF will reimburse the project developer the difference between the cost of the improvements and the project developer's "fair-share" portion. Implementation of this mitigation measure would improve the Latrobe Road/Golden Foothill Parkway South intersection LOS from F to B during the a.m. and from F to C during the p.m. peak hours. During the review of tentative maps for Specific Plan Phase 2, a traffic study will be required to determine what improvements are required as a result of that phase. If the traffic study indicates that the improvements listed in this mitigation measure are necessary then the developer shall construct the improvement and be entitled to a credit and/or reimbursement for improvements made beyond the subdivisions fair share.

d) The project developer shall construct the following improvements:

- Modifying turn lanes at the Latrobe Road/Investment Boulevard intersection (see Exhibit X-11 of Appendix B);
- Signalizing the Latrobe Road/Investment Boulevard intersection. DOT will, at the next update of the RIF, determine the cost of signalization and turn lanes at this intersection and determine the "fair-share" cost of the project developer. The RIF will reimburse the project developer the difference between the cost of the improvements and the project developer's "fair-share" portion. Implementation of this mitigation measure would improve the Latrobe Road/Investment Boulevard intersection LOS from F to B during the a.m. and p.m. peak hours.

The Latrobe Road/Investment Boulevard intersection operates at LOS B during the p.m. peak hour with one left-turn lane on the eastbound approach. The left-turn volume is 600 vehicles per hour during the p.m. peak hour. Occasional queuing of vehicles on the left-turn lane could occur on the eastbound approach. The County should monitor the queues and design the left-turn pocket for this movement to accommodate the volumes. If the County decides to provide dual left-turn lanes for this left-turn movement, an additional northbound lane would be required on Latrobe Road between Investment Boulevard and Golden Foothill Parkway South. During the review of tentative maps for Specific Plan Phase 2, a traffic study will be required to determine what improvements are required as a result of that phase. If the traffic study indicates that the improvements listed in this mitigation measure are necessary then the developer shall construct the improvement, and be entitled to a credit and/or reimbursement for improvements made beyond the subdivisions fair share.

4.5-7: The following mitigation measure address the intersection along White Rock Road (west of Latrobe Road) projected to operate at LOS F with buildout of the Specific Plan.

- a) The project developer shall construct signal and turn lane improvements at the White Rock Road/Project Access Road intersection as shown on Exhibit X-11 of Appendix B. DOT will, at the next update of the RIF, determine the cost of signalization and turn lanes at this intersection and determine the "fair-share" cost of the project developer. The RIF will reimburse the project developer the difference between the cost of the improvements and the project developer's "fair-share" portion. Implementation of this mitigation measure would improve the White Rock Road/Project Access Road intersection LOS from D to B during the a.m. peak hour and from F to C during the p.m. peak hour. This intersection was analyzed with lane configuration as shown in Exhibit 4.5-11. For a worst-case scenario, this analysis assumed that all the project traffic traveling on White Rock Road would use this intersection to access the site resulting in a westbound to southbound left-turn volume of approximately 600 vehicles during the p.m. peak hour.

- 4.5-8: The project developer shall be responsible for the construction of a bus turnout and transit shelter along the project site frontage on White Rock Road (including within the landscape corridor) when fixed route transit service or commuter service is extended to serve the project. The project developer shall also reserve the land area for the proposed mass transit station and parking area as identified in the Carson Creek Specific Plan.

Although not required as part of this mitigation measure, the project developer, El Dorado County Department of Transportation, and the El Dorado County Transit Authority should also develop an implementation plan that identifies the construction phasing and financing for the parking area, other transit shelters within the project site, and the mass transit station. This implementation plan should be approved by El Dorado County Department of Transportation and the El Dorado County Transit Authority prior to the issuance of building permits.

- 4.5-9: The project developer shall be responsible for the construction of Class II bike lanes along the project site frontage on White Rock Road prior to the issuance of building permits. Implementation of mitigation measure 4.5-2 includes the construction of Class II bike lanes; therefore, no additional mitigation is necessary.

- 4.6-1: a) The project applicant shall comply with El Dorado County APCD Rule 223 as required by the Air Pollution Control Officer. The project applicant shall prepare a fugitive dust control plan to be submitted to, and approved by, the APCD prior to the commencement of construction. Control measures to be outlined in the plan may include, but are not limited to, the following:

- Application of water or suitable chemicals or other specified covering on materials stockpiles, wrecking activity, excavation, grading, sweeping, clearing of land, solid waste disposal operations, or construction or demolition of buildings or structures (all exposed soil shall be kept visibly moist during grading);

- Installation and use of hoods, fans and filters to enclose, collect, and clean the emissions of dusty materials;
 - Covering or wetting at all times when in motion of open-bodied trucks, trailer or other vehicles transporting materials which create a nuisance by generating particulate matter in areas where the general public has access;
 - Application of asphalt, oil, water or suitable chemicals on dirt roads;
 - Paving of public or commercial parking surfaces;
 - Removal from paved streets and parking surfaces of earth or other material which has a tendency to become airborne;
 - Limiting traffic speeds on all unpaved road surfaces to 15 mph;
 - Suspending all grading operations when wind speeds exceed 20 miles per hour (including instantaneous gusts);
 - Alternate means of control as approved by the Air Pollution Control Officer.
- b) Construction equipment engines shall be maintained in proper operating condition.
- 4.6-2: a) Low emission mobile construction equipment shall be used (e.g., tractor, scraper, dozer, etc.).
- b) Construction equipment engines shall be maintained in proper operating condition.
- c) Low-emission stationary construction equipment shall be used.
- d) A trip reduction plan shall be developed and implemented to achieve 1.5 average vehicle occupancy (AVO) for construction employees.
- e) Construction activity management techniques, such as extending construction period, reducing number of pieces used simultaneously, increasing distance between emission sources, reducing or changing hours of construction, and scheduling activity during off-peak hours shall be developed and implemented.
- f) The project applicant shall comply with El Dorado County APCD Rule 224.
- g) The project applicant shall comply with El Dorado County APCD Rule 215.

4.6-3: a)

The applicant shall incorporate energy-saving design features into future levels of project implementation as feasible and appropriate. The feasibility and appropriateness of each measure can best be determined at future, more-detailed levels of planning. These design features may include, but are not limited to, the following:

- Solar or low-emission water heaters;
- Central water heating systems;
- Shade trees;
- Energy-efficient and automated air conditioners;
- Double-pane glass in all windows;
- Energy-efficient low-sodium parking lot lights;
- Adequate ventilation systems for enclosed parking facilities;
- Energy-efficient lighting and lighting controls.

b) The applicant, future successors in interest, or future homebuilders shall install only EPA-certified woodstoves and fireplaces.

4.6-4: The County shall coordinate with the Folsom, El Dorado, Cordova TMA to consider including the project site within the TMA's jurisdiction.

4.7-1: Construction activities shall be conducted in accordance with the County noise regulation or limited to the following hours and days:

- Between the hours of 7:00 a.m. and 5:00 p.m. on any weekday
- Between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays
- Prohibited on Sundays and holidays

At the time of the letting of the construction contract, it shall be demonstrated that engine noise from excavation equipment would be mitigated by keeping engine doors closed during equipment operation. For equipment that cannot be enclosed behind doors, lead curtains shall be used to attenuate noise.

4.7-2: Where the development of a project could result in the exposure of noise-sensitive land uses to existing or projected future traffic noise levels in excess of the applicable County noise standards, the County shall require an acoustical analysis to be performed prior to the approval of such projects.

Where acoustical analysis determines that the project would contribute to traffic noise levels in excess of applicable County noise standards at proposed on-site or planned future off-site noise sensitive uses, the County shall require the implementation of noise attenuation measures, such as setbacks, sound barrier walls, or noise berms, as necessary to reduce traffic noise levels at proposed noise sensitive uses to conform with the applicable County standards.

- 4.7-3: Where the development of a project could result in the exposure of noise-sensitive land uses to projected future railroad noise levels in excess of the applicable County noise standards, the County shall require an acoustical analysis to be performed prior to the approval of such projects.

Where acoustical analysis determines that railroad noise levels would exceed applicable County noise standards at proposed on-site noise sensitive uses, the County shall require the implementation of noise attenuation measures, such as setbacks, sound barrier walls, or noise berms, as necessary to reduce traffic noise levels at proposed noise sensitive uses to conform with the applicable County standards.

- 4.7-4: Where the development of a project could result in the exposure of on-site noise-sensitive land uses to projected on-site or off-site stationary source noise levels in excess of the applicable County noise standards, the County shall require an acoustical analysis to be performed prior to the approval of such projects.

Where acoustical analysis determines that stationary source noise levels would exceed applicable County noise standards at proposed on-site noise sensitive uses, the County shall require the implementation of noise attenuation measures, such as setbacks, sound barrier walls, or noise berms, as necessary to reduce stationary source noise levels at proposed noise sensitive uses to conform with the applicable County standards.

- 4.8-2: a) Prior to issuance of a grading permit, the wetland delineation completed for the Euer Ranch shall be verified by USACE. After verification, any wetlands that would be lost or disturbed shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with USACE mitigation guidelines. El Dorado County has also supported the protection of wetlands as specified in the County's General Plan under Objective 7.4.2. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to USACE.
- b) Prior to issuance of a grading permit, a Streambed Alteration Agreement shall be obtained from CDFG, pursuant to §1600 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank, or associated riparian vegetation of the stream. If required, the project applicant shall coordinate with CDFG in developing appropriate mitigation, and shall abide by the conditions of any executed permits.

- c) Grading activities shall incorporate appropriate erosion control measures as provided in the El Dorado County Grading Ordinance. Appropriate runoff controls such as berms, storm grates, detention basins, overflow collection areas, filtration systems, and sediment traps shall be implemented to control siltation, and the potential discharge of pollutants into drainages.
- 4.8-3: Prior to issuance of a grading permit, habitat on the Euer Ranch that is suitable to support Bogg's Lake hedge-hyssop shall be surveyed. If any significant populations of this species are found in areas proposed for development, a mitigation plan designed to result in a no-net-loss of the species shall be prepared by the project proponent and approved by USFWS. The plan may include measures such as transplantation or revegetation in protected areas on-site. Approval of this plan by USFWS and its implementation by the project proponent would reduce impacts to a less-than- significant level.
- 4.9-1: a) The El Dorado County Department of Transportation (DOT) shall consult with the El Dorado County Planning Department during the grading permit approval process to ensure that earth resources impacts related to development in the Carson Creek Specific Plan area are sufficiently addressed.
- b) Prior to the approval of a grading permit for development in the Carson Creek drainage, the applicant shall submit to, and receive approval from, the El Dorado County Department of Transportation (DOT) a soils and geologic hazards report meeting the requirements for such reports provided in the El Dorado County Grading Ordinance. If proposed improvements to the Carson Creek drainage would be located in areas identified as susceptible to soils or geologic hazards, proposed improvements to the Carson Creek drainage shall be designed to prevent failure or damage due to such hazards.
- 4.9-4: Prior to the issuance of building permits, all structures shall be designed in accordance with the Uniform Building Code (UBC), Chapter 23. Although wood frame buildings of not more than two stories in height in unincorporated areas are exempt under the California Earthquake Protection Law, structures shall adhere to the design factors presented for UBC Zone 3, as a minimum. Final design standards shall be in accordance with the findings of detailed geologic and geotechnical analyses for proposed building sites.
- Prior to the approval of subdivision tract maps in the vicinity of the Mormon Island Fault Zone, the location and age of displacements associated with the fault zone shall be determined by geologic mapping and trench logging. Critical structures such as schools shall not be located within the zones of active faulting.
- 4.9-5: Prior to the issuance of building permits, all structures shall be designed in accordance with the UBC, Chapter 23. Although wood frame buildings of not more than two stories in height in unincorporated areas are exempt under the California Earthquake Protection Law, structures shall adhere to the design factors presented for UBC Zone 3, as a

minimum. Final design standards shall be in accordance with the findings of detailed geologic and geotechnical analyses for proposed building sites.

Prior to the approval of subdivision maps in the vicinity of the Mormon Island Fault Zone, a ground acceleration analysis shall be conducted for the Mormon Island Fault Zone. All structures shall be designed in accordance with the ground acceleration analysis for the Mormon Island Fault Zone and the on-site ground accelerations anticipated from the Bear Mountains Fault Zone.

4.9-7: Prior to the issuance of grading permits, grading design plans shall incorporate the findings of detailed geologic and geotechnical investigations. These findings all include methods to control soil erosion and ground instability. Some potential methods include:

- a) Uncemented silty soils are prone to erosion. Cut slopes and drainage ways within native material shall be protected from direct exposure to water runoff immediately following grading activities. Any cut or fill slopes and their appurtenant drainage facilities shall be designed in accordance with the El Dorado County Grading Ordinance and the Uniform Building Code guidelines. In general, soil slopes shall be no steeper than 2:1 (horizontal to vertical) unless authorized by the Geotechnical Engineer. Slope angles shall be designed to conform to the competence of the material into which they are excavated. Soil erosion and instability may be accelerated due to shearing associated with the Foothills Fault System, and/or Mormon Island Fault Zone.
- b) Drainage facilities shall be lined as necessary to prevent erosion of the site soils immediately following grading activities.
- c) During construction, trenches greater than 5 feet in depth shall be shored, sloped back at a 1:1 (horizontal to vertical) slope angle or reviewed for stability by the Geotechnical Engineer in accordance with the Occupational Safety and Health Administration regulations if personnel are to enter the excavations.
- d) Surface soils may be subject to erosion when excavated and exposed to weathering. Erosion control measures shall be implemented during and after construction to conform with National Pollution Discharge Elimination System, Storm Drain Standards and El Dorado County Standards.
- e) Rainfall shall be collected and channeled into an appropriate collection system designed to receive the runoff, minimize erosion and convey the runoff off-site. Conduits intended to convey drainage water off-site shall be protected with energy dissipating devices as appropriate, and in some areas potentially lined with an impermeable, impact proof material.
- f) Parking facilities, roadway surfaces, and buildings all have impervious surfaces which concentrate runoff and artificially change existing drainage conditions. Collection systems shall be designed where possible to divert natural drainage

away from these structures, to collect water concentrated by these surfaces and to convey water away from the site in accordance with the National Pollution Discharge Elimination System, Storm Drain Standards and El Dorado County Standards.

- 4.10-1: a) Prior to the approval of the first tentative subdivision or parcel map, a condition of approval shall be placed on the tentative map that states that, prior to the issuance of a grading plan, the project applicant shall submit and obtain approval of final drainage plans by the El Dorado County Department of Transportation. These final drainage plans shall demonstrate that future post-development stormwater discharge levels from the project will remain at existing stormwater discharge levels and detention basins will be permanently maintained. The drainage plan shall be prepared by a certified Civil Engineer and shall be in conformance with the El Dorado County Drainage Manual adopted by the Board of Supervisors in March 1995. The project applicant shall form a drainage zone of benefit (ZOB) or other appropriate entity to ensure that all stormwater drainage facility maintenance requirements are met. The drainage plan shall include, at a minimum, written text addressing existing conditions, the effects of project improvements, all appropriate calculations, a watershed map, potential increases in downstream flows, proposed on-site improvements, and drainage easements, if necessary, to accommodate flows from the site and implementation and maintenance responsibilities. The plan shall address storm drainage during construction and proposed BMPs to reduce erosion and water quality degradation. All on-site drainage facilities shall be constructed to El Dorado County Department of Transportation satisfaction. BMPs shall be implemented throughout the construction process. The following BMPs, or others deemed effective by the Department of Transportation, will be implemented as necessary and appropriate:

- ▶ Soil Stabilization Practices
 - Straw Mulching
 - Hydromulching
 - Jute Netting
 - Revegetation
 - Preservation of Existing Vegetation
- ▶ Sediment Barriers
 - Straw Bale Sediment Barriers
 - Filter Fences
 - Straw Bale Drop Inlet Sediment Barriers
- ▶ Site Construction Practices
 - Winterization

- Traffic Control
- Dust Control

► Runoff Control in Slopes/Streets

- Diversion Dikes
- Diversion Swales
- Sediment Traps

- b) Specific measures shall be identified in the final drainage plans to reduce stormwater discharge at the Southern Pacific Railroad bridge (Malby Crossing) at the site's southern end. These measures shall include detention basins of adequate size to reduce post-development discharge to pre-development levels. Maintenance of the detention basin and drainage facilities shall include periodic inspections (e.g., annual) to ensure facility integrity and debris removal as necessary.

4.10-2: Prior to the approval of the final map, the applicant shall submit a final drainage plan that clearly identifies the 100-year flood zone following project development to the El Dorado County Department of Transportation for approval. Project development shall not occur in areas within the 100-year flood zone shown in the final drainage plan. The final drainage plan shall be prepared by a registered civil engineer and contain a hydrologic study that outlines the 100-year flood zones associated with the project and proposed flood control measures such as detention basins. Alternatively, 100-year flood protection improvements, approved by the El Dorado County Department of Transportation, can be implemented to allow development in these areas. All storm drainage facilities and embankments shall be designed in compliance with the County Drainage Manual.

4.10-5: a) Prior to issuance of a grading permit, the developer shall obtain from the CVRB a General Construction Activity Stormwater Permit under the National Pollutant Discharge Elimination System (NPDES) and comply with all requirements of the permit to minimize pollution of stormwater discharges during construction activities.

- b) Prior to issuance of a grading permit, the project applicant shall submit to the El Dorado County Department of Transportation and the Resource Conservation District for review and approval an erosion control program which indicates that proper control of siltation, sedimentation and other pollutants will be implemented per NPDES permit requirements. The erosion control plan shall include BMPs as discussed in mitigation measure 4.10-1, and as follows: sediment basins, sediment traps, silt fences, hay bale dikes, gravel construction entrances, maintenance programs, and hydroseeding.

- 4.10-6: a) On-site detention basins shall be constructed and maintained through the construction period to receive stormwater runoff from graded areas to allow capture and settling of sediment prior to discharge to receiving waters. Periodic maintenance of detention basins, such as debris removal, shall occur on a monthly basis or more frequently as needed to ensure continued effectiveness.
- b) Prior to issuance of a grading permit, the project applicant shall develop a surface water pollution control plan (i.e., parking lot sweeping program and periodic storm drain cleaning) to reduce long-term surface water quality impacts. Parking lot sweeping shall occur on a weekly basis and storm drain clearing shall occur semi-annually. The plan shall also include the installation of oil, gas and grease trap separators in the project parking lot. These grease trap separators will be cleaned annually. The project applicant shall develop a financial mechanism, to be approved by the El Dorado County Department of Transportation, that ensures the long-term implementation of the program.
- 4.11-1: a) Prior to grading and construction activities, significant cultural resources found on the project site shall be recorded or described in a professional report and submitted to the North Central Information Center at California State University at Sacramento.
- b) During grading and construction activities, the name and telephone number of an El Dorado County-approved, licensed archaeologist shall be available at the project site. In the event a heritage resource is encountered during grading or construction activities, the project applicant shall ensure that all activities will cease in the vicinity of the recovered heritage resource until an archaeologist can examine the find in place and determine its significance. If a find is authenticated, the archaeologist shall determine proper methods of handling the resource(s) for transport and placement in an appropriate repository. Grading and construction activities may resume, after the resource is either retrieved or found to be not of consequence.
- 4.12-1: The project applicant shall comply with the agreement between the school districts and the applicant entitled "Agreement Between the Latrobe School District, the El Dorado Union High School District, Angelo Tsakopoulos, AKT Mosher Partners, the Moshers, and the Euers" dated September 24, 1996, on file with the Board of Supervisors.
- 4.12-5: Apply Mitigation Measure 4.12-1 and the following measure: Prior to the approval of the Specific Plan, the applicant shall enter into an Agreement with the affected school districts.
- 4.14-1: The project applicant shall ensure adequate law enforcement personnel and equipment to serve the Specific Plan area through one of the following mechanisms:

- a) Prior to the issuance of each building permit, the project applicant will be required to obtain a service letter from the El Dorado County Sheriff's Department identifying that law enforcement staff and equipment are available to serve the proposed land use upon occupancy.

4.16-1: The project applicant shall pay in-lieu fees for the purchase and development of approximately 7 acres of active parks and recreation facilities in addition to the 31.2 acres the applicant shall dedicate for such purposes. Actual land dedication and in-lieu fees will vary based on the final densities proposed in each phase of development.

4.18-1: Project impacts cannot be reduced to a less than significant level until the EID procures new water supplies that are sufficient to meet water needs of the proposed Specific Plan at buildout in conjunction with existing planned growth, or an alternative public water source is secured. Implementation of the following mitigation measures would reduce potential project impacts on water supply. The project applicant would be required to implement these measures before approval of building permits.

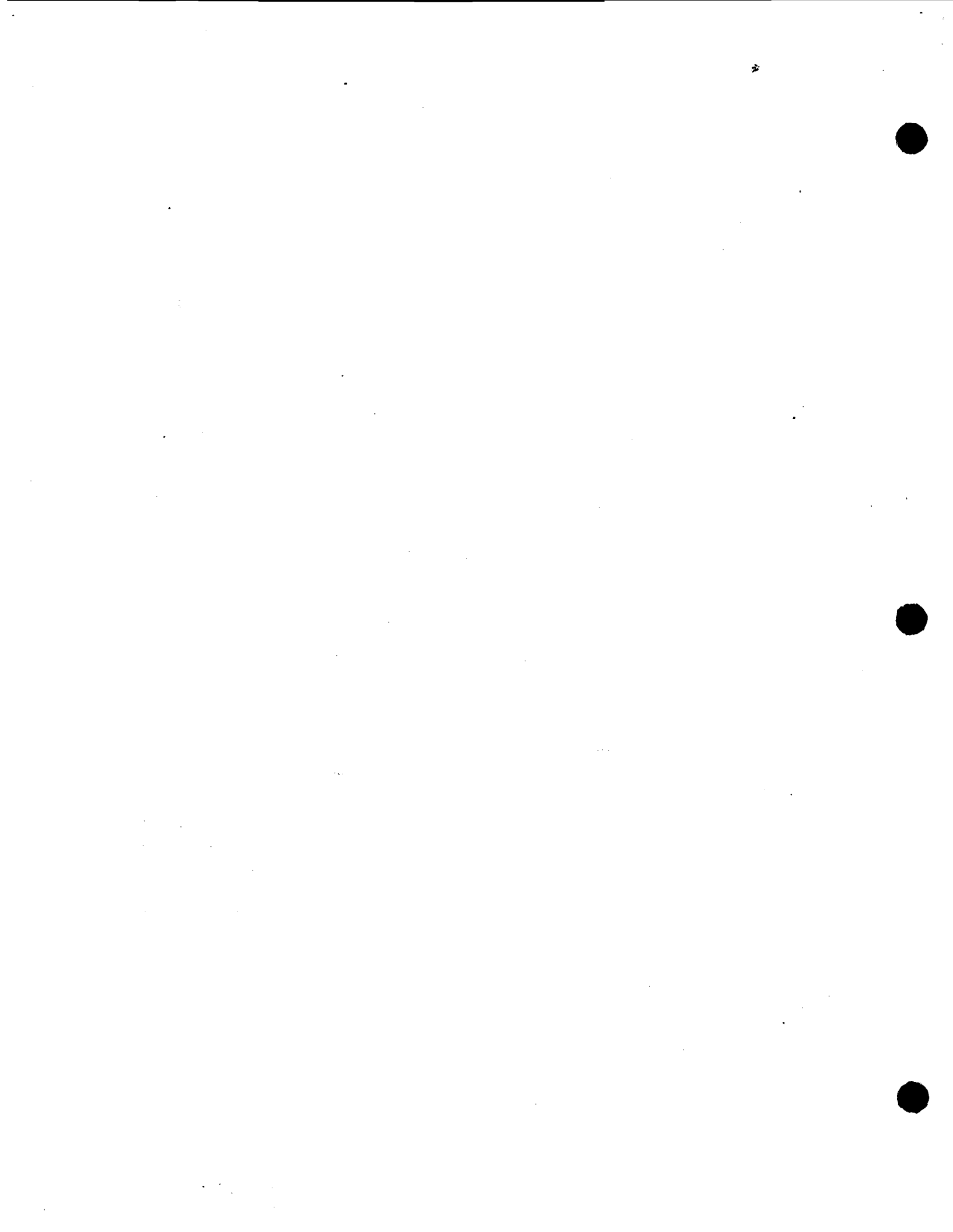
- a) In accordance with EID Policy Statement No. 22, the project applicant shall prepare a Facility Plan Report (FPR) for the proposed project. The FPR shall address the expansion of the water and sewer facilities and the specific fire flow requirements for all phases of the project.
- b) Low-volume and low-flow fixtures shall be installed to reduce water consumption.
- c) Efficient irrigation systems shall be installed to minimize runoff and evaporation and maximize the water that will reach plant roots. One or any combination of the following methods of increasing irrigation efficiency shall be employed: drip irrigation, soil moisture sensors, and automatic irrigation systems. Mulch shall be used extensively in all landscaped areas. Drought resistant and native vegetation shall be used in landscaped areas.

4.22-1: If on-site contamination resulting from the storage and use of hazardous substances within the area of the work shed and barn is discovered during grading or construction, the appropriate local, state, and/or federal agencies shall be contacted. Remediation of any unauthorized release of hazardous substances shall be undertaken in accordance with all existing local, state, and federal regulations/requirements and guidelines established for the treatment of hazardous materials.

4.22-4: Prior to the issuance of a grading permit, shallow groundwater and on-site drainage area shall be sampled to determine the potential presence of on-site contamination (mercury, etc.). If contamination is found, the appropriate

regulatory agency shall be contacted. If deemed necessary by the appropriate regulatory agency, remediation shall be undertaken in accordance with all existing local, state, and federal regulations/requirements and guidelines established for the treatment of hazardous substances.

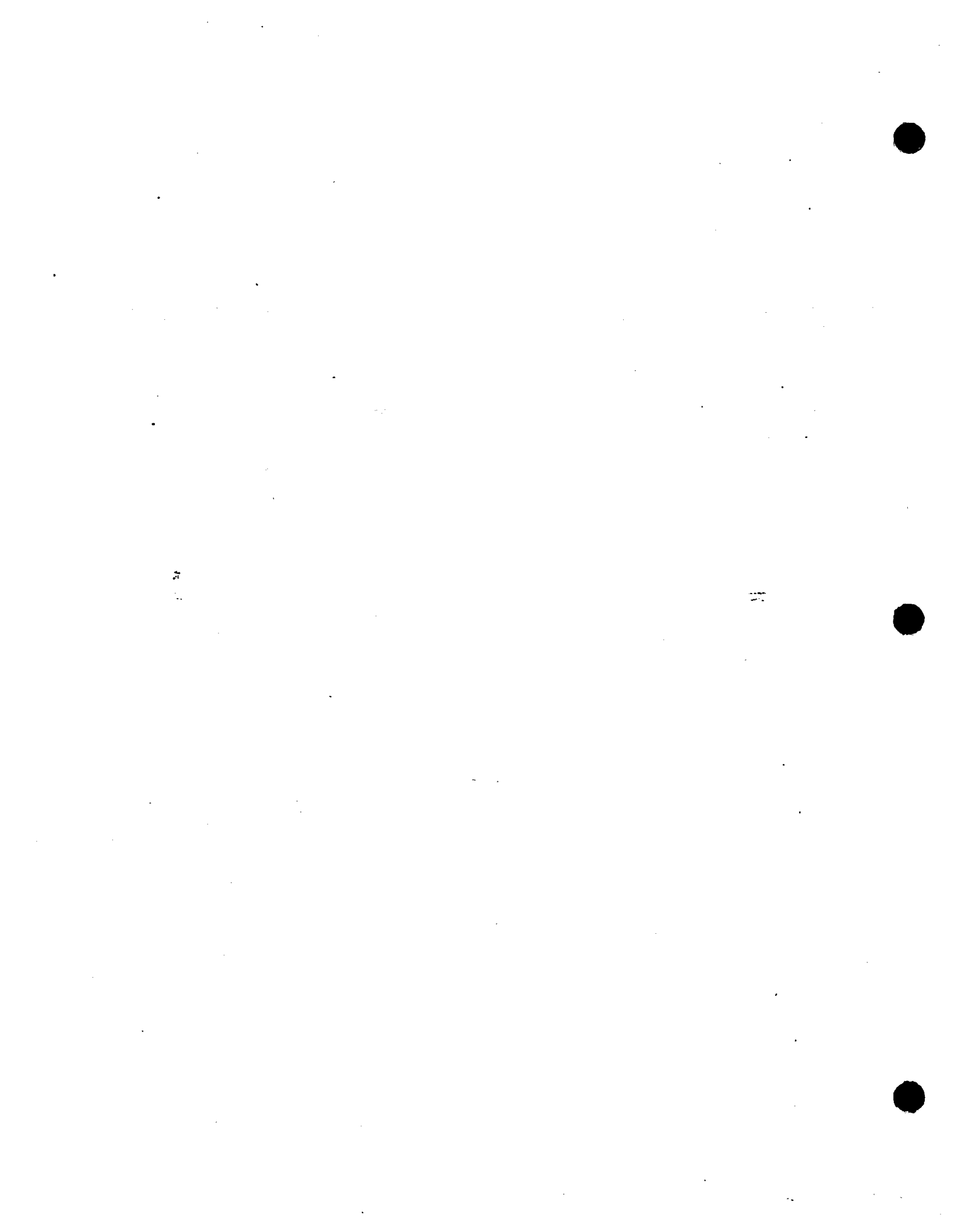
- 4.22-6: Prior to the issuance of a grading permit, the extent (soil and/or groundwater) of potential on-site contamination resulting from the operation of off-site USTs shall be assessed. Once the extent of contamination has been determined, the appropriate regulatory agency shall be consulted in identifying the responsible party and initiating the development of a remediation program in accordance with all applicable local, state, and federal regulations/requirements and guidelines established for the treatment of hazardous substances.
- 5-3: The developer shall form a Landscaping and Lighting District, or other financing mechanism, to cover maintenance costs for landscaping, lighting, fencing, sound walls, entry monuments, parks, open space, and other public or common areas in the Carson Creek Specific Plan area.
- 7-2: a) Widening Latrobe Road from two to four lanes between Golden Foothill Parkway South and Investment Boulevard would improve the daily roadway segment LOS to B or better. El Dorado County considers that additional widening may not be feasible due to cost and right-of-way constraints. Due to the uncertainty regarding feasibility, this cumulative impact would remain significant and unavoidable.
- b) Widening White Rock Road from four to six lanes between Latrobe Road and the project access would improve the daily roadway segment LOS to B or better. El Dorado County considers that additional widening may not be feasible due to cost and right-of-way constraints. Due to the uncertainty regarding feasibility, this cumulative impact would remain significant and unavoidable.
- c) Mitigation measure 4.5-5 requires the project developer to contribute their "fair-share" cost of widening U.S. Highway 50 to six lanes through the western portion of El Dorado County. Although this would not improve the LOS to E or better, El Dorado County considers that additional widening may not be feasible due to cost and right-of-way constraints. However, widening certain sections to more than six lanes may be possible. Therefore, this cumulative impact would remain significant and unavoidable.



TM96-1317 - Phase 1

Findings - As adopted by the Board of Supervisors on September 24, 1996

- 1. The proposed tentative map, including design and improvements, is consistent with the Carson Creek Specific Plan and the 1996 General Plan policies and land use map, as discussed in this staff report, the Carson Creek Specific Plan, and Carson Creek Specific Plan EIR.**
- 2. The proposed tentative map, as conditioned by staff, conforms with the applicable standards and requirements of the Carson Creek Specific Plan, the County's zoning regulations and the Major Land Division Ordinance.**
- 3. The site is considered physically suitable for the proposed type and density of development because of the flat terrain and the fact that all major infrastructure needs are adjacent: White Rock Road is adjacent for road access, and water, power, and sewer lines are located in the adjacent White Rock Road or El Dorado Hills Business Park.**
- 4. The proposed subdivision is not likely to cause substantial environmental damage, since it is consistent with the Carson Creek Specific Plan, which has an EIR prepared and certified, and the conditions of approval of this subdivision include all the applicable mitigation measures from the EIR, and no new significant impacts have been identified beyond that covered in the EIR.**
- 5. The proposed subdivision is exempt from CEQA pursuant to Section 15182 of the CEQA Guidelines which allows the exemption where a project is consistent with an adopted specific plan where an EIR has been certified.**



TM96-1317 - Phase 1

Conditions - As modified by the Board of Supervisors on September 24, 1996

Department of Transportation

1. The developer shall obtain approval of construction drawings consistent with the Subdivision Design and Improvement Standards Manual and cost estimates from the County Department of Transportation and pay all applicable fees prior to commencement of any improvements on the public street and service facilities. All improvements shall be consistent with the approved tentative map.
2. The developer shall enter into an improvement agreement with the County and provide security to guarantee performance of the improvement agreement as set forth within the County of El Dorado Major Land Division Ordinance.
3. The final map shall show all utility, road, and drainage easements per the recommendation of the utility purveyors and the County Engineer. Final determination of the location of said easements shall be made by the County Engineer. Said easements shall be irrevocably offered to the County.
4. If blasting activities are to occur in conjunction with subdivision improvements, the subdivider shall ensure that such blasting activities are conducted in compliance with state and local regulations.
5. If burning activities are to occur during the construction of the subdivision improvements, the subdivider shall obtain the necessary burning permits from the California Department of Forestry and air pollution permits from the County prior to said burning activities.
6. This project shall be subject to the road impact fee of \$3266 per single family dwelling. Pursuant to Resolution No. 175-96, said fee shall be due upon the issuance of a building permit. If prior to the application for a building permit for said project a revised fee is established, such revised amount shall be paid.
7. All roads shall be constructed in conformance with the Design and Improvements Standards Manual with the following widths:

ROAD NAME	STANDARD PLAN	ROAD WIDTH curb face to curb face (RIGHT OF WAY WIDTH)	EXCEPTIONS/SPECIAL NOTES
White Rock Road (on-site)	101 B	84 ft. (100 ft. ROW), with turn pockets and additional ROW as needed	half width frontage improvements, with 6' sidewalk
'A' Drive	101 B	56 ft. (76 ft. ROW), with turn pockets and additional ROW as needed	6 ft. sidewalk on both sides
'C'Drive(south boundary to 'B' Drive) & 'B'Drive('I' Court to White Rock Road & White Rock Road to 'C' Drive)	101 B	40 ft. (60 ft. ROW), with turn pockets and additional ROW as needed	4 ft. sidewalk on both sides of street
'B'Drive('C' Drive-South, to 'I' Court) and 'C'Drive ('B' to 'B' Drive)	101 B	36 ft. (50 ft. ROW)	4 ft. sidewalk on both sides of street
'B'Drive(White Rock Rd.-North, to 'O' Way); 'D','O','P',&'U'Way; and 'E'&'G' Court	101B	36 ft. (50 ft. ROW)	4 ft. sidewalk on both sides of street
'J','K','L','M','Q'V'Way;'N'&'T'Circle; and 'F','H','I','R','S','X',&'W' Court	101B	28 ft. (50 ft. ROW)	4 ft. sidewalk on both sides of street

8. A temporary cul-de-sac shall be constructed at the end of 'M' Way and 'N' Circle. 'M' Way, 'N' Circle, and 'F', 'H', 'X', and 'W' Court can be reduced to a 45 ft. radius roadway width with a reduced right of way width of 53.5 ft in the bulb portion of the cul-de-sac. All other cul-de sac's shall be constructed to County Standard Plan 114.
9. All traffic shall be directed away from traveling northward on 'B' Drive, from 'O' Way with one of the following two scenarios:
 - A. 'O' Way shall be constructed as such to allow continuous travel onto 'L' Way. The remaining portion of 'O' Way ('L' Way - 'B' Drive) shall be blocked off at the 'L' Way intersection.
 - B. 'O' Way shall be constructed as such to allow continuous travel onto 'B' Drive, west to White Rock Road. The remaining portion of 'B' Drive('O' Way - White Rock Road-north) shall be blocked off at the 'O' Way intersection.

Either one of these alternatives shall be subject to review and approval of the Department of Transportation prior to improvement plan approval.

10. 'U' and 'V' Way shall be extended to the southwest and intersect off-site with the southerly extension of 'C' Drive. This extension, for emergency access purposes, shall be constructed to Standard Plan 101B (without frontage improvements), subsequent to securing the necessary access easement from the adjacent property owner.
11. The following intersections shall be analyzed for the determination of final lane configuration:
 - 'B' Drive/White Rock Road @ Manchester Drive
 - 'B' Drive/White Rock Road @ Springfield Ranch Drive
 - 'A' Drive/'C' Drive

Final lane configuration, including the need for additional right of way, shall be subject to review and approval of the Department of Transportation prior to improvement plan approval.

12. All lots that front on two roads shall take access on the minor roadway. All associated frontage along major roadways shall be designated as non-vehicular access easements. The school site shall gain access via 'D' Way and/or at the intersection of 'C' Drive and 'A' Drive, subject to the review and approval of the Latrobe School District and DOT. A non-vehicular access easement shall be established along the entire frontage of the school property, from 'A' Drive to 'D' Way.
13. Access from Lot F to 'A' Drive and 'C' Drive shall be determined by DOT prior to improvement plan approval.
14. Subdivision improvements shall include driveways for all lots with street cuts or fills along the frontage of six feet or more difference in elevation, or as found necessary for reasonable access by the County Transportation Director. Driveways shall be installed in a manner and location acceptable to the County Department of Transportation and shall meet standard County driveway requirements. As an alternative, a Notice of Restriction shall be filed against all downhill lots with fill in excess of 6 feet which allows structural driveway access only.
15. An irrevocable offer of dedication, in fee, shall be made of in the width as described in Condition 7 for the proposed roads, with slope easements where necessary. Said offer may be rejected at the time of the final map, in which case, a homeowners agreement and association, or other entity, shall be established in order to provide for the long term maintenance of the roads.
16. An irrevocable offer of dedication, in fee, shall be made of 60 feet in radius for the cul-de-sacs, with slope easements where necessary. 'M' Way, 'N' Circle, and 'F', 'H', 'X', and 'W' Courts can be reduced to a 53.5 foot radius. Said offer may be rejected at the time of the final map, in which case, a homeowners agreement and association, or other

entity, shall be established in order to provide for the long term maintenance of the roads.

17. A final drainage plan shall be submitted to and approved by the Department of Transportation. Drainage which is collected and routed between lots, as shown on the Preliminary Grading and Drainage Plan, shall be conveyed via underground pipe and not open channel. All drainage facilities shall be designed in compliance with the County Drainage Manual. The developer shall install all drainage facilities shown on the plan with the respective phase of construction.
18. Prior to approval of the final map by the Board of Supervisors, the subdivider shall be required to form a County Service Area Zone of Benefit to fund the maintenance of drainage facilities.
19. All grading plans shall be prepared and submitted to the Soil Conservation Service and the Department of Transportation. The Soil Conservation Service shall review and make appropriate recommendations to the County. Upon receipt of the review report by the Soil Conservation Service, the Department of Transportation shall consider imposition of appropriate conditions for reducing or mitigating erosion and sedimentation from the project. No building permit shall be issued by the County until final grading plans and erosion control plans are approved by the Department of Transportation and the grading is completed.
20. The timing of construction and method of revegetation shall be coordinated by the El Dorado County Resource Conservation District. If grading activities are not completed by September, the developer shall implement a temporary grading and erosion control plan. Such temporary plans shall be submitted to the Soil Conservation Service for review and recommendation to the Department of Transportation. The Department of Transportation shall approve or conditionally approve such plans and cause the developer to implement said plan on or before October 15.
21. The location of fire hydrants and systems for fire flows are to meet the requirements of the responsible Fire Protection District. The location of hydrants shall be shown on the improvement plans which shall be subject to the approval of the fire protection district. Phasing plans shall be subject to Fire District approval to ensure that each phase has a minimum of two access points.
22. The project shall be subject to the Transportation Impact Fee for the State System's Capacity & Interchanges of \$1,570 per single family residential dwelling unit. Pursuant to Resolution 202-96, said fee shall be due upon the issuance of a building permit. If prior to the application for a building permit for said project a revised fee is established, such a revised amount shall be paid.

Surveyor's Office

23. All survey monuments must be set prior to the presentation of the final map to the Board of Supervisors for approval, or the developer shall have surety of work to be done by bond or cash deposit. Verification of set survey monuments, work completed, or work to be completed, and cost of completion is to be determined by the County Surveyor.
24. All roads shall be named by filing a completed road naming petition for each road with the County Surveyor's Office prior to filing the final map.
25. A boundary line adjustment shall be approved and recorded prior to the filing of the final map to remove that portion of tentative map lot 371 that is located in Sacramento County from the map.

Planning Department

26. If human remains are discovered at any time during the subdivision improvement phase, the County Coroner and Native American Heritage Commission shall be contacted per Section 7050.5 of the Health and Safety Code and Section 5097.89 of the Public Resources Code. The procedures set forth in Supplementary Document J, Section VIII, of the California Environmental Quality Act (CEQA) Guidelines concerning treatment of the remains shall be followed. If archaeological sites or artifacts are discovered, the subdivider shall retain an archaeologist to evaluate the resource. If the resource is determined to be important, as defined in Appendix K of the CEQA Guidelines, mitigation measures, as agreed to by the subdivider, archaeologist and Planning Department shall be implemented. Treatment of Native American remains and/or archaeological artifacts shall be the responsibility of the subdivider and shall be subject to review and approval by the County Planning Director.
27. A meter award letter or similar document shall be provided by the water purveyor prior to filing the final map.
28. Parkland dedication requirements shall be calculated based on the standards and factors for development within the El Dorado Hills Community Services District (EDHCSD). An irrevocable offer of dedication (IOD) shall be made to the EDHCSD as a condition of approval of the tentative maps within the Specific Plan area. Prior to County approval of any final map, the developer shall show evidence of a recorded agreement with the EDHCSD for the location, size, park improvements (including water and sewer meters), maintenance, and timing of dedication and acceptance of parks throughout the Specific Plan area.

The developer will be required to provide a Phase I environmental assessment of all land to be dedicated to a public agency.

29. Easements shown to be relocated on the tentative map shall be relocated prior to or in conjunction with the filing of the final map, including the relocation of all electric facilities.
30. A letter of agreement from the cable television franchisee, pursuant to Section 16.16.010 (I) of the County Code, shall be submitted to the Planning Department prior to approval of the final map.
31. As specified in conditions of approval, the subdivider is required to perform off-site improvements. If it is determined that the subdivider does not have or cannot secure sufficient title or interest of such lands where said off-site improvements are required, the County may, at the subdivider's expense and within 120 days of filing the final map, acquire by negotiation or commence proceedings to acquire an interest in the land which will permit the improvements to be made, including proceedings for immediate possession of the property.

Where the subdivider is required to make improvements on land which neither the subdivider nor the County has sufficient title or interest to make such improvements, prior to filing of any final map or parcel map, the subdivider shall submit to the Planning Director for approval:

- a. A legal description prepared by a civil engineer or land surveyor of the land necessary to be acquired to complete the off-site improvements.
- b. Improvement plans prepared by a civil engineer of the required off-site improvements.
- c. An appraisal prepared by a professional appraiser of the cost of land necessary to complete the off-site improvements.

Prior to the filing of the final map, the subdivider shall enter into an agreement pursuant to Government Code Section 66462.5 to complete the required off-site improvements including the full costs of acquiring any real property interests necessary to complete the required improvements.

In addition to the agreement, the subdivider shall provide a cash deposit, letter of credit, or other acceptable surety in a amount sufficient to pay such costs including legal costs subject to the approval of County Counsel.

32. The tentative map shall not become effective until the Carson Creek Specific Plan is approved by the Board of Supervisors.
33. As a vesting tentative map, the approval confers the vested rights as described by Section 66474.2 of the Government Code, including the rights and limitations as established by Ordinance No. 4216 (Chapter 16.68 of the County Code). This map shall expire 24 months from the date of approval.

34. Street lights shall be installed at main intersections. All street lights installed shall be top-shielded to prevent excess glare and light.

35. As a condition of approval of all tentative maps, a wood or other solid fence, at least six foot in height, will be constructed by the developer of all residential lots adjacent to the boundaries of the Specific Plan area.

Agricultural fencing per County Resolution No. 98A-90 shall be required along the Sacramento/El Dorado County line in any location not adjacent to a residential parcel.

The CC&Rs will specify the fence design approval process. Fence design will be as approved by the El Dorado Hills Community Services District and the appropriate design review committee.

Maintenance of fencing adjacent to open space or landscaped corridors will be funded either through a homeowners association, a Landscaping and Lighting District, or other appropriate mechanism.

36. An Open Space Management Plan shall be prepared by the developer, subject to review and approval by the El Dorado Hills Community Services District, and will include a funding mechanism for on-going maintenance of all open space. A Wild Fire Management Plan, subject to approval by appropriate agencies, will also be included as a component of this document.

37. The development of APN 108-040-05 shall not occur until said parcel rolls out (or is approved for immediate cancellation) of the agricultural preserve.

38. Phases 6, 7, and 8 of the tentative map shall not be developed until APN 108-040-07, immediately south of the project, rolls out of Agricultural Preserve status (or is approved for immediate cancellation). The buffer may be reduced or eliminated by the Agricultural Commission, upon presentation to the Agricultural Commission that the buffer is unnecessary or is substantially complied with in another fashion.

EIR Mitigation Measures

39. (MM 4.3-2.a and d, 4.3-5.a) A thirty (30) foot landscape corridor shall be installed adjacent to White Rock Road, and in the residential yards adjacent to the eastern and western boundary of the tentative map, as required in Section 3.5 of the Carson Creek Specific Plan, and shall consist of a majority of native plant and/or fast growing species.

40. (MM 4.3-2.b, 4.3-5b) The CC&Rs or project design notebook shall require use of natural colored roof materials in project development to maximize consistency with the surrounding natural environment to minimize stark visual contrasts.

41. (MM 4.3-2.c, 4.3-5.c) The CC&Rs or project design notebook shall require the use natural components in fencing materials (e.g., wood, stone, brick) that would be consistent with residential uses to the north, and would enhance visual compatibility with the natural surroundings of the site for subdivision fencing and acoustical mitigation walls.
42. (MM 4.5-7.b) The developer shall construct signal and turn lane improvements at the White Rock Road/main project access road intersection, if warranted by traffic volumes, as determined by the County DOT.
43. (MM 4.5-8) The project developer shall be responsible for the construction of a bus turnout and transit shelter along the project site frontage on White Rock Road; however, should the developer enter into a development agreement with the County which includes provisions for a bus and transit shelter when fixed route transit service or commuter service is extended to serve the project, the improvement of the facilities may be delayed, and this condition may be waived.
44. (MM 4.5-9) The project developer shall construct a Class II bike lane along the project site frontage on White Rock Road.
45. (MM 4.6-1, 4.6-2) The project applicant shall comply with El Dorado County APCD Rule 223, 224, and 215 as required by the Air Pollution Control Officer. The project applicant shall prepare a fugitive dust control plan to be submitted to, and approved by, the APCD prior to the commencement of construction.
46. (MM 4.6-3) The applicant shall encourage in the CC&Rs or project design notebook the following energy-saving design features into future levels of project implementation as feasible and appropriate. These design features may include, but are not limited to, the following:
 - Solar or low-emission water heaters;
 - Central water heating systems;
 - Shade trees;
 - Energy-efficient and automated air conditioners;
 - Double-pane glass in all windows;
 - Energy-efficient low-sodium parking lot lights;
 - Energy-efficient lighting and lighting controls.
 - The applicant, future successors in interest, or future homebuilders shall install only EPA-certified woodstoves and fireplaces.
47. (MM 4.7-1) Subdivision improvement plans shall include a notation that requires that construction activities shall be conducted in accordance with the County noise regulation or limited to the following hours and days:

- Between the hours of 7:00 a.m. and 5:00 p.m. on any weekday
- Between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays
- Prohibited on Sundays and holidays

At the time of the letting of the construction contract, it shall be demonstrated that engine noise from excavation equipment would be mitigated by keeping engine doors closed during equipment operation. For equipment that cannot be enclosed behind doors, lead curtains shall be used to attenuate noise.

48. (MM 4.7-2) Sound walls shall be installed as recommended the Brown-Buntin Associates, Inc., June 26, 1996, acoustical analysis for the Euer Ranch along White Rock Road. The walls shall be constructed to heights to reduce the noise levels to 60 dB Ldn or less, except for Lots 8 through 16, where the sound wall shall be constructed to heights to reduce the noise levels to 65 dB Ldn or less.
49. (MM 4.8-2) Prior to issuance of a grading permit, the wetland delineation completed for the Euer Ranch shall be verified by USACE. After verification, any wetlands that would be lost or disturbed shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with USACE mitigation guidelines. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to USACE.
50. (MM 4.8-2) Prior to issuance of a grading permit, a Streambed Alteration Agreement shall be obtained from CDFG, pursuant to §1600 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank, or associated riparian vegetation of the stream. If required, the project applicant shall coordinate with CDFG in developing appropriate mitigation, and shall abide by the conditions of any executed permits.
51. (MM 4.8-3) Prior to issuance of a grading permit, habitat on the Euer Ranch that is suitable to support Bogg's Lake hedge-hyssop shall be surveyed. If any significant populations of this species are found in areas proposed for development, a mitigation plan designed to result in a no-net-loss of the species shall be prepared by the project proponent and approved by USFWS. The plan may include measures such as transplantedation or revegetation in protected areas on-site.
52. (MM 4.9-1) Prior to the approval of a grading permit for development in the Carson Creek drainage, the applicant shall submit to, and receive approval from, the El Dorado County Department of Transportation (DOT) a soils and geologic hazards report meeting the requirements for such reports provided in the El Dorado County Grading Ordinance. If proposed improvements to the Carson Creek drainage would be located in areas identified as susceptible to soils or geologic hazards, proposed improvements to the Carson Creek drainage shall be designed to prevent failure or damage due to such hazards.

53. (MM 4.9-4) Prior to the issuance of grading permits, in the vicinity of the Mormon Island Fault Zone, the location and age of displacements associated with the fault zone shall be determined by geologic mapping and trench logging. Critical structures such as schools shall not be located within the zones of active faulting.
54. (MM 4.9-5) Prior to the filing of the final map in the vicinity of the Mormon Island Fault Zone, a ground acceleration analysis shall be conducted for the Mormon Island Fault Zone. All structures shall be designed in accordance with the ground acceleration analysis for the Mormon Island Fault Zone and the on-site ground accelerations anticipated from the Bear Mountains Fault Zone.
55. (MM4.9-7) Prior to the issuance of grading permits, grading design plans shall incorporate the findings of detailed geologic and geotechnical investigations. These findings all include methods to control soil erosion and ground instability that are described in the Carson Creek Specific Plan EIR Mitigation Measure
56. (MM 4.10-1) Prior to the issuance of a grading plan, the project applicant shall submit and obtain approval of final drainage plans by the El Dorado County Department of Transportation. These final drainage plans shall demonstrate that future post-development stormwater discharge levels from the project will remain at existing stormwater discharge levels and detention basins will be permanently maintained. The drainage plan shall be prepared by a certified Civil Engineer and shall be in conformance with the El Dorado County Drainage Manual adopted by the Board of Supervisors in March 1995. The project applicant shall form a drainage zone of benefit (ZOB) or other appropriate entity to ensure that all stormwater drainage facility maintenance requirements are met. The drainage plan shall include, at a minimum, written text addressing existing conditions, the effects of project improvements, all appropriate calculations, a watershed map, potential increases in downstream flows, proposed on-site improvements, and drainage easements, if necessary, to accommodate flows from the site and implementation and maintenance responsibilities. The plan shall address storm drainage during construction and proposed BMPs to reduce erosion and water quality degradation. All on-site drainage facilities shall be constructed to El Dorado County Department of Transportation satisfaction. BMPs shall be implemented throughout the construction process. The following BMPs, or others deemed effective by the Department of Transportation, will be implemented as necessary and appropriate:
 - ▶ Soil Stabilization Practices
 - Straw Mulching
 - Hydromulching
 - Jute Netting
 - Revegetation
 - Preservation of Existing Vegetation

- ▶ **Sediment Barriers**
 - Straw Bale Sediment Barriers
 - Filter Fences
 - Straw Bale Drop Inlet Sediment Barriers

- ▶ **Site Construction Practices**
 - Winterization
 - Traffic Control
 - Dust Control

- ▶ **Runoff Control in Slopes/Streets**
 - Diversion Dikes
 - Diversion Swales
 - Sediment Traps

57. (MM 4.10-2) The applicant shall submit a final drainage plan that clearly identifies the 100-year flood zone following project development to the El Dorado County Department of Transportation for approval. Project development shall not occur in areas within the 100-year flood zone shown in the final drainage plan. The final drainage plan shall be prepared by a registered civil engineer and contain a hydrologic study that outlines the 100-year flood zones associated with the project and proposed flood control measures such as detention basins. Alternatively, 100-year flood protection improvements, approved by the El Dorado County Department of Transportation, can be implemented to allow development in these areas. All storm drainage facilities and embankments shall be designed in compliance with the County Drainage Manual.

58. (MM 4.10-5) Prior to issuance of a grading permit, the developer shall obtain from the CVRB a General Construction Activity Stormwater Permit under the National Pollutant Discharge Elimination System (NPDES) and comply with all requirements of the permit to minimize pollution of stormwater discharges during construction activities.

Prior to issuance of a grading permit, the project applicant shall submit to the El Dorado County Department of Transportation and the Resource Conservation District for review and approval an erosion control program which indicates that proper control of siltation, sedimentation and other pollutants will be implemented per NPDES permit requirements.

59. (MM 4.10-6.a) On-site detention basins shall be constructed and maintained through the construction period to receive stormwater runoff from graded areas to allow capture and settling of sediment prior to discharge to receiving waters. Periodic maintenance of detention basins, such as debris removal, shall occur on a monthly basis or more frequently as needed to ensure continued effectiveness.

60. (MM4.10-6.b) Prior to issuance of a grading permit, the project applicant shall develop a surface water pollution control plan (i.e., parking lot sweeping program and periodic storm drain cleaning) to reduce long-term surface water quality impacts. These grease trap separators will be cleaned annually. The project applicant shall develop a financial mechanism, to be approved by the El Dorado County Department of Transportation, that ensures the long-term implementation of the program.
61. (MM 4.11-1) Prior to grading and construction activities, significant cultural resources found on the project site shall be recorded or described in a professional report and submitted to the North Central Information Center at California State University at Sacramento.

The grading and improvement plans shall include a note that states that during grading and construction activities, the name and telephone number of an El Dorado County-approved, licensed archaeologist shall be available at the project site. In the event a heritage resource is encountered during grading or construction activities, the project applicant shall ensure that all activities will cease in the vicinity of the recovered heritage resource until an archaeologist can examine the find in place and determine its significance. If a find is authenticated, the archaeologist shall determine proper methods of handling the resource(s) for transport and placement in an appropriate repository. Grading and construction activities may resume, after the resource is either retrieved or found to be not of consequence.

62. (MM 4.12-1) The project applicant shall comply with the agreement between the school districts and the applicant entitled "Agreement Between the Latrobe School District, the El Dorado Union High School District, Angelo Tsakopoulos, AKT Mosher Partners, the Moshers, and the Euers" dated September 24, 1996, on file with the Board of Supervisors.
63. (MM 4.14-1 a and b) Prior to the issuance of each building permit, the project applicant will be required to obtain a service letter from the El Dorado County Sheriff's Department identifying that law enforcement staff and equipment are available to serve the proposed land use upon occupancy and the Department has reasonably estimated that annual funding is available to provide adequate staff and equipment in the future.
64. (MM 4.22-1) If on-site contamination resulting from the storage and use of hazardous substances within the area of the existing work shed and barn is discovered during grading or construction, the appropriate local, state, and/or federal agencies shall be contacted. Remediation of any unauthorized release of hazardous substances shall be undertaken in accordance with all existing local, state, and federal regulations/requirements and guidelines established for the treatment of hazardous materials.
65. (MM 4.22-4) Prior to the issuance of a grading permit, shallow groundwater and on-site drainage area shall be sampled to determine the potential presence of on-site contamination (mercury, etc.). If contamination is found, the appropriate regulatory

agency shall be contacted. If deemed necessary by the appropriate regulatory agency, remediation shall be undertaken in accordance with all existing local, state, and federal regulations/requirements and guidelines established for the treatment of hazardous substances.

66. (MM 4.22-6) Prior to the issuance of a grading permit, the extent (soil and/or groundwater) of potential on-site contamination resulting from the operation of off-site USTs shall be assessed. Once the extent of contamination has been determined, the appropriate regulatory agency shall be consulted in identifying the responsible party and initiating the development of a remediation program in accordance with all applicable local, state, and federal regulations/requirements and guidelines established for the treatment of hazardous substances.
67. (MM 5-3) A financing mechanism or mechanisms, such as a Landscaping and Lighting District, for development and maintenance of parks and for maintenance of open space, landscaping, lighting, fencing, trails, walkways, corridors, signage, sound walls, entry monuments, and other common or public areas shall be determined prior to approval of the final map. Improvement plans will be submitted to the El Dorado Hills Community Services District for approval, and the financing mechanisms shall be in place prior to issuance of building permits (Section 5.2 of the Carson Creek Specific Plan.)
68. Lots 117 and 118 on the south side of 'B' Drive shall be merged into one parcel. Lots 119 and 120 on the north side of 'B' Drive shall be merged into one parcel. The boundary lines of Lots 119, 120, 121, and 122 may be modified so that uniform lot sizes are created.
69. All lots shall be a minimum of 6,000 square feet, which requires lots in Phases 7 and 8 of TM96-1317 to be enlarged.
70. The proponent shall enter into an agreement with the County to indemnify the County of El Dorado against all legal costs associated with any legal challenges resulting from project approval. Said agreement shall be in a form acceptable to County Counsel.
71. The CC&Rs of the subdivision shall include the following language:

"Located approximately 3,000 feet east of this subdivision is the El Dorado Irrigation District El Dorado Wastewater Treatment Plan, which is responsible for the processing of wastewater for the El Dorado Hills area, including the subdivision.

Purchaser, for himself and his heirs, successors and assigns, recognizes that the District, in the course of normal operations conducted in accordance with all requirements of law, produces odors offensive to humans. From time to time, the processing of wastewater will generate unpleasant odors which may be discernible to the occupants of the Carson Creek Specific Plan."
72. A written agreement with the school district shall be in place before Board approves or rezones the project.

NOTICE OF DETERMINATION

FILE NO. SP94-02/TM96-1317

TO: COUNTY CLERK
County of El Dorado
360 Fair Lane
Placerville, CA 95667

FROM: EL DORADO COUNTY PLANNING DEPT.
2850 Fairlane Court
Placerville, CA 95667



SUBJECT: Filing of NOTICE OF DETERMINATION in compliance with Section 21108 or 21152 of the Public Resources Code.

NAME OF APPLICANT: Palisades Development, Inc., 147 Iron Point Road No. A, Folsom, CA 95630

ASSESSOR'S PARCEL NO. 108-040-04, -05, -06, -07, -12, and 108-050-12 SCH NO. 94072021

AREA PLAN: EL Dorado Hills SECTION: 11, 14, 15 TOWNSHIP: 9N RANGE: 8E

NEAREST COUNTY ROAD INTERSECTION: White Rock Road/Latrobe Road

GENERAL PLAN AMENDMENT FROM: _____ TO: _____

REZONING FROM: AE and R&D TO: Various Specific Plan Zones

TENTATIVE PARCEL MAP SUBDIVISION TO SPLIT 710 ACRES INTO 477 LOTS
SUBDIVISION (NAME) Carson Creek

SPECIAL USE PERMIT TO ALLOW: _____

OTHER: and Specific Plan and final EIR

The EL DORADO COUNTY Board of Supervisors has approved disapproved this project on September 24, 1996, and made the following determinations:
(date)

- 1) Project will will not have a significant effect on the environment.
- 2) * An Environmental Impact Report was prepared pursuant to provisions of CEQA.
* A Negative Declaration was prepared pursuant to provisions of CEQA.
- 3) Mitigation Measures were were not adopted for this project.
A Statement of Overriding Considerations was was not adopted.

*The Environmental Impact Report or Negative Declaration and Record of Project Approval may be reviewed at the EL DORADO COUNTY PLANNING DEPARTMENT.

Steve D. Hunt Prepared By September 26, 1996 Date

Public Resources Code Section 21152(A) requires local agencies to submit this information to the County Clerk. The filing of the Notice starts a 30-day Statute of Limitations on court challenges to the approval of the project under Public Resources Code Section 21167. Failure to file the Notice results in the Statute of Limitations being extended to 180 days.

FISH AND GAME AB3158 FEES/RECORDING FEES

- Project is de minimis in effect; \$35 Recorder's fee required.
- Negative Declaration prepared; \$1,285 fee required.
- EIR filed; \$385 fee required.

**FOR USE BY COUNTY CLERK
ENDORSED**

FILED

SEP 26 1996

WILLIAM E. SCHULTZ, Recorder-Clerk

By Linda Penell

Distribution: Original-Recorder/Clerk Pink-Owner Goldenrod-Engineer Yellow-Surveyor Green-File

EXHIBIT B

MEMO

Assigned to Tush

TO: County Counsel

FROM: Bd. of Supervisors

DATE: 10/28/96

RE: (Case # PV002200)

I received:

Petition for Writ of Mandamus, Att'ys. g.
(documents)

Commencement of Action - Notice of Election to Prepare Adm. Record
by mail *by proceedings*

by personal service *Carol Portanova*

on 10/28/96
(date)

RECEIVED
OCT 28 11 26 AM '96
EL DORADO COUNTY
COUNTY COUNSEL

EXHIBIT C

FILED

95 OCT 25 PM 4:09

EL DORADO COUNTY
SUPERIOR COURT

BY **P13** DEPUTY

1 Susan Brandt-Hawley SAN 073907
2 Rose M. Zola SAN 134739
3 **Brandt-Hawley & Zoia**
4 Chauvet House • Post Office Box 1659
Glen Ellen, California 95442
(707) 938-3908 • (707) 576-0198

5 Attorneys for
6 Petitioners

7
8
9 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
10 **IN AND FOR THE COUNTY OF EL DORADO**

11
12 EL DORADO COUNTY TAXPAYERS
13 FOR QUALITY GROWTH;
14 ENVIRONMENTAL PLANNING AND
15 INFORMATION COUNCIL OF
16 WESTERN EL DORADO COUNTY, INC.
(EPIC); and DOES
1 through 5;

17 Petitioners,

18 v.

19 COUNTY OF EL DORADO, and
20 DOES 6 through 10;

21 Respondent,

22 _____
23 PALISADES DEVELOPMENT, INC.;
24 AKT MOSHER; AKT DEVELOPMENT
CORPORATION; and DOES 11
through 15;

25 Real Parties in Interest.
26 _____
27
28

CASE NO. **PV 002200**

**PETITION FOR WRIT OF
MANDAMUS**

[CCP §§ 1085, 1094.5]

"by FAX"

1 Petitioners allege:

2 I. INTRODUCTION

3 1. Petitioners El Dorado Taxpayers for Quality Growth and Environmental Planning
 4 and Information Council of Western El Dorado County, Inc. (EPIC) bring this mandamus
 5 action in the public interest regarding the decision of the County of El Dorado
 6 to approve the Carson Creek Specific Plan, a project for the rezoning and development of a
 7 mixture of residential and commercial uses on a 710-acre site, including 477 buildable lots, in
 8 unincorporated Western El Dorado County. The Environmental Impact Report prepared for
 9 the Specific Plan is inadequate and improperly defers analysis of fundamental environmental
 10 issues, and the project cannot lawfully be approved under the legally deficient El Dorado
 11 General Plan. The peremptory writ should issue in the first instance.
 12
 13

14 II. JURISDICTION AND VENUE

15 2. This court has jurisdiction under §§ 21168 and 21168.5 of the California
 16 Environmental Quality Act (CEQA) and §§ 1094.5 and 1085 of the California Code of Civil
 17 Procedure. The parties and the Carson Creek project are located in El Dorado County.
 18
 19

20 III. PARTIES

21 3. Petitioner El Dorado County Taxpayers for Quality Growth is a California non-
 22 profit public benefit corporation incorporated under the laws of California. The specific
 23 purposes of the corporation are to educate the public about proposed projects on private and
 24 public lands and the effects of those projects on the rural quality of life for existing and
 25 future residents of El Dorado County, to facilitate public input into the planning process, and
 26
 27
 28

1 to defend the public interest. The Taxpayers for Quality Growth bring this petition as a co-
2 petitioner on behalf of all others similarly situated who are too numerous to be named and
3 brought before this court as petitioners. Its members include persons living in the area
4 affected by the approval of Carson Creek, whose personal, aesthetic, and property interests
5 will be severely injured if the project is allowed to proceed as planned.
6

7 4. Petitioner Environmental Planning and Information Council of Western El Dorado
8 County, Inc. (EPIC), is a California non-profit corporation formed in 1974. Through public
9 education, public comment, and judicial action when necessary, EPIC seeks to maintain the
10 rural quality of life in El Dorado County and to ensure a healthy and economically viable
11 environment for its residents. EPIC brings this petition as a co-petitioner on behalf of all
12 others similarly situated who are too numerous to be named and brought before this court as
13 petitioners. EPIC's members include persons living in the area affected by the actions of
14 EID, whose personal, aesthetic, and property interests will be severely injured if the Carson
15 Creek Specific Plan approved by the County is allowed to proceed as planned.
16

17 5. Petitioners Does 1 to 5 are listed under fictitious names. Petitioners are aware that
18 other environmental organizations are concerned about the County's lack of compliance with
19 environmental laws in its action to approve the Carson Creek Specific Plan, and have
20 expressed interest in joining this mandamus action. When true names and capacities are
21 ascertained, petitioners will amend this petition by asserting them.
22

23 6. Respondent El Dorado County is the county which approved the Carson Creek
24 Specific Plan and is the project lead agency.

25 7. Petitioners are ignorant of the true names and capacities of respondents sued herein
26 as DOES 6 through 10, inclusive, and therefore sues these respondents by such fictitious
27 names. Petitioners will amend this petition to allege their true names and capacities when
28

1 ascertained. Petitioners are informed and believe and thereon allege that each of the
 2 fictitiously named respondents are responsible in some manner for the occurrences herein
 3 alleged, and that the wrongs as herein alleged were proximately caused by their conduct.

4
 5 8. Real party in interest Palisades Development, Inc., a corporation doing business in
 6 California, is the legal entity which is the applicant for the project proposed to be located on
 7 the Carson Creek Specific Plan site in El Dorado County.

8 9. Real party in interest AKT Mosher is a partnership doing business in California
 9 and is the owner of the Carson Creek Specific Plan site in El Dorado County.

10 10. Real party in interest AKT Development Corporation, a corporation doing
 11 business in California, is the legal entity which is the developer of the project proposed to be
 12 located on the Carson Creek Specific Plan site in El Dorado County.

13
 14 11. Petitioners are ignorant of the true names and capacities of real parties in interest
 15 sued herein as DOES 11 through 15, inclusive, and therefore sues these real parties in interest
 16 by such fictitious names. Petitioners will amend this petition to allege their true names and
 17 capacities when ascertained. Petitioners are informed and believe and thereon allege that each
 18 of the fictitiously named real parties in interest is responsible in some manner for the
 19 occurrences herein alleged, and that the wrongs as herein alleged were proximately caused by
 20 their conduct.

21
 22 12. The paragraphs below will refer to information in numerous documents relating to
 23 this lawsuit, all of which will be duly filed with this court as part of the record of
 24 proceedings before the county. Such documents are incorporated herein by reference.

IV. GENERAL ALLEGATIONS

1
2 13. Petitioners fully incorporate herein by reference paragraphs 1 through 12, above.

3
4 14. The Carson Creek Specific Plan project proposes a mixture of residential,
5 commercial, research and development, schools, parks, and open space uses on a 710-acre site
6 in unincorporated Western El Dorado County. A Draft Environmental Impact Report was
7 prepared for the Plan and was circulated for a 45-day public comment period between May
8 and July 1996, following which a Responses to Comments Addendum was prepared. The
9 Draft EIR and Responses to Comments Addendum constitute the Final EIR for the Specific
10 Plan project.

11
12 15. The El Dorado Planning Commission held a meeting on June 27, 1996, to apprise
13 the Planning Commission of environmental issues associated with the Plan and not to receive
14 public comments on the Draft EIR. The Responses to Comments Addendum addresses only
15 written comments received during the 45-day public comment period ending July 5, 1996.

16 16. A Mitigation Monitoring Plan for the project was published in August 1996.

17
18 17. Hearings on the Carson Creek Specific Plan were held before the Planning
19 Commission on September 12, 1996, and before the Board of Supervisors on September 24,
20 1996. The EIR was certified and the Plan was approved with a Statement of Overriding
21 Considerations.

22 18. The Notice of Determination was filed with the El Dorado County Clerk on
23 September 26, 1996.

