# 33.9 Comments from Regional and Local Governments and Agencies and Responses

This section contains copies of comment letters (and any attachments) from the regional and local governments agencies listed in Table 33.9-1. As noted previously, each comment in the comment letters was assigned a number, in sequential order (note that some letters may have more than one comment). The numbers were then combined with an abbreviation for the local agency (example: COSL-1).

Responses to the comments follow the comment letters, and are also numbered, corresponding to the numbers assigned in the letters. The letters and associated responses are sorted alphabetically by abbreviation and appear in the section in that order.

Table 33.9-1. Regional and Local Governments and Agencies Providing Comments on Draft Environmental Impact Statement

Abbreviation	Agency
CCWD1	Contra Costa Water District
CCWD2	Contra Costa Water District
COSL1	City of Shasta Lake
COSL2	City of Shasta Lake
COSL3	City of Shasta Lake
EBMUD	East Bay Municipal Utility District
GLWD	Grassland Water District
MGCSD	Mountain Gate Community Services District
REDD	City of Redding
REU	Redding Electricity Utility, City of Redding
SCBS	Shasta County Board of Supervisors
SCBS2	Shasta County Board of Supervisors
SCVWD	Santa Clara Valley Water District
SEWD	Stockton East Water District
SLDMWA	San Luis & Delta Mendota Water Authority
SWC	State Water Contractors



#### 33.9.1 Contra Costa Water District

CCWD1

From: Matt Moses [mailto:mmoses@ccwater.com] Sent: Wednesday, July 24, 2013 10:56 AM

To: 'CHOW, KATRINA'

Cc: Fitzhugh, Thomas; Leah Orloff; Marguerite Patil; Danelle Bertrand

Subject: RE: request for Shasta Lake Draft EIS modeling

CCWD1-7

15-minute timestep output for the DSM2 runs will be perfect.

If possible, can you include output for hydro and qual?

Thanks,

Matt

From: CHOW, KATRINA [mailto:kchow@usbr.gov]
Sent: Wednesday, July 24, 2013 10:46 AM

To: Matt Moses

Cc: Fitzhugh, Thomas; Leah Orloff; Marguerite Patil; Danelle Bertrand

Subject: Re: request for Shasta Lake Draft EIS modeling

Matt: Due to the busiest time/moment, we are more than happy to send you a DVD with DSM2 model (run on a 15-minute timestep), please let us know if you need instruction to convert to daily-averaged output.

Danelle: Could you please mail a DVD with the request to Matt, CCWD. Matt will convert the input/output format as needed.

Thanks

Katrina

On Tue, Jul 23, 2013 at 4:47 PM, Matt Moses <<u>mmoses@ccwater.com</u>> wrote: Hi Katrina,

CCWD1-6

After looking at the model output files (thanks again for helping me find them), I realized that the values provided for Delta water quality are monthly averages. The DSM2 model is typically run on a 15-minute timestep, and the results can be averaged over longer periods of time. Daily averages of these results would be useful in CCWD's review of the project. Can Reclamation please provide daily-averaged output for DSM2 modeling for the Shasta project?

Thanks again,

Matt

#### Shasta Lake Water Resources Investigation Environmental Impact Statement

From: Matt Moses

Sent: Monday, July 22, 2013 5:12 PM

To: 'CHOW, KATRINA'

Ce: Fitzhugh, Thomas; Leah Orloff; Marguerite Patil Subject: RE: request for Shasta Lake Draft EIS modeling

Hi Katrina,

CCWD1-5

My apologies, I just found the "raw modeling output" files on the DVD. Thank you for including them with the Draft EIS, this is a great format.

Matt

From: CHOW, KATRINA [mailto:kchow@usbr.gov]

Sent: Monday, July 22, 2013 5:01 PM

To: Matt Moses

Ce: Fitzhugh, Thomas; Leah Orloff; Marguerite Patil Subject: Re: request for Shasta Lake Draft EIS modeling

Matt.

Those output files were included in our DVD. Have you received a DVD from us? if not we can mail you one. Perhaps, you are requesting to have different model files than in the DVD? Please clarify or I can assist further. Thanks

Katrina

On Mon, Jul 22, 2013 at 4:42 PM, Matt Moses < mmoses@ccwater.com > wrote: Hi Katrina.

CCWD1-4

Just following up on this request – can you give Tom the approval to send the model files to me at CCWD?

Thanks,

Matt

Matt Moses, P.E. Senior Water Resources Specialist Contra Costa Water District 1331 Concord Avenue Concord, CA 94524-2099 (925) 688-8106 (925) 688-8142 fax From: Matt Moses

Sent: Thursday, July 18, 2013 5:15 PM

To: 'KATRINA CHOW'

Cc: Fitzhugh, Thomas; Leah Orloff; Marguerite Patil Subject: RE: request for Shasta Lake Draft EIS modeling

Hi Katrina,

CCWD1-3

Thanks for getting back to me. I'm actually requesting the model output files from CalSim II and DSM2. I have the report and appendices.

