3.0 LIST OF COMMENTERS

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3.0 LIST OF COMMENTERS

The following lists the agencies and organizations that submitted written comments on the Draft EIS/ EIR. No regional or local government agencies submitted written comments. Reponses to comments, which are provided in Chapter 4.0 in this volume, are arranged by the letter numbers shown below.

No oral or written comments were submitted during the two public meetings held on September 15, 2009 (in Folsom, California) and September 16, 2009 (in El Dorado Hills, California).

Federal

Letter 1: Peck Ha, California North Branch, U.S. Department of the Army, Corps of Engineers (August 28, 2009)

Letter 2: Kathleen M. Goforth, Environmental Review Office, Communities and Ecosystems Division U.S. Enviromental Protection Agency (October 14, 2009)

State

Letter 3: Scott Morgan, State of California Governor's Office of Planning and Research, State Clearinghouse (October 20, 2009)

Letter 4: Scott Morgan, State of California Governor's Office of Planning and Research, State Clearinghouse (December 31, 2009)

Letter 5: Kent Smith, California Department of Fish and Game (October 12, 2009)

Letter 6: Katy Sanchez, Native American Heritage Commission (August 25, 2009)

Organizations

Letter 7: Susan Britting, California Native Plant Society (October 16, 2009)

Letter 8: Paul Raveling, El Dorado Hills Citizens Alliance (December 31, 2009)

Letter 9: Jim Crenshaw, California Sportfishing Protecton Alliance, and Jonas Minton, Planning and Conservation League (joint submittal) (December 31, 2009)

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4.0 RESPONSES TO COMMENTS

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4.0 RESPONSES TO COMMENTS

INTRODUCTION

Responses to comments on the Draft EIS/EIR appear in this chapter of this Final EIR. Each comment letter is presented with brackets indicating how the letter has been divided into individual comments. Each comment is given a binomial with the number of the comment letter appearing first, followed by the comment number. For example, comments in Letter 1 are numbered 1-1, 1-2, 1-3, and so on. Immediately following the letter are responses, each with binomials that correspond to the bracketed comments.

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Letter 1

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

August 26, 2009

Regulatory Division SPK-2009-01190

Ms. Tracey Eden-Bishop
El Dorado County Water Agency
3932 Ponderosa Road, Suite 200
Shingle Springs, California 95682

Dear Ms. Eden-Bishop:

We are responding to your August 17, 2009 request for comments on the EDCWA Water Contract Draft Joint EIS/EIR. Your identification number is SPK-2009-01190.

This project may impact waters of the United States. The Corps of Engineers' jurisdiction over waters of the United States is under the authority of Section 404 of the Clean Water Act for the discharge of dredged or fill material into waters of the United States. Waters of the United States include, but are not limited to, rivers, perennial or intermittent streams, lakes, ponds, wetlands, vernal pools, marshes, wet meadows, and seeps. Project features that result in the discharge of dredged or fill material into waters of the United States will require Department of the Army authorization prior to starting work. To facilitate greater understanding of the project, we request to be furnished with a copy of the Draft EIS/EIR. 1-1 1-2

To ascertain the extent of waters on the project site, the applicant should prepare a wetland delineation, in accordance with the "Minimum Standards for Acceptance of Preliminary Wetland Delineations", under "Jurisdiction" on our website at the address below, and submit it to this office for verification. A list of consultants that prepare wetland delineations and permit application documents is also available on our website at the same location. 1-3

The range of alternatives considered for this project should include alternatives that avoid impacts to wetlands or other waters of the United States. Every effort should be made to avoid project features which require the discharge of dredged or fill material into waters of the United States. In the event it can be clearly demonstrated there are no practicable alternatives to filling waters of the United States, mitigation plans should be developed to compensate for the unavoidable losses resulting from project implementation. 1-4

Please refer to identification number SPK-2009-01190 in any correspondence concerning this project. If you have any questions, please contact Mr. Peck Ha by mail at our California North Branch at 1325 J Street, Room 1480, Sacramento, California 95814-2922, by email at *Peck.Ha@usace.army.mil*, or by telephone 916-557-6617. For more information regarding our program, please visit our website at *www.spk.usace.army.mil/regulatory.html*.

Sincerely,

Peck Ha,
Project Manager, California North branch

Copy Furnished:
Mr. William Marshall, California Regional Water Quality Control Board, Central Valley Region, Storm Water and Water Quality Certification Unit, 11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114

LETTER 1: PECK HA, CALIFORNIA NORTH BRANCH, U.S. DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS (AUGUST 28, 2009)

Response to Comment 1-1

Section 3.11 (Consultation Requirements/Required Permits and Approvals) on page 3-38 in the Draft EIS/EIR lists a Section 404 permit as one of several permits and/or approvals that may be required for the Proposed Project. While implementation of the water supply contract would not in and of itself trigger the need for a Section 404 permit, facilities that may be constructed to deliver the water, along with growth facilitated by the water supply, could result in the need for a Section 404 permit if such activities would involve discharge of dredged or fill material into waters of the U.S.

Response to Comment 1-2

Reclamation provided a copy of the Draft EIS/EIR to commenter on June 8, 2010 to facilitate a better understanding of the project.

Response to Comment 1-3

Implementation of the water supply contract would not in and of itself trigger the need for a wetland delineation. However, to the extent facilities that may be constructed in the future to deliver the water and such facilities could impact wetlands or waters of the U.S., a wetland delineation would be prepared and submitted to the USACE. Similarly, if new facilities associated with growth on the western slope were to be developed as a result of water made available under the water supply contract, and to the extent such areas had not been previously evaluated for wetlands or waters of the U.S., delineations would be completed in accordance with applicable laws and regulations by those entities proposing such new development.

Response to Comment 1-4

Please see Response to Comment 1-1. The Proposed Project does not directly involve activities that would result in discharge of dredged or fill materials into waters of the U.S. As such, identification and evaluation of alternatives that would avoid impacts to wetlands is not within the scope of this EIR. At such time that facilities to deliver the water are identified, and if such activities would involve discharge of dredged or fill material into waters of the U.S., alternatives to filling and/or compensatory mitigation would be developed at that time in conjunction with project-level evaluation of the facilities.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

OCT 14 2009

Elizabeth Dyer
Natural Resource Specialist
US Bureau of Reclamation
Central California Area Office
7794 Folsom Dam Road
Folsom, CA 95630

Subject: Draft Environmental Impact Statement for Bureau of Reclamation/El Dorado County Water Agency Central Valley Project Water Service Contract

Dear Ms. Dyer:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

Based upon our review of the Draft Environmental Impact Statement (DEIS), we have a Lack of Objections (see enclosed "*Summary of Rating Definitions*") to the Proposed Action, a new Central Valley Project (CVP) Municipal and Industrial (M&I) water service contract between the Bureau of Reclamation (Reclamation) and El Dorado County Water Agency (EDCWA). The new contract would provide a total of 15,000 acre-feet per year (af/yr) of water from Folsom Reservoir, or from an exchange on the American River upstream from Folsom Reservoir, for the El Dorado Irrigation District (EID) and the Georgetown Divide Public Utility District (GDPUD) under subcontracts with EDCWA. 2-1

EPA concurs with the Preferred Alternative 2A which would allocate 7,500 af/yr each to EID and GDPUD, which minimizes adverse effects on aquatic resources and sensitive species in the North Fork American River below the American River Pump Station (proposed point of diversion for GDPUD) (p. 5-61). The quantity of water diverted should be explicitly conditioned on availability of water after meeting water quality and environmental purposes. The FEIS and proposed contract should demonstrate how meeting water quality and environmental purposes first will be implemented and assured. 2-2 2-3

While EID has decreased their system losses to less than 15 percent, the DEIS clearly states that GDPUD still experiences canal losses approximating 30 percent annually. Significant increases in agricultural water delivery efficiencies and, thus, a potential increase in water for other uses are feasible by reducing the raw water conveyance losses through full canal/ditch encasement, especially in the GDPUD service area (p. 3-27). We urge Reclamation to work with 2-4

GDPUD and EID to aggressively pursue increased water conservation and the reduction of raw water conveyance losses. A commitment to water efficiency actions should be made in the Water Conservation Management Plan required by Reclamation before commencement of water diversions. The FEIS should include a summary of the water conservation commitments made by GDPUD and EID, and the measures they will take to significantly reduce their water system losses. 2-4 (cont.)

The DEIS contains a detailed description of the applicability of the CALSIM II model for determining hydrological effects of this project. It states repeatedly that the CALSIM II model was never designed to evaluate small-scale, less than 100,000 af, changes in system hydrology (pps. ES-14, 5-6). Given the caveats regarding applicability of the CALSIM model used to evaluate hydrological effects, we recommend a robust hydrological monitoring and reporting plan be included in the FEIS, and as a water service contract requirement, in order to validate assumptions and conclusions regarding effects on hydrology, water quality, fish, riparian areas, and other resources. An adaptive management plan should also be included to ensure prompt management response in the event monitoring exposes adverse hydrological impacts not predicted by the CALSIM II model. 2-5 2-6

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one (1) hard copy and one (1) CD ROM to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Laura Fujii, the lead reviewer for this project. Laura can be reached at (415) 972-3852 or fujii.laura@epa.gov.

Sincerely,

Kathleen M. Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosures: Summary of Rating Definitions

Cc: Tracey Eden-Bishop, El Dorado County Water Agency
Steve Thompson, US Fish and Wildlife Service
Office of the General Manager, El Dorado Irrigation District
Office of the General Manager, Georgetown Divide Public Utility District

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

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LETTER 2: KATHLEEN M. GOFORTH, ENVIRONMENTAL REVIEW OFFICE, COMMUNITIES AND ECOSYSTEMS DIVISION U.S. ENVIROMENTAL PROTECTION AGENCY (OCTOBER 14, 2009)

Response to Comment 2-1

The comment summarizes the Proposed Project and states that the agency has a "Lack of Objections" to the Proposed Project. A "Lack of Objections" rating indicates the USEPA review has not identified any potential impacts requiring substantive changes to the proposal.

Response to Comment 2-2

The USEPA has expressed concurrence with the Preferred Alternative 2A, which would allocate 7,500 AFA equally between the El Dorado Irrigation District (EID) and Georgetown Divide Public Utilities District (GDPUD). EDCWA appreciates the commenter's preference for that scenario; however, EDCWA reserves the right and the environmental analysis supports apportionment of the 15,000 AFA available under the contract based on a variety of factors, including market demand, at such point in time as EDCWA determines, in a given year, how much water to make available to EID and GDPUD, respectively.

Response to Comment 2-3

The Draft EIS/EIR acknowledges that under Alternative 2A – Proposed Action – Scenario A, (7,500 AFA each to GDPUD and EID), less-than-significant impacts on fisheries and associated aquatic resources would result from the reduction in long-term expected mean monthly flows in the North Fork American River downstream of the American River Pump Station, relative to the Base Condition. The Draft EIS/EIR also acknowledges that under Alternative 2C – Proposed Action – Scenario C (GDPUD 11,000 AFA and EID 4,000 AFA), reductions in mean monthly flows could represent a significant impact on resident fisheries and associated aquatic resources within this reach of the North Fork. However, on page 5-63 of the Draft EIS/EIR, potential mitigation measures are discussed, which contain alternative approaches that would reduce any impact under this optional scenario of the Proposed Project to a less-than-significant level. If one of the options within these measures is adopted, then Alternatives 2A and 2C would be similar in terms of their environmental impacts, as neither scenario would result in unmitigated significant effects on fisheries and other aquatic resources. The same would be true of a scenario that allowed EDCWA to maintain flexibility, in a given year, to allocate water between the two purveyors consistent with the scenarios addressed in the Draft EIS/EIR. The mitigation measures for Alternative 2C are presented below, and if either that alternative or the flexible scenario mentioned above is chosen, one of the options set forth in the measure will be incorporated into the Mitigation Monitoring and Reporting Program (MMRP) approved by the EDCWA Board of Directors (unless all three options are rejected as being infeasible).

1. Altered seasonal diversion pattern; thus, avoiding a peaked mid-summer diversion (August through October as modeled);

2. Re-allocating the diversion quantities between EID and GDPUD, so as to follow Alternative 2A – Scenario A; or
3. Reduction in the overall diversion total as represented by any of the Reduced Diversion Alternatives (e.g., Alternatives 4A, 4B or 4C).

As to the incorporation of mitigation measures that would reduce potentially significant impacts resulting from a diversion at the American River Pump Station (facilitated by an exchange with PCWA) to less-than-significant levels, Article 9, SALES, TRANSFERS, OR EXCHANGES OF WATER, of the draft "Contract Between The United States And El Dorado County Water Agency Providing For Project Water Service From the American River Division," found in Appendix D of the Draft EIS/EIR, incorporates environmental document compliance through subdivision (a), which states the following:

> "The right to receive Project Water provided for in this Contract may be sold, transferred, or exchanged to others for reasonable and beneficial uses within the State of California if such sale, transfer, or exchange is authorized by this Contract, applicable Federal and State laws, and applicable guidelines or regulations then in effect. No sale, transfer, or exchange of Project Water under this Contract may take place without the prior written approval of the Contracting Officer, except as provided for in subdivision (b) of this Article, and no such sales, transfers, or exchanges shall be approved absent all appropriate environmental documentation, including but not limited to documents prepared pursuant to the National Environmental Policy Act (NEPA) and ESA."

By virtue of the environmental analysis on in-river flows within this portion of the North Fork of the American River (as contained in the Draft EIS/EIR), the Final EIR demonstrates that the Proposed Project, as defined under each of the three potential diversion scenarios and as mitigated, would not result in significant effects on fisheries and associated aquatic resources within this stretch of the North Fork. Subchapter 5.7 in Draft EIS/EIR evaluates potential direct, diversion-related effects on water quality (Impacts 5.7-1 and 5.7-2), and provides quantitative evidence that water quality would not be adversely affected by the Proposed Project.

Response to Comment 2-4

As stated on page 2-12 in the Draft EIS/EIR, before GDPUD receives any of the P.L.101-514 contract water, GDPUD will be required by Reclamation to develop a Water Management Plan consistent with Reclamation guidelines. Prior to the delivery of CVP water, this plan must be approved by the Reclamation contracting officer, must be updated every five years, and must include GDPUD's policies for addressing water shortages, wasteful use of water, and implementation plans for elements of the California Urban Water Conservation Council. The draft "Contract Between The United States And El Dorado County Water Agency Providing For Project Water Service From The American River Division," found in Appendix D of the Draft EIS/EIR, documents the requirement for the development and implementation of a Water Conservation Plan through subdivision (a) of Article 26, "Water Conservation," which states the following:

> "Prior to the delivery of water provided from or conveyed through Federally-constructed or Federally-financed facilities pursuant to this Contract, the Contractor shall be implementing an effective water conservation and efficiency program based on the Contractor's water conservation plan that has been determined by the Contracting Officer to meet the conservation and efficiency

> criteria for evaluating water conservation plans established under Federal law. The water conservation and efficiency program shall contain definite water conservation objectives, appropriate economically feasible water conservation measures, and time schedules for meeting those objectives. . . . "

Although EID is already a CVP contractor, it will be required to develop a Water Management Plan in accordance with current "Standard Criteria for Evaluating Water Management Plans." However, because it is not a Reclamation requirement that a plan be prepared prior to execution of a water supply contract, the specifics of the Water Management Plans for GDPUD and EID have not been developed and are not available at this time.

GDPUD does have a conservation program in place that implements elements of the California Urban Water Conservation Council Best Management Practices. The following is a summary of that plan:

- Metering of domestic water customers with tiered commodity rates:
- Efficient Application of Irrigation Water: Untreated irrigation water is contracted and billed for the irrigation season on the basis of a specified flow rate. Deliveries from ditches are metered. Deliveries from pipelines are made through pressure-activated flow metering devices. There are two evaporation/weather stations that were established with the support and cooperation of the Department of Water Resources and Georgetown Divide Resource Conservation District (GDRCD).
- Maintenance of Water Use Records by User Type: The data provided by record keeping is fundamental to evaluating the effectiveness of water conservation programs.
- System Pressure Control Program: The district operates with eight pressure zones and forty-nine pressure reducing stations.
- Leak Reduction: The district actively implements programs to reduce losses in both the treated and untreated water conveyance systems.
- Public Information and School Education Programs: GDPUD has a public information program promoting conscientious use of water resources. District personnel speak at local schools, service clubs, neighborhood association meetings, etc.
- Demonstration Garden: A demonstration of drought tolerant plants has been established at the district office.
- Water Waste Prohibition: In 1983, in response to the drought years 1976-1977, the district's board of directors passed an ordinance that authorized abatement procedures to curtail blatant water waste.

GDPUD has also focused significant resources on raw water conveyance system rehabilitation and estimates in its 2005 UWMP that over 30% of the untreated water conveyance system is now in pipe or concrete-lined ditches.

Response to Comment 2-5

As stated in the Draft EIS/EIR and, as alluded to in the comment, both the U.S. Bureau of Reclamation (Reclamation) and the El Dorado County Water Agency (EDCWA) fully acknowledge

the limitations of CALSIM II and, by inference, the associated environmental models that use CALSIM II output hydrology. As explained below, however, CALSIM II nevertheless provides information that is directly relevant to the comparative analyses that lie at the heart of NEPA/CEQA review. This is because all of the assumptions are the same for both the with-project and without-project model runs, except assumptions associated with the project itself. The focus of the analysis is on the differences in the results between comparative model runs. Therefore, the generalized trends shown by the model results by and large provide an indication of the magnitude and type of impacts that could result from implementation of the modeled action, relative to the Base Condition, even if the actual impacts may vary widely under specific conditions. Critical to the use of CALSIM II, therefore, is the interpretive evaluation of its output data. When undertaken by resource experts, knowledgeable about how the model works, CVP/SWP operational rules, and resource sensitivities, an appropriate impact evaluation can be presented.

Reclamation, EDCWA, California Department of Water Resources, and the many public trust resource agencies involved in California water resource management all accept CALSIM II and its associated environmental models as the most readily available, system-wide depiction of hydrological operation. At present, no other integrated modeling platform currently exists that simulates CVP/SWP-wide operations and accommodates Reclamation's various river, reservoir, and salmon mortality and water temperature models. By definition, it is the best analytical tool currently available, notwithstanding its acknowledged technical limitations.

The proposed new CVP water supply contract, when executed, will be part of Reclamation's contracting program for CVP water as established under Reclamation Law, the Central Valley Project Act, and reaffirmed through the Central Valley Project Improvement Act of 1992. It will be subject to all of the same allocation, reporting, conservation, and contributory prescriptions (e.g., CVP Restoration Fund surcharges) as other CVP water supply contracts.

Reclamation does not, on an ongoing basis, individually monitor the specific environmental effects of any of its CVP water supply contracts post-approval. Such an exercise would be exhaustive, strain the existing limited resources well beyond their current capacity, and be counter to the holistic approach of looking at the system as an integrated and collective whole. Moreover, it would, at best, produce dubious results due to the inability of any such monitoring program to legitimately tie any observed effect (e.g., water quality degradation) to the specific causal driver (e.g., singular new contract diversion). Since the natural physical and man-made influences on any river reach are both several and varying in their effect, it is virtually impossible to attach an observed effect to an individual diversion, especially when the magnitudes are so small compared to river baseflows.

From Folsom Reservoir downstream to the mouth of the lower American River, for example, numerous diverters draw water. These diversions vary in their daily and seasonal timing, quantity, and between years. Additionally, as part of the CVP, Folsom Reservoir is used by Reclamation as part of the larger CVP (and coordinated SWP); releases from Folsom Reservoir are used to fulfill a range of downstream purposes. Accretions (i.e., point source and non-point source inflows), most notable during the rainy season, also can vary widely. Any measured reduction in flows say, at the mouth of the lower American River would be almost impossible to tie to the specific actions of one upstream diverter.

Rather, Reclamation relies on collective and cumulative analyses of its actions (e.g., contracting actions), taking advantage of defined regulatory processes (e.g., Endangered Species Act) to develop broad analyses that consider the entire suite of actions (e.g., contracts) in order to implement appropriate mitigation and restoration initiatives. Such actions are developed through a collaborative process among numerous stakeholders including public input. The U.S. Department of the Interior, including Reclamation and the U.S. Fish & Wildlife Service, supports this approach and considers it the best means of cumulatively addressing the potential effects of its contracting actions. The U.S. Department of Commerce (through the National Marine Fisheries Service and NOAA Fisheries) also concurs with this approach. The varied and extensive array of prescriptions contained within the Reasonable and Prudent Alternatives (RPAs), terms and conditions and conservation measures associated with the incidental take permits for the Long-Term Operation of the Central Valley Project and State Water Project Biological Opinion(s) attest to the utility and contemporary application of this broad based approach.

Within this wider context, Reclamation does monitor various environmental conditions on a real-time basis (or as close to real time as possible). As an example, the coldwater pool in Folsom Reservoir is continually monitored, evaluated, and its predicted development/depletions calculated as part of Reclamation's downstream in-river thermal obligations. Again, however, this is done on the reservoir coldwater pool as a whole looking at the collective suite of influencing factors affecting coldwater pool volume. No one specific contractor or action is monitored as to its effect on the coldwater pool.

Response to Comment 2-6

As noted above (see Response to Comment 2-5), real-time environmental monitoring with the specific objective of honing in on the potential effects of this singular new contracting action is beyond what Reclamation implements to individual water supply contractors. While the process of adaptive management is an acknowledged practice in contemporary environmental science, its temporal applicability must be acknowledged. Reclamation, through its annual allocation procedures for each contract, already takes into consideration a wide range of factors before setting yearly deliveries; for M&I water supply contracts historically, reductions have been implemented up to 25 percent of normal. In recent years, owing largely to the increased stress imposed on aquatic ecosystem function throughout the CVP/SWP waterways, these shortages have approached 50 percent of normal allocations.

In short, the process of adaptive management is already applied insofar as Reclamation controls water allocations to entire areas on an annual basis depending on operations and hydrology. For example, M&I allocations are usually split between north and south Delta. In 2009, the spilt was even more defined for north of Delta between Sacramento and American River contractors. Moreover, programs within the CVPIA and through the various prescriptions set forth in recent Biological Opinion(s) provide an ongoing adaptive platform for adjusting delivery quantities and timing based on ecosystem needs. A separate adaptive management monitoring and implementation program for each CVP water supply contractor, including EDCWA, is unnecessary and impractical given the current context of CVP/SWP protections.

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Letter 3

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

October 20, 2009

Tracey Eden-Bishop
El Dorado County Water Agency
3932 Ponderosa Road, Suite 200
Shingle Springs, CA 95682

Subject: USBR/El Dorado County Water Service Under P.L. 101-514
SCH#: 1993052016

Dear Tracey Eden-Bishop:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on October 15, 2009, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly. 3-1

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

for Scott Morgan
Acting Director, State Clearinghouse

Enclosures
cc: Resources Agency

RECEIVED
OCT 22 2009
EL DORADO COUNTY
WATER AGENCY

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

Letter 3

SCH# 1993052016
Project Title USBR/El Dorado County Water Service Under P.L. 101-514
Lead Agency El Dorado County

Type EIR Draft EIR

Description NOTE: Review Per Lead

The proposed action/project is a new CVP M&I Water Service Contract between the U.S. Bureau of Reclamation and El Dorado County Water Agency for up to 15,000 acre-feet per annum (AFA). This contract would have a 40-year term and would be subject to renewals. EDCWA intends to allocate this new contract water to both El Dorado Irrigation District (EID) and Georgetown Divide Public Utility District (GDPUD) based on these parties individual water needs and timing requests.