24 19. Petitioners have no plain, speedy, and adequate remedy in the ordinary course of
25 law. If the Carson Creek Specific Plan project remains approved, the project will proceed
26 with immediate, severe, and irreparable harm to petitioners and El Dorado County residents
27
28

1 due to its unsolved environmental problems. The County of El Dorado has the capacity to
2 correct its violations of law but has failed and refused to do so.

3
4 **V. VIOLATIONS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

5
6 20. Petitioners fully incorporate herein by reference paragraphs 13 through 19, above.

7 21. The County of El Dorado abused its discretion and failed to act in the manner
8 required by law in approving the Carson Creek Specific Plan and Mitigation Monitoring Plan,
9 certifying the EIR, and making findings under the California Environmental Quality Act
10 because, among other things:

11 a. The findings adopted by the County are conclusory and are not supported by
12 substantial evidence. Among the many areas of environmental impact not mitigated to
13 insignificance are incompatible land uses, loss of wetlands, traffic, water supply, and public
14 health.

15
16 b. The EIR fails to assess, analyze, and mitigate the impacts of supplying water for
17 the project, improperly leaving analysis to future study and improperly relying upon the
18 unstudied and unlawful actions of the El Dorado Irrigation District.

19
20 c. The EIR fails to adequately analyze project consistency with the General Plan, the
21 consequences of inconsistent land use and traffic planning policies of local and regional plans,
22 and inconsistency of land uses within the Specific Plan. Among unstudied inconsistencies are
23 densities between the Plan area and adjacent agricultural Sacramento County areas, high
24 density Plan residences adjacent to business park uses, varying traffic lane infrastructure
25 between County and regional planning documents, and the lack of mapping of El Dorado
26 County planned communities.
27
28

1 d. The EIR fails to consider a reasonable range of project alternatives, including,
2 among other things, avoidance of wetlands, and fails to study or adopt feasible mitigations.

3 e. The County of El Dorado failed to assess, analyze, or mitigate the project's effects
4 on rare and endangered plants, and failed to adopt feasible mitigation measures allowing
5 preservation of unique habitat.

6
7 f. The EIR is inadequate as specified in the comment letters contained in the
8 Response to Comments Addendum, and the responses fail to answer to questions raised.

9
10 **VI. VIOLATIONS OF THE GOVERNMENT CODE**

11 22. Petitioners fully incorporate herein by reference paragraphs 20 through 21, above.

12
13 23. The El Dorado General Plan is inadequate and unlawful, and is the subject of
14 separate judicial challenge. The Carson Creek Specific Plan project cannot be approved
15 without a lawful general plan in place.

16 24. The county's approval of the Carson Creek Specific Plan is inconsistent with
17 provisions of its General Plan, as presented in the comment letters to the EIR, including but
18 not limited to those which require on-site and off-site public benefit and compatibility.

19 Approval of development inconsistent with the General Plan violates the Government Code.
20

21
22 **WHEREFORE**, Petitioners pray:

23 1. That the court issue an Alternate and Peremptory Writ of Mandate, ordering
24 respondent County of El Dorado to set aside and void its certification of the EIR and its
25 approval of the Carson Creek Specific Plan project, including rezoning and Specific Plan
26 approval, and to comply with all provisions of the California Environmental Quality Act and
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the Government Code prior to further consideration of approval;

2. That the court issue a temporary restraining order and preliminary injunction enjoining respondent or its agents from engaging in any physical activity connected with development under the subject project while this petition is pending;

3. That the court issue a permanent injunction enjoining respondents and its agents from engaging in any activity connected with the subject project unless and until this court finds that said project is in full compliance with CEQA and relevant provisions of the Government Code.

4. For costs of suit and attorney's fees herein; and

5. For other and further relief as the court may deem proper.

Dated: October 25, 1996

BRANDT-HAWLEY & ZOIA

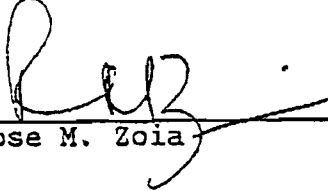
Susan Brandt-Hawley
Rose M. Zoia
Attorneys for Petitioners

e:\carson\petition

VERIFICATION

1
2
3 I am the attorney for Petitioners, who are located
4 outside of the County of Sonoma, State of California, where
5 I have my office. For that reason, I make this verification
6 for and on their behalf pursuant to California Code of Civil
7 Procedure Section 446. I have read the PETITION FOR WRIT OF
8 MANDAMUS and know its contents. The matters stated in it
9 are true and correct based on my knowledge, except as to the
10 matters which are stated therein on my information and
11 belief and as to those matters, I believe them to be true.

12 I declare under penalty of perjury that the above is
13 true and correct. Executed this 25th day of October, 1996,
14 at Glen Ellen, California.

15
16 
17 Rose M. Zoia
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EL DORADO COUNTY TAXPAYERS, et al. v.
COUNTY OF EL DORADO, et al.

PROOF OF SERVICE BY MAIL

I am a citizen of the United States and a resident of the County of Sonoma. I am over the age of eighteen years and not a party to the within entitled action; my business address is P. O. Box 1659, Glen Ellen, CA 95442.

On October 25, 1996, I served one true copy of:

PETITION FOR WRIT OF MANDAMUS

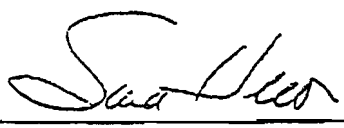
by placing a true copy thereof enclosed in a sealed envelope and postage thereon fully prepaid, in the United States mail at Glen Ellen, addressed as follows:

DANIEL E. LUNGREN, Attorney General
CRAIG C. THOMPSON, Deputy Attorney General
State of California
Department of Justice
P. O. Box 944255
Sacramento CA 94244-2550

PURSUANT TO PUBLIC RESOURCES CODE § 21167

I declare under penalty of perjury, that the foregoing is true and correct.

Executed on October 25, 1996, at Glen Ellen, CA 95442.



Sara Hews

FILED

96 OCT 25 PM 4:11

EL DORADO COUNTY
SUPERIOR COURT

1 Susan Brandt-Hawley SBN 076907
2 Rose M. Zoia SBN 134759
3 **Brandt-Hawley & Zoia**
4 Chauvet House • Post Office Box 1659
Glen Ellen, California 95442
(707) 938-3908 • (707) 576-0198

BY **P13** DEPUTY

5 Attorneys for Petitioners

6 SUPERIOR COURT OF THE STATE OF CALIFORNIA
7 IN AND FOR THE COUNTY OF EL DORADO

8 CASE NUMBER PV 002200

9 EL DORADO COUNTY TAXPAYERS FOR
10 QUALITY GROWTH; ENVIRONMENTAL
11 PLANNING AND INFORMATION
COUNCIL OF WESTERN EL DORADO
COUNTY, INC. (EPIC); and DOES
1 through 5;

NOTICE OF COMMENCEMENT
OF ACTION

12 Petitioners,
13 v.

"by FAX"

14 COUNTY OF EL DORADO, and DOES
6 through 10;

15 Respondent,
16 _____/

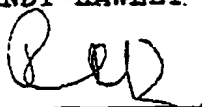
17 PALISADES DEVELOPMENT, INC.;
18 AKT MOSHER; AKT DEVELOPMENT
CORPORATION; and DOES 11
through 15;

19 Real Parties in Interest.
20 _____/

21 TO: COUNTY OF EL DORADO:

22 Notice is hereby given that an action has been commenced
23 against you by the filing of a Petition for Writ of Mandate in
24 the above entitled court on this date.

25 Dated: October 25, 1996 BRANDT-HAWLEY & ZOIA

26 
27 _____
28 Rose M. Zoia
Susan Brandt-Hawley
Attorney for Petitioners

PROOF OF SERVICE

EL DORADO COUNTY TAXPAYERS FOR QUALITY GROWTH, et al. v.
COUNTY OF EL DORADO, et al.

I am a citizen of the United States and a resident of the County of Sonoma. I am over the age of eighteen years and not a party to the within entitled action. My business address is P. O. Box 1659, Glen Ellen CA 95442.

On October 25, 1996, I served one true copy of:

NOTICE OF COMMENCEMENT OF ACTION

by placing a true copy thereof enclosed in a sealed envelope and postage thereon fully prepaid, in the United States mail at Glen Ellen, California addressed to the persons listed below.

COUNTY CLERK
COUNTY OF EL DORADO
360 FAIR LANE
PLACERVILLE CA 94667

I declare under penalty of perjury that the foregoing is true and correct.

Executed on October 25, 1996, at Glen Ellen, California.



Sara Hews

Susan Brandt-Hawley smh@zoiaw.com
Rose M. Zoia rzm@zoiaw.com
Brandt-Hawley & Zoia
Chauvet House • Post Office Box 1659
Glen Ellen, California 95442
(707) 938-3908 • (707) 576-0198

EL DORADO CO. SUPERIOR CT.

FILED 10-25-96

BY

P3

Attorneys for Petitioners

SUPERIOR COURT OF THE STATE OF CALIFORNIA
IN AND FOR THE COUNTY OF EL DORADO

EL DORADO COUNTY TAXPAYERS
FOR QUALITY GROWTH;
ENVIRONMENTAL PLANNING AND
INFORMATION COUNCIL OF WESTERN
EL DORADO COUNTY, INC. (EPIC);
and DOES 1 through 5;

CASE NUMBER PV002200

NOTICE OF ELECTION
TO PREPARE ADMINISTRATIVE
RECORD OF PROCEEDINGS

Petitioners,

v.

"by FAX"

COUNTY OF EL DORADO, and DOES
6 through 10;

Respondent,


PALISADES DEVELOPMENT, INC.;
AKT MOSHER; AKT DEVELOPMENT
CORPORATION; and DOES 11
through 15;

Real Parties in Interest.

Petitioners provide notice that they elect to prepare the
administrative record of proceedings.

Dated: October 25, 1996

BRANDT-HAWLEY & ZOIA



Rose M. Zoia
Susan Brandt-Hawley
Attorney for Petitioners

CARSON\Record.elc



RESOLUTION No. 8-97

**OF THE BOARD OF SUPERVISORS OF THE COUNTY OF EL DORADO
RESCINDING RESOLUTION NO. 224-96**

WHEREAS, on September 24, 1996, the Board of Supervisors ("Board") of the County of El Dorado ("County") adopted Resolution No. 224-96, whereby the Board:

- (1) Certified the Final Environmental Impact Report ("EIR") for the Carson Creek Specific Plan and the Euer Ranch tentative subdivision map, pursuant to the California Environmental Quality Act ("CEQA") (Pub. Resources Code, § 21000 *et seq.*);
- (2) Made findings pursuant to Public Resources Code section 21081, subdivision (a);
- (3) Adopted a mitigation monitoring and reporting program pursuant to Public Resources Code section 21081.6;
- (4) Issued a statement of overriding considerations pursuant to Public Resources Code section 21081, subdivision (b), setting forth those considerations that, in the Board's judgment, render acceptable the significant unavoidable impacts associated with approval of the Specific Plan and tentative subdivision map;
- (5) Approved the Specific Plan; and
- (6) Approved the tentative subdivision map for Euer Ranch;

WHEREAS, on October 25, 1996, El Dorado County Taxpayers for Quality Growth *et al.* ("Petitioners") filed a Petition for Writ of Mandamus in the El Dorado County Superior Court challenging the County's adoption of Resolution No. 224-96;

WHEREAS, on December 17, 1996, the El Dorado Superior Court issued an alternative writ of mandamus, giving the County the option either to rescind its approvals of the Carson Creek Specific Plan and the Euer Ranch tentative subdivision map, or to show cause why such rescissions should not occur;

WHEREAS, the County, without conceding any merit in the litigation filed by Petitioners, wishes to resolve the pending litigation by rescinding its action and thereby avoid the costs and inconveniences associated with litigation;

EXHIBIT D

WHEREAS, the Board of Supervisors intends to re-examine the findings made in Resolution No. 224-96 relating to the consistency of the Specific Plan and tentative subdivision map with County General Plan policies relating to water supply in order to clarify the Board's interpretation of those policies, and to receive information relative to the State Water Resources Control Board's recent approval of a water rights application for the so-called "El Dorado Project," jointly filed by the El Dorado Irrigation District and the El Dorado County Water Agency; and

WHEREAS, the County also intends to reconsider its approvals of the Specific Plan and tentative subdivision map in light of environmental information generated in connection with the El Dorado Project;

NOW THEREFORE, the Board hereby resolves as follows:

1. Pursuant to the alternative writ of mandamus issued by the El Dorado County Superior Court, the Board hereby vacates its approval of Resolution No. 224-96, thereby rescinding (a) its certification of the Final EIR, (b) its adoption of findings, a mitigation monitoring program, and statement of overriding consideration, and (c) its approvals of the Specific Plan and tentative subdivision map;
2. The Board instructs County Staff to prepare an Addendum to the Final EIR for the Specific Plan and tentative map that will include updated information regarding water supply issues and may also include updated information regarding other issues;
3. The Board further instructs County Staff to make the Addendum available to the public, and to bring the Addendum back to the Board for consideration at a noticed public hearing at which the Board will accept public testimony on the Addendum and Final EIR, the

Specific Plan, and the tentative map, and will consider whether the County has satisfied its CEQA and other obligations, and whether to re-approve the Specific Plan and tentative subdivision map.

PASSED AND ADOPTED by the Board of Supervisors of the County of El Dorado at a regular meeting of said Board, held on the 14th day of JANUARY, 1997 by the following vote of said Board:

Ayes: SUPERVISORS: WILLIAM S. BRADLEY,
RAYMOND J. NUTTING, J. MARK NIELSEN,
WALTER L. SHULTZ, JOHN E. UPTON

ATTEST

DIXIE L. FOOTE

Clerk of the Board of Supervisors

Absent:

Noes: NONE

NONE

By Margaret E. Moody
Deputy Clerk

[Signature]
Chairman, Board of Supervisors

I CERTIFY THAT:

THE FOREGOING INSTRUMENT IS A CORRECT COPY OF THE ORIGINAL ON FILE IN THIS OFFICE

Date _____

ATTEST: DIXIE L. FOOTE, Clerk of the Board of Supervisors
of the County of El Dorado, State of California.

By _____
Deputy Clerk



Cal/EPA

**State Water
Resources
Control Board**

**Division of
Water Rights**

Mailing Address:
P.O. Box 2000
Sacramento, CA
95812-2000

901 P Street
Sacramento, CA
95814
(916) 657-1359
FAX (916) 657-1485



**Pete Wilson
Governor**

In Reply Refer
to:332:EM:5645

OCTOBER 10 1996

TO ENCLOSED MAILING LIST

DECISION RELATED TO APPLICATION 29919,29920,29921, AND 29922 AND PETITION FOR PARTIAL ASSIGNMENT OF STATE FILED APPLICATION (SFA) 5645 BY EL DORADO COUNTY WATER AGENCY AND EL DORADO IRRIGATION DISTRICT; APPLICATION 30204 AND PETITION FOR PARTIAL ASSIGNMENT OF SFA 5645 BY KIRKWOOD MEADOWS PUBLIC UTILITIES DISTRICT AND EL DORADO NATIONAL FOREST; PETITION FOR PARTIAL ASSIGNMENT OF SFA 5645 BY KIRKWOOD, INC.; APPLICATION 30219 AND PETITION FOR PARTIAL ASSIGNMENT OF SFA 5645 BY ALPINE COUNTY WATER AGENCY; APPLICATION 30218 AND PETITION FOR PARTIAL ASSIGNMENT OF SFA 5645 BY AMADOR COUNTY--SILVER LAKE, CAPLES LAKE, LAKE ALOHA AND SOUTH FORK AMERICAN RIVER IN ALPINE, AMADOR, AND EL DORADO COUNTY

Enclosed is a copy of Decision 1635 in the above-entitled matter. Decision 1635 was adopted by the State Water Resources Control Board on October 2, 1996. Pursuant to the provisions of Water Code Section 1357 et seq., any interested party affected by the decision may file a petition for reconsideration within 30-days after adoption of the decision.

If you have any questions or comments, please contact Buck Taylor at (916) 657-2100 or Ernest Mona at (916) 657-1947.

Sincerely,

Edward C. Anton, Chief
Division of Water Rights

Enclosures



Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

EXHIBIT E

WM. ROBERT ALCOTT
C - DISTRICT MANAGER
EL DORADO IRRIGATION DISTRICT
2890 MOSQUITO ROAD
PLACERVILLE , CA 95667

JUDY ALLEN
C - CORPORATE SECRETARY
AMADOR COUNTY CHAMBER OF
125 PEEK STREET, SUITE B
JACKSON , CA 95642

MORRIS ALLEN, DIR.
C - CITY OF STOCKTON
MUNICIPAL UTILITIES
2500 NAVY DRIVE
STOCKTON , CA 95208

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C - BARTKIEWICZ, KRONICK, & SHANAHAN
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1951 WEBSTER STREET
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POLLOCK PINES CA 95726

EDWIN & PATRICIA BRENNAN
C
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LOOMIS , CA 95650

SUSAN BRITTING
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EL DORADO CHAPTER
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C - CITY OF SACRAMENTO
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CINDY CHADWICK
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ENVIRONMENTAL SERVICES
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RANCHO CORDOVA 95670

PAUL J. CREGAR
C
501 MAGNOLIA LANE
SANTA CLARA , CA 95051

MERV DEHASS
C - GENERAL MANAGER
EL DORADO COUNTY WATER AGENCY
330 FAIR LANE
PLACERVILLE , CA 95667

HARRY DUNLOP
C - EL DORADO COUNTY CITIZENS
CONCERNED FOR WATER
4284 MISSOURI FLAT ROAD
PLACERVILLE , CA 95667

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C - SMUD
6201 S STREET, MS-42
SACRAMENTO , CA 95817-1899

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49ER COUNCIL
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FRIENDS OF THE RIVER
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MODESTO , CA 95355

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AND CSPA
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QUINCY , CA 95971

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C
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SAN FRANCISCO CA 94120

KEVIN M. O'BRIEN, ESQ.
C - DOWNEY, BRAND, SEYMOUR &
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SACRAMENTO , CA 95814-4686

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C - CHIEF OF OPERATIONS
WESTLAND WATER DISTRICT
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FRESNO , CA 93703

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C - PRESIDENT
KIT CARSON LODGE
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PLYMOUTH , CA 95669

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EL DORADO NATIONAL FOREST
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C - AMADOR COUNTY
500 ARGONAUT LANE
JACKSON , CA 95642

FELIX SMITH
C - SAVE THE AMERICAN
RIVER, ASSOCIATION
4720 TALUS WAY
CARMICHAEL , CA 95608

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BUENA VISTA RANCHERIA
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IONE , CA 95640-9737

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C - SIERRA CLUB LEGAL
DEFENSE FUND
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SAN FRANCISCO CA 94104-4209

I-P CAPLES LAKE HOMEOWNERS ASSOC 444 OAK PLACE SAN ANDREAS , CA 95249	HON. ALFRED ALQUIST I-P MEMBER OF THE SENATE 5100 STATE CAPITOL SACRAMENTO , CA 95814	HON. DOMINIC CORTESE I-P MEMBER OF THE ASSEMBLY 2150 STATE CAPITOL SACRAMENTO , CA 95814
I-P CAPLES LAKE LODGE P.O. BOX 8 KIRKWOOD , CA 95646	PAUL BARTKIEWICZ, ESQ. I-P BARTKIEWICZ, SHANAHAN & KRONICK 1011 22ND STREET, SUITE 100 SACRAMENTO , CA 95816-4907	WILLIAM DUBOIS, DIRECTOR I-P CAL-FARM BUREAU FED 1127 11TH STREET, ROOM 531 SACRAMENTO , CA 95814
I-P EAST SILVER LAKE IMP. ASSOC. 875 BOLLEN CIRCLE GARDENVILLE , NV 89410	ANDREW BELL I-P MPWMD P.O. BOX 85 MONTEREY , CA 93942-0085	JACK GIPSMAN I-P: OFFICE OF ATTORNEY GENERAL U.S. DEPT. OF AGRICULTURE 33 NEW MONTGOMERY ST., 17TH FLOOR SAN FRANCISCO CA 94105
I-P LAKE KIRKWOOD HOMEOWNER'S ASSOC. 3499 MOUNT BLANC COURT CARSON CITY , NV 89705	THOMAS M. BERLINER I-P CITY ATTORNEYS OFFICE 214 VAN NESS AVE. SAN FRANCISCO CA 94102	SALLY GREGORY I-P US FOREST SERVICE 630 SANSOME STREET SAN FRANCISCO CA 94111
I-P: NORHTERN SEIRRA AND SOUTH SILVER LAKE HOMEOWNERS 19909 EAST CONSTOCK ROAD LINDEN , CA 95236	THOMAS M. BERLINER I-P CITY ATTORNEYS OFFICE 1390 MARKET STREET, SUITE 250 SAN FRANCISCO CA 94102	JIM HAMILTON I-P CAL-TROUT 926 J STREET, SUITE 617 SACRAMENTO , CA 95814
I-P: ASSOCIATED PRESS MARK EXECUTIVE BUILDING 925 L STREET, SUITE 320-A SACRAMENTO , CA 95814	CHARLES M. BERTOLETTE I-P P.O. BOX 782 PLACERVILLE , CA 95667	HON. PHILLIP ISENBURG I-P MEMBER OF THE ASSEMBLY 6005 STATE CAPITOL SACRAMENTO , CA 95814
I-P: USFW ECOLOGICAL DIVISION 2800 COTTAGE WAY, ROOM E1803 SACRAMENTO , CA 95825	THOMAS W. BIRMINGHAM, ESQ I-P KRONICK, MOSKOVITZ, TEIDIMEN & GIRARD 400 CAPITOL MALL, 27TH FLOOR SACRAMENTO , CA 95814-4417	DAVID KENNEDY, DIR I-P DWR 1416 9TH STREET SACRAMENTO , CA 95814
I-P YUBA-SUTTER APPEAL DEMOCRAT P.O. BOX 431 MARYVILLE , CA 95901	ERIC P. BOCK, P.E. I-P CITY OF LOS ANGELES, DW&P 111 NORTH HOPE STREET, RM 1469 LOS ANGELES , CA 90012	HONORABLE DAVID KNOWLES I-P MEMBER OF THE ASSEMBLY 2196 STATE CAPITOL SACRAMENTO , CA 95814
JOHN CLAUSEN I-P CONTRA COSTA COUNTY P.O. BOX 69 MARTINEZ , CA 94553	HON. LARRY BOWLER I-P MEMBER OF THE ASSEMBLY 3147 STATE CAPITOL SACRAMENTO , CA 95814	ANTHONY LANDLER I-P SOUTHERN CAL EDISON CO. P.O. BOX 800 ROSEMEAD , CA 91770
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MEMBER OF THE SENATE
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SACRAMENTO , CA 95814

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I-P
HEARTS BUILDING, SUITE 1200
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I-P: PLASSES HOMESTEAD
HOMEOWNERS ASSOCIATION
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SAN RAFAEL , CA 94901

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N. CAL. COUN. OF FLY FISHERMAN
1146 PULORA COURT
SUNNYVALE , CA 94086

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I-P
PLANNING & CONSERVATION LEAGUE
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JAMES STROCK
I-P
CAL-EPA
555 CAPITOL MALL, SUITE 235
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ELLEN SWARD
I-P
LEGIS. COUNCIL BUREAU
925 L STREET, SUITE 400
SACRAMENTO , CA 95814

JIM TESTA
I-P
DEPT OF BOATING & WATER
1629 S STREET
SACRAMENTO , CA 95814

BOB WAGNER
I-P: HANSON ENGINEERING
444 NORTH THIRD STREET, SUITE 400
SACRAMENTO , CA 95814

RUSSEL WICKWIRE
I-P
DF&G
P.O. BOX 73
TAHOE CITY , CA 96145

JEANNE ZOLEZZI, ESQ.
I-P - NEUMILLER & BEARDSLEE
P.O. BOX 20
STOCKTON , CA 95201-3020

THOMAS ZUCKERMAN, ESQ.
I-P
SHERWIN, ZUCKERMAN & SARGENT
146 - 148 WEST WEBER AVE.
STOCKTON , CA 95202

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of:)

Applications 29919, 29920, 29921, and 29922)
and Petition for Assignment of State Filed)
Application 5645 by El Dorado County Water)
Agency and El Dorado Irrigation District,)

DECISION 1635

Applications 30062 and 30453 and Petition)
for Assignment of State Filed)
Application 5645 by Kirkwood Associates,)
Inc. and U.S. El Dorado National Forest,)

SOURCES: Silver Lake)
tributary to)
Silver Fork)
American River;)
Caples Lake)
tributary to)
Caples Creek)
and Silver Fork)
American River;)
and Lake Aloha)
tributary to)
Pyramid Creek)
all three being)
tributary to)
the South Fork)
American River)

Application 30204 by Kirkwood Meadows)
Public Utility District and)
U.S. El Dorado National Forest,)

Application 30219 and Petition for)
Assignment of State Filed Application 5645)
by Alpine County Water Agency,)

Application 30218 and Petition for)
Assignment of State Filed Application 5645)
by Amador County,)

COUNTIES: Alpine, Amador,)
and El Dorado)

Applicants and Petitioners,)

Pacific Gas & Electric Company,)
California Sportfishing Protection)
Alliance, Gerald and Joan Glasgow,)
Bryant M. Bennett, Edward C. Hinde, Edwin)
and Patricia Brennan, Sacramento)
Municipal Utility District, Amador County)
Chamber of Commerce, Plasse's Inc.,)
Edwin Allen Bish II, U.S. Bureau of)
Reclamation, City of Stockton, U.S. Fish and)
Wildlife Service, Sierra Club Legal)
Defense Fund, et al., Kit Carson Lodge,)
Amador County Water Resources,)
California Department of Fish and Game,)
Paul J. Cregor, Save the American River)
Association, San Joaquin County Department)
of Public Works, Friends of the River,)
El Dorado National Forest, Curtis Manning,)
City of Sacramento, California Native)
Plant Society, El Dorado County Water)
Agency, El Dorado Irrigation District,)
Westlands Water District, San Luis and)
Delta-Mendota Water Agency, and El Dorado)
County Taxpayers for Quality Growth.)

Protestants and Interested Parties.)

1.4 El Dorado Amended Application

El Dorado has amended its initial applications and petitions for partial assignment. As amended, the applications and petitions now seek water for storage at only Lake Aloha and Caples and Silver Lakes and direct diversion only at Folsom Reservoir. The total amount of water being sought by direct diversion and rediversion from storage will not exceed 17,000 acre-feet per annum (afa), and the total amount of water to be taken by direct diversion will not exceed 15,000 afa and will be limited to water originating in the South Fork American River watershed upstream of the El Dorado Canal diversion near Kyburz.

2.0 PROJECT DESCRIPTIONS

The following sections provide a brief description of each of the proposed projects.

2.1 El Dorado's Project

El Dorado's petitions and applications are predicated upon PG&E continuing to operate Lake Aloha and Echo, Caples, and Silver Lakes under Federal Energy Regulatory Commission (FERC) requirements as they have been historically operated for hydroelectric purposes.⁴ (95,EDCWA,94,2; 95,EDCWA,93,3.) Water released from Lake Aloha and Caples and Silver Lakes will be rediverted at Folsom Reservoir after it passes through PG&E's hydroelectric facilities. (July 13, 1995, letter from Mr. Somach to SWRCB, A-29919, Correspondence File, Folder J; 95,EDCWA,93,4; 95,EDCWA,94,2-4.) El Dorado will also directly divert water at Folsom Reservoir. The water would be pumped from Folsom Reservoir to El Dorado's place of use. In general terms, El Dorado's service area lies: (1) south of the South Fork of the American River, (2) north of the Cosumnes River and the North

⁴ PG&E's historical operation of the lakes is at the heart of the concerns raised by most protestants. That is, can PG&E's historical operations of the lakes be meaningfully described in quantifiable hydrologic terms.

Fork of the Cosumnes River, (3) east of the Sacramento County line, and (4) west of Pollock Pines. (95,T,I,97:21-99:9; EDCWA,78, Plate 1.) Water would be used for domestic, municipal, and irrigation purposes.

El Dorado Irrigation District (EID) has also entered into an agreement to purchase PG&E's rights to use the lakes, the water from the lakes, and its hydroelectric generation facilities. (95,EDCWA,94,9.) The agreement is subject to approval by both the California Public Utilities Commission (PUC) and FERC. (95,T,I,105:21-106:9.) El Dorado's petition and applications are not dependent upon the agreement; however, El Dorado's eventual acquisition of PG&E's hydroelectric project could have an effect on the protestants and other competing applications and petitions for water within the lakes operated by PG&E.

2.2 Kirkwood, Inc.'s Project

Kirkwood, Inc.'s petition and applications seek to appropriate water for snowmaking at the Kirkwood Ski Resort. Under two applications, up to 500 afa of water would be diverted to storage in Caples Lake between November 1 and June 30 of the following year. Up to 4.2 cfs would also be directly diverted for snowmaking between November 1 and March 1 of the following year. The ski resort is situated within several miles of Caples Lake and near the nexus of Amador, Alpine, and El Dorado Counties. (95,SWRCB,A-30204.)

2.3 Kirkwood PUD

Kirkwood PUD and the U.S. El Dorado National Forest filed an application to appropriate 0.69 cfs of water by direct diversion from Caples Lake between November 1 through June 15 of the following year for municipal use. The water is for municipal use within the district's service area which is in the immediate

vicinity of both Caples Lake and Kirkwood, Inc.'s project.
(95, SWRCB, A-30204.)

2.4 Alpine County Board of Supervisors and Alpine County Water Agency (Alpine County)

Alpine County filed an application and petition for partial assignment seeking up to 0.69 cfs of water by direct diversion from Caples Lake between November 1 and July 31 of the following year. Up to 21,581 afa would also be diverted to storage between November 1 and July 31 of the following year. The water would be used principally for recreation and fish and wildlife preservation and enhancement purposes within Caples Lake and for incidental domestic use in an area immediately adjacent to and north of the lake. (95, SWRCB, A-30216.)

2.5 Amador County

Amador County filed an application and petition for partial assignment seeking up to 8740 afa from Silver Lake between November 1 and July 31 of the following year. The water would be used for only recreation, fish and wildlife preservation and enhancement, and fire protection purposes within Silver Lake. (95, SWRCB, A-30218.)

3.0 PROTESTS TO APPLICATIONS AND PETITIONS FOR ASSIGNMENT OF STATE HELD APPLICATIONS

Notice must be given of both applications to appropriate water and petitions for assignment or release of priority of state filings. (Water Code section 1300 et seq. and section 10504.1.) Numerous protests to the subject applications and petitions for assignment of the state filings were filed with the Board. Table 2 identifies each protestant and the general nature of the protest filed in relation to each project for which an application and petition for assignment were filed.

TABLE 2
PROTEST SUMMARY

PROTESTANTS	APPLICANTS				
	EL DORADO		KIRKWOOD-PUD	ALPINE	AMADOR
Pacific Gas & Electric Co.	WR		WR	WR	WR
California Sportfishing Protection Alliance (CSPA)		ENV			
Gerald & Joan Glasgow		ENV			
Bryant M. Bennett	WR	ENV			
Edward C. Hinde		ENV			
Edwin & Patricia Brennan	WR				
Sacramento Municipal Utility Dist.	WR		WR	WR	WR
Amador County Chamber of Commerce		ENV			
Plasse's Inc. dba Plasse's Resort		ENV			
Edwin Allen Bish II		ENV			
U.S. Bureau of Reclamation	WR			WR	WR
City of Stockton		ENV			
U.S. Fish and Wildlife Service		ENV		ENV	ENV
Sierra Club Legal Defence Fund et al.	WR	ENV			
Kit Carson Lodge		ENV			
Amador County Water Resources (A-5645)	WR	ENV			
Amador County Water Resources (A-29919)		ENV			
California Department of Fish & Game		ENV		ENV	ENV
Paul J. Cregar		ENV			
Save the American River Association (SARA)		ENV			
San Joaquin Co. Department of Public Works	WR	ENV			
Friends of the River		ENV			
El Dorado National Forest		ENV			
Curtis Manning		ENV			
City of Sacramento		ENV			
El Dorado Taxpayers for Quality Growth		ENV			
California Native Plant Society (SFA 5645)		ENV			
California Native Plant Society (SFA 5645)		ENV			

PROTESTANTS	APPLICANTS			
	EL DORADO	KIRKWOOD PUD	ALPINE	AMADOR
El Dorado Co. Water Agency & Irr. District		WR & ENV	WR & ENV	WR & ENV

NOTE: WR = Water Right & ENV = Environmental

3.1 Protests by PG&E

PG&E protested all of the projects encompassed by the applications and petitions for partial assignment of state held applications by El Dorado, Kirkwood, Inc., Kirkwood PUD, and Amador and Alpine Counties. PG&E operates two downstream plants for generating hydroelectric power. The El Dorado Project (FERC 184) and the Chili Bar Project (FERC 2155). Water released from the PG&E lakes is rediverted to the El Dorado Project via the El Dorado Canal near Kyburz. The Chili Bar facility is on the South Fork American River and water released from the PG&E lakes flows to and through the Chili Bar powerhouse. The applications and petitions were protested on the basis that the proposed projects would interfere with PG&E's right to divert and use water for power purposes. (PG&E protests lodged in SWRCB application files for each application and petition.) As earlier noted, all of the applications seek to appropriate water from the lakes which PG&E operates for the production of hydroelectric power.

Following the close of the hearing, PG&E withdrew its protest to the applications and petition for partial assignment filed by Kirkwood, Inc. (A-30062, Correspondence File, Folder B, letter dated December 21, 1995, to Tom Lavenda from Jeffrey D. Butley.) The Board takes administrative notice of this correspondence. Accordingly, PG&E's protest against Kirkwood, Inc.'s applications and petition is dismissed.

3.2 Sacramento Municipal Utility District (SMUD)

SMUD operates the White Rock and Slab Creek hydroelectric power generating facilities on the South Fork American River. Water released from the PG&E lakes flows into the South Fork American River and passes through SMUD's facilities. SMUD protested all of the applications and petitions for partial assignment. The applications and petitions were protested on the basis that the proposed projects would reduce the amount of water available for

power production "under SMUD's senior water rights". (SMUD protests are lodged in SWRCB application files for each application and petition.)

SMUD withdrew its protest to the applications and petition for partial assignment filed by Kirkwood, Inc. (95,KW,16.) Accordingly, SMUD's protest against Kirkwood, Inc.'s applications and petition is dismissed.

3.3 U.S. Bureau of Reclamation (Bureau)

The Bureau protested all of the applications and petitions for partial assignment except the application filed by Kirkwood PUD. The Bureau owns and operates Folsom Dam and Reservoir near Folsom, California. Water is diverted to storage at the dam and directly diverted to the Folsom-South Canal at Nimbus Diversion Dam a few miles downstream of Folsom Dam. The Bureau operates Folsom Dam to generate electric power, supply water for consumptive use purposes, and maintain water quality in the Sacramento-San Joaquin Delta. Water released from the PG&E lakes flows into the South Fork American River and passes through Folsom Reservoir and Dam. The applications and petitions were protested on the basis that the proposed projects would adversely affect power generation and supplying water for consumptive use purposes.

Following the hearing, the Bureau withdrew its protest to the applications and petition for partial assignment filed by Kirkwood, Inc. (A-30062, Correspondence File, February 29, 1996, letter to Edward Anton from Robert F. Stackhouse.) The Board takes administrative notice of this correspondence. Accordingly, the Bureau's protest against Kirkwood, Inc.'s applications and petition is dismissed.

3.4 El Dorado Protests to Competing Applications and Petitions for Partial Assignment

El Dorado filed protests to the applications and petitions for partial assignment filed by Kirkwood, Inc., Kirkwood PUD, and Alpine and Amador Counties.

3.4.1 Alpine County

Regarding Alpine County, El Dorado states that: (1) the proposed diversion from Caples Lake is in direct competition with El Dorado's applications and petition; (2) to the extent Alpine County diverts water for consumptive uses, it would reduce the quantity of water available to El Dorado; and (3) to the extent water is held in the lake for recreation and fish and wildlife purposes, it would interfere with El Dorado's ability to divert water under its applications and petition.

El Dorado contends that it is unclear how lake operations would be modified by the nonconsumptive portion of the application and petition, but that significant environmental effects could occur within the lake, in Caples Creek, and in Silver Fork of the South Fork American River from the consumptive use portion of the application and petition. El Dorado also contends that significant environmental effects could also occur if the nonconsumptive uses altered the manner in which the lake has been historically operated. El Dorado further contends that the application and petition for partial assignment cannot be approved until Alpine County has prepared and certified an EIR.

3.4.2 Amador County

Regarding Amador County, El Dorado states that: (1) the proposed diversion from Silver Lake for recreation and fish and wildlife is in direct competition with El Dorado's applications and (2) to the extent water is held in the lake for recreation and fish and wildlife purposes, it would interfere with El Dorado's ability to divert water under its applications and petition. El Dorado also

contends that it is unclear how lake operations would be modified if Amador's application and petition for partial assignment were approved, but that significant environmental effects could occur within the lake and downstream of the lake in Silver Fork American River. El Dorado further contends that the negative declaration prepared by Amador County is inadequate because it failed to analyze the environmental effects of the proposed project on the lake and in the Silver Fork American River.

3.4.3 *Kirkwood, Inc.*

Regarding Kirkwood, Inc., El Dorado⁵ states that the proposed diversion from Caples Lake is in direct competition with El Dorado's applications and petition and to the extent Kirkwood, Inc. diverts water for snowmaking it would reduce the quantity of water available to El Dorado. El Dorado contends that the proposed project will have adverse environmental effects on the lake, Caples Creek, Silver Fork South Fork American River, and on national forest lands upon which the Kirkwood Ski Resort is situated. On October 24, 1994, El Dorado withdrew its protest to Kirkwood, Inc.'s applications to appropriate water.⁶ Accordingly, El Dorado's protest to Kirkwood, Inc.'s applications is dismissed.

⁵ In this instance, El Dorado means only the protest of the El Dorado County Water Agency.

⁶ EID, EDCWA, and Kirkwood, Inc. entered into an agreement wherein EID and EDCWA agreed, among other things, to withdraw their protests to the issuance and exercise of rights to divert, store and use water as applied for in Applications 30062, 30453, and petition for partial assignment of state filing 5645 (folder 11, Kirkwood, Inc., petition for partial assignment), and Kirkwood, Inc., agreed to certain consideration. These parties have represented to the Board that there is no longer any adversity between their respective rights, and that neither EID nor EDCWA will assert any water rights priority against Kirkwood, Inc.'s water rights, whether based upon existing rights (including those held by the owner of FERC Project 184) or any right they acquire in the future (including any rights issued pursuant to EID and EDCWA Applications 29919, 29920, 29921, 29922, and petition for partial assignment of state filing 5645 (folder 8)).

3.4.4 Kirkwood PUD

Regarding Kirkwood PUD, El Dorado filed the same protest against Kirkwood PUD that it filed against Kirkwood, Inc.; however, El Dorado has not withdrawn its protest to the application filed by Kirkwood PUD. (*Supra*, § 3.4.3.)

3.5 U.S. Fish and Wildlife Service (USFWS)

The USFWS protested only the applications and petitions for partial assignment filed by El Dorado, and Alpine and Amador Counties. Regarding El Dorado, USFWS indicates that:

(1) additional reductions of flow in the American River could have cumulative adverse effects on anadromous salmonid populations and (2) reductions in flow could also adversely affect fish in the lakes and in the streams into which the lakes drain. Regarding Alpine County, USFWS indicates that Caples Lake supplies water which supports cold water fisheries in the South Fork American River and its tributaries. Regarding Amador County, USFWS indicates that Silver Lake supplies water which supports cold water fisheries in the South Fork American River and its tributaries. As to all three proposed projects, USFWS indicates that no instream flow incremental methodology or limnological studies have been performed to establish what flow out of the lakes will best protect fish populations and that such studies should be performed by the applicants.

3.6 California Department of Fish and Game (DFG)

The DFG protested only the applications and petitions for partial assignment filed by El Dorado, Alpine County, and Amador County.

3.6.1 El Dorado

Regarding El Dorado, DFG indicates that: (1) Silver and Caples Lakes and the releases of water from the lakes support numerous aquatic and wildlife species in and along Caples Creek, Silver Fork, and the South Fork American River, as well as recreational uses made of these resources and (2) modifications to the release

of water could adversely affect such resources. DFG requests that El Dorado be required to conduct a broad range of studies including instream flow incremental methodology studies on Caples Creek, Silver Fork, and South Fork American River.

3.6.2 *Alpine County*

Regarding Alpine County, DFG indicates that: (1) the release of water from Caples Lake supports a cold water fishery, amphibian populations, and riparian habitat in and along Caples Creek, and Silver Fork and South Fork American River; (2) modifications to the release of water could adversely affect such resources; and (3) no instream flow incremental methodology or limnological studies have been performed to establish what flows out of the lakes will best protect fish populations. DFG states that it will seek studies from FERC in 2002 and asks the Board to condition any new permit to require conformance with any change in the rate of release imposed by FERC on Project 184.

3.6.3 *Silver and Caples Lakes*

DFG protests should be dismissed because Silver or Caples Lakes will continue to be operated by PG&E. El Dorado has no agreement with PG&E which would result in PG&E modifying the operation of the lakes and El Dorado has stated that the lakes will be operated in the same manner as they have been historically operated by PG&E. Under such circumstances, it is not appropriate for the Board to require El Dorado to conduct limnological studies. Finally, the Board does not have any authority to adopt a condition requiring PG&E to comply with releases from Caples and Silver Lakes required by FERC. Thus, the DFG protest should be dismissed.

3.6.4 *Amador County*

Regarding Amador County, DFG indicates that: (1) releases from Silver Lake support a cold water fishery, amphibian populations, and riparian habitat in and along Silver Fork and South Fork

American River; (2) modifications to the release of water could adversely affect such resources; and (3) no instream flow incremental methodology or limnological studies have been performed to establish what flows out of the lakes will best protect fish populations. DFG states that it will seek such studies from FERC in 2002 and asks the Board to condition any new permit to require conformance with any change in the rate of release imposed by FERC on Project 184.

3.7 Westlands Water District (WWD) and San Luis & Delta-Mendota Water Agency (SLDMWA)

WWD and SLDMWA each filed a protest against Kirkwood, Inc. Because SLDMWA failed to participate in the hearing, its protest is dismissed for failure to support the allegations in its protest. During the hearing, WWD withdrew its protest to Kirkwood, Inc. (95,T,III,200:23-201:2.) Although, WWD failed to file a protest against El Dorado's applications and petition, it did submit timely written testimony and exhibits related to El Dorado's applications and petition for partial assignment, and WWD was granted permission to participate as an interested party vis-a-vis El Dorado. (95,T,I,73:4-74:24.)

As previously indicated, WWD was granted standing to participate as an interested party vis-a-vis El Dorado. WWD is an agricultural water district in the San Joaquin Valley. Under contract, the Bureau supplies water to WWD from the Central Valley Project (CVP) and Folsom Reservoir is a unit of the CVP. WWD contends that any reduction in the water available to the Bureau at Folsom Reservoir will affect the Bureau's ability to fulfill its contractual obligations to supply water to WWD. (95,WWD,1,1-2.)

3.8 Protest to El Dorado's Applications and Petition for Partial Assignment

In addition to the foregoing protests, another 21 protests were filed and accepted against El Dorado's proposed project.

3.8.1 City of Stockton (Stockton)

Stockton protested El Dorado's application and petition for partial assignment of water from Silver Lake on environmental, public interest, and public trust grounds. Silver Lake is east of Stockton on State Route 88, the most direct route for Stockton residents to access the Sierra Mountains. Stockton operates a municipal camp during summer months at Silver Lake. (93,T,I, 16:8-20.) Stockton's protest states that it joins in the protest filed by the League to Save Sierra Lakes (League). The League filed a joint protest with numerous other persons and were represented by Sierra Club counsel. The joint filing by the League et al. does not, however, identify Stockton as a co-protestant. Stockton failed to submit testimony or exhibits for the hearing or appear at the hearing. (93,T,I,i-iii; 95,T,I,11:6-7.) In addition, Sierra Club counsel did not claim to represent Stockton at the hearing. (93,T,I,i-iii; 95,T,I,13:19-14:5.) Stockton appeared and made a policy statement during the 1993 hearing but did not otherwise participate in the hearing as a protestant. Thus, Stockton's protest is dismissed for having failed to support the allegations in its protest.

3.8.2 Amador County Water Resources (Amador County)

Amador County protested El Dorado's application and petition for partial assignment of water from Silver Lake on environmental, public interest, and public trust grounds. Silver Lake is a significant recreation area within Amador County and important to the County's economy. (93,AMADOR,9,4; 95,AMADOR,1.) If El Dorado obtains consumptive rights to the water stored in the lake, Amador County is concerned that water levels in Silver Lake will be more rapidly drawn down by PG&E in response to an agreement with PG&E, or by El Dorado if it obtains PG&E's rights to operate the lakes.

**3.8.3 San Joaquin County, Department of Public Works
(San Joaquin County)**

A protest was filed against El Dorado's applications and petition for partial assignment because San Joaquin County has an application pending to appropriate water from the American River at Nimbus Dam, Application 29657. San Joaquin County seeks assurance that any Board approval of water rights for El Dorado, which do not enjoy the benefit of area of origin statutes, will not impair any right which may be obtained under Application 29657. San Joaquin County did not submit written testimony or exhibits for the hearing nor did a representative appear at either the 1993 or 1995 hearing. (93,T,I,i-iii; 95,T,I,i-iii.) Thus, the protest of San Joaquin County is dismissed for having failed to support the allegations in its protest.

3.8.4 U.S. Eldorado National Forest (Forest Service)

The Forest Service filed a protest against El Dorado's applications and petitions for partial assignment. PG&E's lakes are operated on national forest lands. One is within a national wilderness area, Lake Aloha. The Forest Service states that its primary concern is maintenance of the scenic, recreational, and fishery values associated with the lakes. Like numerous other protestants, the Forest Service is concerned that if El Dorado obtains consumptive rights to the water stored in the lake, water levels in the lakes will be more rapidly drawn down by PG&E in response to an agreement with El Dorado or by El Dorado if it obtains PG&E's rights to operate the lakes.

3.8.5 City of Sacramento (Sacramento)

Sacramento filed a protest against El Dorado's applications and petition for partial assignment. The American River below Folsom Dam flows through Sacramento and its surrounding environs. The protest states that flow in the lower American River (below Nimbus Dam) is needed for fish, wildlife, vegetation, recreation, and other public trust uses and that the flow is already

insufficient, at times, to support such uses. Sacramento is concerned that El Dorado's proposed project will reduce the flows available for public trust uses made of the lower American River. Sacramento did not submit written testimony or exhibits for the hearings, nor did a representative appear at either the 1993 or 1995 hearing. (93,T,I,i-iii; 95,T,I,i-iii.) Thus, the protest of Sacramento is dismissed for having failed to appear or support the allegations in its protest.

3.8.6 Sierra Club et al. (Sierra Club) Protests

In addition to itself, the Sierra Club represents the following persons: Kirkwood PUD, League to Save Sierra Lakes, Alpine County, Caples Lake Homeowners Association, Caples Lake Lodge, East Silver Lake Homeowners Association, Lake Kirkwood Homeowners Association, Kit Carson Lodge, Northern Sierra Homeowners Association, Plasse's Resort, South Silver Lake Homeowners Association, Boy Scouts of American 49er Council, and CSPA. (95,T,I,12:17-14:5.) Apart from the protest filed by the Sierra Club, the CSPA, Plasse's Resort, and Kit Carson Lodge filed separate protests to El Dorado's applications and petition for partial assignment.

The entities represented by the Sierra Club include: (1) public entities; (2) people who have second homes, businesses, or who operate nonprofit campgrounds at or near Caples or Silver Lakes and/or; (3) people who recreate and use the waters of Lake Aloha and Caples and Silver Lakes, and the streams which drain the lakes, Silver Fork American River, South Fork American River, and the lower American River below Folsom Dam. The protests are concerned with how the issuance of water rights to El Dorado could affect the timing of withdrawal of water from Lake Aloha and Caples and Silver Lakes and the level of water in the lakes between June 15 and Labor Day, and the volume of water flowing in the streams which drain the lakes. Sierra Club protestants seek to preserve water in Caples and Silver Lakes for domestic use and

to keep the level of water in the lakes as high as possible through Labor Day in order to preserve the fishing, boating, and other recreational uses of the lakes. In addition, the protestants wish to assure sufficient water in the streams which drain the lakes to protect the fishing and other recreational uses made of the streams. CSPA is also concerned that approval of El Dorado's applications and petitions for partial assignment could adversely affect the quantity and temperature of water for fish below Folsom Dam and the mix of freshwater in the Sacramento-San Joaquin Delta. (See protests to A-29919, Folders 5 and 5a.)

3.8.7 Save the American River Association (SARA)

SARA filed a protest to El Dorado's applications and petition for partial assignment. SARA's protest alleges that El Dorado's proposed project could adversely reduce flow below Folsom Reservoir on the South Fork American River. More specifically, SARA is concerned that El Dorado's project will reduce flow below Folsom Dam and that the effect of such reduction will adversely affect water quality, fish and wildlife, esthetics, navigation, and recreation. (See protests to A-29919, Folder 5a.)

A representative of SARA, Mr. Felix Smith, put in an appearance at the 1993 hearing. (93,T,I,15:8-9.) Thereafter, during the 1993 hearing SARA did not make a policy statement, conduct cross-examination, put on witnesses, or offer exhibits. SARA did file a closing statement in the nature of a policy statement. During the 1995 hearing, SARA did not put in an appearance or otherwise participate in the hearing. Accordingly, SARA's protest is dismissed for having failed to support the allegations in its protest.

3.8.8 Friends of the River (FOR)

FOR filed a protest to El Dorado's applications and petition for partial assignment. FOR's protest alleges that the diversion of

water by El Dorado's proposed project may result in: (1) altered or decreased lake levels and (2) flow in the streams which drain the lakes (operated by PG&E) and in the South Fork American River to the detriment of fish, wildlife, and recreational values. FOR also alleges that changes in the flow from the lakes could infringe on the federally reserved water rights implied in the National Wilderness Act and the National Wild and Scenic Rivers Act.⁷ (See protests to A-29919, Folder 5a.)

3.8.9 California Native Plant Society (CNPS), El Dorado Chapter

The CNPS filed a protest to El Dorado's petitions for partial assignment. CNPS' protest alleges that water supplied from El Dorado's project to the proposed place of use could adversely affect five rare and endangered plant species within El Dorado County. During the 1993 hearing, CNPS' did not make an appearance, present testimony or exhibits, conduct cross-examination, or file closing arguments. During the 1995 hearing, CNPS's appeared and presented a nonevidentiary policy statement (95,T,I,32:13-34:14); but did not otherwise participate in the hearing as a separate party. Thus, CNPS' protest is dismissed for having failed to make a bona fide effort to support the allegations in its protest.⁸ (See protests to A-29919, Folder 5a.)

The protest also alleged that increased water diversions will adversely affect recreational boating on the South Fork American River. Subsequent to the filing of FOR's protest, El Dorado modified its proposed project so that water released from the PG&E lakes would be rediverted only from Folsom Reservoir. This modification means that no water would be rediverted for consumptive use from the South Fork American River or its tributaries which could affect recreational boating on the South Fork American River.

⁸ While CNPS failed to appear at the hearing, other parties addressed the issue raised by the protestant. These parties include El Dorado, DFG, and the Sierra Club.

3.8.10 Paul J. Creger (Mr. Creger)

Mr. Creger filed a protest to El Dorado's applications to appropriate water at the lakes. His protest might best be classified as a public interest protest in that he urges El Dorado's proposed project be evaluated from a systems engineering point of view. While Mr. Creger appeared at the 1993 hearing, (93,T,I,15:3-3) he did not otherwise participate in the 1993 or 1995 hearing. Thus, Mr. Creger's protest is dismissed for having failed to support the allegations in his protest. (See protests to A-29919, Folder 5a.)

3.8.11 Curtis Manning (Mr. Manning)

Mr. Manning filed a protest to El Dorado's applications to appropriate water from the lake. He urges that no further appropriations of water be approved due to unspecified cumulative environmental effects of such withdrawals on streams and in the Sacramento-San Joaquin Delta. Mr. Manning appeared at the 1993 hearing and made a policy statement, but did not otherwise participate in the hearings via the presentations of witnesses, exhibits, the conduct of cross-examination, or the filing of closing statements. (93,T,I,299-35:15.) Thus, Mr. Manning's protest is dismissed for having failed to support the allegations in his protest. (See protests to A-29919, Folder 5a.)

3.8.12 Protests filed by Gerald and Joan Glasgow, Bryant M. Bennett, Edward C. Hinde, Edwin and Patricia Brennan, and Edwin Allen Bish II (Other Protestants)

Other protestants filed protests to El Dorado's applications and petition for partial assignment. In general, the grounds for their protests have been stated previously when identifying the basis of other protests. The Brennans were concerned that El Dorado's proposed project could adversely affect their right

to divert and use water under licensed Application 01887.⁹ None of these persons appeared or otherwise participated in the 1993 or 1995 hearing concerning El Dorado's proposed project. Thus, these protests are dismissed for having failed to appear and support the allegations in their protest. (See protests to A-29919, Folder 5.)

3.8.13 El Dorado County Taxpayers for Quality Growth (Taxpayers)

A protest against El Dorado's applications and petitions for assignment was filed by three individuals in the name of Taxpayers. The three were Craig Thomas, Keith Johnson, and Alice Howard. Taxpayers failed to timely submit written testimony or exhibits for the hearing. Notwithstanding, its failure to comply with the requirements for participating in the hearing, Taxpayers were granted permission to participate in this proceeding in a more limited capacity as an interested party. (95,T,I,28:7-14.) As an interested party, Taxpayers allege that: (1) the proposed project will would take water needed for recreation, fish, wildlife, and other public trust values and would damage natural resources; (2) the project should not be approved because El Dorado continues to violate waste discharge requirements at its wastewater treatment facility; (3) El Dorado seeks water in excess of that needed for necessary development; and (4) the project would supply water for a style of development that will create an unsuitable living environment in El Dorado County.

3.9 Protests Withdrawn or Dismissed

In accordance with the discussions set forth in the proceeding sections, the following protests are either withdrawn, settled by agreement, or dismissed:

⁹ Subsequent to the filing of the Brennans' protest, El Dorado modified its proposed project so that water released from PG&E lakes would be rediverted only from Folsom Reservoir. This modification means that no water would be rediverted for consumptive use from the South Fork American River or its tributaries which could affect the exercise of the Brennans' license.

3.9.1 The following protests filed against the applications and petitions for partial assignment by Kirkwood, Inc., have been withdrawn or otherwise settled by agreement

- a. PG&E (§ 3.1, *supra*)
- b. SMUD (§ 3.2, *supra*)
- c. The Bureau (§ 3.3, *supra*)
- d. El Dorado (§ 3.4, *supra*)
- e. Westland (§ 3.7, *supra*)

3.9.2 The following protests filed against the applications and petitions for partial assignment by El Dorado are dismissed

- a. PG&E (§ 3.1, *supra*)
- b. SMUD (§ 3.2, *supra*)
- c. DFG (§ 3.6.3, *supra*; see § 4.3, *infra*)
- d. Stockton (§ 3.8, *supra*)
- e. San Joaquin County (§ 3.8.3, *supra*)
- f. Sacramento (§ 3.8.5, *supra*)
- g. SARA (§ 3.8.7, *supra*)
- h. CNPS (§ 3.8.9, *supra*)
- i. Mr. Creger (§ 3.8.10, *supra*)
- j. Mr. Manning (§ 3.8.11, *supra*)
- k. Gerald & Joan Glasgow (§ 3.8.12, *supra*)
- l. Bryant M. Bennett (§ 3.8.12, *supra*)
- m. Edward C. Hinde (§ 3.8.12, *supra*)
- n. Edwin & Patricia Brennan (§ 3.8.12, *supra*)
- o. Edwin Allen Bish II (§ 3.8.12, *supra*)

4.0 APPLICABLE LAW

4.1 The Water Code and Public Trust Doctrine

A prerequisite to the issuance of a water right permit is that unappropriated water must be available to supply the applicant. (Water Code § 1375(d).) Unappropriated water does not include water being used by others under paramount rights. (Water Code §§ 1201 and 1202.)

In addition to the quantity of water required to satisfy paramount rights to the use of water, the Board is required to consider the quantity of water required for recreation, the preservation and enhancement of fish and wildlife resources, other beneficial uses, and competing applications for the appropriation of water. (Water Code §§ 1243, 1243.5 and 1257; *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 189 Cal.Rptr. 346.) In *Audubon*, the California Supreme Court articulated a public trust doctrine for the waters of California. Among other matters, the decision requires the Board to consider the effect of proposed diversions of water upon interests protected by the public trust, and attempt, insofar as feasible, to avoid or minimize any harm to those interests. (*Audubon*, 33 Cal.3d 419, 426.) The public trust doctrine does not require an appropriator who diverts water to storage at an artificial reservoir on a nonnavigable stream to forego use of water to maintain the reservoir for recreational use by the public. (*Golden Feather Community Association v. Thermalito Irrigation District* (1989) 209 Cal.App.3d 1276, 257 Cal.Rptr. 836.)

The Board may reject applications which in its judgment will not best conserve the public interest. (Water Code § 1255.) When approving applications, the Board may impose such terms and conditions as in its judgment will best develop, conserve, and utilize in the public interest the water sought for appropriation. (Water Code § 1253.)

4.2 CEQA Responsibilities

CEQA imposes responsibilities on the Board in addition to those imposed by the Water Code and the public trust doctrine. When approving an application to appropriate water, the Board is either a lead agency or a responsible agency. (Public Resources Code §§ 21065, 21067, and 21069.) When approving an application, responsible agencies must adopt conditions to avoid or mitigate adverse environmental project effects within the scope of their

jurisdiction. Failing to avoid or mitigate adverse effects, responsible agencies must adopt a statement of overriding consideration. (Public Resources Code §§ 21002.1 and 21081.)

Responsible agencies are directed to presume that a final EIR is adequate if litigation is not commenced, unless: (1) substantial changes (a) are proposed for the project or (b) occur with respect to the circumstances under which the project is undertaken or (2) new information becomes available which was not known at the time the EIR was certified as complete. When litigation has commenced, responsible agencies are directed to presume a final EIR is adequate until such time as a court determines otherwise.¹⁰ (Public Resources Code §§ 21166, 21167.2, and 21167.3.)

4.3 Regulation of Hydropower Facilities Regulated by the Federal Energy Regulatory Commission (FERC)

FERC occupies the field of hydropower regulation, preempting state water right requirements except to the extent that a state's requirements relate to the protection of proprietary rights. (*Sayles Hydro Associates v. Maughan* (1993) 958 F.2d 451.) The state cannot condition a water right permit for hydropower generation on bypass flow requirements for the protection of instream beneficial uses in excess of flows required by the FERC license for the project. Similarly, the Board has no authority to require that water be retained in reservoirs regulated by FERC for the protection of beneficial uses made of water within a reservoir. (*California v. Federal Energy Regulatory Commission* (1990) 495 U.S. 490 (Rock Creek).)

¹⁰ During the hearing the parties were precluded from presenting evidence on the adequacy of the EIR and Supplemental EIR prepared by El Dorado because of the directive language in Public Resources Code section 21167.3. (95,T,I,7:23-25; II,160:12-16.) The Sierra Club's December 11, 1995, closing memorandum moved the Board to reconsider ruling and urges that consideration be given to its contentions as to the adequacy of El Dorado's environmental documents as set forth in pleadings filed with the El Dorado County Superior Court on December 11, 1995. This motion was denied by letter dated June 5, 1996, from the Board to Mr. Volker.

DFG can seek relief from FERC relative to its protests against El Dorado. It should be noted that these two cases deal only with projects which were operated exclusively for hydropower purposes. Nothing in these cases precludes a state from regulating the consumptive use of water developed in conjunction with hydropower projects subject to the jurisdiction of FERC. That is, the consumptive use component of such projects is subject to state regulation under provisions of the Water Code, the public trust doctrine, and CEQA as sketched in sections 4.1 and 4.2, above, to the same extent as any other project which appropriates water under the laws of the state.

4.4 Access to Streams and Lakes and Right to Appropriate Previously Appropriated Water

One cannot obtain a right to appropriate water unless there exists some means for the actual physical control over the water for which a right is sought. (*California Trout v. State Water Resources Control Board* (1979) 90 Cal.App.3d 816, 818; 133 Cal.Rptr. 672, 674.) The Board has no authority nor can the issuance of a water right permit or license confer the right to enter upon land or diversion works possessed by another. (23 CCR §§ 775, 776.) Further, the Board has no authority nor can the issuance of a water right permit or license confer the right to appropriate and use water being diverted or stored under the rights of another. (Water Code §§ 1202, 1375(d), California and United States Constitutions, Article 1, section 19 and the Fifth Amendment, respectively.) Thus, applicants for the appropriation of water under the control of another legal user of water, must obtain by eminent domain, contract, purchase, or other means some right to enter upon the property or diversion works of another for the purpose of appropriating water. Similarly, applicants must obtain by eminent domain, contract, etc. some right of control over water being diverted and used by another legal user of water in order to effectuate an appropriation of water.

4.4.1 Applicants Must Obtain Access to Water and the Right to Divert and Use Water Being appropriated by PG&E

Much of the land on the west side of Caples Lake, is owned by the United States Forest Service. (95,USFS,1 and 2.) As previously discussed, Caples and Silver Lakes are situated on public or private lands in which PG&E has a possessory interest. Further, PG&E has prior rights to divert to storage and use the water in these lakes. Thus, as discussed in the preceding section, in order to divert natural flows, the applicants and petitioners for partial assignment must reach some accommodation with either PG&E or the federal agency which controls access to the lakes. In addition, the applicants and petitioners must reach some accommodation with PG&E before they can obtain a right to appropriate and use, either consumptively or nonconsumptively, water developed under PG&E's prior rights to the use of water.

4.5 State Filed Applications and County of Origin Protection

The Legislature has authorized the filing of applications by the state to appropriate water which ". . . is or may be required in the development and completion of the whole or any part of a general or coordinated plan looking toward the development, utilization, or conservation of the water resources of the state". (Water Code § 10500.) Such applications are held by the Board, and any portion of an application may be assigned or released from priority when ". . . the release or assignment is for the purpose of development not in conflict with such general or coordinated plan or with water quality objectives established pursuant to law". (Water Code § 10504.) Release or assignment of the priority of any state filed application is prohibited, however, when a county in which the water originates would be deprived of water necessary for its development. (Water Code §§ 10505, 10505.5; County of Origin Laws.)

The County of Origin Laws allow persons within the counties within which water originates to obtain water rights having

precedence over rights and water developed under state filed applications, if the water appropriated under the state filed applications is not being applied to use within the county of origin. Further, the County of Origin Laws only apply to projects constructed pursuant to an assignment or release of the priority of state filed applications.¹¹

An assignment or partial assignment is a transfer of ownership of all or part of the right which can be initiated under a state filing. The recipient of an assignment receives a right to develop water having the priority of the filing. A release from priority is a waiver by the state of the priority of the state application in favor of an application filed by the recipient of the waiver. The effect of a release from priority is to prevent the state or a subsequent holder of the state filing from objecting to the application in favor of which the release was made.

4.6 General or Coordinated Plan

From time-to-time, the state has prepared comprehensive plans for the development of the waters of the state. The first statutory requirement for such a plan was set forth in Water Code § 10000. The section provides:

"The coordinated plan for the conservation, development, and utilization of the water resources of the State (except the project known as the 'Trinity River Diversion', which is not approved) as set forth in the report thereon formulated and prepared by the Department of Public Works and transmitted to the Forty-Ninth Session of the Legislature pursuant to

¹¹ PG&E's right to divert and use the water in the lakes is not based on the release or assignment of a state held application. Thus, the county of origin laws cannot provide a basis for providing persons filing applications for the use of water within Alpine and Amador Counties, with a water right having precedence over PG&E's rights. However, the county of origin laws do give applicants in Alpine and Amador Counties precedence over any rights obtained by El Dorado to divert and store water at Caples and Silver Lakes by a partial assignment of Application 5645.

Chapter 832 of the Statutes of 1929 shall be known as the 'State Water Plan'."

This section was enacted in 1943 and amended, most recently, during 1957. The Legislature subsequently enacted Water Code sections 10004 through 10010. Section 10004 provides:

"(a) The plan for the orderly development and coordinated control, protection, conservation, development, and utilization of the state which is set forth and described in Bulletin No. 1 of the State Water Resources Board entitled 'Water Resources of California,' and Bulletin No. 2 of the State Water Resources Board entitled, 'Water Utilization and Requirements of California,' and Bulletin No. 3 of the department entitled, 'The California Water Plan,' with any necessary amendments, supplements, and additions to the plan, shall be known as 'The California Water Plan.'

"(b) (1) The department shall update the California Water Plan every five years"

"Department" means the Department of Water Resources. Pursuant to this section, the Department has prepared a number of California Water Plans. When section 10000 and related sections are contrasted with section 10004 et seq., it is readily apparent that the more recent enactment requiring preparation of the California Water Plan and regular updates to the plan is the coordinated plan looking toward the development, utilization, or conservation of the water resources of the state, superseding the State Water Plan. Further, a review of the successive California water plans prepared by the Department clearly indicates that the agency responsible for regularly preparing and updating the general plan views the State Water Plan as a historical document only and that each succeeding California Water Plan is the current effective water plan for the development of state

water.¹² (SWRCB, Decision 1587, p. 18.) Thus, in accordance with section 10504, the Board will rely upon the most recent California Water Plan and its updates for the purpose of determining whether a petition for assignment or release of a state filing "is for a purpose of development not in conflict with such general or coordinated plan . . . established pursuant to law".

5.0 WATER IS AVAILABLE FOR APPROPRIATION

This section analyzes the evidence in the hearing record concerning the availability of unappropriated water for the applications and petitions for partial assignment of SFA 564

5.1 Description of Watershed

The South Fork American River is one of three main forks of the American River whose 1921 square-mile watershed is also drained by the North Fork American River and the Middle Fork American River. The South Fork American River meanders through El Dorado County for an approximate distance of 60 miles from its confluence with the North Fork American River at Folsom Lake (elevation 350 feet) to its headwaters. The South Fork American River's watershed is essentially drained via five subwatersheds located in Alpine, Amador, and El Dorado Counties. The subwatersheds are: Weber Creek, Silver Fork of the South Fork American River, Silver Creek, Rock Creek, and Dutch Creek. (SWRCB, Decision 893, pp. 25, 26.)

The physical features of the South Fork American River watershed are typical of the Sierra Nevada region. The main water courses are generally deeply incised and are separated by broad ridges of

¹² See Bulletin No. 3, The California Water Plan (May 1957), Foreword, Chapter 1, Basis and Authority for State-Wide Water Development Planning, and Previous State-Wide Planning. The 1957 California Water Plan is the foundation document upon which all successive plan updates are based. (California Water Plan Update (October 1994), Volume 1, Foreword, Bulletin 160-93.)

comparatively moderate to steep slopes. Vegetative cover ranges from grasslands and oak woodlands in the foothill areas to heavy stands of timber in the central zone. At the watershed's higher elevations, there are large areas of bare granite dotted with numerous small lakes. (SWRCB, Decision 893, pp. 25, 26.)

5.2 Climate

The climate of the South Fork American River watershed ranges from temperate conditions in the foothill areas to alpine conditions at higher elevations. Precipitation usually occurs during the late fall, winter, and early spring. At higher elevations, precipitation usually is in the form of snow. Summer thunderstorms are frequent in the mountains but, in the aggregate, contribute little runoff. (*Ibid.*)

Precipitation within the South Fork American River watershed has been recorded at measuring stations located at Folsom Dam (elevation 350) for the period 1955-1992, Placerville (elevation 1890) for the period 1948-1992, Pacific House (elevation 3440) for the period 1948-1992, and Echo Summit (elevation 7350) for the period 1948-1992. In addition, a measuring gage located at Twin Lakes (elevation 8000) has recorded precipitation for the period 1948-1992. Average annual precipitation ranges from 23.74 inches at Folsom Dam to 50.4 inches at Echo Summit. Total average annual precipitation at Twin Lakes is 48.6 inches. According to available data, 95 percent of all precipitation within the watershed occurs during the period of October through May. (SWRCB, 3, 4, and 5.)