I think what I need is for you to give Tom approval to send them.

Thanks,

Matt

From: KATRINA CHOW [mailto:kchow@usbr.gov]

Sent: Thursday, July 18, 2013 5:08 PM

To: Matt Moses

Cc: Fitzhugh, Thomas; Leah Orloff; Marguerite Patil Subject: Re: request for Shasta Lake Draft EIS modeling

Did you receive a DVD? The model result is included in the DVD modeling appendix. If you have not received the DVD, we can mail it to you.

Sent from my iPhone

On Jul 18, 2013, at 11:19 AM, Matt Moses <<u>mmoses@ccwater.com</u>> wrote: Thanks Katrina, I'm sure you're very busy with the public meetings this week.

CCWD1-2

CCWD is requesting the model results for the Shasta EIS, to assist our review of the project. This is standard practice for us. I think Tom needed approval before providing the results. Can you please let me know who I should talk to for access to the model results?

#### Matt

From: KATRINA CHOW [mailto:kchow@usbr.gov]

Sent: Tuesday, July 16, 2013 4:03 PM

To: Matt Moses

Cc: Fitzhugh, Thomas; Leah Orloff; Marguerite Patil Subject: Re: request for Shasta Lake Draft EIS modeling

Matt,

#### Shasta Lake Water Resources Investigation Environmental Impact Statement

Sorry of my delay getting back to you last week. We are holding several workshops this week for the release of the Shasta draft EIS. I will get back to you soon. Thx

Sent from my iPhone

On Jul 10, 2013, at 2:56 PM, Matt Moses < mmoses@ccwater.com > wrote: Hi Katrina.

Long time no see, I hope you are well.

I am writing on behalf of CCWD to request some of the modeling files for the Shasta Draft EIS. Tom Fitzhugh suggested I contact you with this request.

CCWD1-1

To support our review of the project, I would like the CalSim II output files and the DSM2 output files for all alternatives included in the EIS.

I have used the Reclamation ftp site to share files with Tom previously, I think that would be an efficient way to transfer these files.

Thanks.

Matt

Matt Moses, P.E. Senior Water Resources Specialist Contra Costa Water District 1331 Concord Avenue Concord, CA 94524-2099 (925) 688-8106 (925) 688-8142 fax

# Responses to Comments from Contra Costa Water District

**CCWD1-1:** The requested information was mailed to Mr. Matt Moses in July 2013.

**CCWD1-2:** The requested information was mailed to Mr. Matt Moses in July 2013.

**CCWD1-3:** The requested information was mailed to Mr. Matt Moses in July 2013.

**CCWD1-4:** The requested information was mailed to Mr. Matt Moses in July 2013.

**CCWD1-5:** The requested information was mailed to Mr. Matt Moses in July 2013.

**CCWD1-6:** The requested information was mailed to Mr. Matt Moses in July 2013.

**CCWD1-7:** The requested information was mailed to Mr. Matt Moses in July 2013.

#### 33.9.2 Contra Costa Water District

10/18/13

DEPARTMENT OF THE INTERIOR Mail - CCWD comments on SLWRI DEIS





# CCWD comments on SLWRI DEIS

Matt Moses <mmoses@ccwater.com>

Mon, Sep 30, 2013 at 4:58 PM

To: "BOR-MPR-SLWRI@usbr.gov" <BOR-MPR-SLWRI@usbr.gov>, "CHOW,

KATRINA" < kchow@usbr.gov>

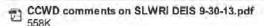
Cc: Leah Orloff <lorloff@ccwater.com>, Wendy Chriss <wchriss@ccwater.com>

Hi Katrina,

CCWD comments are attached. Thanks for your help during our review of the Draft EIS, and for pushing this important project forward. Please call me at the number below if you have any questions about our comments.