Lead Agency Contact

Name Tracey Eden-Bishop
Agency El Dorado County Water Agency
Phone 530 621-5392 **Fax**
email
Address 3932 Ponderosa Road, Suite 200
City Shingle Springs **State** CA **Zip** 95682

Project Location

County El Dorado
City
Region
Cross Streets Highway 50, Highway 49, Highway 193
Lat / Long
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways
Waterways American River, Folsom Reservoir
Schools
Land Use Folsom Reservoir, Residential (high, medium, low, multi-family), commercial, public facilities, industrial

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Flood Plain/Flooding; Geologic/Seismic; Growth Inducing; Landuse; Noise; Recreation/Parks; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Other Issues

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Game, Region 2; Cal Fire; Office of Historic Preservation; Department of Parks and Recreation; Central Valley Flood Protection Board; Department of Water Resources; Caltrans, District 3; State Water Resources Control Board, Division of Water Quality; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Bd., Region 5 (Sacramento); Native American Heritage Commission; State Lands Commission

Date Received 08/17/2009 **Start of Review** 08/17/2009 **End of Review** 10/15/2009

Note: Blanks in data fields result from insufficient information provided by lead agency.

Letter 3

STATE OF CALIFORNIA — Arnold Schwarzenegger, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

August 25, 2009

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RECEIVED
AUG 27 2009
STATE CLEARING HOUSE

Tracey Eden-Bishop
El Dorado County Water Agency
3932 Ponderosa Road, Suite 200
Shingle Springs, CA 95682

RE: USBR/El Dorado County Water Service Under P.L 101-514, **SCH# 1993052016**, El Dorado County

Dear Ms. Eden-Bishop:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Completion (NOC) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for ~~public~~ disclosure. Public ok
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. **USGS 7.5-minute quadrangle name, township, range, and section required.**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Katy Sanchez

~~Reb Wood~~
~~Environmental Specialist III~~

CC: State Clearinghouse

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LETTER 3: SCOTT MORGAN, STATE OF CALIFORNIA GOVERNOR'S OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE (OCTOBER 20, 2009)

Response to Comment 3-1

The comment states the El Dorado County Water Agency has complied with State Clearinghouse review requirements for environmental documents, with the review period beginning August 17, 2009, and ending October 15, 2009.

The Clearinghouse provided a copy of the Draft EIS/EIR to the following 14 State agencies: Resources Agency; Department of Conservation; Department of Fish and Game, Region 2; CalFire; Office of Historic Preservation; Department of Parks and Recreation; Central Valley Flood Protection Board; Department of Water Resources; Caltrans District 3; State Water Resources Control Board, Division of Water Rights; State Water Resources Control Board, Division of Water Quality; Regional Water Quality Control Board, Region 5; Native American Heritage Commission; and State Lands Commission. Only one agency – Native American Heritage Commission (NAHC) – submitted comments directly to the Clearinghouse. A response to the NAHC comment letter is provided in Response to Comment 6-1.

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Letter 4

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

January 4, 2010

RECEIVED
JAN 05 2010
EL DORADO COUNTY WATER AGENCY

Tracey Eden-Bishop
El Dorado County Water Agency
3932 Ponderosa Road, Suite 200
Shingle Springs, CA 95682

Subject: USBR/El Dorado County Water Service Under P.L. 101-514
SCH#: 1993052016

Dear Tracey Eden-Bishop:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on December 31, 2009, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly. 4-1

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Acting Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

Letter 4

SCH# 1993052016
Project Title USBR/El Dorado County Water Service Under P.L. 101-514
Lead Agency El Dorado County

Type EIR Draft EIR

Description NOTE: Extended Review Per Lead

The proposed action/project is a new CVP M&I Water Service Contract between the U.S. Bureau of Reclamation and El Dorado County Water Agency for up to 15,000 acre-feet per annum (AFA). This contract would have a 40-year term and would be subject to renewals. EDCWA intends to allocate this new contract water to both El Dorado Irrigation District (EID) and Georgetown Divide Public Utility District (GDPUD) based on these parties individual water needs and timing requests.

Lead Agency Contact

Name Tracey Eden-Bishop
Agency El Dorado County Water Agency
Phone 530 621-5392 **Fax**
email
Address 3932 Ponderosa Road, Suite 200
City Shingle Springs **State** CA **Zip** 95682

Project Location

County El Dorado
City
Region
Lat / Long
Cross Streets Highway 50, Highway 49, Highway 193
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways
Waterways American River, Folsom Reservoir
Schools
Land Use Folsom Reservoir, Residential (high, medium, low, multi-family), commercial, public facilities, industrial

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Flood Plain/Flooding; Geologic/Seismic; Growth Inducing; Landuse; Noise; Recreation/Parks; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Other Issues

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Game, Region 2; Cal Fire; Office of Historic Preservation; Department of Parks and Recreation; Central Valley Flood Protection Board; Department of Water Resources; Caltrans, District 3; State Water Resources Control Board, Division of Water Quality; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Bd., Region 5 (Sacramento); Native American Heritage Commission; State Lands Commission

Date Received 08/17/2009 **Start of Review** 08/17/2009 **End of Review** 12/31/2009

Note: Blanks in data fields result from insufficient information provided by lead agency.

STATE OF CALIFORNIA — Arnold Schwarzenegger, *Governor*

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Tracey Eden-Bishop
El Dorado County Water Agency
3932 Ponderosa Road, Suite 200
Shingle Springs, CA 95682

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Sincerely,

Katy Sanchez

~~Rob Wood~~
~~Environmental Specialist III~~

CC: State Clearinghouse

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LETTER 4: SCOTT MORGAN, GOVERNOR'S OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE (DECEMBER 31, 2009)

Response to Comment 4-1

On November 13, 2009, Reclamation voluntarily extended the review period for the Draft EIS/EIR to December 31, 2009. The comment states the El Dorado County Water Agency has complied with State Clearinghouse review requirements for environmental documents, with the extended review period ending December 31, 2009.

The Clearinghouse provided a copy of the Draft EIS/EIR to the following 14 State agencies: Resources Agency; Department of Conservation; Department of Fish and Game, Region 2; CalFire; Office of Historic Preservation; Department of Parks and Recreation; Central Valley Flood Protection Board; Department of Water Resources; Caltrans District 3; State Water Resources Control Board, Division of Water Rights; State Water Resources Control Board, Division of Water Quality; Regional Water Quality Control Board, Region 5; Native American Heritage Commission; and State Lands Commission. Only one agency – Native American Heritage Commission (NAHC) – submitted comments directly to the Clearinghouse. This letter is identical to the one included in the Clearinghouse's October 15, 2009, letter. A response to the NAHC comment letter is provided in Response to Comment 6-1.

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Letter 5

California Natural Resources Agency
DEPARTMENT OF FISH AND GAME
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670
(916) 358-2900
http://www.dfg.ca.gov

ARNOLD SCHWARZENEGGER, Governor
DONALD KOCH, Director

October 12, 2009

Ms. Tracey Eden-Bishop, P.E.
Water Resources Engineer
El Dorado County Water Agency
3932 Ponderosa Road, Suite 200
Shingle Springs, CA 95682

Dear Ms. Eden-Bishop:

The Department of Fish and Game (DFG) has reviewed the Draft Environmental Impact Statement (DEIS) and Draft Environmental Impact Report (DEIR) for the Central Valley Project Water Supply Contracts Under Public Law 101-514 (Section 206): Contract Between the U.S. Bureau of Reclamation and the El Dorado County Water Agency, Subcontract Between the El Dorado County Water Agency and the El Dorado Irrigation District, and Subcontract Between the El Dorado County Water Agency and the Georgetown Divide Public Utility District (proposed project). This proposed project is intended to implement those parts of Public Law 101-514 (P.L. 101-514), Section 206, pertaining specifically to the El Dorado County Water Agency (EDCWA) and the need for new water supply entitlements for El Dorado County. Under this new contract, up to 15,000 acre-feet per annum (AFA) of Central Valley Project (CVP) Municipal and Industrial (M&I) water would be made available to EDCWA for diversion from Folsom Reservoir, or from an exchange on the American River upstream from Folsom Reservoir. The contract would provide water that would serve existing and future M&I water needs in El Dorado County, establish and preserve entitlements to divert the water in accordance with State Water Resources Control Board (SWRCB) and Reclamation requirements, and provide new water supplies that would justify future construction, operation, and maintenance of new facilities to convey and treat the diverted water. 5-1

The DEIR concludes that the impact to rare plant habitat or individual rare plants as a result of development facilitated in part by the 15,000 AFA associated with the proposed project has been analyzed under the current El Dorado County General Plan (General Plan) EIR. The DEIR further states on page 5-179 that the associated General Plan Policies (7.4.1.1, 7.4.1.3, 7.4.1.4, 7.4.1.5, 7.4.1.6, and 7.4.2.1) "combined with the current and anticipated future level of participation by the EDCWA and El Dorado County in funding various preservation actions, would render this impact less than significant." The DEIR also states that "El Dorado County and EDCWA have worked with federal and state agencies in the continued development towards a long-term protection and preservation strategy for gabbro soil special status species", including "Contribution to development of the Pine Hill Preserve (preserve) funding $2.1 million toward purchase of 525 acres $2.9 million toward purchase of land $5.7 million toward purchase of 236 acres and a preserve manager salary." 5-2

The DFG does not agree with the characterization that the current and anticipated future level of participation by the EDCWA and El Dorado County in funding various preservation actions, would render impacts to rare plants and their habitat to less than significant, nor that the above preserve funding efforts should be credited entirely to El Dorado County and EDCWA. The DFG believes that the total amount of land acquired by El Dorado County and El Dorado Irrigation District (EID), which should be considered to count toward the County and EID's ongoing rare plant mitigation program, totals 103.25 acres and 79.71 acres, respectively. As depicted in attachment 1, all other funding sources used to acquire lands within the preserve have come from State Funds, and 5-3

Federal Funds (including the Land and Water Conservation Fund, the National Fish and Wildlife Foundation, Central Valley Project Improvement Act Habitat Restoration Fund, U.S. Fish and Wildlife Service Endangered Species Program Section 6 grants, and the National Fish and Wildlife Foundation), and should not be used to offset mitigation required of the County under the California Environmental Quality Act (CEQA). 5-3 (cont.)

The DFG believes that an adequate fee program used to offset impacts imposed by individual projects under CEQA, as in the case of the program established according to the County's General Plan, should include four main components, including a mechanism to:

1) Collect, administer, and appropriate a sufficient amount of funding to ensure that each project under the mitigation program has offset its impacts to less than significant 5-4

2) Identify appropriate lands to ensure that each project under the mitigation program has offset its impacts to less than significant

3) Secure mitigation lands to ensure that each project under the mitigation program has offset its impacts to less than significant, and

4) Manage and maintain these lands in perpetuity, to ensure that each project under the mitigation program has offset its impacts to less than significant

The DFG believes that each of the above 4 components are currently set in place, in part through assistance from the American River Conservancy (ARC) for items 2 and 3 above, and assistance from the Bureau of Land Management (BLM) with item 4 above, but does not believe that El Dorado County and EDCWA are adequately collecting, administering, or appropriating sufficient amounts of funding to ensure that each project under the mitigation program has offset its impacts to less than significant. The reasons for this assertion are that the fee collected by the County has not been updated in several years, which is necessary to accurately determine that there are sufficient funds available to acquire appropriate amounts of land, and the County has not been acquiring adequate amounts of land to offset its CEQA obligation. 5-5

The above General Plan policies provide an option to acquire and restore rare plant habitat at a rate of 1.5 times the number of acres developed as a means to mitigate impacts to rare plants. The DFG agrees that this is an appropriate amount, and using this metric, believes that the current amount of 182.96 acres of habitat preserved by El Dorado County and EID combined does not mitigate the impacts imposed on rare plants since the County's mitigation program's inception. In order for EDCWA to rely on the above County's General Plan policies, the DFG recommends that the County determine the amount of rare plant habitat impacted by all project's approved by the County since the mitigation program's inception, and acquire and manage a total of 1.5 times the number of acres impacted to offset these impacts to less than significant. The DFG further recommends that the County regularly update their rare plant current fee program to adequately reflect the costs of acquiring, restoring, and preserving rare plant habitat. 5-6

The DFG, working with the U.S. Fish and Wildlife Service, is in support of ARC's on-going efforts to acquire lands for the conservation of Gabbro soil plants, and have provided a table (see Attachment 2) which includes properties found by our two agencies to be the top acquisition priorities for the Pine Hill Preserve. The DFG believes funds currently held by the County in association with the County's rare plant mitigation program total approximately $3.7 million, recommends that the County work with ARC to fund the acquisition of properties contained in Attachment 2 to work toward reducing the County Mitigation Program's deficit of CEQA required mitigation lands. 5-7

This project may have an impact to fish and/or wildlife habitat. Assessment of fees under Public Resources Code Section 21089 and as defined by Fish and Game Code Section 711.4 may be necessary. Fees are payable by the project applicant upon filing of the Notice of Determination by the lead agency. 5-8

Pursuant to Public Resources Code Sections 21092 and 21092.2, the DFG requests written notification of proposed actions and pending decisions regarding this project. Written notifications should be directed to this office. 5-9

Thank you for the opportunity to review this project. If the DFG can be of further assistance, please contact Mr. Todd Gardner, Staff Environmental Scientist, at (209) 745-1968, or Mr. Jeff Drongesen at (916) 358-2919.

Attachment

Sincerely,

Kent Smith
Habitat Conservation Program Manager

cc: Ms. Cay Goude
Mr. Jeremiah Karuzas
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W2605
Sacramento, CA 95825-1888

Ms. Elizabeth Dyer
Natural Resource Specialist
U.S. Bureau of Reclamation
Central California Area Office
7794 Folsom Dam Road
Folsom, CA 95630

Mr. Jeff Drongesen
Mr. Todd Gardner
Department of Fish and Game
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670

Attachment 1. Acquisitions Contributing to the Pine Hill Preserve in Addition to BLM's Original Preserve Establsihment

Acquisition	Year	APN	Owner	Acres	Unit	Seller	Funding Source	Sales price	Funded amount	% Contribution	Tot. acres cont.
1	1990	10439001		18.86	SF	Duncan	State	$360,000	$360,000	100.00	18.86
		10439002	STATE	20.69						100.00	20.69
2	1991	10406009	STATE	40	SF	Baldwin #1	State	$300,000	$250,000		
							Other		$50,000	100.00	40.00
3	1995	10421013	STATE	13.3	SF	Baldwin #2	State	$95,000	$95,000	100.00	13.30
4	1995	10421011	STATE	74.51	SF	Gross-Tobias #1	State	$316,000	$316,000	100.00	74.51
5	1995	10421014	STATE	4.14	SF	Carlson	State	$75,000	$75,000	100.00	4.14
6	1996	10406010	STATE	40	SF	Gross-Tobias #2	State	$160,000	$160,000	100.00	40.00
7	1996	10421010	STATE	6.64	SF	Jensen-Harris	State	$85,000	$85,000	100.00	6.64
8	1996	10421012	STATE	86.33	SF	Sanders	State	$300,000	$300,000	100.00	86.33
9	1997	8301001	US	117.36	CP	Smith and Gabbert #1	US (FWS Foundation)	$3,542,685	$1,000,000	28.23	33.13
							US (NFWF)		$100,000	2.82	3.31
							County		$843,000	23.80	27.93
							EID		$843,000	23.80	27.93
							Other		$756,685	21.36	25.07
10	1998	8301002	COUNTY	62.8	CP	Smith and Gabbert #2	US (BOR)	$1,915,400	$500,000	26.10	16.39
							County		$500,000	26.10	16.39
							EID		$500,000	26.10	16.39
							Other		$415,400	21.69	13.62
11	2000	7028055	US	41.82	CP	Ponderosa 50	US (BOR)	$1,802,000	$750,000	41.62	17.41
		7028056	US	48.83	CP		US (NFWF)		$152,000	8.44	4.12
							State (WCB)		$900,000	49.94	24.39
12	2001	8302028	US	49.08	CP	Lloyd Gabbert	US (LWCF)	$896,000	$646,000	72.10	35.39
							US (BOR)		$250,000	27.90	13.69
13	2002	10439003	US	10	SF	Anderson	US (LWCF)	$132,000	$132,000	100.00	10.00
14	2002	10201003	US	34.46	SF	Kanaka Phase 1	US (LWCF)	$3,581,000	$3,581,000		
		10201036		53.92							
		10201037		113.93							
		10409024		393.09						100.00	595.40
15	2002	8302011	US	28	CP	Smith and Gabbert	US (LWCF)	$3,362,000	$3,264,000	97.09	130.39
		8302018		17.3			Other		$98,000	2.91	3.91
		8302030		89							
16	2002	10206018	US	10	PH	Jaberyzadeh	US (LWCF)	$120,000	$120,000	100.00	10.00
17	2002	10206042	US	10	PH	Motto	US (LWCF)	$125,000	$125,000	100.00	10.00
18	2002	10201001	US			Kanaka phase 2	US (BOR)		$400,000	38.31	60.15
		10201002					State (WCB)				
		10201006		157	SF			$1,044,000	$644,000	61.69	96.85
19	2002	10424005	US	16	SF	Heritage	County	$160,000	$160,000	100.00	16.00
20	2002	10424026	US	11	SF	McQuillan	County	$225,000	$225,000	100.00	11.00
		10424028									
21	2003	10406008	US	229	SF	Zee Enterprises	US (BOR)	$1,375,000	$450,000	32.73	74.95
							State (WCB)		$687,500	50.00	114.50
							EID		$212,500	15.45	35.39
							Other		$25,000	1.82	4.16
22	2003	10424014	COUNTY	9.26	SF	Nash	County	$200,000	$200,000		
		10424015		10.35						100.00	19.61
23	2003	10406014	US	12.32	SF	Pearson	County	$170,000	$170,000	100.00	12.32
24	2004	6928064	COUNTY	11.52	PH	Thomas	US (FWS Section 6)	$390,000	$390,000		
		6928065		11.43						100.00	22.95
25	2006	10409021	STATE	20	SF	Phillips	US (NFWF)	$250,000	$43,750	17.50	20.00
		10409022		20			State (WCB)		$206,250	82.50	20.00

Total Acres acquired by El Dorado County = 103.25
Total Acres acquired by EID = 79.71
Total Acres acquired by State Funds = 520.20
Total Acres acquired by Federal Funds = 1057.27 (includes Land and Water Conservation Fund, NFWF, CVPIA Habitat Restoration Fund, FWS Section 6, & FWS Foundation)
Total Acres acquired by other Funds = 46.77

Attachment 2

APN	Acres	Ownership	Surveys	Rare Plants Present							
				C. stebbinsii	*C. roderickii*	*F. californicum* ssp. *decumbens*	*G. californicum* ssp *sierrae*	*P. layneae*	*C. grandiflorum*	*H. suffretescens*	*W. reticulata*
Tier One											
Cameron Park Unit											
070-261-77,-79,-80,-81	20	Carriage Hill/ Temecula Bank	Dr. Mike Baad (June 21, 2001)	X	X		X	X	X		X
070-011-18	167	Cameron Meadows/ Street et al.	BLM Staff (April & Sept 2008) Jones & Stokes (1997)		X		X	X	X		X
083-350-43	35	Pacific Oak Development	Sycamore Env, Consultants, Inc. (April, 2005)	X	X				X	X	X
083-020-2	11	D'Ambriosio	Informal BLM Survey	X	X			X		X	X
109-230-12	51	Scariot	Informal BLM Survey	X	X				X	X	X
Pine Hill Unit											
102-060-25	120	Piatenesi/ Mahon	Informal BLM Survey		X		X	X	X		X
069-280-10	80	Wunschel	Informal BLM Survey		X	X		X			
Salmon Falls Unit											
102-010-26,-46,-47,-48,-49,-50,-58, 104-090-64	695	Kanaka Valley	Informal BLM Survey		X		X	X			X
Tier Two											
104-500-07	60	Witt	Informal BLM Survey (Graciela Hinshaw)	X					X	X	X
104-09-23	48	Smeding	Informal Blm Survey	X					X	X	X
102-010-35,-40	80	Loris	Informal BLM Survey (Graciela Hinshaw)						X	X	X

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LETTER 5: KENT SMITH, CALIFORNIA DEPARTMENT OF FISH AND GAME (OCTOBER 12, 2009)

Response to Comment 5-1

The comment summarizes the Proposed Project and its objectives, as summarized in the Abstract included in front of the Draft EIS/EIR.

Response to Comment 5-2

The comment restates the conclusion on page 5-179 in the Draft EIS/EIR regarding the ability of adopted El Dorado County General Plan policies (listed on page 5-178) to mitigate rare plant species and/or habitat impacts to a less-than-significant level. The comment expresses disagreement with the conclusion, to which the agencies' response is provided in Response to Comment 5-3, below.

Response to Comment 5-3

The primary project proponents include the U.S. Bureau of Reclamation (Reclamation), EDCWA, and the water purveyors EID and GDPUD. The project would be implemented in El Dorado County, and delivery of water would facilitate for development under the El Dorado County Plan. However, while El Dorado County does have discretionary authority over any such development, El Dorado County is not a signatory for the water contract addressed in the Draft EIS/EIR. Therefore, this response addresses participation of Reclamation, EDCWA and EID, and not the County, in the various preservation actions to which the commenter refers.

Provided below is a justification of the less-than-significant determination included in the Draft EIS/EIR in regard to impacts on gabbro soils plants and their habitat. A final Biological Assessment (BA) analyzing potential effects of delivery of 7,500 AFA of water within the EID service area was provided to USFWS in June 2009. The Biological Assessment was included as Appendix G in the Draft EIS/EIR. On April 29, 2010, USFWS provided notification, that was followed by a letter dated June 9, 2010 (included as Appendix B in this Final EIR), to Reclamation that, because effects to gabbro soils plants resulting from water supply and delivery have already been addressed in two previous Biological Opinions (BOs), it would not be necessary to issue a separate BO in response to the *Biological Assessment for the Central Valley Project Water Service Contract between U.S. Bureau of Reclamation and the El Dorado County Water Agency* (Reclamation and EDCWA 2009). The two previous BOs are: (1) a 2006 BO for the renewal of EID's long-term water service contract in the American River Division (USFWS 2006); and (2) more recently, a 2009 BO for a proposed modification of EID's service area (USFWS 2009).

Both BOs concluded that water delivery within the EID service area is not likely to adversely affect Stebbins' morning glory, Pine Hill ceanothus, Red Hills soaproot, Pine Hill flannelbush, El Dorado bedstraw, and stated further that the project is not likely to jeopardize Layne's butterweed. The Biological Assessment (Appendix G in the Draft EIS/EIR, pages 30-44) provides supporting evidence that the "effects of an action on a species or its critical habitat are likely to be insignificant and discountable." These determinations support a similar conclusion under the applicable threshold

of significance under CEQA, which is whether a project would "substantially reduce the number or restrict the range of an endangered, rare or threatened species." (CEQA Guidelines, § 15065, subd. (a).)

As described in the Draft EIS/EIR and in the *Biological Assessment for the Central Valley Project Water Service Contract between U.S. Bureau of Reclamation and the El Dorado County Water Agency* (Reclamation and EDCWA 2009), Reclamation, EDCWA, and EID have made ongoing contributions towards the conservation of gabbro soils plants in El Dorado County including:

- Cooperative management and support of the Pine Hill Preserve: For the past decade, Reclamation, EDCWA, EID, and other parties have worked together under the Pine Hill Preserve Cooperative Management Agreement, a document which formalizes the role each party will play in the management of the Preserve. The current MOU is in effect until July 2011.
- Financial contributions toward the development of the Pine Hill Preserve: Reclamation, EDCWA, and EID have provided extensive funding toward the purchase of acreage containing habitat for gabbro soils plants. EID and the County have also provided financial support for the administration of the Pine Hill Preserve (e.g., staff salaries).
- Cooperation with USFWS and El Dorado County: Since 2008, EDCWA, EID and other parties have been meeting with El Dorado County and USFWS to continue efforts to develop a strategy for the long-term preservation of the gabbro soils species while allowing for implementation of the General Plan.