5.3 Runoff

Flows of the South Fork American River have been recorded by PG&E in connection with FERC Project 184, under the general supervision of the United States Geological Survey (USGS). Such flows have been recorded at two USGS gaging stations: (1) gaging station (USGS #11444500) located downstream of PG&E's El Dorado

TABLE 5-1
SOUTH FORK AMERICAN RIVER
 (USGS # 1144500 - NEAR PLACERVILLE CALIFORNIA)

WATER YEAR	AVERAGE MONTHLY FLOW (CFS)												AVERAGE ANNUAL TOTAL
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1912	119	161	145	323	247	516	779	2707	2194	361	91	136	7779
1913	91	365	196	355	384	518	1837	2898	1207	328	124	72	8375
1914	82	152	355	3646	2197	2521	3414	4650	3225	1040	186	89	21557
1915	146	147	212	408	1817	1500	2911	4361	3562	905	168	106	16243
1916	96	133	348	1563	2362	3457	4299	3906	3172	883	188	105	20512
1917	339	260	736	494	1774	1311	3009	4024	4483	901	154	112	17597
1918	99	98	152	139	469	1461	2648	2608	1487	141	63	153	9518
1919	296	264	213	228	1413	1387	3079	4067	754	123	92	86	12002
1920	111	91	300	218	230	1128	1891	3217	1391	293	60	55	8985
1964											973	672	1645
1965	321	665	5386	4148	2395	1585	2939	3485	2372	1449	1097	970	26812
1966	840	743	1269	1014	864	1030	1540	1421	845	708	743	530	11547
1967	256	405	1331	1623	1353	1959	2091	4352	4047	2268	1136	929	21750
1968	491	1164	982	936	1293	993	925	1169	991	806	902	546	11198
1969	493	821	982	3497	2883	2571	3707	4749	3262	1339	1225	1064	26593
1970	640	802	1466	4871	2719	1762	1565	1975	1890	1013	985	356	20044
1971	429	1121	1975	1792	1353	1306	1516	2400	2845	1405	1200	721	18063
1972	531	752	1115	1323	991	1338	1221	1609	1434	918	1027	763	13022
1973	419	636	1373	2187	1830	1865	1700	2989	1854	839	727	761	17180
1974	472	1451	1883	2875	1703	2869	3511	3775	3004	1269	1300	1182	25294
1975	592	706	993	1180	1065	1406	1874	3506	2785	1183	1041	1054	17385
1976	579	784	1105	749	648	531	522	734	493	938	959	577	8619
1977	401	271	320	188	125	124	255	295	228	88	142	244	2681
1978	275	106	485	1341	888	2024	2833	3367	2226	986	736	542	15809
1979	316	686	571	1374	1162	1403	1903	3066	1276	953	936	918	14564
1980	588	477	799	4027	3300	2343	2706	3075	1964	1584	965	1328	23156
1981	658	639	885	760	810	993	988	908	583	849	842	759	9674
1982	431	1276	2331	2389	4370	3414	5382	5167	3511	1723	1311	1134	32439
1983	878	1847	2602	2221	3790	5561	4279	5444	6496	3648	1483	1123	39372
1984	935	3806	4633	2975	2209	2364	2491	2410	1483	867	1108	1004	26285
1985	646	943	842	744	1318	1018	1533	1232	583	963	918	889	11629
1986	453	453	1083	1461	6613	5067	2993	3075	2686	1183	1079	1052	27198
1987	523	639	729	410	846	647	878	860	774	761	723	447	8237
1988	204	107	464	554	743	650	546	474	433	409	408	454	5446
1989	216	291	415	416	539	2329	1836	1258	1059	1012	1022	948	11341
1991	516	498	525	426	425	862	874	1103	811	623	712	722	8097
1992	533	361	528	568	822	662	874	670	457	457	521	411	6864
AVERAGE (CFS)	417	670	1104	1484	1610	1735	2149	2695	1996	978	739	622	16199
AVERAGE (AF)	25601	39800	67738	91086	89243	106520	127626	165395	118581	60043	45366	36947	973945

36.

SOURCE: SWRCB EXHIBITS 3 AND 5.

TABLE 5-2
SOUTH FORK AMERICAN RIVER
 (USGS #11439500 - NEAR KYBURZ CALIFORNIA)

WATER YEAR	AVERAGE MONTHLY FLOW (CFS)												AVERAGE ANNUAL TOTAL
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1923	33.4	22.5	87.3	82.0	33.1	246.9	740.7	1577.6	905.5	301.4	30.5	55.0	4165.93
1924	52.5	56.7	20.8	9.3	18.1	2.5	172.1	264.8	0.8	0.6	0.7	0.5	599.38
1925	8.3	23.8	31.7	19.1	295.4	342.0	904.0	1539.4	1054.6	187.3	9.1	1.1	4435.74
1926	4.8	5.6	28.4	11.3	16.1	169.3	661.5	601.0	106.5	6.4	0.6	0.6	1612.25
1927	2.5	126.7	73.7	125.7	304.0	460.7	860.6	1581.6	1475.2	257.8	2.8	9.0	5280.37
1928	6.3	95.9	23.6	24.3	6.3	677.4	760.7	1200.5	221.2	4.6	2.9	2.5	3026.48
1929	0.8	0.5	1.5	0.6	7.0	23.2	179.4	743.3	304.8	4.5	1.6	2.1	1269.33
1930	2.6	1.6	36.3	9.8	28.5	158.6	653.5	710.1	550.1	35.1	3.2	3.2	2192.53
1931	3.7	9.6	0.7	1.0	0.8	25.0	231.8	245.3	28.4	0.9	2.0	2.5	351.58
1932	2.8	4.7	1.7	2.2	61.9	221.7	660.2	1373.1	1368.3	317.5	8.7	2.8	4025.68
1933	2.4	1.6	5.5	5.2	2.4	2.4	234.8	535.7	887.6	40.8	2.5	2.4	1723.54
1934	16.4	6.7	44.5	46.5	43.4	285.6	324.2	158.1	43.3	2.8	2.5	2.4	976.49
1935	2.4	16.1	9.7	25.0	53.6	84.1	735.8	1328.2	1026.4	67.2	8.1	8.1	3364.70
1936	5.4	4.8	4.0	87.5	161.3	411.5	1122.9	1741.7	1080.0	149.0	5.6	6.5	4780.09
1937	4.1	2.8	9.1	17.5	105.0	149.9	562.5	1630.4	624.3	46.6	2.3	2.3	3157.00
1938	3.3	8.3	510.4	82.8	109.8	394.0	977.4	2513.6	1945.9	265.8	4.4	2.7	6818.29
1939	7.9	6.1	9.8	9.0	23.6	158.3	616.7	360.8	67.8	2.2	3.1	3.5	1268.93
1940	5.1	6.5	7.9	255.3	260.8	677.4	1092.3	1665.8	604.7	23.5	2.1	3.3	4604.77
1941	1.5	9.2	68.1	30.9	133.3	271.4	522.8	1723.1	970.8	171.6	2.5	3.7	3908.82
1942	2.9	24.2	186.4	262.2	271.2	261.1	861.2	1428.2	1827.0	390.8	2.5	3.7	5521.37
1943	2.2	135.1	155.6	359.4	355.0	730.5	1307.9	1416.6	834.6	187.5	3.8	4.5	5492.66
1944	3.9	2.9	4.3	5.3	3.2	40.1	287.2	1026.0	498.5	57.6	3.0	3.1	1935.23
1945	8.3	117.7	54.2	35.6	414.4	156.2	772.3	1552.2	1037.5	152.5	2.8	4.0	4307.72
1946	49.0	159.5	266.4	209.6	106.8	289.0	1003.7	1517.2	633.5	47.7	6.0	12.3	4300.75
1947	76.8	74.3	12.7	8.2	63.6	139.2	360.4	737.9	157.3	5.4	5.2	6.9	1647.75
1948	54.9	13.8	5.7	47.2	7.2	5.8	370.9	1159.2	1337.5	158.0	5.7	7.0	3172.85
1949	25.4	35.5	6.1	15.3	6.9	15.9	723.4	1112.7	380.3	6.6	6.4	6.6	2341.01
1950	33.1	50.9	5.6	75.6	97.3	192.3	896.4	1522.4	1197.5	157.1	5.6	9.5	4243.28
1951	83.1	1283.4	1587.0	373.7	362.5	290.5	754.6	1037.1	477.6	18.3	7.0	9.6	6284.39
1952	28.2	43.9	52.7	23.5	113.7	171.8	1140.7	2739.7	2049.0	679.6	43.3	10.3	7096.48
1953	24.5	68.8	15.0	91.6	43.7	103.6	670.2	801.2	1310.4	411.0	8.0	7.7	3557.79
1954	36.4	16.4	9.5	7.6	16.2	251.5	751.3	905.6	163.6	5.3	5.5	8.5	2177.51
1955	39.8	23.9	12.9	6.8	18.9	44.3	182.3	911.7	553.1	10.1	6.4	9.0	1819.74
1956	24.4	25.0	939.7	690.4	253.3	355.1	806.2	1962.8	1077.3	318.1	11.0	14.3	7077.45
1957	16.4	12.3	15.8	8.0	178.4	291.9	457.9	1007.8	999.0	60.8	5.9	7.1	3061.42
1958	20.1	10.2	14.6	4.1	136.8	105.7	627.4	2544.5	1522.3	312.0	19.7	9.1	5326.47
1959	24.6	7.9	5.1	39.6	46.6	127.9	439.3	586.2	126.8	5.2	5.4	12.8	1227.36
1960	60.1	5.4	5.7	6.6	49.4	244.1	494.8	522.7	180.8	5.9	7.6	5.2	1588.36
1961	19.8	5.2	7.1	6.7	16.0	18.0	226.5	434.6	153.6	5.5	7.8	8.3	909.09
1962	31.4	6.1	9.3	6.2	49.5	33.9	923.4	972.4	814.6	82.8	8.5	5.3	2943.27
1963	104.8	6.7	43.9	220.4	877.4	73.5	384.8	1742.0	1059.8	121.1	9.0	7.9	4651.42
1964	35.9	123.7	7.3	13.4	18.4	34.3	346.7	702.7	422.4	11.0	7.8	5.0	1728.55
1965	12.6	5.8	1365.1	491.2	294.3	263.0	869.4	1486.2	1203.5	335.9	117.7	20.8	6465.44
1966	121.1	61.8	29.2	16.2	9.7	191.6	755.2	723.7	68.3	7.5	8.1	5.8	1998.17
1967	12.7	51.7	109.8	76.4	137.2	459.7	219.4	1725.4	2432.3	922.5	29.1	14.4	6190.73
1968	21.8	12.4	36.6	19.8	224.4	185.6	453.0	490.9	107.7	8.1	10.1	5.8	1576.17
1969	13.3	70.6	31.8	411.2	145.8	199.0	1053.9	2765.2	1697.0	378.2	8.8	7.8	6782.56
1970	28.2	12.3	210.2	878.2	347.6	325.9	389.3	1048.0	799.4	72.1	8.5	10.0	4129.54
1971	22.0	108.6	60.4	130.4	116.9	202.7	586.3	1241.9	1287.5	211.7	8.2	15.4	3991.71
1972	10.3	36.8	27.0	8.8	19.3	475.2	391.6	926.9	415.5	7.6	6.4	8.8	2334.19
1973	20.8	12.3	104.7	111.4	36.0	70.6	552.3	1839.0	685.7	11.9	20.7	5.8	3471.19
1974	21.8	378.7	169.5	436.7	136.2	420.4	705.7	1830.0	1132.7	210.2	13.4	9.4	5464.79
1975	17.7	9.3	10.0	7.6	23.9	79.2	129.7	1578.3	1743.1	242.6	20.9	12.3	3874.60
1976	91.7	31.5	12.0	12.8	16.3	27.4	99.1	253.8	10.3	9.5	20.8	22.5	607.57
1977	10.8	9.2	8.6	6.3	5.0	6.1	38.9	56.8	63.7	7.8	8.6	10.4	232.28
1978	8.4	3.7	37.5	46.6	40.0	358.6	587.5	1518.5	1472.4	230.7	6.8	36.5	4347.28
1979	21.9	7.6	19.1	108.6	24.9	162.3	528.1	1646.1	586.6	27.5	7.2	13.1	3153.01
1980	30.9	34.3	23.8	937.4	508.3	278.5	792.5	1450.4	1145.5	439.5	9.3	17.6	5668.00
1981	10.3	8.5	13.7	5.8	39.1	36.3	442.0	577.9	93.9	5.4	5.3	12.0	1250.36
1982	11.6	365.1	627.6	216.2	991.0	566.9	1496.7	2187.1	1255.0	379.9	21.5	60.4	8178.94
1983	208.0	300.2	222.5	228.6	367.9	781.1	613.8	2309.3	3551.3	1526.5	343.5	417.0	10869.65
1984	223.4	901.7	999.1	634.0	386.4	569.3	738.6	1606.4	884.7	93.7	8.9	13.0	7059.31
1985	46.7	86.5	55.3	52.7	53.8	63.7	742.9	679.9	134.6	52.1	51.9	38.7	2058.79
1986	49.3	59.4	101.6	242.9	1333.1	1252.5	1024.9	1400.4	992.1	111.4	55.0	58.9	6681.64
1987	61.7	54.7	52.4	54.8	63.5	69.4	344.0	275.5	21.7	20.9	19.8	17.1	1055.46
1988	17.2	18.9	26.4	26.8	23.5	52.5	146.4	139.1	37.2	23.8	23.0	14.9	549.56
1989	19.4	30.2	22.4	24.9	42.1	641.5	1021.7	831.5	533.7	53.0	53.1	61.9	3335.38
1991	20.1	20.6	21.3	21.2	16.2	83.6	198.7	617.3	412.4	24.5	20.9	23.1	1481.11
1992	28.8	20.6	22.8	23.2	81.4	65.8	382.4	156.8	23.9	32.5	21.7	22.9	882.89
AVERAGE (CFS)	31.0	77.9	127.8	124.5	155.1	241.0	610.3	1174.2	803.9	152.8	17.7	18.1	3534.26
AVERAGE (AF)	1900.4	4627.3	7844.0	7644.6	8601.0	14790.5	36249.8	72072.4	47754.4	9378.0	1083.6	1074.6	213021.30

SOURCE: SWRCB EXHIBITS 3 AND 5.

5.4 Effect of Board Decisions and Orders Related to Water Availability

Decision 893 approved the appropriation of water at Folsom Reservoir by the Bureau and other applicants in the American River watershed. Decision 893 evaluated water availability based on hydrologic conditions prior to and subsequent to the 1927 priority date of Application 5645. The decision found that unappropriated water is not available in the South Fork American River by direct diversion for consumptive use purposes, and by storage for any purposes during the months of August through October.¹³ Thus, the Board is required to limit the season of diversion for any permits issued pursuant to the pending applications and petitions for partial assignment of Application 5645 to the months of November through July of the following year.

5.5 Existing Water Rights

There are a total of 144 recorded water rights with a higher priority than state filed Application 5645 on file with the Division of Water Rights for the South Fork American River watershed in Alpine, Amador, and El Dorado Counties. (Division of Water Rights, Water Rights Information Management System (WRIMS)). Of the total 144 paramount rights, only 11 are located on the main stem of the river, 9 are located within Pyramid Creek's watershed (Aloha Lake), 3 are located within Caples Creek's watershed (Caples Lake), and 10 are located within the Silver Fork American River's watershed (Silver Lake). Table 5-3 provides a summary of the water rights on record.

¹³ The Board takes administrative notice of the findings in Decision 893.

Board Orders WR 89-25 and WR 91-07 (Declarations of Fully Appropriated Streams) declare the American River to be fully appropriated during the period July 1 to October 31 upstream from its confluence with the Sacramento River; however, state filings are expressly exempted from these orders, unless they are filed subsequent to the entry of the orders.

TABLE 5-3

South Fork American River Watershed--Water Rights Summary

TYPE OF WATER RIGHT	SFAR WATERSHED TOTAL WITH HIGHER PRIORITY THAN SFA 5645	PYRAMID CREEK (ALOHA LAKE) WATERSHED TOTAL WITH HIGHER PRIORITY THAN SFA 5645	CAPLES CREEK (CAPLES LAKE) WATERSHED TOTAL WITH HIGHER PRIORITY THAN SFA 5645	SFAM (SILVER LAKE) WATERSHED TOTAL WITH HIGHER PRIORITY THAN SFA 5645	SFAR MAIN STEM TOTAL WITH HIGHER PRIORITY THAN SFA 5645
Application	41	3	3	4	2
Stockpond Certificate	0	0	0	0	0
Small Domestic Use Registration	0	0	0	0	0
Federal Filing	0	0	0	0	0
Statements	103	6	9	6	9
Temporary Permit	0	0	0	0	0
TOTAL RECORDED	144	9	3	10	11

Table 5-4 summarizes the paramount water rights of record within the watersheds of Pyramid Creek, Caples Creek, and Silver Fork, as well as rights located on the South Fork American River. As Table 5-4 indicates, the total annual paramount demand within each of the three watersheds and on the main stem are: Pyramid Creek, 12,091 af; Caples Creek, 25,000 af (or 50,000 af, assuming a cumulative total of PG&E's and Bureau rights); Silver Fork American River, 22,546 af; and main stem of the South Fork American River, 1,423,395 af (1,300,860 af at Chili Bar Powerhouse and 112,741 af at PG&E's El Dorado Intake).

5.6 Water Availability

Table 1-1 summarizes the substance of the applications and petitions for partial assignment of SFA 5645 filed by El Dorado, Kirkwood PUD, Kirkwood, Inc., Alpine County, and Amador County.

The combined total annual demand for all filings is 64,227 afa. The following summarizes each filing:

- ◆ **El Dorado:** Under water right Applications 29919, 29920, 29921, 29922, and SFA 5645(8), the total amount of water directly diverted and diverted to storage would not exceed 33,000 afa, the total amount of water to be taken by direct diversion and rediversion of stored water would not exceed 17,000 afa, and the total amount of water to be taken by direct diversion would not exceed 15,000 afa and would be limited to water originating in the South Fork American River watershed upstream of the El Dorado Canal diversion near Kyburz.
- ◆ **Kirkwood, Inc.:** Under Applications 30062, 30453, and SFA 5645(11), the total combined direct diversion and storage would not exceed 500 afa.
- ◆ **Kirkwood PUD:** Under Application 30204, the total amount diverted would not exceed 310 afa.
- ◆ **Alpine:** Under Application 30219 and SFA 5645(9), the maximum annual combined quantity for direct diversion and storage would not exceed 21,581 afa. The applications would appropriate by direct diversion 71 afa and 96.4 afa, respectively.
- ◆ **Amador:** Under Application 30218 and SFA 5645(10), the total amount diverted would not exceed 8740 afa.

USGS records relating to the measurement of water downstream of Lake Aloha and Caples and Silver Lakes and the river's main stem are available. (95,SWRCB,3,5.) The following is a brief

description of each gage and the supply of water available at each gage:

- ◆ **USGS Gage #11436000** (see Table 5-5): This gage is located in the Silver Fork at Silver Lake's outlet near Kirkwood and has recorded regulated runoff produced by a 15.2 square mile watershed during the period of record 1923-1992. The recorded total average annual flow for the period of record is 25,103 af (minimum--6,348 af [1976]; maximum--61,741 af [1983]).
- ◆ **USGS Gage #11437000** (see Table 5-6): This gage is located in Caples Creek at Caples Lake's outlet near Kirkwood and has recorded regulated runoff produced by a 13.5 square-mile watershed during the period of record 1923-1992. The recorded total average annual flow for the period of record is 27,574 af (minimum--8,201 af [1924]; maximum--59,063 af [1983]).
- ◆ **USGS Gage #11435100** (see Table 5-7): This gage is located in Pyramid Creek at Twin Bridges and has recorded regulated runoff produced by an 8.8 square-mile watershed during the period of record 1971-1992. The recorded total average annual flow for the period of record is 27,627 af (minimum--11,036 af [1977]; maximum--47,055 af [1982]).
- ◆ **USGS Gage #11444500**: This gage is located downstream of PG&E's Chili Bar Dam. The recorded total average annual flow for the period of record is 973,946 af (minimum--161,463 af [1977]; maximum--2,371,178 af [1983]).
- ◆ **USGS Gage #11439500**: This gage is located about 0.8 mile downstream of the South Fork American River's confluence with the Silver Fork of the South Fork American River. The recorded total average annual flow for the period of record is

TABLE 5-4
RECORDED WATER RIGHTS - PRE-SFA 5645 PRIORITY

RECORDED APPLICATION	FILED DATE	PERMIT	LICENSE	MAX. D/D	D/D UNIT	MAX. STORAGE (AD)	LAST NAME	COMPANY NAME	SOURCE NAME	TRIBUTARY NAME	USE CODE	D/D SEASON	STORAGE SEASON	TOTAL ANNUAL AMOUNT (AFY)
MAIN STEM - SOUTH FORK AMERICAN RIVER														
1001206	08/08/19	000981	007430	88	C	0	BAUER	PACIFIC GAS & ELECTRIC COMPANY	SOUTH FORK AMERICAN RIVER (EL PASO DISTRICT)	AMERICAN RIVER	P	01-12/31		88
1001116	09/27/11	001401	004411	910	G	0	BAUER	PACIFIC GAS & ELECTRIC COMPANY	SOUTH FORK AMERICAN RIVER	AMERICAN RIVER	P	01-12/31		910
3001141	12/28/11	001411	001411	13.3	C	0	UNLUK	COLORADO LOTS MANCHEL TRUSS A RECO	SOUTH FORK AMERICAN RIVER	AMERICAN RIVER	P	01-12/31		13.3
3001187	01/01/11	001411	001411	70	C	0	UNLUK	PACIFIC GAS & ELECTRIC COMPANY	SOUTH FORK AMERICAN RIVER	AMERICAN RIVER	P	01-12/31		70
3001194	02/17/11	001411	001411	1800	C	0	BAUER	PACIFIC GAS & ELECTRIC COMPANY	SOUTH FORK AMERICAN RIVER (EL PASO DISTRICT)	AMERICAN RIVER	P	01-12/31		1800
5010319	04/23/11	001411	001411	500	C	0	BAUER	PACIFIC GAS & ELECTRIC COMPANY	SOUTH FORK AMERICAN RIVER (EL PASO DISTRICT)	AMERICAN RIVER	P	01-12/31		500
5010349	06/15/11	001411	001411	500	C	0	BAUER	PACIFIC GAS & ELECTRIC COMPANY	SOUTH FORK AMERICAN RIVER (EL PASO DISTRICT)	AMERICAN RIVER	P	01-12/31		500
5010717	12/13/11	001411	001411	831.4	C	0	WFS	EL PASO DISTRICT	SOUTH FORK AMERICAN RIVER	AMERICAN RIVER	P	01-12/31		831.4
5010934	01/09/13	001411	001411	831.4	C	0	WFS	EL PASO DISTRICT	SOUTH FORK AMERICAN RIVER	AMERICAN RIVER	P	01-12/31		831.4
5011391	01/17/13	001411	001411	831.4	C	0	WFS	EL PASO DISTRICT	SOUTH FORK AMERICAN RIVER	AMERICAN RIVER	P	01-12/31		831.4
5011429	02/24/14	001411	001411	831.4	C	0	WFS	EL PASO DISTRICT	SOUTH FORK AMERICAN RIVER	AMERICAN RIVER	P	01-12/31		831.4
PYRAMID CREEK WATERSHED														
RECORDED APPLICATION	FILED DATE	PERMIT	LICENSE	MAX. D/D	D/D UNIT	MAX. STORAGE (AD)	LAST NAME	COMPANY NAME	SOURCE NAME	TRIBUTARY NAME	USE CODE	D/D SEASON	STORAGE SEASON	TOTAL ANNUAL AMOUNT (AFY)
1000314	02/26/13	000919	000919	0	C	1000	BAUER	PACIFIC GAS & ELECTRIC COMPANY	ALPHA LAKE - PYRAMID CREEK	SOUTH FORK AMERICAN RIVER	P	01-12/31		1000
1000315	03/01/13	000919	000919	0	C	3300	BAUER	PACIFIC GAS & ELECTRIC COMPANY	ALPHA LAKE - PYRAMID CREEK	SOUTH FORK AMERICAN RIVER	P	01-12/31		3300
1000418	07/23/13	001010	001010	0.17	C	4300	BAUER	U S BUREAU OF RECLAMATION	ALPHA LAKE - PYRAMID CREEK	SOUTH FORK AMERICAN RIVER	P	01-12/31		4300
5004948	01/01/11	001411	001411	0.1	C	0	BAUER	U S BUREAU OF RECLAMATION	WHIT	PYRAMID CREEK	P	01-12/31		0.1
5004949	01/01/11	001411	001411	0.1	C	0	BAUER	U S BUREAU OF RECLAMATION	WHIT	PYRAMID CREEK	P	01-12/31		0.1
5006015	06/27/11	001411	001411	330	C	330	BAUER	PACIFIC GAS & ELECTRIC COMPANY	PYRAMID CREEK	SOUTH FORK AMERICAN RIVER	M	01-12/31		330
5010940	06/27/13	001411	001411	1500	C	0	BAUER	U S BUREAU OF RECLAMATION	WHIT	GILFILLAN CREEK	P	01-11/30		1500
5011318	02/05/13	001411	001411	1500	C	0	BAUER	U S BUREAU OF RECLAMATION	WHIT	GILFILLAN CREEK	P	01-11/30		1500
5011319	02/05/13	001411	001411	200	C	0	BAUER	U S BUREAU OF RECLAMATION	WHIT	GILFILLAN CREEK	P	01-11/30		200
CAPIERS CREEK WATERSHED														
RECORDED APPLICATION	FILED DATE	PERMIT	LICENSE	MAX. D/D	D/D UNIT	MAX. STORAGE (AD)	LAST NAME	COMPANY NAME	SOURCE NAME	TRIBUTARY NAME	USE CODE	D/D SEASON	STORAGE SEASON	TOTAL ANNUAL AMOUNT (AFY)
1000453	02/20/13	000919	000919	0	C	1000	BAUER	PACIFIC GAS & ELECTRIC COMPANY	CAPIERS LAKE	CAPIERS CREEK	P	01-12/31		1000
1001441	07/23/13	000919	000919	0	C	3300	BAUER	PACIFIC GAS & ELECTRIC COMPANY	CAPIERS LAKE	CAPIERS CREEK	P	01-12/31		3300
1001418	07/23/13	000919	000919	0	C	4300	BAUER	PACIFIC GAS & ELECTRIC COMPANY	CAPIERS LAKE	CAPIERS CREEK	P	01-12/31		4300
SILVER FORK AMERICAN RIVER WATERSHED														
RECORDED APPLICATION	FILED DATE	PERMIT	LICENSE	MAX. D/D	D/D UNIT	MAX. STORAGE (AD)	LAST NAME	COMPANY NAME	SOURCE NAME	TRIBUTARY NAME	USE CODE	D/D SEASON	STORAGE SEASON	TOTAL ANNUAL AMOUNT (AFY)
1001443	07/09/13	000919	002141	0	C	2300	BAUER	PACIFIC GAS & ELECTRIC COMPANY	SILVER LAKE	SILVER LAKE	P	01-12/31		2300
1001847	01/07/14	001148	001093	8000	C	0	PLAZER	PACIFIC GAS & ELECTRIC COMPANY	SILVER LAKE	SILVER LAKE	P	01-12/31		8000
1001874	07/01/14	001183	001114	0.01	C	0	PLAZER	CITY OF STOCKTON	UNCL	SILVER LAKE	P	01-12/31		0.01
1002119	07/17/17	000210	002141	0	C	4300	PLAZER	U S BUREAU OF RECLAMATION	UNCL	SILVER LAKE	P	01-12/31		4300
1002148	11/01/14	001148	001148	0.1	C	4300	PLAZER	U S BUREAU OF RECLAMATION	UNCL	SILVER LAKE	P	01-12/31		4300
1002171	01/01/16	001148	001148	1500	C	0	PLAZER	U S BUREAU OF RECLAMATION	SILVER LAKE	SILVER LAKE	P	01-12/31		1500
1002563	01/01/16	001148	001148	4000	C	0	PLAZER	U S BUREAU OF RECLAMATION	SILVER LAKE	SILVER LAKE	P	01-12/31		4000
1002578	01/01/16	001148	001148	347	C	0	PLAZER	U S BUREAU OF RECLAMATION	SILVER LAKE	SILVER LAKE	P	01-12/31		347
1002583	01/01/16	001148	001148	180	C	0	PLAZER	U S BUREAU OF RECLAMATION	SILVER LAKE	SILVER LAKE	P	01-12/31		180
1001041	12/13/13	001411	001411	180	C	0	PLAZER	U S BUREAU OF RECLAMATION	SILVER LAKE	SILVER LAKE	P	01-12/31		180
SOURCE DIVISION OF WATER RIGHTS INFORMATION MANAGEMENT SYSTEM (WRIMS)														
(a) PG&E EXHIBIT 25														
(b) DIVISION OF WATER RIGHTS APPLICATION 1618														

TABLE 5-5
SILVER LAKE OUTLET NR KIRKWOOD CALIF
 (USGS GAGE #11436000)

WATER YEAR	AVERAGE MONTHLY RELEASES (AF)												TOTAL ANNUAL
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1923	1642.2	1183.6	781.7	613.8	443.5	1657.3	2732.4	10092.1	5673.1	1571.1	463.1	9.5	26863.5
1924	12.1	11.9	315.8	1718.6	610.2	6.1	11.7	3475.5	303.7	1764.2	1538.5	70.3	9836.6
1925	34.5	361.7	942.5	710.8	1149.4	1237.5	2710.6	11262.2	8114.0	850.4	27.1	861.1	28261.9
1926	2442.7	459.8	477.2	85.1	11.1	11.3	4996.1	5239.1	1466.6	926.6	2358.2	230.9	18704.7
1927	14.7	321.0	429.1	1511.7	1552.3	1718.6	2185.9	10977.1	11975.0	1276.7	2593.8	1787.9	36343.9
1928	279.8	1297.9	811.0	645.5	455.2	1435.9	5039.1	9951.5	1522.4	1727.0	2089.5	590.2	25844.9
1929	17.4	8.7	10.5	9.2	8.3	30.7	183.0	6286.9	2796.8	672.8	1841.4	1940.2	13805.8
1930	6.9	59.2	105.9	196.6	18.2	26.1	2489.5	5882.6	3746.2	3002.7	2255.2	1011.8	18800.9
1931	152.7	143.7	35.2	20.2	30.3	213.8	87.9	1226.4	182.0	238.6	220.6	3819.4	6390.8
1932	545.9	392.4	61.6	61.4	491.0	1067.0	2655.2	9692.1	7991.3	3401.6	2215.6	1801.8	30397.0
1933	644.9	48.9	10.1	12.3	7.7	17.4	791.2	2488.9	6411.2	311.5	364.5	2346.3	13454.9
1934	1880.6	681.7	391.8	198.2	5.5	38.8	1201.5	1335.1	137.0	85.3	55.6	3411.5	9422.8
1935	1452.7	480.7	530.6	628.7	704.9	1047.4	2035.4	7546.2	7261.7	167.1	71.9	3693.3	25620.6
1936	1687.2	99.4	62.2	306.9	574.2	1243.4	4609.4	13660.0	4746.5	398.4	140.8	3529.7	31058.1
1937	2002.8	67.1	12.3	12.3	166.3	429.7	1841.4	12036.4	3735.3	197.0	103.8	2801.7	23406.0
1938	2429.5	219.4	4045.9	1692.9	1473.1	1774.1	2508.7	12020.6	10820.1	1557.3	109.9	3618.1	42269.4
1939	1510.3	1154.9	626.9	45.7	11.1	635.8	1303.6	2222.2	209.7	70.9	56.8	877.9	8725.9
1940	1161.3	2678.5	605.9	1627.6	1154.3	1455.3	3914.5	14325.3	1578.9	88.1	173.1	4158.8	39291.5
1941	996.1	150.3	182.6	736.6	554.4	1037.5	1641.4	13618.4	5478.7	816.0	107.5	3952.1	29271.5
1942	1708.7	457.4	2057.6	1738.4	1419.7	1247.4	1904.8	8973.4	10842.5	2573.2	123.7	2889.0	35935.8
1943	1958.6	53.9	792.8	1164.2	1120.7	1235.5	7906.1	9905.9	3241.3	619.1	64.5	1368.2	29430.9
1944	2009.9	1869.1	185.7	61.4	57.4	184.1	594.0	7010.2	3545.4	158.2	108.3	3028.4	18812.2
1945	2015.6	252.8	1218.7	1595.9	1675.1	1859.2	3203.2	10172.8	5409.8	997.9	40.6	2625.7	31007.4
1946	1234.5	929.6	1837.4	1312.7	589.2	1384.0	6231.1	8959.5	2586.3	105.1	28.5	991.0	26189.1
1947	3318.5	1043.9	448.3	306.9	514.4	9.3	289.5	5913.5	698.9	129.7	1497.5	3124.4	17294.7
1948	966.0	586.7	371.2	738.9	5.3	0.8	498.0	5516.3	8997.1	622.3	81.6	3606.8	21991.1
1949	1631.1	269.7	90.3	92.1	83.2	92.1	4103.7	6872.8	3725.0	118.0	63.6	3348.2	20489.6
1950	1495.7	193.0	52.7	9.9	51.5	940.5	3395.1	9785.2	6468.5	453.0	83.8	2988.4	25917.2
1951	2372.0	6555.8	7139.9	1717.8	13.7	28.5	2621.9	6187.5	2348.9	130.9	110.3	3540.6	32767.8
1952	1205.0	378.0	784.7	81.2	11.5	311.3	3421.4	15018.3	9502.2	4674.8	125.9	1644.2	37158.5
1953	3332.3	985.0	90.9	13.1	5.5	81.0	3336.9	3127.2	8850.6	1851.5	155.0	1787.9	23617.0
1954	2463.1	1091.0	371.1	51.1	55.4	2450.8	3930.1	7267.8	1186.6	190.5	138.4	2811.6	22007.5
1955	1789.9	385.5	310.7	426.3	384.7	514.2	150.5	6445.7	4036.6	175.2	164.1	3234.3	18017.8
1956	1566.2	303.9	3218.1	3049.2	2124.5	1635.5	3407.6	12276.0	8448.7	1166.6	132.5	2949.6	40278.3
1957	2750.2	986.2	690.6	401.5	780.9	1393.9	1968.1	6557.8	8058.6	355.0	1192.8	3478.9	28614.6
1958	1403.8	357.4	216.0	306.1	527.1	853.4	1496.9	15218.3	8731.0	1666.4	106.3	2843.1	33725.7
1959	2560.1	513.4	52.3	364.1	429.1	946.8	1197.1	1662.6	1560.0	55.8	43.6	3196.9	12581.9
1960	1766.2	25.1	0.0	0.0	44.4	534.6	1094.3	3648.3	2383.7	64.9	28.3	2740.3	12330.3
1961	1627.6	378.6	153.3	70.1	247.1	688.8	481.1	1826.2	1526.8	82.0	2149.9	2688.8	11920.2
1962	1006.4	139.4	166.7	174.0	448.5	488.9	4439.2	7401.2	5532.3	447.5	195.8	3702.2	24142.1
1963	909.2	1883.0	772.2	751.2	5169.8	1061.1	1533.7	9388.6	6262.7	571.4	232.1	3280.9	31815.8
1964	1082.1	2005.1	1343.2	1237.5	469.5	443.3	356.4	3474.7	2731.4	161.2	203.7	2642.9	16151.1
1965	1016.1	1269.2	4708.8	2425.5	1588.0	1376.1	2898.7	11844.4	5995.0	2313.2	347.7	2061.0	37843.7
1966	3033.4	1683.0	383.1	514.0	469.1	571.8	2861.1	5456.9	290.1	201.0	207.7	1371.7	17042.8
1967	1355.1	1029.4	1886.9	1073.2	865.3	1661.2	2065.1	8185.3	13388.8	5434.3	188.5	4167.7	41300.8
1968	1198.3	577.6	299.4	241.6	242.2	1225.6	4581.7	2667.9	1137.7	234.0	311.8	3623.0	16340.7
1969	1028.5	15.1	18.4	1609.8	912.8	731.6	4591.6	18790.2	9531.1	2833.2	179.6	2895.9	43137.8
1970	1852.7	1197.7	1264.8	4369.9	3156.1	2366.1	2304.1	6182.0	5565.4	222.6	171.1	514.6	29167.0
1971	1071.0	2715.0	2286.9	469.9	146.7	448.7	3047.2	10612.8	6394.4	790.4	175.4	2100.2	30258.6
1972	2647.1	701.7	690.2	395.7	359.4	2313.0	624.3	6187.9	3212.5	164.1	162.6	3476.1	20934.6
1973	1390.0	708.2	510.0	472.4	238.4	265.9	841.9	13456.1	4658.9	222.2	224.5	3437.1	26425.7
1974	1363.4	4134.0	1841.4	1606.0	774.2	1540.4	3423.4	11737.4	7553.1	1180.9	137.6	4005.1	39297.1
1975	1199.9	341.4	117.1	207.9	461.5	101.6	122.4	8418.4	11383.0	1193.7	172.1	3038.3	26757.2
1976	918.7	740.9	1924.6	1233.1	157.6	270.3	124.7	132.5	134.8	142.0	139.2	430.1	6348.5
1977	2024.9	1443.2	63.5	46.7	27.3	89.8	38.5	84.2	85.1	82.1	103.9	2920.3	7009.6
1978	290.3	852.4	346.1	131.4	322.9	109.9	3506.6	9985.1	10241.0	1701.0	168.9	1690.3	29345.9
1979	147.3	2755.2	1744.4	837.9	813.8	158.8	1476.0	10755.4	3329.6	165.3	196.2	2830.4	25210.3
1980	1607.6	809.6	678.9	2920.6	1813.7	1027.6	5423.2	9628.7	8339.8	2948.0	166.4	1211.9	36576.0
1981	2689.2	1419.5	153.6	174.2	199.2	199.4	1378.7	5094.5	893.0	147.7	137.0	1031.4	13517.4
1982	2560.1	2455.1	5276.7	1372.1	4166.5	1881.0	6926.0	13966.9	9452.5	1820.2	169.3	744.5	50791.0
1983	1449.6	6002.0	1035.7	797.7	751.2	1110.0	1209.8	11291.9	20978.1	11420.6	1261.9	4432.6	61741.2
1984	3296.7	3886.7	3302.6	2936.3	498.8	1031.8	4110.5	10694.0	5031.6	120.6	145.6	1977.0	37032.2
1985	2987.8	1448.6	2343.2	1115.0	726.7	662.7	2836.9	4941.3	1294.3	105.9	152.8	2002.4	20617.6
1986	1450.0	1950.3	583.5	336.8	3776.3	6027.1	7526.0	13135.3	7318.1	468.9	225.1	1000.0	43797.3
1987	2365.3	2554.2	518.4	81.8	96.0	433.6	225.1	2096.4	297.4	245.9	3101.5	1427.8	13443.3
1988	816.9	730.6	236.4	448.5	522.7	596.0	186.9	280.8	497.2	330.3	1273.9	731.2	6651.4
1989	1052.8	1044.4	821.5	800.5	416.0	1530.7	5245.6	6799.3	3989.5	262.9	1318.7	391.0	23673.1
1991	2001.8	1186.0	270.7	63.0	43.0	346.1	363.1	3797.0	3822.8	383.7	498.6	824.1	13599.9
1992	1065.6	670.4	1418.7	1249.2	444.5	359.6	1427.2	1636.5	265.7	311.1	1413.9	379.6	10641.9
AVERAGE	1521.3	1098.3	979.0	788.8	719.4	897.5	2461.8	7736.3	5013.1	1041.7	530.6	2315.1	25102.9

SOURCE: SWRCB EXHIBIT 3 AND 5

TABLE 5-6
CAPLES LK OUTLET NR KIRKWOOD CA

(USGS GAGE #11437000)

AVERAGE MONTHLY RELEASES (AF)

WATER YEAR	AVERAGE MONTHLY RELEASES (AF)												TOTAL ANNUAL
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1923	90.1	80.6	73.7	263.9	238.4	307.3	2271.2	7724.0	7953.7	5312.3	867.1	100.2	25282.4
1924	1313.7	559.2	94.6	12.3	11.5	36.8	128.1	61.4	598.6	12.3	2468.7	2904.7	8201.7
1925	1730.9	1016.9	453.4	458.0	11.1	15.6	75.6	50.5	6277.6	1462.8	2482.3	123.4	14158.1
1926	478.0	1962.0	1559.6	2765.7	140.6	34.8	177.7	3597.7	3188.0	961.7	3915.3	5869.7	24650.7
1927	3329.6	1672.3	620.1	129.9	22.2	35.6	100.9	2870.8	7327.6	2498.8	545.3	1342.2	20495.3
1928	4722.7	196.6	1402.2	1163.6	23.0	132.9	651.8	5448.0	2543.3	539.4	1919.2	6791.4	25534.1
1929	6319.8	1859.2	2878.1	657.6	38.8	20.8	63.4	37.0	20.8	1105.6	3641.2	2373.6	19016.0
1930	852.2	666.7	17.2	1805.0	13.5	19.0	71.7	29.7	251.3	852.4	1331.0	4554.0	10463.5
1931	1261.3	6405.3	4959.1	2156.2	602.7	55.0	142.6	24.4	24.0	24.6	1426.4	973.6	18055.1
1932	2131.7	2176.4	1802.8	1335.5	1285.0	126.7	366.2	129.5	2730.4	3942.2	691.0	251.7	16969.1
1933	3457.1	4318.4	4494.6	3112.6	3746.2	482.1	1009.9	105.1	96.2	92.1	587.7	348.7	21850.5
1934	95.0	487.7	2827.4	1847.3	122.4	160.6	305.4	411.0	946.4	959.5	3516.5	157.0	11776.3
1935	2357.8	730.0	2305.7	2356.2	98.6	91.1	290.1	1850.3	8925.8	2506.7	2815.6	2670.6	26998.5
1936	1966.7	5308.4	3692.7	731.6	86.1	96.8	326.7	4672.4	6589.4	3013.6	2726.5	1597.7	30808.6
1937	4950.0	4377.8	3043.3	3880.8	297.0	92.3	271.1	138.6	2209.3	2560.1	3124.4	1089.6	26034.2
1938	1429.8	3096.7	1326.8	91.9	1286.0	7733.9	15561.6	5441.8	11511.7	5470.7	1712.7	875.4	55539.0
1939	326.7	700.9	3342.2	3857.0	2659.1	1102.9	2210.8	228.3	1981.8	2629.0	3498.5	519.0	23056.2
1940	95.4	1950.9	4272.8	1079.5	86.1	96.2	4792.5	2315.2	6530.0	1686.6	3581.8	1545.4	28032.5
1941	3196.7	1586.0	2936.3	625.7	1386.0	1534.5	4354.4	542.9	7524.0	4233.2	1294.9	1058.1	30272.8
1942	4068.9	2332.8	815.8	736.6	4765.9	3235.3	7261.0	118.8	10360.9	6874.6	1401.8	713.0	42685.4
1943	1671.5	249.3	666.7	1445.4	4694.6	3655.1	10776.5	4075.0	7894.3	3750.1	383.5	394.0	39656.0
1944	603.3	2079.0	4274.8	3635.3	2423.5	1380.5	2672.3	80.6	2311.6	2243.1	2630.4	2417.6	26752.1
1945	4191.7	101.0	483.3	1122.9	554.8	598.6	1796.5	5324.2	7304.2	3454.5	2342.3	2319.8	29593.7
1946	1579.0	111.9	2987.2	3197.7	2882.9	644.7	1830.5	5496.5	5940.0	1883.0	3969.9	4959.9	35483.1
1947	2026.7	1193.7	1294.9	1332.5	435.0	236.8	675.8	256.2	2187.3	1397.9	4930.2	2837.3	18804.5
1948	1897.6	670.6	1595.9	874.8	1993.1	812.4	1697.3	148.9	4827.2	2762.1	1454.0	2314.4	21039.3
1949	1192.2	566.9	2968.0	4361.9	2898.7	1047.4	2683.8	279.0	2448.5	756.2	2043.2	2063.8	23309.4
1950	3457.1	3029.4	2522.5	2677.0	917.1	251.1	654.9	756.2	8613.0	2791.8	3284.8	1277.5	30232.3
1951	2701.5	2824.3	6638.9	1985.1	609.8	675.2	4589.5	7993.3	6421.1	1879.0	4072.9	2511.0	42901.7
1952	2610.8	1938.8	2011.3	2391.8	1205.8	1289.0	3705.8	1356.3	10531.6	8486.3	2164.1	882.3	38574.0
1953	3738.2	2696.8	6163.7	2259.2	1087.0	596.6	1314.4	182.6	2181.8	6009.3	2857.1	2070.3	31157.0
1954	2936.3	5845.0	4898.5	1851.3	515.4	169.7	526.3	219.6	164.7	2809.8	5221.3	3099.5	28257.4
1955	3522.4	2406.9	1496.9	2174.0	534.8	343.7	769.0	52.5	30.3	998.3	4207.5	3337.3	19873.6
1956	4276.8	2502.7	628.6	415.0	390.5	418.6	1201.7	5149.2	13252.1	5153.9	1749.3	1094.5	36233.1
1957	4146.1	3456.9	4414.0	2260.8	877.3	204.3	588.1	250.9	7187.4	3150.4	3825.4	2559.3	32920.9
1958	5171.8	2668.2	1570.1	726.7	153.4	165.7	2278.3	6693.8	4504.5	5464.8	1657.3	1672.9	32727.6
1959	4540.1	7591.3	2475.0	1171.8	902.9	430.3	980.0	170.3	199.6	265.3	4445.1	2086.7	25258.4
1960	3183.8	2777.9	1753.5	2013.3	286.5	299.8	729.0	160.4	134.4	973.8	3330.4	1615.1	17257.9
1961	2522.5	1898.8	2007.7	1758.2	223.7	188.7	559.9	198.6	188.1	1524.6	1381.8	882.1	13334.8
1962	2066.7	3286.8	2013.7	2287.9	205.1	1433.7	2982.7	214.4	4756.2	3445.2	6169.7	1588.8	30450.8
1963	668.8	4561.9	3193.7	2260.4	208.5	199.2	571.4	3225.4	9224.8	4031.3	3627.4	917.1	32689.9
1964	1373.3	536.8	743.7	2758.1	2760.1	1723.0	3443.9	180.2	4397.6	1770.5	4276.8	4061.0	28025.0
1965	2527.1	2293.0	213.8	165.7	149.7	165.7	5946.4	4067.5	8502.9	5955.8	3613.9	666.5	34268.1
1966	1917.2	4235.2	4066.9	3377.9	2486.9	576.8	1297.4	207.9	483.5	1649.3	4757.9	4565.7	29622.6
1967	1842.4	2464.5	953.2	206.3	249.1	313.8	917.9	2288.5	12519.5	10525.7	3175.9	1714.5	37171.3
1968	2682.3	5628.7	6336.0	2399.8	829.8	546.1	1307.2	187.1	211.9	1542.4	2447.3	1476.5	25595.0
1969	1876.8	1701.6	4647.1	1473.1	1330.6	1473.1	4256.0	4542.1	15647.9	6318.8	1886.3	1865.2	47018.6
1970	1982.4	4358.0	6418.0	893.2	918.7	1037.5	2728.2	763.5	8517.8	3490.5	6195.7	4388.7	41692.1
1971	310.9	1818.6	2043.4	544.9	197.6	186.9	570.6	301.0	8493.6	3942.2	2163.7	1693.3	22266.7
1972	4472.8	4583.7	5049.0	2391.8	954.0	312.4	709.4	274.0	280.0	340.8	3653.1	1877.4	24898.5
1973	2167.7	4757.9	1945.9	351.1	306.7	349.5	1033.5	2670.0	7438.9	1607.8	2840.3	3065.0	28534.3
1974	2189.9	1329.0	205.9	707.3	972.2	861.3	4124.1	8656.8	10406.0	4305.3	946.4	2982.1	37686.1
1975	4335.4	6937.9	3876.8	762.3	321.0	233.2	628.6	246.7	4816.0	3976.4	1505.0	2150.3	29789.6
1976	487.9	513.6	1883.0	2397.4	3997.8	1407.4	2863.8	171.5	216.0	943.5	4896.5	1248.0	21026.4
1977	346.3	1926.5	2840.9	937.9	140.8	75.5	201.9	78.7	262.0	579.3	5615.3	864.3	13869.5
1978	96.0	207.3	693.6	85.1	151.3	226.5	598.0	455.2	9416.9	5021.3	2027.1	946.8	19925.2
1979	186.3	2804.3	5286.6	2785.4	2104.7	423.7	998.3	2531.8	5925.5	2075.0	4524.3	1748.3	31394.4
1980	2264.1	4546.5	4306.5	230.3	177.4	228.9	664.3	1977.4	8224.9	8056.6	2385.9	514.2	33577.0
1981	1945.0	6444.9	5957.8	2267.1	468.1	169.3	540.5	726.7	310.9	957.3	6151.9	1259.9	26699.3
1982	1510.3	489.1	326.7	370.3	371.3	438.2	6842.8	8933.8	9082.3	6551.2	1483.6	1168.4	37567.9
1983	2671.2	2969.2	1203.8	2461.1	3025.4	881.1	2550.6	5791.5	16927.0	9151.6	4084.7	7345.8	59063.1
1984	1030.6	1469.0	4041.2	1352.3	879.1	1245.4	4367.7	8102.2	8252.6	2836.2	2057.2	5074.7	40708.2
1985	3983.8	2280.0	4358.0	1202.7	725.9	354.6	1001.0	317.4	378.8	1413.7	6947.8	2060.4	25024.0
1986	1104.4	2037.6	381.3	386.3	303.3	373.6	4095.8	5288.6	12297.8	3597.7	6583.5	2892.4	39342.4
1987	2152.9	3221.5	3225.4	2169.1	515.0	462.3	1275.2	454.4	472.6	496.6	606.1	522.9	15574.0
1988	459.8	448.1	1002.1	999.7	489.5	409.5	1165.5	409.9	450.1	833.6	1523.0	2349.9	10540.4
1989	551.2	726.5	1250.6	1912.5	2103.9	510.2	1485.5	699.9	5955.8	2863.1	3801.6	3746.2	25607.0
1991	1137.1	2387.9	2277.0	1421.2	392.6	384.9	1110.2	426.3	460.2	425.1	1452.3	1803.4	13678.3
1992	2411.4	938.5	951.4	1601.8	1497.3	612.4	1758.3	498.2	486.9	721.9	2376.0	2187.3	16041.4
AVERAGE	2215.9	2434.8	2542.9	1592.5	1010.7	672.1	2065.2	2012.0	5054.0	2926.3	2945.9	2101.4	27573.8

SOURCE: SWRCB EXHIBIT 3 AND 5

TABLE 5-7
ALOHA LAKE OUTLET-PYRAMID CREEK AT TWIN BRIDGES
 (USGS GAGE #11435100)

WATER YEAR	AVERAGE MONTHLY RELEASES (AF)												TOTAL ANNUAL
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1971	353.2	2820.7	780.7	1352.9	904.9	859.3	1984.0	7177.5	8888.2	2847.2	4494.6	1199.9	33663.2
1972	188.3	675.0	816.2	613.0	567.6	2411.6	1607.8	5516.3	5146.0	4296.6	2261.0	276.8	24376.1
1973	565.7	740.9	1494.7	990.0	693.0	736.6	2730.4	9450.5	5049.0	2853.2	2995.3	550.2	28849.6
1974	832.0	3196.3	1487.0	1936.4	1011.8	1421.6	1970.1	9838.6	7866.5	3926.3	5536.1	646.5	39669.3
1975	76.2	415.0	533.0	737.7	754.4	936.1	875.2	6007.3	9062.5	3316.5	4901.3	1044.8	28660.1
1976	1788.1	1405.8	767.6	636.8	634.3	986.0	1423.6	3263.0	1805.8	3457.7	653.0	283.3	17105.1
1977	885.5	258.0	118.6	254.6	272.3	437.6	1686.6	1811.7	1549.2	3493.7	210.7	57.6	11035.9
1978	25.8	239.3	1088.6	863.3	702.9	1380.1	1550.3	8195.2	10385.1	3467.0	4175.8	2078.2	34151.7
1979	215.0	282.5	561.1	1385.4	683.7	1211.8	2061.2	8591.2	4720.3	2817.5	2854.6	878.1	26262.5
1980	1029.4	1088.0	907.4	3459.1	1177.6	1059.3	2682.9	8133.8	5579.6	5296.5	3249.2	1459.9	35122.7
1981	1159.5	415.0	644.3	604.1	985.6	833.6	2694.8	3764.0	2073.1	4011.5	154.8	16.6	17356.8
1982	689.4	2799.7	3219.5	1370.2	3084.8	3876.8	3975.8	7524.0	7569.5	5252.9	3908.5	3783.8	47055.0
1983	2166.1	1362.2	1239.5	1120.7	1081.1	1322.6	1247.4	5779.6	12670.0	10701.9	3213.5	4599.5	46504.3
1984	2168.1	3013.6	1908.7	1269.2	1038.1	1510.7	1982.0	8854.6	8306.1	4102.6	4932.2	459.4	39545.1
1985	1049.2	1758.2	881.1	569.4	503.1	684.7	3201.7	4280.8	2441.3	4752.0	563.5	400.4	21085.4
1986	748.6	623.3	1001.9	1564.2	2053.3	3074.9	3118.5	7918.0	9349.6	5611.3	4258.2	428.9	39750.7
1987	718.1	633.8	207.9	289.3	546.3	803.3	3356.1	3336.3	1091.0	3094.7	988.6	35.7	15101.1
1988	20.8	421.9	1005.4	745.9	665.1	1231.6	2180.0	2706.7	1289.0	2616.2	1649.7	76.4	14608.6
1989	15.0	760.5	566.1	550.6	768.6	2667.1	3520.4	5765.8	6607.3	4130.3	2827.8	548.3	28727.8
1991	11.0	43.8	118.4	138.0	196.0	1459.1	1716.7	3847.1	3936.2	1980.0	3253.1	252.5	16951.9
1992	103.5	995.7	401.9	366.3	791.8	863.3	2843.3	2195.8	1851.3	3360.1	737.6	66.3	14576.9
AVERAGE	705.2	1140.4	940.5	991.3	910.3	1417.5	2305.2	5902.8	5582.7	4066.0	2753.3	911.6	27626.7

SOURCE: SWRCB EXHIBIT 3 AND 5

46.

Table 5-8 provides an accounting of the data summarized above:

TABLE 5-8

Water Availability Accounting

	CAPLES CREEK WATERSHED	SILVER CREEK WATERSHED	PYRAMID CREEK WATERSHED	SFAR MAIN STEM
PARAMOUNT RIGHTS	25,000 afa (power)	22,546 afa (power - 20,000 afa)	12,091 afa (power - 11,200 afa)	112,741 afa at El Dorado Canal 1,300,860 afa at Chili Bar Power House
RECORDED AVERAGE ANNUAL TOTAL RUNOFF (1977 runoff)	27,574 afa (13,869 afa)	25,103 afa (7,009 afa)	27,627 afa (11,036 afa)	213,021 afa- Kyburz 973,945 afa- Chili Bar
UNAPPROPRIATED DEMAND:				
El Dorado¹⁴	21,581 afa (consumptive)	6,000 afa (consumptive)	5,350 afa (consumptive)	15,000 afa (consumptive)
Kirkwood, Inc.	500 afa (consumptive)	0	0	0
Kirkwood PUD	310 afa (consumptive)	0	0	0
Alpine	21,581 afa (nonconsumptive) 71 afa (consumptive) 96.4 afa (consumptive)	0	0	0
Amador	0	8,740 afa (nonconsumptive)	0	0
WATER AVAILABLE	YES	YES	YES	YES

As can be seen from Table 5.8, based on historic average annual runoff conditions and critical dry conditions such as occurred during 1977, there appears to be sufficient water available for

¹⁴ El Dorado's maximum direct diversion and redirection of water from storage limited to 15,000 afa and 17,000 afa, respectively.

all of the consumptive use applications and/or petitions for partial assignment of SFA 5645. However, this analysis does not evaluate water availability during the dry periods of the year. Decision 893 evaluated water availability using flow records prior to 1927 and, as stated earlier, that analysis was used to determine the season of availability.

6.0 PG&E'S EL DORADO PROJECT OPERATION

6.1 History

During the period of 1860-1876, portions of the El Dorado Project were built for gold mining purposes. After 1884 water from the project was used for industrial, irrigation, and domestic purposes within the Placerville area. In 1916 Western States Gas and Electric Company acquired the project for power development. Improvements to the project were made during the period 1917-1919. In 1922 the Federal Powers Commission issued a 50-year license, which was transferred in 1928 to PG&E. (PG&E, 2, License for the El Dorado Project (FERC 184), p. 1.)

6.2 Project Facilities

The hydroelectric facilities associated with the El Dorado Project covered under FERC's License 184, as well as PG&E's Chili Bar, License 2155, include the following:

- ◆ **Lake Aloha (aka Medley Lakes):** Used since the late 1800s, this reservoir is located in El Dorado County on Pyramid Creek and has a storage capacity of 5,063 af.

- ◆ **Echo Lake:** This reservoir is located in El Dorado County and is on a tributary to Lake Tahoe. Water is diverted from the lake through the Echo Lake conduit to the South Fork American River. The reservoir has been used since the late 1800s and has a storage capacity of 1890 af.

- ◆ **Caples Lake:** This 21,581 af reservoir is located in Alpine County on Caples Creek.
- ◆ **Silver Lake:** This 8,590 af reservoir is located in Amador County on the Silver Fork of the South Fork American River.
- ◆ **El Dorado Canal:** Since 1856 the canal has diverted water (including water released from the above identified four upstream reservoirs) from the South Fork American River at a point just below the river's confluence with Silver Fork American River near Kyburz, California. The canal is approximately 22 miles long and has a maximum capacity at its intake of 156 cfs. The canal discharges into the El Dorado Forebay.
- ◆ **El Dorado Forebay:** This 285 af reservoir is located at the end of the El Dorado Canal near the town of Pollock Pines.
- ◆ **El Dorado Powerhouse:** The powerhouse is operated under FERC License 184. The powerhouse uses 1910 feet of head and a flow rate of 163 cfs to produce power. The normal operating capacity of the powerhouse is 21 megawatts (MW).
- ◆ **Chili Bar Forebay:** This 3139 af reservoir is located near the City of Placerville and is the forebay to the Chili Bar Powerhouse.
- ◆ **Chili Bar Powerhouse:** The powerhouse is operated under FERC License 2155. The powerhouse uses 80 feet of head and a flow rate of 2700 cfs. The normal operating capacity for the powerhouse is 7.8 MW. (93,PG&E,5; 93,EDCWA,47,1-2.)

6.3 Associated Water Rights With the El Dorado Project

Table 6-1 summarizes PG&E's water rights for its facilities on the South Fork American River. (93, PG&E, 5.)

TABLE 6-1

**Summary of PG&E Water Rights for
PG&E's South Fork American River Hydropower Project**

TYPE OF RIGHT	ID. NUMBER	DATE OF PRIORITY	AMOUNT	SEASON	POINT OF DIVERSION
PRE-1914 POST-1914	S-9034 A-1440	1856 1919	70 cfs 86 cfs	all year	Intake of El Dorado Canal
PRE-1914	S-?	1860	30 cfs	all year	Echo Creek trib. to Upper Truckee River to Echo Canal
POST-1914	A-6383	1929	15 cfs	12/1-6/15	Alder Creek to alder feeder
PRE-1914 POST-1914	S-? A-654	1860 1917	2,000 afa 2,000 afa	all year	Echo Reservoir
PRE-1914 POST-1914 POST-1914	S-9035 A-654 A-1441	1875 1917 1919	360 afa 5,000 afa 500 afa	all year	Lake Aloha (aka Medley Lakes)
PRE-1914 POST-1914	S-4708 A-1441	1875 1919	5,000 afa 5,000 afa	all year	Silver Lake
POST-1914	A-654 A-1441	1917 1919	8,000 afa 17,000 afa	all year	Caples Lake

6.4 Operation of the El Dorado Project

PG&E has historically released water from Lake Aloha, Echo, Caples, and Silver Lakes to augment the El Dorado's Project water requirements during periods of each year when the natural flow of the South Fork American River is insufficient for meeting the Project's power, irrigation, recreation, and the instream flow releases required by FERC License 184. In the winter and spring seasons, the lakes store runoff for later release. Evidence presented by Amador County describes the physical operation of the four lakes associated with the El Dorado Project in the following manner:

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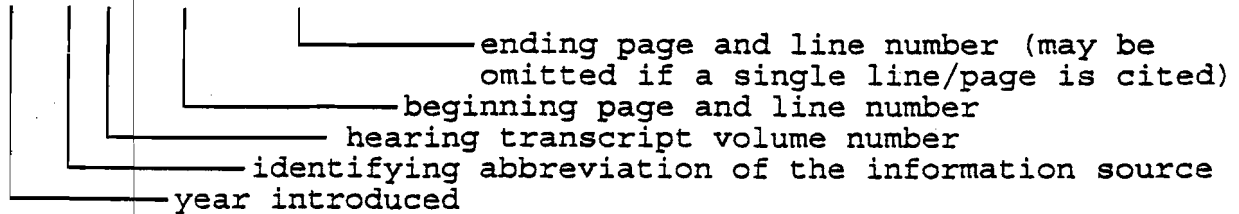
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CITING THE RECORD AND OTHER ABBREVIATIONS

When citing evidence in the hearing record, the following convention has been adopted:

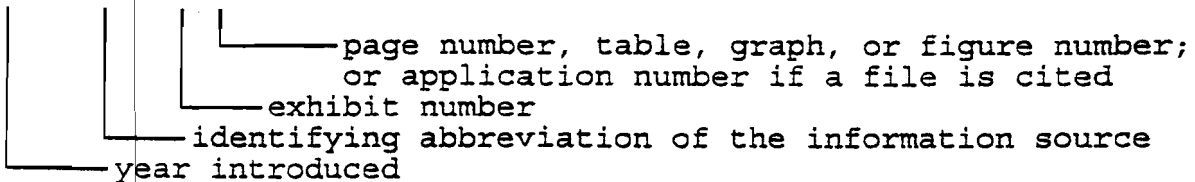
I. Information derived from the hearing transcript:

93,T,I,12:10-14:19



II. Information derived from an exhibit:

95,SWRCB,9,6



III. Abbreviations of the information sources are:

- 93 1993 Hearing, June 14, 15, 16, & 21; four volumes
- 95 1995 Hearing, October 24, 25, 30, & 31; four volumes
- ACWA Alpine County Water Agency
- AMADOR County of Amador
- CSPA California Sportfishing Protection Alliance
- DFG California Department of Fish and Game
- EDCTQG El Dorado County Taxpayers for Quality Growth
- EDCWA El Dorado County Water Agency and El Dorado Irrigation District (co-applicants)
- EDNF El Dorado National Forest (aka FS-USDA in 1995)
- FR Friends of the River
- KPUD Kirkwood Public Utility District

KW Kirkwood Associates, Inc.
 PG&E Pacific Gas & Electric Company
 PJC Paul J. Creger
 SCLDF Sierra Club Legal Defense Fund
 SJCDPW San Joaquin County Department of Public Works
 SMUD Sacramento Municipal Utility District
 SWRCB State Water Resources Control Board
 T Hearing Transcript
 USBR U.S. Department of Interior, Bureau of Reclamation
 USFS United States Department of Agriculture, Forest Service
 USFWS United States Fish and Wildlife Service
 WWD Westlands Water District

IV. Other abbreviations used in this document are:

af acre-feet
 afa acre-feet per annum
 cfs cubic feet per second
 CEQA California Environmental Quality Act
 CCR California Code of Regulations
 EDCWQ El Dorado County Water Agency
 EID El Dorado Irrigation District
 EIR Environmental Impact Report
 FEIR Final Environmental Impact Report
 FERC Federal Energy Regulatory Commission
 NEPA National Environmental Policy Act
 SEIR Supplemental Environmental Impact Report

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of:)
)
 Applications 29919, 29920, 29921, and 29922)
 and Petition for Assignment of State Filed)
 Application 5645 by El Dorado County Water)
 Agency and El Dorado Irrigation District,)
)
 Applications 30062 and 30453 and Petition)
 for Assignment of State Filed)
 Application 5645 by Kirkwood Associates,)
 Inc. and U.S. El Dorado National Forest,)
)
 Application 30204 by Kirkwood Meadows)
 Public Utility District and)
 U.S. El Dorado National Forest,)
)
 Application 30219 and Petition for)
 Assignment of State Filed Application 5645)
 by Alpine County Water Agency,)
)
 Application 30218 and Petition for)
 Assignment of State Filed Application 5645)
 by Amador County,)
)
 Applicants and Petitioners,)
)
 Pacific Gas & Electric Company,)
 California Sportfishing Protection)
 Alliance, Gerald and Joan Glasgow,)
 Bryant M. Bennett, Edward C. Hinde, Edwin)
 and Patricia Brennan, Sacramento)
 Municipal Utility District, Amador County)
 Chamber of Commerce, Plasse's Inc.,)
 Edwin Allen Bish II, U.S. Bureau of)
 Reclamation, City of Stockton, U.S. Fish and)
 Wildlife Service, Sierra Club Legal)
 Defense Fund, et al., Kit Carson Lodge,)
 Amador County Water Resources,)
 California Department of Fish and Game,)
 Paul J. Cregor, Save the American River)
 Association, San Joaquin County Department)
 of Public Works, Friends of the River,)
 El Dorado National Forest, Curtis Manning,)
 City of Sacramento, California Native)
 Plant Society, El Dorado County Water)
 Agency, El Dorado Irrigation District,)
 Westlands Water District, San Luis and)
 Delta-Mendota Water Agency, and El Dorado)
 County Taxpayers for Quality Growth.)
)
 Protestants and Interested Parties.)

DECISION 1635

SOURCES: Silver Lake
 tributary to
 Silver Fork
 American River;
 Caples Lake
 tributary to
 Caples Creek
 and Silver Fork
 American River;
 and Lake Aloha
 tributary to
 Pyramid Creek
 all three being
 tributary to
 the South Fork
 American River

COUNTIES: Alpine, Amador,
 and El Dorado

BY THE BOARD:

Applications having been filed to appropriate water by El Dorado County Water Agency and El Dorado Irrigation District (El Dorado), Kirkwood Associates, Inc., and U.S. El Dorado National Forest (Kirkwood, Inc.), Kirkwood Meadows Public Utility District (Kirkwood PUD), Alpine County Board of Supervisors and Water Agency (Alpine County), and the County of Amador (Amador County); petitions for partial assignment of state filed Application 5645 having been filed by El Dorado, Kirkwood, Inc., and Alpine and Amador Counties; protests having been filed to the applications and petitions; hearings having been held on June 14, 15, 16, and 21, 1993, and October 24, 25, 30, and 31, 1995; the applicants, petitioners, and numerous protestants having appeared and presented testimony and exhibits; closing briefs having been submitted; the evidence and closing briefs having been duly considered, the State Water Resources Control Board (Board) finds as follows:

1.0 APPLICATIONS TO APPROPRIATE WATER

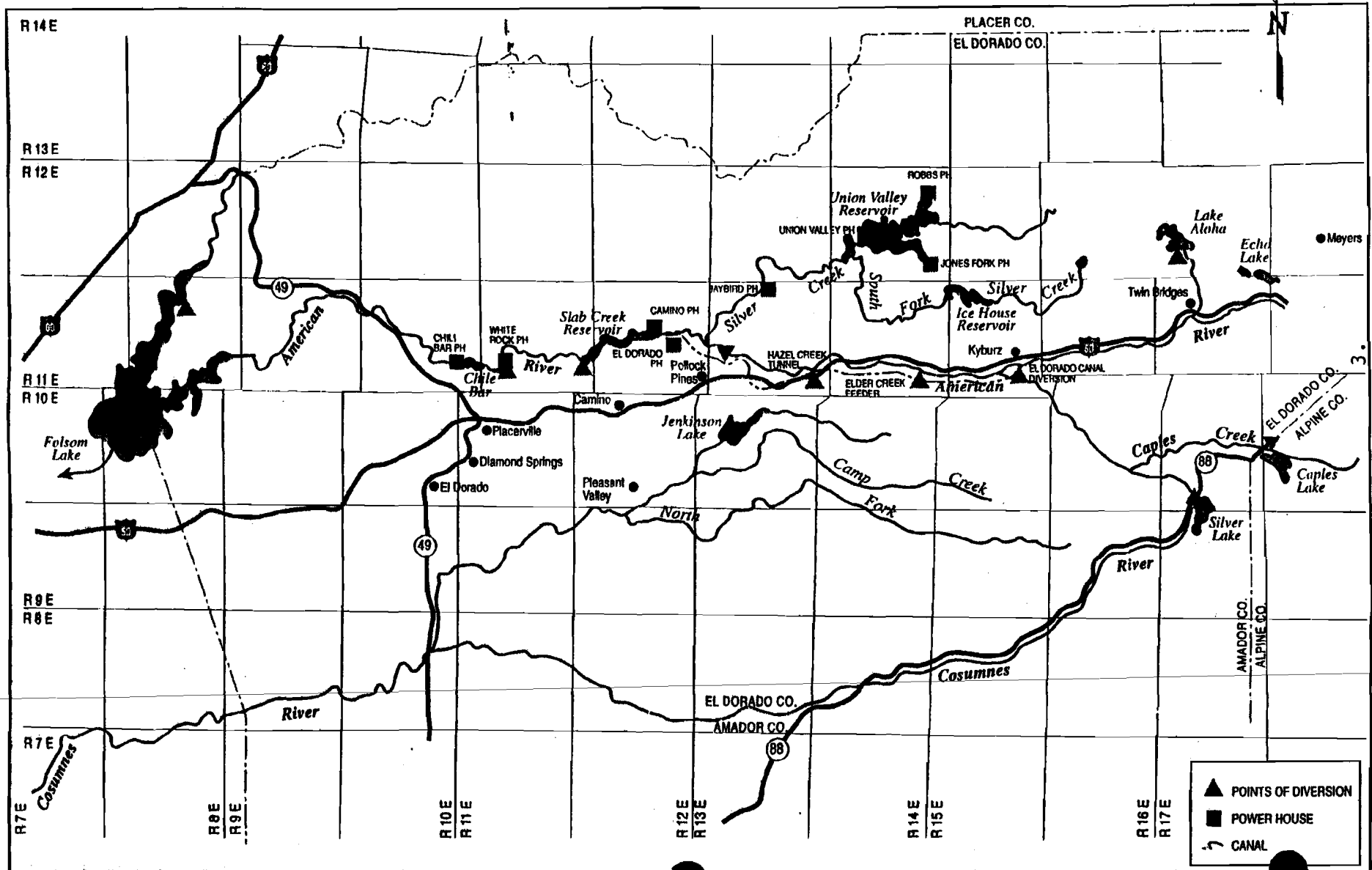
1.1 Pacific Gas & Electric Company (PG&E) operates Lake Aloha, and Caples and Silver Lakes

PG&E claims the right to divert and use water at Lake Aloha¹ tributary to Pyramid Creek, Caples Lake tributary to Caples Creek, and Silver Lake tributary to Silver Fork of the South Fork American River. (See map.) Pyramid Creek, Caples Creek, and Silver Fork American River are tributary to the South Fork American River. PG&E controls releases of water from these reservoirs for the generation of hydroelectric power, a nonconsumptive use of water. However, up to 15,080 afa are directly diverted and rediverted from storage into the El Dorado Canal at Kyburz for consumptive uses.²

¹ Lake Aloha is sometimes referred to as the Medley Lakes.