Matt

Matt Moses, P.E. Senior Water Resources Specialist Contra Costa Water District 1331 Concord Avenue Concord, CA 94524-2099 (925) 688-8106 (925) 688-8142 fax





1331 Concord Avenue P.O. Box H2O Concord, CA 94524 (925) 588-8000 FAX (925) 688-8122 www.cowater.com

By postal delivery and email to BOR-MPR-SLWRIQusbr, gov

September 30, 2013

Directors
Joseph L. Campbell
President

Katrina Chow, Project Manager Burcau of Reclamation 2800 Cottage Way, MP-700

Kerl L Wandry Vice President Sacramento, CA 95825

Bette Boatmun Lisa M. Borba John A. Burgh

Subject: Comments on Draft Environmental Impact Statement for Shasta Lake

Water Resources Investigation

Jerry Brown General Manager

Dear Ms. Chow:

Contra Costa Water District (CCWD) appreciates this opportunity to provide input on the draft Environmental Impact Statement (EIS) for the Shasta Lake Water Resources Investigation (SLWRI). As a Central Valley Project (CVP) contractor and a stakeholder in the Sacramento-San Joaquin Delta (Delta), CCWD supports developing more water storage in California and is committed to careful planning of these projects, CCWD applauds the efforts of the Reclamation team in producing the SLWRI Draft EIS. Our comments on the draft are below.

CCWD2-1

Project Benefits and Cost Allocation

CCWD2-2

As a CVP customer, CCWD supports development and adoption of a cost allocation for water storage projects that is consistent with the distribution of project benefits. If benefits of the project are extended to water users beyond the CVP, those water users should be incorporated into the funding structure for the project. If municipal and industrial (M&I) water supply benefits are not a focus of the selected project alternative, that emphasis should be reflected in the reduced cost allocation to M&I contractors.

customers. Because of these uses, maintaining good water quality in the Delta is important to CCWD. CCWD staff have reviewed the updated model simulations of the operations and effects of the SLWRI project alternatives provided with the draft EIS. The results specific to CCWD indicate that little or no change to CCWD water supply is anticipated by Reclamation as a result of developing the SLWRI project. Similarly, the Delta water quality estimated in the modeling results provided by Reclamation does not vary substantially at CCWD intake locations among the project alternatives. CCWD notes the minimal estimates of water supply or water quality benefits provided directly

CCWD diverts Delta water for delivery to municipal, industrial and agricultural

D2-4 to CCWD in the project modeling. It would be useful to have the water supply reliability benefits quantified for the proposed action, when selected.

CCWD2-4

CCWD2-3

#### Shasta Lake Water Resources Investigation Environmental Impact Statement

Ms. Katrina Chow, Bureau of Reclamation Comments on Draft Feasibility Report for Shasta Lake Water Resources Investigation September 30, 2013 Page 2

# CCWD2-5

More discussion should be presented of the potential for reduced deliveries to M&I contractors in the expanded reservoir scenarios. If those effects are artifacts of the model analysis, rather than intended effects of the project, then that should be clearly stated. If those effects are intended, then appropriate mitigation for the impacts to water supply should be developed.

#### Rock Slough Water Quality Objective

The discussion of the State Water Resources Control Board Decision 1641 water quality objectives at Rock Slough should be clarified. There are two water quality objectives at Rock Slough; one is for a water quality threshold of 150 milligrams per liter chloride (mg/L Cl), and one is for a threshold of 250 mg/L Cl. Compliance for the 150 mg/L Cl objective is measured either at CCWD's Pumping Plant I on the Contra Costa Canal, which diverts water from Rock Slough, or at the City of Antioch Water Works on the lower San Joaquin River. Compliance for the 250 mg/L Cl objective is measured at CCWD's Pumping Plant 1, West Canal at Clifton Court Forebay, Delta-Mendota Canal at the CVP Jones Pumping Plant, Barker Slough at North Bay Aqueduct Intake, and Cache Slough at the City of Vallejo Intake. While Table 7-13 of the draft EIS presents these details correctly, the discussion of the analysis and the presentation of water quality effects of the project alternatives in the draft EIS (in Tables 7-14, 7-15, 7-45, 7-46, 7-72, 7-73, 7-99, 7-100, 7-128, and 7-129) indicate that water quality at Old River at Rock Slough was evaluated to determine effects of the project alternatives. As a modeling solution to the difficult problem of estimating water quality at Pumping Plant 1, water quality at Old River at Rock Slough is often used, with an appropriate transfer function, to estimate Pumping Plant 1 water quality. This is necessary because water quality is often different at Pumping Plant 1 than measured in Old River, due in part to local effects. We suggest that these details be clarified in the presentation of results, and that the relationship of the water quality analysis presented to the correct compliance location be carefully described.

CCWD2-6

CCWD2-7

CCWD2-8

Furthermore, compliance with the water quality objectives does not appear to be correctly evaluated in the Draft EIS. Compliance with the Rock Slough objectives is not measured by long-term averages of monthly values; it is measured by comparing the total number of days in excess of the given objective. The allowable number days water quality is allowed to exceed 150 mg/L chloride varies with water year type. Water quality in excess of 250 mg/L chloride is never allowable. Evaluation of both components of the objective requires evaluation of the annual total number of days in excess of each threshold value; evaluation of long-term average by month does not suffice for either. We are confident that the expanded reservoir could and would be operated to meet the D-1641 water quality objectives, just as the current Shasta Reservoir is operated to do so. However, the discussion of the objective should be clarified to ensure that the analysis has been done carefully. The suggested analysis is likely possible with the DSM2 runs already performed for the project alternatives.