Please refer to the Draft EIS/EIR (pages 5-175 through 5-179) and the Biological Assessment (Appendix G in the Draft EIS/EIR) for a more detailed description of these efforts. In the BOs, USFWS cites these efforts as contributing to the long-term preservation of these species, and includes them as ongoing conservation recommendations to be implemented by Reclamation, EDCWA, and EID to "further the purposes of the Act" and ensure the preservation of gabbro soils plants and their habitat.

Therefore, the less-than-significant impact conclusion presented in the Draft EIS/EIR is based on USFWS's assessment of potential project impacts to gabbro soils plants, including USFWS concurrence with the role of ongoing conservation efforts toward the preservation of these species, and the application of conclusions from USFWS to the mandated CEQA threshold (whether the project would "substantially reduce the number or restrict the range of an endangered, rare or threatened species)." It should be noted that the impact conclusion was based on participation in all conservation programs, and not solely on funding contributions.

Notably, there is also support in CEQA case law for the proposition that water agencies serving already-planned growth analyzed in a recent general plan EIR do not independently or directly cause significant terrestrial impacts simply by supplying such water. (See *Sierra Club v. West Side Irrigation District* (2005) 128 Cal.App.4th 690, 701.

The approximate dollar amounts summarized in the Draft EIS/EIR are based on Table 4 of the Biological Assessment completed for this project (Reclamation 2009), which is included in Appendix

G in the Draft EIS/EIR. The information in this table was developed from the best available information provided by Reclamation, EDCWA, and EID at the time that the Biological Assessment was prepared. However, based on the more detailed financial information provided by the commenter, the acreage amounts provided in Appendix G Table 4 reflect the total amount of acreage purchased, rather than the relative amount of acreage purchased based on the percent funding supplied by Reclamation and EID. The corrected acreages are provided in Exhibit A with this response. Note that Exhibit A also includes additional acreage EID purchased after development of the Biological Assessment.

EXHIBIT A

RECLAMATION, EDCWA, AND EID FINANCIAL CONTRIBUTIONS FOR LAND PURCHASES AND MANAGEMENT OF THE PINE HILL PRESERVE

Year	Contribution Amount ($)	Acres	Action
Bureau of Reclamation			
2000	750,000	17.41	Land acquisition, Ponderosa property
2001	250,000	13.69	Land acquisition, Gabbert property
2002	400,000	60.15	Land acquisition, Salmon Falls Unit
2003	450,000	74.95	Land acquisition, Zee property
2003	25,000	--	Gabbro soil plants seed collection
2004	100,000	--	Preserve manager salary
2006	103,000	--	Gabbro soil plants baseline research, GIS mapping and predictive modeling
Subtotal	**$2,078,000**	**166.20**	
El Dorado County Water Agency			
July 1998	1,343,000	Unavailable	Land acquisition, general/multiple parcels
Feb 2002	828,000	Unavailable	Land acquisition, general/multiple parcels
July 2002	755,000	Unavailable	Land acquisition, general/multiple parcels
2005	--	--	Signatory to Joint Powers Agreement
July 2006	--	--	Officially included in renewal of Cooperative Management Agreement for Pine Hill Preserve
Subtotal	**$2,926,000**	**Unavailable**	
El Dorado Irrigation District			
Oct 1997	834,000	27.93	Land acquisition, Phase I for Cameron park Unit
July 1998	500,000	16.39	Land acquisition, Phase II for Cameron park Unit
Oct 1998	Unavailable	--	$345 surcharge per connection to fund continuing mitigation toward future conservation measures
Mar 2001	--	--	Participation in BLM Mgmt Advisory Group and Cooperative Management Agreement
Jan 2003	212,500	35.39	Purchase of Zee property
Feb 2003	Unavailable	--	Vote for continuation of $345 surcharge
2002–2007	150,000	--	Preserve mgr salary 2002–2007
Through 2007	4,480,000	--	EID contribution to CVPIA Habitat Restoration Program Fund
November 2009	1,418,000	40.52	Purchase of Cameron Meadows property
Subtotal	**7,594,500**	**120.23**	
TOTAL	**12,598,500**	**286.43**	

Response to Comment 5-4

The fee mitigation program the commenter describes is under the authority of and implemented by the County. EDCWA, in contrast to the County, is a creation of state enabling legislation that gives it

no authority over land use or implementation of General Plan policies, such as the fee mitigation program.

Response to Comment 5-5

The El Dorado County General Plan identifies several policies to address conservation of rare plant species, including a mitigation fee program for development projects that would result in impacts to rare plants or their habitat. (Policy 7.4.2.8 and Measure CO-U of the El Dorado County General Plan). This fee program is implemented solely by El Dorado County, and not by EDCWA. While EDCWA is one of the project proponents for the water contract addressed in the Draft EIS/EIR, EDCWA is not a physical supplier of water in the County, has no authority over land use, and acts only as an advisory agency to purveyors in El Dorado County. In addition, the proposed project does not include the construction of infrastructure or buildings which would require direct mitigation under the fee program. Please see also Response to Comment 5-3 and Response to Comment 7-6.

Response to Comment 5-6

As described previously, EDCWA does not have the authority to regulate future development on private land in the project area—jurisdiction over private lands lies with El Dorado County. EDCWA, lacking any discretionary land use planning authority, must defer to the existing General Plan and associated County code, which provide the mechanisms for mitigating direct or indirect impacts to rare plants or their habitats.

Policies 7.4.1.1–7.4.1.7 describe policies applicable to discretionary lands that fall within the Ecological Preserve layer, including conducting studies to determine potential effects to gabbro soils plants and appropriate mitigation. Gabbro soils plants would also benefit from implementation of Policies 7.4.2.7–7.4.2.9, which describe policies applicable to discretionary lands that fall within the Important Biological Corridor layer, including development of an Integrated Natural Resources Management Plan (INRMP). Finally, Policy 7.4.3 states that all plant and wildlife protection programs will be coordinated with the appropriate federal and state agencies.

Appropriate mitigation for discretionary projects within this framework would be established on a project-by-project basis through appropriate CEQA analysis. Further, discretionary projects that may affect federal- and state-listed plants, including Stebbins' morning glory, Pine Hill ceanothus, Red Hills soaproot, Pine Hill flannelbush, El Dorado bedstraw, Layne's butterweed, and El Dorado County mule's ears would be required to consult on a project-specific basis under Section 7 of the ESA.

EDCWA is entitled to assume its sister agencies, including the County, will live up to legal commitments tending to protect natural resources, including updating its fee in response to the Court of Appeal's observation that the County had not updated its fee to account for inflation, as required by the original fee ordinance.

Further, as described in Response to Comment 5-3, the Draft EIS/EIR and the Biological Assessment for the water contract do not rely fully on County policies. These documents both describe ongoing contributions of Reclamation, EDCWA, and EID towards the conservation of

gabbro soils plants in El Dorado County. USFWS cites these efforts as contributing to the long-term preservation of these species, and includes them as ongoing conservation recommendations to be implemented by Reclamation, EDCWA, and EID to "further the purposes of the Act" and ensure the preservation of gabbro soils plants and their habitat.

Please see also Response to Comment 7-6.

Response to Comment 5-7

Comment noted.

Response to Comment 5-8

As stated in the Draft EIS/EIR, the proposed project could result in direct significant impacts to fish and wildlife, but such impacts can be reduced to less-than-significant levels. The fees referred to by the commenter are statutory fees for DFG review of the Draft EIS/EIR and will be paid upon filing of the Notice of Determination (NOD).

According to the California State Clearinghouse website, the Department of Fish and Game filing fee for the review of an environmental impact report is $2,792.25. If the El Dorado County Water Agency Board of Directors, after certifying the Final EIR, opts to approve the proposed project or one of the alternatives, payment of the filing fee will be submitted with the NOD.

Response to Comment 5-9

Comment noted.

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STATE OF CALIFORNIA Arnold Schwarzenegger, *Govemor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

August 25, 2009

Tracey Eden-Bishop
El Dorado County Water Agency
3932 Ponderosa Road, Suite 200
Shingle Springs, CA 95682

RE: USBR/El Dorado County Water Service Under P.L 101-514, **SCH# 1993052016**, El Dorado County

Dear Ms. Eden-Bishop:

The Native American Heritage Commission (NAHC) has reviewed the Notice of Completion (NOC) referenced above. The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA Guidelines 15064(b)). To comply with this provision the lead agency is required to assess whether the project will have an adverse impact on historical resources within the area of project effect (APE), and if so to mitigate that effect. To adequately assess and mitigate project-related impacts to archaeological resources, the NAHC recommends the following actions:

6-1

- ✓ Contact the appropriate regional archaeological Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If any known cultural resources have already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- ✓ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- ✓ Contact the Native American Heritage Commission for:
  - A Sacred Lands File Check. **USGS 7.5-minute quadrangle name, township, range, and section required.**
  - A list of appropriate Native American contacts for consultation concerning the project site and to assist in the mitigation measures. **Native American Contacts List attached.**
- ✓ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
  - Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Katy Sanders

Rob Wood
Environmental Specialist III

CC: State Clearinghouse

Native American Contact
El Dorado County
August 19, 2009
24 KS

Shingle Springs Band of Miwok Indians
John Tayaba, Vice Chairperson
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El Dorado Miwok Tribe
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El Dorado Miwok Tribe
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Cameron Park , CA 95682
530-672-9819

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 1993052016 USBR/El Dorado County Water Service Under P.L. 101-514; El Dorado County.

Native American Contact
El Dorado County
August 19, 2009
24 KS

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Nashville-El Dorado Miwok
Cosme Valdez, Interim Chief Executive Officer
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This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH# 1993052016 USBR/El Dorado County Water Service Under P.L. 101-514; El Dorado County.

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LETTER 6: KATY SANCHEZ, NATIVE AMERICAN HERITAGE COMMISSION (AUGUST 25, 2009)

Response to Comment 6-1

Archaeological records on file at the North Central Information Center of the California Historical Resources Information System were reviewed to identify any properties listed on the National Register, state registers and other listings, including the files of the State Historic Preservation Office, and to identify those project areas that have previously been subject to a field archaeological reconnaissance. The study also included archival research at the El Dorado County Recorder's and Assessor's offices and additional research with the local public utilities files and participating agency records was directed at historic land use within the project area. The results of this study were documented in *El Dorado County Water Agency (EDCWA) Water Service Contract EIR/EIS Heritage Resource Study, Phase I: Background Report and Contextual History* (October 1999). Potential historic or unique archaeological resources identified in Sections 18, 19, 23, or 24. Such resources could include, but would not be limited to, prehistoric resources associated with CA-ELD-90 and CA-ELD-91 sites, hunting/gathering, food processing and tool manufacturing, bedrock mortar and midden sites, and burials. Historic resources could include structures and artifacts associated with mining, ranching, and farming. Such resources would only be affected if ground-disturbing activities were to occur.

Appendix J in the Draft EIS/EIR contains correspondence regarding the results of a Sacred Lands File Check and EDCWA correspondence with Native American contacts. The inquiry, completed in February 2008, indicated the records search did not indicate the presence of Native American cultural resources in the immediate project area. Although the absence of specific site information in the sacred lands file did not indicate the absence of cultural resources, to the extent that future development of facilities to convey water made available under the Proposed Project could be constructed, site-specific investigation(s) would be completed when the precise location(s) of such facilities are identified (see Draft EIS/EIR page 5-167).

Subsection 4.9 (Water-Related Cultural Resources) in the Draft EIS/EIR presented the results of a Class I survey that establish existing conditions in the Area of Potential Effect (APE) for direct diversions.

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California Native Plant Society

PO Box 377 • Coloma • California • 95613

October 16, 2009

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Re: Comments on DEIS/DEIR for Water Supply contracts between USBR and EDCWA (State Clearinghouse No. 1993052016)

Dear Ms. Dyer and Ms. Eden-Bishop:

These comments are submitted on behalf of the El Dorado Chapter of the California Native Plant Society (CNPS).

I am a professional biologist with over 14 years experience evaluating native plant resources in El Dorado County. I serve on the Plant and Wildlife Technical Advisory Committee for El Dorado County providing expertise on native plant and habitat issues. I have also provided technical assistance to state and federal wildlife agencies regarding field identification and habitat information for the rare plants in the Pine Hill area. I have reviewed the sections of the DEIS/DEIR on terrestrial and wildlife resources and the biological assessment (Appendix G) and offer the following comments.

Overview

Numerous sensitive resources, including rare plants and oak woodlands, are present within El Dorado County. These resources are briefly described in the affected environment section of the DEIS/DEIR and covered in greater detail in the biological assessment (Appendix G). The affected environment section also describes the regulatory framework which relies to a large extent on the general plan adopted by the County of El Dorado ("County") in 2004 to address protection of these resources.

7-1

Since adoption in 2004, the County has failed to implement a number of measures in the general plan and the county codes designed to protect and mitigate the adverse effects of development on sensitive resources. Further, the County has recently taken additional steps to reduce the level of protection, through general plan amendments, for natural resources. The County's failure to implement the general plan is discussed in detail below and should be addressed in the DEIS/DEIR. The DEIS/DEIR also relies on an analysis process to evaluate impacts to rare plants that underestimates the level of potential impact on federally listed species and fails to identify for the purposes of CEQA potential impacts to all rare plant species. Lastly, the DEIS/DEIR relies on conservation measures to be provided by either EDCWA or EID for rare plants that are not clearly defined or that do not exist. We ask that these failings be addressed in the environmental analysis for this project.

7-2
7-3
7-4

I. El Dorado County's Failure to Implement the General Plan

A. Failure to Mitigate Impacts to Rare Plants

El Dorado County is home to a unique suite of rare plants referred to as the gabbro soils plants of western El Dorado County ("gabbro plants"). Eight rare species are associated with the gabbro soils complex and include five species that are listed under the Endangered Species Act (Stebbins' morning glory, Pine Hill ceanothus, Pine Hill flannelbush, El Dorado bedstraw, and Layne's butterweed). One of the plants (Stebbins morning glory) is listed under the California Endangered Species Act. The remaining species are listed as rare under the Native Plant Protection Act and/or considered to be rare under the definitions provided by the California Environmental Quality Act. Residential and commercial development in and around the Cameron Park, Shingle Springs, Rescue, and Salmon Falls areas of western El Dorado County has been found to have an adverse impact on these species. Development in these areas provoked the listing of these species as endangered or threatened.

This water contract will provide water for the development of areas now occupied by rare plants which will an adverse, indirect and cumulative impact on rare plants and rare plant habitat.

7-5

1. The County Has Failed to Implement Approved Conservation Measures

The general plan approved in 2004 identifies several policies that address conservation of these rare species. These approved policies identify a mitigation fee program adopted by the County in 1998 as a principle component of the conservation strategy for the plants. This chapter (Chapter 17.71)[1] in the County's code directs, among other things, a mechanism intended to mitigate the impacts of development on the gabbro plants. A recent decision by the Third District Court of Appeal (*California Native Plant Society v. County of El Dorado* (2009) 170 Cal. App. 4th 1026) (Attachment 1) found that the County failed to implement the fee program according to the direction in the county code. As a result, the County's fee program was

7-6

[1] http://co.el-dorado.ca.us/planning/ZoningOrdinanceUpdated/Chapter17-71_03292009.pdf

determined to be inadequate to mitigate the effects of a development that removed 27 acres of occupied rare plant habitat.

The Court of Appeal identified the County's failure to complete an annual review of the fee mitigation program review as a significant failing. The annual consideration of adjustments to the fee itself is just one action required by the zoning ordinance that the county has failed to undertake. Other elements that the County has not complied with include:

Failure to Establish Conservation Easements

The County also has failed to implement the code with respect to establishing conservation easements for projects that have adopted on-site set asides to achieve rare plant mitigation. Chapter 17.17.210 A. requires this, yet conservation easements have not been recorded for any project.[2] There are an unknown number of projects to which this applies. Creation of a conservation easement is required by the County Code and necessary to provide the long term protection and monitoring of the conserved plants and habitat. Without the required conservation easements, there is no ability to monitor and hold the property owner accountable for the protection of the affected rare plant species. This undermines attainment of the conservation outcomes intended by the county code and the general plan.

7-6 (cont.)

Failure to Complete Annual Accounting of the Funds Collected and Expended

The fee program specifically requires that there be an annual accounting of the fee program. (See County Code 17.71.270 Accounting). To the best of our knowledge, such a review has never been posted or provided. Further, the code requires that the county "make findings each fifth fiscal year following the first deposit into the fund with respect to unexpended portions of the fund, in which the county: identifies the purpose to which the fee is to put; demonstrates a reasonable relationship between the fee and the purpose for which it is charged; identifies all sources and amounts of funding anticipated to complete financing; and designates the approximate dates on which the funding is expected to be deposited." This 5-year review has never been completed even though it has been over ten years since the program was adopted by the County. The detailed review required every five years is critical to accessing the efficacy of the program.

A recent request for information from the county on the funds available in the fee program indicated that there is over $5.7 million associated with the rare plant program. A portion of this is available for acquisition of rare plant habitat. The County also verified that the required 5-year reports had not been completed.

[2] See El Dorado County website for a history of Pine Hill (p. 4): "County records reviewed to date indicate that ***<u>although there were instances where the conservation easement requirement was appropriate</u>,*** no conservation easements have been obtained to date through this program."
http://www.co.el-dorado.ca.us/bos/wwwroot/Attachments/eadf4302-3c24-473a-bee4-9cc2f2673a84.doc

Failure to acquire critical properties

The County has failed to move forward in the expenditure of funds from the mitigation fee program to acquire rare plant habitat. Presentations made to the Board of Supervisors have indicated that since the creation of the fee program in July, 1998, the County has expended $1,255,000 for the purchase of 80 acres of rare plant habitat. According to our records, the County has not expended funds for land acquisition since August, 2003.

There have been opportunities since 2003 to acquire rare plant property with the mitigation funds, but the County has declined to do so. In October 2006, the County declined to approve an allocation of funding for the acquisition of a rare plant property determined by the US Fish and Wildlife and the California Department of Fish and Game to be a priority for acquisition and for which there was a willing seller (commonly known as the Avatar property). The Board of Supervisors assigned an individual to negotiate a purchase price on behalf of the County in November 2006. (See November 6, 2006 BOS minutes.) A review of all BOS minutes to date indicates that the County did not take action on the proposal to acquire the Avatar property with the rare plant fee mitigation funds. Since that time, other agencies contributed funding for that project and it has now been added to the preserve system. In May 2009, the County decline to approve the funding to acquire a second rare plant property determined by the US Fish and Wildlife and the California Department of Fish and Game to be a priority for acquisition and for which there was a willing seller (commonly known as the Carriage Hill property). 7-6 (cont.)

We have been told that the County does not intend to acquire any rare plant properties until the wildlife agencies agree to let them develop a road through the Cameron Park unit of the Pine Hill Ecological Preserve as well as other demands that have been identified by the County in their ongoing discussions with the wildlife agencies.[3]

The County has failed to undertake specific actions required by the county code and the general plan to conserve rare plant resources. The failure to implement the rare plant fee program undermines the ability to conserve these species and is in violation of the County's general plan.

2. The County has Failed to Correct Other Deficiencies in the Fee Program

In June, 2007, the County also identified deficiencies in the fee program and indicated that steps would be taken "develop a conservation plan and implementation strategy that would address baseline conditions, process between agencies, obligations and outcomes, and achieve

[3] The nature of the County's discussions is not commonly known to the public. Supervisor Sweeney has made specific references to such negotiations in memoranda to the Board of Supervisors (http://www.co.el-dorado.ca.us/bos/wwwroot/Attachments/3cc095f1-a14a-47fb-99ea-d5218b22b671.pdf) stating that "we are working with Fish and Wildlife Service and Fish and Game department to resolve the endangered species issues." We have been told by county staff that the issues being raised by the county include the construction of a road through the Cameron Park Preserve.

consensus on a conservation and mitigation strategy."[4] The Proposed Scope of Work[5] (p. 3) identifies the creation of a new conservation plan for the rare plants and states:

> SAIC will work with the Management Team, DFG, and FWS to develop biological goals and objectives for each of the eight plant species. We will assess the potential impacts on the plants from proposed land use changes as provide to SAIC by the County.
>
> SAIC will prepare a first draft of the Rare Plant Conservation Plan for the eight gabbro soils plants. The Plan will provide descriptions of conservation measures that include habitat protection, habitat enhancement, habitat management, and monitoring actions. These conservation measures will serve to minimize and mitigate the effects of land use changes on the plants. The Plan will include an adaptive management program and a monitoring program. SAIC will work with County staff, DFG, FWS, botanists and soil scientists with specific knowledge of the gabbro plants to identify appropriate conservation measures.

This scope of work was proposed in June, 2007. Since that time, the County has not taken any action to remedy deficiencies that they identified in the fee program.

7-6 (cont.)

B. Failure to Mitigate Impacts to Oak Woodlands and other Sensitive Resources

The general plan adopted by the County in 2004 included numerous mitigation measures intended to protect sensitive resources and in certain circumstances "fully mitigate" the impacts from development if adverse impacts could not be avoided. Numerous implementation measures were identified in the general plan with specific timelines for completion of these measures.[6] The timeframe for implementation for most of these measures is two years from adoption and at most 5 years. In most cases, the County has not completed the required implementation measures that address biological resources. For instance, "Measure CO-M Develop and implement an Integrated Natural Resources Management Plan consistent with Policy 7.4.2.8." is to be implemented with three years of adoption of the general plan. The County has yet to develop the INRMP and is just now going through the process of hiring a consultant to develop the plan.[7] Other implementation measures have been pursued by the County, and some of these, such as the measures related to oak woodland conservation, are being challenged in court.

7-7

The adverse effect of delaying implementation of these measures is further exacerbated by the recent decision by the Board of Supervisors to approve general plan amendment (A07-0011). This amended general plan policy 2.2.5.20 by raising the threshold for review of building and

[4] See also additional history and direction in legislative text for BOS meeting June 28, 2007 (http://www.co.el-dorado.ca.us/bos/wwwroot/detailreport/Reports/Temp/1172007175859.pdf)
[5] See SAIC proposal (http://www.co.el-dorado.ca.us/bos/wwwroot/attachments/9f3e523d-f830-4e6b-ac3c-4ad9a7f053d3.pdf)
[6] http://www.co.el-dorado.ca.us/Planning/AdoptedGeneralPlan/7_conservation.pdf
[7] See http://co.el-dorado.ca.us/Planning/GeneralPlanINRMP.html for most recent updates on the progress of developing the INRMP.

grading permits for consistency with the General Plan from 120 square feet of building area to 4,000 square feet of building area or 20,000 square feet of disturbed area.[8] This amendment allows projects to be completed that do not comply with the general plan and that may negatively affect sensitive resources, such as oak woodlands or stream courses.[9] The revised policy does provide an exception for projects within the Important Biological Corridor (IBC). However, the question remains whether or not the IBC layer is sufficiently complete to address conservation of important habitat since it has not yet been reviewed, as was directed by Implementation Measure CO-N of the general plan. Further, the INRMP, that has not yet been developed, is expected to identify additional important habitat to be protected along with mitigation measures to address habitat loss. Lastly, these additional requirements when adopted in the INRMP process now will not apply to all residential and commercial development, but only to a subset of these projects.