² This water is delivered per a 1919 agreement between Western State Gas and Electric Company and the El Dorado Water Company.

South Fork American River Major Reservoirs and Facilities



1.2 Applicants and Petitioners Have Filed Competing Applications and Petitions for Partial Assignment of State Filed Applications to Appropriate Water From PG&E Lakes

El Dorado, Kirkwood, Inc., Kirkwood PUD, Alpine County, and Amador County have filed applications and petitions for partial assignment of state filed Application 5645 for competing projects to appropriate water from Caples and Silver Lakes.³ El Dorado has filed an application and petition for partial assignment of state filed Application 5645 to appropriate water from Lake Aloha and Caples and Silver Lakes. Kirkwood, Inc., and Alpine County have filed applications and petitions for partial assignment to appropriate water from Caples Lake. Kirkwood PUD also filed an application to appropriate water from Caples Lake. Amador County has filed an application and petition for partial assignment of state filed Application 5645 to appropriate water from Silver Lake.

All of the competing applications and petitions for partial assignment seek to utilize diversion dams and reservoirs operated by PG&E for hydroelectric generation. Further, the competing applications and petitions either seek to: (1) make consumptive use of the same water that PG&E is diverting for nonconsumptive hydropower purposes or (2) use the diversion and storage capacity of PG&E facilities to utilize water that PG&E is diverting for nonconsumptive hydropower purposes.

1.3 With One Exception, Applicants and Petitioners Seek Water for Consumptive Use

With the exception of Amador County, the applications and petitions for assignment seek to appropriate water for consumptive uses. Amador County seeks water only for recreation

³ Each person petitioning for assignment of a state filed application must file an application to appropriate water consistent with the proposed assignment and describing the proposed project. Water Code section 10504.01. Thus, each petitioner for a state filing must file an application to appropriate water.

and fish and wildlife uses. El Dorado seeks to appropriate water for domestic, municipal, and irrigation uses; Kirkwood, Inc. seeks to appropriate water for snowmaking; Kirkwood PUD seeks water for municipal uses; and Alpine County seeks water for domestic and fish and wildlife uses. Table 1-1 more fully describes each application and petition for assignment.

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TABLE 1-1

APPLICANTS, APPLICATIONS, SOURCES,
AMOUNTS, DIVERSION SEASONS, AND USES

APPLICANT & APPLICATION #	SOURCE	DIRECT DIVERSION		STORAGE		USES ¹
		cfs ¹	Season	afa ²	Season	
EL DORADO						
29919	Silver Lake	--	--	6,000	11/01 to 08/01	Dom. ³ Mun. & Irr.
29920	Caples Lake	--	--	21,581	11/01 to 08/01	Dom., Mun. & Irr.
29921	Lake Aloha	--	--	5,350	11/01 to 08/01	Dom., Mun. & Irr.
29922	So. Fork American River: ⁴	156 total		--	--	Dom., Mun. & Irr.
	Kyburz ⁴	156	11/01 to 08/01			
	Flange ⁴	120	11/01 to 08/01			
	Folsom Lake ⁵	156	11/01 to 08/01			
SFA ⁶ 5645(8): Same as for A-29919, A-29920, A-29921 & A-29922 except diversion season requested is 01-01 to 12-31.						
KIRKWOOD, INC.						
30062	Caples Lake	1.8	11/01 to 03/01	250	11/01 to 03/01	Snowmaking
30453	Caples Lake	2.4	11/01 to 03/01	250	11/01 to 06/30	Snowmaking
SFA ⁶ 5645(11)	Caples Lake	4.2 total	11/01 to 03/01	500 total	01/01 to 12/31	Snowmaking
KIRKWOOD PUD						
30204	Caples Lake	0.69	11-01 to 06-15			Municipal
ALPINE CO.						
30219	Caples Lake	0.13	11-01 to 07-31	21,581	11-01 to 07-31	Dom., Rec. & F&WL ⁷
SFA ⁶ 5645(9)	Caples Lake	0.13 total	01-01 to 12-31	21,581	01-01 to 12-31	Dom., Rec. & F&WL
AMADOR CO.						
30218	Silver Lake	--	--	8,740	11/01 to 07/31	Rec. & F&WL
SFA ⁶ 5645(10)	Silver Lake	--	--	8,740 total	01-01 to 12/31	Rec. & F&WL

FOOTNOTES FOR TABLE 1

1 "cfs" = cubic feet per second.

2 "afa" = acre-feet per annum.

3 "Dom." = domestic uses.

4 El Dorado is not currently seeking a permit which would approve the diversion of water at Kyburz or the Flange (at SMUD's White Rock facility).

5 This point of diversion is also the point of redirection.

6 "SFA" = state filed application. The number "5645" is the number of the application for which a petition for assignment has been filed and the number in parentheses identifies the file folder in which the petition is filed.

7 "F&WL" = fish and wildlife uses.

". . . The amount of streamflow available in the river at the El Dorado Diversion Dam without releases from project storage generally falls below the required canal diversion needs during the first or second week of July. At that time, water is released from Lake Aloha to maintain diversion requirements. By late summer, as the stream flow further decreases and Lake Aloha storage becomes depleted, drafts from Caples Lake and Silver Lake are used to supplement Aloha Lake water. After Labor Day, when Lake Aloha has been drawn down completely, Echo Lake storage is drawn down. The storage of Echo Lake is quickly depleted and releases from Caples and Silver Lakes maintain power operations until the last two weeks of October, when, generally, the project shuts down for repair and maintenance. When the project resumes operations in November, releases from Caples and Silver Lakes, plus increased natural stream flow from winter storms and snowmelt, provide water to the canal throughout the winter period.

"Other factors which are considered in the use of project storage are as follows. Echo Lake water is not available for release until after Labor Day holidays The same consideration applies to Silver Lake. There are extensive private and public recreation developments which require maintenance of a high lake level throughout the summer Under project operations, Lake Aloha reaches maximum drawdown by September, while Caples, Silver, and Echo Lakes reach maximum drawdown in the fall and winter months" (95,AMADOR,18.)

Any spills and runoff below the reservoirs are diverted into the El Dorado Canal, which delivers water to the El Dorado Forebay. A portion of the water delivered into the El Dorado Forebay is rediverted by EID for irrigation and domestic use supplies under a contract with PG&E that dates back to the 1920s. The majority of the water diverted into the forebay is used for power generation at the El Dorado Powerhouse. The water returns to the South Fork American River, just upstream of SMUD's Slab Creek Reservoir. From the Slab Creek Reservoir, water is either diverted through SMUD's White Rock Powerhouse or allowed to flow downstream. All water that is diverted through SMUD's powerhouse or allowed to flow downstream enters PG&E's Chili Bar Reservoir

and is diverted through PG&E's Chili Bar Powerhouse. From Chili Bar the water is discharged back into the river and flows to Folsom Lake. (93, PG&E, 5.)

6.5 Operational Constraints Contained in FERC License 184

FERC License 184 imposes constraint on the operation of the El Dorado Project. These constraints fall under two general categories: recreation and fish protection. (PG&E, 2, FERC 184, Revised Exhibit R, 1-3.)

6.5.1 Recreation

"Exhibit R" of License 184 outlines PG&E's plan for recreational development of project lands and facilities associated with the El Dorado Project. PG&E's plan recognizes that both Silver and Caples Lakes provide natural outdoor recreational environments. (*Ibid.*)

Recreational uses associated with Silver Lake include boating, fishing, swimming, and camping. Three resorts have been developed to provide a variety of goods and services at the lake: Kay's, Plasse's, and Kit Carson. These resorts provide cabins, rental boats, boat launching ramps, docks, and sanitary facilities. Additionally, a Camp Fire Girls and Boys Scout camps have been developed along Silver Lake's eastern shore, the City of Stockton operates a municipal camp at the south end of the lake, a 96-unit public campground has been developed at Silver Lake East and Silver Lake West, and other facilities have been developed to support picnicking and swimming opportunities. (*Ibid.*)

Recreational use associated with Caples Lake is limited to fishing because of high winds and low water temperatures which create a less attractive environment than that of Silver Lake. To support this use, a lake shore resort, a 35-unit forest

service campground, and fishing access have been developed.
(*Ibid.*)

License 184 does not impose specific reservoir level requirements at either Silver Lake or Caples Lake to support recreational opportunities. With regard to Silver Lake operations, Exhibit S of PG&E Application for relicensing states:

"Silver Lake water surface will be maintained at as high a level as possible during the summer months. Never the less, at times seepage from the reservoir and fish water releases may exceed inflow, making it impossible to maintain the lake at its full level for recreational purposes." (PG&E, Exhibit 2, FERC License 184's Exhibit S, p.5.)

This implies no withdrawal of water from Silver Lake between the end of snowmelt runoff and Labor Day, excepting the requirement to release water from Silver Lake to provide instream flow for fish.

With regard to Caples Lake operation, Exhibit S states:

"Caple Lake water surface will be maintained as high as possible during the recreation season consistent with project demands. In the summer months of all years, water will be released from the reservoir for fish life and to meet downstream water demands for domestic, irrigation, industrial, and power purposes." (*Ibid.*)

The operational restriction on Caples Lake differs from that for Silver Lake because "project demand" may be met from Caples Lake during the summer recreational season along with releases for fish and "domestic, irrigation, and industrial purposes".

6.5.2 Fish Protection

In 1984 License 184 was amended by revising "Exhibit S", which relates to fishery protection requirements. Pursuant to Article 34 of License 184, PG&E is required to comply with the

2. Flow Release Rate

The rate of change in flow releases from Silver Lake and Caples Lake is limited according to the following schedule:

CHANGE IN WATER LEVEL OF STREAM (FEET/HOUR)	FLOW RANGE (CFS)
0.5	1-75
1.0	75-175
1.5	ABOVE 175

3. Reservoir Storage Volume

The minimum pool in Caples Lake shall be maintained at 2000 af. (93, PG&E, 2, Order Amending License and Approving Revised Exhibit S, 4-6.)

7.0 LAKE OPERATIONS EVALUATION

USGS records and other available records relating to PG&E's operations at Lake Aloha and Caples and Silver Lakes¹⁵ were analyzed to determine the historic lake levels during five (5) types of water years. These water-year types are defined as "critical", "dry", "below normal", "above normal", and "wet".

7.1 Water-Year Type Definition

The five water-year types are based on an evaluation of runoff produced by the South Fork American River's 193 square-mile drainage area above the river's confluence with the Silver Fork American River. This area includes the three lakes and is the drainage area from which water would be appropriated under the applications and petitions filed by the parties.

¹⁵ SWRCB, 3-5; 95, KW, 6B, Table 1; 95, EDCWA 101, Sierra Hydrotech Data, 10/24/95; EDCWA, 47, Historical Operation of PG&E Lakes, February 1993.

The development of the five water-year types includes an evaluation of historic precipitation data recorded at Caples Lake and recorded South Fork American River total flow data as measured at USGS Gage #11439501 near Kyburz. The purpose of this evaluation was to develop a "water-year hydrologic classification index" for measured flows at USGS Gage #11439501. The water-year types were developed using the following methodology:

1. Precipitation data were initially evaluated for the period (October to June) of record 1949-1991, based on a straight frequency distribution of 20 percent. Table 7-1 provides a tabular summary of recorded precipitation. Table 7-2 ranks annual precipitation data and groups the data into five water-year types.
2. Based on the ranked distribution of precipitation data (Table 7-2), corresponding South Fork American River flow data (USGS Gage #11439501) was evaluated and grouped by precipitation water-year types, to determine the average recorded runoff during the typical snowmelt/runoff period of April through July for each type of water-year. Table 7-3 provides a tabular summary of river flow data for the following water-year types: "critical", "dry", "below normal", "above normal", and "wet". The average April through July figure is then used for indexing purposes.
3. Based on the results of Step 2 (i.e., average April through July figure), Table 7-4 ("Water Year Hydrologic Classification Index") was developed to evaluate historic South Fork American River flows measured at USGS Gage #11439501 during the period 1923-1991:

TABLE 7-4**South Fork American River (USGS Gage #11439501)
Water-Year Hydrologic Classification Index**

CLASSIFICATION	INDEX
	APRIL THROUGH JULY (THOUSANDS OF ACRE-FEET - TAF)
CRITICAL	EQUAL TO OR LESS THAN 87.9
DRY	GREATER THAN 87.9 BUT LESS THAN OR EQUAL TO 130.7
BELOW NORMAL	GREATER THAN 130.7 BUT LESS THAN OR EQUAL TO 208.4
ABOVE NORMAL	GREATER THAN 208.4 BUT LESS THAN OR EQUAL TO 255.9
WET	GREATER THAN 255.9

4. Based on the water-year classification index defined in Table 7-4, the data summarized in Table 7-5 is evaluated and associated with corresponding water-year type classifications. The purpose of this evaluation is to develop water-year type groupings for the following lake level evaluation.

7.2 Lake Level Evaluations

Tables 7-6, 7-7, and 7-8 group average end-of-month (EOM) storage for levels for Silver Lake, Caples Lake and Lake Aloha based on the five water-year types provided by Table 7-5. Figures 7-1, 7-2, and 7-3 illustrate each lake's average historic EOM storage and gage heights for the five water-year types. Similarly, Tables 7-6A, 7-7A, and 7-8A group average monthly EOM storage for each type of water-year beginning in 1985, the effective date for minimum flow required at each lake by FERC License 184. Related Figures 7-2A, 7-3A, and 7-4A graphically illustrate these post-1985 EOM data. (EDCWA, 47, Table 1, 7.) As shown in the following sections, the operation of the lakes differ in several respects.

**TABLE 7-1
TWIN LAKES (CAPLES LAKE) RECORDED PRECIPITATION**

WATER YEAR	TOTAL MONTHLY PRECIPITATION (INCHES)												OCT to JUN WATER-YEAR TOTAL
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1949	1.07	2.52	3.11	4.7	7.35	10.37	1.85	4.06	0.06	0.5	1.15	0	40.09
1950	1.34	2.82	2.79	19.3	4.71	10.79	6.37	2.67	1.47	0.37	0.23	1.57	52.26
1951	4.92	14.79	11.92	8.27	4.22	2.42	4.3	2.18	0.22	0	0.25	0	53.24
1952	3.8	6.86	14.68	17.88	6.82	11	2.51	0.8	1.17	2.02	0.02	1.3	65.52
1953	0.1	3.18	12.44	9.32	1.39	5.48	6	5.75	1.38	0.39	1.29	0.13	45.02
1954	1.9	3.6	2.77	7.78	7.35	10.88	2.22	0.58	1.4	0.3	0	0	38.28
1955	0	4.88	8.45	6.8	5.47	1.88	6.61	2.21	0.94	0.09	0.4	0.8	37.24
1956	0.42	7.25	29.41	13.96	6.02	1.35	4.19	5.24	0.61	2.17	0.22	1.28	68.45
1957	7.17	0.4	3.95	6.54	8.69	7.83	2.97	6.47	0.09	0.58	0	0.25	44.11
1958	1.75	4.89	6.62	7.41	12.15	11.84	8.81	1.54	2.51	3.04	1.64	1.45	57.52
1959	0.43	2.84	1.4	8.25	10.75	1.95	1.15	2.18	0	1.11	0.3	3.56	28.93
1960	0.06	0.03	2.8	6.17	10.71	6.03	3.45	0.76	0	1.25	0	0.7	30.01
1961	2.45	6.46	2.18	1.42	3.5	8	3.4	2.91	0.71	0.7	1.77	2.82	33.03
1962	2.82	5.02	3	5.14	18.45	10.62	1.47	3.02	0.54	0.25	0.19	0.17	30.08
1963	10.06	1.89	2.99	10.26	6.86	10.32	13.61	5.6	2.71	0.25	0.38	2.26	64.3
1964	4.15	11.89	1.7	9.24	0.58	5.26	2.36	5.09	1.94	0.73	0.24	0.08	42.21
1965	1.34	0	30.01	11.96	2.3	3.24	6.98	1.27	1.21	0.57	6.36	1	58.31
1966	0.46	13.28	7.98	3.74	3.9	2.41	2.82	1.54	0.53	0.08	0.6	0.12	36.66
1967	0	9.15	10.45	16.59	0.7	16.6	12.2	2.53	1.98	0.14	2.15	1.45	70.2
1968	1.34	3.91	4.23	7.77	6.32	4.3	0.9	2.02	0.2	0.12	2.27	0.12	30.99
1969	2.03	8.54	11.39	30.24	14.34	3.35	5.21	1.42	0.86	0.56	0	0.63	77.38
1970	4.08	4.04	11.13	18.17	5.22	2.74	3.8	0.15	5.22	0.03	0	0.09	54.55
1971	1.48	13.7	17.41	4.9	1.56	6.77	2.05	3.85	1.95	0.48	0.56	0.93	53.67
1972	1.24	8.44	13.46	3.4	2.93	2.11	5.02	0.47	1.29	0.04	0.22	2.73	38.36
1973	3.65	5.7	7.78	11.16	8.52	4.45	1.7	1.86	0.28	0.6	1.86	0.29	45.1
1974	4.09	16.13	12.47	5.9	2.96	10.48	5.54	0.54	0.08	4	0	0	58.19
1975	1.74	2.74	5.28	4.8	11.43	10.95	6.15	1.42	0.95	0.02	1.92	0.71	45.46
1976	8.78	3.16	0.98	1.43	5.3	3.33	2.07	0.94	0.3	2.01	2.86	1.86	26.49
1977	1.71	1.28	0.22	3.14	3.72	3.75	0.47	3.92	1.7	0.46	0.01	1.02	19.95
1978	0.6	4.6	11.22	12.24	9.25	6.98	5.74	0.88	1	0.15	0.3	4.49	53.51
1979	0.16	3.57	5.33	10.4	10.49	6.07	3.55	2.93	0.21	1.36	0.13	0	42.51
1980	4.16	3.33	7.62	16.19	13.97	4.72	3.43	2.2	0.96	0.67	0.39	0.43	57.58
1981	1.27	0.75	3.38	9.53	4.12	5.41	2.65	2.5	0	0.17	0	1.15	29.61
1982	4.77	12.54	11.98	10.93	6.49	14.15	9.64	0.32	1.81	0.02	0.41	4.85	72.43
1983	7.21	9.82	8.27	11.26	12.79	12.14	5.71	1.6	0.92	0	2.54	3.54	59.72
1984	2.88	17.8	14.03	0.89	6.65	4.79	3.56	1.08	2.63	0.92	0	0.97	54.31
1985	4.2	10.78	1.96	1.19	3.12	8.14	0.85	0.07	0.44	0.53	0.33	3.54	30.75
1986	2.61	9.54	3.57	6.97	23.06	8.7	0.92	1.1	0.53	2.2	0.08	2.09	57
1987	0.11	0.52	1.27	5.2	5.03	3.67	0.94	3.14	0.88	0.11	0.03	0.3	20.76
1988	1.65	2.92	8.41	5.23	0.25	1.09	2.9	1.33	0.87	0.51	0.16	0.1	24.65
1989	0.05	9.01	5.63	2.92	3.74	13.67	2.79	1.96	1.59	0	0.76	2.81	41.36
1990	4.79	7.06	0.06	6.03	5.06	2.8	3.56	3.25	0.29	0.67	1.33	0.92	32.9
1991	1.07	1.4	2.19	0.23	2.25	16.82	1.72	2.95	0.84	0.68	0	0.72	29.47
1992	4.22	2.43	2.47	2.1	5.69	3.26	1.09	0.79					
AVERAGE	2.6	6.1	7.6	8.3	6.8	6.9	4.0	2.2	1.1	0.7	0.8	1.2	48.3

SOURCE: SWRCB EXHIBIT 4

**TABLE 7-2
TWIN LAKES
ANNUAL PRECIPITATION RANKING**

RANK	OCT to JUN WATER-YEAR	TOTAL ANNUAL (INCHES)	WATER YEAR TYPE
1	1977	19.95	CRITICAL
2	1987	20.76	CRITICAL
3	1988	24.65	CRITICAL
4	1976	26.49	CRITICAL
5	1959	28.93	CRITICAL
6	1991	29.47	CRITICAL
7	1981	29.61	CRITICAL
8	1960	30.01	CRITICAL
9	1985	30.75	CRITICAL
10	1968	30.99	DRY
11	1990	32.9	DRY
12	1961	33.03	DRY
13	1966	36.66	DRY
14	1955	37.24	DRY
15	1954	38.28	DRY
16	1972	38.36	DRY
17	1949	40.09	DRY
18	1989	41.36	DRY
19	1964	42.21	BELOW NORMAL
20	1979	42.51	BELOW NORMAL
21	1957	44.11	BELOW NORMAL
22	1953	45.02	BELOW NORMAL
23	1973	45.1	BELOW NORMAL
24	1975	45.46	BELOW NORMAL
25	1962	50.08	BELOW NORMAL
26	1950	52.26	BELOW NORMAL
27	1951	53.24	BELOW NORMAL
28	1978	53.51	ABOVE NORMAL
29	1971	53.67	ABOVE NORMAL
30	1984	54.31	ABOVE NORMAL
31	1970	54.55	ABOVE NORMAL
32	1986	57	ABOVE NORMAL
33	1958	57.52	ABOVE NORMAL
34	1980	57.58	ABOVE NORMAL
35	1974	58.19	ABOVE NORMAL
36	1965	58.31	ABOVE NORMAL
37	1963	64.3	WET
38	1952	65.52	WET
39	1956	68.45	WET
40	1983	69.72	WET
41	1967	70.2	WET
42	1982	72.43	WET
43	1969	77.38	WET

TABLE 7-3
SOUTH FORK AMERICAN RIVER (USGS #11439501) - (ACRE-FEET)
WATER-YEAR TYPE EVALUATION FOR HYDROLOGIC CLASSIFICATION INDEXING

WATER YEAR	CRITICAL WATER-YEAR											TOTAL	TOTAL APR-JUL	
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG			SEP
1977	5581.9	4878.5	3904.4	2702.6	2128.3	3294.9	10555.4	12711.8	11571.1	6076.6	6524.7	5371.5	75301.7	40914.9
1987	7445.4	7531.9	4653.2	4288.6	4867.1	3691.4	28737.7	26718.7	7288.4	5795.5	5001.2	2757.9	113777.1	68540.3
1988														
1976	9716.5	10965.2	10035.6	8562.5	8632.0	11134.3	15093.5	25214.9	7496.3	6457.2	7856.6	3730.3	124895.0	54261.9
1959	8470.4	9438.7	4195.3	8734.4	8770.6	17211.0	35307.4	33298.7	16542.9	7506.8	7267.4	7531.9	164275.4	92655.7
1991	4827.5	4779.9	3504.8	2744.3	2090.6	11318.5	21217.7	47692.3	33959.0	7893.5	7163.0	4377.8	151568.9	110762.4
1981	8212.6	10246.5	9434.1	5314.3	8133.0	9906.7	34885.6	44856.5	14214.4	7887.3	7826.0	3617.5	164534.6	101843.9
1960	6346.7	3480.8	2710.5	3894.6	7373.5	22753.6	38093.2	41278.1	19851.5	7175.3	7635.7	6320.2	166913.6	106398.1
1985	11944.5	13578.8	11711.3	7408.6	7567.6	11588.5	52058.2	50927.0	16091.5	9372.7	9262.2	6795.4	208306.3	128449.3
AVERAGE APRIL TO JULY													87978.3	
DRY WATER-YEAR														
1968	10839.7	8310.1	7826.0	6831.6	19736.6	20365.9	35942.9	39798.8	15604.4	7623.4	8022.4	7591.3	188493.0	98969.5
1990	8587.1	8114.0	7273.5	8323.1	7179.5	16597.2	37873.4	29002.1	17855.6	8065.3	7267.4	4197.8	160336.0	92796.5
1961	5290.3	3615.7	4181.8	3627.6	5560.6	7727.7	21805.7	35833.6	18384.3	6862.3	6905.3	6682.5	126477.5	82886.0
1966	9409.6	13044.2	10606.5	9759.4	8332.6	21096.3	54250.0	54124.9	12123.5	8010.1	8936.9	8149.7	217843.3	128508.5
1955	6586.1	4523.3	5737.8	6469.5	6497.6	10606.5	19958.4	65124.2	42696.7	10403.9	9507.8	9319.9	197431.5	108183.2
1954	8120.6	10014.8	8697.5	5810.8	7345.8	23784.8	52943.2	64449.0	19435.7	9237.7	9385.0	9100.1	228325.0	146065.6
1972	9360.5	9028.8	10360.9	8132.9	8061.0	37920.6	31921.6	65983.5	34083.7	9207.0	3034.6	8054.6	240149.6	141195.8
1949	4885.8	3847.3	5916.4	6500.1	5452.0	5966.1	50644.4	77522.9	31963.1	7715.5	7408.6	7050.8	214873.2	167846.0
1989	2514.7	4730.0	4857.0	5947.7	8293.8	47907.1	69438.6	60250.6	40962.2	9673.5	9084.2	6967.6	270627.2	180324.9
AVERAGE APRIL TO JULY													130752.9	
BELOW NORMAL WATER YEAR														
1964	2631.0	15545.0	9262.2	9974.3	9264.0	11146.6	29248.6	52001.1	34321.3	9728.7	9716.5	9527.8	205367.1	125299.7
1979	2469.3	3405.1	10054.0	15265.2	9275.1	18567.5	39970.3	110299.9	44419.3	11668.3	10360.9	8013.1	288768.0	206357.8
1957	10907.2	9100.1	9931.3	6923.7	15634.1	26178.6	36287.5	71139.4	68963.4	13380.8	9673.5	9557.5	287677.0	189771.1
1953	9489.3	6142.0	9943.6	14749.6	10544.7	15222.2	48395.2	57973.4	86842.8	35115.5	9728.7	9521.8	313666.8	228324.9
1973	6420.3	9765.4	14657.5	14878.5	9763.0	12988.0	41354.3	121839.3	50056.4	10182.9	8464.3	9177.3	309547.3	223432.9
1975	512.9	9795.1	7212.2	5354.2	6115.0	12638.1	15592.5	105143.9	112800.6	24944.8	11177.3	9628.7	327915.4	258481.9
1962	5191.5	5090.6	5126.5	5257.2	8914.8	10176.8	63142.2	68500.1	57754.6	15007.4	10342.5	9444.6	263948.3	204404.3
1950	6966.6	5308.6	4043.7	11257.1	13000.7	20906.0	61776.0	102872.9	80902.8	19236.5	9250.0	9123.8	344644.7	264788.2
1951	3525.7	77279.4	104223.2	33335.3	29871.1	27001.1	54107.5	73042.2	37968.5	10514.4	9826.9	9147.6	474843.0	175632.5
AVERAGE APRIL TO JULY													208499.3	
ABOVE NORMAL WATER-YEAR														
1978	1277.3	2332.6	7304.2	11152.7	9801.8	30241.9	42892.7	101829.4	96762.6	24196.0	10256.6	10056.4	348104.4	265680.8
1971	3318.2	15503.4	12331.2	14197.2	14364.5	21262.0	42964.0	84827.2	85417.2	22790.4	10213.6	7377.5	334566.5	235998.8
1984	14013.1	53739.2	61564.1	39228.0	21782.4	35391.7	45132.1	106617.1	62132.4	15701.0	10538.9	10240.6	476080.5	229582.6
1970	8120.6	7615.1	22391.4	62239.3	27032.5	28596.9	31476.1	72919.4	56637.9	14105.1	10195.2	9254.5	350584.1	175138.5
1986	6009.1	7668.5	8789.6	21255.9	78281.3	82494.7	68844.6	95752.8	68607.0	16689.2	12883.7	6635.0	473911.4	249893.6
1958	8709.8	6142.0	6150.3	5351.7	14924.4	14946.0	42304.7	164437.0	99613.8	29394.9	11300.1	10139.6	413414.3	335750.4
1980	8126.7	11238.5	10747.6	64940.0	36036.0	25828.7	55764.7	98208.0	77457.6	37018.3	10496.0	6361.7	442223.9	268448.6
1974	6518.6	30757.3	19021.7	35305.8	15667.3	34483.3	50151.4	121532.4	76685.4	22857.9	10704.7	10003.0	433688.7	271227.1
1965	4777.3	7128.0	89123.8	35140.1	24033.2	25092.1	60112.8	100110.8	80902.8	30782.1	17033.0	11167.2	485403.6	271908.5
AVERAGE APRIL TO JULY													255958.8	
WET WATER-YEAR														
1963	9642.8	10014.8	11244.8	19807.3	54525.2	13853.5	31143.4	115517.2	72111.6	17211.0	10109.3	9444.6	374625.5	235983.1
1952	6653.6	7294.3	11036.1	9182.4	13582.8	18941.9	74844.0	176774.4	130739.4	51375.1	11999.8	9664.4	522088.2	433732.9
1956	7764.6	4943.9	61871.0	44930.2	21056.1	29548.3	55693.4	129634.6	109414.8	29775.4	10152.3	10329.7	515114.2	324518.2
1983	23416.0	25821.2	21740.8	22317.8	27204.4	51718.8	39435.7	144365.8	211523.4	94341.1	21937.2	25203.4	708025.4	489665.9
1967	4229.1	9331.7	15658.0	11870.9	15528.7	34170.2	20498.9	114289.6	152895.6	66638.7	11631.5	10632.6	467395.6	354342.8
1982	7660.2	28434.8	47793.3	21593.5	62425.4	43285.2	91060.2	140498.8	82922.4	32838.3	10790.6	13145.2	581947.9	347319.7
1969	3318.6	10412.8	10066.3	32826.0	15573.1	21041.1	70329.6	178308.9	109652.4	32979.5	9698.0	9486.2	505692.5	391270.4
AVERAGE APRIL TO JULY													368119.0	

SOURCE: SWRCB EXHIBIT 3 AND 5

**TABLE 7-6
SILVER LAKE
AVERAGE E.O.M. STORAGE**

HISTORIC AVERAGE E.O.M. STORAGE (1920-1991) (AF)												
	OCT	NOV	DEC	IAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1923-1991	1567	1156	1115	1184	1348	2208	4334	6792	7987	7053	3693	3068
CRITICAL-YEAR E.O.M. STORAGE												
1924	4750	4712	4171	2115	600	1250	4071	5392	3112	2780	920	125
1951	640	277	125	180	336	1345	6436	8366	7831	6408	3410	1304
1954	1270	839	630	1075	2090	5620	8600	8390	8115	6810	5870	2210
1961	888	383	485	485	485	1000	3182	8390	8090	6718	4068	1453
1976	3488	3612	2346	753	396	1690	3992	7790	6718	5375	3010	4854
1977	2210	540	234	182	156	260	3300	5755	6600	5500	4730	1816
1987	3182	880	260	260	280	710	6350	8340	7885	6380	3600	2074
AVERAGE	2348.3	1637.9	1181.6	721.4	706.1	1696.4	3418.7	7831.9	7190.1	5767.3	4229.7	1919.7
DRY-YEAR E.O.M. STORAGE (AF)												
	OCT	NOV	DEC	IAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1928	662	381	387	451	609	3550	5750	5952	4942	3700	360	282
1929	25	0	0	280	532	812	3244	5947	6236	1246	2885	413
1933	250	250	250	50	0	0	2350	6400	8600	7500	5860	3100
1939	1863	955	243	234	333	2150	7505	8600	8090	6853	5870	4690
1947	1740	990	842	694	925	2750	7585	8390	8240	6925	4680	1300
1939	1150	630	600	300	0	1000	3985	8390	7990	6856	5755	2620
1940	820	743	714	714	714	1000	6348	8390	7890	6626	5575	2600
1944	1690	1784	1600	970	484	1180	5025	8390	8340	7132	5990	2934
1966	2176	1240	940	1140	917	2380	6672	8513	7740	6475	5397	3800
1968	1430	975	675	475	500	1500	4371	8290	8165	6380	5565	1816
1981	2108	340	0	0	1300	2100	6300	8240	7780	6396	5268	3800
1985	1912	1180	650	300	800	1270	3440	8440	8190	7132	6074	4030
1990	2874	1600	900	650	800	2244	7600	8665	8140	6676	5550	4200
1991	1931	635	297	57	0	1549	4082	7810	3681	7528	6147	4813
AVERAGE	1475.2	837.4	378.6	483.4	363.4	1691.8	3618.2	7929.9	7803.1	6241.2	5068.3	2883.7
BELOW-NORMAL-YEAR E.O.M. STORAGE (AF)												
	OCT	NOV	DEC	IAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1928	183	783	323	393	424	4674	3538	6213	3825	3775	1370	150
1930	437	442	1490	1857	2723	4392	7699	8146	8331	4656	3040	772
1937	182	26	0	0	255	1105	3010	5845	8600	7625	6395	3383
1944	2910	890	1300	2133	1670	3320	4367	8230	8390	7840	6475	5067
1949	627	1195	1715	2330	2700	3220	4800	8390	8590	7150	5995	2470
1951	975	3840	3000	2333	1713	4600	7417	8390	8505	7178	6074	2253
1954	1838	900	0	900	1230	3000	6600	8390	8390	7086	3870	2940
1955	1000	835	839	839	970	1270	3500	7156	3490	7224	5960	2320
1957	1290	840	400	100	0	4000	8300	8390	7317	5268	1998	
1962	344	78	103	133	400	670	3805	5790	8390	7600	6212	2100
1970	1784	194	0	0	0	1750	2630	8240	8390	7552	6238	4960
1972	1150	430	260	230	250	2462	5177	8240	8440	7028	3800	2250
1979	4650	2008	550	1400	600	2200	4500	7900	8390	7458	6160	2950
1989	2623	1848	1300	636	946	4201	7364	8140	8463	7270	5352	4370
AVERAGE	1428.2	1022.1	821.7	786.4	1207.4	2660.3	5029.1	7712.3	8356.1	6897.1	5372.1	2584.8
ABOVE-NORMAL-YEAR E.O.M. STORAGE (AF)												
	OCT	NOV	DEC	IAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1925	2000	900	100	0	0	0	2830	5645	6336	5902	4802	4675
1925	750	1035	942	500	1000	2630	4370	5432	3392	5482	4985	3812
1932	430	100	0	0	880	1210	3360	4810	8600	5190	3420	1330
1935	428	610	660	705	783	853	4220	7408	8600	7725	6360	2430
1940	3878	925	315	760	1039	2210	3060	5390	8680	7390	6200	1725
1941	210	120	860	205	960	1420	2310	4355	8190	8140	6835	2383
1943	1300	2273	2714	2912	3093	3437	4473	6731	8390	8140	6841	4917
1943	1080	2000	2125	2233	2780	2143	4530	5317	8390	7940	6672	3312
1946	3073	3966	3940	3883	3840	3970	4580	7383	8390	7505	6375	4925
1948	913	214	411	1000	1825	2290	4610	7170	8390	7825	6488	2660
1953	1730	762	0	495	945	1595	4000	7100	8490	8090	6787	4454
1963	2980	1300	1690	1720	3370	3764	4000	7364	8390	7740	6330	2660
1971	3870	2450	1480	2040	2000	4030	4030	4300	8290	8090	6672	5992
1973	975	512	1944	2320	2913	3250	6310	8090	8390	7364	6074	2260
1984	2450	3800	3840	2220	2660	4068	4068	7740	8390	7790	6718	4454
1986	2300	815	1350	2980	4270	4290	4693	6028	8540	7990	6800	5230
AVERAGE	1785.6	1362.6	1402.6	1312.3	2036.4	2374.0	4216.5	6298.8	8205.0	7436.4	6161.2	3476.3
WET-YEAR E.O.M. STORAGE (AF)												
	OCT	NOV	DEC	IAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1937	412	300	2067	2060	1970	2168	4683	5422	3304	5831	2868	360
1936	243	115	130	360	683	1800	3205	5140	8600	7815	6605	2800
1938	290	500	1105	2495	1910	1420	4083	5483	8363	8600	7259	3293
1942	307	456	1646	1923	1440	1350	3934	4220	8040	8183	6883	3475
1950	630	570	383	920	1223	1360	3480	7503	8390	7399	6383	3169
1952	1033	1193	1292	1390	1480	1700	3640	4730	8340	8390	7495	5139
1956	830	512	210	62	0	0	1270	3770	8390	8460	7086	3800
1958	714	512	200	100	200	0	3530	4530	8440	8340	7086	3734
1965	1720	839	3840	3164	2600	3425	4220	4332	8335	8240	7990	5220
1967	2802	2312	1912	1660	1660	3423	1963	4375	7305	8340	7270	2600
1969	340	2575	2838	1838	1000	2000	3200	4980	8390	8340	5830	3498
1974	830	3034	2693	3840	3840	4087	4123	7364	8390	8040	6700	2312
1975	975	260	430	683	786	1360	2138	6365	8340	8340	6764	3275
1978	1430	130	373	1660	1880	3273	4200	6810	8340	8440	7000	3311
1980	1250	838	540	3750	3992	3840	4493	6304	8240	8490	7040	5030
1982	1510	4020	4000	3880	3950	4580	4320	7018	8240	8390	7487	7080
1983	8390	3992	3810	3800	3900	3923	3990	5053	7438	8390	8390	4371
AVERAGE	1431.1	1308.2	1663.2	1975.8	1912.8	2339.6	3689.4	5329.6	8148.6	8191.2	6893.6	3805.2

SOURCE: (1) SWRCB EXHIBIT 3 AND 3
(2) KIRKWOOD ASSOCIATES, KW6B, TABLE 1.
(3) EDCWA/EID EXHIBIT #101, SIERRA HYDROTECH DATA SUBMITTED 10/24/95.
(4) EDCWA EXHIBIT 47.

TABLE 7-7
CAPLES LAKE
AVERAGE E.O.M. STORAGE

	HISTORIC AVERAGE E.O.M. STORAGE (1920-1991)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1923-1991	12643	10704	8907	7643	7548	7643	9779	16607	19881	19119	16969	14728
CRITICAL-YEAR E.O.M. STORAGE												
1924						916	2778	7864	7923	7769	5393	2764
1931	13775	7615	2938	1135	700	266	3702	9182	10681	10543	9000	7923
1934	17017	16306	14370	12839	13193	15148	19431	21381	21182	20114	16168	13732
1961	3741	7098	5332	3801	3963	4300	6728	12836	16992	15752	14344	13432
1976	18628	18770	17103	14982	11580	10807	12132	17316	18221	17420	12914	11732
1977	11434	9496	8749	5873	3912	6067	7607	9912	12894	12246	6395	5618
1987	10822	7604	4613	2190	2364	2427	3707	11303	12325	11806	10989	10300
AVERAGE	13402.8	11181.3	8521.2	6903.3	6319.3	3804.4	8300.7	12827.7	14308.4	13664.6	10771.9	9648.7
DRY-YEAR E.O.M. STORAGE												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1926	17000	13360	14100	11823	12200	13000	17916	21060	20320	19331	13388	8992
1929	3303	3331	975	230	333	474	1718	8846	13400	12973	9136	6672
1933	16952	12661	8298	5821	2330	2013	2833	6384	16639	18194	17416	16730
1939	19330	18880	13720	12390	10090	10090	13310	20970	21270	18390	14560	14030
1947	10112	9420	8342	7263	7223	7948	10774	20233	21581	20358	15150	11988
1959	13148	7992	3593	4895	4612	4732	8342	13333	17796	17970	13298	11400
1960	8167	3258	3640	1880	2031	2427	5631	12137	17161	16422	13041	11206
1964	13970	16985	16814	14489	11988	10726	13244	20234	21581	20781	16418	11791
1966	18794	14982	11400	8209	5820	5858	10336	19310	21380	20333	13308	10441
1968	16249	10966	3473	3637	3922	4634	7663	14945	19229	18034	13333	13803
1981	17390	10774	4837	2676	2398	3339	6366	13905	17423	16430	9996	8333
1983	10670	9311	3221	4788	4087	4415	8311	16196	20314	19332	11988	9938
1990	11960	10183	8193	5800	3300	3900	9880	13921	18932	16874	12915	10600
1991	10203	7326	4969	3378	3368	3874	4361	3923	16421	17521	15613	13813
AVERAGE	13812.1	10987.8	8100.3	6323.7	5407.3	3676.4	8798.9	13130.2	18689.2	18071.9	13984.4	11442.9
BELOW-NORMAL-YEAR E.O.M. STORAGE												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1928	12330	13080	11000	10043	10477	12183	15888	21130	21162	21102	18781	13333
1930	3750	5071	3468	4120	4333	3247	8300	14833	21240	21192	19730	15083
1937	11668	7098	4472	1239	1394	1614	2834	14430	21363	20874	17477	16083
1944	20296	18088	13973	10918	9056	7783	9011	17738	21381	21303	18338	13807
1949	13974	13332	13092	8475	5936	3379	8387	17796	21581	21417	19318	16676
1951	14335	21438	20600	19872	20054	20114	21028	21380	21580	21132	16932	14400
1954	14167	8564	4030	2395	2454	3866	7948	17564	21438	19692	14237	11013
1955	7689	5332	4300	2564	2292	2160	2993	10300	19451	19732	13422	11791
1957	13690	12386	8319	6206	6606	7283	9146	16874	21320	20722	16874	14131
1962	11400	8080	6327	4267	4967	4030	7905	14825	21381	21089	15203	13247
1970	16834	12511	7311	9282	9940	10062	11233	20107	21168	20264	13797	9182
1972	12254	9491	3730	1425	4087	2238	4409	13062	19648	20004	13941	13893
1979	13630	16903	11793	9360	8913	3958	11240	20301	21543	21192	16450	14304
1989	11100	10630	9600	8167	6130	8080	13300	21131	21381	21273	17161	13092
AVERAGE	13384.1	11674.6	8861.0	7080.9	6649.1	7100.8	9378.9	17272.9	21173.6	20792.1	16850.1	13602.8
ABOVE-NORMAL-YEAR E.O.M. STORAGE												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1923								2889	2330	1479	1250	1406
1925	1468	968	733	666	1396	2262	3840	16944	19500	19762	17328	17300
1932	5948	4130	3044	1905	918	1166	2878	11988	21330	21380	21120	20661
1935	13478	13041	11061	9237	9463	10066	12483	19731	21320	21120	18499	13422
1940	14343	12333	8342	8407	9280	10680	8790	19990	21380	20630	17390	13505
1941	12310	10770	8630	8500	7430	6330	3740	18440	21270	21380	20720	19480
1943	18416	18914	19030	18988	14498	12087	13869	21181	21330	21381	21330	21028
1945	11732	12386	12560	11791	12611	12899	15094	20034	21381	21381	19272	16391
1946	15918	17333	19374	13869	11642	11448	15863	20966	21381	21380	17274	11889
1948	10336	10139	8741	8433	6728	6207	7848	14823	21381	21381	19993	16989
1953	16000	13349	7361	3898	3602	4607	8254	12788	21458	21381	19212	17100
1963	14127	10019	7349	3591	10441	11449	12938	18370	21380	21437	18086	17133
1971	8772	7608	6260	6587	7020	7672	9333	16322	21248	21362	19277	17362
1973	11112	7480	6302	7069	7399	7603	9388	20769	21318	21198	18204	14831
1984	15150	17275	15453	13049	14986	13231	13974	21089	21316	21384	20233	14906
1986	9178	7307	7367	8019	10121	12897	14290	21320	21381	21381	15884	12882
AVERAGE	11967.1	10899.6	9243.3	8673.4	8397.1	8876.9	10593.7	17442.9	20172.8	20073.6	17843.4	15681.9
WET-YEAR E.O.M. STORAGE												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1927	6038	4732	4839	3714	5104	7149	9300	16972	20670	21170	20386	18781
1936	13329	8189	4931	4877	3630	6111	10421	17796	21333	21365	18736	16843
1938	14878	11816	16252	16932	17218	9741	11158	17105	21427	21381	20447	19362
1942	13238	13304	13723	16449	11988	9146	10702	17834	21320	21331	21034	20144
1950	13144	10112	7775	3936	3332	3782	9237	18736	21381	21381	18264	16740
1952	11693	10206	9036	7361	6728	6150	7432	18796	21438	21381	20800	13993
1956	7689	3148	8632	10489	10774	11497	14663	19932	20902	21381	20600	13371
1958	9142	5810	3144	3348	3830	6367	6447	12339	21381	21381	21333	19812
1963	9190	7307	13449	13148	13748	16418	14022	18380	21319	21380	21334	20720
1967	8943	6443	6228	6209	6978	8232	8845	14361	19926	21319	20304	18611
1969	11999	11233	7163	6995	6276	5367	6367	20440	21192	21337	20374	18611
1974	12768	16063	17299	18322	18263	18733	18433	20598	21392	21331	21022	17993
1975	13642	6740	3389	2819	2907	2936	11439	20800	21333	20470	18422	17993
1978	5467	3333	3087	3637	3938	6700	8473	17304	20362	21437	20143	20005
1980	12284	7839	3934	4833	3823	6390	11610	18537	21437	21380	19973	19402
1982	7160	8831	12216	13339	13331	16340	14126	17172	21063	21344	21438	21406
1983	21013	19511	19392	18205	15389	13707	13768	16916	18032	21347	21341	15386
AVERAGE	11405.1	9403.6	9478.3	9707.8	9549.8	9348.2	10608.2	17366.2	20978.9	21307.1	20490.6	18941.8

SOURCE: (1) SWRCB EXHIBIT 3 AND 3

(2) KIRKWOOD ASSOCIATES, KW6B, TABLE 1.

(3) EDCWA/EID EXHIBIT #101, SIERRA HYDROTECH DATA SUBMITTED 10/24/93.

(4) EDCWA EXHIBIT 47.

**TABLE 7-8
ALOHA LAKE
AVERAGE E.O.M. STORAGE**

HISTORIC AVERAGE E.O.M. STORAGE (1920-1991)												
(AF)												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1934-1991							1225.3	3030.4	4407.7	3446.0	1108.4	341.8
CRITICAL-YEAR E.O.M. STORAGE												
1934							1058.4	3140.3	4538.0	4538.0	837.7	97.0
1941							1058.4	3767.1	4959.2	3951.1	2356.4	1058.4
1976							981.1	2268.6	3034.2	429.7	97.0	97.0
1977							1058.4	3767.1	4959.2	3767.1	1195.9	97.0
1987							1195.9	2182.8	3889.1	1407.1	97.0	97.0
AVERAGE							1070.4	3025.2	4276.0	2818.6	916.8	289.3
DRY-YEAR E.O.M. STORAGE												
(AF)												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1939							97.0	3359.7	4959.2	3034.2	557.9	141.3
1947							1712.6	2730.1	4675.7	5105.0	429.7	429.7
1959							837.7	2182.8	5105.0	2058.3	97.0	97.0
1960							981.1	3140.3	5105.0	2930.5	1344.5	630.4
1964							981.1	1712.6	5105.0	5105.0	3951.1	1112.1
1966							907.5	4959.2	4959.2	4816.1	4205.4	2829.1
1968							981.1	1712.6	3951.1	5105.0	2058.3	97.0
1981							224.6	907.5	3647.6	5179.0	2182.8	429.7
1985							837.7	2182.8	5105.0	2058.3	97.0	97.0
1990							837.7	2356.4	4816.1	3647.6	97.0	97.0
1991							1899.5	3889.1	3359.7	750.2	97.0	97.0
AVERAGE							936.1	2648.5	4617.2	3617.2	1374.3	550.7
BELOW NORMAL-YEAR E.O.M. STORAGE												
(AF)												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1937							630.4	1504.6	3248.8	5105.0	1977.9	1112.1
1944							837.7	1407.1	5105.0	4675.7	1195.9	224.6
1949							981.1	3416.0	4470.2	4675.7	1977.9	429.7
1951							1058.4	3034.2	3951.1	5105.0	2538.8	97.0
1954							1712.6	3647.6	4959.2	2930.5	557.9	224.6
1955							1058.4	3359.7	5105.0	5179.0	2568.6	429.7
1957							907.5	4959.2	4959.2	4959.2	1899.5	224.6
1962							3248.8	4675.7	4538.0	4205.4	1641.3	97.0
1970							97.0	97.0	3359.7	5105.0	1058.4	97.0
1972							2538.8	2633.3	4538.0	2730.1	224.6	97.0
1979							4356.5	4959.2	4959.2	4959.2	1977.9	1058.4
1989							1825.2	3767.1	4816.1	1572.0	97.0	97.0
AVERAGE							1602.5	3121.7	4500.8	4266.8	1451.3	549.1
ABOVE NORMAL-YEAR E.O.M. STORAGE												
(AF)												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1935							837.7	1407.1	3767.1	4538.0	1407.1	557.9
1940							981.1	3248.8	4675.7	5105.0	1112.1	97.0
1941							97.0	1058.4	2058.3	4538.0	1823.2	224.6
1943							630.4	3647.6	5179.0	3889.1	429.7	97.0
1945							1195.9	3140.3	5179.0	3951.1	1112.1	429.7
1946							1572.0	4959.2	4959.2	1112.1	97.0	97.0
1948							1283.7	3140.3	4816.1	3034.2	429.7	224.6
1953							981.1	4538.0	5105.0	3140.3	1344.5	429.7
1963							1058.4	1823.2	4816.1	3248.8	688.6	97.0
1971							1407.1	3416.0	5179.0	1823.2	97.0	97.0
1973							3034.2	3034.2	4205.4	5105.0	429.7	97.0
1984							97.0	1823.2	3140.3	4675.7	907.5	97.0
1986							1283.7	2058.3	3767.1	981.1	97.0	97.0
AVERAGE							1112.2	2868.8	4372.9	3472.3	767.3	203.3
WET-YEAR E.O.M. STORAGE												
(AF)												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1936							97.0	3416.0	4675.7	3889.1	688.6	97.0
1938							1899.5	4205.4	4816.1	3034.2	1058.4	750.2
1942							1344.5	4205.4	5179.0	5179.0	1195.9	224.6
1950							630.4	4205.4	4959.2	3359.7	688.6	97.0
1952							907.5	1641.3	4077.0	4816.1	2730.1	688.6
1956							1058.4	3889.1	4538.0	3889.1	1504.6	97.0
1958							1058.4	3140.3	4675.7	1112.1	97.0	97.0
1965							981.1	4077.0	5105.0	1977.9	97.0	97.0
1967							1058.4	2446.5	3889.1	1977.9	97.0	97.0
1969							3034.2	3767.1	5329.0	3951.1	2633.3	429.7
1974							97.0	1823.2	3140.3	4675.7	907.5	97.0
1975							1112.1	2829.1	2633.3	97.0	97.0	688.6
1978							708.7	2446.5	4140.9	2829.1	750.2	97.0
1980							1572.0	3647.6	4336.5	97.0	97.0	97.0
1982							1058.4	2182.8	2058.3	1899.5	3767.1	1641.3
1983							2930.5	3647.6	3889.1	4675.7	688.6	97.0
AVERAGE							1221.8	3223.2	4215.2	2965.3	1066.6	337.1

SOURCE: (1) SWRCB EXHIBIT 3 AND 5
 (2) KIRKWOOD ASSOCIATES, KW6B, TABLE 1.
 (3) EDCWA/EID EXHIBIT #101, SIERRA HYDROTECH DATA SUBMITTED 10/24/95.
 (4) EDCWA EXHIBIT 47.

FIGURE 7-1

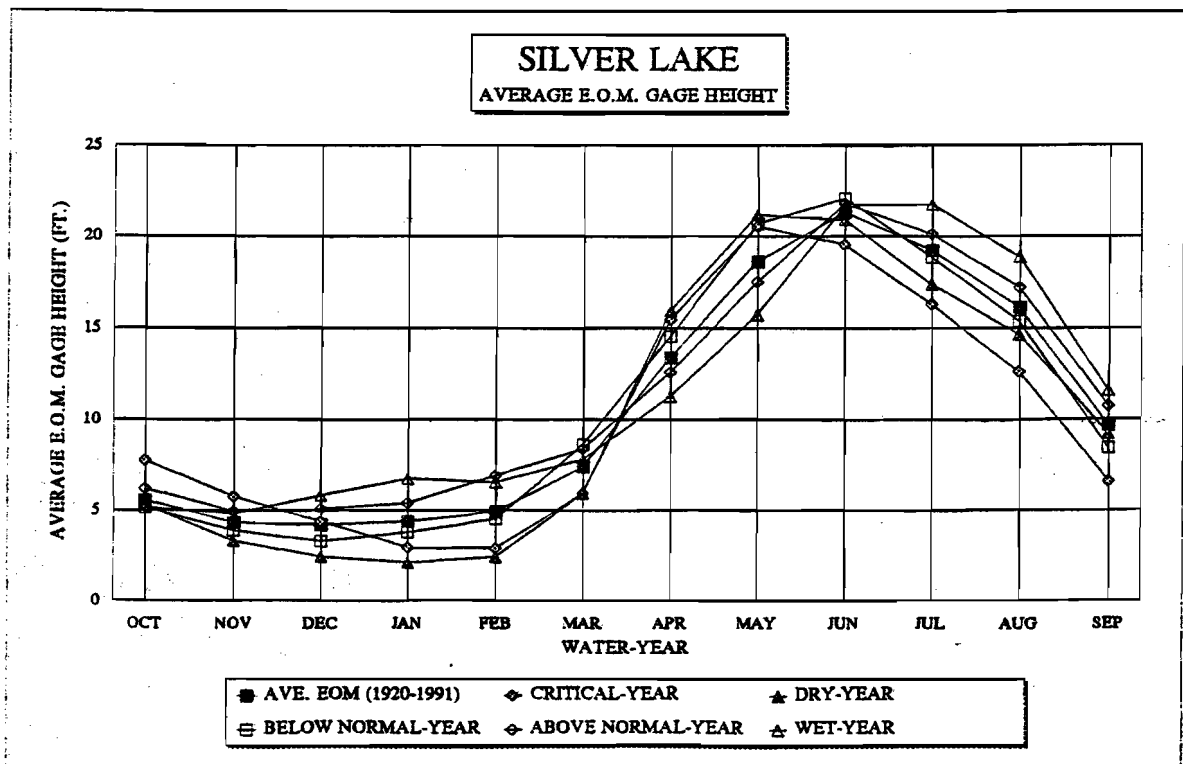
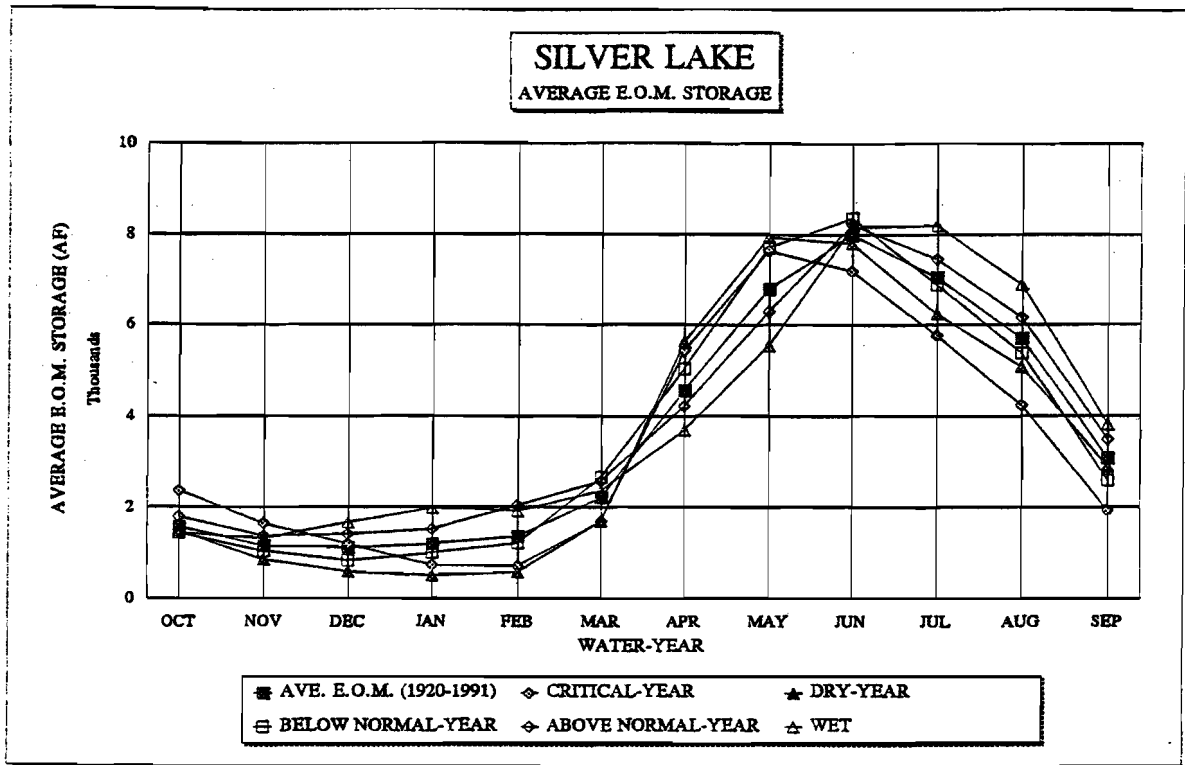


FIGURE 7-1A

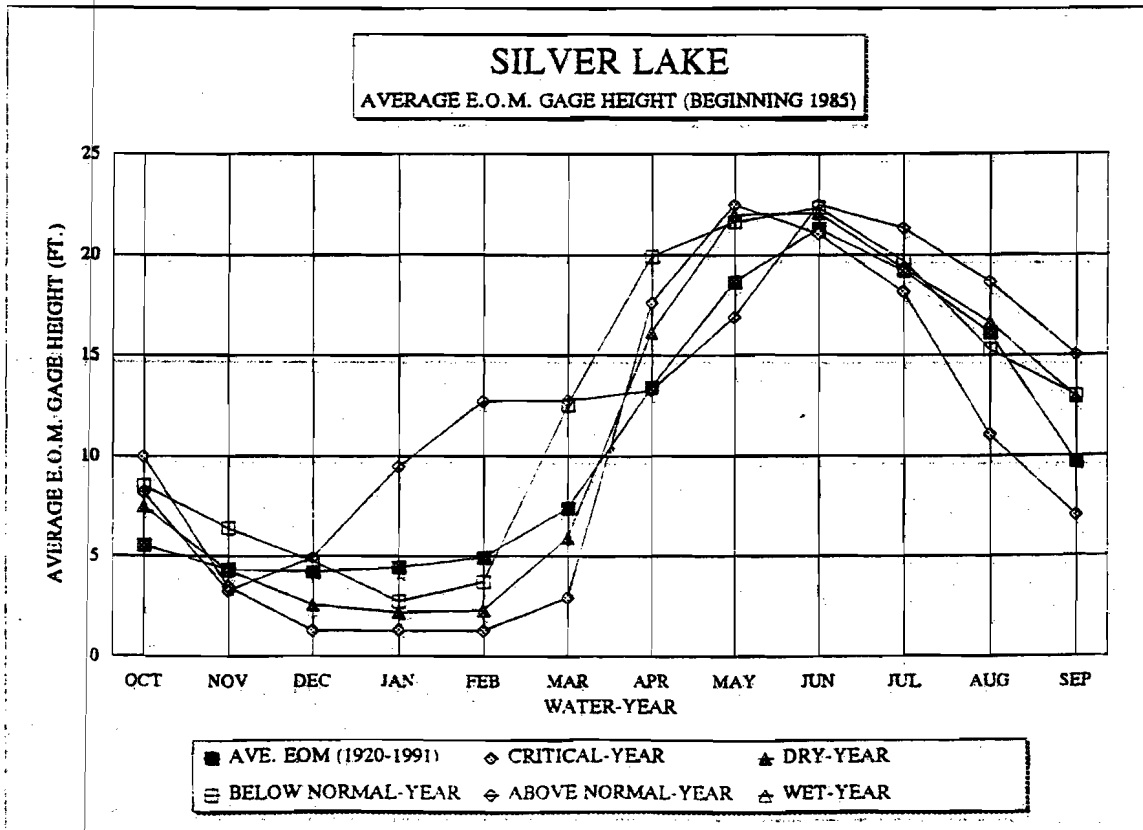
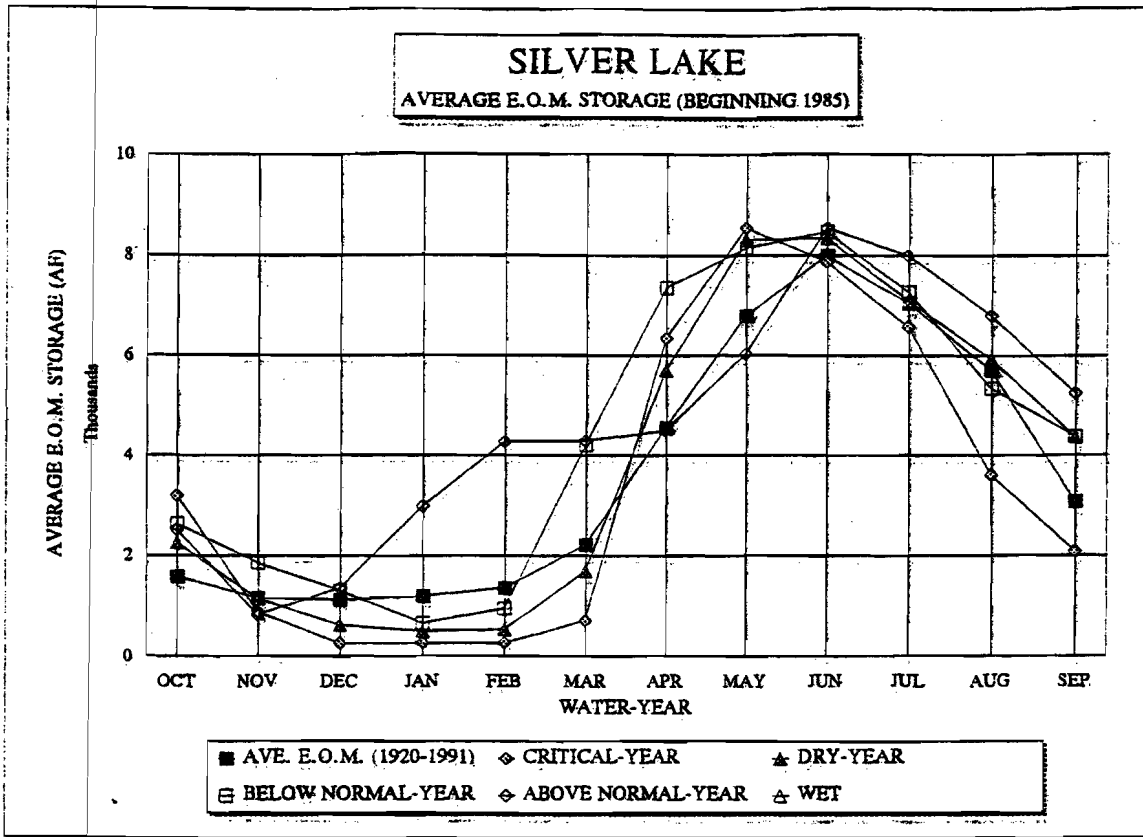