Ms. Katrina Chow, Bureau of Reclamation Comments on Draft Feasibility Report for Shasta Lake Water Resources Investigation September 30, 2013 Page 3

CCWD2-9

Also, the values presented in Table 7-14 should be verified as values of less than I milligram per liter chloride rarely occur in Old River.

Description of CCWD Facilities and Operations

CCWD2-10

The table of CalSim II modeling assumptions (Modeling Appendix, Table 2-1) categorizes CCWD demand as "south of the Delta", however, CCWD demands should be categorized as "in-Delta". CCWD operates four intakes located in the Delta independently of the Jones Pumping Plant. CCWD is an in-Delta user of CVP water, and also diverts water under other water rights held by CCWD. Similarly Los Vaqueros Reservoir should not be included as a Delta export. Water diverted into Los Vaqueros Reservoir is later released to offset CCWD's in-Delta diversion of CVP water supply. We recognize that these may seem to be minor semantic points of difference, but we encourage the Reclamation team to help clarify the complicated plumbing in the California Delta through careful presentation of information in the final EIS document. Again, please feel free to call CCWD for more input on this subject.

CCWD2-12

CCWD2-11

Thank you for this opportunity to provide input to the scoping process. If you have any questions, please call me at (925) 688-8083, or call Matt Moses at (925) 688-8106.

Sincerely,

Leah Orloff

Water Resources Manager

LO/MM:wec

# Responses to Comments from Contra Costa Water District

**CCWD2-1:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."

CCWD2-2: This comment appears to be related to allocation of costs to project beneficiaries, which is outside the scope of the DEIS. A response to this comment is not required under NEPA because the comment does not raise a significant environmental issue (NEPA Regulations 40 CFR Part 1503.4(b)). As described in COST/BEN-5, "Potential Project Financing," an updated cost allocation was included in the SLWRI Final Feasibility Report. However, this comment will be considered in development of evaluations for the Final Feasibility Report.

Please refer to Master Comment Response COST/BEN-5, "Potential Project Financing."

**CCWD2-3:** Reclamation agrees that results of SLWRI evaluations show that CCWD water supply and Delta water quality at CCWD intake locations would not vary substantially under SLWRI action alternatives.

**CCWD2-4:** Please refer to Master Comment Response COST/BEN-1, "Intent of EIS and Process to Determine Federal Interest."

CCWD2-5: Water operations under SLWRI action alternatives are described in DEIS in Chapter 2, "Alternatives," Section 2.3, "Action Alternatives," and results of changes in deliveries to SWP Table A contractors under various project alternatives are shown in Table 6-29 in Chapter 6, "Hydrology, Hydraulics and Water Management." As shown in this table 6-29, SWP deliveries would increase under all alternatives except CP3 where SWP Table A deliveries would reduce by 8 TAF (0 percent) on an annual average basis and by 22 TAF (-1 percent) during dry and critical years, a difference of less than one percent. This is only seen under CP3 where the additional storage is retained for agricultural water supply reliability and to expand the cold-water pool in Shasta Reservoir for fisheries benefits with no additional water reserved for M&I.

As described in Chapter 2, the SLWRI No-Action Alternative and action alternatives would not include changes to any rules and regulations that govern operations at Shasta Dam in the form of flood control requirements, flow requirements, water quality requirements, water supply, and hydropower commitments. SLWRI alternatives would not increase existing maximum CVP or SWP contract quantities or expand the place of use and would not include changes to the CVP and SWP Coordinated Operations Agreement. However, through expanding Shasta Dam and reservoir, the CVP could operate more efficiently and store more water under its existing water rights during wet years. This could result in reductions in Delta surplus flows and unstored water for exports that would have otherwise been available for export for the SWP. Reclamation would not be required to mitigate for these decreases in deliveries, since they would be the result of the CVP exercising a greater portion of its existing water rights.

**CCWD2-6:** The editorial recommendations submitted by the comment author have been incorporated into Chapter 7, "Water Quality."