7-7 (cont.)

C. Failure to Implement the General Plan Jeopardizes Natural Resources

As described above, the County has failed to implement its own policies that were designed to protect and mitigate the adverse effects of development on sensitive resources. Further, the County has recently taken additional steps to reduce the level of protection, through general plan amendments, for natural resources. The environmental analysis needs to address the County's failure to implement the general plan. Until the County remedies these deficiencies, the USBR and EDCWA can not rely on them as mitigation measures for this water contract.

7-8

7-9

II. Analysis Process Used for Rare Plants Underestimates Impacts

The analysis in the biological assessment limits the assessment of impacts on rare plants to properties greater than 4 acres in area. Habitat for the Pine Hill plants occurs on properties less than 4 acres in size, and there are known plant occurrences on smaller parcels. Land use designations in the southern assessment area allow for properties to be subdivided into parcels smaller than 0.25 acres. Further, the general plan allows for the creation of a second dwelling on many parcels. The subdivision of lots less than 4 acres in size and the development of secondary dwellings have the potential to impact rare plants and rare plant habitat on smaller parcels and ones that are already developed. These impacts should be addressed in the environmental analysis.

The detailed analysis in the biological assessment only addresses the five federally listed species. Three additional species recognized as rare under CEQA are not evaluated. These species occur throughout the gabbro soils study area and occurrences exist within the southern assessment area. The potential impacts to these species should be evaluated in the environmental analysis.

7-10

[8] http://www.co.el-dorado.ca.us/bos/wwwroot/meetings/2008/6/1152_M_Board_Of_Supervisors_08-06-17_MINUTES.pdf
[9] http://co.el-dorado.ca.us/Planning/PCagendas/2008/05-22-2008_A07-0011_Z08-0012.pdf

Lastly, the assessment area is limited to a region defined by the EID service boundary that falls within the "place of use" boundary. This may be appropriate when assessing the direct effects of the water contract, but it is inappropriate for assessing indirect and cumulative effects of the contract. The water contract itself indirectly increases the capacity of EID to serve development throughout its service boundary. This extends to the area due east and north of the southern assessment boundary which supports some of the highest densities of rare plants. The water in this contract could allow EID to redistribute water that presently serves users inside the place of use to areas outside the place of use which, in turn, has the potential to impact rare plants outside the place of use boundary. If EDCWA and EID claim that the water under this contract will not result in a redistribution of water currently accessed by existing users inside the place of use to areas outside the place of use, then a statement to that effect needs to be documented and an evaluation of this assertion needs to be included in the environmental analysis. 7-11

III. Conservation Measures Not Clearly Defined

The DEIS/DEIR (p. 5-178) cite the development of an MOA with UWFWS as conservation action that supports long term protection of the Pine Hill plants. It is our understanding that an MOA does not now exist. We understand that meetings have taken place among local, state and federal agencies, but no agreements have been reached. There also has been no public disclosure of the nature of these meetings or any outcomes from the meetings. Until a specific action or agreement can be documented, the reference to the "development" of an MOA should be removed from the DEIS/DEIR. 7-12

The DEIS/DEIR identifies a number of past monetary contributions that were made to the Pine Hill Preserve (p. 5-177), but does not specifically define what regulatory decisions or actions these past conservation measures were designed to mitigate. The DEIS/DEIR, however, relies on the description of these past actions and an undefined "anticipated future level of participation" (p. 5-179) to conclude that impacts to rare plants would be insignificant. The specific actions that EDCWA and EID intend to take to mitigate potential impacts on rare plants as a result of this water contract need to be described in detail now in order to adequately evaluate impacts. 7-13

In summary, we ask that you address the issues noted above in the environmental analysis for this water contract. If you have further questions, please contact me at (530) 295-8210 or britting@earthlink.net.

Sincerely,

Susan Britting

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LETTER 7: SUSAN BRITTING, CALIFORNIA NATIVE PLANT SOCIETY (OCTOBER 16, 2009)

Response to Comment 7-1

Comment noted.

Response to Comment 7-2

Please see Responses to Comments 7-6 through 7-9 and Responses to Comments 5-4 and 5-5.

Response to Comment 7-3

The process used to analyze impacts on federally listed plant species and their habitat correctly relied on the Biological Assessment included in Appendix G in the Draft EIS/EIR, which included a stepwise process, approved by USFWS, to evaluate potential impacts. Please see Responses to Comments 7-5, 7-10 and 7-11, and Response to Comment 5-3.

Response to Comment 7-4

The project proponents include Reclamation, EDCWA, and their water purveyors EID and GDPUD. These agencies do not have authority over land use in El Dorado County. Jurisdiction over private lands lies with El Dorado County; therefore, Reclamation, EDCWA and water purveyors must rely on the General Plan and other County processes. Please see Responses to Comments 7-6 through 7-13 and Responses to Comments 5-4 and 5-5.

Response to Comment 7-5

Eight sensitive plant species, listed below, are associated with the gabbro soils complex in El Dorado County:

- *Calystegia stebbinsii* (Stebbins' morning glory): Federal Endangered (FE), State of California Endangered (CE), and CNPS 1B
- *Ceanothus roderickii* (Pine Hill ceanothus): FE, State of California Rare (CR), and CNPS 1B
- *Chlorogalum grandiflorum* (Red Hills soaproot): CNPS 1B
- *Fremontodendron decumbens* (Pine Hill flannelbush): FE, CR, and CNPS 1B
- *Galium californicum spp. sierrae* (El Dorado bedstraw): FE, CR, and CNPS 1B
- *Helianthemum suffratescens* (Bisbee Peak rush-rose): CNPS 3.2
- *Senecio layneae* (Layne's butterweed): Federal Threatened (FT), CR, and CNPS 1B
- *Wyethia reticulata* (El Dorado County mules ears): CNPS 1B

CEQA statutes and guidelines require analysis of project impacts on rare, threatened and endangered plants, which are generally understood by professional biologists in California to include all plants on the CNPS 1A, 1B and 2 lists. Inclusion of plants on the CNPS 3 and 4 lists is recommended, but not required, under CEQA.

In recognition that delivery of 15,000 AFA of water within the EID and GDPUD service areas could potentially result in adverse impacts to federal listed species, including gabbro soils plants, the U.S. Bureau of Reclamation and EDCWA requested consultation with USFWS. On April 29, 2010, USFWS notified EDCWA that, because effects to gabbro plants resulting from water supply and delivery have already been addressed in two previous Biological Opinions (BOs), it would not be necessary to issue a BO in response to the *Biological Assessment for the Central Valley Project Water Service Contract between U.S. Bureau of Reclamation and the El Dorado County Water Agency* (Reclamation and EDCWA 2009). The two previous BOs include 1) a 2006 BO for the renewal of EID's long-term water service contract in the American River Division (USFWS 2006) and, 2) more recently, a 2009 BO for a proposed modification of EID's service area (USFWS 2009).

Both BOs concluded that water delivery within the EID service area is not likely to adversely affect Stebbins' morning glory, Pine Hill ceanothus, Red Hills soaproot, Pine Hill flannelbush, El Dorado bedstraw, and stated further that the project is not likely to jeopardize Layne's butterweed. In other words, USFWS has determined that existing commitments are sufficient under the Endangered Species Act to protect these species. This conclusion is not inconsequential under CEQA.

The Draft EIS/EIR describes ongoing efforts of the Bureau of Reclamation, EDCWA, and EID (among others) in development of the Pine Hill Preserve, as well as working with El Dorado County and other organizations to develop a strategy or the long-term protection and preservation of gabbro plant species (see Response to Comment 7-6). In the BOs, USFWS cites these efforts as contributing to the long-term preservation of these species, and includes them as ongoing conservation recommendations to be implemented by Reclamation, EDCWA, and EID to "further the purposes of the Act" and ensure the preservation of gabbro soils plants and their habitat. The less-than-significant impact conclusion presented in the Draft EIS/EIR is based on USFWS's assessment of potential project-specific impacts on gabbro soils plants. However, the Draft EIS/EIR does conclude that there would be adverse cumulative and growth-related impacts on rare plant species (Draft EIS/EIR pages 5-247 and 6-10 through 6-12).

Please see also Responses to Comments 7-6 through 7-13.

Response to Comment 7-6

The commenter has expressed several areas of concern regarding the County's implementation of certain General Plan policies and programs intended to protect and preserve rare plants (gabbro plant species). Such comments are more appropriately directed to County staff. It should be noted the project proponents are Reclamation and EDCWA. El Dorado County is not a signatory for the water contract evaluated in the Draft EIS/EIR.

Policies 7.4.1.1–7.4.1.7 describe policies applicable to discretionary lands that fall within the – Ecological Preserve (EP) layer (i.e., proposed rare, threatened, or endangered species preserves), including conducting studies to determine potential effects to gabbro soils plants and appropriate mitigation. Gabbro soils plants would also benefit from implementation of Policies 7.4.2.7–7.4.2.9, which describe policies applicable to discretionary lands that fall within the – Important Biological Corridors (IBC) layer (i.e., lands identified as having high wildlife habitat value), including

development of an Integrated Natural Resources Management Plan (INRMP). Finally, Policy 7.4.3 states that all plant and wildlife protection programs will be coordinated with the appropriate federal and state agencies. Appropriate mitigation for discretionary projects within this framework would be established on a project-by-project basis through appropriate CEQA analysis. Further, discretionary projects that may affect federal- and state-listed plants, including Stebbins' morning glory, Pine Hill ceanothus, Red Hills soaproot, Pine Hill flannelbush, El Dorado bedstraw, Layne's butterweed, and El Dorado County mule's ears would be required to consult on a project-specific basis under Section 10 of the ESA.

As described in the Draft EIS/EIR and in the *Biological Assessment for the Central Valley Project Water Service Contract between U.S. Bureau of Reclamation and the El Dorado County Water Agency* (Reclamation and EDCWA 2009), Reclamation, EDCWA, and EID have made ongoing contributions towards the conservation of gabbro soils plants in El Dorado County including:

- Cooperative management and support of the Pine Hill Preserve: For the past decade, Reclamation, EDCWA, EID, and other parties have worked together under the Pine Hill Preserve Cooperative Management Agreement, a document which formalizes the role each party will play in the management of the Preserve. The current MOU is in effect until July 2011.
- Financial contributions toward the development of the Pine Hill Preserve: Reclamation, EDCWA, and EID have provided extensive funding toward the purchase of acreage containing habitat for gabbro soils plants. They have also provided financial support for the administration of the Pine Hill Preserve (e.g., staff salaries).
- Cooperation with USFWS and El Dorado County: Since 2008, EDCWA, EID and other parties have been meeting with El Dorado County and USFWS to continue efforts to develop a strategy for the long-term preservation of the gabbro soils species while allowing for implementation of the General Plan.

In addition to General Plan policies, the Biological Assessment for this project includes a number of other conservation measures implemented by Reclamation, EID, and EDCWA. These include financial support and cooperative management of the Pine Hill Preserve and working with USFWS, the County, and other partners to develop a long-term strategy for protecting gabbro soils plants during implementation of the General Plan (see Response to Comment 7-6). USFWS states in the BO that these measures will assist USFWS in the recovery of these species.

Refer to the Draft EIS/EIR and the Biological Assessments for a more detailed description of these efforts. In the Biological Opinions (BOs), USFWS cites these efforts as contributing to the long-term preservation of these species, and includes them as ongoing conservation recommendations to be implemented by Reclamation, EDCWA, and EID to "further the purposes of the Act" and ensure the preservation of gabbro soils plants and their habitat. The Draft EIS/EIR therefore concludes that, based on the consultation with USFWS, with continued implementation of these ongoing efforts to preserve gabbro soils plants, delivery of 7,500 AFA to the EID service area would result in a less-than-significant effect on these species.

The commenter states that a recent Court of Appeal decision found that the County had failed to implement a General Plan fee program for rare plants, and therefore the fee program is currently inadequate to mitigate the effects of development. However, the commenter overstates the legal significance of that judicial decision with respect to EDCWA and this project. Because EDCWA has no land use authority in the County, EDCWA must rely on the General Plan and associated County policies to mitigate the indirect effects of a new water diversion, as these policies provide the mechanism for regulating future development of private lands within the County. EDCWA has no ability to step into the County's shoes. One of the teachings of the referenced court decision is that the adequacy of mitigation proposed for discretionary projects, such as the County's in-lieu fee program, may need to be assessed on a site-specific basis through the CEQA process. The County's mistake in that case, which involved a negative declaration, was to assume that payment of the fee by itself was sufficient to eliminate any "fair argument" that the project at issue – a convalescent facility – might have significant effects on the plants in question. It is clear from the court's ruling, and EDCWA understands, that implementation of measures in addition to the fee program – e.g., the INRMP and continued funding for existing preserves – will be needed in the long-term to protect the affected species on a larger geographic basis. Considerable legal protection arises from the fact that discretionary projects that would result in take of federal- and state-listed plants, including Stebbins' morning glory, Pine Hill ceanothus, Red Hills soaproot, Pine Hill flannelbush, El Dorado bedstraw, Layne's butterweed, and El Dorado County mule's ears may require consultation under Section 7 of the ESA or may need to obtain a CDFG Section 2081 Incidental Take Permit.

El Dorado County's setback in the single CEQA case mentioned by the commenter, though not to be taken lightly, need not negate the long-term effectiveness of the overall conservation program described above. EDCWA must assume that its sister agency the County will adjust its program as needed, if at all, in light of judicial rulings and will faithfully carry out and enforce General Plan policies tending to conserve and reduce impacts to rare plants. In particular, EDCWA assumes that the County will complete an effective Integrated Natural Resources Management Plan.

While EDCWA is the project proponent for the water contract addressed in the Draft EIS/EIR, EDCWA is not a physical supplier of water in the County, has no authority over land use, and acts only as an advisory agency to purveyors in El Dorado County. In contrast, El Dorado County, through its Board of Supervisors, has statutory authority over land use within the County's unincorporated areas. This authority is embodied in the County's 2004 General Plan, which creates a policy framework that, along with compliance with various state and federal laws and permitting requirements, requires the mitigation of environmental impacts from new development. The Draft EIS/EIR acknowledges, consistent with the General Plan EIR, that water delivery would facilitate development under the General Plan, with subsequent indirect effects to gabbro soils plants and their habitats. However, EDCWA does not have the authority to regulate future development on private land in the project area—jurisdiction over private lands lies with El Dorado County. EDCWA, lacking any discretionary authority, must defer to the existing General Plan and associated County Code provisions, which provide the mechanisms for mitigating direct or indirect impacts to rare plants or their habitats.

Although the commenter has catalogued a number of actions it would like to see from the County, the existence of the list does not alter EDCWA's statutory mission, which allows it no land use authority while requiring it to assist with obtaining the water needed for growth and development planned by the County Board of Supervisors. To the extent that the commenter has suggestions to direct to the County, EDCWA suggests that the commenter contact the County directly, which apparently is occurring already.

Response to Comment 7-7

The commenter has expressed several areas of concern regarding the County's implementation of certain General Plan policies and programs intended to protect and preserve oak woodlands and other sensitive resources. It should be noted the project proponents are Reclamation and EDCWA. El Dorado County is not a signatory for the water contract evaluated in the Draft EIS/EIR. As a point of clarification, the issues raised by the commenter would be most effectively and fruitfully directed to County staff, as EDCWA has no authority or means for bringing about the result sought by the commenter. The Draft EIS/EIR acknowledges, consistent with the General Plan EIR, that water delivery would facilitate development under the General Plan, with subsequent indirect effects to sensitive habitats including oak woodlands. However, EDCWA does not have the authority to regulate future development on private land in the project area—jurisdiction over private lands lies with El Dorado County. EDCWA, lacking any discretionary authority, must defer to the existing General Plan and associated County code, which outline the mechanisms for mitigating direct or indirect impacts to sensitive habitats.

In compliance with the state-level Oak Woodlands Conservation Act of 2001, the General Plan includes several policies to reduce the impacts of development on oak woodlands. Policies 7.4.4.4 and 7.4.4.5 include requirements for the retention of oak woodland corridors and tree canopy retention levels. Policies 7.4.5.1 and 7.4.5.2 include requirements for a tree survey, preservation, and replacement plan for issuance of grading permits, as well as development of an Oak Tree Preservation Ordinance, which was still in development at the time this document was written. Finally, as required by implementation measure CO-P, the County developed an Oak Woodland Management Plan (OWMP), which was adopted by the Board of Directors on May 6, 2008. The OWMP establishes and funds an oak canopy mitigation program, identifies and establishes a database inventory of large expansions of contiguous oak woodland habitats where conservation easements may be acquired, encourages and provides incentives for voluntary preservation of oak woodlands, and provides for education and outreach.

In addition to these policies, site-specific mitigation for discretionary projects within this framework would be established on a project-by-project basis through project-specific CEQA analysis. Although the commenter may believe the County is falling short in protecting oak woodlands, EDCWA as a practical matter has no authority or means of bringing about the outcome favored by the commenter. EDCWA respectfully suggests that the commenter continue to communicate directly with the County.

Response to Comment 7-8

The project proponents for this Proposed Project are Reclamation, EDCWA, and their water purveyors EID and GDPUD. These agencies do not have authority over land use in El Dorado County. Jurisdiction over private lands lies with El Dorado County; therefore, Reclamation, EDCWA and water purveyors must rely on the General Plan and other County processes. Please see also Responses to Comments 7-6 and 7-9.

Response to Comment 7-9

Refer to Response to Comment 7-6. References to General Plan policies are included in the Draft EIS/EIR not as mitigation measures, but as part of the existing regulatory environment within the County. As explained earlier, EDCWA is entitled to assume its sister agencies, including the County, will live up to legal commitments tending to protect natural resources. EDCWA is a creation of state enabling legislation that gives it no authority over land use or the terrestrial impacts of development that may use water whose development and delivery was in part facilitated by EDCWA. The commenter is apparently in touch with the County and has means of expressing its opinions to County authorities.

In addition to reliance on the General Plan policies, the Draft EIS/EIR describes the participation of Reclamation, EDCWA, and EID in efforts to preserve gabbro soils plants and their habitat. These efforts include participation in the development of the Pine Hill Preserve, as well as working with El Dorado County and other organizations to further develop and implement a strategy for the long-term protection and preservation of gabbro plant species (see also Response to Comment 7-6). In the BOs related to this project, USFWS cites these efforts as contributing to the long-term preservation of these species, and includes them as ongoing conservation recommendations to be implemented by Reclamation, EDCWA, and EID to "further the purposes of the Act" and ensure the preservation of gabbro soils plants and their habitat.

Response to Comment 7-10

The effects analysis included in the *Biological Assessment for the Central Valley Project Water Service Contract between U.S. Bureau of Reclamation and the El Dorado County Water Agency* (Reclamation and EDCWA 2009), included in Appendix G in the Draft EIS/EIR, consisted of a stepwise process to evaluate potential habitat for gabbro soils plants in the action area. Criteria for this analysis were developed in 2006 in consultation with USFWS to identify parcels that fit several requirements (including land ownership, size, connectivity, soils, and plant value) and that had potential for inclusion into the Pine Hill gabbro soils preserve. Initially, USFWS had requested an analysis that included parcels of 10 acres or greater. On July 18, 2006, Pete Trenham of USFWS requested that the analysis be expanded to included parcels of 4 acres or greater. Refer to Appendix D of the Biological Assessment (included as Appendix G of the Draft EIS/EIR) for more information on the ESA consultation process.

The *Biological Assessment for the Central Valley Project Water Service Contract between U.S. Bureau of Reclamation and the El Dorado County Water Agency* (Reclamation and EDCWA 2009), developed as part of the Section 7 consultation with USFWS for this project, was required to

addresses only the five federally listed gabbro soils plants. As described previously, two BOs previously issued by USFWS concluded that water delivery within the EID service area is not likely to adversely affect Stebbins' morning glory, Pine Hill ceanothus, Red Hills soaproot, Pine Hill flannelbush, El Dorado bedstraw, and stated further that the project is not likely to jeopardize Layne's butterweed.

Red Hills soaproot and El Dorado County mule's ears are not federally listed species, and therefore were not specifically addressed in the BA. Habitat requirements for and distribution of these two species are similar to those of the federally listed species described in the BA. Red Hills soaproot is typically found on rocky soils within open areas in chaparral, although it may also be present in woodlands and grasslands. This species is also found in the Red Hills area of Tuolumne County. El Dorado County mule's ears are restricted to the Pine Hill gabbro soils, where it is found in rocky areas within chaparral plant communities. CNDDB data indicate that, within the area covered by the Draft EIS/EIR, these two species occur in the same habitat with Stebbins' morning glory, Pine Hill ceanothus, and El Dorado bedstraw, primarily within the EID service area (CDFG 2010). Therefore, measures for the protection of habitat for the five federally listed species would also protect these species.

The Draft EIS/EIR describes ongoing efforts of the Bureau of Reclamation, EDCWA, and EID (among others) in development of the Pine Hill Preserve, as well as working with El Dorado County and other organizations to develop a strategy or the long-term protection and preservation of gabbro plant species (see also Response to Comment 7-6). In the BOs, USFWS cites these efforts as contributing to the long-term preservation of these species, and includes them as ongoing conservation recommendations to be implemented by Reclamation, EDCWA, and EID to "further the purposes of the Act" and ensure the preservation of gabbro soils plants and their habitat. The Draft EIS/EIR therefore concludes that, based on the consultation with USFWS, with continued implementation of these ongoing efforts to preserve gabbro soils plants, delivery of 7,500 AFA to the EID service area would result in a less-than-significant effect on these species. (See Draft EIS/EIR, pages 5-175 - 5-179.) The Draft EIS/EIR summarizes the biological resources conclusions of the County's General Plan EIR, noting more generally that the document "concluded that development of and projected increases in urban, agricultural, and mined areas under the General Plan would lead to loss of habitat and loss of individuals of both special-status plants and animals. This impact was considered significant for all of the four equal-weight alternatives[.]" (Draft EIS/EIR, page 6-11.)

The remaining gabbro soils plant species, Bisbee Peak rush-rose, which is CNPS 3.4, is not addressed in this analysis. CEQA statutes and guidelines require analysis of project impacts on rare, threatened and endangered plants, which are defined to include all plants on the CNPS 1A, 1B and 2 lists. Inclusion of plants on the CNPS 3 and 4 lists is recommended, but not required, under CEQA.

Response to Comment 7-11

EDCWA developed a supply/demand analyses in 2009 in response to a similar concern expressed by USFWS that the Proposed Project would result in non-CVP water being freed up for use in a broader area. The results of the supply/demand analyses indicate that, as a result of projected

growth within the CSA (Contractor Service Area), all existing and proposed CVP water (under the Reclamation/EDCWA contract), together with "other supplies," in a greater amount than are used today, will be required to meet water demands within the CSA. Exhibit B, below, provides a summary of existing and projected El Dorado County General Plan buildout water demands within the current and proposed addition to the CSA. It also shows current supplies available to these areas and the supply that would be required at buildout of the proposed CSA.

Depending on CVP Contractor cutbacks and operational constraints, supply amounts and their sources vary from year to year. Actual diversions from Folsom Reservoir have been as high as 9,171 acre-feet (ac-ft) in 2007, which included 6,599 ac-ft of existing CVP Water Service Contract water and 2,572 ac-ft of Temporary Warren Act Contract water. Because of these variations and EID's contractual right to take up to 7,550 ac-ft, the full allocation from the existing long-term Water Service Contract is used for this analysis.