FIGURE 7-2

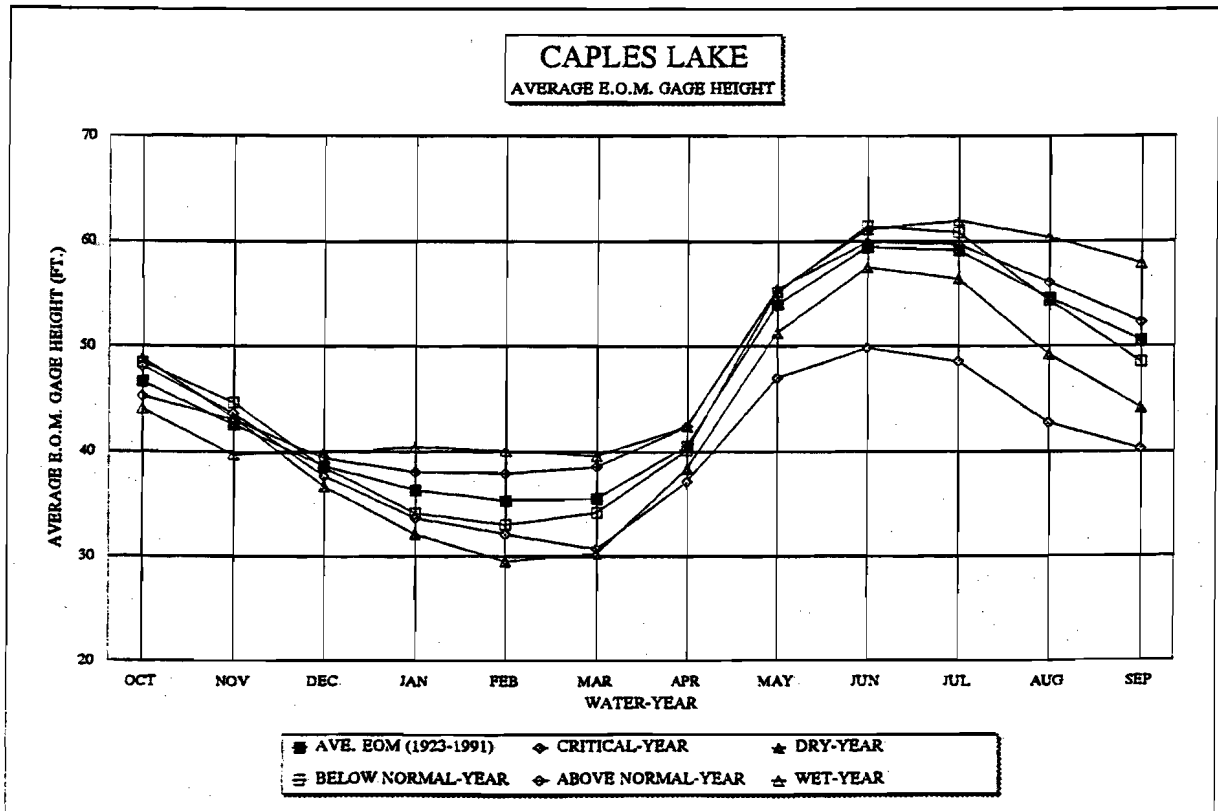
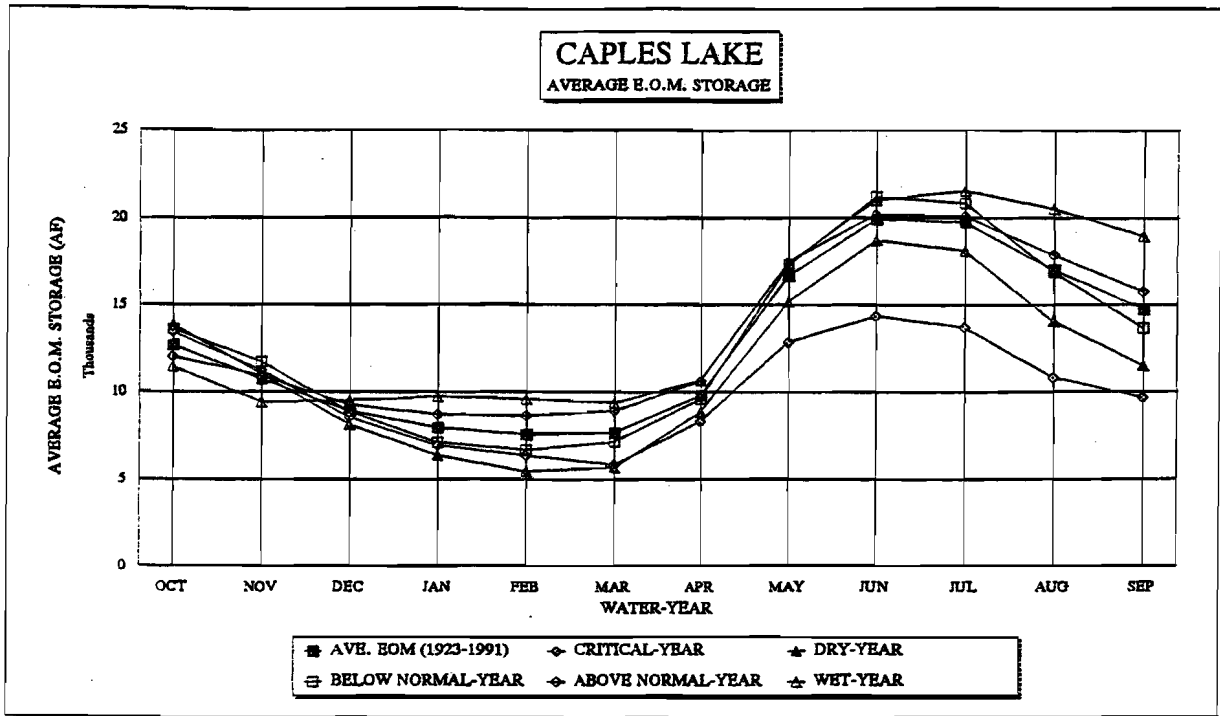
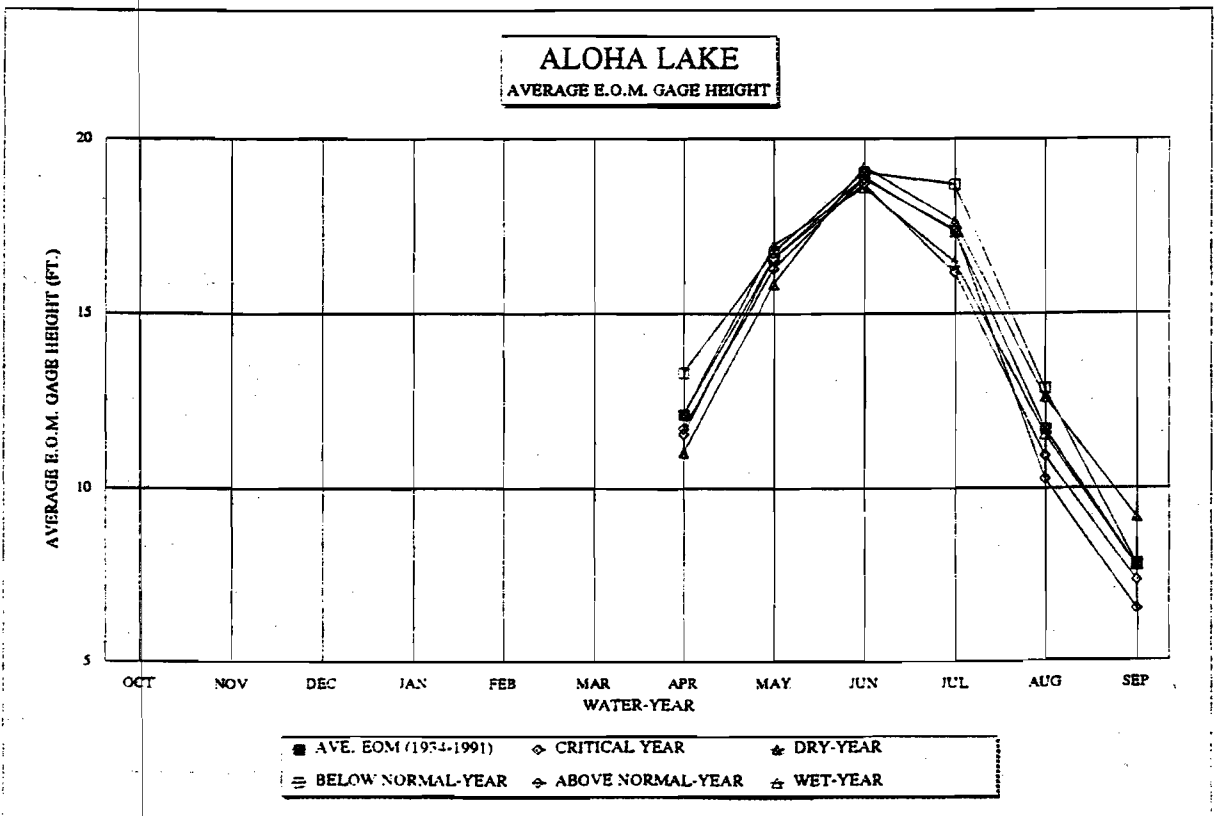
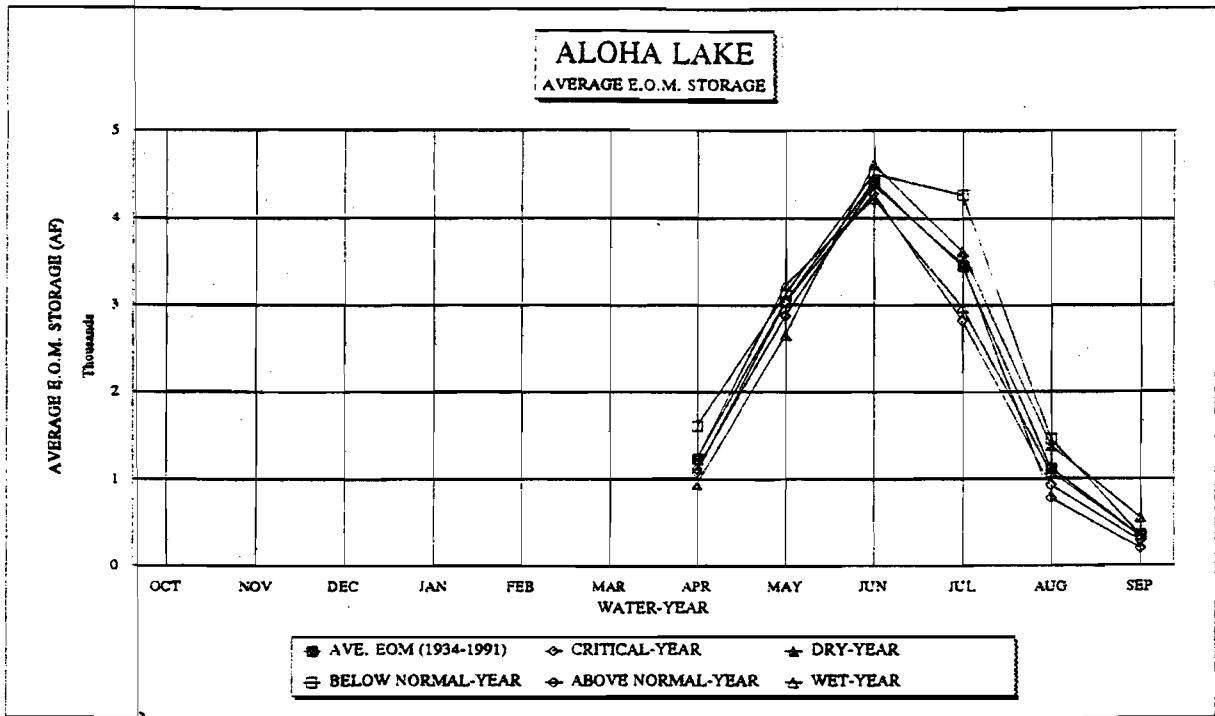


FIGURE 7-3



**TABLE 7-6A
SILVER LAKE
AVERAGE E.O.M. STORAGE - BEGINNING 1985**

	HISTORIC AVERAGE E.O.M. STORAGE (1920-1991)											
	OCT	NOV	DEC	JAN	FEB	(AF) MAR	APR	MAY	JUN	JUL	AUG	SEP
1923-1991	1367	1156	1115	1184	1348	2208	4554	6792	7987	7053	5693	3068
	CRITICAL-YEAR E.O.M. STORAGE											
1924												
1931												
1934												
1961												
1976												
1977												
1987	3182	880	260	260	260	710	6350	8540	7865	6580	3600	2074
AVERAGE	3182.0	880.0	260.0	260.0	260.0	710.0	6350.0	8540.0	7865.0	6580.0	3600.0	2074.0
	DRY-YEAR E.O.M. STORAGE (AF)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1926												
1929												
1933												
1939												
1947												
1959												
1960												
1964												
1966												
1968												
1981												
1985	1912	1180	650	800	800	1270	5440	8440	8190	7132	6074	4080
1990	2874	1600	900	650	800	2244	7600	8665	8140	6626	5330	4200
1991	1931	655	297	37	0	1549	4052	7810	8681	7528	6147	4813
AVERAGE	2239.0	1138.3	613.7	495.7	533.3	1687.7	5697.3	8305.0	8337.0	7095.3	5917.0	4347.7
	BELOW-NORMAL-YEAR E.O.M. STORAGE (AF)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1928												
1930												
1937												
1944												
1949												
1951												
1954												
1955												
1957												
1962												
1970												
1972												
1979												
1989	2625	1848	1300	656	946	4201	7364	8140	8465	7270	5332	4370
AVERAGE	2625.0	1848.0	1300.0	656.0	946.0	4201.0	7364.0	8140.0	8465.0	7270.0	5332.0	4370.0
	ABOVE-NORMAL-YEAR E.O.M. STORAGE (AF)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1923												
1925												
1932												
1935												
1940												
1941												
1943												
1945												
1946												
1948												
1953												
1963												
1971												
1973												
1984												
1986	2500	815	1350	2980	4270	4290	4493	6028	8540	7990	6800	5230
AVERAGE	2500.0	815.0	1350.0	2980.0	4270.0	4290.0	4493.0	6028.0	8540.0	7990.0	6800.0	5230.0
	WET-YEAR E.O.M. STORAGE (AF)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1927												
1936												
1938												
1942												
1950												
1952												
1956												
1958												
1965												
1967												
1969												
1974												
1975												
1978												
1980												
1982												
1983												
AVERAGE	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

SOURCE: (1) SWRCB EXHIBIT 3 AND 3
 (2) KIRKWOOD ASSOCIATES, KW6B, TABLE 1.
 (3) EDCWA/EID EXHIBIT #101, SIERRA HYDROTECH DATA SUBMITTED 10/24/95.
 (4) EDCWA EXHIBIT 47.

**TABLE 7-7A
CAPLES LAKE
AVERAGE E.O.M. STORAGE (BEGINNING 1985)**

	HISTORIC AVERAGE E.O.M. STORAGE (1920-1991)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1923-1991	12643	10704	8907	7943	7548	7643	9779	16607	19881	19719	16969	14726
	CRITICAL YEAR E.O.M. STORAGE											
1924												
1931												
1934												
1961												
1976												
1987	10822	7604	4615	2790	2564	2427	3707	11303	12326	11806	10989	10800
AVERAGE	10822.0	7604.0	4615.0	2790.0	2564.0	2427.0	3707.0	11303.0	12326.0	11806.0	10989.0	10800.0
	DRY-YEAR E.O.M. STORAGE (AF)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1926												
1929												
1933												
1939												
1947												
1959												
1960												
1964												
1966												
1968												
1981												
1985	10870	9311	3221	4788	4067	4415	8211	16196	20114	19152	11988	9958
1990	11900	10183	8000	6800	5300	5900	9880	13921	16932	16874	12915	10800
1991	10220	7326	4669	3378	3368	3874	4561	9925	16421	17321	15613	13815
AVERAGE	10991.7	9006.7	6063.3	5053.3	4245.0	4729.7	7530.7	13347.3	17822.3	17782.3	13305.3	11524.3
	BELOW NORMAL-YEAR E.O.M. STORAGE (AF)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1928												
1930												
1937												
1944												
1949												
1951												
1954												
1955												
1957												
1962												
1970												
1972												
1979	11100	10650	9600	8167	6150	3080	13300	21151	21581	21273	17161	13092
AVERAGE	11100.0	10650.0	9600.0	8167.0	6150.0	3080.0	13300.0	21151.0	21581.0	21273.0	17161.0	13092.0
	ABOVE NORMAL-YEAR E.O.M. STORAGE (AF)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1923												
1925												
1932												
1935												
1940												
1941												
1945												
1946												
1948												
1953												
1963												
1971												
1973												
1984												
1986	9178	7507	7367	8019	10121	12897	14290	21520	21581	21581	15884	12882
AVERAGE	9178.0	7507.0	7367.0	8019.0	10121.0	12897.0	14290.0	21520.0	21581.0	21581.0	15884.0	12882.0
	WET-YEAR E.O.M. STORAGE (AF)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1927												
1926												
1938												
1942												
1950												
1952												
1957												
1956												
1958												
1965												
1967												
1969												
1974												
1975												
1978												
1980												
1982												
1983												
AVERAGE	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR

SOURCE: (1) SWRC EXHIBIT 1 AND 3
 (2) KIRKWOOD ASSOCIATES, KWGB, TABLE 1.
 (3) EDCWA/EID EXHIBIT #101, SIERRA HYDROTECH DATA SUBMITTED 10/24/95.
 (4) EDCWA EXHIBIT 47.

**TABLE 7-8A
ALOHA LAKE
AVERAGE E.O.M. STORAGE (BEGINNING 1985)**

	HISTORIC AVERAGE E.O.M. STORAGE (1920-1991)											
	OCT	NOV	DEC	JAN	FEB	(AF) MAR	APR	MAY	JUN	JUL	AUG	SEP
1934-1991							1225.3	3030.4	4407.7	3446.0	1108.4	341.8
	CRITICAL-YEAR E.O.M. STORAGE											
1934												
1961												
1976												
1977												
1987							1195.9	2182.8	3889.1	1407.1	97.0	97.0
AVERAGE							1195.9	2182.8	3889.1	1407.1	97.0	97.0
	DRY-YEAR E.O.M. STORAGE											
	OCT	NOV	DEC	JAN	FEB	(AF) MAR	APR	MAY	JUN	JUL	AUG	SEP
1939												
1947												
1959												
1960												
1964												
1966												
1968												
1981												
1985							837.7	2182.8	5105.0	2058.3	97.0	97.0
1990							837.7	2356.4	4816.1	3647.6	97.0	97.0
1991							1899.5	3889.1	3359.7	750.2	97.0	97.0
AVERAGE							1191.6	2809.5	4426.9	2152.0	97.0	97.0
	BELOW NORMAL-YEAR E.O.M. STORAGE											
	OCT	NOV	DEC	JAN	FEB	(AF) MAR	APR	MAY	JUN	JUL	AUG	SEP
1937												
1944												
1949												
1951												
1954												
1955												
1957												
1962												
1970												
1972												
1979												
1989							1823.2	3767.1	4816.1	1572.0	97.0	97.0
AVERAGE							1823.2	3767.1	4816.1	1572.0	97.0	97.0
	ABOVE NORMAL-YEAR E.O.M. STORAGE											
	OCT	NOV	DEC	JAN	FEB	(AF) MAR	APR	MAY	JUN	JUL	AUG	SEP
1933												
1940												
1941												
1943												
1945												
1946												
1948												
1953												
1963												
1971												
1973												
1984												
1986							1283.7	2058.3	3767.1	981.1	97.0	97.0
AVERAGE							1283.7	2058.3	3767.1	981.1	97.0	97.0
	WET-YEAR E.O.M. STORAGE											
	OCT	NOV	DEC	JAN	FEB	(AF) MAR	APR	MAY	JUN	JUL	AUG	SEP
1936												
1938												
1942												
1950												
1952												
1956												
1958												
1965												
1967												
1969												
1974												
1975												
1978												
1980												
1982												
1983												
AVERAGE							ERR	ERR	ERR	ERR	ERR	ERR

SOURCE: (1) SWRCB EXHIBIT 3 AND 5

(2) KIRKWOOD ASSOCIATES, KW6B, TABLE 1.

(3) EDCWA/EID EXHIBIT #101, SIERRA HYDROTECH DATA SUBMITTED 10/24/95.

(4) EDCWA EXHIBIT 47.

FIGURE 7-1A

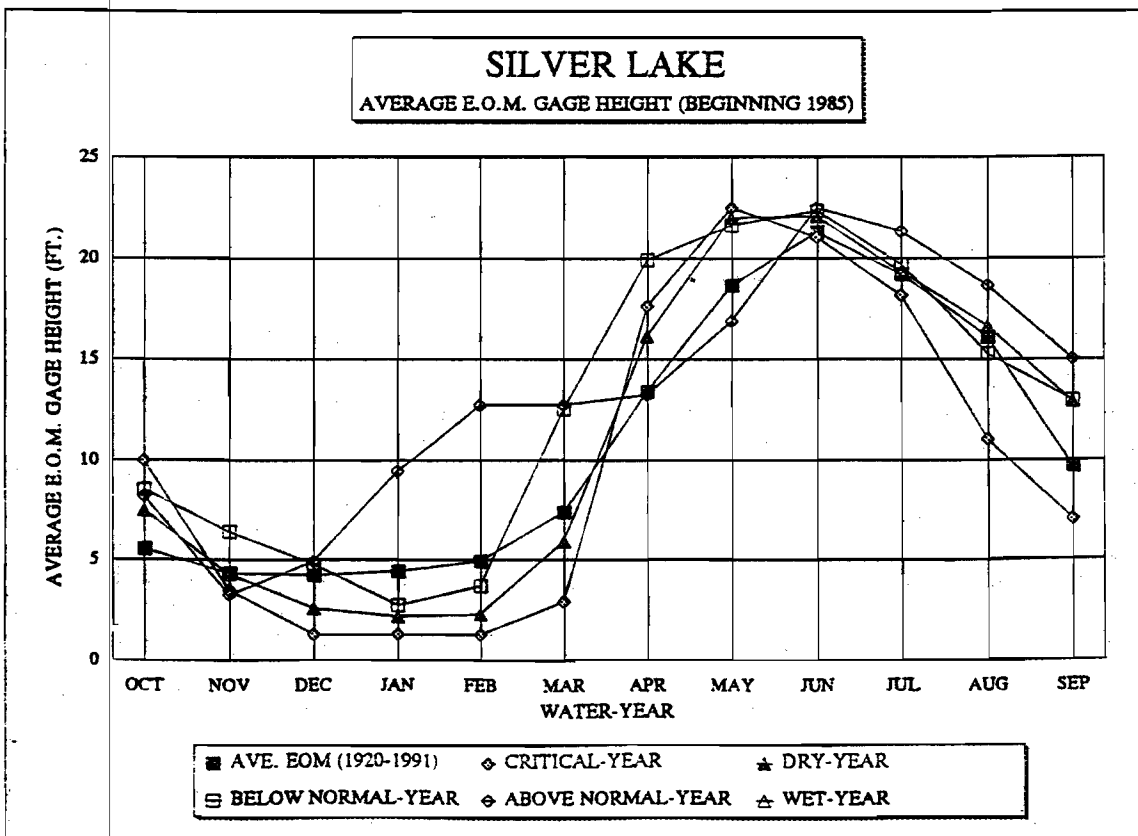
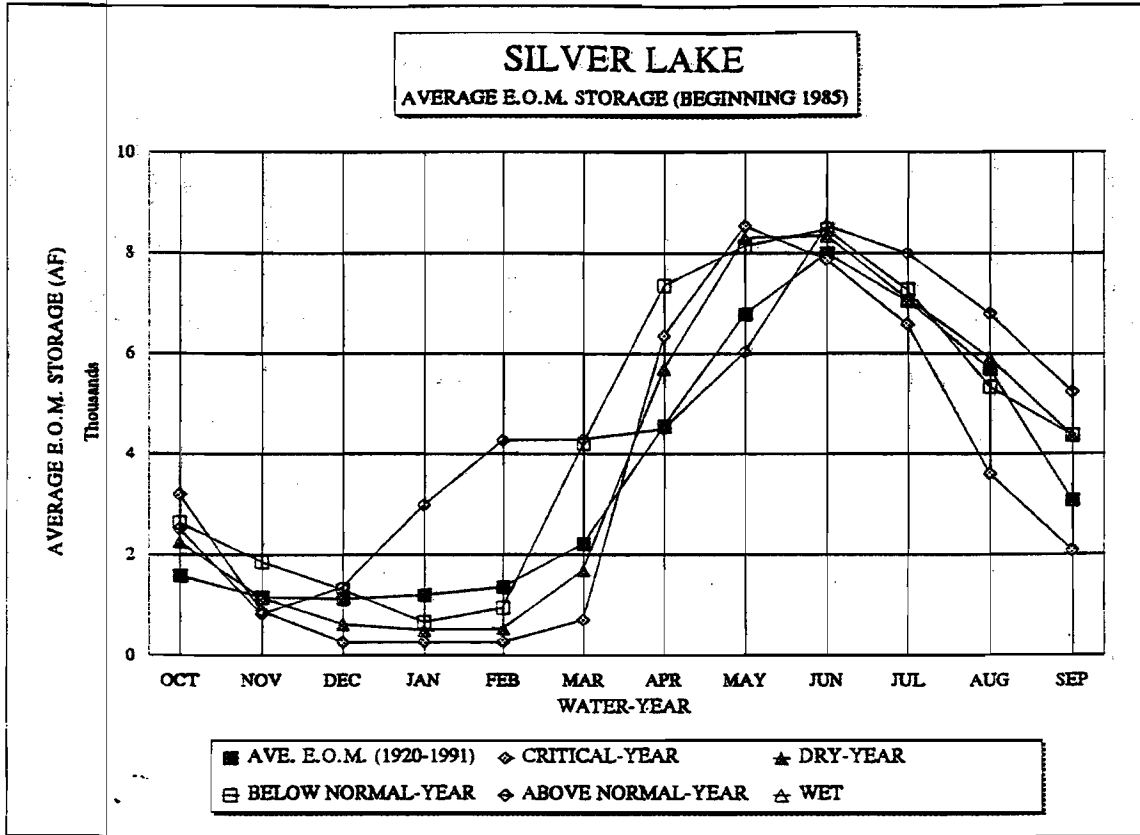


FIGURE 7-2A

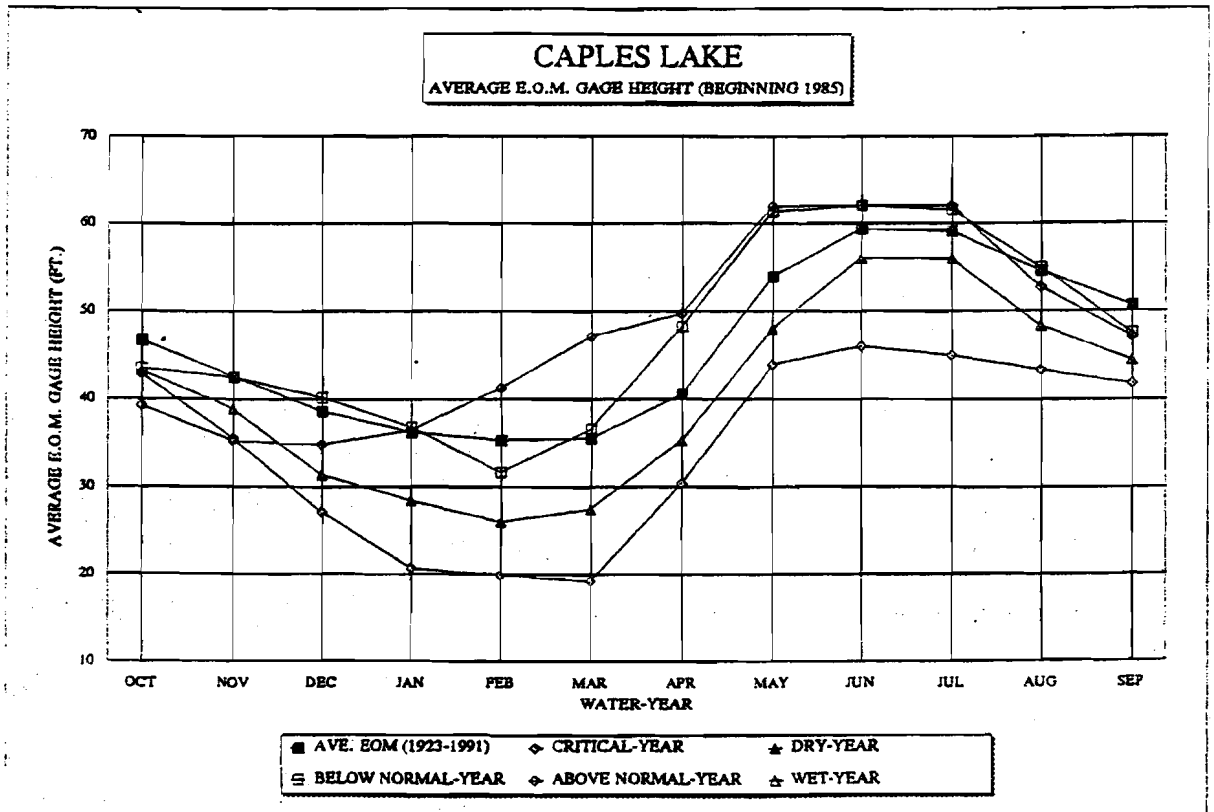
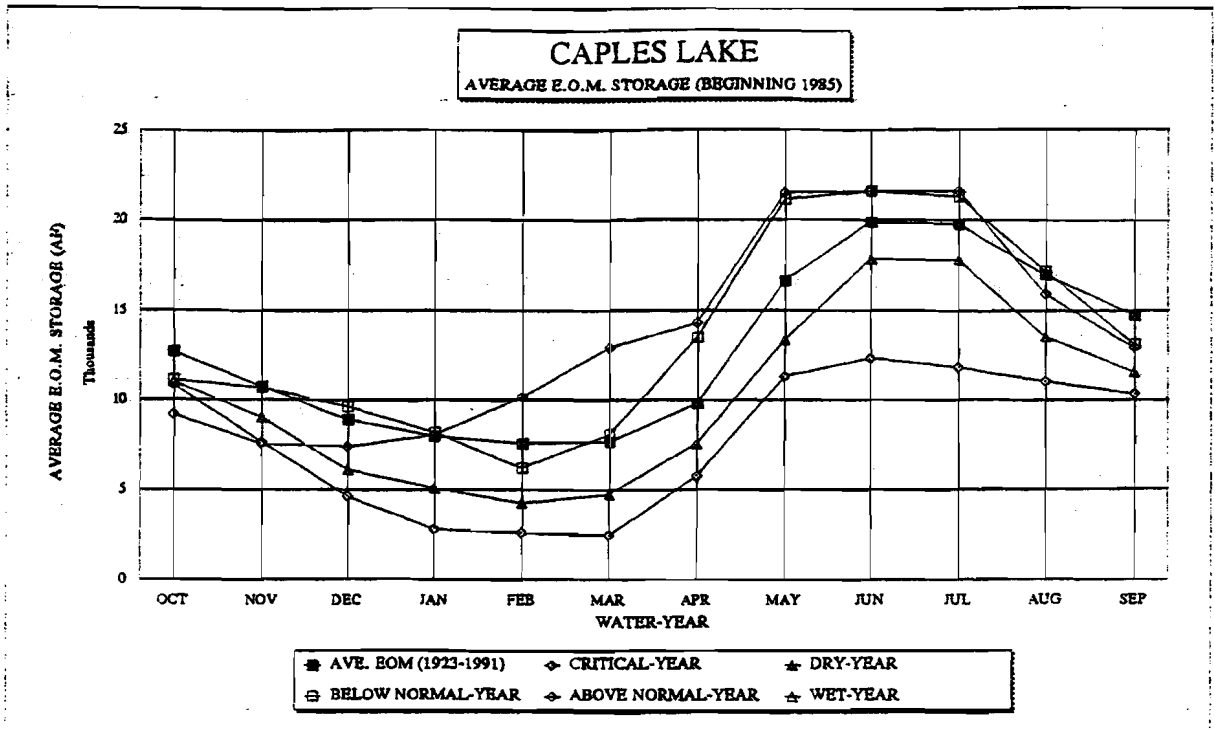


FIGURE 7-3A

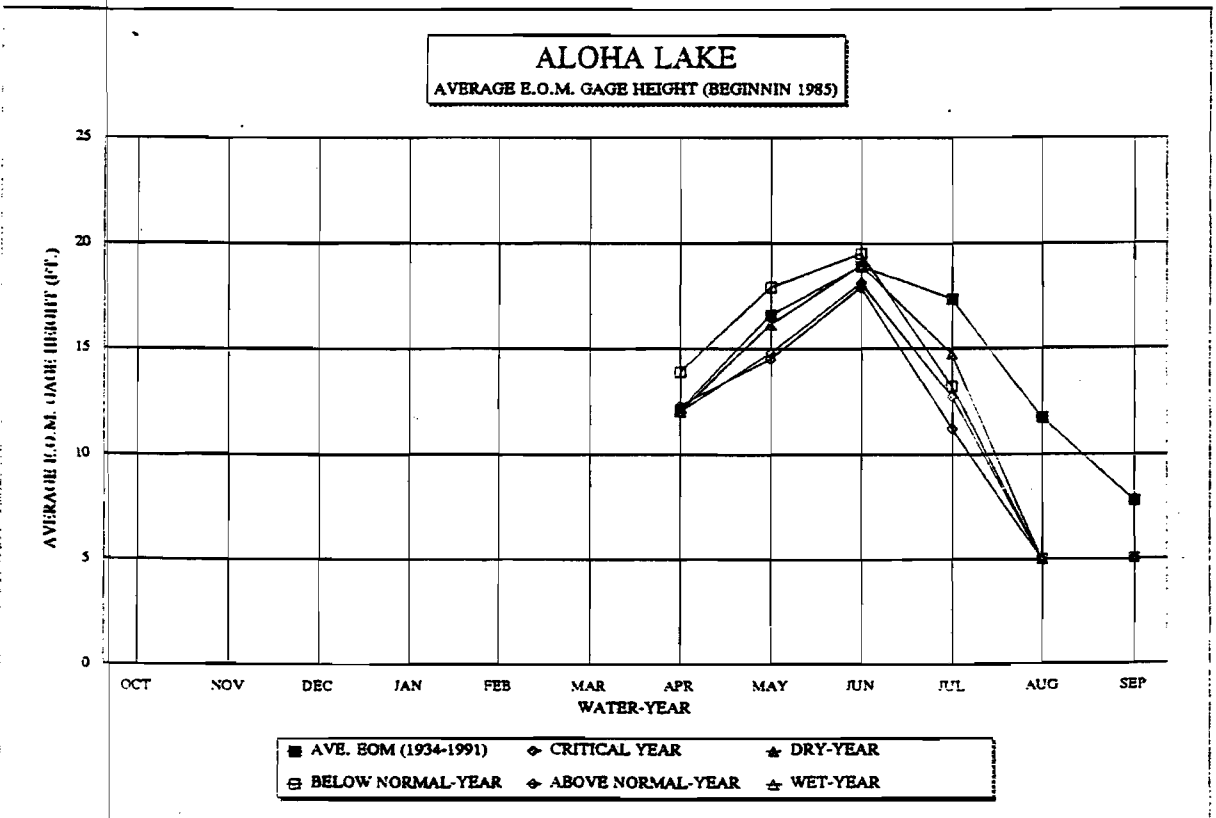
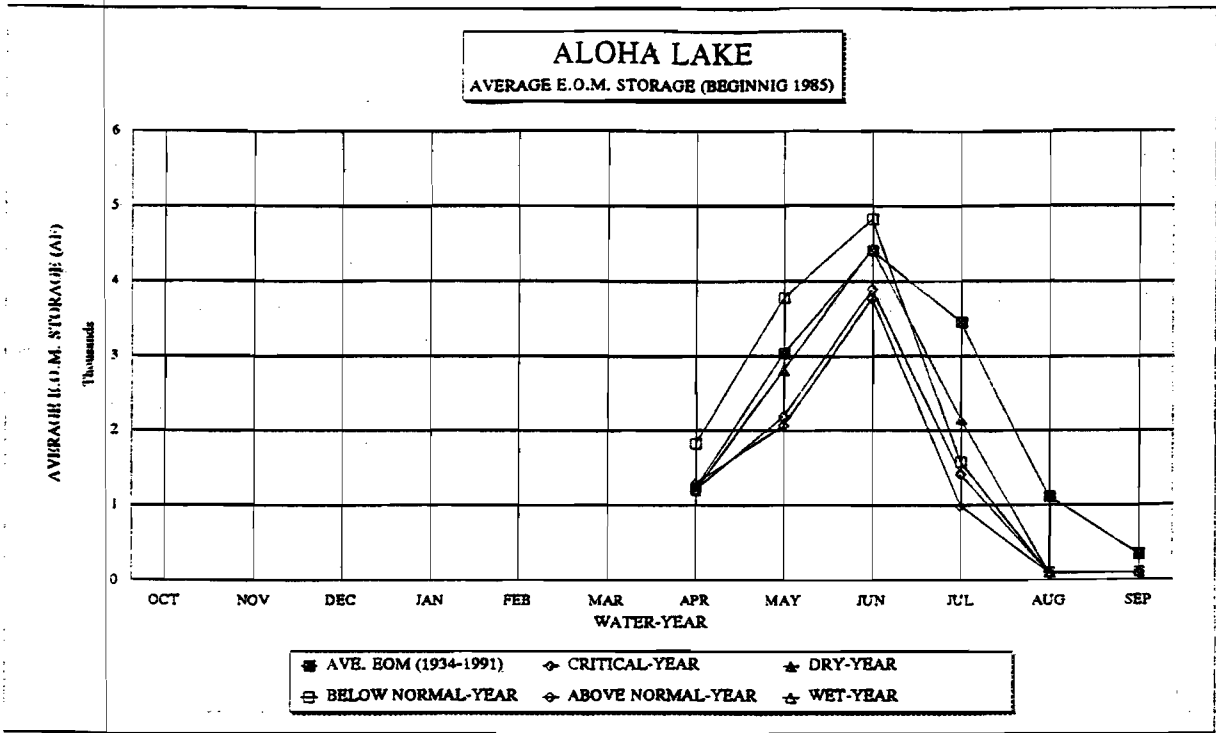


TABLE 7-9

**Silver Lake--Historic Operations Summary
1923-1991**

WATER-YEAR TYPE	MAXIMUM AVE. EOM STORAGE (GAGE HEIGHT)	MINIMUM AVE. EOM STORAGE (GAGE HEIGHT)	AVERAGE EOM STORAGE (GAGE HEIGHT)
CRITICAL	7,631.9 af (20.5 ft)	706.1 af (2.9 ft)	3,370.7 af (10.0 ft)
DRY	7,929.9 af (21.1 ft)	485.4 af (2.1 ft)	3,431.5 af (10.0 ft)
BELOW NORMAL	8,356.1 af (22.1 ft)	821.7 af (3.2 ft)	3,673.1 af (10.7 ft)
ABOVE NORMAL	8,203.8 af (21.7 ft)	1,362.6 af (4.9 ft)	3,873.8 af (11.4 ft)
WET	8,191.2 af (21.7 ft)	1,308.2 af (4.7 ft)	3,909.0 af (11.4 ft)

TABLE 7-9.1

**Silver Lake--Historic Operations Summary
Post-1985**

WATER-YEAR TYPE	MAXIMUM AVE. EOM STORAGE (GAGE HEIGHT)	MINIMUM AVE. EOM STORAGE (GAGE HEIGHT)	AVERAGE EOM STORAGE (GAGE HEIGHT)
CRITICAL	8,540.0 af (22.5 ft)	260.0 af (1.3 ft)	3,380.0 af (9.8 ft)
DRY	8,337.0 af (22.0 ft)	495.7 af (2.1 ft)	3,867.4 af (11.3 ft)
BELOW NORMAL	8,465.0 af (22.3 ft)	656.0 af (2.7 ft)	4,376.4 af (12.5 ft)
ABOVE NORMAL	8,540.0 af (22.5 ft)	1,350.0 af (4.9 ft)	4,607.1 af (13.2 ft)
WET			

7.2.2 Caples Lake

The data generally indicate that: (1) during "critical" water-years, water was collected to storage during the period of April

to July (post-1985--April to July) and released from storage during the period of July through March (post-1985--July through March); (2) during "dry" water-years, water was collected to storage during the period March to July (post-1985--March to July) and released from storage during the period of July through February (post-1985--July through February); (3) during "below normal" water-years, water was collected to storage during the period of March to July (post-1985--March to July), and released from storage during the period of July through February (post-1985--July through February); (4) during "above normal" water-years, water was collected to storage during the period March to July (post-1985--March to August) and released from storage during the period July through February (post-1985--August through February); and (5) during "wet" water-years, water was collected to storage during the period December to August and released from storage during the period August through November. Tables 7-10 and 7-10.1 summarize the average maximum, average minimum, and average EOM storage capacity and lake level for each type of water-year identified in Tables 7-7 and 7-7A.

TABLE 7-10

**Caples Lake--Historic Operations Summary
1923-1991**

WATER-YEAR TYPE	MAXIMUM AVE. EOM STORAGE (GAGE HEIGHT)	MINIMUM AVE. EOM STORAGE (GAGE HEIGHT)	AVERAGE EOM STORAGE (GAGE HEIGHT)
CRITICAL	14,308.4 af (49.7 ft)	5,804.4 af (30.6 ft)	10,137.8 af (40.9 ft)
DRY	18,689.2 af (57.4 ft)	5,407.3 af (29.5 ft)	11,368.7 af (43.1 ft)
BELOW NORMAL	21,175.6 af (61.4 ft)	6,649.1 af (32.9 ft)	12,851.9 af (46.0 ft)
ABOVE NORMAL	20,172.8 af (59.8 ft)	8,597.1 af (37.8 ft)	13,338.8 af (47.3 ft)
WET	21,507.1 af (61.9 ft)	9,403.6 af (39.7 ft)	14,065.4 af (48.5 ft)

TABLE 7-10.1

**Caples Lake--Historic Operations Summary
Post-1985**

WATER-YEAR TYPE	MAXIMUM AVE. EOM STORAGE (GAGE HEIGHT)	MINIMUM AVE. EOM STORAGE (GAGE HEIGHT)	AVERAGE EOM STORAGE (GAGE HEIGHT)
CRITICAL	12,326.0 af (45.9 ft)	2,427.0 af (19.19ft)	7,771.08 af (34.5 ft)
DRY	17,822.3 af (55.9 ft)	4,245.0 af (25.9 ft)	10,135.3 af (40.2 ft)
BELOW NORMAL	21,581.0 af (62.0 ft)	6,150.0 af (31.6 ft)	13,458.7 af (47.2 ft)
ABOVE NORMAL	21,581.0 af (62.0 ft)	7,367.0 af (34.8 ft)	13,568.9 af (47.4 ft)
WET			

7.2.3 Lake Aloha

The data generally indicate for the periods of 1934-1991 and post-1985, in critical" water-years, water was collected to storage during the period of April to June and released from storage during the period of July through September; (2) during "dry" water-years, water was collected to storage during the period April to July, and released from storage during the period of July through September; (3) during "below normal" water-years, water was collected to storage during the period of April to July and released from storage during the period of July through September; (4) during "above normal" water-years, water was collected to storage during the period April to July, and released from storage during the period July through September; and (5) during "wet" water-years, water was collected to storage during the period April to July and released from storage during the period July through September. Tables 7-11 and 7-11.1 summarize the average maximum, average minimum, and average EOM storage capacity and lake level for each type of water-year identified in Tables 7-8 and 7-8A.

TABLE 7-11**Lake Aloha--Historic Operations Summary
1934-1991**

WATER-YEAR TYPE	MAXIMUM AVE. EOM STORAGE (GAGE HEIGHT)	MINIMUM AVE. EOM STORAGE (GAGE HEIGHT)	AVERAGE EOM STORAGE (GAGE HEIGHT)
CRITICAL	4,276.0 af (18.7 ft)	1,070.4 af (11.5 ft)	2,066.0 af (13.5 ft)
DRY	4,617.2 af (19.2 ft)	936.1 af (11.0 ft)	2,290.6 af (14.2 ft)
BELOW NORMAL	4,500.8 af (19.0 ft)	1,602.5 af (13.2 ft)	2,548.7 af (14.7 ft)
ABOVE NORMAL	4,372.9 af (18.8 ft)	1,112.2 af (11.7 ft)	2,132.8 af (13.5 ft)
WET	4,215.2 af (18.6 ft)	1,221.8 af (12.1 ft)	2,172.0 af (13.9 ft)

TABLE 7-11.1**Lake Aloha--Historic Operations Summary
Post 1985**

WATER-YEAR TYPE	MAXIMUM AVG. EOM STORAGE (GAGE HEIGHT)	MINIMUM AVG. EOM STORAGE (GAGE HEIGHT)	AVERAGE EOM STORAGE (GAGE HEIGHT)
CRITICAL	3,889.1 af (18.1 ft)	1341.8 af (5.0 ft)	1,478.1 af (11.2 ft)
DRY	4,426.9 af (18.9 ft)	97.0 af (5.0 ft)	1,795.6 af (11.9 ft)
BELOW NORMAL	4,816.1 af (19.5 ft)	97.0 af (5.0 ft)	2,028.7 af (12.4 ft)
ABOVE NORMAL	3,767.1 af (17.9 ft)	97.0 af (5.0 ft)	1,380.6 af (10.9 ft)
WET			

The following tables, Tables 7-12, 7-12.1, 7-13, and 7-13.1, summarize the average EOM storage levels for Silver and Caples Lakes during the months of June through September for each water-year type.

TABLE 7-12
Silver Lake

Average End-of-Month Lake Levels
(based on period of record 1923-1991)

WATER-YEAR TYPE	JUNE EOM GAGE HEIGHT (FEET)	JULY EOM. GAGE HEIGHT (FEET)	AUGUST EOM GAGE HEIGHT (FEET)	SEPTEMBER EOM GAGE HEIGHT (FEET)
CRITICAL	19.5	16.2	12.6	6.5
DRY	20.8	17.3	14.6	9.2
BELOW NORMAL	22.1	18.8	15.3	8.4
ABOVE NORMAL	21.7	20.1	17.1	10.7
WET	21.7	21.70	18.8	11.5

TABLE 7-12.1

Silver Lake
Average End-of-Month Lake Levels
(based on period of record beginning 1985-1991)

WATER-YEAR TYPE	JUNE E.O.M. GAGE HEIGHT (FEET)	JULY E.O.M. GAGE HEIGHT (FEET)	AUGUST E.O.M. GAGE HEIGHT (FEET)	SEPTEMBER E.O.M. GAGE HEIGHT (FEET)
CRITICAL	21.0	18.1	11.0	7.0
DRY	22.0	19.3	16.1	12.9
BELOW NORMAL	22.3	19.7	15.2	12.9
ABOVE NORMAL	22.5	21.3	18.6	15.0
WET				

TABLE 7-13

**Caples Lake
Average End-of-Month Lake Levels
(based on period of record 1923-1991)**

WATER-YEAR TYPE	JUNE EOM GAGE HEIGHT (FEET)	JULY EOM GAGE HEIGHT (FEET)	AUGUST EOM GAGE HEIGHT (FEET)	SEPTEMBER EOM GAGE HEIGHT (FEET)
CRITICAL	49.7	48.5	42.7	40.3
DRY	57.4	56.4	49.1	44.1
BELOW NORMAL	61.4	60.8	54.3	48.4
ABOVE NORMAL	59.8	59.6	56.0	52.3
WET	61.1	61.9	60.3	57.8

TABLE 7-13.1

**Caples Lake
Average End of Month Lake Levels
(based on period of record 1985-1991)**

WATER-YEAR TYPE	JUNE EOM GAGE HEIGHT (FEET)	JULY EOM GAGE HEIGHT (FEET)	AUGUST EOM GAGE HEIGHT (FEET)	SEPTEMBER EOM GAGE HEIGHT (FEET)
CRITICAL	45.9	44.8	43.1	41.7
DRY	56.0	55.9	48.2	44.3
BELOW NORMAL	62.0	61.6	54.8	47.4
ABOVE NORMAL	62.0	62.0	52.6	47.0
WET				

Based on a comparison of Tables 7-12, 7-12.1, 7-13, and 7-13.1, we find that Silver Lake's water levels were generally higher subsequent to the effective date of FERC License's 184, 1985

release requirements; however water levels in Caples Lake were generally lower.

The operational comparison for the different periods are consistent with the operational descriptions provided under section 6.5.1 of this Decision: during the summer recreational season, project demands are first met with water released from Caples Lake, with no operational withdrawals from Silver Lake, except for release requirements imposed by FERC.

8.0 KIRKWOOD, INC.'S APPLICATIONS TO APPROPRIATE WATER HAVE ALREADY BEEN APPROVED

Order WR 95-36, section 3.2.10 delegates to the Chief, Division of Water Rights, the authority to issue permits when no protests are outstanding against a pending application. As earlier stated, all protests to Applications 30062 and 30453 were withdrawn or otherwise settled. (Section 3.9.1, *infra*.) On June 25, 1996, the Chief, Division of Water Rights, approved Applications 30062 and 30453 by Kirkwood, Inc. Accordingly, no further consideration will be given to the applications filed by Kirkwood, Inc., and its petition for partial assignment of Application 5648 will be denied.

9.0 DENIAL OF APPLICATIONS AND PETITIONS FOR PARTIAL ASSIGNMENT OF STATE FILED APPLICATION 5645 TO APPROPRIATE WATER BY KIRKWOOD PUD AND ALPINE AND AMADOR COUNTIES

Kirkwood PUD and Alpine and Amador Counties filed applications to appropriate water from Caples and Silver Lakes. Respectively, their applications are denominated as Applications 30204, 30219, and 30218. Alpine and Amador Counties also petitioned for the partial assignment of state filed Application 5645; petitions 5645(9) and 5646(10), respectively.

9.1 Denial of Application 30204 by Kirkwood PUD

Application 30204 by Kirkwood PUD will be denied because:

(1) the applicant requested the Board to suspend processing of the application and (2) the applicant did not offer evidence in support of its application. (95,T,II,175:23-177:6; 224:14-225:21.)

9.2 Denial of the Direct Diversion Consumptive Use Portion of Application 30219 and Petition for Partial Assignment of State Filed Application 5645(9) by Alpine County

The direct diversion consumptive use portion of Application 30219 and petition for partial assignment of state filed Application 5645(9) by Alpine County will be denied because the applicant:

(1) requested the Board to suspend processing of the consumptive use portion of the applications and (2) did not offer evidence in support of the consumptive use portion of its applications.

(95,T,II,175:23-177:6; 224:14-225:21.)

In addition, Alpine County has not prepared and adopted environmental documents for a project that is consistent with the consumptive use portion of its applications. That is:

(1) Application 30219 seeks up to 0.13 cfs by direct diversion from November 1 to July 31 of the following year, approximately 71 afa and (2) the petition for partial assignment of Application 5645(9) seeks 0.13 cfs year round, approximately 96.4 afa.

Alpine County's February 25, 1993, Notice of Exemption describes a direct diversion project of only 6.0403 afa for consumptive use purposes. (95,T,II,231:23-234:13.) Thus, the quantity of water sought by the consumptive use portion of Application 30219 and the petition for assignment of state filed Application 5645(9) is not covered by the Notice of Exemption filed by the County.

(SWRCB,1,A-30219,Notice of Exemption.) As a responsible agency the Board is prohibited from approving projects subject to the requirements of CEQA, unless appropriate environmental documents have been prepared and are considered by the Board when approving

a project. (14 CCR 15004(a) and 15021.) In the absence of appropriate environmental documents, the Board cannot approve the consumptive use portion of Application 30219 or the petition for partial assignment of state filed Application 5645(9).

9.3. Denial of Nonconsumptive Application 30218 and the Petition for State Filed Application 5645(10) by Amador County and Nonconsumptive Application 30219 and the Petition for State Filed Application 5645(9) by Alpine County

Application 30218 and the petition for SFA 5645(10) by Amador County each seek to appropriate 8,740 afa for storage in Silver Lake for recreation and fish and wildlife uses. Application 30219 and petition for partial assignment of state filed Application 5645(9) by Alpine County each seek to appropriate 21,581 afa to storage in Caples Lake for recreation and fish and wildlife uses. The amount applied for by each applicant is, essentially, the total storage capacity of each lake operated by PG&E.

Both applicants seek water for recreation purposes to preserve the status quo in the manner in which the lakes are operated by PG&E. (95,T,II,218:6-7,237:7-12; AMADOR,95-1,3.) Amador County recognizes that PG&E has the right to determine how the lakes are operated. (AMADOR,95-1,3.) Alpine County, however, thinks something might have to be worked out with PG&E to control releases from Caples Lake. (95,T,II,235:12-237:12.) Although Alpine seeks to maintain the status quo in the manner in which PG&E has operated the lakes, it is of the opinion that such an operation defies description. (95,T,II,218:12-219:14.) Neither applicant offered evidence as to how the lakes could or would be operated if permits were issued for the pending applications and petitions for partial assignment.

Representatives for the Sierra Club and Amador County produced ample testimony and exhibits demonstrating that: (a) the lakes are heavily used for recreation and for fish and wildlife

purposes; (b) recreation activities at the lakes result in a significant portion of the revenues needed for the operation of Alpine County;¹⁶ (c) numerous small businesses in the vicinity of the lakes are dependent upon the recreation activities associated with the lakes; (d) high water levels in the lakes is important to support such recreation activities; (e) the lakes should be maintained as high as possible through Labor Day of each year; and (f) lake levels are dependent upon the manner in which PG&E operates the lakes. (95,AMADOR,1-3; 95,SCLDF,KR-1,NR,BP-5,LB,LT,TP-1.)

As previously discussed in section 4.4, an essential requisite for the appropriation of water is that an applicant must be able to exercise some measure of physical control over the water which it would appropriate. (*California Trout, Inc. v. State Water Resources Control Board* (1979) 90 Cal.App.3d 816; 153 Cal.Rptr.672.) In the case of both Caples and Silver Lakes, PG&E has constructed and/or acquired the works from predecessors in interest. PG&E owns or has the right to control the facilities which impound the lake water and controls the release of water from the lakes. In addition, PG&E owns the water rights, a type of real property, for the water impounded in the lakes.

In order to exercise control over any water which would be impounded in the lakes, the applicants must either: (a) acquire PG&E's water rights and the right to control the facilities which impound and control the release of water from the lakes or (b) enter into some type of agreement with PG&E which would give them some participation in the control of the water at the lakes.

Neither applicant introduced evidence during the hearing indicating they were pursuing either alternative with PG&E.

¹⁶ The evidence for this statement was produced by Kirkwood, Inc. (95, KW, 8, 8B, 8D.)

(95,T,II,235:2-237:12; 95,T,III,180:24-25.) Indeed, such an agreement may be precluded by PG&E's agreement to sell its interests in the project encompassed by FERC License 184 to El Dorado. (95,EDCWA,94,9.) Both lakes are operated almost solely for hydropower purposes by PG&E and the Board does not have the authority to require PG&E to maintain lake levels for the protection of the beneficial uses made of water within such reservoirs. In addition, the Board does not have the authority to grant the applicants a right of access or control over PG&E facilities which regulate lake water levels nor can the Board grant the applicants the right to use or control PG&E's water rights for the water in the lakes. (4.3 and 4.4, *infra*.) Inasmuch as the applicants are unable to exercise control over the water which they would appropriate and do not have any apparent plans or means for acquiring such control, the Board will deny Application 30218 and the petition for state filed Application 5645(10) by Amador County and Application 30219 and the petition for state filed Application 5645(9) by Alpine County.

9.4 County of Origin Protection for Amador and Alpine Counties

The county of origin laws provide persons who file applications to appropriate water for use within Amador and Alpine Counties a priority claim against the water originating within the county vis-a-vis any release of priority or assignment of state held applications in favor of El Dorado. The Board will include a condition in any permit issued to El Dorado, based upon a release of priority or assignment of a state filed application, expressly providing that the water which El Dorado appropriates is subject to diminution by applicants seeking water for use within Alpine and Amador Counties.

10.0 PERSONS DIRECTLY DIVERTING WATER FROM THE LAKES TO SUPPLY CABINS, BUSINESSES, CAMPGROUNDS, AND OTHER RECREATION FACILITIES SHOULD SEEK APPROPRIATIVE WATER RIGHTS FROM THE BOARD

It appears that a small quantity of water is currently being directly diverted from the lakes and served to homes, businesses, and camps surrounding Caples and Silver Lakes. (SWRCB,1, Application 30219; 95,SCLDF,KR-1,3,NR,4BP-5,9,BP-1.) In written testimony for the Sierra Club, Mr. Bradley Pearson states that 34 afa is needed from Silver Lake for existing uses. An exhibit to his written testimony indicates that many of the existing uses obtain water from sources other than the lake and that no more than about 15 afa is supplied to existing uses around the lake. (95,SCLDF,BP-1.) By Application 30218 and petition for assignment of state filed Application 5645(10), Alpine County seeks water for nonconsumptive uses only.

By Application 30219 and petition for partial assignment of Application 5645(9) Alpine County seeks to appropriate water from Caples Lake for existing consumptive and nonconsumptive uses. It cannot be estimated from the application, with any certainty, how much water is needed for existing consumptive uses. Using information noted in the application, it appears that perhaps 25 afa may be needed for existing uses; however, it is not clear that such uses are currently being supplied water from the lake.²⁷ Application 30204 by Kirkwood PUD seeks to appropriate up to 310 afa by direct diversion from Caples Lake. The application does not indicate whether any of the water would be used for existing uses of water being supplied from the lake; however, the application does indicate that there are 1,205 people currently residing within the District's service area. It

²⁷ Item 5b of the application states that water is needed for 300 people at 75 gallons per day. The multiple of these numbers is 22,500 gpd. Multiplying daily demand by 360 days results in an annual demand of 8,100,000 gallons per year. Applying a denomination of 325,000 results in an annual demand of 25 afa.

is not clear whether the District currently serves water to some or all of these persons or from what sources the water is obtained.

No one identified any water right which would provide a legal basis for any existing diversion and use of the water for consumptive uses from the lakes or the streams flowing into the lakes. If such diverters do not have a legal basis of right for their diversions, they are advised to consider whether it would be appropriate to file an application with this Board to appropriate water.

It also appears that such persons can obtain access to directly divert water from the lakes from the national forest adjoining the lakes. Article 23 of License 184 provides that the holder of the license will not bar access to the lakes for the purpose of obtaining water. So long as an applicant does not seek to control lake levels, the quantity of water stored in the lakes, or the timing of PG&E's releases from the lakes, an application for direct diversion does not present the problems of physical control over the water to be appropriated that is discussed in section 7.2, *supra*.

From a water right point of view, the key issue for ~~such~~ direct diversion applications is whether unappropriated water is available to supply the applications. Our analysis of the availability of unappropriated water clearly indicates some unappropriated water is available. (Section 5.0, *supra*.) Of course, such diversions cannot, cumulatively, directly divert water from the lake at a rate exceeding the rate the inflow of the streams into the lake without diverting water to which PG&E has a paramount claim.

In 1993 El Dorado representatives testified that a potential solution to assure that Alpine and Amador Counties have water in

the future would be for the Board to adopt a permit condition reserving the right to require El Dorado to reduce the amount of water it could store in Caples and/or Silver Lakes to provide a supply of water for the needs of Alpine and Amador Counties. (93,T,II,128:17-129:20.) Following the 1995 hearing, El Dorado represented that it would have no objection to making 200 afa available to Amador County for development of consumptive uses. (EDCWA, Closing Statement, 51:1-3.) Therefore, the Board will reserve up to 200 afa of El Dorado's allocation to water in Caples and/or Silver Lakes for persons making existing diversions for consumptive use from the lakes and for future uses.

The Board recommends that the Forest Service, and/or Alpine and Amador Counties quantify the amount of water necessary to supply existing uses of water from the lakes and hold discussions with FERC and PG&E regarding the provisions of Article 23 of the License of Project 184. Parties seeking to use this reservation must file a water right application with the Board and may need to enter into a contractual agreement with PG&E or its successor to compensate for energy generation foregone as a result of the consumptive use of water stored in the lakes.

11.0 PG&E'S CONTRACT TO SUPPLY WATER TO EL DORADO VIA THE EL DORADO CANAL AND FOREBAY

PG&E supplies 15,080 afa of water to EID for consumptive use purposes pursuant to contract. It appears this contract was not entered into until 1919, after 1914. During the hearing, the Sierra Club raised the issue of whether PG&E had a water right under which it could supply water to EID for consumptive use from Caples and Silver Lake. Whether PG&E has appropriative rights to supply water to EID for consumptive use was not an issue noticed for hearing and the evidence in the record for making findings of this point is not satisfactory.

PG&E does not have a post-1914 appropriative right to supply consumptive use water from the Lake Aloha and Caples and Silver Lakes. PG&E claims a pre-1914 appropriative right to divert up to 350 afa to storage from Pyramid Creek for consumptive use. (Tables 5-4 and 6-1.) PG&E also claims a pre-1914 appropriative right to directly divert up to 70 cfs year round at the headworks of the El Dorado Canal for power, irrigation, industrial, and municipal uses. (Statement of Diversion 9034.) On an average daily basis, 21 cfs is required to supply 15,080 afa of water. Table 7.5 shows that there is sufficient flow at the headworks of the El Dorado Canal to supply 21 cfs of water during all years, except during critically dry years like 1977.

In general, the holder of pre-1914 appropriative water rights may change the purpose of use so long as no legal user of water is injured. Such changes do not require the Board approval. (Water Code section 1706.) On the other hand, Water Code section 1055 provides that after 1914 no new appropriative right to the use of water can be initiated except in compliance with Water Code section 1200 et seq. That is, the filing of an application with the Board and the issuance of a permit for the appropriation of water. PG&E has not sought such a right from the Board for the water supplied under the El Dorado contract. In the Board's view, the conversion of a nonconsumptive right for the generation of hydroelectric power to a consumptive use is the initiation of a new right to appropriate water subject to the provisions of Water Code section 1200 et seq. Changing water from a nonconsumptive use to consumptive use has the effect of removing water from a stream system which is available for: (a) diversion and use by others and (b) fish and recreation in a stream. PG&E is advised that it should closely scrutinize the legal basis of the right or rights under which it supplies water for consumptive use to El Dorado and, if appropriate, file an application to

obtain a right to supply consumptive use water to El Dorado.¹⁸ In the event that EID acquires PG&E's interests in the El Dorado Hydroelectric Project, El Dorado should be required to submit a report on the legal basis under which 15,080 afa of water is diverted and supplied to EID for consumptive use.

12.0 EL DORADO'S NEEDS FOR ADDITIONAL WATER SUPPLIES

EID was formed in 1925 and currently serves domestic, municipal, and agricultural water demands primarily in that portion of Western El Dorado County lying between the South Fork American River and North Fork Cosumnes River. EID's boundaries cover a service area of approximately 135,000 acres, which has been subdivided into three geographical areas: East Service Area, West Service Area, and El Dorado Hills Sub-Service Area. EID's present annual water demands for the three service areas are, respectively, 25,493 af, 7,918 af, and 3,745 af, for an annual total of 37,156 af. (EDCWA, 78, Analysis of EID Supplemental Water Requirements From PG&E Sources, Table 3-1.)

EID's present water supply needs are being met from small sources such as the Crawford Ditch and three major sources. (EDCWA, 78, 3-4.) The following describes EID's principal sources of supply:

- ◆ **Sly Park Reservoir:** This 41,000 af reservoir was originally built by the Bureau as part of the Central Valley Project during construction of the Folsom Dam. EID can exercise, at present, complete operational control over water stored at the reservoir, which provides EID with a safe yield of 18,000 afa. The reservoir provides EID with a high degree of flexibility in the operations of its water system.

¹⁸ Even if PG&E is delivering water to EID for consumptive use without a valid basis of right, it would not necessarily mean that more water would be retained in either Silver or Caples Lakes because PG&E has the right to release the water for power production.

- ◆ **PG&E Forebay:** PG&E's 1919 contract supplies EID with a safe yield of 15,080 afa.

- ◆ **Folsom Reservoir:** Per contract with the Bureau of Reclamation for Central Valley contract water, EID can pump 7,550 afa from Folsom Reservoir. EID serves the El Dorado Hills Sub-Service Area and West Service Area with water from Lake Folsom; however, contract water has been curtailed, historically, when adverse hydrologic conditions occur (i.e., dry years).

The total available supply from the major sources is 40,630 af. The most critical period of time to EID's operations is generally the period of August 1 to November 1, the months of least precipitation and lowest flow in California streams. (*Ibid.*, p. 11.) Thus, an additional supply during these months, generally requires the acquisition of additional storage capacity so that water can be captured in the winter and spring and released for use during late summer and fall.

Although EID's current supply exceeds its current water demands by 3,474 af, available supply may be less than 40,630 af during years of less than normal precipitation. Indeed, in 1982 the Board found that EID needed additional supplies of water. (Decision 1587, 29-37.) Further, in response to a series of dry years, the Board adopted an emergency order to enable EID to augment its supply of water to meet its demands. (Order WR 88-13.)¹⁹

EID now seeks to augment the supply available to meet current and future water demand, particularly in its far western service area, i.e., El Dorado Hills. (*Ibid.*) EID's projected water requirements are summarized in Table 12-1. (*Ibid.*, Table 3.1.)

¹⁹ The Board takes administrative notice of the findings in Decision 1587 and in the action ratified by Order 88-13.

TABLE 12-1
EL DORADO IRRIGATION DISTRICT
PROJECTED MONTHLY WATER DEMAND BY SERVICE AREA
(ACRE-FEET)

YEAR	SERVICE AREA	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL DEMAND
1995	EAST	1045	867	918	1377	2575	3722	4181	4028	2728	1785	1173	1096	25493
	WEST	325	269	285	428	800	1156	1299	1251	847	554	364	340	7918
	EL DORADO HILLS	154	127	135	202	378	547	614	592	401	262	172	161	3745
	SUBTOTAL	1523	1263	1338	2006	3753	5425	6094	5871	3976	2601	1709	1598	37156
1999	EAST	1076	893	945	1418	2652	3833	4306	4148	2809	1838	1208	1129	26255
	WEST	355	295	312	468	875	1266	1422	1370	927	607	399	373	8668
	EL DORADO HILLS	216	179	190	285	532	769	864	833	564	369	242	227	5269
	SUBTOTAL	1648	1367	1447	2170	4059	5868	6591	6350	4301	2813	1849	1728	40192
2000	EAST	1084	899	952	1428	2671	3861	4337	4178	2830	1851	1217	1137	26446
	WEST	363	301	319	478	894	1293	1452	1399	948	620	407	381	8856
	EL DORADO HILLS	232	192	203	305	571	825	926	893	604	395	260	243	5649
	SUBTOTAL	1679	1392	1474	2211	4136	5979	6716	6470	4382	2867	1884	1761	40951
2005	EAST	1130	937	992	1488	2783	4023	4520	4354	2949	1929	1268	1185	27558
	WEST	399	331	351	526	984	1422	1598	1539	1042	682	448	419	9743
	EL DORADO HILLS	346	287	304	456	853	1232	1384	1334	903	591	388	363	8441
	SUBTOTAL	1875	1555	1647	2470	4620	6678	7502	7227	4894	3202	2104	1967	45742
2010	EAST	1178	977	1034	1551	2902	4195	4712	4539	3074	2011	1322	1235	28731
	WEST	441	365	387	580	1085	1569	1762	1698	1150	752	494	462	10744
	EL DORADO HILLS	514	426	451	677	1266	1831	2056	1981	1342	878	577	539	12539
	SUBTOTAL	2133	1768	1873	2809	5253	7594	8530	8218	5565	3641	2393	2237	52014
2013	EAST	1216	1008	1068	1601	2995	4330	4863	4685	3173	2076	1364	1275	29655
	WEST	460	382	404	606	1133	1638	1840	1773	1201	786	516	483	11222
	EL DORADO HILLS	554	459	486	729	1364	1971	2214	2133	1445	945	621	581	13500
	SUBTOTAL	2229	1849	1958	2936	5492	7939	8918	8592	5818	3806	2501	2338	54377
2021	EAST	1316	1092	1156	1734	3243	4688	5266	5073	3435	2247	1477	1381	32107
	WEST	513	426	451	676	1265	1828	2054	1978	1340	877	576	538	12522
	EL DORADO HILLS	662	549	581	872	1630	2357	2647	2550	1727	1130	742	694	16141
	SUBTOTAL	2492	2066	2188	3282	6138	8872	9966	9602	6502	4254	2795	2613	60770

SOURCE: EDCWA EXHIBIT 78, TABLE 3.1

**13.0 ENVIRONMENTAL AND PUBLIC INTEREST ISSUES AFFECTING
EL DORADO'S PROPOSED PROJECT**

13.1 EID'S Proposed Project

Under pending filings, El Dorado intends to ". . . utilize water released and diverted or rediverted by PG&E from certain of its facilities to meet present and future demands to provide for a reliable supplemental water supply" Thus, El Dorado seeks to acquire consumptive use rights to the water that is currently being stored and released or diverted by PG&E under its nonconsumptive use rights, and to redivert that water for consumptive use. (*Ibid.*,1.)

Under pending filings, El Dorado seeks to obtain rights for the consumptive use of water stored in Lake Aloha and Caples and Silver Lakes by PG&E for hydrogeneration. Under its amended applications or petition, El Dorado could directly divert and redivert water for consumptive use only from Folsom Lake. Folsom Lake is an existing "point of take" to serve the El Dorado Hills subservice area, however, it can also serve the entire West Service area. The amended applications and petition seek a "safe yield" total of 17,000 afa by direct diversion and storage. (*Ibid.*,9.) Notwithstanding that El Dorado has stated that it will not modify or seek to modify the manner in which PG&E has operated Lake Aloha and Caples and Silver Lakes, numerous protestants have expressed concern that the manner in which the lakes are operated will change. This concern is based, in part, upon the perception that it is not possible to describe "historic operations" in measurable terms.

**13.2 Potential Impact of Consumptive Use Rights on the
Operation of the Lakes**

Two operational scenarios are used to evaluate how El Dorado's proposed project could effect historic PG&E lake operations:

- (1) assume that PG&E maintains ownership of the project

(FERC 184) and (2) assume that El Dorado obtains some measure of direct or indirect control over the operation of the project.

Assuming that PG&E maintains ownership of the El Dorado Project, additional impacts to Lake Aloha and Silver and Caples Lakes historic levels are not foreseeable for the following reasons. Any water appropriated by El Dorado for consumptive purposes would be water released by PG&E pursuant to FERC License 184 operational constraints and its hydroelectric requirements. Thus, unless El Dorado pays PG&E a premium to release water at certain times of the year, the project proposed by El Dorado would have no new impact on the operation of Lake Aloha and Silver and Caples Lakes.

Tables 5-5, 5-6, and 5-7 provide a tabular summary of recorded average releases from each lake, as measured by USGS gages No. 11436000 (Silver), No. 11437000 (Caples), and No. 11435100 (Aloha-Pyramid Creek). Figure 13-1 illustrates the average monthly releases from each lake and the average total monthly release for the three lakes.

Assuming that El Dorado directly or indirectly obtains some measure of control over lake operations, historic lake releases and available direct diversion water were compared to El Dorado's projected consumptive use demands to evaluate potential impacts to the lakes. The purpose of this evaluation is to determine whether historic lake release patterns and direct diversion supplies could accommodate El Dorado's current and projected demands, without a change in lake operations. As previously noted, El Dorado's current demands are being met by EID's 1919 Agreement covering diversions from the El Dorado Forebay (15,080 afa), and future demands for water sought under El Dorado's applications and petition for partial assignment are based upon EID's projected year-2021, 16,141 acre-feet

requirement for the EID's El Dorado Hills service area (i.e., Table 12-1).

The relevant historic years (1923-1991) and critical water-year (1977) data relating to lake releases, monthly recorded runoff at USGS Gage No. 11439501 near Kyburz, EID's monthly 1919 Agreement Water, and projected year-2021 monthly requirements (El Dorado Hills Service Area) are summarized by Tables 13-1 and 13-2. Figure 13-2 illustrates a comparison of EID's year-2021 demand for the El Dorado Service Area with the available South Fork American River direct diversion water during average historic years (1923-1991) and critical water conditions (1977).