**CCWD2-7:** The following text has been incorporated into Chapter 7, "Water Quality," Section 7.3.2, "Criteria for Determining Significance of Effects," per the comment to clarify the discussion of water quality metrics and impact analysis methodology. "Delta Salinity standards are typically specified as a function of the daily salinities at a location, such as number of days or 14-day running daily averages. The daily values of salinity are influenced by daily variations in delta inflow, interior delta

diversions, and export pumping. The mean monthly flow data from CalSim-II used in the DSM2 model does not include any representation of these daily variations. Because of this the DSM2 simulated daily salinities are not the result of these unknown variations but are a result of the DSM2 simulation approaching a monthly equilibrium. This simplification of the system simulation means that it is not appropriate to use the daily output from the DSM2 model to directly evaluate the ability of the system to meet daily salinity based regulatory requirements in the Delta. Because of these limitations the change in mean monthly salinities is compared to mean monthly standards as an indicator of the potential impact of the projects on meeting the standards."

**CCWD2-8:** The following text has been incorporated into, "Criteria for Determining Significance of Effects," per the comment to clarify the discussion of water quality metrics and impact analysis methodology. "Delta Salinity standards are typically specified as a function of the daily salinities at a location, such as number of days or 14-day running daily averages. The daily values of salinity are influenced by daily variations in delta inflow, interior delta diversions, and export pumping. The mean monthly flow data from CalSim-II used in the DSM2 model does not include any representation of these daily variations. Because of this the DSM2 simulated daily salinities are not the result of these unknown variations but are a result of the DSM2 simulation approaching a monthly equilibrium. This simplification of the system simulation means that it is not appropriate to use the daily output from the DSM2 model to directly evaluate the ability of the system to meet daily salinity based regulatory requirements in the Delta. Because of these limitations the change in mean monthly salinities is compared to mean monthly standards as an indicator of the potential impact of the projects on meeting the standards."

**CCWD2-9:** Table 7-14 in Chapter 7, "Water Quality" has been found to be incorrect and hence revised accordingly.

**CCWD2-10:** The editorial recommendations submitted by the comment author have been incorporated into the Modeling Appendix, Chapter 2, "CalSim-II."

**CCWD2-11:** The editorial recommendations submitted by the comment author have been incorporated into the Modeling Appendix, Chapter 2, "CalSim-II."

CCWD2-12: Comment noted.

# 33.9.3 City of Shasta Lake

COSL1

From: Tom Miller <Tom.Miller@ci.shasta-lake.ca.us>

Date: July 18, 2013, 4:18:19 PM PDT

To: < kchow@usbr.gov >, < sharral@usbr.gov >

Cc: "John Duckett (John.Duckett@ci.shasta-lake.ca.us)"

< iduckett@cityofshastalake.org >, < iskenny@lawksn.com >, "Trent Drenon" (Trent.Drenon@ci.shasta-lake.ca.us)" <tdrenon@cityofshastalake.org>

Subject: Correction Requested in the DEIS - SLWRI

7-18-13

Ms. Chow (Sheri, could you please pass this email on to Brian Person? Thx)

I began the task of reviewing the DEIS. I was disheartened to see the report incorrectly represents that the City of Shasta Lake's electricity is supplied PG&E. Chapter 21, Utilities and Service Systems, 21-18, lines 24-26.

It should read something like this:

COSL1-1

The City of Shasta Lake is a load serving entity and retail distribution provider of electrical energy to the city's 4,500 electric customers. The City of Shasta Lake owns and operates a looped 115kV system, which delivers energy to two 115/12kV distribution substations that step the voltage down to 12 kV for delivery to the city's end-users. The system is managed by the city and assisted by Redding Electric Utility for ancillary services. In total, the city's distribution system has 15 miles of 115kV sub-transmission and approximately 67 miles of overhead and underground 12kV distribution lines. The city has two points of delivery one made to the Flanagan 230/115kV transmission substation and the other at the Keswick Dam switch yard. The city has a base resource allocation from Western Area Power Administration who delivers energy to the city from Shasta and

COSL1-2 By the way, the city is the retail electrical energy provider to Digger Bay Marina and the Centimudi Boat Ramp.

It is important to the city that historical recognition be given to Shasta Dam Area Public Utility District, the city's (electric distribution system) predecessor, having taken 13.8kV service from Bureau of Reclamation at Shasta Dam.

COSL1-3

I would be happy to provide any other information about the city's electric utility upon

Respectfully,

Tom Miller

Electric Utility Director City of Shasta Lake 4332 Vallecito Shasta Lake CA 96019 (530) 275-7457 office (530) 917-9711 cell tmiller@cityofshastalake.org

## Responses to Comments from City of Shasta Lake

**COSL1-1:** The editorial recommendations submitted by the comment author have been incorporated into Chapter 21, "Utilities and Service Systems," Section 21.1.5, "Electrical Service and Infrastructure," of the EIS.

**COSL1-2:** The editorial recommendations submitted by the comment author have been incorporated into Chapter 21, "Utilities and Service Systems," Section 21.1.5, "Electrical Service and Infrastructure," of the EIS.