In 2008, as shown in Exhibit B, there was a demand of 14,829 ac-ft within the existing CSA and another 4,678 ac-ft of demand within the proposed addition to the CSA. The existing CVP Water Service Contract allows up to 7,550 ac-ft of water to be used within the existing CSA area, with the remainder of the demand coming from "Other Supplies," which can be a combination of water from recycled water, Sly Park, South Fork American/Project 184, and Temporary Warren Act contracts. As shown, 11,957 ac-ft would have come from "Other Sources," if the full 7,550 ac-ft CVP supply was utilized.

EXHIBIT B

CVP WATER SUPPLY CONTRACT BETWEEN EDCWA AND BUREAU OF RECLAMATION
SUPPLY/DEMAND ANALYSIS OF INTERRELATED
"EXPANSION OF CONTRACTOR PLACE OF USE"

Proposed Contractor Service Area	**2008[2]**	**GP Buildout[1]**
Demand		
Existing Contractor Service Area		
Bass Lake	2,177	
El Dorado Hills	9,903	
Total metered demand	*12,080*	*23,395*
Latent demand[5]	667	1,638
Unaccounted for water and beneficial uses[7]	2,082	2,807
Subtotal Existing Contractor Service Area	***14,829***	***27,840***
Addition to Existing Contractor Service Area		
Cameron Park Service Area metered demand [3]	3,938	10,540
Latent demand[6]	61	738
Unaccounted for water and beneficial uses[7]	679	1,265
Subtotal Addition to Contractor Service Area	***4,678***	***12,542***
Total Proposed Contractor Service Area Demand	**19,507**	**40,382**
Supply		
CVP Supplies		
Current Water Service Contract	7,550	7,550
New Folsom Contract PL101-514		7,500
Subtotal Folsom Supplies	***7,550***	***15,050***
Other supplies		
Recycled Water Supply[4]	3,364	5,536
Sly Park, Forebay, Warren Act Contract	8,593	19,797
Subtotal Other Supplies	***11,957***	***25,332***
Total supply required to meet demand	**19,507**	**40,382**

EXHIBIT B

CVP WATER SUPPLY CONTRACT BETWEEN EDCWA AND BUREAU OF RECLAMATION
SUPPLY/DEMAND ANALYSIS OF INTERRELATED
"EXPANSION OF CONTRACTOR PLACE OF USE"

Proposed Contractor Service Area	2008[2]	GP Buildout[1]

Notes:
1. El Dorado County General Plan and FAR General Plan Amendment
2. EID 2008 Consumption Report for El Dorado Hill and Bass Lake and analysis prepared by EDCWA using County Survey TAZ data and EID consumption data for Cameron Park Water Service Area. Demand includes potable and recycled water.
3. Portion of Cameron Park Service Area within Proposed Contractor Service Area
4. 2008 reclaimed wastewater supply available from DC and EDHWWTP less in-plant uses. Draft 2009 Water Resources and Service Reliability Report. Projected supply from EID RW Seasonal Storage System Task 1 Technical Memorandum dated October 5, 2006. Assumes dry year and no seasonal storage.
5. 2008 latent from 2009 Water Resources and Service Reliability Report Table 6 and 13. Projected latent is 7% of active demand as assumed in GP.
6. 2008 latent is prorated from Draft 2009 Water Resources and Service Reliability Report, Table 7 and 8A. Projected latent is 7% of active demand as assumed in GP.
7. 2008 UAW and BU from Draft 2009 Water Resources and Service Reliability Report, App. Table D. Projected UAW is 12% of active demand as assumed in GP, which is approximately 10% UAW.

The projected General Plan buildout demand within the existing CSA is 27,840 ac-ft, with an additional 12,542 ac-ft of demand projected for the proposed addition to the CSA. The supply required to meet that demand would come from the existing CVP Water Service Contract (7,550 ac-ft), EID's portion of the new CVP water supply contract (7,500 ac-ft) and 25,332 ac-ft from some combination of "Other Supplies," which is substantially greater than the 11,957 ac-ft required in 2008.

Response to Comment 7-12

As requested, reference to the MOA is hereby deleted from the Draft EIS/EIR. Please see Chapter 2, Text Changes to the Draft EIS/EIR. Although an MOA with USFWS has not yet been completed, Reclamation, EDCWA, EID, El Dorado County, USFWS and other parties have been meeting since 2008 to develop long-term strategy for the preservation of gabbro soils plants while allowing for implementation of the General Plan. In addition to this effort, the Draft EIS/EIR and the Biological Assessment describe Reclamation, EDCWA, and EID's participation in several other ongoing conservation measures to protect gabbro soils plants. Refer to Response to Comment 7-6 for more details on these programs. The deletions to these former references do not alter any of the environmental conclusions in the Draft EIS/EIR.

Response to Comment 7-13

As described under Response to Comment 7-6, water delivery would facilitate development under the General Plan, with subsequent indirect effects to gabbro soils plants and their habitats. EDCWA and EID do not have the authority to regulate future development on private land in the project area—jurisdiction over private lands lies with El Dorado County, and therefore cannot authorize direct mitigation for the effects of future development projects.

In recognition of the importance of preserving El Dorado County's natural resources, including gabbro soils species, EDCWA and EID are participants in several ongoing conservation efforts in the County. This includes participation in the development of the Pine Hill Preserve, financial

contributions toward land purchases and Pine Hill Preserve staff salaries, and ongoing cooperation with USFWS, El Dorado County, and other organizations working toward the long-term protection and preservation of gabbro soils plants in the County (see also Response to Comment 7-6). Again, because EDCWA and EID do not have a direct role in the development of private County lands, and because they do not have discretionary authority to regulate development, EDCWA and EID's contributions were not intended as mitigation toward any specific development project. Rather, these efforts show EDCWA and EID's willingness to participate in program-level conservation programs, such as the Pine Hill Preserve.

As described in Responses to Comments 7-6 and 7-12, EDCWA, EID, the County, USFWS and other organizations are involved in ongoing efforts to develop a broader conservation strategy framework for protecting gabbro soils plants while allowing the County to implement its General Plan. Because this is an ongoing, cooperative effort, it is not possible for EDCWA and EID to provide the details of any agreement prior to its development. Details of progress in this effort to date are described in Responses to Comments 7-6 and 7-12.

From: El Dorado Hills Citizens Alliance [alliance@edhca.net]
Sent: Thursday, December 31, 2009 2:26 AM
To: Dyer, Elizabeth
Cc: El Dorado Hills Citizens Alliance
Subject: Comments on Draft EIS/EIR, CVP/El Dorado County Water Agency contract (PL 101-514)

Bureau of Reclamation Mid-Pacific Region,

Writing on behalf of the El Dorado Hills Citizens Alliance, please accept the comments below on the project identified as follows:

Central Valley Project Water Supply Contracts Under Public Law 101-514 (Section 206):
Contract Between the U.S. Bureau of Reclamation and the El Dorado County Water Agency, Subcontract Between the El Dorado County Water Agency and the El Dorado Irrigation District, and Subcontract Between the El Dorado County Water Agency and the Georgetown Divide Public Utility District Draft Environmental Impact Statement/Environmental Impact Report El Dorado County, California State Clearinghouse No. 1993052016 State of California Lead Agencies:
NEPA Lead Agency: U.S. Department of the Interior, Bureau of Reclamation (Reclamation) CEQA Lead Agency: El Dorado County Water Agency (EDCWA)

_____
Paul Raveling, president
El Dorado Hills Citizens Alliance
Reply to alliance@edhca.net<mailto:alliance@edhca.net>
or Paul.Raveling@sierrafoot.org<mailto:Paul.Raveling@sierrafoot.org>
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(916) 933-5826 Home
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Overall, the El Dorado Hills Citizens Alliance recognizes need for this project. We have one comment relating to EDCWA's designated suballocation of the contracted water supply and a few details in the Draft EIS/EIR thave some inaccuracies that would be appropriate for correction. 8-1

The Draft EIS/EIR notes in several parts of the document that EDCWA, EIR, and GDPUD mutually agreed to supply 50% of the new water allocation to the El Dorado Irrigation District and to the Georgetown Divide Public Utilities District, and that the basic objective is to support future growth in these areas. We agree with BOR comments in the document which question consistency of the suballocation with the objective. We further wish to emphasize this disparity. 8-2

Throughout at least the past decade, probably at least for the past 2 decades, at least half of El Dorado County's population growth has been in El Dorado Hills. 8-3

This is observed by tracking building permits issued for construction of new housing. The best authoritative records of El Dorado Hills population growth are from the Annual Reports of the El Dorado Hills County Water District (fire department). Based on those records the EDH population is now reasonably estimated to be between 42,000 and 43,000, about a quarter of the entire population of El Dorado County's west slope. Building permits in 2009, even at our current radically reduced growth rate, building permits continued to show at least half of new housing in El Dorado Hills.

We believe that El Dorado County's increased demand for water in coming decades will be driven mainly by population growth, rather than agricultural growth. It is in fact possible that future population growth will displace agricultural land uses and could potentially reduce agricultural demand for water. Under both land use and policy provisions of the El Dorado County General Plan most population growth would be directed into the western part of the County.

8-3 (cont.)

The following comments refer to specific sections of the EIS/EIR.

Section 1.2.1, General Plan Update and Measure "Y"

This section refers only to 1998 Measure Y. It would be appropriate to note that an updated version of Measure Y was adopted in 2008 as General Plan Amendment A08-0005, changing General Plan Policy TC-Xa and related policies. Its provisions are generally similar to the 1998 language due to Measure Y, but two details could have effects on level and rate of population growth:

* Multi-family residential development is exempted from the requirements of TC-Xa. This could increase the rate of multifamily residential development, though we believe such effects would be less than significant for the CVP water allocation EIS/EIR.

* Additional roads would be permitted to reach LOS F operating conditions by approval of a 4/5ths majority of the County Board of Supervisors instead of by a vote of the County's registered voters. In principle this could increase the rate of population growth somewhat, although we believe that this also would not be significant for the CVP water allocation EIS/EIR. This is mainly a pragmatic observation based on the fact that the County Board of Supervisors never submitted LOS F conditions to a vote of the electorate even though El Dorado Hills traffic routinely continues to operate at or near LOS F during peak periods at a number of locations in our road system. Continuation of LOS F conditions without a vote of the Board of Supervisors would represent no change from existing conditions.

8-4

Section 4.11/1, Affected Environment/Setting, Regional Road and Highway System

This section notes that "There are existing LOS deficiencies on U.S. 50, El Dorado Hills Boulevard, and Green Valley Road, which comprise major roadways in the El Dorado Hills area, where the most growth is anticipated to occur. The deficiencies are caused largely by commuter traffic to and from Sacramento County. Roadway improvements across the county line in Sacramento County have not kept pace with the development in El Dorado County, creating LOS F conditions on these roadways near the county line."

8-5

We concur with this statement, with addition of these points:

* LOS F conditions also occur frequently on Silva Valley Parkway, White Rock Road, and Latrobe Road.

* Road system development in the existing City of Folsom provides a good Level Of Service within Folsom, north of US 50. However, it is of very limited value to relieve El Dorado Hills due to shortage of east/west arterial connections in El Dorado Hills. We have only one: Green Valley Road.

* South of US 50 it will be necessary for the City of Folsom and the County of Sacramento to be very strongly involved in building roads to serve the EDH Business Park and major residential subdivisions as they build out within the next 1 to 2 decades.This follows from El Dorado County having planned no north/south arterial roadways on the west side of these areas, as well as issues in route selection for east/west through traffic on the Capital Southeast Connector for through traffic in this area.

8-5 (cont.)

Section 6.7, Growth-Inducing Impacts

A particular area in which we wish to emphasize agreement with this EIR but with a nuance is the set of impacts listed for full implementation of the El Dorado County General Plan, with the General Plan EIR itself classifying these as significant and unavoidable.

Many of the individuals who later formed the El Dorado Hills Citizens Alliance had previously argued that many of the impacts in question certainly were significant, but could have been mitigated if not avoided by adoption of different provisions in the General Plan. This is especially true for the Land Use Element and the Transportation and Circulation Element. However, the County has a long history of maximizing the priority of growth, often at the expense of other objectives, including details in the general nature of quality of life. Quality of life in turn drives economic benefit through home values.

8-6

El Dorado Hills currently is slightly over 60% of planned buildout. Most additional future housing growth has already been committed through Specific Plans and their corresponding development agreements. In this context, This project (PL 101-514) for allocation of water supply has very limited opportunity to induce additional growth. Instead it is more likely to serve as a measure to mitigate impacts of additional growth.\

8-7

_____

Section 7, Climate change

Remarks on Section 7 are by Paul Raveling as an individual: The El Dorado Hills Citizens Alliance has not considered possible effects of climate change in connection with local issues in public policy. These comments do not directly address potential local environmental impacts due to climate change; they refer mainly to certain notes in the EIS/EIR which indicate uncertainty in the scientific literature regarding causes of climate change. Those notes are

8-8

inconsistent with the overall body of scientific literature on this topic, consisting mainly of peer-reviewed papers and journal articles.

8-8 (cont.)

Section 7 first cites Milankovitch Theory, then issues in solar radiative variability as contributors if not causes for climate warming, notes short term oscillations such as ENSO (El Niño-Southern Oscillation), and suggests uncertainty with regard to whether climate changes are due to anthropogenic forcings or natural forcings. Another example which is highly significant to climate is the North Atlantic Oscillation, not mentioned in the EIS/EIR but definitely warranting consideration in global climate prediction.

On a broadly analytic scale the EIS/EIR conveys doubt about anthropogenic climate forcing which was essentially resolved in climatology research around two decades ago, possibly even three. A lecturer and author who surveyed the literature about 5 years ago characterized the state of agreement in published research to include "a robust consensus that anthropogenic climate change is occurring." The full text of this assessment is accessible on the a web site maintained by the American Association for the Advancement of Science, at http://www.sciencemag.org/cgi/content/full/306/5702/1686 . This is a published essay by Naomi Oreskes of the University of California at San Diego, titled "The Scientific Consensus on Climate Change", with the published copy excerpted from the 2004 George Sarton Memorial Lecture. This includes a brief summary of review of abstracts of 928 peer-reviewed papers published in scientific journals between 1993 and 2003. It reports that about 75% of the papers either explicitly or implicitly accepted the consensus view that anthropogenic forcing is occurring; about 25% dealt with topics such as experimental methods or assessment of paleoclimate and did not address anthropogenic forcing. No papers -- 0 -- disagreed with the consensus view that anthropogenic forcing is occurring.

8-9

Those results are similar to what I observed nearly 2 years ago by using Google Scholar to search citations. I examined only the first 300 results, and remarkably did find one paper that questioned whether anthropogenic forcings are involved in current climate change. My recollection is that this was a rare publication from a Russian source, and in fact it was the only Russian paper on climate change found in the Google Scholar search.

Care should be taken to recognize that a question of "anthropogenic forcing or natural forcing" represents a false dichotomy. Research in the literature shows that both types of forcing are occurring, these are not mutually exclusive but rather are additive.

I have a small concern that the EIS/EIR discussion of climate change as a whole represents a very sparse sample from an exceptionally large and rich body of published research. A sparse sample can easily produce results which inadequately represent the state of the overall body of science, and consequently can be misleading when applied to prediction of future climate changes. This tends to be confirmed by the EIS/EIR expression of uncertainty regarding anthropogenic forcing.

8-10

In contrast, the citations specific to hydrology, and especially California hydrology, appear to be good and are directly applicable to local prediction. I appreciate this summary of hydrology-related references and will use the EIS/EIR

8-11

citations as a resource for future study. A particular point for my own future inquiry will be the modeling specific to El Dorado County, cited in Section 7.2.6.

8-11 (cont.)

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LETTER 8: PAUL RAVELING, EL DORADO HILLS CITIZENS ALLIANCE (DECEMBER 31, 2009)

Response to Comment 8-1

The comment states the El Dorado Hills Citizens Alliance (EDHCA) recognizes the need for the project, but has a comment related to the suballocation. See Response to Comment 8-2 for a response to that comment. The EDHCA also recommended some revisions to the text in the Draft EIS/EIR. Response to Comment 8-4 addresses those issues.

Response to Comment 8-2

The comment questions the consistency of the sub-allocation between EID and GDPUD with the project objective. While it is agreed that El Dorado Hills has been responsible for the majority of growth over the last two decades and that growth will likely be directed into the western part of the county in the future, the El Dorado County General Plan land use projections indicate a need for more water than the 50% allocation of 7,500 AFA proposed under this water supply contract for the GDPUD service area in the future. Thus, there is a clear need over time for at least 7,500 AFA in the GDPUD service area under the approved General Plan.

Response to Comment 8-3

Comment noted. The comment states that the County's increased demand for water in the coming decades will mainly be driven by population growth, rather than agricultural growth and that population growth may displace agricultural land uses as defined under the contract provisions and could potentially reduce agricultural demand for water. The El Dorado County Water Agency agrees with this comment. In fact, it has, for many years, acknowledged that the western slopes represent the most likely area for future development and resulting population growth and furthermore, agree that the majority of the water demand will occur here.

The water supply contract analyzed in the Draft EIS/EIR is limited to water for municipal and industrial uses and explicitly excludes agricultural uses. If in the future, population growth displaces agricultural land uses, more water would be needed for municipal and industrial purposes, further demonstrating the needed for this water supply contract.

Response to Comment 8-4

Additional information has been added to the end of Subsection 1.2.1 (General Plan Update and Measure "Y") on page 1-4 in the Draft EIS/EIR regarding Measure Y, per the commenter's suggestion. This information has also been added to Section 4.11 (Transportation and Circulation: Indirect Effects Study Area) on page 4-103 in the Draft EIS/EIR. Please see Chapter 2, Text Changes to the Draft EIS/EIR, in this Final EIR for the specific additions. The inclusion of this additional information supplements the Draft EIS/EIR, but it does not affect the purpose and need for the Proposed Project nor the environmental analysis presented in the Draft EIS/EIR.

Response to Comment 8-5

The comment expresses an opinion about levels of service as they relate to traffic congestion on local roadways in El Dorado Hills (Silva Valley Parkway, White Rock Road, and Latrobe Road). The comment does not address any aspects of the Proposed Project nor the analysis of potential effects presented in the Draft EIS/EIR. The Proposed Project and its alternatives would have no direct impact on traffic volumes, levels of service, or the roadway network. Further, regional and local traffic planning and congestion management is not within the jurisdiction of Reclamation nor EDCWA to implement and monitor.

Response to Comment 8-6

Comment noted. The comment states that many significant and unavoidable cumulative impacts addressed in the El Dorado County General Plan could have been mitigated to less than significant or avoided by adoption of different provisions of the General Plan. The project proponents are the U.S. Bureau of Reclamation (Reclamation), EDCWA, and water purveyors EID and GDPUD. None of these agencies has jurisdiction over, or has land use authority in El Dorado County. El Dorado County was the lead agency for the General Plan EIR and its Board of Supervisors was responsible for making findings of overriding considerations for significant and unavoidable impacts.

The El Dorado County Water Agency acknowledges that, during the public process leading up to the 2004 El Dorado County General Plan, there were a variety of perspectives amongst participants regarding how to strike the proper balance between satisfying the market demand for new development, on the one hand, and how to best mitigate the effects of new development, on the other. The commenter suggests that its members favored a different mitigation package than was ultimately approved by the Board of Supervisors.

Response to Comment 8-7

The comment expresses an opinion that the Proposed Project could mitigate impacts of additional growth because El Dorado Hills is slightly over 60 percent of planned buildout, and most additional future housing growth has already been committed through specific plans and associated development agreements. In that context, the comment suggests the Proposed Project has limited opportunity to induce growth. This comment does not affect the conclusions presented in the Draft EIS/EIR, but will be considered by the EDCWA Board of Directors during its decision-making process.

Response to Comment 8-8

The comment states the EDHCA has not considered possible effects of climate change in connection with local issues in public policy. However, comments of an individual (Paul Raveling) have been included with that entity's comment letter. The comment further notes that Mr. Raveling's comments do not directly address potential local environmental impacts due to climate change, but, rather they address the technical information relied upon in the climate change analysis in Chapter 7 in the Draft EIS/EIR. The specific issues raised by Mr. Raveling are further addressed in Responses to Comments 8-9 through 8-11, below.

The introductory discussions in Chapter 7.0 (Climate Change) are intended to provide a background to climate change and fully disclose both the natural and anthropogenic forcing mechanisms and processes that act upon the global energy balance. Both processes are recognized and, in fact, the Draft EIS/EIR readily and openly acknowledges those contributions that are anthropogenic in origin.

See page 7-6 in the Draft EIS/EIR, 2nd full paragraph which states, "Regarding human-induced climate change, there is a broad scientific consensus that this is a real phenomenon and that it is altering the natural air, sea, land and water cycles and their interactions in a variety of important ways". The text cites the collective conclusions from past IPCC Reports. The El Dorado County Water Agency and United States Bureau of Reclamation also recognize that, for purposes of both California law and federal law, human-influenced climate change is a reality that public agencies must address in various ways. For example, the California Global Warming Solutions Act of 2006 includes the following legislative findings (see California Health & Safety Code, § 38501):

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

EDCWA also notes that the United States Government, through the Environmental Protection Agency, has also gone on record as indicating that greenhouse gases are “pollutants” within the meaning of the federal Clean Air Act that have the potential to endanger public health. More specifically, on December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)--in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

Notably, these findings do not themselves impose any requirements on industry or other entities. The findings, however, are a prerequisite to the finalization of EPA's proposed greenhouse gas emission standards for light-duty vehicles as proposed in September 15, 2009.

In summary, although the Draft EIS/EIR does not question the causes of climate change, the document does discuss the uncertainties associated with the magnitude and accuracy of the current methods being used to predict future climate change. In fact, the scientific literature today, is going through what some in the field of climate change research refer to as the *next generation* of findings; and the fact is that not all of analytical assumptions used in previous studies are still valid today.

See also Response to Comment 8-9, for a few recent examples.

Response to Comment 8-9

North Atlantic Oscillation

The comment is correct; the Draft EIS/EIR did not mention the Northern Atlantic Oscillation (NAO).

EDCWA agrees that the NAO is important in global climatology. It is the dominant mode of winter climate variability in the North Atlantic region representing the shifting atmospheric mass between the subtropical high and the polar low. The climatic influence of the NAO extends from the eastern United States to Western Europe and can affect human activities such as shipping, oil drilling, fisheries, hydroelectric power generation and coastal management. The NAO index is calculated as a weighted difference between the polar low and the subtropical high during the winter season. In a positive phase, both the low-pressure zone over Iceland and high pressure over the Azores are intensified, resulting in changes in the strength, incidence, and pathway of winter storms crossing the Atlantic Ocean. In a negative phase, a weak subtropical high and a weak Icelandic low results in fewer and weaker winter storms crossing on a more west-east pathway. The NAO index varies from year to year, but also exhibits a tendency to remain in one phase for intervals lasting more than a decade. Interestingly, an unusually long period of positive phase between 1970 and 2000 led to the suggestion that global warming was affecting the behavior of the NAO. More recent observations, however, suggest that anthropogenic warming does not appear to be altering whether the NAO is in a positive or negative phase at multi-decadal time scales, though it does seem to be increasing variability.

The NAO does not, however, directly affect Western North America or California, and was not omitted in the Draft EIS/EIR for any other reason than that.

Anthropogenic Forcing

As noted in the Response to Comment 8-8, above, uncertainty, as presented in the Draft EIS/EIR, is not meant to discount either the naturally occurring or anthropogenic forcing mechanisms that contribute to climate variability, rather it is to justly describe and disclose the limitations and conditions around which the scientific conclusions are based. As noted above, the EIS/EIR does not question the physical theory behind anthropogenic forcings; they are well known.