The following conclusions can be derived from Tables 13-1, 13-2, and Figure 13-2:

1. During historic average conditions, sufficient natural surface flow is available at Kyburz for direct diversion from the South Fork American River to meet EID's 1919 Agreement demands in all months;
2. During historic average conditions, sufficient natural surface flow is available at Folsom Reservoir for direct diversion from the South Fork American River to meet EID's year-2021 demand (El Dorado Hills) in all months, except August;
3. During a critical water-year like 1977, sufficient natural surface flow is available at Kyburz for direct diversion from the South Fork American River to meet EID's 1919 Agreement demands in all months, except July, August, and September;
4. During a critical water-year like 1977, sufficient natural surface flow is available at Folsom Reservoir for direct diversion from the South Fork American River to meet EID's

**TABLE 13-1
HYDROLOGIC DATA - HISTORIC AVERAGE CONDITIONS**

	(ACRE-FEET)												TOTAL ANNUAL
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
SILVER (table 5-5) USGS # 11436000	1521.3	1098.3	979.0	788.8	719.4	897.5	2461.8	7736.3	5013.1	1041.7	530.6	2315.1	25102.9
CAPILES (table 5-6) USGS #1143700	2215.9	2434.8	2542.9	1592.5	1010.7	672.1	2065.2	2012.0	5054.0	2926.3	2945.9	2101.4	27573.8
ALOHA (table 5-7) USGS #11435100	705.2	1140.4	940.5	991.3	910.3	1417.5	2305.2	5902.8	5582.7	4066.0	2753.3	911.6	27626.7
TOTAL COMBINED RELEASES	4442.3	4673.6	4462.4	3372.6	2640.4	2987.1	6832.2	15651.1	15649.9	8034.1	6229.7	5328.1	80303.4
SOUTH FORK AMERICAN RIVER USGS GAGE # 11439501 1923-1991 RECORDED RUNOFF (table 7-5)	6913.0	10047.2	13965.9	13615.2	14545.0	22028.8	43528.1	81216.8	56992.7	17866.2	9205.7	8106.4	298031.0
EID'S MONTHLY DEMAND - YEAR 2021 EL DORADO HILLS SERVICE AREA (table 12-1)	1130.0	742.0	694.0	662.0	549.0	581.0	872.0	1630.0	2357.0	2647.0	2550.0	1727.0	16141.0
EID'S MONTHLY 1919 AGREEMENT WATER (SOURCE: Exh. 78, p. 13)	553.0	416.0	430.0	615.0	555.0	1230.0	2082.0	2152.0	2082.0	2152.0	2152.0	661.0	15080.0
ACCOUNTING SUMMARY													
WATER AVAILABLE FOR DIRECT DIVERSION (RECORDED RUNOFF - TOTAL COMBINED RELEASES)	2470.7	5373.6	9503.5	10242.6	11904.6	19041.7	36695.9	65565.7	41342.8	9832.1	2976.0	2778.3	217727.6
WATER AVAILABLE FOR EL DORADO SERVICE AREA YEAR - 2021 DEMAND (DIRECT DIVERSION WATER - 1919 WATER)	1917.7	4957.6	9073.5	9627.6	11349.6	17811.7	34613.9	63413.7	39260.8	7680.1	824.0	2117.3	202647.6

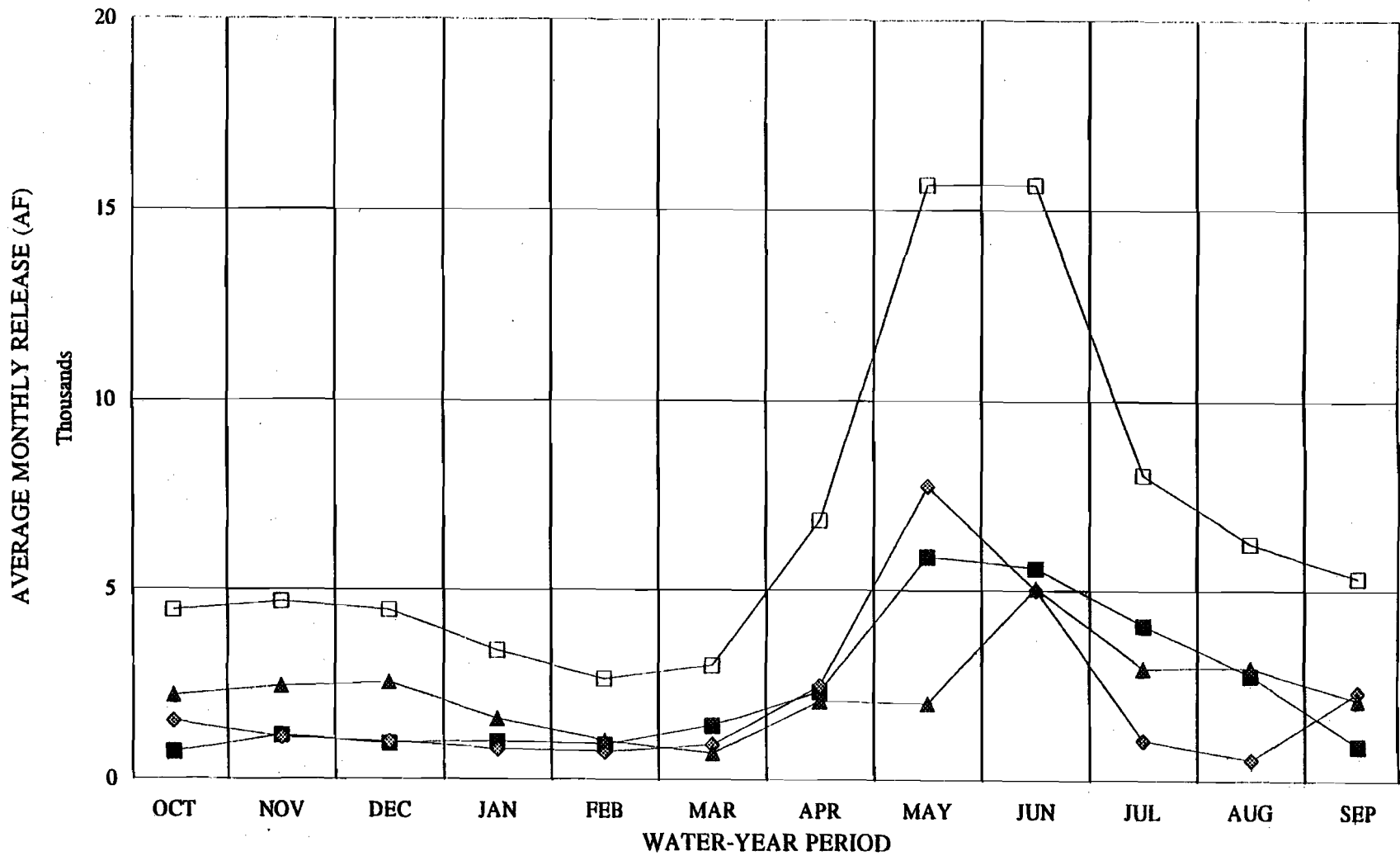
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**TABLE 13-2
HYDROLOGIC DATA - CRITICAL WATER-YEAR 1977 AVERAGE CONDITIONS**

	(ACRE-FEET)												TOTAL ANNUAL
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
SILVER (table 5-5) USGS # 11436000	2024.9	1443.2	63.5	46.7	27.3	89.8	38.5	84.2	85.1	82.1	103.9	2902.3	6991.5
CAPLES (table 5-6) USGS #1143700	346.3	1926.5	2840.9	937.9	140.8	75.5	201.9	78.7	262.0	579.3	5615.3	2101.4	15106.5
ALOHA (table 5-7) USGS #11435100	885.5	258.0	118.6	254.6	272.3	437.6	1686.6	1811.7	1549.2	3493.7	210.7	57.6	11036.1
TOTAL COMBINED RELEASES	3256.7	3627.7	3023.0	1239.2	440.4	602.9	1927.0	1974.6	1896.3	4155.1	5929.9	5061.3	33134.1
SOUTH FORK AMERICAN RIVER USGS GAGE # 11439501 1923-1991 RECORDED RUNOFF (table 7-5)	5581.9	4878.5	3904.4	2702.6	2128.3	3294.9	10555.4	12711.8	11571.1	6076.6	6524.7	5371.5	75301.7
EID'S MONTHLY DEMAND - YEAR 2021 EL DORADO HILLS SERVICE AREA (table 12-1)	1130.0	742.0	694.0	662.0	549.0	581.0	872.0	1630.0	2357.0	2647.0	2550.0	1727.0	16141.0
EID'S MONTHLY 1919 AGREEMENT WATER (SOURCE: Exh. 78, p. 13)	553.0	416.0	430.0	615.0	555.0	1230.0	2082.0	2152.0	2082.0	2152.0	2152.0	661.0	15080.0
	ACCOUNTING SUMMARY												
WATER AVAILABLE FOR DIRECT DIVERSION (RECORDED RUNOFF - TOTAL COMBINED RELEASES)	2325.2	1250.8	881.4	1463.4	1687.9	2692.0	8628.4	10737.2	9674.8	1921.5	594.8	310.2	42167.6
WATER AVAILABLE FOR EL DORADO SERVICE AREA YEAR - 2021 DEMAND (DIRECT DIVERSION WATER - 1919 WATER)	1772.2	834.8	451.4	848.4	1132.9	1462.0	6546.4	8585.2	7592.8	-230.5	-1557.2	-350.8	27087.6

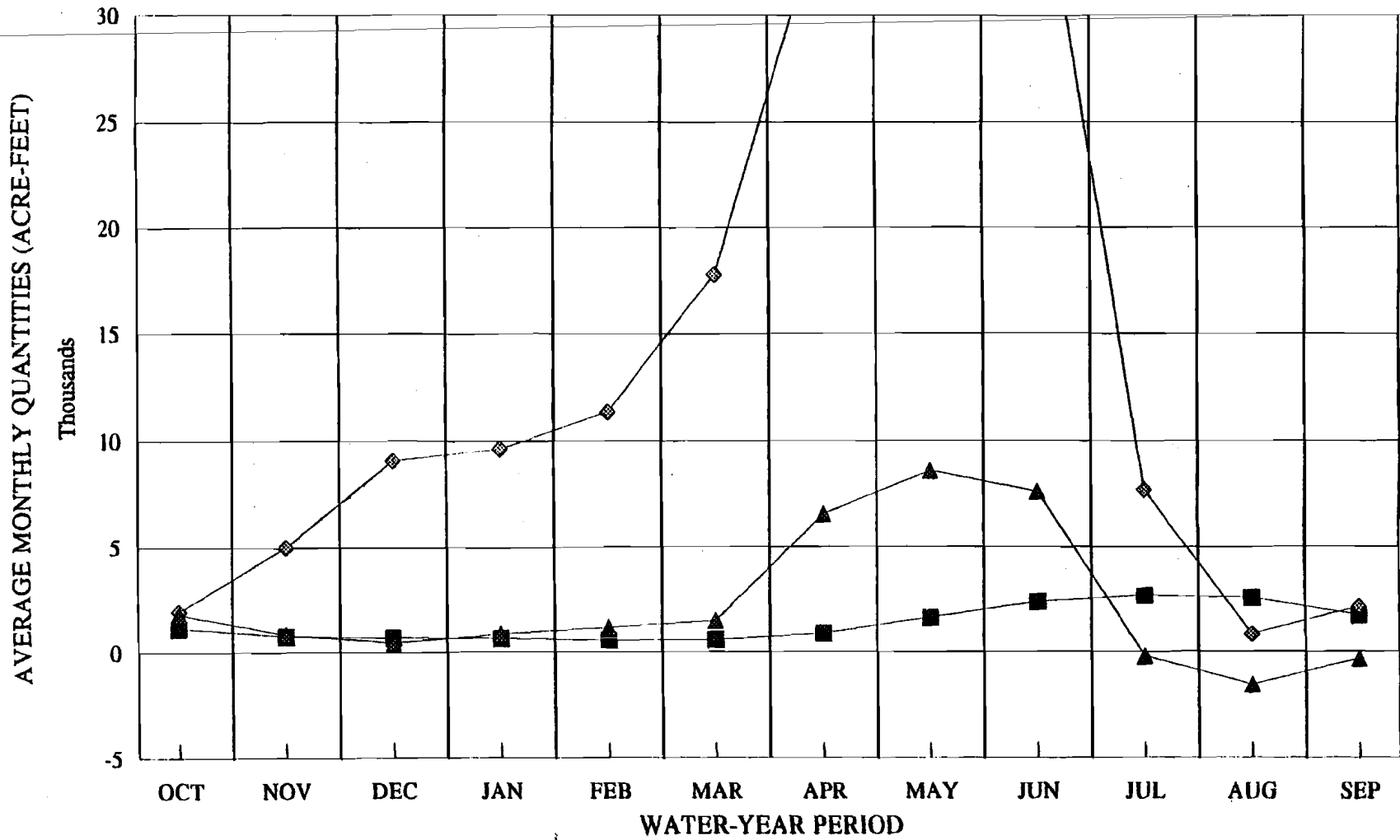
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FIGURE 13-1
AVERAGE MONTHLY RELEASE COMPARISON



■ ALOHA LAKE ◆ SILVER LAKE
 ▲ CAPLES LAKE □ TOTAL COMBINED RELEASE

FIGURE 13-2
DEMAND - WATER AVAILABILITY EVALUATION



YEAR-2021 DEMAND (EDSA)
 WATER AVAILABLE (HISTORIC AVE. CONDITIONS)
 WATER AVAILABLE (1977 CONDITIONS)

13.3 Potential Environmental Impact of El Dorado's Proposed Project on the Streams Below Lake Aloha, and Caples and Silver Lakes, and on the South Fork of the American River

The same type of analysis can be made of the potential environmental impacts of El Dorado's proposed project on the streams below the lakes. Assuming PG&E continues to divert water to storage and release water from storage per the requirements of FERC License 184, the release of water from the lakes will not alter the flow regimes in the streams below the reservoirs. Further, since El Dorado seeks to directly divert and redivert water released from storage only at Folsom Reservoir, El Dorado's Project would not change current stream flows below Lake Aloha, Caples and Silver Lakes, and the South Fork of the American River at least as far downstream as Folsom Reservoir.

Assuming that El Dorado acquires some form of direct or indirect control over the operation of the lakes, El Dorado could be tempted to release additional water stored in either Lake Aloha or Caples and Silver Lakes during the month of July through September to satisfy projected water demands. Obviously, this would alter historic release patterns and the flow regimes in the streams below the lakes. At least during some months, such an alteration would provide more water for fish and recreation in the streams below the lakes. Obviously, such modifications would have to be made within the general operational constraints of FERC License 184. As noted above, rather than draw on Lake Aloha and Caples and Silver Lakes to meet projected summer demands, El Dorado may be able to rely upon existing sources of water supply for water deliveries during critical summer months. However, without terms to prevent a reoperation of these lakes for water supply rather than hydropower, impacts to uses around the lakes could occur.

13.4 Evolution of the Proposed Project and the Environmental Documents Prepared for the El Dorado Project

EDCWA in preparing a water resource development and management plan, to meet long-term needs of local water districts within its jurisdiction, and prepared a draft EIR evaluating a proposed water program. The draft EIR was released for public review on September 30, 1992.

The draft EIR evaluated nine alternatives, each consisting of a combination of five individual projects. The draft EIR proposed to serve as a "Programmatic EIR" for ECDWA's Water Program and a project EIR for the project alternative called the "El Dorado Project". (93,EDCWA 29, 2-2 to 2-3.) In the final EIR, the preferred alternative was described as Alternative 1a.

Alternative 1a consists of the following individual project elements: the El Dorado Project and the Folsom Reservoir Project with the White Rock Project. (93,EDCWA 29,3-19.)

The El Dorado Project relies primarily on obtaining consumptive use rights to water stored in PG&E reservoirs. The El Dorado Project proposed to make use of existing waterways, tunnels, canals, and storage facilities to provide water to EID customers. Under the preferred alternative, project water would be delivered to the EID service area in three ways:

1. Water could be diverted from the El Dorado Forebay to the EID canal and primary conveyance facilities through Hazel Creek as a point of diversion.
2. Water could be diverted through the Hazel Creek Tunnel to Sly Park Reservoir and EID's primary conveyance facilities.
3. Water could be taken at Folsom Reservoir and pumped to the El Dorado Hills water treatment plant to serve the El Dorado Hills area.

If the White Rock Penstock Project was constructed, water from the El Dorado Project could also be taken at the White Rock Penstock. (93,EDCWA 29,4-3.) It should be noted that the draft and FEIR for the EDCWA Water Program treated the review of the Folsom Reservoir and White Rock Penstock diversion projects only at the programmatic level. To build these projects, EID would have to prepare, circulate, and certify final individual project specific environmental documents pursuant to CEQA. In addition, the Board as a responsible agency could not approve the diversion of water at the White Rock Penstock without a final CEQA document.

The FEIR for the El Dorado County Water Agency Water Program and El Dorado Project FEIR (SCH 72012088) was prepared in March of 1993. (93,EDCWA, 29.) The FEIR was certified by EDCWA on May 10, 1993. (93,EDCWA, 96.)

Because of upstream points of diversion in the preferred alternative, reduced opportunities for white-water boating in the Lotus reach of the South Fork American River was identified as a significant environmental effect in the FEIR. (93,EDCWA 96,1-6.) The proposed mitigation in the FEIR required agreements with second parties to make the mitigation measure feasible. Those agreements were not provided to the Board during or after the 1993 hearing for the proposed project. (SWRCB,1, A-29919, October 28, 1993, letter from James Stubchaer to Stuart L. Somach.)

Thereafter, based on an additional review, El Dorado concluded that it was logistically and economically feasible to divert all of the water for the proposed project from Folsom Reservoir. (SWRCB,1,A-29919; 95,EDCWA,Closing Statement,6:2-14.) On March 25, 1994, El Dorado submitted supplemental testimony and exhibits to the Board. (SWRCB,1,A-29919.) The supplemental

materials included a proposed permit term limiting the quantity of water sought under the applications and petition to 17,000 afa and removed the Hazel Creek Tunnel and El Dorado Forebay as points of diversion. El Dorado maintained the request for points of diversion and rediversion from Folsom Reservoir and at the White Rock Penstock. El Dorado requested that the Board approve the applications and petition for partial assignment. The White Rock point of diversion and rediversion, however, would be subject to the completion of necessary environmental work and on obtaining operations agreements that would avoid or mitigate the significant adverse impacts to white water boating within the Lotus reach of the South Fork American River. (93,EDCWA,2.)

On May 11, 1994, after review of the supplemental testimony, the Board informed El Dorado that it had not submitted information which had been requested for the White Rock Project. (SWRCB,1, A-29919.) The Board informed the parties that the White Rock point of diversion and rediversion would not be considered in the pending proceeding. (93,EDCWA,2.) On July 13, 1995, counsel for El Dorado indicated that it would seek approval of only the point of diversion and rediversion of water from Folsom Reservoir during the current 1995 hearing. (SWRCB,1 A-29919.)

The result of amending the applications and petition was to shift the focus of the environmental analysis from FEIR alternative 1a ("the preferred alternative") to FEIR Alternative 1b, identified as the "environmentally superior alternative". (93,EDCWA,29:1-7.) As described in the FEIR, Alternative 1b (El Dorado Project and Folsom Reservoir Project) assume that water would be taken at Hazel Creek Tunnel, the forebay at the end of the El Dorado Canal (forebay), or Folsom Reservoir and that Folsom Reservoir water would be taken at the forebay or Folsom Reservoir. (EDCWA, 29,3-16.)

In addition to reformulating the project and amending the applications and petition since the 1993 hearing, EID has entered into an agreement to acquire PG&E's El Dorado Hydroelectric Project, FERC License 184. Based on the reformulated El Dorado Project and the prospective acquisition of PG&E interests in the El Dorado Project, EDCWA released for public comment a draft Supplement to the FEIR (SEIR) for the El Dorado County Water Agency "Water Program"/El Dorado Project on August 8, 1995. The draft SEIR evaluated an El Dorado Project that would limit the consumptive diversion or rediversion of 17,000 afa of water exclusively from Folsom Reservoir.

On October 23, 1995, EDCWA certified the final SEIR for the El Dorado County and El Dorado Project. In doing so, EDCWA made findings of fact regarding the significant environmental impacts of the preferred Alternative (1b), and proposed mitigation for the significant impacts. In addition, EDCWA adopted a statement of overriding consideration for certain significant and unavoidable adverse environmental effects which will result from project approval. EDCWA also found that all mitigation measures identified for significant secondary growth-inducing impacts identified in the 1992 DEIR and 1993 FEIR are changes and alterations within the responsibility and jurisdiction of the County of El Dorado and that such mitigation measures have been or can and should be adopted by that public agency.

(95,EDCWA,96,B.)

13.5 Environmental and Public Interest Issues

The environmental and public interest issues fall into several major categories. These are:

1. Recreation at the lakes, that are the points of diversion for the above applications.

2. What are the "Historical Operations" of PG&E to which El Dorado has promised to adhere?
3. Impacts of the proposed appropriations at Folsom Lake, the American River, and the Delta.
4. Impacts to state or federal listed species or species of special concern as result of the appropriations.
5. Project specific studies yet to be conducted.

13.5.1 Recreation at the Lakes and PG&E Historical Operations

At issue is the impact that El Dorado's proposed appropriations might have on the existing recreational uses at the PG&E reservoirs (Lake Aloha and Caples and Silver Lakes) that are proposed points of storage for consumptive uses.

Most of the existing recreation developments at PG&E Project 184 occupy U.S. Forest Service lands under special-use-permit, and include summer homes, group camps, public campgrounds, resorts, and boat docks. Silver Lake is the most extensively developed of the lakes. Lake Aloha does not have any developed recreational uses because it is in the Desolation Valley Primitive Area. (93, EDCWA, 29, Appendix B.; FERC License 184.)

These lakes historically and currently provide significant recreational opportunity and are important resources to the people of the State of California. They are also important generators of revenue for businesses and to the Counties (Alpine and Amador) in which they occur. (93, FS-USDA, 1, 3, 5; 95, FS-USDA, 3; 93, SCLDF, 1-7; 95, SCLDF, NR 1-12; 95, SCLDF, KR-1, DD-1, MS-2, NR-13, BP-5, JP-1, SB-1, SB-1, JB-1; 93, Amador, 1-3; and 95, Amador, 1-5, 7, 9, 11.)

PG&E, the current operator of Project 184, recognizes its responsibility to conserve and make available for public recreation the natural resources which are part of its hydroelectric projects and watershed land holdings. PG&E has attempted to optimize, within economic limits, the contribution each development can make to its integrated system-wide recreation program. PG&E recognizes that Silver Lake provides the best potential for recreation development. Caples Lake and Echo Lake, while not as extensively developed, are also popular recreation areas. (93,Amador,1:27-31; 93,Amador,4:1-6.)

FERC has recognized the recreation values of these lakes by placing conditions in License 184 to protect, to the degree possible, summer recreation values. PG&E is required to maintain Silver Lake as high as possible during the summer months for recreation; however, at certain times seepage and fish releases may exceed inflow. Caples Lake is maintained as high as possible consistent with operational demands and fish releases.

(93,Amador,2,Exhibit S, FERC License 184.) PG&E's hydrographer testified, that other than the general FERC requirement to maintain the lake levels as high as possible during the summer months, there were no written operational guidelines used by PG&E controlling the drawdown of the lakes. Generally, annual operating decisions are based on snow surveys during the winter months and on projected runoff. (93,T,III,61:14-62:7.) PG&E's operation of the lakes is more fully described in section 6.0, *supra*.

PG&E's witness further testified that the El Dorado Powerhouse has not operated since March 5, 1993, due to a nozzle-body failure. As a result, water has been held in the lakes a little longer than is historically the case since this benefits recreation and water cannot be used at the El Dorado Powerhouse. PG&E has chosen not to repair the powerhouse but to seek a buyer for Project 184. He further testified that an "Asset Sale

Agreement By and Between Pacific Gas and Electric Company and El Dorado Irrigation District" for the sale of the El Dorado Project to EID was executed on September 1, 1995. (95,PG&E,1:1-2.)

During the 1995 hearing, the major objection to the approval of El Dorado applications or petition focused on how such approval might affect future lake levels during the summer recreation at Lake Aloha and Silver, Caples, and Echo, Lakes. This concern is well documented in written comments to the 1992 draft EIR (93, EDCWA,29:6,Comments and Responses to Comments), draft SEIR (95, EDCWA,A: II & III Comments and Responses to Comments), and by several of the protests filed with the Board relative to the El Dorado applications and petition. (SWRCB,1,A-29919, A-29920, A-29921 and A-29922 and Petition 5645(8).) In its environmental documents, EDCWA steadfastly states its proposed project will not impact recreation because they will only take water that is released during the normal hydroelectric operations of Project 184 and that PG&E will not reoperate its upper watershed reservoirs or alter diversions. (93,EDCWA,29:4-2.) In the response to U.S. Forest Service comments in the 1993 final EIR, EDCWA states that it is willing to include a formal agreement in the terms of any water rights permit issued by the Board that would limit operations of Caples, Silver and Aloha Lakes' releases to the PG&E historical operations criteria and lake levels. (93,EDCWA,30.)

The public controversy changed slightly from the 1993 hearing to the 1995 hearing with the proposal by EID to purchase the El Dorado Project. On April 3, 1995, EID prepared a Notice of Exemption (NOE) for the acquisition and continued operation and repair of Project 184. (95,ECDWA,96:Appendix E.) The NOE is based on the statement that EID does not seek to change or expand operations beyond those currently permitted by FERC License 184. However, the NOE does not include an operation plan against which such assurances can be measured. (95,T,I,160:10-161:2.) During

the 1995 hearing, counsel for El Dorado, represented that it was relying upon PG&E's historical operations. (95,T,I,175:1-176:21; 95,T,I,178:2-22.)

Interested parties remain concerned, however. Mr. Passe, a private landowner and descendant of an 1853 family that homesteaded at Silver Lake, stated that he feels that the term "historic" means that there is some record of how things have been operated, and that if there is evidence to ascertain what "historical" means, the Board should use that evidence to develop permit terms. (95,T,III,90:12-20.) Kit Carson Lodge owner, Mr. Pearson, states that El Dorado has failed to show how it can actually operate the project and at the same time preserve the economic and recreation viability. (95,T,II,187:21-24.) Counsel for the Sierra Club states that because "historical operation" defies definition, it is tantamount to a blank check. (95,SCLDF, Closing Memorandum.)

The Board finds that the term "historical" operating conditions as presented by El Dorado is confusing and parameterless. Thus, the Board will include conditions in any permit issued to El Dorado which will prohibit the rediversion of water released from storage for consumptive use purposes if: (1) El Dorado obtains some measure of control over how the lakes are operated and (2) the water levels in Caples and Silver Lakes falls below established levels.²⁰

²⁰ Such a condition cannot have any effect on the manner in which PG&E or a successor in interest operates the hydropower project subject to License 184.

13.5.2 Cumulative Impacts to the American River and Sacramento River and Delta

The hearing record contains considerable testimony regarding the potential impacts of El Dorado's proposed project on: (1) the Bureau's operation of Folsom Reservoir and (2) natural resources of the San Joaquin-Sacramento River Delta and Bay Estuary.

The cumulative impact analysis in the 1993 draft EIR for the El Dorado Project assume the project will decrease the combined supply of water available to the Central Valley Project (CVP) and the State Water Project (SWP) by 22,600 afa. The El Dorado Project was found to contribute to an already existing significant cumulative impact on fisheries and water quality on the lower Sacramento River and Delta. In addition, the draft EIR found that the project would additionally contribute to the cumulative loss of wetland habitat on the American River below Folsom Reservoir.

The final EIR (EDCWA, 29, Chapter 1:6) refers the reader to the draft EIR for the detailed descriptions of the impacts resulting from the proposed El Dorado Project, however, the final EIR ignores the cumulative impacts previously identified in the draft EIR and discussed above. The final EIR finds that the proposed project will reduce flows in the lower American River and Delta by 17,000 afa and have an insignificant impact on fishery resources and water quality. No explanation is provided as to the differences in the findings from the draft EIR. Responding to questions, a witness for El Dorado testified that, to his understanding, relative to the proposed mitigations for impacts in the draft EIR, that El Dorado only committed to mitigate the direct impacts of the El Dorado Project. (93,T,II,155:18-157:11.)

The draft SEIR made the same finding of no significant impact to water quality and fisheries in the lower American River, lower

Sacramento River and Delta resulting from the diversion of 17,000 afa at Folsom Reservoir. (EDCWA,96,III:A-8,IV:C-6.) In comments on the draft SEIR, Board's staff disagreed with the findings of no significance. (SWRCB,1,A-29919, September 21, 1995.) In responding to this comment, the final SEIR states "this disagreement among experts is acknowledged". (EDCWA,100,III-15.)

Testimony in the 1993 hearing by an El Dorado expert stated that, it is very difficult to accurately predict what would happen in the lower American River from such a small change in flow. However, he stated with confidence that the average annual discharge to the lower American River, lower Sacramento River and Delta would decrease by 17,000 afa. The testimony did not speak to the cumulative effect of the proposed project in conjunction with other reasonably foreseeable projects as was examined in the draft EIR. (93,T,I,152:17-22.) A later El Dorado expert witness stated that "the El Dorado Project would not significantly affect the lower American River, lower Sacramento River and Delta fisheries because the associated reduction in streamflow and daily outflow would be minor". However, the same expert witness later stated "the incremental effect of the El Dorado Project on Delta inflow would not be beneficial but would contribute to future and ongoing cumulative effects". The witness further stated that implementation of the El Dorado Project would have to be consistent with existing and future Board standards and criteria designed to protect, maintain, and enhance fishery resources. (93,T,I,156:20-157:7.) An expert witnesses for El Dorado who prepared the 1992 draft and 1993 final EIR testified that they had met with DFG but had not met formally or informally with the National Marine Fisheries or the U.S. Fish and Wildlife Service (USFWS) during the preparation of the EIR. (93,T,II,145:10-146:14.) An expert witnesses for the USFWS testified that the El Dorado Project did pose a potential adverse affect on Delta outflow and that the USFWS was concerned with the

cumulative effects of the project, particularly for the federally listed Delta Smelt. (93,T,III,21:2-23.) Another USFWS witness agreed that, individually, there is a difference in magnitude²¹ and that a specific threshold for the El Dorado Project cannot be specifically identified; however, the opinion of USFWS was that there is a significant and measurable cumulative effect on Delta fish resources. (93,T,III,24:16-26:3.) Dr. Moyle testified that the potential impact on the Delta cannot be dismissed. Although the 1992 draft and 1993 final EIR state that the El Dorado is a small project compared to Delta outflow, Dr. Moyle states that the project is in fact one of many small water projects that affect Delta inflow. Dr. Moyle stated that based on what had been presented in the Bay/Delta hearing from 1987 to 1992, it was clear to him that the combined effects of big and small water projects are factors that have caused the major declines of the fisheries in the Delta. (93,T,IV,43:14-46:7; 93,T,IV,53:12-54:11.)

However, since the above testimony was presented, the Board has adopted and implemented new water quality and flow requirements for the Bay/Delta Estuary contained in the 1995 Bay/Delta Water Quality Control Plan and Water Right Order 95-6. The Board takes judicial notice of these documents for this proceeding. These new standards provide significantly better protection for fish and wildlife resources over the previous standards. They do so at the expense of water supply exported from Bay/Delta estuary. With these new Bay/Delta requirements in place, the concerns related to the cumulative impact expressed at the hearing of this project have been greatly reduced. The Board sees no need to adopt additional terms to address the concerns.

²¹ In this context a "difference in magnitude" refers to a large diversion such as a diversion by a unit of the CVP and the 17,000 afa which El Dorado seeks to divert.

The Bureau testified that it is convinced that the approval of the applications or petitions will have an adverse impact on the Bureau's existing rights and interfere with the operation of the CVP. (95,USBR,1.) An expert witness for Westlands Water District (WWD) testified that in most critically dry, dry, or below normal years, the entire amount proposed for diversion by El Dorado will result in a direct acre-foot for acre-foot impact on CVP supplies. The witness stated that although 17,000 af is a relatively small number compared to the total storage in Folsom Reservoir, the times when that water is not available is likely to affect CVP operations when it is most needed, in critical and dry years. (95,WWD,1:1-3.) El Dorado acknowledges that before it can use Folsom Reservoir for the direct diversion or rediversion of water, it will need a Warren Act contract with the Bureau. (95,EDCWA,93,7.)

The Board recognizes that granting water rights to El Dorado, an in-basin water user, will reduce the Bureau's ability to export water. However, this is what was intended by the Legislature when it passed the watershed protection statutes. (Water Code § 11460 et seq.) Any significant water supply impacts to the Bureau's export customers are overridden by the Board's legal requirements to reallocate water supplies to the watershed of origin for CVP projects pursuant to the watershed protection statutes.

13.5.3 Impacts of El Dorado's Proposed Project on State and Federally Listed Species or Species of Special Concern

El Dorado seeks to appropriate water for a specific place of use or service area. The construction of pipelines and related works for delivering water to the service area will have direct impacts on the environment. In addition, water supplied to the proposed place of use will have indirect effects on the environment.

State or federal listed species or species-of-special concern, or the habitats in which those species are found, will be affected by water delivered to the proposed place of use. In the 1992 draft EIR and 1993 FEIR for the EDCWA Water Program and EID El Dorado Project, it was found that the preferred Alternative (1a) would have significant secondary adverse and unavoidable growth inducing impacts such as: a substantial increase in population (human), conversion of land suitable for agricultural uses, conversion of vacant land and timberland to urban use, and the loss and degradation of existing vegetation and wildlife habitat. (93,EDCWA,30,1-3; 93,EDCWA,29,1-4.) The draft EIR discloses that the projected growth will result in the conversion of approximately 24,000 acres of vacant and agricultural land to various residential uses within the western service area of EID. An additional 40,000 acres of existing open space is projected for conversion to developed land. The draft EIR states that the potential exists for the substantial loss or degradation of the following biological resources:

1. Sensitive biological communities, particularly vernal pools riparian areas, other wetlands, Pine Hill chaparral, and oak woodlands;
2. Special-status plants, invertebrates, and amphibians in vernal pools or other seasonal wetlands; and
3. Special-status plants in the Pine Hill chaparral. Some species may be designated as threatened or endangered under the federal or state Endangered Species Acts as a result of development. (93,EDCWA,30,9-20.)

The final EIR declares that the water program is considered growth inducing because providing water to the EID service area would remove an obstacle to growth. A correction in the final EIR revises a section pertaining to population growth by stating

that "projected growth is expected to occur if the water program is implemented". (93,EDCWA,29,5-7.) The adverse secondary impacts associated with growth which are projected to occur in the EID service area include conversion of the vacant land and the habitat loss discussed above. The final EIR further states that these secondary impacts and mitigation measures are evaluated only at a general level in the present EIR and will be evaluated more thoroughly in an upcoming EIR for the proposed El Dorado County 2010 General Plan. (93,EDCWA,29,1-5.)

In the final SEIR for the El Dorado water program, the findings for the new preferred Alternative (1b) were the same as discussed in the previously certified 1993 EIR for Alternative (1a). The final SEIR states that the secondary impacts and mitigation measures were evaluated in detail in the draft EIR on the proposed El Dorado County 2010 General Plan. (95,EDCWA,96-A, ES:3-4.) The final SEIR does include general mitigation and monitoring recommendations specific to the El Dorado Project water delivery infrastructure segments and are listed in Table V-1, ES-31 through ES-42. (95,EDCWA,96-A.)

Considerable expert testimony was presented regarding the proposed project's impacts to state listed and federal candidate species and their habitats. SCLDF presented two expert witnesses Drs. Clark and Skinner. (95,SCLDF,GC-1,MS-1.) Dr. Skinner represented the California Native Plant Society (CNPS). CNPS played an active role on the El Dorado County Planning Department Rare Plant Advisory Committee. The Committee attempted to establish natural preserves for eight rare plant species that are found chiefly on "gabbro" soils in the central Sierra foothills.

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sites. In 1992 El Dorado County held public workshops concerning the report. The County Board of Supervisors approved in principal four sites but did not consider funding to establish or maintain the preserves. (95,SCLDF,MS-2:18870.)

The final SEIR also discusses how direct project impacts to the listed species may be handled in the future analysis for the proposed water delivery infrastructure contemplated for the El Dorado Project. The mitigation proposed is at the programmatic level. The measures that were adopted by EDCWA and EID are to be incorporated in subsequent project-specific designs and related environmental assessments. Such measures included surveys for threatened and endangered plants. (95,EDCWA,96-C; 95,EDCWA,96-B; 96, EDCWA,96-B:3.) No consideration was given, however, to the unavoidable adverse impacts to rare plants resulting from the secondary growth-inducing impacts of the water program. The final SEIR states that these impacts were to be addressed by El Dorado County when approving its 2010 General Plan. In certifying the final SEIR and adopting its statement of overriding consideration, EDCWA stated that the mitigation measures identified for the significant secondary growth-inducing impacts identified in the 1992 draft EIR and 1993 final EIR have been or can and should be adopted by the County. (EDCWA,96-B.)

In 1995 the Bureau and USFWS held a series of hearings and workshops to determine if groups of species might have "critical needs" with respect to interim reauthorizations for 67 water contracts by the CVP. "Critical needs" were considered to exist if authorization of water contracts for a period of three to five years would lead to extinction or might preclude the recovery of the species in question. On August 3, 1995, of the eight sets of species considered, only the El Dorado assemblage of gabbro endemic plants met the "critical needs" criteria. This meant that supplying water for development in western El Dorado County

could lead to the extinction or preclude the recovery of one or more of the rare plants occurring on the gabbro soils complex during the next three to five years. (95,SCLDF,GC-2:2-3.)

On January 23, 1996, the El Dorado County 2010 General Plan was adopted by the El Dorado County Board of Supervisors.

(95,SWRCB,21.) The General Plan includes Objective 7.4.1: Rare, Threatened, and Endangered Species. The objective states: "the County shall protect State and Federally recognized rare, threatened, or endangered species and their habitats consistent with Federal and State laws". According to the glossary to the General Plan "an Objective is a specific end, condition or state that is an intermediate step toward attaining a goal. It should be achievable and, when possible, measurable and time-specific". In addition to Objective 7.4.1., a series of policies were adopted to guide future decision making. The policies indicate a clear intent to protect rare, threatened, or endangered species and their habitats within El Dorado County. Selected examples of these policies follow:

Policy 7.4.1.1

The eight sensitive plant species known as the Pine Hill endemics and their habitats (specifically identified gabbro and serpentine soils) shall be protected in perpetuity through the establishment of four preserve sites. These preserve sites are integrated into the County's overall open space plan. Components of this program include but are not limited to:

- A. Coordination with the DFG and USFWS, and other appropriate agencies.
- B. Development of mechanisms for the establishment of preserve site(s) such as clustered development, transfers of development rights, mitigation banking, and conservation easements.
- C. Development of programs with the DFG to fund the purchase of fee title acquisition, conservation easements, and operations and maintenance of preserve sites.

D. Establishment of guidelines for development of site-specific management, maintenance, and monitoring plans for preserve sites that will be held in private ownership.

Policy 7.4.1.2

Private land for preserve sites will only be purchased from willing sellers.

Policy 7.4.1.5

Species, habitat, and natural community preservation/conservation strategies shall be prepared to protect special status plant and animal species and natural communities and habitats when discretionary development is proposed on lands with such resources unless it is determined that those resources exist, and either are or can be protected, on public lands or private Natural Resource Lands. (95, SWRCB, 21, Chapter 7:130-131.)

Of concern was the fact that a water right granted to El Dorado by the Board will spur discretionary development threatening these listed species and their habitats. (95, SCLDF, GS-2:6; 95, SCLDF, MS-1:8-9; 93, T, II, 210:10-25; 93, T, IV, 49:11-25; 95, T, I, 33:4-34:14; and 95, DFG, Closing Argument of Protestant, III, 11:1-12:19.)

The County is the primary agency responsible for land use planning and for approving development consistent with the plan. Consistent with its responsibilities, the County adopted General Plan Objective 7.4.1 to address state and federal listed species of concern and establishes a process to protect species endangered by development within the County and the proposed place of use. The Board shares the concerns expressed regarding the need to protect endangered species and without the policies adopted by the County, it is doubtful the Board could approve the water rights being sought by El Dorado. Because (1) the County is the agency primarily responsible for development within the County; and (2) the County has established a process to protect the endangered species from secondary growth impacts, it would be

inappropriate for the Board to adopt additional conditions as a part of any water right permit to protect the endangered species.

However, with regard to the direct environmental impacts which may result from the construction of pipelines and related works for delivering water to the service area, any water right permit issued to El Dorado should contain conditions to protect, conserve, avoid, or mitigate potential adverse impacts to the environment.

14.0 STATE FILED APPLICATION 5645(8) CAN BE ASSIGNED TO EL DORADO

14.1 State Filed Application 5645

State filed Application 5645 was filed in 1927 to appropriate water for irrigation and domestic uses. The place of use is for 210,000 acres within Township 8 North to Township 11 North, inclusive; and Range 8 East to Range 13 East, inclusive; a place of use mostly within El Dorado County and EID's existing service area. The application includes a point of direct diversion and diversion to storage at a point above the existing Folsom Reservoir not far below the City of Coloma. The maximum rate of direct diversion is 700 cfs and the maximum amount that could be diverted to storage in any one year is 70,000 af.

14.2 The California Water Plan

Although the Department of Water Resources has published numerous updates, the 1957 California Water Plan is the basic State Water Plan. The plan states in part:

"The water development works described in this chapter and shown on the plates accompanying this bulletin demonstrate one means believed practicable of accomplishing the objectives of the California Water Plan in each area of the State, based on presently available knowledge. As knowledge increases, as technology improves, as conditions change through the years, and as future patterns of development become more easily discernible, more

suitable alternatives to any future or features herein discussed are likely to be found. It is the intention that as the time approaches for construction in any given area further studies will be made to determine the most feasible solution in the light of conditions then obtaining. That solution may depart considerably from the Plan now conceived."

The objectives of the plan for the American River include development of land, water, power, fish, wildlife, and recreation resources to the highest practicable extent. (P. 113.) The plan identifies numerous works that could be used to develop South Fork American River water for beneficial use. (Pp. 112-116, and sheets 8A of 26.) State filed applications retain their force and effect even though subsequent State Water Plans may envision the development of water and related facilities in a manner that differs from the state filing. (Water Code § 10007.)

**14.3 Approval of Changes in Points of Diversion Required By
Petition for Assignment of SFA 5645(8)**

El Dorado's petition proposes to divert water to storage at Lake Aloha and Caples and Silver Lakes, points far upstream in the American River System from those specified in SFA 5645 or in the State Water Plan. However, a point of diversion can be changed so long as: the change does not initiate a new right nor injure other lawful users of water. (23 CCR 791; *Johnson Rancho Water District v. State Water Resources Control Board* (1965) 235 Cal.App.2d 863.) The combination of the early priority of SFA 5646 and a limitation on the season of diversion to the times when unappropriated water is available will assure that the petitioned changes will not injure other legal users of water. Thus, the Board finds that the changes from the points of diversion to those in the petition for assignment will not initiate a new right or injure other lawful users of water.

14.4 The Petition for Assignment is Not in Conflict With the California Water Plan or With Water Quality Objectives

As discussed in the preceding sections, the authors of the California Water Plan intended that the plan be no more than a general planning document and that more feasible plans would have to be developed at a later date. Thus, El Dorado's petition cannot be in conflict with the State Water Plan. Although, there is no conflict with the plan, it is important that the petition seeks to appropriate water for purposes of use and a place of use that is consistent with the purpose for which Application 5645 was initially filed. Fundamentally, Application 5645 was filed to assure a priority claim on the right to divert and use water from the South Fork American River to supply the future needs of El Dorado County and some adjoining areas. In general, the Board should look favorably upon petitions for release of assignment of state filed applications so long as the petitioner seeks to appropriate water for purposes of use and places of use consistent to the state filed application.

By virtue of the operation of El Dorado's proposed project, there can be no effect on water quality upstream of Folsom Reservoir. That is, PG&E's lakes will be operated as they have been historically and El Dorado will only divert water from the river at Folsom Reservoir. Below Folsom Reservoir, the Bureau and the Department are required to operate the units of the CVP and the SWP in a manner which assures that water quality objectives in the Sacramento River and the Sacramento-San Joaquin Delta are protected. (SWRCB, Decision 1485; Order 95-6.) Thus, approval of El Dorado's petition for assignment of SFA 5645(8) is not in conflict with established water quality objectives.

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14.5 Amador and Alpine Counties Will Not be Deprived of Water Necessary For Their Development

Water Code section provides that:

"No priority . . . shall be released or assignment made of any application that will, in the judgement of the board, deprive the county in which the water covered by the application originates of any such water necessary for the development of the county."

The water which El Dorado seeks to appropriate to storage in Caples and Silver Lakes originates in Amador and Alpine Counties. Previously referenced testimony by protestants to El Dorado's proposed project have indicated that both Amador and Alpine Counties have a need for water to support domestic, recreation, and commercial uses associated with the lakes. Clearly, the Board cannot approve El Dorado's petition for partial assignment of Application 5645(8) unless a condition is adopted expressly reserving to these counties the right to appropriate water necessary for their development. The Board will adopt such a condition. El Dorado must understand that all of the water which it may develop and use under a partial assignment of SFA 5645(8) from Caples and Silver Lakes is subject to reduction by water projects that may be developed in these counties. Accordingly, subject to the limitations discussed in this section, SFA 5645(8) can be assigned to El Dorado.

15.0 EL DORADO'S PETITION FOR PARTIAL ASSIGNMENT OF APPLICATION 5645(8) FOR THE DIRECT DIVERSION OF WATER AT FOLSOM LAKE SHOULD BE CONDITIONALLY APPROVED

El Dorado has a need for water. (Section 12.0, *supra.*) Unappropriated water is available for El Dorado's petition for partial assignment of SFA 5445(8). Unappropriated water is available for diversion to storage at Lake Aloha and Caples and Silver Lakes from November 1 through July 31, and for direct diversion at Folsom Reservoir from November 1 through July 31 of the succeeding year. (Section 5.0, *supra.*) The Board finds that subject to appropriate conditions to protect the counties of

origin, public interest, and the environment the petition for partial assignment of SFA 5645(8) to directly divert water from Folsom Reservoir should be approved. (Sections 4.0, 9.0, 10.0, 13.0, and 14.0, *supra.*)

16.0 EL DORADO'S PETITION FOR PARTIAL ASSIGNMENT OF APPLICATION 5645(8) TO APPROPRIATE WATER TO STORAGE AT LAKE ALOHA AND CAPLES AND SILVER LAKES, AND TO REDIVERT SUCH WATER AT FOLSOM RESERVOIR SHOULD BE CONDITIONALLY APPROVED

El Dorado has no more control over the lakes than do Alpine and Amador Counties. The counties' petitions for assignment of SFA 5645 were denied because they could not demonstrate an essential requisite for the appropriation of water, i.e., any means or prospect of exercising control over the water sought for appropriation. (Section 9.2.) El Dorado, however, has an agreement to purchase PG&E's El Dorado Project under License 184. Although the contract is subject to the approval of the PUD and FERC, it provides some basis for an expectation that El Dorado may acquire the right to exercise control over the water sought for appropriation. Accordingly, the Board will conditionally approve El Dorado's petition for partial assignment of Application 5645(8) to divert water to storage at Lake Aloha and Silver and Caples Lakes and to redivert water released from storage at the lakes to Folsom Reservoir. The permit issued to El Dorado shall include a condition prohibiting El Dorado from diverting any water to storage at Lake Aloha and Silver and Caples Lakes and from rediverting any water released from storage at the lakes until they have demonstrated to the satisfaction of the Board that they have some real measure of control over the manner in which Lake Aloha and Caples and Silver Lakes are operated. Further, by this decision the Board will delegate this determination to the Chief, Division of Water Rights. The approval should also be subject to conditions to protect the counties of origin, public interest, and the environment. (Sections 4.0, 9.0, 10.0, 13.0, and 14.0, *supra.*)

17.0 TERM 91 SHOULD NOT BE MADE APPLICABLE TO EL DORADO'S
PETITION FOR PARTIAL ASSIGNMENT OF STATE FILED APPLICATION
5645(8)

Term 91 is a permit condition included in permits for more than 1 cfs or for more than 100 afa of storage for diversions from the Sacramento, Cosumnes, Mokelumne, Calaveras, or San Joaquin River Basins or the Sacramento-San Joaquin Delta (Delta) when hydraulic continuity with the Delta exists or is likely to exist. The American River is a part of the Sacramento River system. The purpose of the term is to protect persons claiming paramount rights to divert water from the Delta and the water quality upon which such rights depend and to protect fish and wildlife.

(SWRCB, Decision 1629, p. 23.) In general, the term prohibits the diversion and use of water when the Bureau or the Department is making releases of stored or imported water from units of the CVP or the SWP to maintain water quality in the Delta. The effect of Term 91 is to reduce the months of each year during which a permit holder can divert water.

The Board previously imposed Term 91 on the assignment of a state filing when the Board approved the assignment of state filed Application 5645, among others, to El Dorado when the SOFAR project was approved. (SWRCB, Decision 1587.) The decision does not include any analysis or explanation for why the term was imposed. In its fairly recent approval of the Los Vaqueros Project the Board states, in part, that:

"Under Term 91, water is not available for diversion when satisfaction of inbasin entitlements requires that the CVP and the State Water Project release supplemental Project water. Inbasin entitlements include senior water rights and water required by the SWRCB to maintain water quality and fish and wildlife. Supplemental Project water includes water imported to the basin and water released from the CVP and State Water Project storage which exceeds export diversions, carriage water in the Delta, and deliveries of project water within the basin." (SWRCB, Decision 1629.)

This language indicates that Term 91 should apply to condition all new junior diversions of water when the satisfaction of inbasin entitlements requires that the CVP and SWP release supplemental project water. Nevertheless, the circumstances surrounding approval of the applications for the Los Vaqueros Project can be readily distinguished from state filed applications under consideration in this decision.

The state filed application for the Los Vaqueros Project (A-25516) is junior to the permitted applications under which the Bureau and the Department are operating the CVP and the SWP. Under this circumstance, protecting the holders of more senior or earlier rights required the application of Term 91. By contrast, state filed Application 5645 is senior to many if not most of the permitted applications under which the Bureau and the Department operate the CVP and the SWP. Further, Water Code section 11128 provides that the watershed of origin protection shall apply to Bureau and Departmental operations of units of the CVP, as defined by the Water Code, irrespective of the priority of the permitted applications under which the projects are operated. Finally, at this time, it would be inequitable to apply Term 91 to Application 5645, because the Board has not imposed Term 91 on many permitted applications which are junior to Application 5645. Notwithstanding the foregoing; however, the Board will reserve jurisdiction, via the language of standard condition 80, to change the season of diversion to conform to later findings of the Board concerning the availability of water and the protection of beneficial uses of water in the Sacramento-San Joaquin Delta and the San Francisco Bay.

18.0 MANDATORY CEQA FINDINGS

For the purpose of considering whether to approve the proposed El Dorado project, the Board is a responsible agency under CEQA. (Public Resources Code section 21069.) When approving a project, a responsible agency must: (1) adopt conditions to avoid or

mitigate significant adverse environmental project effects within the scope of its responsibility; (2) find that another agency has the responsibility and jurisdiction and that such agency can or should avoid or mitigate the adverse effect; or (3) adopt a statement of overriding consideration. (Public Resources Code sections 21002.1, 21081; 14 CCR sections 15091 and 15093.)

EDCWA, as the lead agency, in cooperation with EID prepared an EIR and supplemental EIR (SEIR) analyzing the project. On October 23, 1995, EDCWA certified the final SEIR and approved the proposed project. (93,EDCWA,29; 95,EDCWA,96a.) The Board has reviewed and considered the final EIR and SEIR prepared by EDCWA.

18.1 Significant Effects Identified in the Supplemental FEIR

The final SEIR identifies the following significant unavoidable impacts from the project:

1. Short-term construction related emissions: Ozone Precursor, Sox, and PM10;
2. Substantial increase in population;
3. Conversion of land identified for its potential to support agriculture uses;
4. Conversion of vacant land and timberland to urban use;
5. Loss and degradation of existing vegetation and wildlife habitat; and
6. Increase in Ozone Precursor Emissions.

18.2 Significant Effects Within the Jurisdiction of the Board
Acting as a responsible agency when approving applications or petitions for assignment of state filed applications to appropriate water, the Board does not have responsibility to regulate significant effects 1, 2, 3, 4, and 6. Depending upon particular circumstances, the Board may have responsibility over the fifth effect, i.e, the loss and degradation of existing vegetation and wildlife habitat.

18.3 Measures Adopted to Avoid or Mitigate for the Loss and Degradation of Existing Vegetation and Wildlife Habitat

As lead agency, EDWCA relied upon El Dorado County to adopt a program to mitigate the project's growth-inducing effects of the proposed project, including secondary effects on vegetation and wildlife habitat. The Board finds that El Dorado County is the primary agency responsible for: (1) land use planning, (2) approving development consistent with the county's general plan, and (3) mitigating the effects of development resulting from approved development within the county. Thus, the Board will not adopt conditions to address these secondary environmental effects.

The Board's approval of the proposed project may have some direct effect on existing vegetation and wildlife habitat. These effects may result from the pipeline which will be constructed to deliver water diverted at Folsom Reservoir to the proposed place of use. Conditions 22 and 23 of this decision will avoid or mitigate the effects to vegetation and wildlife habitat which may result from the construction of the pipeline.

19.0 CONCLUSIONS

Application 30204 by Kirkwood PUD to appropriate water from Caples Lake for consumptive use should be denied. (Section 9.1, *supra*.) Application 30219 and the petition for partial assignment of SFA 5645(9) by Alpine County for the direct

diversion and use of water from Caples Lake should be denied. (Section 9.2, *supra.*) Application 30218 and the petition for partial assignment of Application 5645(10) by Amador County for the nonconsumptive use of water for recreation in Silver Lake should be denied. (Section 9.3, *supra.*) The petition for partial assignment of Application 5645(11) by Kirkwood, Inc., should be denied. (Section 8.0, *supra.*) The petition for partial assignment of Application 5645(8) by El Dorado to appropriate water by direct diversion at Folsom Reservoir and to divert water to storage at Lake Aloha and Caples and Silver Lakes and to redivert water released from storage at Folsom Lake should be approved subject to conditions to protect the counties of origin, the public interest, and the environment. No special operating condition will be imposed upon El Dorado's rediversion of water from Lake Aloha because this lake is drawn upon first in order to maintain Caples and Silver Lakes at higher levels as long as possible; however, jurisdiction will be reserved to consider whether such a condition should be imposed at a later date. Applications 29919, 29920, 29921, and 29922 by El Dorado should be denied. These applications duplicate the water sought by El Dorado in its petition for partial assignment of Application 5645(8).

20.0 ORDER

NOW THEREFORE IT IS HEREBY ORDERED that the following applications and petitions for assignment are denied:

1. Petition for partial assignment of state filed Application 5645(11) by Kirkwood, Inc.;
2. Application 30204 by Kirkwood PUD;
3. Application 30219 and petition for partial assignment of state filed Application 5645(9) by Alpine County;

4. Application 30218 and petition for partial assignment of state filed Application 5645(10) by Amador County; and
5. Applications 29919, 29920, 29921, and 29922 by El Dorado.

IT IS FURTHER ORDERED that El Dorado's petition for partial assignment of state filed Application 5645(8) is approved subject to standard permit terms 1, 2, 6, 10, 11, 12, 13, 80, and 119 and special conditions. Any portion of El Dorado's petition for partial assignment of SFA 5645(8) not expressly approved by this order is denied. The assignment of SFA 5645(8) shall be subject to the following special conditions:

1. All water appropriated under this approval is subject to the county of origin preferences as required by Water Code section 10505. Any water appropriated under this approval is subject to the right of Amador and Alpine Counties to obtain appropriative rights to water necessary for their development from the water originating in their respective counties.²²

Permittee shall make up to 200 afa of storage available in Silver and Caples Lakes for existing and future uses in the immediate vicinity of the lakes in the counties of origin. This condition does not require the Permittee to obtain the approval of PG&E or pay PG&E for the right to store water in the lakes on behalf of applicants in the counties of origin. In the event that Permittee obtains ownership of PG&E's El Dorado Hydroelectric Project, Permittee shall make up to 200 afa of storage available in Silver and Caples Lakes without cost to applicants in the counties of origin.

²² This reservation does not and cannot grant water right applicants in the counties of origin the right to divert and use water directly diverted or diverted to storage under PG&E's rights at Caples and Silver Lakes.

2. The purposes and places of use for the water appropriated under this approval shall be limited to domestic, municipal, and irrigation within the authorized place of use.
3. The Place of Use is located within the Townships 8 through 11 North, inclusive, and Ranges 8 through 13 East, inclusive, as defined in Application 5645; and within the service area of El Dorado Irrigation District (excluding service zones 9, 14, and 15) and lands being within Township 12 North and Ranges 9 and 10 East, as delineated on the maps entitled "El Dorado County Water Agency and El Dorado Irrigation District Place of Consumptive Use", and "Lands within El Dorado Irrigation District" on file with the Board.
4. No water shall be diverted under this approval until El Dorado has installed devices, satisfactory to the Board, which are capable of measuring instantaneous flow diverted daily from Folsom Reservoir, to be reported annually in operation reports to the Board. The report will include daily and monthly quantities reported in acre-feet diverted from Folsom Reservoir, and the quantity in acre-feet released from and remaining in each of Caples Lake, Silver Lake and Lake Aloha at the end of each month. The report shall also, on a monthly basis, account for any water diverted from Folsom Reservoir under any other rights, including contracts with the U.S. Bureau of Reclamation or others. Streamflows above and below the El Dorado Canal diversion at Kyburz and quantities diverted into the El Dorado distribution headworks will also be included in these annual reports. The following gages are approved to be used for measuring water released from Caples lake,

Silver Lake, and Lake Aloha, and for computing water available for direct diversion from Folsom Reservoir:

GAGE NAME	USGS IDENTIFICATION NUMBER	TYPE OF RECORD
CAPLES LAKE	USGS 11436900 PG&E A5	RESERVOIR STAGE RECORDER ON CAPLES LAKE
CAPLES LAKE OUTLET NEAR KIRKWOOD	USGS 11437000 PG&E A6	RATED STREAMFLOW RECORDER BELOW CAPLES LAKE OUTLET
SILVER LAKE	USGS 11435900 PG&E A8	RESERVOIR STAGE RECORDER ON SILVER LAKE
SILVER LAKE OUTLET NEAR KIRKWOOD	USGS 11436000 PG&E A9	RATED STREAMFLOW RECORDER BELOW SILVER LAKE OUTLET
LAKE ALOHA	PG&E A1	RESERVOIR STAFF GAGE ON ALOHA LAKE
PYRAMID CREEK AT TWIN BRIDGES	USGS 11435100 PG&EA40	RATED STREAMFLOW GAGE RECORDER REPRESENTING OUTFLOW FROM ALOHA LAKE
SOUTH FORK AMERICAN RIVER NEAR KYBURZ (RIVER ONLY)	USGS 11439500 PG&E A12	RATED STREAMFLOW GAGE BELOW EL DORADO DIVERSION DAM
SOUTH FORK AMERICAN RIVER NEAR KYBURZ (TOTAL FLOW)	USGS 11439501 PG&E A11	RATED STREAMFLOW GAGE IN EL DORADO CANAL BELOW EL DORADO DIVERSION DAM
EL DORADO IRRIGATION DISTRICT DELIVERY	PG&E A18	RATED STREAM GAGE IN EID CANAL MEASURING PG&E DELIVERIES TO EID
FOLSOM LAKE	EID'S EL DORADO HILLS WATER TREATMENT PLANT	PUMPED WATER CALCULATED FROM FLOW METER MEASUREMENT

5. No water shall be used under this approval until all necessary federal, state, and local approvals have been obtained.
6. The total quantity of water to be diverted to storage at Lake Aloha, Caples and Silver Lakes shall not exceed 32,931 acre-feet per annum. The Permittee is limited to a maximum

rediversion of 17,000 acre-feet of water stored in the lakes in any one year. The maximum quantity of water represents the total quantity of supplemental water from PG&E sources which may be rediverted under this permit.

7. No water shall be diverted to storage for consumptive use until El Dorado: (1) has an executed agreement with PG&E which gives El Dorado a measure of control over the operation of Lake Aloha and Caples and Silver Lakes; (2) a copy of such agreement has been provided to the Chief, Division of Water Rights; and (3) the Chief, Division of Water Rights has advised El Dorado in writing that he finds that the agreement provides El Dorado with sufficient control over water which would be diverted to storage to accomplish an appropriation of water within the meaning of the California Water Code.
8. The water appropriated by direct diversion shall be limited to the quantity which can be beneficially used and shall not exceed 156 cubic feet per second to be diverted from Folsom Reservoir in any one year from November 1 through July 31.
9. The total quantity of water to be diverted by direct diversion at Folsom Reservoir during any one year shall not exceed 15,000 acre-feet, and will be limited to water originating in the South Fork American River upstream of the El Dorado Canal diversion near Kyburz.
10. The total quantity of water to be diverted in any one year by direct diversion and rediversion of stored water shall be limited to 17,000 acre-feet.

11. The water appropriated at Lake Aloha shall be limited to the quantity which can be beneficially used and shall not exceed 5,350 acre-feet per annum to be collected from November 1 through July 31.
12. The water appropriated at Caples Lake shall be limited to the quantity which can be beneficially used and shall not exceed 21,581 acre-feet per annum to be collected from November 1 through July 31.
13. The permittee shall maintain the release, bypass, and lake capacity requirements imposed by FERC License 184, Exhibit S. Jurisdiction is reserved to adopt conditions to protect inlake and instream beneficial uses of water if permittee obtains ownership of PG&E's El Dorado Hydroelectric Project and abandons the operation of the licensed hydroelectric project. Permittee is required to put the Board on notice at such time as it commences any proceeding to abandon the project. Upon abandonment, Permittee shall continue to operate the components of the hydroelectric project as if the FERC license requirements for protecting inlake and instream beneficial uses were still in effect. Permittee shall continue such operations until such time as the Board exercises its reserved jurisdiction and adopts conditions to protect in lake and instream beneficial uses of water. In exercising its reserved jurisdiction, no condition will be adopted without notice to El Dorado and other interested persons and the opportunity for a hearing.
14. To protect Caples Lake's summer recreational uses, El Dorado shall not redivert water released from the lake for consumptive use, excluding nondiscretionary releases required by FERC License 184 or the State Division of Safety of Dams, unless end-of-month (EOM) lake levels are at or

above the levels in the following schedule, which reflects historic average EOM lake levels attributed to PG&E's post-1985 operations under FERC License 184 during defined water-year types:

Caples Lake

Minimum End of Month Lake Level Requirements

WATER-YEAR TYPE	JUNE EOM GAGE HEIGHT (FEET)	JULY EOM GAGE HEIGHT (FEET)	AUGUST EOM GAGE HEIGHT (FEET)	LABOR DAY (SEPTEMBER) EOM GAGE HEIGHT (FEET)
CRITICAL	45.9	44.8	43.1	43.1
DRY	56.0	55.9	48.2	48.2
BELOW NORMAL	62.0	61.6	54.8	54.8
ABOVE NORMAL	62.0	62.0	52.6	47.0
WET	62.0	62.0	52.6	47.0

15. The water appropriated at Silver Lake shall be limited to the quantity which can be beneficially used and shall not exceed 6000 acre-feet per annum to be collected from November 1 through July 31.
16. To protect Silver Lake's summer recreational uses, El Dorado shall not redivert water released from the lake for consumptive use prior to Labor Day of each year, excluding nondiscretionary releases required by FERC License 184 or the State Division of Safety of Dams.
17. Conditions 14 and 16 seek to assure that the use of water from Caples and Silver Lakes for consumptive use purposes will not have the effect of increasing the releases from the lakes prior to Labor Day of each year, consistent with the

nondiscretionary obligations imposed upon the operations of these lakes by FERC License 184. Under Water Code section 1394, the Board reserves jurisdiction over this permit, for a period of ten years after El Dorado obtains some measure of control over the water impounded in the lakes, to revise these conditions or to promulgate other conditions which may more effectively assure the maintenance of the levels of these lakes as high as possible through Labor Day consistent with historical lake operation. Either El Dorado or other interested persons having an interest in how the lakes are operated may petition the Board to revise the tables or propose other conditions for the maintenance of lake levels; however, the proponent of such changes shall have the burden of producing evidence to support the requested changes. No changes will be made to these conditions without notice to El Dorado and other interested persons and the opportunity for a hearing.

18. Construction work shall begin within five years of the date of this permit and thereafter be prosecuted with reasonable diligence.
19. Construction work shall be completed by December 31, 2006.
20. Complete application of the water to the authorized use shall be made by December 31, 2015.
21. The Board shall have continuing authority to revoke all or any portion of the partial assignment of Application 5645(8), if El Dorado fails to diligently construct and place water to beneficial use in accordance with conditions 18, 19, and 20. All or any portion of the revoked assignment shall return to the Board and be available for the release or assignment to El Dorado or others consistent with the requirements of Water Code sections 10500 et seq.

22. Prior to the finalization of the route for the pipeline/water delivery system identified in the final SEIR, EID shall conduct, in consultation with the DFG and USFWS, reconnaissance surveys for state and federally listed species-of-special concern. The surveys shall, in part, guide the determination of alternatives for the final routes for the pipeline/water delivery system. The survey protocols shall be reviewed and approved by DFG. The final report shall be prepared from the results of the plant/animal surveys. The final report shall identify necessary mitigation and monitoring measures to conserve and protect the species identified to occur within the final routes of the pipeline/water delivery system. The final report shall be submitted to the Board, DFG, and USFWS for review. The final reports shall constitute the analysis and mitigation/monitoring program for the subsequent environmental assessments pursuant to the El Dorado Project.
23. The Board adopts and incorporates by reference into any permit issued to EID the mitigation and monitoring measures adopted by EDCWA and EID pursuant to the final SEIR for the El Dorado Project and listed in Tables ES-1, revised (page ES-5 through ES-27 and Table V-1, revised (page ES-31 through ES-43) specifically mitigation measures B-3, D-1 through D-19, F-9, F-10, F-16, and H-1 through H-12. (95 EDCWA/EID 96-A.)
24. El Dorado shall enter into a Warren Act Contract with the Bureau for the use of Folsom Reservoir as proposed in its El Dorado Project. No water shall be diverted under this approval until the contract is executed and a copy delivered to the Chief, Division of Water Rights.

requested condition. No condition will be approved without notice to El Dorado and other interested persons and the opportunity for a hearing.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a decision duly and regularly adopted at a meeting of the State Water Resources Control Board held on **OCTOBER 02 1996**

AYE: John P. Caffrey
John W. Brown
Marc Del Piero
James M. Stubchaer
Mary Jane Forster

NO: None

ABSENT: None

ABSTAIN: None



Maureen Marché
Administrative Assistant to the Board

1996 UPDATE

to the

1991 Water Supply and Demand Report

EL DORADO IRRIGATION DISTRICT

APPROVED BY EID BOARD

May 29, 1996

EXHIBIT F

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WATER SUPPLY & DEMAND REPORT - UPDATE 1996

1.0 SUMMARY

Demand: Total actual water demand in 1995 decreased 3,908 acre feet from 1994. The 30,062 acre feet total actual demand in 1995 represents use of 72% of the District's firm yield supply.

District water demands in 1995, were met by the following sources, in acre feet:

Sly Park 19,602 Forebay 5,402 Folsom 4,357 Crawford 700

Metered consumption also decreased in 1995 to 25,373 acre feet, down from 26,307 acre feet used in 1994. The most notable change in 1995 water demand was the 15.6% of unaccounted-for water, down 7% from 1994.

Supply: All four of the District's supply sources were relied upon in 1995. Because of several breaks in the El Dorado Canal, the Forebay supply was reduced to 5,402 acre feet. Sly Park and Folsom Lake were operated to make up the difference, with 19,602 acre feet taken from Sly Park and 4,357 acre feet (an all time high) diverted from Folsom.

1996 Water Availability: The system firm yield supply remains at 41,700 acre feet, unchanged from 1995. Total potential demand is calculated to be 36,800 acre feet. This results in 4,900 acre feet of unallocated supply. Using 0.6 acre feet per equivalent dwelling unit (EDU) as the basis, this 4,900 acre feet of unallocated supply equals 8,166 EDUs.

2.0 BACKGROUND

In September 1991 a four-member Water Advisory Group issued the initial Water Supply and Demand Report which presented that group's study of District supply and demand from 1984 through 1990. This 1996 Update, like the annual updates before it, documents District water demand for previous years as well as reports proposed system firm yield supply adjustments, if any. The updated reports are based on actual prior year water use by District customers, established Board policy, analyses by District staff, and input from the community. The format of this update is generally consistent with that of the initial report.

3.0 CONCLUSIONS

Following are the conclusions which have been reached regarding the District's supply and demand condition as of the end of 1995. The bases for these conclusions are presented in Section 4.0 of this report.

3.1 Conclusions Regarding Supply

- (a) The current system firm yield is 41,700 acre feet, an amount equal to that determined in the 1995 Update Report.
- (b) The potential system firm yield also remains unchanged from the 44,100 acre feet set in the prior year's report.
- (c) Sly Park Reservoir on December 31, 1995 held 27,878 acre feet of water which is 68% of capacity. The reservoir filled and began spilling on February 15, 1996.