**COSL1-3:** The editorial recommendations submitted by the comment author have been incorporated into Chapter 21, "Utilities and Service Systems," Section 21.1.5, "Electrical Service and Infrastructure," of the EIS.

# 33.9.4 City of Shasta Lake

City of Shasta Lake

P.O. Box 777 • 1650 Stanton Drive Shasta Lake, CA 96019 Phone: 530.275.7400 Fax: 530.275.7412

Website: cityofshastalake.org

COSL2

E-Mail: BOR-MPR-SLWRI@usbr.gov

September 25, 2013

Katrina Chow, Project Manager Bureau of Reclamation Planning Division 2800 Cottage Way Sacramento CA 95825-1893

RE: Draft Environmental Impact Statement for Shasta Lake Water Resources Investigation

Dear Ms. Chow:

The City of Shasta Lake (City) thanks the Bureau of Reclamation (BOR) for the opportunity to provide comments on the Draft Environmental Impact Statement (DEIS) for the Shasta Lake Water Resources Investigation.

The City is located immediately south/southeast of the Shasta Dam complex and is literally and figuratively the Gateway to the Dam. Shasta Dam Boulevard (SR 151) is the main access road from Interstate 5 to the Dam and serves as the main thoroughfare through the City's Central Business District. SR 151 continues west past the City limit and loops to the north past Lookout Point (where the three "Shastas" can be seen) to the Shasta Dam Visitor's Center.

The north-south access road to the Dam is Lake Boulevard, which intersects with SR 151. Lake Boulevard continues directly north around to the Dam and is the shorter route to access the Dam. The northerly City limit on Lake Boulevard is ¼ mile from Kennett Road, the access road to Centimudi Boat Ramp.

The City exists largely because of the Initial construction of the Dam. Its predecessor organizations, the Shasta Dam Area Public Utility District and the Summit City Public Utility District, were created to gain access to potable water deliveries and power generated by the Dam. It shares a symbiotic relationship with the Dam because of these connections. The City has received water and power from the Dam since 1946.

Because of its proximity to the Dam, the configuration of the existing roadways, and the interrelationship of water and power services, the City is extremely concerned about the overall impact this massive construction project will have on the City and its citizens, both during and after construction.

COSL2-2 Accordingly, after review of the DEIS, the City has identified several areas that warrant additional analysis, mitigation measures and comment by BOR.

33.9-16 Final - December 2014

#### SOCIOECONOMIC IMPACTS

COSL2-2 CONTD. Chapter 16 of the DEIS, Socioeconomics, Population and Housing, does not even mention the City of Shasta Lake. It is obvious, as the City of Shasta Lake is the closest community to the project construction site, we would bear a disproportionate share of the impacts associated with reduction in air quality, increased traffic flow, degradation of streets and roadways from increased traffic, exposure to hazardous materials, and loss of tourism revenues related to the elimination of the Dam tours and other recreational facilities.

By nearly every measure currently in place in the State of California, the City is considered a disadvantaged community. The State defines "disadvantaged community" as a community with a median household income less than 80 percent of the statewide average. According to the U.S. Census Bureau, the State median Income (2007-2011) was \$61,632; whereas, the median income for the City was \$42,901 – 69 percent of the State median.

COSL2-3

According to the California Employment Development Department, Labor Market Information Division, the California unemployment rate was 8.8% in August 2013, compared to 10.2% for Shasta County. The unemployment rate for the City was 13.9%, the highest percentage of all incorporated cities within the County.

This disparity is further intensified by the recent economic downturn, which has had a detrimental impact on Shasta County in general, and has specifically impacted individuals in disadvantaged communities with limited job skills.

COSL2-4

With respect to the impact on tourism and recreational activities, the City has serious concerns regarding the socioeconomic impacts of the project, both during and post project. Currently, thousands of visitors throughout the year visit the Dam to take the tours and utilize the boat ramp and docking facilities at Centimudi and Digger Bay Resort. Cessation of the tours and closures of the boat ramps would result in lost revenue for local stores, service stations, and supermarkets. The majority of this economic disruption would be borne by the City.

Pursuant to federal Environmental Justice regulations, the DEIS should discuss specific outreach strategies used to contact low-income members of our City. The DEIS should discuss what personal interviews were conducted with homeowners, tenants, businesses, business organizations, local schools and public health agencies within our City. Describe innovative methods used to overcome cultural, economic and other barriers and how members of this disadvantaged community were specifically encouraged to participate in the review process.

COSL2-5

Please provide the City with a list of all homeowners, tenants, businesses, business organizations, local schools and public health agencies within our City limits who received, either by mail or by hand-delivery, written materials and/or meeting notices to inform them of the project, how they could obtain additional information about the project and where a hard-copy of the entire document, including appendices and referenced documents, could be viewed.