With any scientific study, however, there are assumptions, experimental design limitations, and boundary conditions that set the context for the interpretive conclusions reached by scientific investigators. In fact, it is a prerequisite of the scientific method that these elements of the process be rigorously and continuously challenged and tested. That is the essence of scientific advancement. Nowhere is this more evident than when modeling is used and climate modeling is no exception.

Previous comment response discussions have touched on this issue. Clearly, there has been an increasingly robust effort directed towards investigating the potential effects of climate change over the past several decades. Yet even today, there is continuing investigative work being undertaken

to better understand atmospheric processes that govern the interactions and relationships between GHG (both natural and human-induced) and our climate. Some of this work has pointed to possible shortcomings in past GCM development theories. Moreover, some of the most recent evidence has cast new light on some of the assertive conclusions that have been previously made. One the most significant and intensifying areas of research is determining the role of natural variability with the global climatic signature.

Relevant theoretical, methodological, and applied management principles are the cornerstones of the science of climate change. No environmental evaluation on this topic is realistically defensible without a thorough understanding and discussion of the tools, limitations, assumptions, and physical theories that form the foundation for the conclusions upon which this contemporary issue is based. Since 1990, major funds of the order of billions of Euros have been spent in Europe and worldwide on research into projected climate change, its impacts, and emerging vulnerabilities. Earth sciences, including climatology and hydrology, have played a central role in this scene and benefitted significantly. On the other hand, scientific progress has been arguably incommensurate to the effort and funds spent, perhaps because these disciplines have been perceived as “tools” subservient to the needs of the climate change enterprise rather than the autonomous sciences. In fact, despite the generous funds being expended, many of the targets set have not been achieved.

So much of the climate change work to date has involved characterizing the climatic signature (e.g., long-term temperature change) and then applying those hydrometeorologic drivers to the natural system (e.g., reduced annual watershed runoff, ecotone migration, increased wildfire risk, etc.). In this context, it is easy to see how important the initial characterization must be in order for all of the applied evaluations to have relevancy, since the final results from the applied exercises will assume all of the errors (i.e., confidence limits) of the analyses and tools that went into their development. While progress has been made across many of these efforts, there still remain challenges, obstacles, and the need to consciously be aware of these limitations.

For a broader more comprehensive review of climate change, the commenter is encouraged to review the El Dorado Water & Power Authority's Draft EIR: Supplemental Water Rights Project (Chapter 8.0) available at the offices of the El Dorado County Water Agency, 3932 Ponderosa Road, Suite 200, Shingle Springs, California.

A significant body of continuing research on climate change has occurred since 2003. A few examples will help illustrate how the field of climate change is constantly changing. The references cited in the foregoing are found in the above noted report.

Most GCMs today still focus exclusively on the troposphere (up to 10 km in altitude) but neglect the stratosphere (between 10 and 50 km) which supports the critical ozone layer. The ozone layer is particularly important in any assessment of climate change in that it affects the energy balance of the lower atmosphere. In fact, there is admittedly a less than perfect understanding of the mechanisms by which stratospheric circulation changes are communicated with the surface. This is important since any long-term changes in stratospheric winds and temperatures are likely to affect surface climate variability. Still other investigations have noted that while GCMs provide a solid basis for

generalized temperature prediction, projected precipitation levels do not necessarily match with projected future atmospheric moisture modeling.

As noted by Clement et al. (2009) and others, feedbacks involving low-level clouds also remain a primary cause of uncertainty in global climate model projections. Low-level clouds are of significant importance in climatology due to their net cooling effect on global climate. If, for example, the coverage of this type of cloud cover were to change as the climate warms, it could lead to either an enhancement or reduction in the projected warming (i.e., as either a positive or negative feedback, depending on whether cloud cover decreases or increases).

Despite the significant attention on atmospheric CO2, water vapor is the most important and abundant GHG in the atmosphere. As water vapor pressure increases exponentially with temperature, a positive feedback effect with respect to the current global warming trend is expected and confirmed by satellite measurements over the ocean. However, highly complex interactions via cloud formation and the release of latent heat, affecting convection, complicate matters and do not appear to be well represented in most current climate models, especially those in the tropics. Land-atmosphere couplings add further uncertainties. An accurate depiction and understanding of hydrologic cycles and their various feedback mechanisms is indispensible for both reliable weather and long-term climate predictions.

The earlier work by Schwartz and Andrea (1996) and, more recently, by Kerr (2007) have noted the seeming omission of aerosols in the consideration of most early generation GCM simulations (see below for more detailed discussion). Some aerosols, such as sulfates, reflect solar radiation and thus, have a cooling effect on climate, while others, such as black carbon, have a warming effect because they absorb solar radiation. A large fraction of anthropogenic aerosols consists of sulfate, which forms through chemical processing from sulfur dioxide, and is emitted jointly with carbon dioxide in fossil fuel combustion.

Over the 20th century, aerosol cooling has offset part of the warming induced by anthropogenic GHGs. The preponderance of reflective aerosols causes the net effect to be one of cooling, but the amount of cooling is uncertain, owing to the large difference in estimates of the effect of aerosols in global aerosol models compared with estimates based on observation. As Quaas (2009) notes, recent satellite improvements have enabled enhanced measurement-based estimates of global aerosol forcing. These estimates have systematically yielded larger aerosol cooling than most current climate models calculate. Part of the discrepancy can possibly be explained by different assumptions made in the two approaches; for example, models and satellite data interpretations may use different estimates of the anthropogenic fraction of aerosols, or make different assumptions about aerosol forcing under cloudy skies and above bright surfaces.

Myhre (2009) used the state-of-the-art global aerosol model Oslo CTM2, incorporating all of the main atmospheric aerosol components, compared against the satellite retrieved MODIS (Moderate Resolution Imaging Spectroradiometer) aerosol optical depth (AOD) data to better maintain consistency between observed AOD data and modeled predictions. While those results showed improved consistency, uncertainty remains. As Myhre (2009) notes, the remaining uncertainties are likely related to the vertical profile of the aerosols and their location in relation to clouds. From a

scale perspective, since man-made aerosols tend to be concentrated in areas near their sources, such as industrial regions, they will affect climate with a very strong regional pattern. Future changes in anthropogenic aerosols, therefore, could play a very significant role in regional climatic impacts on decadal scales (Hurrell et al., 2009).

Today, in many areas of the world, sulfate aerosol concentrations have declined in recent decades due to the introduction of pollution-reduction legislation. Since sulfate aerosols remain in the atmosphere for days, as opposed to carbon dioxide, which can remain in the atmosphere for a century or more, the GHG effect accumulates, whereas aerosol cooling is closely linked, temporally, to current emissions (Quaas, 2009). Interestingly, therefore, aerosol cooling can offset part of the GHG warming, a masking effect that may be removed suddenly when fossil fuel combustion emissions are cleaned up or, when fuel consumption is drastically reduced.

Some of the recent countervailing evidence has included the fact that the stratosphere has in fact cooled since 1979, the year in which the Montreal Protocol was ratified (WMO/UNEP 2007). The Montreal Protocol was signed in an effort to control aerosol emissions to the upper atmosphere. Consequently, other documentation has identified an overall cooling in the upper atmosphere in the high latitudes, over the polar region. One can hope that as climate change research continues, sensitivity will be encouraged in how these results are conveyed. It is important that we strive to avoid coming to hard and fast conclusions based solely on what Huntingford and Lowe (2007) refer to as “overshooting scenarios”. Caution must be continually exercised when applying what we know today and assuming that it is universal and unconstrained.

Others maintain, however, that the complexity of the climate system, its influencing factors, and the delicate balance that exists, in fact, warrants an overly cautious approach. There may exist fine, though as yet undefined, thresholds which, once crossed, cannot be reversed. This is what Schellenhuber et al., (2006) refer to as “dangerous climate change”. The balance of taking action now compared to the future, although uncertain of the consequences of no action, is an area of active and increasing debate (see Stern, 2007). Still, with climate change research at the forefront of many hydrometeorological disciplines and pursuits and, propelled by the media's constant attention on this matter, we can expect even more studies in the future focusing on the various limitations, boundary conditions, drivers, and interactive processes that define climate change.

Scientific investigation has for centuries grappled with the issue of scale. Distilled down to its fundamental challenge, the question of how to interpolate investigative results to a broader scale has long been the test of scientific researchers. In the field of climate change, while GCMs and other gross-scale computational and analytical methods are common, uncertainty remains in how climate will change at the regional, local and site-specific levels where the signal of natural variability is large (Kay et al., 2008). Decision-makers in diverse arenas, from water managers in the U.S. southwest to public health experts in Asia, need to know the extent to which the climate events they are seeing are the result of natural variability, and hence, can be expected to reverse at some point or, are the result of potentially irreversible anthropogenic forces (Hurrell et al., 2009).

As noted, GCMs have demonstrated better predictive capacity for temperature than for other climate variables such as precipitation and their quantitative estimates for future climate change can be

particularly credible at the continental scale and above. Despite this recognized lower predictive capacity of GCMs for precipitation, hydrologists have not put into question the GCM future rainfall projections but, rather are using them as if they were credible. Applying hydrologic models and using as input data the GCM outputs for rainfall, hydrologists have attempted to predict the impact of climate change on surface water at the regional scale. However, the changes predicted may be too small in comparison to the natural variability and uncertainty of runoff, which has been underestimated even by current mainstream hydrological research. Natural system hydrological response must take into account scaling behavior, long-term persistence, long-range dependence, long memory, and Hurst-Kolmogorov dynamics, the latter representing the concept of dramatically high variability and uncertainty in hydroclimatological processes.

The climate change scientific community will not be able to answer these questions and reduce the uncertainties in near-term climate projections without moving toward high resolution climate system predictions, with a blurring of the distinction between shorter-term predictions and longer-term climate projections. Climate system predictions of natural and forced change, regardless of timescale, will require initialization of coupled general circulation models with the best estimates of the current observed state of the atmosphere, oceans, cryosphere, and land surface, a state influenced both by the current phases of models of natural variability and by the accumulated impacts to date of anthropogenic radiative forcing (Hurrell et al., 2009).

In any case, many formidable challenges remain. An excellent example is the 2009 findings of the Met Office Hadley Center, UK, (one of the leading climate change institutions in the world). They observed that from 1999 through 2008, global temperatures have warmed by 0.07°C±0.07°C, rather than the 0.20°C reported by the IPCC. Corrected for the natural temperature effects of El Nino and its sister climate event, El Nina, the decade's trend is at a perfect 0.00°C. These data imply that greenhouse warming has stopped in its tracks for the past 10 years (Kerr, 2009). Such findings, as with any good scientific investigation, do not discount the reality of global warming, but they do emphasize the importance of temporality and the effective role of natural system variability.

It is now widely acknowledged in the climate change field that the trend in global surface temperatures has been nearly flat (or no increase) since the late 1990's despite continuing increases in the forcing due to the sum of the well-mixed GHGs (CO2, CH4, halocarbons, and N2O), raising questions regarding the understanding of forced climate change, its drivers, the parameters that define natural variability, and how fully these terms are represented in climate models.

Predictability, or lack thereof, can involve both external forces as well as natural internal variability. As described previously, a significant challenge to predictability on the decadal time scale is associated with external forcing, both natural (e.g., solar variability, volcanic aerosols) and anthropogenic (e.g., GHGs, ozone, and aerosols) in origin. Attempting to account for natural variability represents the most significant challenge since these processes and dynamics are not yet fully understood and, therefore difficult to translate into modeling algorithms. In fact, a good portion of the natural variability is likely tied to solar variability, yet most models cannot translate solar variability into climate variability the way the actual climate system can. Studies that came out this year, on meridonial flow in the Sun and its effects on the Sun's polarity and the influence on

sunspots are important in that the computation of the total irradiance flux of the Sun is used in climate change models (see Hathway and Rightmire, 2010).

EDCWA is in agreement that both forcings are occurring. A primary focus of contemporary climate change research, however, is the recognition that, without defining the scale, magnitude, and temporality associated with the increasing number of factors that influence natural climatic variability, it is virtually impossible to quantitatively ascribe causation to anthropogenic drivers that is defensible. This is an ongoing challenge to climate change researchers worldwide. While the effects of both within the contemporary timescale are indeed additive, the fact is that natural climatic variability is completely independent of anthropogenic forcings and includes both long- and short-term events that are global in magnitude, duration, and resulting effect.

Response to Comment 8-10

EDCWA agrees that what is presented in the Draft EIS/EIR represents a small sampling of the published literature. Having said that, it should be noted that the environmental analyses required under NEPA or CEQA are intended to focus on the potential environmental effects of the proposed project and its alternatives. An exhaustive literature review of each environmental issue is not required under the statutes nor would it be pragmatically possible in the context of EIS/EIR documents to do so. CEQA documents are intended, in relevant part, to "…[*I*]*nform government decision maker and the public about the potential significant environmental effects of proposed activities*….". (e.g., §15002(a)(1) CCR, Title 14, Chapter 3).

EDCWA, through the Draft EIS/EIR, recognizes and acknowledges the published scientific literature on climate change perturbations related to anthropogenic forcings. By the same token, EDCWA believes that it is important to express all sides of the scientific literature and most importantly, disclose recent relevant findings, regardless of whether they may refine or even contradict earlier work. Climate change science has evolved significantly over the past decades (see Response to Comment 8-9 for examples).

For a broader more comprehensive review of climate change, the commenter is encouraged to review the El Dorado Water & Power Authority's Draft EIR: Supplemental Water Rights Project (Chapter 8.0) available at the offices of the El Dorado County Water Agency, 3932 Ponderosa Road, Suite 200, Shingle Springs, California.

Response to Comment 8-11

Comment noted. For further enhancement on El Dorado County modeling, see below.

Since 2005, EID has been actively pursuing a greater understanding of the changing demands of water management and energy use under the vast variety of climate change scenarios. EID has been participating in State activities to manage emissions and has contributed to international projects of modeling management decisions and mapping effects.

Almost $1 million has been invested into the effort of mapping EID’s water management infrastructure within the Water Environment and Planning (WEAP) model. This investment has

come from State, federal, and private sources, as well as many hours of EID staff's time. Primary researchers on this topic include Dr. David Purkey from the Stockholm Environment Institute (SEI) and Dr. David Yates from the National Center for Atmospheric Research (NCAR). This is important to note, as EID provides many public services (water, wastewater, recycled water, and hydropower), but is relatively easy to model because of the compact nature of the source water area. The potential effects of climate change are therefore relatively easy to tease out of demand responses and reservoir levels.

Some of the conclusions of these modeling efforts have suggested that the region in which EID is situated may expect a warmer/wetter hydrologic regime in the future, with a greater percentage of the precipitation occurring as rain, and with a later start to the snow season and earlier melt/spring runoff. Generally, this could mean greater water quality issues with sedimentation and elevated temperature, the possibility of reservoirs emptying sooner in the summer, and threats to endangered riparian species.

It is important to note that, in addition to these general findings, EID is aware that these are possibilities, not predictions. Having knowledge of the watershed and water supply system is important, as is working with other land and resource managers in the watershed to identify alternatives and minimal-risk implementation options.

The WEAP analysis has provided decision support on several occasions. The first exploration of the effects of climate change on planning efforts was the exploration of how well EID's Drought Preparedness Plan (2008) performs under a variety of climate change scenarios. The outcome of this analysis was two-fold:

1) EID staff realized the need to better prepare the district and the customers in supporting greater efforts in conservation and supply retention/recruitment in the coming decades, and;

2) the analysis contributed to a re-assessment of the three-stage drought structure EID staff had previously recommended, strengthening EID's drought management and improving its customer communications strategy.

In addition to this analysis, EID has also examined the qualitative (financial) and quantitative (customer hardship and environmental changes) effects of water shortage (drought) on the district, the customers, and the region. The econometric model produced as a tool of this analysis is complete and will be invaluable to the District in the future as greater insight will be necessary into the behaviors of customers and the determination of issues of greatest need ("utility" of individual management options) within EID.

The integration of WEAP into EID's long-range planning tools, as in the 2010 update of the Urban Water Management Plan and the Integrated Water Resources and Wastewater Master Plan (currently under preparation), will provide a valuable tool in terms of option assessment for resource allocation decisions into the future. In both planning efforts, WEAP will be included as a tool for analysis of each of the management strategies (for example: recycled water storage, increased conservation efforts, or water banking) examined for resource provision, allowing EID staff and stakeholders a more complete picture for analysis of each strategy individually and as a group.

WEAP has also provided an excellent tool for public education, including a most recent project with GoogleEarth. In this project, researchers worked with GoogleEarth staff to place the EID system and some climate change effects on infrastructure and management strategies onto the online map. A companion to this is a set “tour” of the EID system that walks viewers through the EID watershed, highlighting areas of challenge and opportunity in light of hydrologic changes due to climate change effects.

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From: Jonas Minton [JMinton@pcl.org]
Sent: Thursday, December 31, 2009 4:14 PM
To: Dyer, Elizabeth; tracey.eden-bishop@edcgov.us
Cc: Charlotte Hodde; crenshaw@cal.net
Subject:

Please see our attached comments on the Draft EIR/EIS for the Proposed Water Service Contract, El Dorado County Water Agency, El Dorado County, CA.

For your convenience I have also copied them below in this email message.

El Dorado Draft EIR/EIS Comments

December 31, 2009

Elizabeth Dyer
United States Bureau of Reclamation
Mid Pacific Region
elizabethdyer@usbr.gov<mailto:elizabethdyer@usbr.gov>

Tracy Eden-Bishop
El Dorado County Water Agency
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These are the comments of the Planning and Conservation League (PCL) and the California Sports Fishing Protection Alliance (CSPA) on the Draft EIR/EIS for the Proposed Water Service Contract, El Dorado County Water Agency, El Dorado County, CA.

Both PCL and CSPA are non-profit environmental advocacy organizations with members in El Dorado County and other members who enjoy the natural and public trust resources of El Dorado County as well as other areas that would be affected by this project. 9-1

Because of the impacts of this project, including those inadequately analyzed in this draft EIR/EIS, both PCL and CSPA oppose this project. In addition the deficiencies are so significant that the analyses need to be redone and the Draft EIR/EIS recirculated. 9-2

1. The Draft EIR/EIS is impermissibly vague on where the water would be used and therefore what the comparative impacts would be to the North and Middle Forks of the American River as well as the impacts of the growth that would be served in the two different areas. 9-3 9-4

The DEIR/EIS posits a range of allocations between El Dorado Irrigation District EID and Georgetown Divide Public Utility District. However it is quite possible that due to land use restrictions, limitations on the ability to finance pumping and distribution infrastructure the actual allocation could be outside the range analyzed, e.g. 100% to EID. 9-5

2. It is not clear if the modeling and the analyses actually included the dry year diversions restrictions in the Water Forum and the current biological opinions for the OCAP. If not, that would invalidate any reliance on the analyses or assurances in those biological opinions or OCAP. Conversely if the analyses did assume the dry year restrictions that would be incorrect because there are no enforceable assurances that the USBR, EID or GDPUD will operate with those diversion restrictions.

3. The analyses for this DEIR/EIS did not use the current interpretation of the two OCAP biological opinions. It is noted on Page 1-5 of the summary that outdated information was used. There are now final biological opinions as well as a current interpretation of those opinions available for modeling and analytical purposes.

This is important because the adopted OCAP biological opinions and the current interpretation used for modeling purposes have some differences in operations within and upstream of the Delta as compared to previous biological opinions and interpretations.

9-6

4. The analyses do not appear to include reasonably foreseeable impacts of climate change including but not limited to impacts on timing, amount and type of precipitation. This is especially important as the American River watershed is particularly vulnerable to climate change impacts. Diversions of water by this project would exacerbate adverse environmental impacts in the American River as well as downstream.

The analyses need to evaluate the impacts of a drier future hydrology. As specified in the California Department of Water Resources, Drought Reliability Report 2008, April 2008, pg 70
Report cited: Richard Segar, "Making a Bad Situation Worse: Human-Induced Climate Change and Intensifying Aridity in Southwestern North America," (Lamont Doherty Earth Observatory of Columbia University Palisades, New York). September 2007,

"Standing where we are now in 2007 it would be a reasonable conclusion that southwestern North America - and the subtropics in general - will have a drier climate in the future and that transition may already be underway. Or to put it another way, though wet years will still occur, on average they will be drier than prior wet years while the dry years will be drier than prior dry years. (emphasis added) The two decade period of overall wet conditions from 1976 to 1998 is likely to never be repeated as the region faces an intensifying aridity that will simply get worse as the century progresses (barring actual stabilization and then reduction of atmospheric GHGs)."

9-7

In addition the greenhouse gas impacts of pumping, treating, and heating, the diverted water as well as waste water treatment need to be analyzed for all alternatives. This needs to include the greenhouse gas impacts of the growth

9-8

that would be served by this additional water supply.

9-8 (cont.)

5 The cumulative impacts of over allocation of rivers in the Sacramento San Joaquin River Delta watershed such as the American River need to be evaluated. As the Governor's Delta Vision Blue Ribbon Task Force Strategic Plan (2009) pointed out, there are already eight times as much water approved for diversion as there is water available in an average year. This project would be a significant addition to that misbalance further exacerbating the widespread aquatic and avian impacts.

9-9

6. Pursuant to Judge Wanger's recent ruling on the OCAP biological opinions, the impacts analyses also need to consider other impacts such as the effects that reduced water supplies to other users (e.g. Westlands Water District) would have on land fallowing, dust mobilization and groundwater, perhaps socio-economic impacts in areas that would have reduced supplies as a result of this and other projects. etc.

9-10

7 The DEIR/DEIS should include an alternative of what is known as water neutral development. This is a practical way for communities to accommodate growth without increasing net water use or diversions from streams such as the American River. Developers first incorporate state of the art water use efficiency into their new developments. They then work with the local water supplier to offset the remaining new demand by increased conservation among existing water users within the water supplier's service area. Water neutral development is being included or considered for a number of jurisdictions in California.

9-11

We look forward to the additional analyses called for in these comments and the opportunity to review a revised and recirculated Draft EIR/EIS.

9-12

Jim Crenshaw,
President, California Sports Fishing Protection Alliance

Jonas Minton
Water Policy Advisor
Planning and Conservation League

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LETTER 9: JIM CRENSHAW, CALIFORNIA SPORT FISHING ALLIANCE/JONAS MINTON, PLANNING AND CONSERVATION LEAGUE (DECEMBER 31, 2009)

Response to Comment 9-1

Comment noted.

Response to Comment 9-2

Comment noted. The Draft EIS/EIR has been prepared in accordance with NEPA and CEQA requirements. The Draft EIS/EIR adequately discloses the impacts of the project.

Response to Comment 9-3

The Draft EIS/EIR does provide detailed documentation of where the proposed new CVP M&I water supply contract water would be used. Specific areal delineation, consistent with federal water contracting provisions on where the proposed new CVP water supply contract will be used, is provided in Figure ES-1 (on page ES-3) which identifies the "Proposed Subcontractor Service Areas", and in Figure ES-2 (on page ES-5) titled, "EID and GDPUD Service Area Boundaries and Proposed Subcontractor Service Areas", also in Figure ES-3 (on page ES-7), which identifies the "Diversions Under the Proposed Action Federal Water Use and Potential Exchange". In the Project Description (in Chapter 3.0: Alternatives Including the Proposed Action and Project Description) and, specifically in Figure 3.5-2, once again, the precise intended services areas are identified (see Figure 3.5-2 titled, "EID and GDPUD Service Area Boundaries and Proposed Subcontractor Service Areas"). Detailed text descriptions are provided commencing on page 3-16 under the header, "Proposed Subcontractor Service Areas" and augmented with Figure 3.5-3 on the following page.