WATER SUPPLY & DEMAND REPORT - UPDATE 1996

3.2 Conclusions Regarding Demand

- (a) Total actual demand in 1995 was 30,062 acre feet, down 3,908 acre feet from the prior year's total of 33,970 acre feet.
 - * The rate of unaccounted-for water was down to 15.6%, representing 4,689 acre feet in 1995 versus 7,663 acre feet the previous year.
 - * Metered consumption also decreased, from 26,307 acre feet in 1994 to 25,373 acre feet in 1995.
- (b) The total potential demand is estimated at 36,800 acre feet, which is 400 acre feet less than last year. Several modifications have been made in the way total potential demand is determined. These changes are discussed in Section 4.2d of this report.

3.3 Conclusion Regarding Supply/Demand Linkage

By maintaining 41,700 acre feet as the annual system firm yield, and setting the current total potential demand at 36,800 acre feet, this yields 4,900 acre feet of unallocated supply. Using 0.6 acre feet per EDU, this 4,900 acre feet of supply represents 8,166 EDUs.

4.0 BASES FOR CONCLUSIONS

Listed below are the key elements and related criteria relied upon by District staff in developing the conclusions presented in the preceding section.

4.1 Bases For Conclusions Regarding System Firm Yield Supply

- (a) The system firm yield as determined in this report is based on Policy Statement No. 41, Water Supply Reliability, which was revised by the Board of Directors in October 1991 and May 1992. Following is the Board-adopted definition of system firm yield:

"The annual quantity of water which the integrated water supply system can theoretically make available 95% of the time. In the remaining 5% of the time, shortages calculated not to exceed twenty percent annually will be allowed. The integrated system firm yield value is to be calculated based on the methodology established by the Abraham model, with modifications based on actual operations experience."
- (b) The current firm yield supply of 41,700 acre feet is based on the adopted Policy No. 41. Adjustments to the database, which had been made in prior years, such as the zero acre feet contribution of domestic Crawford supply (*now 200 acre feet*); the 5 percent reduction to the PG&E Forebay source (*now using 15,080 acre feet*); and the 4,000 acre feet minimum pool assumed for Sly Park (*now assumed at 2,000 acre feet*) were readjusted by the District in 1995, continue unchanged. In addition, the hydrologic record now spans the water years 1908 through 1995. Included later in this report is an Engineering Department memorandum entitled System Firm Yield Analysis (p.13) which documents the parameters utilized in calculating the current firm yield value.

WATER SUPPLY & DEMAND REPORT - UPDATE 1996

- (c) Other than the changes mentioned in (b) above, the system model constraints and protective contingencies included in the Abraham model have remained unchanged. These model constraints (e.g. 2,000 acre feet minimum at Sly Park, limiting user deficiencies to 20% annually, etc.) enhance the system's reliability to present customers beyond the established 95% probability level.
- (d) The Abraham model anticipates a Folsom Lake contribution of up to 5,660 acre feet in any given year, although the District has contract rights to 7,550 acre feet annually. (The Bureau of Reclamation had authorized the District to take up to 5,000 acre feet of water from Folsom Lake in 1993 in part due to the Cleveland Fire's impact to the District's Forebay supply).

4.2 Bases For Conclusions Regarding Demand

- (a) The data relied upon in developing the conclusions regarding demand are reported in Tables 1 through 7, attached. Table 2B and Table 6B have been added to the 1996 Update. These tables separate active meters (i.e. meters which indicate water use during the prior year), from all active accounts. See (d) below.
- (b) Latent water demand increased to 2,563 acre feet which is 187 acre feet more than the prior year.
- (c) Unaccounted-for water decreased to 15.6%, or 4,689 acre feet, in 1995. A discussion regarding potential causes for this significant decrease is provided on page 15.
- (d) The total potential demand calculation has been modified in the following respects.

* Normalized consumption is now based on the average actual consumption during the prior three-year period, rather than based on the 1984-1986 sample average. (Note: because 1995 was an abnormal year in terms of rainfall and crop production, the normalized consumption for Agricultural Metered Irrigation is calculated using the three-year period 1992 through 1994.)

* During the three-year period used for determining average consumption, approximately 7% of the District's active accounts did not use water. In recognition of this fact, Table 2B and Table 6B have been added to show these active meters and their resulting three-year average consumption. Table 2B pertains to averages for the contiguous district for all user categories. Table 6B pertains to averages for the single-family residential category by service area.

The revised averages contained in Tables 2B and 6B have been used for the potential demand calculations in Table 6A. As in previous updates, Table 2A reports the number of all active accounts and their three-year average consumption. The annual metered consumption remains unchanged and is referenced on all three tables for clarification in determining the averages.

* Unaccounted-for water is now also expressed as a three-year average, rather than as the prior year's actual amount. This change results in an increase to unaccounted-for water of 1,571 acre feet over the 1995 actual.

GLOSSARY WATER TERM DEFINITIONS

The following are water term definitions tailored to reflect EID's needs. It should be noted that normal water quantity measurements are gallons per day (gpd), cubic feet per month and acre feet per year.

ACTIVE WATER ACCOUNT:

Any account established after September 1987 where the meter has been installed and the account is charged a minimum monthly billing, regardless of recorded water use; or any account established prior to September 1987 which has recorded water use or has changed ownership since 1987 (excluding those accounts temporarily disconnected for non-payment of a bill or seasonal accounts).

ACTIVE WATER METER:

Any installed water meter which has recorded water use during the prior year.

CURRENT ACTUAL WATER DEMAND:

The quantity of water presently supplied by the District for all its uses, including all unaccounted-for water. (This excludes latent water demand.)

EQUIVALENT DWELLING UNIT (EDU):

The average water demand for a detached single family dwelling unit which is typically measured in gallons per day or acre-feet per year but which does not include unaccounted-for water. (Should be further defined when used, as to whether demand applies to an average dwelling unit for the District or an average dwelling unit in a specific zone in the District).

INACTIVE WATER ACCOUNT:

Any account with a meter installed prior to September 1987 which has no recorded water use and has not changed ownership since 1987; a meter that has been temporarily disconnected because of non-payment of a bill; a meter idle due to a change in ownership; or seasonal accounts.

LATENT WATER DEMAND:

The combined anticipated demand for water by all inactive accounts and uninstalled meters, if and when placed in service.

METERED WATER CONSUMPTION:

The total amount of measured and billed water which is delivered to EID customers. This could be measured and totaled daily, weekly, monthly or yearly; but is usually measured and billed once every two months.

MINIMUM POOL:

The lowest volume of water required to be held in storage (at Sly Park) as determined by the District Board of Directors.

NORMALIZED CONSUMPTION:

A calculated annual amount of water consumption which is based on normal, unrestricted water use.

PROJECTED WATER DEMAND:

Potential water demand plus the anticipated demand resulting from growth occurring through some specified time in the future.

POTENTIAL SYSTEM FIRM YIELD:

The quantity of water the integrated water system can potentially provide with fully assured Folsom (7,550 af) and Crawford (4 cfs) supplies and associated infrastructure reinforcement.

POTENTIAL WATER DEMAND:

The total amount of normalized water consumption, plus latent water demand and unaccounted-for water.

SAFE YIELD:

The maximum annual quantity of water that can continuously be made available without deficiency, each and every year, under hydrologic conditions similar to the most critical dry period of record.

SYSTEM FIRM YIELD:

In EID's Policy Statement No. 41, Water Supply Reliability, Firm Yield is defined as the annual quantity of water which a source or project can make available with no shortages in 95 years out of 100, based on historic hydrological conditions and restrictions. In the remaining 5 years out of 100, shortages of up to twenty percent will be accepted. Firm Yield of a source is assumed to be measured at the point of water release.

UNACCOUNTED-FOR WATER:

Water that is taken into the system from all of EID's main sources (Sly Park, Forebay, Folsom and Crawford) but which is not delivered to the consumers or otherwise accounted for.

UNINSTALLED WATER METERS:

A meter which has been purchased to serve a parcel of land, but has not been installed nor has an account been set up for billing purposes.

WATER SUPPLY MATRIX AND TEMPORARY WATER SHORTAGE RESPONSE MEASURES:

An adopted management program which establishes required water conservation measures to be adhered to by District customers when water storage levels are below seasonal norms. The measures are grouped into stages, with the stages becoming more burdensome as the water storage levels decrease.

WATER YEAR:

A continuous 12-month period during which a complete cycle occurs, arbitrarily selected from the presentation of data relative to hydrologic or meteorologic phenomena. The U. S. Geological Survey uses the period October 1 to September 30 in the publication of its records of stream flow.

TABLE 1
EI DORADO IRRIGATION DISTRICT
TOTAL ANNUAL ACTUAL SYSTEM WATER
DEMAND AND CONSUMPTION

	1	2	3	4	5	6	7
	<i>Total Actual Demand (in acre feet)</i>	<i>Metered Consumption (in acre feet)</i>	<i>Unaccounted for Water (in acre feet) (1-2)</i>	<i>Percent Unaccounted for Water (3÷1)</i>	<i>Total Number of Active Metered Connections</i>	<i>Average Actual Demand per Active Connection (1÷5)*</i>	<i>Average Metered Consumption per Active Connection (2÷5)*</i>
1995	30,062	25,373	4,689	15.6%	26,407	1.14 acre feet	0.961 acre feet
1994	33,970	26,307	7,663	22.6%	26,058	1.30 acre feet	1.010 acre feet
1993	30,324	23,897	6,427	21.2%	25,501	1.19 acre feet	0.937 acre feet
1992	32,220	25,273	6,947	21.6%	25,099	1.28 acre feet	1.007 acre feet
1991	30,642	22,053	8,589	28.0%	24,582	1.25 acre feet	0.897 acre feet
1990	30,770	22,193	8,577	27.9%	23,428	1.31 acre feet	0.947 acre feet
1989	30,947	20,729	10,218	33.0%	21,891	1.41 acre feet	0.947 acre feet
1986	38,004	16,912	21,092	55.5%	17,653	2.15 acre feet	0.958 acre feet

SOURCE: Data for 1989 through 1995 taken from Annual Water Delivery and Consumption Reports.

SOURCE: Data for 1986 derived from 1986 EID Report to State Water Resources Control Board.

Column 1 - represents the total quantity of water used, which includes metered consumption and unaccounted for water.

Column 2 - represents the total amount of water measured and billed to District customers.

Column 3 - represents amount of water taken into system but not measured and billed to customers.

Column 5 - represents the total number of active accounts, including residential, commercial, industrial, agricultural and municipal.

The City of Placerville has 9 municipal accounts serving more than 2,400 city accounts.

Excludes satellite water systems and associated customer accounts (i.e. Swansboro, Strawberry and Outingdale).

* Note: These values represent trends in overall water usage and must be used with care to avoid misunderstanding and misrepresentation.

**TABLE 2A
EL DORADO IRRIGATION DISTRICT
AVERAGE ANNUAL METERED CONSUMPTION PER ACTIVE ACCOUNT
(Excluding Unaccounted for Water)**

User Categories	Number Of Active Accounts (As of December 31st)							Annual Metered Consumption (in acre feet)						
	1989	1990	1991	1992	1993	1994	1995	1989	1990	1991	1992	1993	1994	1995
Single-Family Residential	17,783	19,344	20,423	20,937	21,071	21,530	21,765	6,122.5	6,832.4	7,442.6	8,575.4	8,620.4	9,522.0	9,424.6
Multi-Family Residential (# of units served)	189 (3,475)	194 (3,534)	200 (3,839)	203 (3,869)	477 (4,459)	484 (4,467)	482 (4,469)	796.7	802.8	861.2	990.8	1,152.8	1,279.8	1,238.7
Domestic Irrigation	2,837	2,760	2,736	2,704	2,686	2,743	2,736	3,233.0	3,353.0	3,354.9	4,132.4	3,818.2	4,316.4	4,304.6
Agricultural Metered Irrigation	223	231	228	230	234	236	221	5,523.1	5,859.6	5,676.3	6,340.2	5,347.5	5,798.4	3,882.1
Recreational Turf Services (1)	---	---	---	---	---	---	83	---	---	---	---	---	---	1,443.4
Commercial	660	749	780	807	813	855	876	1,228.4	1,389.7	1,500.8	1,636.7	1,780.2	2,023.9	1,527.7
Industrial	16	17	14	14	14	14	18	455.1	286.3	263.5	267.4	119.1	144.7	252.1
Municipal-City of Placerville (# of accounts served)	8 (2,263)	8 (2,391)	8 (2,414)	8 (2,416)	8 (2,435)	9 (2,467)	9 (2,476)	1,128.1	1,146.8	1,102.2	1,324.7	1,336.8	1,430.8	1,440.0
Ditches (2)	110	125	128	131	133	122	102	2,075.5	2,291.5	1,767.1	1,908.8	1,654.5	1,702.2	1,751.9
Construction Meters	65	65	65	65	65	65	65	167.0	231.0	34.9	96.6	67.4	34.0	107.5
CONTIGUOUS TOTALS	21,891	23,423	24,582	25,099	25,501	26,058	26,407	20,729	22,193	22,053	25,273	23,897	26,307	25,373

User Categories	Average Consumption Per Active Account (in acre feet)							Average Use (4) 1993 / 1994 / 1995 (in acre feet)
	1989	1990	1991	1992	1993	1994	1995	
Single-Family Residential	0.34	0.35	0.36	0.41	0.41	0.44	0.43	0.43
Multi-Family Residential	4.22	4.14	4.31	4.88	2.42	2.64	2.57	2.54
Domestic Irrigation	1.14	1.21	1.23	1.53	1.42	1.57	1.55	1.51
Agricultural Metered Irrigation	24.77	25.37	24.90	27.57	22.35	24.57	17.57	25.31 (3)
Recreational Turf Services (1)	---	---	---	---	---	---	17.39	---
Commercial	1.86	1.86	1.92	2.03	2.19	2.37	1.74	2.10
Industrial	28.44	16.84	18.32	19.10	8.51	10.33	14.01	11.22
Municipal-City of Placerville	141.01	143.35	137.77	165.59	167.10	158.98	160.00	161.33
Ditches (2)	18.87	18.33	13.81	14.57	12.44	13.95	17.18	14.31
Construction Meters	2.57	3.55	1.31	1.49	1.04	1.29	1.65	1.33

SOURCE: Annual Consumption Report by Zone and User Category.

- (1) The Recreational Turf Services category was added in May 1995. As a consequence, 4 Single-Family, 9 Domestic Irrigation, 9 Agricultural Metered Irrigation, and 57 Commercial accounts were reassigned to this new category. In addition, 4 new Recreational Turf accounts were also added in 1995.
 - (2) The actual number of ditch accounts that were active during the year is more accurately identified starting in 1995.
 - (3) The Agricultural Metered Irrigation Average Use is calculated based on use during the period 1992-1994 because 1995 was an abnormal year in terms of rainfall and crop production.
 - (4) Average Use for each category is calculated using the total metered consumption for the 3-year period, divided by the total number of active accounts for the same period.
- * The 1995 Agricultural Metered Consumption excludes 473 acre feet of water used in 1995 by 9 reclassified Recreational Turf Services accounts (see footnote 1 above).

**TABLE 2B
EL DORADO IRRIGATION DISTRICT
AVERAGE ANNUAL METERED CONSUMPTION PER ACTIVE METER
(Excluding Unaccounted for Water)**

User Categories	Number Of Active Meters (As of December 31st)			Annual Metered Consumption (in acre feet)		
	1993	1994	1995	1993	1994	1995
Single-Family Residential	19,133	19,676	20,078	8,620.4	9,522.0	9,424.6
Multi-Family Residential (# of units served)	475 (4,449)	478 (4,437)	479 (4,458)	1,152.8	1,279.8	1,238.7
Domestic Irrigation	2,672	2,732	2,771	3,818.2	4,316.4	4,304.6
Agricultural Metered Irrigation	227	229	216	5,347.5	5,798.4	3,882.1
Recreational Turf Services (1)	---	---	82	---	---	1,443.4
Commercial	781	820	828	1,780.2	2,028.9	1,527.7
Industrial	13	13	17	119.1	144.7	252.1
Municipal-City of Placerville (# of accounts served)	7 (2,435)	8 (2,467)	8 (2,476)	1,336.8	1,430.8	1,440.0
Ditches (2)	133	120	100	1,654.5	1,702.2	1,751.9
Construction Meters	65	65	65	67.4	84.0	107.5
CONTIGUOUS TOTALS	23,506	24,141	24,644	23,897	26,307	25,373

User Categories	Average Consumption Per Active Meter (in acre feet)			Average Use (4) 1993 / 1994 / 1995 (in acre feet)
	1993	1994	1995	
Single-Family Residential	0.45	0.48	0.47	0.47
Multi-Family Residential	2.43	2.68	2.59	2.56
Domestic Irrigation	1.43	1.58	1.55	1.52
Agricultural Metered Irrigation	23.56	25.32	17.97	26.02 (3)
Recreational Turf Services (1)	---	---	17.60	---
Commercial	2.28	2.47	1.85	2.20
Industrial	9.16	11.13	14.83	12.00
Municipal-City of Placerville	190.97	178.85	180.00	182.94
Ditches (2)	12.44	14.19	17.52	14.47
Construction Meters	1.04	1.29	1.65	1.33

SOURCE: Annual Consumption Report by Zone and User Category, REVISED for the 1996 Update to the Water Supply & Demand Report.

- (1) The Recreational Turf Services category was added in May 1995. As a consequence, 4 Single-Family, 9 Domestic Irrigation, 9 Agricultural Metered Irrigation, and 57 Commercial accounts were reassigned to this new category. In addition, 4 new Recreational Turf accounts were also added in 1995.
 - (2) The actual number of ditch accounts that were active during the year is more accurately identified starting in 1995.
 - (3) The Agricultural Metered Irrigation Average Use is calculated based on use during the period 1992-1994 because 1995 was an abnormal year in terms of rainfall and crop production.
 - (4) Average Use for each category is calculated using the total metered consumption for the 3-year period, divided by the total number of active meters with usage for the same period.
- The 1995 Agricultural Metered Consumption excludes 473 acre feet of water used in 1995 by 9 reclassified Recreational Turf Services accounts (see footnote 1 above).

**TABLE 3
CITY OF PLACERVILLE WATER USE STATISTICS**

Year	Residential Use (acre feet)	# of Residential Accounts	Commercial Use (acre feet)	# of Commercial Accounts	Total Use (acre feet)	Total # of Accounts	Average Meter Use Per Acct	Total EID Delivery (2) (acre feet)	Estimated City Use (5) (acre feet)	Unaccounted For Water (6) (acre feet)	Unaccounted For Water (percent)	Total Demand per Account (3)
1995 (1)	915	2,154 (.43 af/acct)	432	322 (1.34 af/acct)	1,347	2,476	0.544	1,440	40.20	52.80	3.7%	0.582
1994	898	2,153 (.42 af/acct)	528	314 (1.68 af/acct)	1,426	2,467	0.578	1,431	80.55	-75.55 (7)	-5.3% (7)	0.580
1993	809	2,124 (.38 af/acct)	421	311 (1.35 af/acct)	1,230	2,435	0.505	1,337	74.64	32.36	2.4%	0.549
1992	833	2,104 (.40 af/acct)	387	312 (1.24 af/acct)	1,220	2,416	0.505	1,325	74.64	30.36	2.3%	0.548
1991	833	2,097 (.40 af/acct)	366	317 (1.16 af/acct)	1,199	2,414 (4)	0.497	1,102	75.14	See Note	See Note	See Note
1990	734	2,077 (.35 af/acct)	378	314 (1.20 af/acct)	1,112	2,391	0.465	1,147	25.04	See Note	See Note	0.480
1989	653	1,953 (.33 af/acct)	332	310 (1.07 af/acct)	985	2,263	0.435	1,128	17.40	108.20	9.6%	0.499
1988	626	1,864 (.34 af/acct)	307	308 (1.00 af/acct)	933	2,172	0.430	1,050	44.12	72.88	6.9%	0.483

- (1) SOURCE: Letter to the District dated January 25, 1996 from Steve Calfee, Interim Community Development Director, City of Placerville.
- (2) SOURCE: El Dorado Irrigation District billing records for 9 City meters.
- (3) The total demand per account includes unaccounted for water.
- (4) The 1991 total number of accounts represents a 23 EDU increase taken from the 1990 Crawford Allocation of 105 EDUs.
- (5) Estimated City Use includes water used by municipal buildings and irrigation of landscaping and City parks. This use is metered by the City, however, inoperable meters and erroneous meter reads have contributed to the fluctuations in usage between years. These numbers should be used with caution.
- (6) As of July 1991, the City reclaims filter backwash water at their main water treatment plant, which saves approximately 25 acre-feet of unaccounted for water annually. It is recognized, however, that the unaccounted for water statistics may be suspect.
- (7) The estimated City water use in 1994 has been adjusted since the 1995 Update. The City determined that erroneous meter reads contributed to the overstated usage, however, the resulting unaccounted for water values are still questionable.

Note: Reconciliation of the 1991 City consumption report with the District's 1991 billing records uncovered a discrepancy whereby the City consumed more water than was actually measured and billed by EID. Investigation revealed that two six-inch compound meters were operating improperly and measuring less than actual deliveries, which may have been a trend beginning in 1990. Repairs to these meters were initiated immediately upon discovery.

TABLE 4A
EL DORADO IRRIGATION DISTRICT
AVERAGE ANNUAL METERED CONSUMPTION PER SINGLE FAMILY RESIDENTIAL ACCOUNT
BASED ON 5% SAMPLE OF TOTAL ACCOUNTS
(In Acre Feet)

Zone No.	Service Area	Sample Averages (1)			Sample Average (1) 1984-1986	Sample Averages (1)			Sample Average (1) 1988-1990	Sample Averages (1)	
		1984	1985	1986		1988	1989	1990		1991	1992
WESTERN SERVICE AREA											
02	El Dorado Hills	0.66	0.70	0.73	0.70	0.54	0.56	0.56	0.55	0.58	0.62
04	Cameron Park	0.55	0.54	0.50	0.53	0.38	0.37	0.39	0.38	0.42	0.43
05	Shingle Springs	0.51	0.51	0.56	0.53	0.35	0.40	0.38	0.38	0.33	0.47
TOTAL WESTERN SERVICE AREA		0.59	0.60	0.61	0.60	0.45	0.45	0.46	0.45	0.47	0.51
CENTRAL SERVICE AREA											
06	El Dorado	0.43	0.61	0.72	0.59	0.38	0.39	0.38	0.38	0.39	0.40
07	Diamond Springs	0.51	0.48	0.49	0.49	0.30	0.37	0.39	0.35	0.39	0.44
18,28	Placerville	0.32	0.44	0.44	0.40	0.27	0.32	0.37	0.32	0.32	0.34
03	Coloma/Lotus	0.56	0.50	0.70	0.59	0.31	0.36	0.56	0.41	0.33	0.60
10	Camino	0.31	0.33	0.40	0.35	0.25	0.26	0.32	0.28	0.32	0.35
11	Pleasant Valley	0.52	0.57	0.46	0.52	0.29	0.37	0.30	0.32	0.41	0.30
TOTAL CENTRAL SERVICE AREA		0.43	0.46	0.49	0.46	0.27	0.34	0.38	0.33	0.36	0.40
EASTERN SERVICE AREA											
12	Sly Park	0.23	0.24	0.26	0.24	0.21	0.24	0.20	0.22	0.26	0.28
13	Pollock Pines	0.26	0.23	0.25	0.25	0.19	0.25	0.20	0.21	0.23	0.24
TOTAL EASTERN SERVICE AREA		0.25	0.23	0.25	0.24	0.19	0.25	0.20	0.21	0.25	0.26
WEIGHTED DISTRICT AVERAGES (based on total sample)		0.47	0.49	0.50	0.49	0.35	0.38	0.39	0.37	0.39	0.43

(1) Based on annual independent sample of 12-month active District accounts, based on 5% of 1990 total accounts (967 sample size for each year).

Note: Table excludes 1987 data due to deficiencies in the source for said data.

Shaded areas contain weighted averages which reflect total sample size (i.e. not arithmetic averages).

TABLE 4B
EL DORADO IRRIGATION DISTRICT
AVERAGE ANNUAL METERED CONSUMPTION AND ACTUAL NUMBER OF ACTIVE ACCOUNTS
FOR ALL ACTIVE SINGLE FAMILY ACCOUNTS
(In Acre Feet)

Zone No. Service Area (4)	Sample Average 1984-1986	Actual Average Water Use (1)								Actual Average (1) 1993-1995	Actual Number of Active Accounts						
		1989	1990	1991	1992	1993	1994	1995	1989		1990	1991	1992	1993 (3)	1994	1995	
WESTERN SERVICE AREA																	
02 El Dorado Hills	0.70	0.44	0.47	0.46	0.54	0.52	0.58	0.56	0.56	3,387	3,876	4,363	4,591	4,791	4,983	5,058	
04 Cameron Park	0.53	0.35	0.37	0.37	0.42	0.43	0.45	0.43	0.44	3,767	4,040	4,333	4,390	4,435	4,609	4,800	
05 Shingle Springs	0.53	0.39	0.41	0.41	0.48	0.47	0.51	0.48	0.49	1,044	1,140	1,168	1,205	1,225	1,232	1,228	
TOTAL WESTERN AREA	0.60	0.39	0.42	0.42	0.48	0.48	0.54	0.50	0.50	8,198	9,056	9,864	10,186	10,451	10,824	11,086	
CENTRAL SERVICE AREA																	
06 El Dorado	0.59	0.35	0.33	0.34	0.41	0.43	0.46	0.46	0.45	290	347	355	354	357	359	358	
07 Diamond Sprgs	0.49	0.38	0.36	0.35	0.42	0.42	0.45	0.42	0.43	2,512	2,788	2,867	2,924	2,868	2,873	2,842	
18,28 Placerville	0.40	0.34	0.35	0.37	0.38	0.38	0.41	0.41	0.40	1,643	1,736	1,759	1,781	1,741	1,756	1,775	
03 Coloma/Lotus	0.59	0.34	0.38	0.39	0.46	0.46	0.45	0.46	0.46	402	455	472	482	482	501	488	
10 Camino	0.35	0.33	0.32	0.33	0.37	0.34	0.36	0.38	0.36	1,115	1,202	1,231	1,281	1,265	1,275	1,262	
11 Pleasant Valley	0.52	0.31	0.33	0.36	0.40	0.38	0.45	0.39	0.41	511	537	558	575	569	585	589	
TOTAL CENTRAL AREA	0.46	0.35	0.35	0.36	0.40	0.40	0.43	0.41	0.41	6,473	7,065	7,242	7,397	7,282	7,349	7,314	
EASTERN SERVICE AREA																	
12 Sly Park (2)	0.24	0.19	0.17	0.23	0.20	0.22	0.24	0.27	0.24	1,164	1,227	1,272	1,287	1,305	1,312	1,319	
13 Pollock Pines (2)	0.25	0.21	0.18	0.23	0.20	0.22	0.23	0.27	0.24	1,948	1,996	2,045	2,067	2,033	2,045	2,046	
TOTAL EASTERN AREA	0.24	0.20	0.18	0.23	0.20	0.22	0.24	0.27	0.24	3,112	3,223	3,317	3,354	3,338	3,357	3,365	
CONTIGUOUS DISTRICT	0.49	0.34	0.35	0.36	0.41	0.41	0.44	0.43	0.43	17,783	19,344	20,423	20,937	21,071	21,530	21,765	

SOURCE: Sample Averages from Table 4A. Actual Water Use and Actual Number of Active Accounts from the Annual Consumption Report by Zone and User Category.

- (1) These averages are based on actual water use by ALL single family residential accounts, rather than a sample of accounts.
- (2) Usage in these areas decreased in 1992 from 1991, due in part to the additional conservation imposed by the Cleveland Fire Emergency during the last quarter of 1992.
- (3) In 1993 the actual number of accounts decreased in some service areas because of changes in the definition for the Multi-Family category.
- (4) Due to the detailed analysis of the Water Master Plan in 1995, service area boundaries have changed slightly depending upon their source of water supply.

TABLE 5
EL DORADO IRRIGATION DISTRICT
ESTIMATED LATENT WATER DEMAND
as of December 31, 1995

<i>SINGLE - FAMILY RESIDENTIAL</i>	<i>Western Service Area</i>	<i>Central Service Area</i>	<i>Eastern Service Area</i>	<i>Estimated Latent Demand (in acre feet)</i>
<i>Single-Family Inactive Accounts</i>	74	145	68	
<i>Single-Family Uninstalled Meters</i>	1,418	69	14	
<i>Total Single-Family Residential</i>	1,492	214	82	
<i>1993-95 Average Unit Consumption per Active Meter</i>	0.56	0.44	0.25	
<i>Latent Demand in Acre Feet</i>	836	94	21	
			<i>Subtotal Single-Family</i>	951 af
<i>ALL OTHER CATEGORIES</i>	<i>Number of Meters</i>	<i>1993-95 Average Unit Consumption per Active Meter</i>		<i>Estimated Latent Demand (in acre feet)</i>
<i>Commercial Inactive Accounts</i>	14	2.20		31
<i>Commercial Uninstalled Meters</i>				
<i>Meter/Public (1)</i>	13	2.20		29
<i>Meter/Private (1)</i>	63	2.20		139
<i>Business Park (1)</i>	8	2.20		18
<i>Potable Landscape</i>	7	2.20		15
		<i>EDUs</i>	<i>per EDU</i>	
<i>Multi-Family Inactive Accounts</i>	6	25.5	0.28	7
<i>Multi-Family Uninstalled Meters</i>	105	517.75	0.28	145
<i>Industrial Inactive Accounts</i>	3	12.00		36
<i>Industrial Uninstalled Meters</i>	2	12.00		24
<i>Irrigation Inactive Accounts</i>				
<i>Domestic Irrigation</i>	23	1.52		35
<i>Agricultural Irrigation</i>	21	26.02 (3)		546
<i>Ditches</i>	34	14.47		492
<i>Agricultural Irrigation Uninstalled Meters</i>	2	26.02 (3)		52
<i>Municipal</i>				
<i>City of Placerville (1)</i>	79	0.544 (2)		43
			<i>Subtotal All Other Catego</i>	1,612 af
TOTAL ESTIMATED LATENT WATER DEMAND				= 2,563 af

- (1) Latent demand for these categories is estimated by converting equivalent dwelling units into a corresponding number of meters.
(2) Refer to Table 3 for City of Placerville consumption data.
(3) The Agricultural Irrigation, Average Unit Consumption, is calculated based on water use during the period 1992-1994 because 1995 was an abnormal year in terms of rainfall and crop production.

**TABLE 6A
EL DORADO IRRIGATION DISTRICT
1995 NORMALIZED CONSUMPTION AND POTENTIAL DEMAND**

<i>SINGLE-FAMILY RESIDENTIAL</i>	<i>1995 Number of Active Accounts</i>	<i>1993 - 95 Average Unit Consumption per Active Meter (acre feet/dwelling unit)</i>	<i>Normalized Consumption (1995 Accounts times 1993 - 95 Average Unit Consumption in acre feet)</i>
<i>Western Service Area</i>	11,086	0.56	6,208
<i>Central Service Area</i>	7,314	0.44	3,218
<i>Eastern Service Area</i>	3,365	0.25	841
<i>Subtotal Single-Family</i>			<i>10,267 af</i>

<i>ALL OTHER CATEGORIES</i>	<i>1995 No. Active Accounts or Dwelling Units</i>	<i>1993 - 95 Average Unit Consumption per Active Meter/Unit (acre feet/unit)</i>	<i>Normalized Consumption (1995 Accounts times 1993 - 95 Average Unit Consumption in acre feet)</i>
<i>Multi-Family Units (482 connections)</i>	4,469	0.28	1,251
<i>Domestic Irrigation</i>	2,786	1.52	4,235
<i>Agricultural Metered Irrigation</i>	221	26.02 (3)	5,750 (3)
<i>Recreational Turf Services</i>	83	17.60	1,461
<i>Commercial</i>	876	2.20	1,927
<i>Industrial</i>	18	12.00	216
<i>Municipal (9 connections) (1)</i>	2,476	0.544	1,347
<i>Ditches</i>	102	14.47	1,476
<i>Construction Meters</i>	65	1.33	86
<i>Subtotal All Other Categories</i>			<i>17,749 af</i>

<i>CONTIGUOUS DISTRICT SUMMARY</i>	<i>Potential Demands</i>	
<i>TOTAL NORMALIZED CONSUMPTION (single-family and all other categories)</i>	28,016	
<i>UNACCOUNTED FOR WATER (1993/1994/1995 average) (2)</i>	6,260	
<i>ESTIMATED LATENT DEMAND (from Table 5)</i>	2,563	
<i>TOTAL POTENTIAL DEMAND (before rounding)</i>	36,839	
<i>TOTAL POTENTIAL DEMAND</i>		<i>36,800 af</i>

- (1) Municipal per unit consumption is not an average and is taken from Table 3, City of Placerville Water Use Statistics.
(2) A 3-year average has been calculated to normalize the unaccounted-for water number and provide stability against annual fluctuations.
(3) The Agricultural Metered Irrigation, Average Unit Consumption, is calculated based on water use during the period 1992-1994 because 1995 was an abnormal year in terms of rainfall and crop production.

**TABLE 6B
EL DORADO IRRIGATION DISTRICT
SINGLE-FAMILY RESIDENTIAL SUMMARY
AVERAGE CONSUMPTION BY SERVICE AREA**

<i>Annual Metered Consumption</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>3-Year Total</i>
<i>Western Service Area</i>	4,987.0	5,598.5	5,503.5	16,089.0
<i>Central Service Area</i>	2,895.5	3,135.8	3,021.5	9,052.8
<i>Eastern Service Area</i>	737.7	787.6	899.6	2,424.9
<i>DISTRICT TOTALS</i>	8,620.2	9,521.9	9,424.6	27,566.7

<i>Active Meters With Usage</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>3-Year Total</i>
<i>Western Service Area</i>	9,139	9,598	9,963	28,700
<i>Central Service Area</i>	6,846	6,910	6,904	20,660
<i>Eastern Service Area</i>	3,148	3,168	3,211	9,527
<i>DISTRICT TOTALS</i>	19,133	19,676	20,078	58,887

<i>Active Accounts</i>	<i>1993</i>	<i>1994</i>	<i>1995</i>	<i>3-Year Total</i>
<i>Western Service Area</i>	10,451	10,824	11,086	32,361
<i>Central Service Area</i>	7,282	7,349	7,314	21,945
<i>Eastern Service Area</i>	3,338	3,357	3,365	10,060
<i>DISTRICT TOTALS</i>	21,071	21,530	21,765	64,366

<i>1993 - 95 Average Unit Consumption (1)</i>	<i>Active Meters Only (acre feet per meter)</i>	<i>All Active Accounts (acre feet per account)</i>
<i>Western Service Area</i>	0.56	0.50
<i>Central Service Area</i>	0.44	0.41
<i>Eastern Service Area</i>	0.25	0.24
<i>DISTRICT AVERAGE</i>	0.47	0.43

SOURCE: Annual Consumption Report by Zone and User Category, Revised for the 1996 Update to the Water Supply & Demand Report.

(1) The 1993 - 95 average unit consumption is calculated using the total metered consumption for the 3-year period, divided by the total number of active meters with usage, or the total number of active accounts for the same period.

TABLE 7
EL DORADO IRRIGATION DISTRICT
AVERAGE METERED CONSUMPTION BY CATEGORY
1986 - VS - 1995

<i>User Categories</i>	<i>1986 Number of Accounts</i>	<i>1986 Consumption (in acre feet)</i>	<i>1986 Average Consumption Per Meter (in acre feet)</i>	<i>1995 Number of Accounts</i>	<i>1995 Consumption (in acre feet)</i>	<i>1995 Average Consumption Per Meter (in acre feet)</i>	<i>Increase or Decrease of 1995 from 1986</i>
<i>All Domestic Meters includes single-family, multi-family (1) and domestic irrigation (2)</i>	16,694	9,324.6	0.56	25,033	14,967.9	0.60	7.1%
<i>Commercial Meters (2)</i>	448	513.7	1.15	876	1,527.7	1.74	51.3%
<i>Industrial Meters</i>	16	129.4	8.09	18	252.1	10.33	27.7%
<i>Agricultural Irrigation Meters (2)</i>	251	5,584.4	22.25	221	3,882.1	17.57	-21.0%

SOURCE: Data for 1995 taken from the 1995 Consumption Report by Zone and User Category.
SOURCE: Data for 1986 derived from 1986 EID Report to State Water Resources Control Board.

- (1) Refers to number of meters serving multi-family complexes (e.g. 482 in 1995), not the number of units.
(2) The Recreational Turf Services category was added in May 1995. The user categories of Commercial, Domestic Irrigation and Agricultural Metered Irrigation are affected by the transfer of schools, golf courses and parks to this new category.

Note: This table excludes the Municipal and Ditch categories because they are not germane to the comparative analysis in this report.



El Dorado Irrigation District

MEMORANDUM

TO: Rob Alcott
FROM: Sharon Fraser
VIA: David Powell *DP*
DATE: March 21, 1996
SUBJECT: 1996 System Firm Yield

EM0396-043

The analysis of the system firm yield for 1996 has been completed using the Abraham Model. As the attached table indicates, the modeling parameters have not changed since last year with the following exception. The hydrologic record has been updated through the 1995 water year, which includes October 1994 through September 1995.

The results of the computer modeling confirm the system firm yield to be 41,700 acre feet, which is unchanged from the 1995 update. As previously outlined in the 1995 Firm Yield memo dated May 3, 1995, the following improvements would be necessary in order to meet the maximum day demands for this firm yield. The El Dorado Hills water treatment plant must be expanded to 20 MGD; the Reservoir A water treatment plant must be upgraded and expanded; and the Oakridge pump station must be expanded or some other source for pumping into Cameron Park will be required.

If you have any questions or need additional information please contact me at extension 4112.

Sharon Fraser

Sharon Fraser

SF:alm

Attachment

done to account for concern over ability to deliver water

SYSTEM FIRM YIELD

INPUT PARAMETERS						
DESCRIPTION	1991	1992	1993	1994	1995	1996
PG&E Forebay Reservoir	15,080 af	14,326 af	14,326 af	14,326 af	15,080 af	15,080 af
Folsom Reservoir	4,000 af	3,500 af	3,500 af	3,500 af	5,660 af	5,660 af
Crawford Ditch to Reservoir 7	4 cfs	0 cfs	0 cfs	0 cfs	200 af ⁽¹⁾	200 af ⁽¹⁾
Sly Park Minimum Storage Level	4,000 af	4,000 af	4,000 af	4,000 af	2,000 af	2,000 af
Reservoir A Max. Delivery Rate	80 cfs	77 cfs	77 cfs	77 cfs	77 cfs	77 cfs
EDHWTP Max. Delivery Rate	10 cfs	8.8 cfs	8.8 cfs	8.8 cfs	18 cfs ⁽²⁾	18 cfs
Hydrologic Record (Water Years)	1921 - 1990	1921 - 1990	1908 - 1992	1908 - 1993	1908 - 1994	1908 - 1995
SYSTEM FIRM YIELD	41,300 af	39,050 af	37,400 af	37,150 af	41,700 af	41,700 af

(1) Model runs indicate 200 acre feet results in a flow to Reservoir 7 of approximately 1 cfs average for April, May and June.

(2) The El Dorado Hills Water Treatment Plant underwent an expansion from 8.8 cfs to 18 cfs in 1994.



El Dorado Irrigation District

MEMORANDUM

TO: Rob Alcott
FROM: Sharon Fraser/Dave Powell
VIA: Dale Bohnenberger
DATE: April 11, 1996
SUBJECT: 1995 Unaccounted-for Water Analysis

EM0496-062

Background

The purpose of this memorandum is to discuss the underlying causes contributing to the considerably lower unaccounted-for water realized in 1995. As shown in the table below, the unaccounted-for losses in 1995 were 15.6 percent, a decrease of 7.0 percent from 1994.

Years of Data Available	Unaccounted-for Water Annually	Unaccounted-for Water Percentage	Decrease/Increase from Previous Year
1995	4,689 af	15.6 %	- 7.0 %
1994	7,663 af	22.6 %	+ 1.4 %
1993	6,427 af	21.2 %	- 0.4 %
1992	6,947 af	21.6 %	- 6.4 %
1991	8,589 af	28.0 %	+ 0.1 %
1990	8,577 af	27.9 %	- 5.1 %
1989	10,218 af	33.0 %	- 22.5 %
1986	21,092 af	55.5 %	---

Our investigation revealed not only positive factors that contributed to the reduction of losses in 1995, but also unavoidable circumstances that caused the 1994 number to be considerable higher than "normal." District staff has calculated the *estimated* savings or losses based on observations and general assumptions. These numbers are presented to illustrate the magnitude of the savings or loss. Caution should be exercised in using these values beyond the scope of this memorandum.

Detailed below are the findings of our analysis, based upon information and data collected from Engineering, Meter Services and Operations & Maintenance.

Findings

The following factors contributed to an increase in unaccounted-for water in 1994; or a reduction in unaccounted-for water in 1995.

- 1) In 1994, the Main Ditch between Forebay and Reservoir 1 was in operation for 12 months. In 1995 this same segment of ditch was in operation for only 7 months (water was pumped from Reservoir A to Reservoir 1 the remaining time). Using estimated loss rates from the Handbook of Water Conveyance, losses in this section of ditch are calculated to be 1,143 acre feet in 1994, and only 597 acre feet in 1995, a difference of 546 acre feet. It is significant to note that over 380 acre feet of the 1995 savings occurred during 2 summer months when losses are the greatest.
- 2) O&M estimates that losses are approximately 50% for the remainder of this ditch system, which includes the Main Ditch below Reservoir 1, the Iowa Ditch and the Gold Hill Ditch. Using the water treatment plant daily log sheets, the ditch flows bypassed at Reservoir 1 were calculated to be 3,468 acre feet in 1994 and 1,457 acre feet in 1995. Therefore, applying the 50% loss factor, in 1994 the loss was 1,734 acre feet, and only 729 acre feet in 1995, a difference of 1,005 acre feet.
- 3) In 1994, an estimated 60 acre feet of loss occurred due to high start-up losses in the segment of ditch between Forebay and Reservoir 1. This additional loss was a result of the ditch being so dry from lack of use during the PG&E canal outage and below normal rainfall. In 1995, there were minimal start-up losses because the ground was already saturated due to record rainfall.
- 4) In 1994, approximately 152 acre feet of water was required to fill Blakeley Reservoir, which was empty due to the PG&E canal outage. Blakeley Reservoir was already full at the beginning of the 1995 ditch irrigation season.
- 5) An aggressive meter testing program by the Meter Services Division resulted in an estimated savings of 1,204 acre feet in 1995. Source: Memorandum No. MS0396-2460, "Meter Testing Programs (Large & Small) Status Report," dated March 27, 1996.
- 6) Due to above normal precipitation in 1995, an estimated 562 acre feet of rainfall was added to the piped system at uncovered reservoirs, including Bass Lake. Likewise, evaporation at uncovered reservoirs was considerably reduced. The annual evapotranspiration rate in 1995 was almost 7 inches less than in 1994, which equates to approximately 73 acre feet of additional water.
- 7) The Reservoir A Water Treatment Plant began operating on automatic floats in 1995. This reduced operational spills at Reservoirs 2 and 2A to approximately 2 acre feet in 1995, a savings of 135 acre feet from 1994.
- 8) Capital improvement waterline replacements in 1995 saved an estimated 33 acre feet of water.
- 9) In 1995, the District terminated the Sly Park Intertie flushing to Clear Creek from the Reservoir 1 Water Treatment Plant. In 1994, O&M released 482 acre feet, which was reduced to 390 acre feet in 1995, a savings of 92 acre feet.

Recommendations

As illustrated above, annual unaccounted-for water numbers can be affected by many factors. Despite diligent effort from District personnel, losses can fluctuate from year to year simply because of changes in system operations and abnormal weather conditions. In 1995 it appears that both favorable operation and weather conditions combined to create the low unaccounted-for water. However, these circumstances will not necessarily occur in future years on a consistent basis.

Engineering staff recommends that an operational contingency be observed from year to year. This conservative approach would better insure that the District maintains enough water supply to cover years of higher losses that are inherent to normal operations and drier weather patterns.


Three different options are proposed for consideration in Table 6 of the Water Supply & Demand Report. Attached are draft copies of Table 6 showing the resulting Total Potential Demand using each option. In order to maintain the operational contingency described above, staff recommends the adoption of either Option 2 or Option 3.

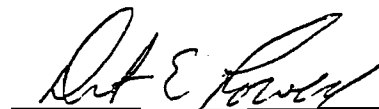
Option 1 The prior year's unaccounted-for water number has been used to determine the potential demand. This option is consistent with previous report updates. The unaccounted-for water number has not been stabilized by 3-year or 5-year averaging.

Option 2 Uses a 5-year average to "normalize" the unaccounted-for water number. A 5-year average would provide the greatest stability when annual fluctuations occur in unaccounted-for water due to operational changes, acts of nature or abnormal weather conditions.

Option 3 Uses a 3-year average to "normalize" the unaccounted-for water number. A 3-year average would also provide stability, but reacts more quickly to ongoing decreases in unaccounted-for water attributed to factors other than operational changes and abnormal weather conditions.

Please advise if we can be of further assistance.


Sharon Fraser


Dave Powell

SF/DP:imp

Attachments: Table 6 - Option 1; Table 6 - Option 2; Table 6 - Option 3

cc: Bruce Adams John Kingsbury
Reggie Beaulieu Ken Meyer
Steve Hutchings Gary Meyers
Ron Jones

**TABLE 6 - OPTION 1
EL DORADO IRRIGATION DISTRICT
1995 NORMALIZED CONSUMPTION AND POTENTIAL DEMAND**

SINGLE-FAMILY RESIDENTIAL	1995 Number of Accounts	Unit Consumption (acre feet/dwelling unit)		Normalized Consumption Using 1995 Accounts and Unit Consumption (acre feet)	
<i>Location:</i>		<i>Sample Average 1984 - 86</i>	<i>Actual Average 1993 - 95</i>	<i>Sample Average 1984 - 86</i>	<i>Actual Average 1993 - 95</i>
<i>Western Service Area</i>	11,086	0.60	0.50	6,652	5,543
<i>Central Service Area</i>	7,314	0.46	0.41	3,364	2,999
<i>Eastern Service Area</i>	3,365	0.24	0.24	808	808
<i>Subtotal Single-Family</i>				10,824 <i>af</i>	9,350 <i>af</i>

ALL OTHER CATEGORIES	1995 No. of Accounts or Dwelling Units	Avg 1993-95 Unit Consumption (acre feet/unit)	Consumption Using Avg 1993 - 95 (2) (acre feet)	Consumption Using Avg 1993 - 95 (acre feet)
<i>Multi-Family (482 connections)</i>	4,469	0.27	1,207	1,207
<i>Domestic Irrigation</i>	2,786	1.51	4,207	4,207
<i>Agricultural Metered Irrigation</i>	221	21.75	4,807	4,807
<i>Recreational Turf Services</i>	83	17.39	1,443	1,443
<i>Commercial</i>	876	2.10	1,840	1,840
<i>Industrial</i>	18	11.22	202	202
<i>Municipal (9 connections) (1)</i>	2,476	0.544	1,347	1,347
<i>Ditches</i>	102	14.31	1,460	1,460
<i>Construction Meters</i>	65	1.33	86	86
<i>Subtotal All Other Meters</i>			16,599 <i>af</i>	16,599 <i>af</i>

CONTIGUOUS DISTRICT SUMMARY	Potential Demand Using Avg 1984 - 86	Potential Demand Using Avg 1993 - 95
<i>TOTAL NORMALIZED CONSUMPTION (single-family and all other categories)</i>	27,423	25,949
<i>1995 UNACCOUNTED FOR WATER (from consumption report)</i>	4,689	4,689
<i>ESTIMATED LATENT DEMAND (from Table 5)</i>	2,502	2,502
<i>TOTAL POTENTIAL DEMAND (before rounding)</i>	34,614	33,140
<i>TOTAL POTENTIAL DEMAND</i>		33,100 <i>af</i>

(1) Municipal per unit consumption is not an average and is taken from Table 3, City of Placerville Water Use Statistics.

(2) The 1993-95 average is used in both normalized consumption columns for the All Other Categories section because 1984-86 data is unavailable.

**TABLE 6 - OPTION 2
EL DORADO IRRIGATION DISTRICT
1995 NORMALIZED CONSUMPTION AND POTENTIAL DEMAND**

SINGLE-FAMILY RESIDENTIAL	1995 Number of Accounts	Unit Consumption (acre feet/dwelling unit)		Normalized Consumption Using 1995 Accounts and Unit Consumption (acre feet)	
<i>Location:</i>		<i>Sample Average 1984 - 86</i>	<i>Actual Average 1993 - 95</i>	<i>Sample Average 1984 - 86</i>	<i>Actual Average 1993 - 95</i>
<i>Western Service Area</i>	11,086	0.60	0.50	6,652	5,543
<i>Central Service Area</i>	7,314	0.46	0.41	3,364	2,999
<i>Eastern Service Area</i>	3,365	0.24	0.24	808	808
Subtotal Single-Family				10,824 af	9,350 af

ALL OTHER CATEGORIES	1995 No. of Accounts or Dwelling Units	Avg 1993-95 Unit Consumption (acre feet/unit)	Consumption Using Avg 1993 - 95 (2) (acre feet)	Consumption Using Avg 1993 - 95 (acre feet)
<i>Multi-Family (482 connections)</i>	4,469	0.27	1,207	1,207
<i>Domestic Irrigation</i>	2,786	1.51	4,207	4,207
<i>Agricultural Metered Irrigation</i>	221	21.75	4,807	4,807
<i>Recreational Turf Services</i>	83	17.39	1,443	1,443
<i>Commercial</i>	876	2.10	1,840	1,840
<i>Industrial</i>	18	11.22	202	202
<i>Municipal (9 connections) (1)</i>	2,476	0.544	1,347	1,347
<i>Ditches</i>	102	14.31	1,460	1,460
<i>Construction Meters</i>	65	1.33	86	86
Subtotal All Other Meters			16,599 af	16,599 af

CONTIGUOUS DISTRICT SUMMARY	Potential Demand Using Avg 1984 - 86	Potential Demand Using Avg 1993 - 95
TOTAL NORMALIZED CONSUMPTION (single-family and all other categories)	27,423	25,949
UNACCOUNTED FOR WATER (1991 - 1995 average) (3)	6,863	6,863
ESTIMATED LATENT DEMAND (from Table 5)	2,502	2,502
TOTAL POTENTIAL DEMAND (before rounding)	36,788	35,314
TOTAL POTENTIAL DEMAND		36,800 af
		35,300 af

- (1) Municipal per unit consumption is not an average and is taken from Table 3, City of Placerville Water Use Statistics.
 (2) The 1993-95 average is used in both normalized consumption columns for the All Other Categories section because 1984-86 data is unavailable.
 (3) A five year average has been calculated for this update due to the abnormally low 15.6% unaccounted for water experience in 1995.

**TABLE 6 - OPTION 3
EL DORADO IRRIGATION DISTRICT
1995 NORMALIZED CONSUMPTION AND POTENTIAL DEMAND**

SINGLE-FAMILY RESIDENTIAL	1995 Number of Accounts	Unit Consumption (acre feet/dwelling unit)		Normalized Consumption Using 1995 Accounts and Unit Consumption (acre feet)	
Location:		Sample Average 1984 - 86	Actual Average 1993 - 95	Sample Average 1984 - 86	Actual Average 1993 - 95
Western Service Area	11,086	0.60	0.50	6,652	5,543
Central Service Area	7,314	0.46	0.41	3,364	2,999
Eastern Service Area	3,365	0.24	0.24	808	808
Subtotal Single-Family				10,824 af	9,350 af

ALL OTHER CATEGORIES	1995 No. of Accounts or Dwelling Units	Avg 1993-95 Unit Consumption (acre feet/unit)	Consumption Using Avg 1993 - 95 (2) (acre feet)	Consumption Using Avg 1993 - 95 (acre feet)
Multi-Family (482 connections)	4,469	0.27	1,207	1,207
Domestic Irrigation	2,786	1.51	4,207	4,207
Agricultural Metered Irrigation	221	21.75	4,807	4,807
Recreational Turf Services	83	17.39	1,443	1,443
Commercial	876	2.10	1,840	1,840
Industrial	18	11.22	202	202
Municipal (9 connections) (1)	2,476	0.544	1,347	1,347
Ditches	102	14.31	1,460	1,460
Construction Meters	65	1.33	86	86
Subtotal All Other Meters			16,599 af	16,599 af

CONTIGUOUS DISTRICT SUMMARY	Potential Demand Using Avg 1984 - 86	Potential Demand Using Avg 1993 - 95
TOTAL NORMALIZED CONSUMPTION (single-family and all other categories)	27,423	25,949
UNACCOUNTED FOR WATER (1993/1994/1995 average) (3)	6,260	6,260
ESTIMATED LATENT DEMAND (from Table 5)	2,502	2,502
TOTAL POTENTIAL DEMAND (before rounding)	36,185	34,711
TOTAL POTENTIAL DEMAND	36,200 af	34,700 af

- (1) Municipal per unit consumption is not an average and is taken from Table 3, City of Placerville Water Use Statistics.
(2) The 1993-95 average is used in both normalized consumption columns for the All Other Categories section because 1984-86 data is unavailable.
(3) A three year average has been calculated for this update due to the abnormally low 15.6% unaccounted for water experience in 1995.



El Dorado Irrigation District

MEMORANDUM

TO: Rob Alcott MS0396-2460
FROM: Regis Beaulieu
VIA: Bruce Adams *[Signature]*
DATE: March 27, 1996
SUBJECT: Meter Testing Programs (Large & Small) Status Report

BACKGROUND:

From mid 1994, the Meter Services Division, ran a series of AWWA accuracy tests of small meters (3/4" and 1") that have been measuring water consumption during the past fourteen to eighteen years to determine losses or unaccounted water. The staff also found twelve older and larger meters (both Rockwell and non-Rockwell) that were too large for the application required. Two examples found - were a 4-inch Sparling which would only measure accurately with water flows of more than 60 GPM and a 6-inch meter whose lower end accuracy was at 100 GPM. In 1995, these meters were replaced or a smaller bypass meter was installed to measure lower flows with greater accuracies.

FINDINGS:

The smaller meters (3/4 to 1 inch) were tested in accordance with AWWA criteria and resulted in losses of 2% to 100% - for stuck meters. The highest average loss of 11.95% was found during the low flow test. Low flow usages are the flows where the highest losses usually occur.

Large compound meters (two to 6-inch) testing commenced in February 1995 and fire hydrant meters (3-inch) followed in May 1995. It should be noted that neither of these large type meters were ever tested for accuracy since being installed, some dating as far back as 1979. The District's large meter maintenance program, prior to 1995, was to repair meters when they were found to be stuck or replaced when found to be outdated or lack spare parts for repairs.

Forty-eight large compound meters in the two to four inch range were tested resulting in measured total average losses of 15.33%. Meters of two and three-inch proved the most inaccurate. Two tested City compound meters, of six inch capacity, are not included in the stated loss estimate - both testing within AWWA accuracies. The forty-eight compound meter test results are further detailed in the attached memo MS0895-073 (Attachment A).

ACTION TAKEN:

As a result of all the tests conducted in 1994 and 1995; Meter Services has continued to repair or replace large and small meters. Some two inch compound meters are being replaced with two inch displacement (piston) meters. Smaller bypass meters are being installed with larger meters, of the

four and six-inch range, to more accurately measure low flow water usage. Two 12 inch meters installed during the 1960's at Sierra Pacific Lumber were replaced and one two-inch "Turbo" meter was installed at Sly Park Headquarters facility to measure its usage as well as at the wash-rack and campsites - contributing to the decrease of unaccounted for water losses in 1995.

It is estimated that 1,204 acre feet (AF) of water is now accounted for from these meter replacements and the recently installed bypasses required for the testing, repair and recalibration of compound meters and testing of the fire hydrant meters.

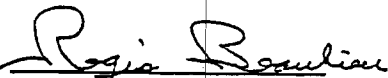
TOTAL ACRE FEET ACCOUNTED FOR

Meter Sizes	AF Estimates	Replaced Meters
Small	767	1,316 (5/8 to 1 inch)
Large*	437	25 (1 ½ to 14 inches)
TOTAL	1,204	1,341 meters

(* A four-inch propeller meter used by the City of Placerville is not included in the these figures-while the meter finally passed AWWA standards; the erratic nature of its performance, during testing, makes loss estimates inaccurate.)

CONCLUSION:

Upon completion of the remaining bypass installations of compound meters in April 1996, all 130 compound meters will be tested annually. Three hundred and thirty-five 'turbo' meters (1 ½ to 6 inch range) which cannot be tested in the field are under review. A 1997 CIP plan of action to address these 'turbo' meters will include the building of a meter test site at Reservoir #3 where an additional 1,225 AF to 1,500 AF of water could be accounted for . Completing the compound meter testing program could further lower the unaccounted for water rate by an additional 233 acre feet.


 Regis Beaulieu

gp

cc: David Powell
 Sharon Fraser



El Dorado Irrigation District

MEMORANDUM

TO: Bruce adams
FROM: Regis Beaulieu
VIA:
DATE: August 22, 1995
SUBJECT: Large Meter Testing Program(s) Status Report

MS0895-073

BACKGROUND:

During the late fall of 1994, staff with the help of O&M's welder, fabricated an up to date resetable portable large meter tester units and commenced to become proficient with the test units testing compound meters.

On February 6, 1995, staff worked on identifying existing compounds where required by - passes were needed (compounds are required to have by-passes in order to keep the customer(s) with water during meter testing) and were able to install 16 by-passes.

Upon conclusion of the these installations, staff started the District's new large meter test program testing 48 two inch, three inch and four inch meters. It is noted that these meters have not been tested since they were installed from 1979 through 1994.

FINDINGS:

Staff found that of the 48 compound meters tested that 20 of the meters were under registering on the low flows equaling 41.7% of the meters tested!

The results of all test, repairs and re-calibrations are attached (Attachment A).

Staff also found that there are currently 70 compound meters that are in need of by-pass installations in order to test the remaining meters in the system at a cost (in house O&M crews) of \$105,000 materials and labor.

Because of the prolonged winter rains and short time since repairs were made, there is insufficient usage data on those meters tested/repared/recalibrated to determine what the revenue gain would be under normal conditions.

It also has been found that by checking newer installations - low to moderate usage, that the time span (years) for the compound meter to start to lose accuracy is not long - four to six years, sometimes sooner.

AWWA recommendation is that it is considered advisable to provide for more frequent test of large meters, on the logical premise that an error in their registration affects revenue to a much greater extent. Further more, compound meters may under or over register to a much greater degree than positive - displacement meters.

The testing interval of continuing multi-testing programs have long been advocated by AWWA and are required by the California Public Service Commission Regulations rule number 103 of 1967 for all sized meters. As the characteristics of water vary, it becomes obvious that an arbitrary number of years is not the criterion to use for determining the length of time between test - the utility's own test results should be used to determine the length of time its meter should remain in service between tests.

It is inexplicable why meter maintenance is, in too many instances, considered of secondary importance, as something that is done only when other work that cannot be readily deferred is out of the way. Only when meters are formally recognized as the only means by which revenue is equitably obtained to operate the system will the necessary time and study be given to the question of how often it is necessary to test meters for most efficient and economic results.

Staff initiated a fire hydrant meter testing, repair and re-calibration program this spring and found that ever the newly purchased fire hydrant meters were inaccurate and re-calibrated these meters to required accuracy standards by AWWA.

RECOMMENDATION:

Staff recommends that more time and resources be allocated to the large meter maintenance program of repair, test and re-calibrations utilizing two staff personnel for the District's 1,000 +/- meters. To allocate funds to install by-passes for 70 compound meters for maintenance purposes (testing, repairs and re-calibration) for calendar year 1996 either by O&M staff or contract outsource. O&M believes that work can be accomplished during the winter season.

Staff also requests that the District position of Large Meter and Backflow Technician of performing water audits usage (85%) time and (15%) of time working with large meter and backflow prevention for total time (full time) be allocated to the large meters maintenance program(s) and another position budgeted for strictly domestic water audits in 1996.

CONCLUSION:

Staff is hopeful that this report helps to explain and continue to justify the District's large meter test, repair and re-calibration maintenance program(s) and their contribution to reducing the District's unaccounted for water loss.


Regis Beaulieu

br

ATTACHMENT A

METER SIZE	NUMBER TESTED	NUMBER INACCURATE	AVG. PERCENT LOSSES (LOW FLOW)	AVG. PERCENT LOSSES (HIGH FLOW)	AVG. PERCENT GAIN (HIGH FLOW)	OVERALL WEIGHTED TO LOSSES
2"	36	11	44.03	NONE	31.9 (4)	-12.13%
3"	10	8	22.51	6.63 (3)	1.28 (4)	-27.86%
4"	2	1	6.00	NONE	NONE	-6.00%
			TOTAL AVERAGE LOSSES			15.33%

EL DORADO COUNTY PUBLIC WATER PLANNING ORDINANCE
 APPROVED 1995 UPDATE -- WATER SUPPLY AND DEMAND REPORT

WATER SUPPLY AND DEMAND SUMMARY

Category	Public Water Service			Totals
	EID ²	GDFUD ²	GFCSD ²	
I. Existing Supply/Demand Data, acre-feet/year				
A. Entitlement	49,130	N/A	N/A	49,130
B. Supply Estimate	44,100	11,200	127	55,427
C. Demand Estimate				
• Single Family Residential	10,287	1,336	142	11,745
• Multi-Family Residential	1,251	-	-	1,251
• Subagricultural	4,235	-	-	4,235
• Agricultural	5,750	4,529	-	10,279
• Recreational Turf Services	1,461	-	-	1,461
• Commercial	1,927	237	-	2,164
• Industrial	216	-	-	216
• City	1,347	-	-	1,347
• Ditches	1,476	-	-	1,476
• Construction	86	-	-	86
• Unaccounted-for/Losses	6,260	2,421	-	8,681
• Latent	2,563	860	-	3,423
TOTAL (Demand Estimate)	36,800	9,383	142	46,325
D. Supply Balance	7,300	1,817	-15	9,102
II. Existing Unserved Vacant Parcels and Projects				
A. Single Family Residential				
• Parcels Less Than 5 Acres	4,346	716	771	5,833
• Parcels 5 Acres or Larger	1,995	898	20	2,913
Subtotal (Single Family Residential Parcels)	6,341	1,614	791	8,746
B. Multi-Family Residential	83	6	0	89
C. Commercial	248	18	1	267
D. Industrial	238	1	0	239
TOTAL (Existing Unserved Vacant Parcels and Projects)	6,910	1,639	792	9,341
Estimated Potential Water Need, acre-feet/year	5,190	1,990	330	7,510
III. Increased Agricultural Demand Through the Year 2015, acre-feet/year	2,934	0	0	2,934
IV. Parcels in Approved Tentative Maps				
A. Single Family Residential				
• Approved Parcels Within EDH Development Agreement	1,419	N/A	N/A	1,419
• Approved Parcels Outside EDH Development Agreement	3,729	249	0	3,978
Subtotal (Single Family Residential Parcels)	5,148	249	0	5,397
B. Multi-Family Residential	0	0	0	0
C. Commercial	18	6	0	24
D. Industrial	168	0	0	168
TOTAL (Parcels in Approved Tentative Maps)	5,334	255	0	5,589
Estimated Potential Water Need, acre-feet/year	3,220	300	0	3,520

Post-it® Fax Note 7671

Date	12/18/96	# of pages	2
To	Dante Pritchison		
From	Paul Converse		
Co./Dept.	Remy, et. al.	Co.	EDCWA
Phone #		Phone #	621-5392
Fax #	443-7017	Fax #	621-2212

EXHIBIT G

**EL DORADO COUNTY PUBLIC WATER PLANNING ORDINANCE
APPROVED 1995 UPDATE -- WATER SUPPLY AND DEMAND REPORT^{1/}**

WATER SUPPLY AND DEMAND SUMMARY

Category	Public Water Service			Totals
	EID ^{1/}	GDPUD ^{2/}	GFCSD ^{3/}	
V. <u>Balance of Potential Single Family Parcels Within EDH Development Agmt.</u> Estimated Potential Water Need, acre-feet/year	4,415 2,860	N/A 0	N/A 0	4,415 2,860
Number of Parcels and Projects (Categories II, III, IV, & V) Estimated Potential Water Need, acre-feet/year (Categories II, III, IV, & V)	16,659 14,204	1,894 2,290	792 330	19,345 16,824
VI. <u>Parcels and Projects Being Processed</u> Parcels Proposed in Tentative Maps				
A. Single Family Residential	785	45	0	830
B. Multi-Family Residential	0	0	0	0
C. Commercial	14	0	0	14
D. Industrial	8	0	0	8
TOTAL (Parcels and Projects Being Processed)	807	45	0	852
Estimated Potential Water Need, acre-feet/year	500	190	0	690
VII. <u>Specific Plan Projects Being Processed</u>				
A. Single Family Residential				
• Specific Plans Within Existing Water District Boundaries				
1. Valley View	836	N/A	N/A	836
2. Bass Lake	114	N/A	N/A	114
• Specific Plans Requiring Annexation				
1. Bass Lake	1,345	N/A	N/A	1,345
2. Carson Creek	2,922	N/A	N/A	2,922
3. Promontory	1,395	N/A	N/A	1,395
TOTAL (Specific Plan Projects Being Processed)	6,612	0	0	6,612
Estimated Potential Water Need, acre-feet/year	4,280	0	0	4,280
VIII. <u>Potential Supplies, acre-feet/year</u>				
A. Storage	-	-	11	11
B. Wells	-	-	40	40
C. El Dorado Project	17,000	-	-	17,000
D. USBR (CVP - P.L. 101-514 Water)	5,625	5,625	-	11,250
E. Reduction in Unaccounted-for Water	1,200	-	-	
F. Reclaimed Water Through the Year 2015	5,680	-	-	5,680
G. Crawford Ditch	1,500	-	-	1,500
TOTAL (Potential Supplies)	31,005	5,625	51	36,681

^{1/} Data adopted by the El Dorado County Board of Supervisors on June 4, 1996.

^{2/} Source: "1996 Update to the 1991 Water Supply and Demand Report", approved by the EID Board May 29, 1996. The water demands represent normalized consumption, as shown in Table 6A of the report. EID defines "latent water demand" as the combined anticipated demand for water by all inactive and uninstalled meters, if and when placed in service. The total estimated existing water demand has been rounded.

^{3/} Source: GDPUD "1995 Year End Water Supply and Demand Summary", April 2, 1996. The demand shown under the agricultural use category represents current irrigation water sales and includes agricultural and subagricultural uses. GDPUD defines "latent water demand" as the combined anticipated demand for water by current inactive meters plus unmetered parcels within assessment districts.

^{4/} Source: GFCSD "Water Supply and Demand Information" presented in a letter from Sandi Bush to Mr. Conrad B. Montgomery, dated March 12, 1996. Estimated potential water need does not include the additional demand associated with existing parcels shifting from part-time to full-time occupancy.

FINDINGS OF FACT
OF THE BOARD OF SUPERVISORS
OF EL DORADO COUNTY

for the

El Dorado County General Plan

January 23, 1996
(Revised January 26, 1996)

EXHIBIT H

E. WATER IMPACTS: RESOURCES, QUALITY, AND HAZARDS

Based on the CEQA Guidelines and commonly accepted professional practice, a significant impact would occur if:

1. Additional growth would result in a reduction in service levels to existing users (domestic and agricultural) if projected water supplies are not adequate to serve additional development to the year 2015 or Buildout;
2. If increased development were allowed in mapped floodplains or floodways;
3. If increased flood risk occurred as a result of increased surface drainage from new development;
4. If increased population was permitted in areas subject to inundation from dam failure;
5. If impacts on surface water sources through construction activities and other soil disturbances were increased; and
6. If groundwater quality impacts were created.

(Draft EIR, p. V.5-54.)

Based on the foregoing significance criteria, the Draft EIR identified the following significant impacts to water resources, water quality, and water hazards.

Impact 5.2.1 Water Supplies May Not Meet the Demand Generated by Community Regions and Other Land Uses, And Reduction In Existing Service Levels May Occur (Final EIR, vol. II, Response to Comment WA-189.)

1. Original Project Description

The 1995 *Final Water Supply and Demand Report* (Appendix 2, and update of the Fourth Review Draft provided in the Draft EIR) accurately describes the existing water supply, available vacant parcels, demands of pending and proposed projects, and projected water availability for water purveyors in the County. Water supplies will exceed projected demands for the year 2015, assuming that all the potential identified water supply projects materialize. As explained below, if these projected supplies are not developed, policies in the Original Project Description and in the County Public Water Planning Ordinance (County Ord. No. 4325) will limit growth.

In the short term, water supplies must be developed in the not too distant future to meet near term demands. EID, for example, identifies sufficient water availability for

approximately 11,500 new dwelling units. The GDPUD has sufficient water for approximately 3,050 additional dwelling units. Combined, these two supplies will support an additional 35,000 to 38,000 population, which should be sufficient to meet projected population to at least the year 2003 for EID and 2015 for the GDPUD. (Note: Some infrastructure improvements are required to provide this level of service.) (Final EIR, vol. II, Response to Comment WA-103.) The Original Project Description directs that public water be used within Community Regions, and the Capital Improvement Program emphasizes capacity improvements in Community Regions and Rural Centers, and health and safety improvements in Rural Regions. This direction is given as a way of more efficiently providing service.