#### WATER

There are sections of the DEIS that contain incorrect statements or misrepresentations regarding water.

COSL2-6

<u>Chapter 21, page 21-5, lines 18-20</u> states the City has an input capacity of 5.0 Million Gallons per day (MGD) of raw water. This is incorrect. Pursuant to the <u>Supplemental Water Supply Feasibility Study</u> referenced below, the City's maximum input capacity of the 16-inch pipe in the face of the Dam is 9.3 MGD. Please make this correction.

## Shasta Lake Water Resources Investigation Environmental Impact Statement

COSI 2-7

Chapter 21, page 21-8, under Shasta Community Services District (SCSD), states, "SCSD...was formed in 1959 to supply water for domestic use and fire protection for the City of Shasta Lake and adjacent developed areas...". This is incorrect. We believe the authors mean the town of Old Shasta, which is a State of California Historic area and is within the boundaries of the Shasta CSD. There is no connection between the Shasta CSD and the City of Shasta Lake and never has been. Please make this correction.

#### City of Shasta Lake Water Supply System

COSL2-8

The City's present water supply system consists of an intake piping system from inside Shasta Dam, a raw water pump station at the base of the dam, a treatment plant above Fisherman's Point, and a transmission main along Lake Boulevard. This water is pumped to the City's water treatment plant above the Dam to the east and in turn, the City supplies treated water to the Shasta Dam Administrative and Construction Maintenance facilities complex as well as residents and businesses of the City who depend on it for their livelihoods. Failure of any portion of the City's water supply or transmission system would be catastrophic to the City.

The City's water intake facilities utilize some of the ten-inch pipelines that are associated with the eight-foot diameter Dam spillway discharge tubes at the 950 and 750 foot elevations (four existing connections at the 950 foot level and three existing connections at the 750 foot level). In addition to the existing connections, there are eight tap locations at the 850 foot level which could be connected to the City's raw water intake system.

The current net design capacity available to the City of Shasta Lake is estimated at about 9.0 MGD. According to the City's General Plan and 2004 update to the City's Master Water Plan, the City will need to develop a new water supply system that is capable of being expanded to provide up to 9.5 MGD of treated water on a maximum daily demand basis.

COSL2-9

As recommended in the Supplemental Water Supply Feasibility Study, March 2007, prepared by Pace Civil, Inc. for the City of Shasta Lake, Bella Vista Water District and Mt. Gate Community Services District, connections to one additional ten-inch pipeline at the 750 foot level and six additional ten-inch pipelines at the 850 foot level would provide sufficient flexibility and reliability to yield sufficient supplemental raw water flow needed for the City of Shasta Lake and Mt. Gate Community Services District at lake level elevations of about 865 feet and higher. Based on preliminary discussions with BOR at the time the report was prepared, it appears feasible to construct the needed piping improvements within the existing Dam corridors, similar to the retrofit piping that was installed in 1958.

The DEIS needs to analyze this option and discuss how the increase in the impounded water and enlargement of the cold water pool (CWP), particularly in CPs 3 through 5, will impact and enable the City's ability to secure an additional long-term water supply (see water supply discussion below).

As stated above, the raw water supply for the City is via a 16-inch pipe attached to the face of the Dam with intakes at the 950 and 750 foot levels. Significant construction work is proposed in the area of these intakes to alter the Temperature Control Device and raise the Dam crest. The DEIS needs to include mitigation measures to ensure that turbidity in the area of these intakes created by the construction work will be minimized and identify available remedies in the event turbidity exceeds statemandated maximum acceptable levels.

COSL2-10

Significant turbidity increases could result in the cost of additional treatment to not just marginally increase, but increase by multiplicative factors. The DEIS needs to analyze impacts to the City in the event additional treatment is required to remove turbidity from our drinking water and identify the method of reimbursement to the City for costs incurred as a result of the requirement for additional treatment.

COSI 2-11

The DEIS needs to include mitigation measures to protect the City's entire water treatment and transmission infrastructure, including the water intakes and pipelines inside the Dam, exposed intake pipeline on the face of the Dam, the raw water pump station at its base, and all associated water transmission and electrical facilities between the Dam, the water treatment facility, and distribution system intertie at Lake Boulevard and Red Bud Lane.

COSL2-12

There are other municipal water supply intakes in Shasta Lake. The DEIS needs to explicitly address these intakes and include appropriate mitigation measures to ensure impacts are less than significant.

#### City of Shasta Lake Water Contract

The City has an executed water transfer agreement with a local Settlement contractor who has a diversion below the Dam. This agreement provides for the transfer of up to 2,000 acre feet (AF) per year of Central Valley Project (CVP) water above the Dam to the City's intakes. BOR has not approved this transfer because of purported impacts to the CWP under some water supply scenarios.