This level of spatial clarity is typical in all CVP water supply contracts. It is part of the standard Reclamation negotiations for new CVP water supply contracts and the associated contract documentation. These maps are included as exhibits to the contracts as the Subcontractor Service Areas. Notably, the impacts of future development in the EIR and GPDUD service areas were exhaustively analyzed in the EIR for the 2004 El Dorado County General Plan, which provided the primary basis for growth-related impact discussions in this EIR. Because the project here is a water supply contract, and not a proposed development project, this EIR was not required to repeat the full breadth and scope of that earlier environmental analysis, which is readily available to the commenter's. Nothing about the new CVP water supply contract changes the anticipated locations of development consistent with the approved General Plan.

The Draft EIS/EIR, based on the Proposed Project, as described (see Chapter 3.0: Alternatives Including the Proposed Action and Project Description) is not required to compare impacts between the North and Middle Forks of the American River. As described in the Project Description (see Chapter 3.0: Alternatives Including the Proposed Action and Project Description), the proposed PCWA/GDPUD exchange (to facilitate the GDPUD acquisition of new water) does not include the Middle Fork American River. The proposed PCWA/GDPUD exchange is intended to occur at the American River Pump Station through an exchange of MFP water (from the North Fork); this is fully described on page 3-15 of the EIS/EIR under "GDPUD/PCWA Exchange".

Response to Comment 9-4

The Proposed Project is intended to serve existing and future water supply needs *in El Dorado County* [emphasis added] as provided under P.L. 101-514 (Draft EIS/EIR, page 1-1). There are no areas outside El Dorado County that would use this water, as stipulated in the federal legislation authorizing this new CVP water supply.

Potential growth-related impacts associated with the GDPUD diversion of exchanged water is fully described in three places in the Draft EIS/EIR: (1) starting from Subchapter 5.12 (Land Use - Service Area indirect Impacts) on page 5-135 and in the following nine resource descriptions through Subchapter 5.20 ending on page 1-179; (2) in the Cumulative Impacts discussions related to service area effects (i.e., growth-related) commencing on page 5-236 (Land Use - Cumulative Impacts) and ending on page 5-247 (Terrestrial and Wildlife Resources - Cumulative Impacts); and (3) in a separate Chapter devoted exclusively to growth inducing impacts (see Chapter 6.0 Growth-inducing Impacts) commencing on page 6-1 through 6-12.

The analysis concludes that, as set forth in El Dorado County's EIR for its 2004 General Plan, growth accommodated in part by the Proposed Project could result in the following significant and unavoidable environmental impacts, as listed in the order presented on pages 6-9 and 6-10 in the Draft EIS/EIR:

Land Use and Housing

- substantial alteration or degradation of land use character in the county or subareas
- Agriculture and Forestry
- Potential for conversion of Important Farmland, Grazing Land, or Land Currently in Agricultural Production or for conflict that results in cancellation of a Williamson Act Contract

Visual Resources

- degradation of existing visual character or quality of the area or region

Traffic and Circulation

- potential inconsistencies with LOS policies
- increase in daily and peak hour traffic
- short-term unacceptable LOS conditions related to generation of new traffic in advance of transportation improvements
- insufficient transit capacity

Water Resources

- increased water demand and likelihood of surface water shortages resulting from expected development
- potential environmental impacts associated with the development of new surface water supplies and related infrastructure
- increase in groundwater demand and related impacts
- increase in wastewater flows and related infrastructure impacts

- increase in surface water pollutants from additional wastewater treatment plant discharges

Utilities

- potential noncompliance with state-mandated solid waste diversion rate
- potential for land use incompatibility and other impacts of new and expanded solid waste and hazardous-waste facilities
- potential for land use incompatibility and other impacts of new and expanded energy supply infrastructure
- potential for impacts associated with new and expanded communications infrastructure

Public Services

- potential land use incompatibility associated with development and expansion of public school facilities

Human Health and Safety

- increased incidents of illegal dumping of household hazardous wastes
- increased risk of accidental release of hazardous materials
- risk of exposure to flood hazards inside dam inundation area
- exposure to electromagnetic fields generated by new electric energy facilities at school locations
- increased potential for fire incidents and fire hazards

Noise

- exposure of noise-sensitive land uses to short-term (construction) noise
- exposure to ground transportation noise sources
- exposure of noise-sensitive land uses to fixed or non-transportation noise sources
- exposure to aircraft noise

Air Quality

- construction emissions of ROG, NOx, and PM10
- long-term operational (regional) emissions of ROG, NOx, and PM10
- toxic air emissions
- local mobile-source emissions of carbon monoxide (CO)
- odorous emissions

Biological Resources

- loss and fragmentation of wildlife habitat
- impacts on special-status species.
- impacts on wildlife movement
- removal, degradation, and fragmentation of sensitive habitats

Response to Comment 9-5

The Draft EIS/EIR, in anticipation of any potential allocation between the El Dorado Irrigation District (EID) and the Georgetown Divide Public Utility District (GDPUD), fully discloses and describes a range of potential allocations between these two pending subcontractors.

EDCWA agrees that it is quite possible that owing to any number of reasons, the El Dorado Irrigation District (EID) could receive 100 percent of the new CVP water supply contract allocation. That is precisely the reason why the Draft EIS/EIR modeled and analyzed three different diversion scenarios.

As fully described under Contract and Diversion Pattern (see page 3-20) of the Alternatives Including the Proposed Action and Project Description (Chapter 3.0), these three diversion patterns and their rationale are described. Monthly allocations assumed under these three diversion patterns are, moreover, provided in Tables 3.5-2, 3.5-3, 3.5-4, and 3.5-5 on pages 3-21 and 3-22 of the Draft EIS/EIR.

The potential diversion pattern identified and alluded to in the comment (i.e., 100% allocation to EID) is identified and presented in Table 3.5-4 of the EIS/EIR and reproduced herein for convenience here (see below). This is referred to as the Proposed Project - Scenario B modeling simulation and is carried forward in all of the CALSIM II-related hydrologic modeling analyses for the Draft EIS/EIR.

TABLE 3.5-4 (REPRODUCED FROM DRAFT EIS/EIR)

EXPECTED MONTHLY DIVERSIONS OF THE P.L.101-514 CONTRACT WATER BY EID AND GDPUD (AF PER MONTH) PROPOSED ACTION – SCENARIO B

Diversion	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
EID	0	0	0	1000	1000	2500	2500	2500	2500	2000	0	0	15,000
GDPUD	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**1000**	**1000**	**2500**	**2500**	**2500**	**2500**	**2000**	**0**	**0**	**15,000**

Accordingly, the Draft EIS/EIR fully covers and evaluates the potential that, in the future, EID may take all of the authorized new CVP water supply contract water if its needs significantly outpace or supersede those of GDPUD. Importantly, regardless of how the water at issue is divided between EID and GDPUD (including GDPUD not receiving any water), the growth-related impacts indirectly resulting from water diversion will still be consistent with the land use patterns anticipated in the 2004 El Dorado County General Plan and analyzed in the EIR prepared for that Plan. Thus, the manner in which the 15,000 AFA at issue is divided between EID and GDPUD cannot result in any pattern of growth-related environmental impacts different from what is authorized by the General Plan and what was studied in the General Plan EIR.

Response to Comment 9-6

Dry-Year Restrictions

EDCWA agrees with the comment that inclusion of the dry-year diversion restrictions from the Water Forum Agreement would be incorrect because, as noted in the comment, there are no current

assurances (e.g., no federal diversion agreement) that would compel Reclamation to impose diversion restrictions from Folsom Reservoir consistent with those identified in the Water Forum Agreement, to which Reclamation was not a signatory. EDCWA also agrees with the comment that neither the El Dorado Irrigation District (EID) or the Georgetown Divide Public Utility District (GDPUD) possess Purveyor-Specific Agreements (PSAs) ratified through the Water Forum process. Accordingly, the dry-year restrictions set out in the Water Forum Agreement and in the individual PSAs were inappropriate for inclusion as an operational, demand delivery assumption, and were therefore not included.

To recap the modeling framework used in the Draft EIS/EIR and to provide further background that may assist in the commenter's understanding of what was done, the following summarizes the modeling framework used. This information is already provided in Appendix H (Hydrologic Modeling Technical Memorandum, "New CVP Water Service Contract Authorized Under Public Law 101-514 (Section 206) Modeling Technical Memorandum", dated August, 2007) included in the Draft EIS/EIR.

In 2004, several CALSIM II simulations were performed to support Reclamation's Long-Term Operation of the Central Valley Project and State Water Project (referred to previously as the "OCAP BA"). These simulations represent a consensus on the physical features and regulatory environment that the CVP/SWP system would operate under at that time. Two of these simulations, OCAP_2001D10A_TodayEWA_012104, were modified to include the Trinity minimum flow requirements of the ROD of the Trinity River Main Stem Fishery Restoration EIS/EIR (known as the OCAP 3 model simulation) and OCAP_2020D09D_FutureEWA5a (known as the OCAP 5a model simulation). These were selected for use as the basis for development of the hydrologic modeling simulations used in the Draft EIS/EIR. Detailed information on the assumptions included in these simulations is included in the original Reclamation Biological Assessment (see "Long-Term Central Valley Project Operations Criteria and Plan, CVP-OCAP, U.S. Department of the Interior, Bureau of Reclamation, Mid-Pacific Region, Sacramento, California, June 30, 2004").

For the Draft EIS/EIR, a number of assumptions in the foundation, or baseline simulations not directly related to the Proposed Project required modification or updating based on changes since the 2004 OCAP foundation simulations were performed. Exhibit C, below, summarizes these assumptions.

The Existing and Future level baseline simulations were compared to the foundation simulations to ensure that the assumptions were properly implemented as part of the modeling quality assurance and control process for the Draft EIS/EIR.

EXHIBIT C

MAJOR DIFFERENCES IN ASSUMPTIONS BETWEEN FOUNDATION AND BASELINE SIMULATIONS

Assumption	OCAP3	Existing Level Baseline	OCAP5a	Future Level Baseline
Level of Demand	Existing	Existing	Future	Future
Trinity ROD	No	Yes	Yes	Yes
Yuba River Operation	Hec-3	D-1644 Interim	HEC-3	Yuba Accord
Water Forum Agreement Cuts (Pl 101 Water)	No	No	Yes	No
Lower American River Flow Management Study	No	No	No	Yes
Banks Pumping Capacity	6,680 cfs	6,680 cfs	6,680 cfs	6,680 cfs
Supplemental Water Rights Project	No	No	No	Yes
EID Temperature Control Device [1]	No	No	No	Yes
Non EID American River Demands	Same	SRWRS	Same	SRWRS
UARM		SRWRS		SRWRS

Note:
[1] This is implemented in the temperature modeling. It has no impact on the CALSIM II modeling.

For the Future level simulations, some notable features are apparent. Regarding the dry-year diversion restrictions of the Water Forum Agreement, the OCAP 5a model simulation conservatively included some P.L. 101-514 water diversions for EID and GDPUD that were assumed subject to cuts based on the Water Forum Agreement. As noted, however, neither EID nor GDPUD hold Water Forum Agreement PSAs at this time. For the Draft EIS/EIR, the assumption was made that neither would ratify their own PSAs and, accordingly, their diversions would not be subject to the cuts. Any CVP water would still be subject to the CVP North of Delta system cuts computed by CALSIM II. This assumption means that the Draft EIS/EIR may be simulating slightly higher diversions in the driest years (FUI <=400 TAF), which could slightly overestimate impacts in those years. In other words, the analysis was conservative in assuming diversions that might not occur in order to avoid understating environmental impacts, even at the risk of overstating those impacts.

Based on the developmental timing of the Lower American River Flow Management Standard (FMS), it was not included in the OCAP 5a model simulation. This standard is intended to benefit fall-run Chinook salmon, steelhead and other fish species in the lower American River. The new recommended minimum flow requirements in the lower American River below Nimbus Dam vary throughout the year in response to the hydrology of the Sacramento and American River basins and based on various indices. The October 1 through December 31 minimum flow requirements range between 800 and 2,000 cubic feet per second (cfs), the January 1 through Labor Day minimum flow requirements range between 800 and 1,750 cfs and the post-Labor Day through September 30 minimum flow requirements range between 800 and 1,500 cfs. Nimbus Dam releases may drop below 800 cfs to avoid depletion of water storage in Folsom Reservoir when extreme dry or critical hydrologic conditions are forecasted. For the Draft EIS/EIR, the lead agencies assumed implementation of the FMS only in the future (this has since been supported by the two most recent Biological Opinions associated with the Long-Term Operation of the Central Valley Project and the State Water Project).

OCAP/Biological Opinions

As stated in the Executive Summary and Introduction of the Draft EIS/EIR, the timing of the release of the two Final Biological Opinions referred to in this comment regarding the Long-Term Operation of the Central Valley Project and State Water Project, one by the U.S. Fish & Wildlife Service on December 15, 2008 and the other by the National Marine Fisheries Service/NOAA Fisheries on June 4, 2009, post-dated the completion of the Draft EIS/EIR by a good one to two years. This fact, however, is irrelevant in the context of the Draft EIS/EIR in that the issuance of these two Biological Opinions does not alter any of the environmental impact conclusions derived from the previously conducted modeling. This lack of any change in impact conclusion reflects, in large part, the fact that the modeling already anticipated many CVP/SWP operations made more likely by these Biological Opinions, as well as the relatively modest amount of water being diverted pursuant to the project in light of the enormous amounts of water entering the Sacramento-San Joaquin Delta.

The Draft EIS/EIR did not need to use the *current interpretation* of the two Final Biological Opinions because these Opinions were based on analyses that already included the P.L.101-514 contract, at least as part of their future cumulative evaluations (see next paragraph). The various Reasonable and Prudent Alternatives (RPAs), Conservation Measures, and Terms and Conditions associated with any Incidental Take Permits (ITPs), were all developed within the context of the overall, long-term conditions of the CVP/SWP, which included, by definition, the proposed P.L.101-514 contract.

Notably, this contract (i.e., P.L.101-514) has been anticipated for many years and thus has been included in the future cumulative condition assumptions as a reasonably foreseeable future action for well over a decade. Furthermore, the professional scientists and engineers who prepared the modeling for the Draft EIS/EIR are intimately involved in ongoing regulatory proceedings involving the Sacramento-San Joaquin Delta, and are keenly aware of current regulatory requirements and trends. Based on their professional opinion(s), they have concluded that these new developments are very unlikely to alter the specific impact conclusions set forth in the Draft EIS/EIR.

EDCWA agrees that the recent Final Biological Opinions on the Long-Term Operation of the Central Valley Project and State Water Project were based on the Reclamation Biological Assessment(s) that contain different modeling assumptions than those used earlier. This fact, however, does not call into question the validity of the analyses conducted for the Draft EIS/EIR.

The applicability of CALSIM II in environmental analyses is based on its ability to provide comparative data results. This is an important point since CALSIM II, as with most gross-scale, long time-step (monthly) hydrologic simulations, is appropriate for the purposes upon which it was designed but not necessarily for other evolved and evolving applications. CALSIM II has been, and continues to be used for environmental analyses of specific project (or action) increments because, with an integrated CVP/SWP and coordinated operations throughout the many interconnecting watersheds, CALSIM II is a useful and the accepted tool to gauge system-wide hydrological changes resulting from a particular action. Again, as noted above, it does so within a comparative framework in which the results of the with-project condition simulation are compared against those from the baseline condition simulation.

Accordingly, although the results from a single simulation may not necessarily represent the exact operations for a specific month or year, they do reflect long-term *trends*. Since CALSIM II is not designed to unerringly predict operations and flows, results from individual months should be considered only in the context of overall trends and averages. CALSIM II represents operational or regulatory thresholds through the use of coded step functions. Due to CALSIM's dynamic responses to system conditions, slight changes in model inputs or operations could trigger responses which may significantly vary on an individual monthly basis between the Base Condition and "Project" simulation. These dynamic responses, however, often average out over longer time periods. It is these longer-term *trends* which are useful in determining potential effects of larger diversion projects on the coordinated CVP/SWP.

This last point is important in the interpretation and understanding of what the model output is presenting. Often, intuitive changes in hydrology resulting from a certain action are, in fact, shown in the opposite for certain time periods. Many observers mistakenly confuse this fact with model performance. The manner with which CALSIM II "moves water around" within its operating rules and the stepwise triggers built into the model, especially at the monthly time-step, do not allow for real-time operational flexibility. Accordingly, minor adjustments in model inputs or, the imposition of a new action (e.g., new project withdrawal) may impart changes in modeled hydrology that are not intuitively obvious and, in some instances, may be completely opposite to what would be typically expected. This is where care should be exercised in interpreting the modeled output. One should not assume absolute accuracy in the numerical values. The utility of CALSIM II modeled output is not in the individual numerical values, but rather, in the overall trends revealed in the *entire* dataset, when compared against the baseline, or existing condition.

As noted, the modeling work for the Draft EIS/EIR pre-dates the most recently completed CALSIM II baseline model simulations (e.g., Reclamation's Biological Assessment for the Long-Term Operation of the CVP and SWP released in 2008; and most recent 2009/2010 Reclamation work on incorporating the various RPAs from the U.S. Fish & Wildlife and NOAA Fisheries Biological Opinions on the Long-Term Operation of the CVP and SWP, as well as the most recent Bay-Delta Conservation Plan).

The specific modeling assumptions are contained and set out in Appendix H of the Draft EIS/EIR. The major differences between the CALSIM II versions used in the 2004 Reclamation Biological Assessment (generally similar to the output relied upon in the Draft EIS/EIR) and the 2008 Reclamation Biological Assessment are reflected in Exhibit D, below.

EXHIBIT D

MAJOR CALSIM II MODELING ASSUMPTION DIFFERENCES BETWEEN RECLAMATION'S 2004 AND 2008 BIOLOGICAL ASSESSMENTS FOR THE LONG-TERM OPERATION OF THE CVP AND SWP

Assumption	2004 Biological Assessment	2008 Biological Assessment
Hydrology	73-years (1922-1994)	82-year (1922-2003)
San Joaquin River	Derived from older logic	Water Quality and Hydrology Updated
Yuba River	Time series from DWR's HEC-5	Time series updated from YCWA model
Colusa Basin	Colusa Basin within hydrology	Improved hydrology
Sacramento River Hydrology	No explicit rice decomposition	Included rice decomposition water
SWP	Assumed Variable Table A demand and some Article 21	Updated 3 pattern with Article 56 and more accurate Table A and Article 21 split
ANN - Delta Salinity Estimate	2004 version of ANN	Training of ANN improved between DSM2 by including tidal energy and now using DSM2 trained X2
Level of Development	Current 2001 & Future 2020	Current 2005 and Future 2030
American River Demands	Future demands based on Water Forum assumptions	Future demands based on full contract amounts
SWP Demands	Future Table A: 3.3-4.1 MAF and Article 21 demand 134 TAF/month (Dec-Mar)	Future Full Table A: 4.2 MAF and Article 21 demand 314 TAF/month (Dec-Mar)
EWA	Future with Full EWA and different logic for assets, debts and actions	Future with Limited EWA with updated more explicit asset, debt and action logic
Refuge	Firm Level 2	Updated land based demand
Trinity River	Flows 340 TAF in Current or 369-453 TAF and 369-815 TAF in Future	Trinity River flows Current level is 369-815 TAF based on ROD

Source: U.S. Fish & Wildlife Service, Biological Opinion on Delta Smelt, Reclamation Long-Term Operation of the CVP and SWP, December 15, 2008.

As discussed above, these differences, and their implications to the EIS/EIR, are made moot insofar as the impact analyses presented in this document due to the following summarized reasons, (1) the impact increment of analysis is based on a comparative assessment between model simulations having the same foundational baseline simulations (i.e., the difference between foundational baseline simulations become more irrelevant), (2) the CALSIM II coding logic, regardless of the operational assumptions used in the foundational baseline simulations, make it practically impossible to precisely identify accurate incremental effects between project simulations (proposed project) and the existing condition baseline, and (3) the 15,000 AFA increment, relative to existing hydrology in the American River watershed and throughout the larger CVP/SWP make it extremely difficult to detect measurable changes in hydrology that can realistically be inferred as representing genuine impacts. In fact, the modeling results of the Draft EIS/EIR bear this out in that the only potentially significant impact recognized was a slight mean monthly flow reduction in the lower American River at the mouth during the month of September, relative to the Base Condition model simulation.

For all of the reasons described in the EIS/EIR and further discussed in these responses to comments, EDCWA, through its modeling experts, determined that nothing in the current Biological Opinions creates a need to identify any new significant impact or to posit a "substantial increase" in the severity of any previously identified impact. No changes in impact determinations are necessary.

In fact, the rulings from United States District Court Judge Oliver Wanger in May, 2010, in which he found violations of both the National Environmental Policy Act and the Endangered Species Act in connection with both Biological Opinions, have tended to reduce the legal and practical significance

of the prior issuance of those Biological Opinions. Those rulings have also created significant uncertainty as to the long-term validity of some of the conservation strategies included within those documents. It is entirely possible that, after Reclamation and its sister federal agencies complete NEPA review and revisit the substance of some of the Reasonable and Prudent Measures that Judge Wanger found to be problematic, new and different Biological Opinions will be issued. This current uncertainty underscores the relative unimportance of the fact that the computer modeling done for this EIS/EIR was undertaken prior to release of the flawed Biological Opinions. It seems entirely possible that the new Biological Opinions, prepared after NEPA compliance, will embody an approach that allows more water for consumptive uses while still providing sufficient flows to facilitate the recovery of affected threatened and endangered species. Of particular relevance regarding the Biological Opinion issued by the United States Fish and Wildlife Service on delta smelt is Judge Wanger's finding that,

> "[C]ongress created public expectations in the Amended Reclamation Act by instructing Reclamation to contract for water service to hundreds of public-entity water service providers that supply water to millions of people and thousands of acres of productive agricultural land. The agencies have not fully discharged their responsibility to effectively allocate Project water resources. Federal Defendants have acted arbitrarily and capriciously in formulating Component 2 of the RPA, which lacks factual and scientific justification, while effectively ignoring the irreparable harm that pumping restrictions have inflicted and will inflict on humans and the human environment…".[1]

In other words, USFWS seems to have erred on the side of providing more water for fish – at the expense of human needs – than can be justified by the scientific information Judge Wanger reviewed. Regarding the Biological Opinion prepared by the National Marine Fisheries Service on salmonids, Judge Wanger notes that,

> "….NMFS has failed to adequately justify by generally recognized principles the precise flow prescriptions imposed by RPA Actions IV.2.1 and IV.2.3. The exact restrictions impacts, which are inflicting material harm to humans and the human environment, are not supported by the record. Rather, they are product of guesstimations and attempts to try to achieve 'equity', rendering it impossible to determine with the RPA Actions are adequately protective, too protective, or not protective enough. Judicial deference is not owed to such arbitrary, capricious, and scientifically unreasonable agency action.".[2]

[1] / See The Consolidated Delta Smelt Cases; Findings of Fact and Conclusions of Law re: Plaintiffs' Request for Preliminary Injunction Against implementation of RPA component 2 (a/k/a Action 3) (Doc.433), 1:09-cv-00407-OWW-DLB, 1:09-cv-00480-OWW-GSA, 1:09-cv-00422-OWW-GSA, 1:09-cv-00631-OWW-DLB, 1:09-cv-00892-OWW-DLB Filed 5/27/2010.