In the long term, water supply development is also necessary to meet the projected demand associated with increased residential, commercial, and other uses. In the event that water supplies prove inadequate, additional growth could affect the ability of water purveyors to provide service. There could be several impacts should the growth associated with the Original Project Description occur without a concurrent increase in the water supply. If growth exceeds the available water for any of the water purveyors, the following impacts could occur:

- Existing customers (including agricultural accounts) may be requested or required to further conserve during times of water shortage; and
- Purveyors could stop accepting new customers with resulting impacts on property owners and the local economy.

The Draft and Final EIRs describe the long-term sources of additional water supply. The County recognizes, however, that these supplies may not materialize for legal, economic, or physical reasons. The Original Project Description therefore links growth to water supply. Policy 5.1.3.1 provides that growth and public facility expenditures be directed to Community Regions and Rural Centers. Public water is a requirement for all new development in Community Regions (Policies 5.1.2.2 and 5.2.1.3). The Concurrency Policy in Policy 5.1.2.1 requires that an adequate water supply either be available or be made available to serve the development. Policy 5.1.2.3 directs that projects not be approved unless public services and infrastructure are available or can be made available with a development project. In addition, the County Public Water Planning Ordinance requires that purchase of a water meter is mandatory for approval of all new final parcel or subdivision maps or development projects that require public water service. (County Ord. No. 4325, § 1.) These policies and the County Ordinance ensure that the development of new supplies be assured prior to new growth creating additional water demand. (See Final EIR, vol. II, Response to Comment WA-69.)

Water supply availability is not a limiting constraint to growth in the portions of the County within the jurisdiction of the Tahoe Regional Planning Agency. The Regional Water Quality Control Board staff advises (1995) that the current TRPA Regional Plan

could allow more development at Buildout than the scenario on which the recommended "zonal allocation" was based. The Draft EIR prepared by the State Water Resources Control Board for proposed water policy revisions within the Tahoe Basin concluded that additional conservation might be necessary to stay within the Compact limit if occupancy increased at the earlier projected level of development. Still greater levels of conservation or further restrictions on development could be necessary under current TRPA growth projections. (Final EIR, vol. II, Response to Comment WA-13.)

If new developments in rural areas are approved based on wells that do not provide anticipated yields on a long-term basis, there may be a need to supply those developments with public water if alternative private water supplies are not available. Public water supplies otherwise intended for Community Regions may not be available to meet market demand and land use needs that would contribute to achieving the County's land use, economic, and social goals.

One aspect of the General Plan is the possibility that significantly more land could be designated for development than is likely to occur to the year 2015. This is premised on the idea that market forces should not be unnecessarily constrained in directing the location of growth. If public water supplies are not available to accommodate market demands, the concurrency/phasing (Policies 5.1.2.1, 5.1.2.3, 5.2.1.2) provisions of the General Plan would restrict the approval of discretionary projects until water supplies were increased. If public water supply becomes a constraint, a closer accounting of the remaining supply with the County General Plan and Capital Improvement Plan will result. This accounting will need to occur so that the growth increment to be accommodated will strategically implement the General Plan. (See Growth Management Council to Governor Wilson, Strategic Growth: Taking Charge of the Future (Jan. 1993), p. 29.)

Buildout is not considered in this EIR discussion of water. The ultimate availability of water supplies to serve Buildout population is unknown. As noted herein, there is no guarantee that any of the water entitlements identified will be acquired. It is believed, however, that most, if not all, of those entitlements will eventually be acquired. Under any alternative or scenario, water is a potential limiting factor to the growth projected in the General Plan. Should the water supply tap be turned off or reduced at some point in the future, growth would stop. This shortage scenario may occur in five years, or possibly fifty years or more. There is no way to make such a determination. Any attempt to define and project such as occurrence would be highly speculative. Regardless, it can be assumed with confidence that water will continue to be a scarce resource, demanding and responsive to careful and attentive management. Careful management is guaranteed by the annual review of water supply and demand as required by the El Dorado County Public Water Planning Ordinance No. 4325. This annual report will help to maintain public awareness of the supply and demand issue and will set the stage for possible future amendments to the General Plan should the possibility of future supplies become bleak. As noted throughout the Draft EIR section on Water,

Policy 2.10.2.1 requires five-year reviews of the General Plan. During these reviews, the County can reconsider the assumption that water will be available if conditions warrant. (Final EIR, vol. II, Response to Comment WA-191.)

Overall, this impact is considered significant for the Original Project Description. (Draft EIR, pp. V.4-56 to V.5-58.)

2. Annotated Project Description

The Thresholds Analysis describes the changes to the land use map between the Original Project Description and the Annotated Project Description. (Thresholds Analysis (Sept. 18, 1995), § II, pp. 1-4.) Table 1 provides a comparison of the Project Description and the Annotated Project Description by dwelling unit type and population. (Thresholds Analysis (Sept. 18, 1995), § II, Table I.) Generally, the Annotated Project Description will result in reduced population and reduced dwelling units. (Thresholds Analysis (Sept. 18, 1995), § II, p. 5; Plan Comparison (Jan. 9, 1996).) Population reductions for the Annotated Project Description are greatest in Regional Analysis Area 1, which is served by EID. (Plan Comparison (Jan. 9, 1996).) Despite these populations differences, the increased demand for public water service under the Annotated Project Description will still result in a significant impact. (Thresholds Analysis (Sept. 18, 1995), § II, p. 5.)

3. Mitigation Measures

Original Project Description Mitigation Measures

The following Original Project Description policies would partially mitigate the impacts on public water supplies and infrastructure:

Element	Policies
Public Services and Utilities	5.1.2.1-5.1.2.4. 5.1.3.1, 5.1.3.2., 5.2.1.1-5.2.1.3

The County adopted the foregoing Original Project Description policies without change, except for minor changes to Policy 5.1.2.1, which require the County to assess whether the demand for a particular service or utility exceeds supply based on input from the service or utility provider.

Additional Mitigation Measures

In addition to the policies in the Original Project Description cited above, the Draft EIR identified the following policy modifications or additions that would mitigate the impacts to a less than significant level.

1. Add the following policies under Objective 5.2.1 of the Public Services and Utilities Element:

- A. Rezoning and subdivision approvals in Community Regions or other areas dependent on public water supply shall be subject to the certain availability of a permanent and reliable water supply to meet the needs of current customers, the reasonable needs for agricultural expansion, and the needs of those already approved but as yet unserved parcels and projects found by the Board of Supervisors to likely develop. Certain availability means that all necessary environmental documentation and regulatory approvals including water rights have been accomplished, financing has been secured, and that there are no remaining impediments of any type to the utilization of that water supply.

The County adopted this mitigation measure in part to read as follows:

Rezoning and subdivision approvals in Community Regions or other areas depending on public water supply shall be subject to the availability of a permanent and reliable source of water.

The County will include this measure as Policy 5.2.1.4 in the Annotated Project Description. The County has determined that this rewording of the mitigation measure is consistent with the "Concurrency Policy" (5.1.2.1) and the County Water Ordinance. That Policy and Ordinance ensure that adequate public water supplies will be available to serve future development. Policy 5.1.2.1 requires project proponents to demonstrate that they have planned to meet future water demand prior to receiving discretionary development approvals. The County Water Ordinance requires a project proponent to obtain a water meter for all new final parcel or subdivision maps or for development projects requiring public water service. The County rejects as infeasible the language from the proposed mitigation measure specifying the extent of water availability required and the language on "certain availability." This language would largely duplicate the kind of showing required by Policy 5.1.2.1 and the County Water Ordinance. To the extent that the proposed wording would create requirements more stringent than those in the Concurrency Policy and Water Ordinance, the County rejects the language as infeasible. Of particular concern is language that might be construed to require the Board of Supervisors to deny subdivision approvals simply because EID and other water providers could not show that water was already available (i.e., physically ready to deliver) for "projects found by the Board of Supervisors to be likely to develop."

As a practical matter, water purveyors often will not make the capital investments necessary to physically obtain water supplies for new development until the planning process for such development is far advanced. At early points in the planning process (e.g., approval of specific plans), landowners will commit themselves to creating funding mechanisms that will allow the purveyors to make the investments needed to eventually

obtain water for subsequent development; but such investments typically cannot be made in advance of such preliminary planning approvals. After these preliminary approvals are granted, capital is created for the purveyors to build physical facilities needed to obtain and deliver water. By the time later planning approvals (i.e., final subdivision maps and building permits) are granted, the purveyors will typically have had time (if water supplies are available for delivery) to build the infrastructure necessary to deliver water to new homes and businesses. (See Letter from Craig M. Sandberg, Law Offices of Craig M. Sandberg, to Chairman of El Dorado County Board of Supervisors (Jan. 9, 1996) (explaining process for financing public infrastructure projects); Letter from Michael J. McDougall, Palisades Properties, Inc., to Mark Nielsen, El Dorado County Board of Supervisors (Jan. 3, 1996) (same); Letter from Norm Brown, N.C. Brown Development Inc., to Mark Nielsen (Jan. 10, 1996) (explaining time lag between tentative map approval and actual building of residential projects); Letter from Kyle Smith, Dorado Land & Development, to El Dorado County Board of Supervisors (Jan. 10, 1996) (explaining difficulty in obtaining financing for project infrastructure until entitlements exist).) Policy 5.1.2.1 will allow this complex process to work in an efficient fashion. The rejected language from the proposed mitigation measure might not have done so. That language is therefore infeasible as being inconsistent with Project Objectives 1, 4, and 5. By failing to recognize the realities of funding capital facilities needed to deliver water to new customers, the language would thwart the County's efforts to achieve economic growth through new businesses. The policy could also thwart efforts to facilitate the construction of affordable housing. (Annotated Project Description (Aug. 17, 1995), p. 99; Thresholds Analysis (Sept. 18, 1995), p. 25; County Water Ordinance No. 4325, § 1; Annotated General Plan (Dec. 21, 1995), p. 118 (Policy 5.2.1.4); Final General Plan (Jan. 23, 1996), p. 94 (Policy 5.2.1.4); Final EIR, vol. I, Letter LG-11; Final EIR, Vol. IV, Responses to Comments WA-294. WA-310.)

- B. Development within the three Planned Communities cannot proceed until the Fazio water allocation (USBR-CVP) is authorized to the El Dorado Irrigation District. Development in the Bass Lake Hills Specific Plan area may not occur until the El Dorado or Fazio water is available. All four of these projects must meet the "certain availability" standard.

The County rejected this mitigation measure as unnecessary. The County has determined that the "Concurrency Policy" contained in Policy 5.1.2.1 and the County Water Ordinance both recognize the potential water supply/demand problem in the County and contain adequate policies to ensure that supply meets demand. Further, the County has determined that the "certain availability" requirement conflicts with Project Objectives 1, 4, and 5, as described under "A" above. (Annotated Project Description (Aug. 17, 1995), p. 99; Thresholds Analysis (Sept. 18, 1995), p. 25; County Water Ordinance No. 4325, § 1; Final EIR, vol. II, Response to Comment WA-101; Final EIR, vol. IV, Responses to Comments WA-294, WA-310, WA-315. See also Housing Articles and Studies; Letter from Michael McDougall, Palisades Properties, Inc., to Mark Nielsen, El Dorado County Board of Supervisors (Jan. 3, 1996); Letter from Craig M. Sandberg,

Law Offices of Craig M. Sandberg, to Chairman of El Dorado County Board of Supervisors (Jan. 9, 1996) (explaining process for financing public infrastructure projects).) Nevertheless, the County adopted the following language, as a new Policy 5.2.1.8, in order to further mitigate Impact 5.2.1:

"The preparation and approval of specific plans may occur without the availability of water guarantees. The timing of water guarantees shall be established within the policies of each specific plan consistent with Policy 5.2.1.4."

The County notes that comments on the Final EIR, as well as oral and written testimony directed to the Board of Supervisors in January 1996 questioned the conclusion in the Draft EIR and Final EIR that additional water supplies may be available in the future through the El Dorado Project proposed by the County Water Agency. As explained in the Final EIR, the El Dorado Project has the potential to provide a safe yield of 17,000 acre feet annually. (Final EIR, vol. IV, Response to Comment WA-300; *See 1995 Final Water Supply and Demand Summary*, Final EIR, vol. V, App. 2.) The El Dorado Project has been the subject of its own environmental review process, with the County Water Agency acting as the Lead Agency. The County Water Agency concluded the environmental review process in October of 1995 and approved its project. The project is also subject to review and approval by the State Water Resources Control Board, an agency with substantial technical expertise and responsibility for weighing public trust considerations.

The following documents fully describe the County Water Agency's plans for the El Dorado Project, the potential water supply it may provide, its environmental impacts, and the Agency's mitigation measures for those impacts:

- El Dorado County Water Agency Water Program and El Dorado Project for the El Dorado Irrigation District Service Area, Draft Environmental Impact Report (Sept. 30, 1992)
- El Dorado County Water Agency Water Program and El Dorado Project for the El Dorado Irrigation District Service Area, Final Environmental Impact Report (March 1993)
- Draft Supplement to El Dorado County Water Agency: Water Program and El Dorado Project EIR (July 1995)
- Final Supplement to El Dorado County Water Agency: Water Program and El Dorado Project EIR (Oct. 1995)
- El Dorado County Water Agency, Findings of Fact, Statement of Overriding Considerations for the El Dorado County Water Agency Water Program and El Dorado Project (April 1993)

- El Dorado County Water Agency, Findings of Fact, Statement of Overriding Considerations, Adoption of Mitigation Monitoring Program, and Approval of Preferred Alternative Relating to Supplement to El Dorado County Water Agency Water Program and El Dorado Project EIR (Oct. 23, 1995).

These documents are available for public review with the County Water Agency. The County emphasizes that the analysis in the Draft and Final EIRs regarding the El Dorado Project is not contingent on the Project being built. Rather, the Draft and Final EIRs note that the El Dorado Project *may* provide additional water supply in the future to allow for additional growth, but that if this project proves infeasible, growth will be limited. (See Annotated General Plan (Dec. 21, 1995), p. 115, Policy 5.1.2.1; Final General Plan (Jan. 23, 1996), p. 91, Policy 5.1.2.1; County Public Water Planning Ordinance No. 4325.)

- C. All annexations to a water district must be found to be consistent with the General Plan and satisfy LAFCO guidelines and policies regarding General Plan consistency. Annexations in Rural Regions may only occur if groundwater services are not available to serve, or are unable to continue serving the development, or infrastructure already abuts the property, and sufficient water is available to serve the annexed area.

The County adopted this policy (now 5.2.1.5) with the following language changes:

Approval of development projects requiring annexations to water districts in Rural Regions may only occur if groundwater sources are not available to serve, or are unable to continue serving the development, or if existing infrastructure abuts the property, and sufficient water is available to serve the annexed area.

The County determined that the first sentence of the proposed measure was unnecessary because it was a statement of existing law. (Thresholds Analysis (Sept. 18, 1995), p. 25; Annotated General Plan (Dec. 21, 1995), p. 118 (Policy 5.2.1.5); Final General Plan (Jan. 23, 1996), p. 94 (Policy 5.2.1.5).)

- D. Priority shall be given to discretionary developments that are infill or where there is an efficient expansion of the water supply delivery system.

The County has adopted this mitigation measure as new Policy 5.2.1.6. (Thresholds Analysis (Sept. 18, 1995), p. 26; Annotated General Plan (Dec. 21, 1995), p. 118 (Policy 5.2.1.6); Final General Plan (Jan. 23, 1996), p. 94 (Policy 5.2.1.6).)

- E. In times of declared water shortages, the Board of Supervisors shall give priority to approving affordable housing and non-residential development projects.

The County has adopted this mitigation measure as Policy 5.2.1.7. (Thresholds Analysis (Sept. 18, 1995), p. 26; Annotated General Plan (Dec. 21, 1995), p. 118 (Policy 5.2.1.7); Final General Plan (Jan. 23, 1996), p. 94 (Policy 5.2.1.7).)

4. Finding

The County has determined that with the foregoing adopted mitigation measures, adequate changes have been incorporated into the project to reduce impacts associated with an increased demand for public water services to a less-than-significant level.

Impact 5.2.2 Additional Growth Will Occur In Areas Which Are Dependent On Private Wells For Water, Potentially Affecting The Quality and Quantity Of Groundwater

1. Original Project Description

The Draft EIR explained that, given the geological nature of the County, where water is typically found in rock fractures, water table levels and groundwater supplies simply are not identifiable or quantifiable. El Dorado County does not have the typical water tables found in the Sacramento Valley environment, making it extremely difficult to monitor trends and determine the quantity of groundwater available for future development.

Therefore, existing data on groundwater supply and quality is lacking. At best, based on Environmental Management Department staff experience, it can be concluded that areas of sparse water supply do exist in some areas of the County and that some areas have experienced dry wells, or the need for deeper wells, especially in recent dry years. Even though new dry wells are occasionally experienced, however, it is rare that a proposed rural residential project has not been able to develop a well with acceptable water production.

The Original Project Description, with a potential increase of 172 percent over the existing 1990 rural population, appears to have the potential for creating a heavy demand on groundwater for domestic use. Based on the Original Project Description, the Draft EIR analyzed projections for rural development within each Regional Analysis Area.

The Draft EIR analyzed the potential for impacts in each of the Regional Analysis Areas as follows:

- Regional Analysis Area 1 (El Dorado Hills, Cameron Park/Shingle Springs, Diamond Springs/El Dorado, and Placerville Market Areas): As noted in the Draft EIR and Tables V-5-14 and V-5-15, the increase in wells in this area would range from 70 percent in the Alternative to 191 percent in the No Project Alternative, with the Project Description increase being 109 percent. Since over



ORDINANCE No. 4325

THE BOARD OF SUPERVISORS OF THE COUNTY OF
EL DORADO DOES ORDAIN AS FOLLOWS:

(UNCODIFIED)

EL DORADO COUNTY PUBLIC WATER PLANNING ORDINANCE

Section 1. New Parcels.

Upon passage of this ordinance, the County shall make purchase of a water meter mandatory for approval of all new final parcel or subdivision maps or development projects which require public water service.

Section 2. Obtain Water Data.

Within 180 days after the passage of this ordinance, and annually thereafter the County shall do the following:

1. obtain water supply and demand data from the public water agencies and districts within the County as set forth in California Government Code Sec. 65352.5;
2. provide for public review of the water data;
3. hold public hearings prior to acceptance of the water data.

Section 3. Water Plan.

Within 12 months after passage of this measure, the County shall, after holding public hearing(s), prepare a long term public water plan, to be updated annually thereafter, that includes the following:

1. an inventory of the projects and parcels being processed by the County, within each public water district, and estimates of their potential public water needs;
2. an inventory of all existing unserved parcels and projects within each public water district and estimates of their potential public water needs;
3. a water availability assessment for each public water

EXHIBIT I

district that determines the adequacy of existing and planned future public water supplies to meet existing and planned future demand on these water supplies, projected over the next twenty (20) years, for all types of growth and development - residential, commercial and agricultural.

Section 4. Public Notice.

The County shall annually mail a summary of the annual public water availability assessment to all County property owners as shown on the current property tax assessment roll.

Section 5. Severability.

If any section, subsection, sentence, clause, phrase, part or portion of this ordinance is for any reason held to be invalid or unconstitutional by a final judgment of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. It is hereby declared that this measure, and each section, subsection, sentence, clause, phrase, part or portion thereof would have been adopted or passed irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, parts or portions be declared invalid or unconstitutional.

Section 6. Amendment or Repeal.

This ordinance may be amended or repealed only by a unanimous vote of the total authorized membership of the Board of Supervisors or by a majority of the voters voting in an election thereon.

Section 7. Tahoe Regional Planning Agency Exclusion.

This ordinance shall not apply to any projects or parcels within the jurisdiction of the Tahoe Regional Planning Agency.

Section 8. Pursuant to Elections Code section 4050, this ordinance shall take effect and shall become effective immediately upon the adoption hereof.

Section 9. By adoption hereby the Board of Supervisors has authorized the filing of a Notice of Exemption for purposes of the California Environmental Quality Act.

PASSED AND ADOPTED by the Board of Supervisors of the County of El Dorado at a regular meeting of said Board, held on the 8th day of March, 1994, by the following vote of said Board:

Ayes: Supervisors William S. Bradley, Raymond J. Nutting, J. Mark Nelson, William N. Center, John E. Upton

Noes: none
Absent: none

ATTEST
DIXIE L. FOOTE
Clerk of the Board of Supervisors

By Margaret E. Mosley
Deputy Clerk

John E. Upton
Chairman, Board of Supervisors

I CERTIFY THAT:
THE FOREGOING INSTRUMENT IS A CORRECT COPY OF THE ORIGINAL ON FILE IN THIS OFFICE

Date _____
ATTEST: DIXIE L. FOOTE, Clerk of the Board of Supervisors
of the County of El Dorado, State of California.

By _____
Deputy Clerk



POLICY STATEMENT

SUBJECT:

SERVICE PROCUREMENT

NO. 22

ADOPTED November 10, 1981

REVISED

December 9, 1981

September 12, 1984

October 21, 1991

April 27, 1992

COPY

SCOPE AND PURPOSE

This Policy Statement establishes the procedure by which an applicant, who is requesting an extension of new water and/or sewer services, can obtain service from the District. The purpose of this procedure is to establish a means by which potential District customers are advised of conditions precedent to receiving water and sewer service.

BACKGROUND

Local law requires that an applicant submit evidence of water and sewer service prior to Final Map approval and also make approval of a Final Map contingent upon the applicant entering into a contract with the District for extension of necessary facilities. The District, pursuant to Policy No. 41, will not commit to serve properties when such service would reduce the water supply reliability below the established firm yield. In order to comply with local development laws and to ensure consistency with District water supply policy, the District will issue Facility Improvement, Meter Award and Department of Real Estate Letters as specified below.

APPLICABILITY

This Policy applies to subdivisions, commercial, industrial developments, and parcel splits. In the case where a parcel split requires a major extension of facilities, the requirements for a subdivision may apply.

As they relate to conditions of and fees for extension of service, District Regulations and Policies will apply as of the date of the fully executed Extension of Facilities Agreement. As they relate to conditions of and charges for initiation of service and the on-going water and sewer service provided to the customer, District Regulations and Policies will apply as adopted and amended from time to time by the District's Board of Directors.



POLICY STATEMENT

SUBJECT:

SERVICE PROCUREMENT

NO. 22

ADOPTED November 10, 1981

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FACILITY IMPROVEMENT LETTER

The District will issue Facility Improvement Letters (See Sample, Exhibit A) for water and/or sewer service to applicants requesting service to existing parcels, lands being subdivided or split, and lands being rezoned or involving petition for amendment to the County or City General Plan. The applicant's request must be in writing, and must contain the Assessor's parcel number(s), current zoning, proposed zoning, General Plan land use classification (existing and/or proposed), and other information regarding water and/or sewer services as applicable. The applicant must contact the local Fire Department to inquire about fire flow requirements. If fire protection is required, the applicant's request for a Facility Improvement Letter must be accompanied by a letter from the Fire Department specifying fire flow requirements.

In addition to the above requirements, Commercial and Industrial developments requesting a Facility Improvement Letter must submit specific water or sewer requirements. The District will determine whether the applicant must prepare a Project Facility Plan Report as specified below.

The Facility Improvement Letter will be valid for 2 years from the date of issuance. If the project has not received Tentative Map approval within 2 years from the date of the letter, a revised Facility Improvement Letter may be required.

For subdivisions, commercial or industrial developments, the Facility Improvement Letter will contain the size, approximate location and remaining capacity of water and/or sewer pipelines that will serve the project. This information will be sufficient for the preparation of a Facility Plan Report (FPR). The FPR shall be prepared by a Registered Engineer employed by the applicant.



POLICY STATEMENT

SUBJECT:

SERVICE PROCUREMENT

NO. 22

ADOPTED November 10, 1981

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The FPR shall indicate the facilities that are necessary for service and shall comply with District standards and requirements (See Sample, Exhibit B). The engineering report is to be approved by the District Engineering Director or a registered engineer in the Department designated by the Engineering Director.

For Parcel Splits, the Facility Improvement Letter specifies the size, approximate location, and extent of the water and/or sewer facility improvements required to serve a proposed parcel split. However, if the proposed parcel split requires a major extension of water and/or sewer facilities, the applicant may be required to prepare an FPR.

METER AWARD LETTER

The District will issue a Meter Award Letter (See Sample, Exhibit C) to eligible applicants.

To receive an award letter, the following conditions must be satisfied:

- submission of a Facility Improvement Letter and an approved Facility Plan Report, if required
- submission of Extension of Facilities Application and Fee, if required
- submission of Engineered Improvement Plans and associated fees
- submission of all required environmental documents
- all applicable water, sewer and other connection fees paid.
- approval of Annexation; if required
- all agreements approved by EID Board of Directors and signed
- all land rights being conveyed or guaranteed to be conveyed to the District
- all Engineered Improvement Plans approved by the District Engineer



POLICY STATEMENT

NO. 22

ADOPTED November 10, 1981

REVISED

December 9, 1981

September 12, 1984

October 21, 1991

April 27, 1992

SUBJECT:

SERVICE PROCUREMENT

- compliance with all construction and maintenance bonding requirements
- all other District requirements being met

DEPARTMENT OF REAL ESTATE LETTER ISSUED

Upon request, the District will issue a letter to the Department of Real Estate (Exhibit D) to eligible applicants meeting the following conditions:

- Water and/or sewer improvements have been completed and accepted by the District (Notice of Completion issuance)
- Applicant has supplied the District with parcel numbers, lot numbers and addresses for each parcel.

SAFEGUARD TO PREVENT OVER-COMMITMENT OF SUPPLY

The District will NOT continue to issue Meter Award Letters if available supplies (pursuant to Policy No. 41) are seriously threatened. This provision is intended to prevent an over-allocation of water by terminating issuance of Meter Award Letters until an additional water supply is deemed to be available.

SAMPLE

In reply refer to: E0000-000

_____, 1992

John Doe
0000 Dartmouth Place
Somewhere Inn, CA 95630

Subject: Facility Improvement Letter
Assessor's Parcel No. 000-000-00

Dear Mr. Doe:

This letter is written in response to your request dated _____ and is pursuant to District Policy Statement No. 22 which states the procedure agreed upon between the District and the County to indicate water and sewer improvement requirements necessary to support your proposed subdivision.

Please be advised that the District manages its water supply under Policy Statement No. 41. In the event the District's water supply is depleted, water meters will not be sold. This letter is not a commitment to serve, but does address the location and approximate capacity of existing facilities available to serve your project. In terms of supply, as of _____ (Date) there were _____ EDU's available. Your project, as proposed on this date, would require an estimated _____ EDU's.

This letter is valid for a period of two years. If your project has not received Tentative Map approval within two years of the date of this letter, a revised Facility Improvement letter may be required.

The balance of this letter will be dedicated to Engineering information specific to the subject parcel.

If you have any questions, please contact Kyle Ericson at 622-4534.

By _____
EID Engineer RCE 00000

Improve-.sub

ENGINEERING FACILITY PLAN REPORT

PURPOSE:

The District requires an approved Project Facility Plan Report (FPR) for subdivisions, and commercial/industrial developments prior to issuing a Meter Award Letter. The purpose of the report is to develop an understanding between the developer and the District on what system improvements the developer must construct prior to receiving service. This will help the developer to determine the costs that will be incurred for water and wastewater service. It will also help prevent misunderstandings and costly revisions from occurring when construction drawings are prepared.

CONTENT:

The complexity of the report will depend on the size and number of phases in the project and the extent of improvements that are required. The report shall at a minimum include the following:

- 1) A vicinity Map.
- 2) Name, address and telephone number of Engineer and owner/developer.
- 3) A letter from the Fire Department stating their required fire flow and duration.
- 4) A map showing the overall development boundary and major subdivision thereof.
- 5) Topographic map with contour intervals of 20 feet or less.
- 6) Water demands and wastewater projections based on the equivalent dwelling unit (EDU) concept and maximum flow demand criteria provided in the District Standards.
- 7) Existing or proposed sources of water.
- 8) Existing or proposed locations for sewage disposal.
- 9) Adjacent proposed developments on file or being proposed with the County, and number of EDU's for both water and wastewater.
- 10) Existing and proposed pressure zone boundaries if applicable.
- 11) The location, capacity and high water elevation of any storage facility.
- 12) The location and size of any required pressure reducing station.
- 13) Location and size of all water mains.
- 14) Location, size and approximate slope of all sewers.
- 15) The location, capacity and head for any pumping or lift stations.
- 16) A statement of whether the property is within the District.
- 17) Existing County zoning designation(s).

In conjunction with the submittal to the County of a Tentative Subdivision Map, the developer/engineer shall submit a Draft FPR to the District. An initial screening for completeness of the FPR will be performed by the Engineering Department. If the report is not complete, it shall be returned with comments for re-submittal.

Upon approval of a County Tentative Map, the developer/engineer shall obtain approval of the Draft FPR from the District, and then can begin the process of preparing improvement plans.

The first submittal of improvement plans for District review must be accompanied by an approved Draft FPR. If, through the review process, changes are required to the improvement plans which affect the Approved Draft FPR, such changes must be reflected in the FPR. In conjunction with the approval of the final improvement plans, the developer/engineer shall submit a final FPR for approval. Draft and final FPRs shall be transmitted by the attached form.

Note: A Meter Award Letter will not be issued absent an approved Final FPR.

FACILITY PLAN REPORT TRANSMITTAL
(Name of Development)

Contact Person _____

Address _____

Telephone # () _____

APN(s) _____

Date _____

Location (zone) _____

1. This development will be constructed in _____ phases.
2. The property requires Annexation to EID. _____ Yes _____ No.
3. The total acreage of the development is _____ acres.
4. The number of parcels proposed is _____.
5. The number of EDUs requested is _____.
6. The estimated maximum day water demand is _____ gpm.
7. The fire flow requirement is _____ gpm for _____ hours duration.
8. Pressure reducing stations are required. _____ Yes _____ No.
9. The estimated average dry weather sewer flow is _____ gpm.
10. The estimated peak wet weather sewer flow is _____ gpm.
11. Engineer's cost estimates sheet for all facilities to be built. _____.

By _____
Developer's Engineer

RCE _____

Draft FPR Approved by

EID Engineer, RCE # _____

Final FPR Approved by

EID Engineer, RCE # _____

NOTE: If project is to be constructed in phases, indicate number of parcels, number of EDUs, etc. for each phase.

jre:5:5:92:fpr

SAMPLE

In reply refer to:

State of California
Department of Real Estate
2201 Broadway
Sacramento, CA 95814

Subject: _____

Project Work Order No.: _____

Gentlemen:

The water and sewer systems have been designed to meet the requirements for domestic use. All water served to this subdivision will be potable.

Meters have been purchased for all parcels. System improvements have been constructed and accepted by the District in accordance with the Regulations and Policies in effect and approved by the Board of Directors of the El Dorado Irrigation District.

The water main extension serving this subdivision has been sized to meet the fire flow requirements of the _____ Fire Department (the agency responsible for fire protection in the subject area).

Sincerely,

John Kingsbury
Customer Services Supervisor



POLICY STATEMENT

NO. 41

ADOPTED July 24, 1989

REVISED October 21, 1991
May 11, 1992

COPY

SUBJECT:

WATER SUPPLY RELIABILITY

SCOPE AND PURPOSE

The purpose of this Policy Statement is to establish standards and procedures by which the adequacy of water supplies and the risks of water shortages may be determined. This will provide a basis for subsequent and ongoing efforts to maintain an appropriate relationship between supply and demand.

This Policy is directed primarily toward management of water supply reliability as applied to the primary and contiguous water distribution system of the District. Application to satellite systems or to ditch systems should not be assumed, and shall be done with care and judgement.

BACKGROUND

The District recognizes that the uncertainties associated with weather patterns result in considerable variation from year to year in the quantity of water yielded by any watershed causing various degrees of shortage. Hardships caused in terms of the degree and frequency of water shortages should be balanced against the hardships associated with the costs required to minimize such shortages. To provide sufficient water shortage to eliminate shortages under all circumstances would involve investments in rarely used capacity. Stated differently, providing a totally risk-free service is in general not realistic.

The District has accepted considerable uncertainty of supply under the assumption that agriculture, the predominant user, could better absorb occasional shortages than costs associated with major additional facilities. However, the changing character and expectations of water users now makes refinement of supply risks a management priority.



NO. 41 P. 13
ADOPTED July 24, 1989
REVISED October 21, 1991
May 11, 1992

POLICY STATEMENT

SUBJECT:

WATER SUPPLY RELIABILITY

DEFINITIONS

System Firm Yield: The annual quantity of water which the integrated water supply system can theoretically make available 95% of the time. In the remaining 5% of the time, shortages calculated not to exceed twenty percent annually will be allowed. The integrated system firm yield value is to be calculated based on the methodology established by the Abraham model, with modifications based on actual operations experience.

Potential Water Demand: The total amount of normalized water consumption, plus latent water demand and unaccounted-for water.

Normalized Consumption: A calculated annual amount of water consumption which is based on normal, unrestricted water use.

Latent Water Demand: The combined anticipated demand for water by all inactive and uninstalled meters, if and when placed in service.

Unaccounted-for Water: Water that is taken into the system from all EID's main sources (Sly Park, Forebay, Folsom, Crawford) but which is not delivered to the consumers or otherwise accounted for.

WATER RELIABILITY POLICY

It is the Policy of the El Dorado Irrigation District to endeavor to provide water supplies having a System Firm Yield greater than or equal to the normal, unrestricted, water demands of the District's system. Recognizing that System Firm Yield as defined above may result in shortages in approximately 5% of the time, it is the Policy of the District to accept such shortages in the system when available supplies are insufficient to supply the unrestricted normal demands of the system, and to impose



POLICY STATEMENT

NO. 41

ADOPTED July 24, 1989

REVISED October 21, 1991
May 11, 1992

SUBJECT:

WATER SUPPLY RELIABILITY

such voluntary or mandatory conservation measures as it deems appropriate in the circumstances. To mitigate these measures where possible, it is the Policy of the District to give priority to and seek means for the provision of supplies over curtailment of demands, in the implementation of this policy, in order that the needs of the system may be best served.

WATER SUPPLY MANAGEMENT

The District will maintain adequate water supply and demand records to ensure accurate monitoring and reporting. The District Manager will prepare an Annual Updated Water Supply and Demand Report which will be submitted by April of each year to the Board of Directors. This report will present an analysis of demand and supply based on occurrences during the preceding year, and will specifically include updated information on normalized consumption, latent water demand, unaccounted-for water, potential water demand, and significant changes in water supply, if any.

IMPLEMENTATION

The District will endeavor to plan for, identify and implement supply enhancements as required to maintain System Firm Yield in an amount greater than the normal unrestricted demands of the system. The District may, if judged necessary impose temporary restrictions on new connections in order to prevent or limit any firm yield deficiencies. Any such restrictions will be established pursuant to Water Code Sec. 350 et. seq. of the California Water Code. Therefore, to effectively manage the District's water supply and to ensure compliance with applicable law, the District Manager shall implement the following actions:



POLICY STATEMENT

NO. 41

ADOPTED July 24, 1989

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May 11, 1992

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WATER SUPPLY RELIABILITY

- (1) monitor on a daily basis the amount of remaining firm supply that can be made available to new customers through either issuance of meter award letters per Policy No. 22 or meter sales per Policy No. 14
- (2) at any time the remaining firm supply is at or below 1,000 equivalent dwelling units (i.e. 600 acre feet), a public hearing will be scheduled as soon as possible after the 7 day notice requirement in (3) below is met.
- (3) the public hearing called for in (2) above will be noticed as soon as possible per the notice requirements of Water Code Section 352.
- (4) information and supporting data which describe the District's supply and demand condition at that point in time will be assembled and distributed prior to the public hearing.
- (5) the District Board of Directors will convene the noticed Public Hearing, consider the supply and demand data, take public comment and determine whether a Water Shortage Emergency should be declared pursuant to Water Code Section 350 et. seq.

ld:5:13:92

-4-



EL DORADO COUNTY
PLANNING DEPARTMENT

Lill

2850 Fairlane Court
Placerville, CA 95667

Phone: (916) 621-5355
Fax: (916) 642-0508

**NOTICE OF ADDENDUM
TO THE FINAL ENVIRONMENTAL IMPACT REPORT
FOR THE CARSON CREEK SPECIFIC PLAN**

Agency: County of El Dorado
2850 Fairlane Court
Placerville, CA 95667

Contact: Roger Trout, Senior Planner
Planning Department

Project Name: Carson Creek

Applicant: Palisades Development, Inc.

The County of El Dorado is the land use authority charged with the preparation and review of an Addendum to the Final Environmental Impact Report for the Carson Creek Specific Plan.

A copy of the Addendum (without Appendices) is provided with this notice. The Addendum, Appendices, and referenced documents are available for review or purchase from the Planning Department at the above address.

The Addendum is subject to public review and comment. A public hearing on the Addendum is scheduled before the Board of Supervisors on February 25, 1997, at 2:00 p.m. Any person or organization that desires to submit written comments that will be presented to the Board of Supervisors must submit said comments to the Planning Department no later than 5:00 p.m., February 18, 1997.

EL DORADO COUNTY PLANNING DEPARTMENT
CONRAD B. MONTGOMERY, Planning Director

Date: January 31, 1997



EL DORADO COUNTY PLANNING DEPARTMENT

2850 Fairlane Court
Placerville, CA 95667

Phone: (916) 621-5355
Fax: (916) 642-0508

NOTICE OF PUBLIC HEARING

The **El Dorado County Board of Supervisors** will hold a public hearing in the Board Chambers, 330 Fair Lane, Placerville, CA 95667 on **February 25, 1997, at 2:00 p.m.**, to consider the following: **Environmental Impact Report/Specific Plan 94-02/Vesting Tentative Subdivision Map TM96-1317 (Carson Creek)**; request submitted by PALISADES DEVELOPMENT, INC. (Agent: Cooper, Thorne and Associates) for the following: Certification of the Carson Creek Specific Plan Environmental Impact Report, with addendum; approval of the Specific Plan (SP94-02) for the Carson Creek project which establishes zoning as shown below; rezoning of properties in the proposed Carson Creek Specific Plan to allow up to 2,434 dwelling units in 20 separate villages on 470 acres (with reserved sites for elementary and middle schools replacing two villages), 31 acres of parks, 14 acres of commercial, 48 acres of research and development, 3 acres reserved for mass transit, and 142 acres of open space; and vesting tentative subdivision map with phasing plan for 477 lots in Phase I (Euer Ranch). Properties will be rezoned from Exclusive Agricultural (AE) and Research and Development (R&D) to the following zoning districts which are consistent with the land use designations in the General Plan for the Carson Creek Specific Plan Area: Single Family (7,000 square foot minimum) [CCSP/SF7000]; Single Family (6,000 square foot minimum) [CCSP/SF6000]; Single Family (5,000 square foot minimum) [CCSP/SF5000]; Single Family (3,000 square foot minimum) [CCSP/SF3000]; Multifamily Residential [CCSP/MF]; Local Convenience Commercial [CCSP/LC]; Research and Development [CCSP/R&D]; Open Space [CCSP/OS]; and Parks [CCSP/P] (see map below). The properties, identified by Assessor's Parcel Nos. 108-040-04, -05, -06, -07, -12, and 108-050-02, consist of 710 acres, are located on the south side of White Rock Road, approximately 1/2 mile west of the intersection with Latrobe Road, in the **El Dorado Hills area**. The property is bounded on the west by the El Dorado County/Sacramento County line. Immediately to the east is the El Dorado Hills Business Park. Adjacent to the south is the Southern Pacific Rail Road right-of-way.

The Board of Supervisors may consider other zoning found to be consistent with the County General Plan.

All persons interested are invited to attend and be heard or to write their comments to the Board of Supervisors. Any person or organization that desires to submit written comments that will be presented to the Board must submit said comments to the Planning Department no later than 5:00 p.m., February 18, 1997. If you challenge the application in court, you may be limited to raising only those items you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Board at, or prior to, the public hearing. Any written correspondence should be directed to Roger Trout, Senior Planner, 2850 Fairlane Court, Placerville, CA 95667.

EL DORADO COUNTY PLANNING DEPARTMENT
CONRAD B. MONTGOMERY, Director of Planning

Date: January 31, 1997

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EL DORADO COUNTY PLANNING DEPARTMENT
CONRAD B. MONTGOMERY, Director of Planning

MOUNTAIN DEMOCRAT
1 time
Date: February 3, 1997

108-090-03-10 00 602
ARBOCEDA NARANJA INC
EL DORADO SPRINGS PARTNERSHIP
251 LAFAYETTE CIR #240
LAFAYETTE CA 94549

108-220-32-10 00 602
ARIETTA CARLO A
ARIETTA JEANETTE K
1191 MANCHESTER DR
EL DORADO HILLS CA 95762

108-220-19-10 00 602
ARIETTA GENEVIEVE G TR
ARIETTA ANTHONY J TR
1220 MANCHESTER DR
EL DORADO HILLS CA 95762

108-220-30-10 00 602
ARIETTA GENEVIEVE G TR
SANGUINETTI TEST TR OF 3/28/82
1220 MANCHESTER DR
EL DORADO HILLS CA 95762

108-220-23-10 00 602
ARIETTA REV 1993 TRUST
C/O 1200 MANCHESTER DR
EL DORADO HILLS CA 95762

108-250-29-10 00 602
CAMERON JAMES W JR
CAMERON & ASSOCIATES
629 J STREET
SACRAMENTO CA 95814

108-030-09-10 00 602
CAMERON JAMES W JR &
CAMERON & ASSOCIATES
629 J STREET
SACRAMENTO CA 95814

108-350-01-10 00 602
CEMO SAPHY F
4989 GOLDEN FOOTHILL PKWY #2
EL DORADO HILLS CA 95762

108-250-22-10 00 602
COHEN JOEL I
COHEN SUSAN
10 HICKORY HILL
HOLLISDAYBURG PA 16448

108-250-17-10 91 602
COLYER FAMILY LTD PARTNERSHIP
C/O 197 JOHNSTON RD
SACRAMENTO CA 95815

108-250-43-10 00 602
DUTCH M DEVELOPMENT CO
4950 WINDPLAY DR
EL DORADO HILLS CA 95762

108-220-26-10 00 602
EBER 1984 REV TRUST
C/O 300 PROSPERITY POINT CT
EL DORADO HILLS CA 95762

108-340-22-10 00 602
EL DORADO BUILDING ASSOCIATES
3921 SANDSTONE DR
EL DORADO HILLS CA 95762

108-020-08-10 92 602
EL DORADO HILLS INVESTORS LTD
3864 PARK DR #204
EL DORADO HILLS CA 95762

108-040-04-10 92 602
EUER JOHN WESLEY
EUER ROBERT BRYCE
P O BOX 400
FOLSOM CA 95762

108-220-16-10 00 602
GINNEY MARION R & DOLORES
719 STERLING CT
EL DORADO HILLS CA 95762

108-275-02-10 00 602
GRANT ROBERT I
GRANT CIANE
2340 MERRON ISLAND DR
EL DORADO HILLS CA 95762

108-274-18-10 00 602
GRIGSBY JOHN P
GRIGSBY PATRICIA A
3005 CRIFTHOOD CIR
EL DORADO HILLS CA 95762

108-220-24-10 00 602
HELLMAN GERNIS M
HELLMAN REBECCA D
702 STERLING CT
EL DORADO HILLS CA 95762

108-040-01-10 00 602
HMS II
C/O 11246 GOLD EXPRESS CE
GOLD RIVER CA 95670

108-250-18-10 00 602
JOHN WAGNER ASSOCIATES INC
P O BOX 4060
CONCORD CA 94524

108-275-10-10 CC JOHNSON DENNIS L JOHNSON CORCHY R 5400 COWHIDE CT PLACERVILLE CA 95667	602	108-275-03-10 CC KING DANIEL C KING SARAH L 102 LANCRUM CIRCLE FOLSOM CA 95630	602	108-290-03-10 CC KRULL BRUCE R TR KRULL DIONE G TR 2863 COUNTRYSIDE DR PLACERVILLE CA 95667	602
108-275-10-10 CC LAROCC STEPHIN LAROCC GWENITA 5075 HILLSDALE CIR EL DORADO HILLS CA 95762	602	108-275-17-10 CC LAROCC STEPHIN G LAROCC GWENITA C 5075 HILLSDALE CIR EL DORADO HILLS CA 95762	602	108-250-16-10 CC LESNIEWSKI ROBERT S (DEC'D) 2 W BLACK 688 KINGCLE ST #210 HILO HI 96720	602
108-230-17-10 CC LEWIS HOMES OF CALIFORNIA P O BOX 276125 SACRAMENTO CA 95827	602	108-050-01-10 CC MEHRTEN CHARLES A MEHRTEN JANET S P O BOX 66 FOLSOM CA 95763	602	108-220-25-10 CC METAXAS JAMES V METAXAS LADENE A 718 STERLING CT EL DORADO HILLS CA 95762	602
108-040-05-10 CC MOSHER WILLIAM TR MOSHER MELBA GUIDA TR 10161 GRANT LINE RD ELK GROVE CA 95624	602	108-340-11-10 CC NIEMANN THOMAS CARRAGHAN TR NIEMANN VIRGINIA LOUISE TR 3187 CAPRIDGE RD CAMERON PARK CA 95682	602	108-275-09-10 CC PACIFIC STATES DEV CORP 985 GOVERNOR DR EL DORADO HILLS CA 95762	602
108-230-10-10 CC PONCIN MICHAEL S PONCIN LORRAINE C 1040 BERKSHIRE EL DORADO HILLS CA 95762	602	108-040-13-10 CC RPA INC 2969 PROSPECT PARK DR RANCHO CONGOVA CA 95670	602	108-220-31-10 CC SANGUINETTI JENNIE J CO-TR ARIELLA BERNICE S CO-TR 1220 MANCHESTER DR EL DORADO HILLS CA 95762	602
108-275-03-10 CC SCC PROPERTIES 4909 GOLDEN FOOTHILL PKWY #2 EL DORADO HILLS CA 95762	602	108-220-20-10 CC SCHWARTZTRAUER KEITH TR SCHWARTZTRAUER ISOBEL P TR 12 ASH CREEK LN LAGUNA HILLS CA 92653	602	108-220-17-10 CC SCOTCH ANTHONY G LEWIS-SCOTCH LYNETTE 723 STERLING CT EL DORADO HILLS CA 95762	602
108-230-20-10 CC SISLER KENNETH D JR & JEANNE SISLER KENNETH D JR & JEANNE 1020 BERKSHIRE DR EL DORADO HILLS CA 95762	602	108-277-02-10 CC SPENCE BOB SPENCE CORRINE 4993 GOLDEN FOOTHILL PKWY #8 EL DORADO HILLS CA 95762	602	108-250-21-10 CC SUN HILLS COMMUNITY CHURCH 5000 WINDPLAY CR #10 EL DORADO HILLS CA 95762	602

108-275-22-10 00 602
TRADE SOURCE INTERNATIONAL
P O BOX 5130
EL DORADO HILLS CA 95762

108-050-03-10 00 602
WETSEL-CVITTT LUMBER CO
P O BOX 910
EL DORADO HILLS, CA 95630

108-230-18-10 00 602
WENG TIN S & VIRGINIA
2887 S PEPPERDALE DR
ROWLAND HEIGHTS CA 91744

108-340-16-10 00 602
1ST NAT BK OF CENTRAL CA CUST
FOURNIER EMERY P SOZIRA ACCT
C/O 904 SEVERNDALE DR #104
EL DORADO HILLS CA 95762

* * * * LABELS PRINTED FOR 602 * 46

TOTAL LABELS PRINTED TODAY = 224

Steven Proe
Utility Enterprises, Inc.
P.O. Box 94
C...wood, CA 95635

John Hidahl
c/o EDH APAC
El Dorado Hills CSD
1021 Harvard Way
El Dorado Hills, CA 95762

Jeffrey Pulverman, Chief
Office of Transpo/Metro Planning
Dept. of Transportation, District 3
P.O. Box 942874 - MS 41
Sacramento, CA 94274-0001

Ralph Friend, Superintendent
Latrobe School District
7900 South Shingle Road
Shingle Springs, CA 95682

Dennis Carroll, Chair
Board of Trustees
Latrobe School District
7900 South Shingle Road
Shingle Springs, CA 95682

Michael J. McDougall
Palisades Properties, Inc.
147 Iron Point Road, Suite A
Folsom, CA 95630

Brian K. Veerkamp, Assistant Chief
El Dorado Hills Fire Department
990 Lassen Lane
El Dorado Hills, CA 95762

Terence M. Rooney, President
CableLease, Inc.
2969 Prospect Park Drive
Rancho Cordova, CA 95670-6006

Velma Gambles, Director
Special Projects
El Dorado Hills CSD
1021 Harvard Way
El Dorado Hills, CA 95762-4353

Lewis W. Archuletta, Supervisor
Environmental Resources
El Dorado Irrigation District
2890 Mosquito Road
Placerville, CA 95667

William M. Wright
Attorney at Law
2828 Easy Street
Placerville, CA 95667

James Bales, Member
Board of Trustees
Latrobe School District
7900 South Shingle Road
Shingle Springs, CA 95682

Alice Q. Howard
El Dorado County Taxpayers
for Quality Growth
P.O. Box 141
Rescue, CA 95672

W.K. Smith, Fire Prevention
California Department of Forestry
2840 Mt. Danaher Road
Camino, CA 95709

Harriett B. Segel
2067 Wood Mar Drive
El Dorado Hills, CA 95762

Natalie Porter, Sr. Civil Engineer
EDC Department of Transportation
2850 Fairlane Court
Placerville, CA 95667

Tracey L. Eden, P.E.
Associate Engineer-Planning
El Dorado Irrigation District
2890 Mosquito Road
Placerville, CA 95667

Lorraine Larsen-Hallock, Clerk
Board of Trustees
Latrobe School District
7900 South Shingle Road
Shingle Springs, CA 95682

Michael O. Donnelly, REHS
Air Pollution Control District
EDC Environmental Management
2850 Fairlane Court
Placerville, CA 95667

David Storer, Planning Director
City of Folsom
Planning Department
50 Natoma Street
Folsom, CA 95630

EL DORADO COUNTY PLANNING DEPARTMENT
LABEL REQUEST FORM

P/C MEETING OF: 9/12/96



GROUP NO: 602

APPLICANT'S NAME: CARSON CREEK/PALISADES DEV. INC.

SUBDIVISION (2 SETS LABELS + LIST)
PARCEL MAP (1 SET LABELS + LIST)
VARIANCE (1 SET LABELS + LIST)

S.U.P. (1 SET LABELS + LIST)
ZONING (2 SETS LABELS + LIST)
AMENDMENT (2 SETS LABELS + LIST)

PRINT AS INDICATED ABOVE

DELETE GROUP FROM FILE

ASSESSOR'S PARCEL NUMBERS

PLEASE LIST APPLICATION PARCEL # FIRST

R4	1.0.8:0.4.0	0.4	1.0.8:2.2.0	1.9	R2	1.0.8:2.7.4:0.3	P1
D2					P2		
P2		0.7		2.0			1.8 P1
R1							
D1		1.2		2.3	R4		5:0.3 P1
R1					P4		
D1		0.5.0:0.2		2.6			0.7 P1
R2	1.0.8:0.3.0	0.8		3.0	R3		0.9 P2
P2					P5		
		0.9		3.2			1.0 P2
R1		0.4.0:0.1		1.6	R5		1.7 P2
P1					D1		
		0.3		2.0	P4		1.8 P2
P1		1.3		1.6	R4		2.2 P2
R2					D1		
D2		1.5		1.9	P3		2.3 P1
		1.6		2.1			
					R2	3.4.0:1.1	P1
R1-D1		1.9		2.2	R2		1.6 P1
R2							
D2		2.3		2.9	P1		1.8 P1
		2.4		4.3	R2		2.2 P1
P1		0.5.0:0.1		4.4	P1		3.9.0:0.1 P2
P1		0.3		0.1	R4		0.5 P2
					P4		
R3		0.5		0.4			
D3							
		0.7		0.1	R3		
R1-D1		1.4		0.3	D2		
					AE		
	2.2.0:	1.6		3:0.2	R1		
P2		1.7			D1		

46

COMPLETED BY: [Signature]

DATE: 8/9/96

Donna,

Please also distribute notice of hearing to the attached
people and addresses in Sacramento County.

Thanks

Roy

SACRAMENTO COUNTY

SECURED ROLL

ROGER G.F. FONG, ASSESSOR

APN:072-0070-001-0000 USE:HNASAB TRA:52030 ZONING:AG20 BK_PG:072007
NEIGHBOR:

OWNER MAILING ADDRESS

CODE

OWNER:KNAUER RUSSELL G/MARJORIE C
STREET:P O BX 1068 CARE OF:C S NICOLES/CO
CITY:PLACERVILLE STATE:CA ZIP:95667

00

SITUS ADDRESS

STR#: SUB#: STREET:WHITE ROCK RD CITY: ZIP:95630

VALUES EXEMPTIONS OTHER

LAND: 106345 TYPE: DEED TYPE:HWJTREC DT:781006REC# 310
IMPR: HO: REC DT:781006REC#PAGE 310 HW
FIX: VET:
PP: OTHR:
BUS: TOT:
GROSS: 106345
NET: 106345 IMPR%

LAST 3 SALES

DTT AMT	DTT CODE	TYPE	WOP	REC	DT	PAGE	REL	%INT
1:								
2:								
3:								
	Grantor						Deed Dt	DD Type
1:								
2:								
3:								

ADDITIONAL SALES

DTT AMT	REC	DT	PAGE	DTT AMT	REC	DT	PAGE
4:				9:			
5:				10:			
6:				11:			
7:				12:			
8:				13:			

CHARACTERISTICS

CLASS:	HALL:	TOT ROOMS:	1ST.FLOOR SQFT:
MODEL:	DINING:	BATHS:	2ND FLOOR SQFT:
STORIES:	FAMILY:	COND:	CONV GAR SQFT:
FLOOR T:	BEDS:	BLT INS:	TOT ADDNL SQFT:
CEN H/AC	UTILITY:	GAR SPACES:	TOT RES SQFT:
CON. YR:	SUPP RM:	TRAFFIC:	BASEMENT SQFT:
EFF.DT:			GARAGE SQFT:
LOT SF:			PATIO:
ACRES:			FIREPL:
ZONING:			MISC.:
SPA/TUB:			POOL:
USE TYPE			POOL YR BLT:

END OF RECORD

SACRAMENTO COUNTY

SECURED ROLL

ROGER G.F. FONG, ASSESSOR

APN:072-0070-032-0000 USE:HNAKMB TRA:52043 ZONING:AG80 BK_PG:072007

NEIGHBOR:

OWNER MAILING ADDRESS

CODE

OWNER:TSAKOPOULOS ANGELO K/ETAL

00

STREET:7700 COLLEGE TOWN DR 101CARE OF:

CITY:SACRAMENTO STATE:CA ZIP:95826

SITUS ADDRESS

STR#:15125 SUB#: STREET:WHITE ROCK RD CITY:

ZIP:95630

VALUES EXEMPTIONS OTHER

LAND: 3029255 TYPE: DEED TYPE:GD REC DT:950227REC# 1501

IMPR: 4044 HO: REC DT:950227REC#PAGE 1501 GD

FIX: VET:

PP: OTHR:

BUS: TOT:

GROSS: 3033299

NET: 3033299 IMPR%

LAST 3 SALES

DTT AMT DTT CODE TYPE WOP REC DT PAGE REL %INT

1:	Grantor	Grantee	Deed Dt	DD Type
2:				
3:				

1:				
2:				
3:				

ADDITIONAL SALES

DTT AMT REC DT PAGE DTT AMT REC DT PAGE

4:	890911	1677	9:		
5:			10:		
6:			11:		
7:			12:		
8:			13:		

CHARACTERISTICS

CLASS:	HALL:	TOT ROOMS:	1ST.FLOOR SQFT:
MODEL:	DINING:	BATHS:	2ND FLOOR SQFT:
STORIES:	FAMILY:	COND:	CONV GAR SQFT:
FLOOR T:	BEDS:	BLT INS:	TOT ADDNL SQFT:
CEN H/AC	UTILITY:	GAR SPACES:	TOT RES SQFT:
CON. YR:	SUPP RM:	TRAFFIC:	BASEMENT SQFT:
EFF.DT:			GARAGE SQFT:
LOT SF:	NUISANCE:		PATIO:
ACRES:	SOLAR W/H:		FIREPL:
ZONING:	SOLAR HT:		MISC.:
SPA/TUB:	ROOF TYPE:		POOL:
USE TYPE			POOL YR BLT:

END OF RECORD

SACRAMENTO COUNTY SECURED ROLL ROGER G.F. FONG, ASSESSOR

APN:072-0070-023-0000 USE:HNAMAB TRA:52030 ZONING:AG80 BK_PG:072007
NEIGHBOR:

OWNER MAILING ADDRESS CODE
OWNER:RUSSELL DANIEL H 00
STREET:P O BX 190 CARE OF:
CITY:SACRAMENTO STATE:CA ZIP:95812

SITUS ADDRESS CITY: ZIP:95630

STR#: SUB#: STREET: CITY: ZIP:95630
VALUES EXEMPTIONS OTHER
LAND: 439 TYPE: DEED TYPE:GD REC DT:791121REC# 1331
IMPR: HO: REC DT:791121REC#PAGE 1331 GD
FIX: VET:
PP: OTHR:
BUS: TOT:
GROSS: 439
NET: 439 IMPR%

LAST 3 SALES
DTT AMT DTT CODE TYPE WOP REC DT PAGE REL %INT
1:
2:
3:
Grantor Grantee Deed Dt DD Type
1:
2:
3:

ADDITIONAL SALES
DTT AMT REC DT PAGE DTT AMT REC DT PAGE
4: 9:
5: 10:
6: 11:
7: 12:
8: 13:

CHARACTERISTICS
CLASS: HALL: TOT ROOMS: 1ST.FLOOR SQFT:
MODEL: DINING: BATHS: 2ND FLOOR SQFT:
STORIES: FAMILY: COND: CONV GAR SQFT:
FLOOR T: BEDS: BLT INS: TOT ADDNL SQFT:
CEN H/AC UTILITY: GAR SPACES: TOT RES SQFT:
CON. YR: SUPP RM: TRAFFIC: BASEMENT SQFT:
EFF.DT: GARAGE SQFT:
LOT SF: NUISANCE: PATIO:
ACRES: SOLAR W/H: FIREPL:
ZONING: SOLAR HT: MISC.:
SPA/TUB: ROOF TYPE: POOL:
USE TYPE POOL YR BLT:
END OF RECORD

SACRAMENTO COUNTY

SECURED ROLL

ROGER G.F. FONG, ASSESSOR

APN:072-0070-015-0000 USE:HNAMAG TRA:52045 ZONING:AG80 BK_PG:072007

NEIGHBOR:

OWNER MAILING ADDRESS

CODE

00

OWNER:MOSHER MELBA OUIDA
STREET:10161 GRANTLINE RD CARE OF:
CITY:ELK GROVE STATE:CA ZIP:95624

SITUS ADDRESS

STR#: SUB#: STREET:OLD PLCRVILLE RD CITY: ZIP:95630

VALUES EXEMPTIONS OTHER

LAND: 18536 TYPE: DEED TYPE:GD REC DT:690825REC# 384
IMPR: HO: REC DT:690825REC#PAGE 384 GD
FIX: VET:
PP: OTHR:
BUS: TOT:
GROSS: 18536
NET: 18536 IMPR%

LAST 3 SALES

DTT AMT DTT CODE TYPE WOP REC DT PAGE REL %INT

1:
2:
3:
Grantor Grantee Deed Dt DD Type

1:
2:
3:

ADDITIONAL SALES

DTT AMT REC DT PAGE DTT AMT REC DT PAGE

4: 9:
5: 10:
6: 11:
7: 12:
8: 13:

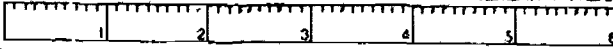
CHARACTERISTICS

CLASS: HALL: TOT ROOMS: 1ST.FLOOR SQFT:
MODEL: DINING: BATHS: 2ND FLOOR SQFT:
STORIES: FAMILY: COND: CONV GAR SQFT:
FLOOR T: BEDS: BLT INS: TOT ADDNL SQFT:
CEN H/AC UTILITY: GAR SPACES: TOT RES SQFT:
CON. YR: SUPP RM: TRAFFIC: BASEMENT SQFT:
EFF.DT: GARAGE SQFT:
LOT SF: NUISANCE: PATIO:
ACRES: SOLAR W/H: FIREPL:
ZONING: SOLAR HT: MISC.:
SPA/TUB: ROOF TYPE: POOL:
USE TYPE POOL YR BLT:

END OF RECORD

TRW-REDI

SCALE IN 1/10 OF AN INCH

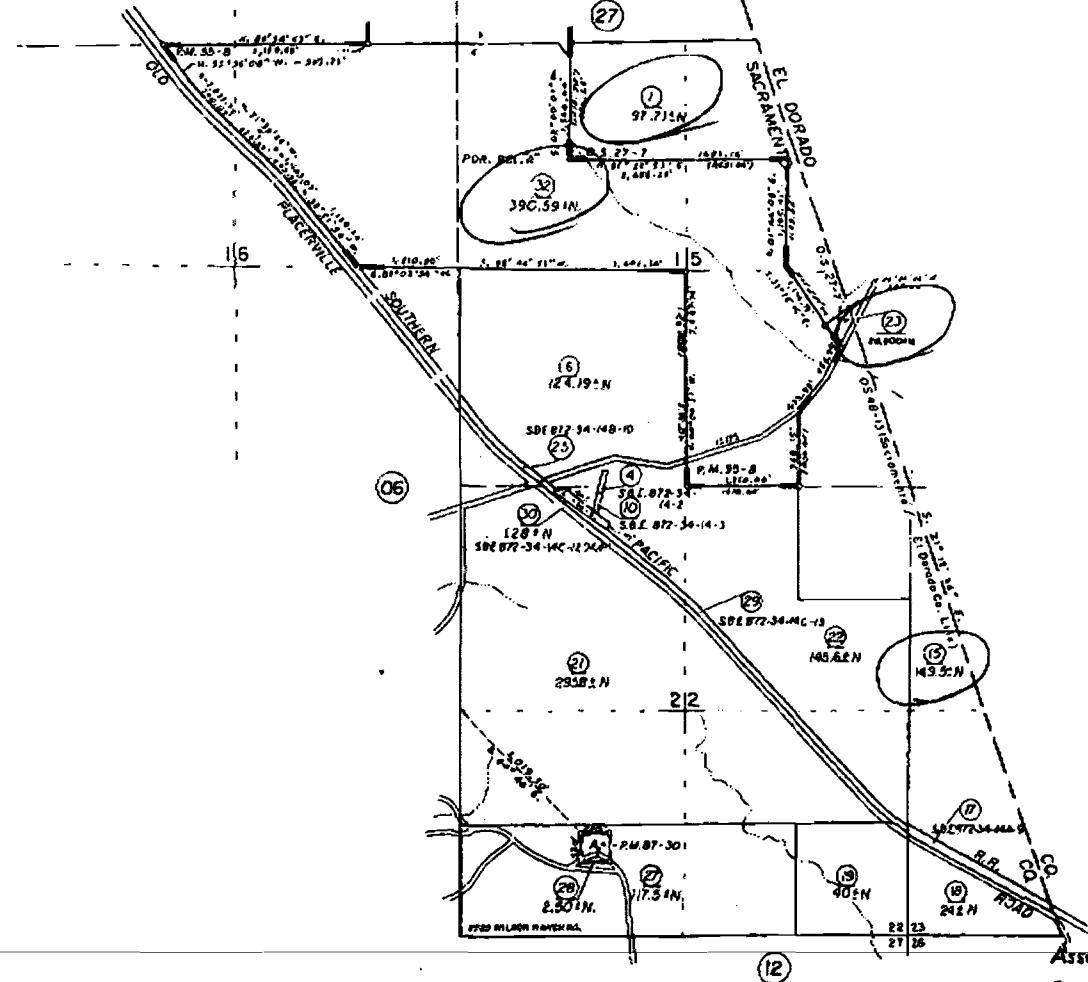


1-800-345-7334

POR. T.9N., R.8E., M.D.B. & M.

Tax Area Code

72-07



Record of Survey, U.S. Bk. 48 Pg 13 (10-31-90)
C.S. Bk. 27 Pg. 7 (9-23-69)

NOTE-Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.

Assessor's Map Bk.72 -Pg.07
County of Sacramento, Calif.



El Dorado County
Environmental Management
Air Pollution Division
Attention: Dennis Otani

El Dorado County
LAFCO
Attn: Roseanne Chamberlain

El Dorado County
Board of Supervisors
Supervisor Sam Bradley

El Dorado County
Board of Supervisors
Supervisor Walt Shultz

El Dorado County Library
Oak Ridge High School Branch

El Dorado County Library
South Lake Tahoe Branch

E.P.I.C.
PO Box 231
Rescue CA 95672

Steven Proe
PO Box 94
Greenwood CA 95635

John Hidahl
c/o EDH APAC - El Dorado Hills CSD
1021 Harvard Way
El Dorado Hills CA 95762

Frey Pulverman, Chief
Office of Transpo/Metro Planning
Dept of Transportation - Dist 3
PO Box 942874 - MS 41
Sacramento CA 94274-0001

El Dorado County
CAO
Attention: Mike Hanford

El Dorado County
Environmental Management
Solid Waste/Haz Mat
Attention: Jon Morgan

El Dorado County
Board of Supervisors
Supervisor Ray Nutting

El Dorado County
Board of Supervisors
Supervisor Mark Nielsen

El Dorado County Library
Pollock Pines Branch

El Dorado County Library
Georgetown Branch

California Water Quality
Control Board - Central Valley
3443 Routier Road
Sacramento CA 95827-3098

Terence Rooney, President
CableLease, Inc.
2969 Prospect Park Drive
Rancho Cordova CA 95670-6006

Velma Gambles, Director
Special Projects - EDH CSD
1021 Harvard Way
El Dorado Hills CA 95762

Lewis Archuletta, Supervisor
El Dorado Irrigation District
2890 Mosquito Road
Placerville CA 95667

El Dorado County
County Counsel
Attention: Lou Green

El Dorado County
Water Agency
Attention: Merv DeHaas

El Dorado County
Board of Supervisors
Supervisor John Upton

El Dorado County Library
Main Branch

El Dorado County Library
Cameron Park Branch

El Dorado County Taxpayers
for Quality Growth
PO Box 1011
Georgetown CA 95634

State of California
Office of Planning & Research
1400 10th Street
Sacramento CA 95814

Harriett Segel
2067 Wood Mar Drive
El Dorado Hills CA 95762

El Dorado County
Department of Transportation
Attention: Natalie Porter

Tracey Eden, P.E.
El Dorado Irrigation District
2890 Mosquito Road
Placerville CA 95667

Ralph Friend, Superintendent
Latrobe School District
7900 South Shingle Road
Shingle Springs CA 95682

Dennis Carroll, Chair
Board of Trustees
Latrobe School District
7900 South Shingle Road
Shingle Springs CA 95682

Michael McDougall
Palisades Properties, Inc.
147 Iron Point Road, Suite A
Folsom CA 95630

Brian Veerkamp, Assistant Chief
El Dorado Hills Fire Department
990 Lassen Lane
El Dorado Hills CA 95762

David Witter
El Dorado Irrigation District
2890 Mosquito Road
Placerville CA 95667

Shirine C. McEfee
EIP Associates
1200 Second Street, Suite 200
Sacramento CA 95814

William Wright
Attorney at Law
2828 Easy Street
Placerville CA 95667

James Bales, Member
Board of Trustees
Latrobe School District
7900 South Shingle Road
Shingle Springs CA 95682

+ Alice Howard
+ El Dorado County Taxpayers
for Quality Growth
PO Box 141
Rescue CA 95672

W.K. Smith, Fire Prevention
CA Department of Forestry
2840 Mt Danaher Road
Camino CA 95709

Sharon Fraser
El Dorado Irrigation District
2890 Mosquito Road
Placerville CA 95667

Lorraine Larsen-Hallock, Clerk
Board of Trustees
Latrobe School District
7900 South Shingle Road
Shingle Springs CA 95682

El Dorado County
Environmental Management
Air Pollution Division
Attention: Michael Donnelly

David Storer, Planning Director
City of Folsom Planning
50 Natoma Street
Folsom Ca 95630

Jim Moose
Remy, Thomas & Moose
455 Capitol Mall, Suite 210
Sacramento CA 95814

Patrick Angell
ESA
1930 9th Street, Suite 220
Sacramento CA 95814-7044

++ Big Envelope (NOTICE, APPENDIX?)
= one sheet Notice only (envelope)
no marks { NOTICE + APPENDIX }

-- Joan also mailed notice to all landowners w/in 500 ft (tent map file, mail list)