[2] / See *The Consolidated Salmonid Cases; Findings of Fact and Conclusions of Law re: Plaintiffs' Request for Preliminary Injunction* (Docs. 161 & 230), Case 1:09-cv-01053-OWW-DLB Document 347 Filed 05/18/2010.

Response to Comment 9-7

Climate change effects are fully described in the Draft EIS/EIR in Chapter 7: Climate Change (see pages 7-1 through 7-36). The Draft EIS/EIR provides extensive discussion of the timing, amount and type of precipitation predicted in many of the downscaled climate models. The potential effects of climate change on water resources are provided in Subchapter 7.2.4: Climate Effects on Water Resources, commencing on page 7-9. With respect to California's water resources, Subchapter 7.2.5: Climate Change Effects on California Water Resources, commencing on page 7-12 provides further discussion. For example, Table 7.1-1, titled, "Potential Effects of Climate Change on California Water Resources and Expected Consequences", (on page 7.15) and its companion Table 7.1-2, titled "Possible Effects of Climate Change on Precipitation in California and Potential Consequences" (on page 7-16) speak specifically to the information requested in the comment. In Table 7.1-2 for example, the possible changes in precipitation include five categories including amount, form, intensity, duration and timing, variability, and location. This information was taken from Table 2-3 of the California Department of Water Resources' *Progress on Incorporating Climate Change into Management of California's Water Resources, Technical Memorandum Report*, July 2006, and is cited as such.

For the American River watershed, the Draft EIS/EIR provides two areas where potential future climatic perturbations on the in-basin water resources are discussed. Specific to El Dorado County, the Draft EIS/EIR provides an update on climate change modeling from the Shared Vision Model (SVM) where stakeholders included EDCWA, EID, GDPUD, Grizzly Flats Community Service District, and the City of Placerville. This discussion is found in Subchapter 7.2.6: Climate Change Modeling in El Dorado County.

Most notably, the Draft EIS/EIR provides a detailed description and discussion of potential future CVP/SWP effects resulting from a climate induced hydrologic regime shift. Subchapter 7.2.7: Climate Change Effects on the CVP/SWP provide a summary of the earlier work of Lund et al. in 2003. This is augmented by a more recent investigation by the California Department of Water Resources in 2006 where, various downscaled climate perturbation factors were used as upper basin inputs to rout CALSIM II simulations. The watershed runoff model, Variable Infiltration Capacity (VIC) model was used and runoff data was processed to generate regional scale streamflow for several river reaches, including the North Fork American River and the American River at Folsom Reservoir (see pages 7-20 and 7-21).

These results, in fact, were included in Reclamation's Biological Assessment on the Long-Term Operation of the Central Valley Project and State Water Project (see Appendix R to the Biological Assessment: *Sensitivity of Future CVP/SWP Operations to Potential Climate Change and Associated Sea Level Rise*). The EIS/EIR cites this work and incorporates it by reference.

As noted in the Reclamation Biological Assessment and, as summarized in the Draft EIS/EIR, the general results of the models indicate that future warming is expected to cause a greater fraction of the annual runoff from the Central Valley (including the American River basin) to occur during winter and early spring and a reduced fraction of the annual runoff to occur during late spring and summer. This reflects the predicted change from less snowmelt derived runoff to greater precipitation driven

runoff in the region's watershed, particularly those watersheds originating in the northern Sierra and Cascade mountain ranges.

Dry-Year Hydrology

The analyses provided in Chapter 7: Climate Change, include an analysis of a potential future hydrology that is drier than present.

The breadth of scientific research on climate change effects has, is currently, and will likely continue to evolve significantly in the future. Please see Response to Comment 8-9 comment for a detailed discussion of the importance in keeping abreast with international advances in climate change research, understanding the limitations of existing GCMs (including parameterization of key atmospheric drivers of the "greenhouse gas" effect), the sensitivity of current model output, recent trends in what had been allegedly established truisms about global warming (e.g., recent decadal flat line on temperature increases), and counter-balancing cooling effects of other GHGs (e.g., aerosols), to name a few.

Appropriate resource management, following the edicts of scientific adaptive management, should avoid rigidly assuming that what is in the published literature today represents the preeminent and ultimate conclusion regarding any scientific issue. The scientific method has long been developed to do just the opposite; it must continually advance.

As noted here, and in other previous comments (including those referenced), a "drier" future hydrology in the American River basin is a distinct possibility and several research papers have alluded to this. At the same time, however, there is no one unerring and universally accepted thesis as to precisely what those changes will be, exactly how severe they will be (relative to the historic record), and precisely when they will occur. Most importantly, at this time, it is impossible to accurately (emphasis added) ascribe if those hydroclimatic shifts will occur within a reasonably foreseeable timeframe, relative to ambient natural variability; the effects of which, on any timescale, can drive hydroclimatic conditions in the opposite direction from what might be considered intuitive.

It should also be noted that total precipitation is also only one of several hydrological factors affecting water availability. The current literature suggests the possibility of earlier, more intense storm events occurring as rainfall. If taken as a truism, then even if total seasonal precipitation is reduced, relative to historic conditions, a sharper and more distinct quickflow hydrograph with higher seasonal peak runoff may compel the need for reservoir re-operation or, in some cases, new reservoir or storage development. Either would be necessary in order to maintain an acceptable level of downstream flood control, assure continual dam safety, and capture what would have otherwise been lost as mid-winter flood releases. A "drier" future climate, in other words, may end up increasing in-basin carryover storage, relative to current conditions, simply through the temporal shift of when precipitation inputs would, or could occur in the future. Accordingly, climate change effects could and, in many cases in which seasonal hydrology is manifest, are prompting a robust new look at developing new water storage alternatives, including new on-stream storage reservoirs.

Both Reclamation and the California Department of Water Resources adjust and prescribe water allocations on an annual and within-year basis as part of their regular yearly allocation processes

(e.g., CVP water service contracts and Table A SWP contracts). A drier future hydrology, as evidenced by potential future reductions in unimpaired runoff forecasts and reduced accumulated snowpack water equivalent will, as they are now, be accounted for by both Reclamation and the California Department of Water Resources. With or without future reservoir re-operation or new reservoir and/or storage development, allocations for consumptive use will continue to be made by these two water contracting agencies on an annual basis to assure that no more than what is available is allocated.

Response to Comment 9-8

The comment is requesting that the effects of water diversion projects on GHG effects (i.e., climate change) be analyzed.

Water diversion projects, per se, have virtually no direct effect on *climate change*, as it has been defined in the Draft EIS/EIR. Even a potentially large water diversion project with the capability of significantly depleting a reservoir will have no discernible direct effect on regional changes in climate. This is because climate change is driven primarily by the net radiative energy balance of the atmospheric layers (e.g., troposphere and stratosphere), whose interactive processes are unaffected by the singular action of diverting water at the ground surface. Assuming that a residual water supply remains in the waterbody after diversion, the continued presence of ongoing exchange mechanisms (e.g., gradient of saturated vapor pressure) between the water surface and atmosphere will remain. By all of the atmospheric, hydroclimatological and climatological processes known and accepted, water diversions, in and of themselves, cannot affect global climatic forcings. For this Proposed Project, a 15,000 AFA maximum diversion from Folsom Reservoir or, from points upstream, will have no direct measurable effect on local climate.

However, when considering the matter of the indirect effects of water diversion projects on climate, the issue becomes more intriguing and certainly not as clear. As an action that can be viewed as accommodating approved growth (i.e., development, urbanization, land clearing, etc.), the indirect effects of water diversions can be tied, at least in some manner, to a variety of land activities to which it serves. These can include:

- Removal of vegetation (land conversions)
- Soil disturbance
- New highways, roads, and parking lots
- Commercial/retail development
- Residential development
- Recreational facilities
- Industrial development
- Institutional development

These activities can, by their influence on the net radiative energy balance and the exchange mechanisms with the overlying atmosphere, have a collective effect on climate in varying degrees.

In El Dorado County, each of these land uses are controlled, for the most part, by the Board of Supervisors and Planning Commission, and the Community Development Services Department of El Dorado County as part, and through the County's standard land use designation and project approval processes. The El Dorado County Water Agency, El Dorado Irrigation District, or the Georgetown Divide Public Utility District, do not control, direct, propose, or otherwise influence large scale land use changes associated with development. In the case of the two purveyors, individually small infrastructure facility projects are periodically constructed, but in terms of land area conversions, these are insignificant, relative to county and city approved development initiatives. Each facility project proposed, furthermore, undertakes its own project-level analysis that would include an assessment of potential GHG emissions. At this point, such facilities, including their size, location, footprint, construction phasing, and mode of operation are not known; this Proposed Project remains a water diversion approval, not an approval to construct a new facility.

As land uses change, the physical processes between the land and atmosphere (e.g., evaporation, sensible heat exchange, latent heat exchange) will change. This is largely due to changing net radiation at the surface (i.e., solar shortwave reflectivity), surface roughness, moisture availability, and momentum uptake. Different surfaces also emit long wave radiation in varying amounts as defined by the Stefan-Boltzmann law. With land use changes, the entire net radiative energy balance is altered.

Land use changes (e.g., clearing land for logging, ranching, and agriculture), lead to varying amounts of carbon dioxide emissions, depending on the intensity of the land use change. Vegetation contains carbon that is released as carbon dioxide when the vegetation decays or burns. Under natural regeneration, lost vegetation would normally be replaced by re-growth with little or no net emission of carbon dioxide, however, over the past several hundred years, deforestation and other land use changes in many countries have contributed substantially to atmospheric carbon dioxide increases. Land use changes are responsible for 15 to 20 percent of current carbon dioxide emissions.

Methane (natural gas) is the second most influential of the GHGs resulting from human activities. It typically is produced by rice cultivation, cattle and sheep ranching, and by decaying material in landfills. Methane is also emitted during coal mining and oil drilling, and by leaky gas pipelines. Human activities have increased the concentration of methane in the atmosphere by about 145 percent above what would be present naturally.

Nitrous oxide is produced by various agricultural and industrial practices. It is estimated that human activities have increased the concentration of nitrous oxide in the atmosphere by about 15 percent above what would be present naturally.

Chlorofluorocarbons (CFCs) have been used in refrigeration, air conditioning, and as solvents. However, the production of these gases is being eliminated under existing international agreements (i.e., Montreal Protocol), rationalized because of their effect on the stratospheric ozone layer. Other fluorocarbons that are also GHGs are being used as substitutes for CFCs in some applications, such as in refrigeration and air conditioning. Although currently very small, their contributions to climate change are expected to rise in the future.

Ozone in the troposphere is another important GHG resulting from industrial activities. It is, however, also created naturally and also by reactions in the atmosphere involving gases resulting from human activities, including nitrogen oxides from motor vehicles and power plants. Based on current data, tropospheric ozone is an important contributor to an enhanced greenhouse effect. However, in part because ozone is also produced naturally, and because of its relatively short atmospheric lifetime, the magnitude of this contribution remains uncertain.

The most dramatic of human activities in terms of being the largest contributor to GHGs is the burning of fossil fuels. Of that category of emissions, those generated from fossil fuel run automobiles and other vehicles represent the most significant contribution. It is estimated that in California, approximately 41 percent of the GHG emissions result from transportation (see Rio Del Oro Specific Plan, DEIS/DEIR). Together, the burning of fossil fuels and land use changes, have increased the abundance of small airborne particles in the atmosphere. These particles can change the amount of energy that is absorbed and reflected by the atmosphere; and hence, the net radiative energy balance. Particulates are also believed to modify the properties of clouds, changing the amount of energy that they absorb and reflect.

It is evident that changes in land use and land cover are important contributors to climate change and variability. Reconstructions of past land-cover changes and projections of possible future land-cover changes are needed to better understand past climate changes and to more accurately project possible future climate changes. Additionally, changes in land use and land cover can affect ecosystems, biodiversity, and the many important goods and services they provide to society, including carbon sequestration. Land-cover characteristics, therefore, are important inputs to climate models.

Determining the effects of land-use and land-cover change on the Earth's ecosystems depends on an understanding of past land-use practices, current land-use and land-cover patterns, and projections of future land use and cover, as affected by human activities, population size and distribution, economic development, technology, and other factors.

A significant complicating factor when assessing the potential effects of existing or planned activities on climate change is that, given current impact metrics (e.g., GHG loadings), it is virtually impossible to ascribe the increment of impact from a single activity to potential climate change effects either at that location, regionally, or in some transboundary context. The highly complex nature of atmospheric dynamics are such that GHG emissions in one location may, depending on a multitude of variables, spatially (in three-dimensions) and temporally, contribute to or affect a climate change related parameter (e.g., temperature or precipitation) that may be observed, but more likely than not, remain unobserved.

Finally, as described in the Draft EIS/EIR (see Chapter 3.0: Alternatives Including the Proposed Action and Project Description), the Proposed Project represents a new federal water acquisition. And as previously noted, it does not represent nor does it propose to change, alter, or by its implementation, change already approved land use, zoning, anticipated infrastructure/service needs, or other aspects associated with growth. Each of the alternatives in the Draft EIS/EIR address options to, or within the new CVP M&I water supply contract, not variations in land use or spatial use

provisions in the areas with which this water is to be served. The contractor service areas are identical between all alternatives. For this reason, it is redundant to carry forward an analysis of the indirect effects of growth (within the context of potential GHG emission increases) across all alternatives as they would be identical.

Response to Comment 9-9

Two facts are relevant in response to this comment. First, is the actual effect of the Proposed Project, relative to existing hydrology. The second relates to the legal obligation, under NEPA and CEQA to assess a potential cumulative condition, over-allocation, that is as yet undefined given the fact that all existing entitlements within the Sacramento-San Joaquin River watershed are not yet fully utilized. As to the first issue, EDCWA as the CEQA lead agency has properly considering *existing conditions*, which do not reflect the claimed over-allocation condition mentioned by the commenter, as the "baseline" condition for purposes of assessing the significance of project impacts in the non-cumulative context. (See CEQA Guidelines, § 15125, subd. (a).) To the extent that NEPA uses a "no action" scenario as a similar benchmark for assessing the significance of action alternatives, the "no action" scenario also does not include over-allocation on the scale mentioned by the commenter, as such a scenario is not currently reasonably foreseeable, for reasons discussed below. (See, e.g., (See, e.g., *Havasupai Tribe v. United States*, 752 F.Supp. 1471, 1491 (D. Ariz. 1990) ("*Havasupai Tribe*") (the no-action alternative "provides a sound baseline against which all other options can be compared"); *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, p. 4; see also *Nashvillians Against I-440 v. Lewis*, 524 F.Supp. 962, 988 (M.D. Tenn. 1981) (citing CEQ's direction on this issue). As to the second issue, both lead agencies for the Draft EIS/EIR appropriately did not assume the kind of claimed over-allocation being mentioned, for the reason, again, that such a severe strain on the affected river systems is not currently reasonably foreseeable. (See, e.g., CEQA Guidelines, § 15130, subd. (b)(1)(A) (cumulative analysis using "list method" should account for "*probable* future projects") (italics added); 40 CFR § 1508.7 (NEPA regulations define "cumulative impact" as resulting "from the incremental impact of the action when added to other past, present, and *reasonably foreseeable* future actions").)

In examining the actual physical impacts of the proposed project, it is important to focus on its net effect on the potentially affected waterways. As a water accounting exercise, the amount of water that is actually lost to the system as a result of the P.L.101-514 contract is informative. While the contract allows for diversions up to 15,000 AFA (from Folsom Reservoir or upstream), it is an M&I contract and, therefore, there is a presumption that a significant fraction of the water in fact returns to the system. Using Reclamation's planning and operations model CALSIM II, one can determine the extent of this hydrological return flow condition. The framework of CALSIM II, as a mass-balance model, assumes both accretions and depletions within identified spatial segments (or nodes) representing the CVP. Part of the accretion assumptions for any node is the return flow component. These are computed separately from direct depletions and are identified by Drainage Service Area (or DSA) within the modeling code. It essentially returns pre-withdrawn or diverted water at specified downstream locations consistent with how either the natural hydrology or, regional wastewater infrastructure is set-up.

American River efficiency is determined through calculations that account for both indoor and outdoor use efficiency as well as a component for non-recoverable losses. Naturally, as one would expect, indoor demands are constant throughout the year; hence, their return flows are also constant. Outdoor use, however, varies with the season. Return flows, therefore, based on variable outdoor uses varies throughout the year, with higher summer month return flows than during winter. On average, when combined, roughly 56% of the diverted water within the American River basin returns to the river system. This return, however, varies markedly by month (e.g., approximately 90% returns during December-February, compared to about 45% during June-August).

Therefore, hydrologically, the Proposed Project would not be a *significant* addition to any alleged "misbalance" as the comment implies.

The second point relates to over-allocation. Over allocation, in and of itself is not the issue. It potentially only becomes an issue if all entitlements are perfected (i.e., the maximum total diversions under all entitlements are taken) such that it imposes a detrimental effect on the environment. At this time, however, there is no evidence that this condition is indeed occurring. For example, if it was occurring, the entire Water Forum PSA development process which included, in part, a willingness of purveyors to cut back on unexercised water entitlements for the benefit of the other half of the co-equal objective mandate (i.e. protection of the lower American River) could not have been accomplished. A look at various PSAs from the Water Forum will show that most water purveyors have entitlements that they willingly reduced under the auspices of the Water Forum Agreement PSAs.

Furthermore, while the Governor's Delta Vision Blue Ribbon Task Force noted the risk of over allocation, it proposed nothing to suggest that its recommendations should supersede a 1990 Congressional mandate for EDCWA and Reclamation to enter into a new CVP M&I water supply contract for 15,000 AFA. There is no current legal basis to rescind the new CVP M&I water supply contract authorized by Congress under Public Law 101-514 (Section 206).

Response to Comment 9-10

See Response to Comment 9-6 for reasons why EDCWA does not believe that it needs to revisit the conclusions of the Draft EIS/EIR due to recent developments related to updates to the 2004 OCAP and the Biological Opinions issued in late 2008 and mid-2009 by the United States Fish and Wildlife Service and the National Marine Fisheries Service. As demonstrated in the Draft EIS/EIR, the incremental effect of the Proposed Project (i.e., annual total maximum diversion of 15,000 AFA) on the existing CVP entitlements and projected annual allocations are insignificant. See the impact discussions on CVP M&I and Ag contractors both North and South of the Delta (pages 5-13 through 5-17 and, in particular, Tables 5.4-1A through 5.4-1D). Based on the CALSIM II modeling output in the Draft EIS/EIR, there would be no significant anticipated shortages or adverse effects to water deliveries to any CVP water supply contractor category. Nothing occurring since the modeling for the Draft EIS/EIR was completed, including the earlier decision of Judge Wanger mentioned by the commenter, calls these impact conclusions into question.

Notably, in holding that the United States Fish and Wildlife Service and the National Marine Fisheries Service, in issuing the two Biological Opinions, had given too little attention to adverse effects such as land fallowing, groundwater overdraft, and dust mobilization, Judge Wanger said nothing indicating that the diversion of a mere 15,000 AFY from the American River watershed would cause similar impacts in the San Joaquin Valley or anywhere else. Judge Wanger's rulings considered the effects of new OCAP Biological Opinions addressing the *entire CVP/SWP system*, which involves millions of acre feet of water deliveries. Thus, the fact that the judge concluded that the federal lead agencies there failed to comply with NEPA by failing to address potential impacts on the human environment south of the Delta by no means stands for the proposition that a comparatively tiny delivery project, such as the 15,000 AFA contract at issue herein, will result in similar impacts.

Without documented significant impacts, there is no legal obligation under either NEPA or CEQA to speculate on what those CVP water service contractors might pursue, and the potential environmental effects of those speculative mitigative prescriptions, had there been effects from this Proposed Project. To do so would be to foster a second order of speculation not required by NEPA or CEQA and, in fact, something that is explicitly discouraged under established case law.

Response to Comment 9-11

The EIS/EIR process, commencing in 1993, underwent several NEPA/CEQA scoping exercises to identify, develop, and rationalize a reasonable range of alternatives to advance to the environmental review phase of the Proposed Project. The alternatives identification, screening, and development process was comprehensive. See Chapter 3.0: Alternatives Including the Proposed Action and Project Description. In particular, please note the care and detail that was exercised in identifying the preliminary alternatives other than the Proposed Project (see Subchapter 3.6 on page 3-22), the alternative water supplies which included potential new water rights, water transfers, new CVP and SWP contracts, new storage, groundwater banking/conjunctive use, and use of reclaimed wastewater, as well as a number of demand reduction alternatives (see Subchapter 3.6.3: commencing on page 3-27). Both water conservation and growth control were identified as preliminary alternatives under this latter category. Additionally, the Draft EIS/EIR also included variations in how the proposed new CVP M&I water supply contract would be implemented with three variations (this was discussed previously as part of Response to Comment 10-5) as well as including an additional three levels of reduced action alternatives (i.e., three separate reduced diversion alternatives; 12,500 AFA, 10,000 AFA, and 7,500 AFA).

For the water conservation alternative, the Draft EIS/EIR provided a detailed discussion of why water conservation was not carried forward as a stand-alone alternative within the NEPA/CEQA context. While increased water conservation easily passed all of the alternative screening criteria, as fully explained in the Draft EIS/EIR, it could not meet an important check; the ability to meet the primary objectives of the Proposed Project, namely, the provision of a new water supply to meet approved and planned growth. Moreover, this alternative could be considered one that, for the most part, is already actively implemented. Many of the water conservation measures identified by the California Urban Water Conservation Council Memorandum of Understanding, paramount of which is metering with tiered commodity rates, are already being implemented by EID and GDPUD. Most importantly,

however, there is general acceptance and acknowledgment that there is a limit to which additional water savings can be achieved at the consumer end. Water conservation alone, cannot be relied upon as a firm water supply for anticipated future planned growth. However, to the extent that open canals and ditches are being improved and managed for lowering water losses by both EID and GDPUD, increased water conservation could be achieved through various conveyance improvements and this would certainly help reduce current losses associated with raw water deliveries.

So, while water conservation possesses long-accepted environmental and social benefits, it is hampered by its limited effect on a water agencies demand/supply portfolio. Because of the water conservation measures already in place, it will not be possible for the continued population growth to be met by demand reduction alone. New supplies are a physical inevitability where a water purveyor already employs aggressive conservation and can expect future new planned growth into the future.

For those water agencies already implementing significant water conservation measures, it is difficult, if not impossible, to increase the level of water conservation to a point that would allow the redirection of existing supplies (through conservation savings) to effectively meet all future growth demands. As noted above, a fundamental precept of population growth is the presumption of new consumption, regardless of the effectiveness or aggressiveness of any water conservation program. There exists a finite limit as to the amount of water that can be conserved.

As stated in the Draft EIS/EIR, for these reasons, the alternative failed the Long-Term Reliability and Quantity Sufficiency, Economic, and Infrastructure and Operational Certainty criteria. These results and the important fact that water conservation measures are already built into both EID and GDPUD's current water supply planning and existing entitlements, influenced the decision to screen out this alternative. This alternative was, therefore, not carried forward for further evaluation in the Draft EIS/EIR. A new alternative, based on the same principles of water conservation only, cannot by any mathematical equation, achieve sustainability so long as the primary driver of water use, population growth, is assumed to continue.

Response to Comment 9-12

The additional analyses, as requested in the comments are unnecessary given the current content of the Draft EIS/EIR and, as explained in the responses contained herein to the submitted comments, which will be considered by the EDCWA Board of Directors when it makes its decision on the Proposed Project. No recirculation of the Draft EIS/EIR is necessary.

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