COSL2-13

The City's challenge and goal has been to use the most cost effective method to maintain the integrity of the CWP while protecting the City against a water shortage during drought periods and preparing for inevitable growth. The City has investigated several options to meet this goal; however, the methods investigated to date either would not fully mitigate the depletion of the CWP or are not economically feasible. In addition, as documented in the City's 2004 update to the Master Water Plan (Evaluation of Feasibility for Ground-Water Supply for the City of Shasta Lake), the geology under the City precludes the development of any commercially viable fresh water wells. The City is reliant solely on surface water allocations and transfers.

COSL2-14

As partial mitigation for the social disruptions, traffic impacts, and revenue losses predicted for this disadvantaged community, the City requests BOR dedicate 4,600 AF of the newly impounded water to the City's base allocation of 4,400 AF, increasing its total long-term allocation to 9,000 AF. This would secure a sufficient water supply through build-out of the City's General Plan for new and expanded residential, public, commercial and industrial uses. This dedication should include the same rights in terms of cutbacks and transfers as was afforded to a local private entity that received such an allocation in connection with the removal of the Seltzer Dam on Clear Creek.

# ELECTRICAL SERVICE / POWER

There are several sections in the DEIS and supporting documents that contain incorrect statements or misrepresentations regarding electrical facilities and power.

Chapter 21, Section 21.1.5 - page 21-17 - Electrical Service and Infrastructure, beginning with line 40, cosl2-15 should be corrected to read: "Pacific Gas and Electric Company (PG&E), the City of Redding (COR), and the City of Shasta Lake (COSL) provide electrical service to Shasta Lake and vicinity."

The existing sentence implies that PG&E is the only electric service provider in the area. This is incorrect. The City of Shasta Lake has been providing electric service to the Shasta Dam Area since 1946. Its predecessor, the Shasta Dam Area Public Utility District, began by taking 13.8kV service from the BOR at the Dam.

Chapter 21, Section 21.1.5 - page 21-18 - beginning at line 24, should be revised to read: "The City of COSL2-16 Anderson, outlying rural areas of Shasta County, and Tehama County (Red Bluff and Corning) receive electrical service from PG&E."

## Shasta Lake Water Resources Investigation **Environmental Impact Statement**

The following paragraph should be added:

COSL2-17

"The City of Shasta Lake is a load serving entity and retail distribution provider of electrical energy to the City's 4,500 current electric customers. The City of Shasta Lake owns and operates a looped 115kV system, which delivers energy to two 115/12kV distribution substations that step the voltage down to 12kV for delivery to the City's end users. The system is managed by the City and assisted by the City of Redding Electric Utility for ancillary services. In total, the City's distribution system has 15 miles of 115kV sub transmission and approximately 67 miles of overhead and underground 12kV distribution lines. The City has two points of delivery; One made to the Flanagan 230/115kV transmission substation and the other at Keswick Dam switchyard. The City has a base resource allocation from the Western Area Power Administration (WAPA), who delivers the energy to the City from Shasta and Keswick Dams. The City also has a supplemental energy agreement with the City of Redding. The City of Shasta Lake is also the retail energy provider to the Digger Bay Marina, and the Centimudi Boat Ramp and the Fisherman's Point Picnic Area Facilities."

COSL2-18

In addition, as partial mitigation for the social disruptions, traffic impacts, and revenue losses predicted for this disadvantaged community, we request that BOR grant the City's Electric Utility First Preference customer status (as other similarly situated utilities have been granted) to the added generation output attributed to the increased reservoir capacity.

The City of Shasta Lake Electric Utility will provide additional comments under separate cover on issues directly related to power production as portrayed in the DEIS.

#### TRAFFIC AND TRANSPORTATION

As stated in the DEIS, Chapter 20, page 20-9, import of fill and construction materials and export of construction waste would result in 95-177 truck trips per day for up to 5 years; export of vegetation would result in 52-75 round trips per day for up to 3.5 years; and the construction labor force would add 300-360 daily round trips for up to five years. This has the potential to result in significant impacts to the City's circulation system.

COSL2-19 Currently, SR 151 and Lake Boulevard loop from their intersection near the westerly edge of the City past the Shasta Dam complex and back. The plan suggests that significant alterations will take place in the area of the current roundabout and rotunda near the security offices associated with the reconstruction of the left abutment of the Dam.

The DEIS needs to discuss specific efforts that will be made to ensure that this loop configuration remains operational and will be continued throughout the construction process. The City believes maintaining this loop configuration is vital to traffic flow for local users, recreational users, cyclists, sportsmen, law enforcement, fire and any other users of the facility.

COSL2-20

The project proposes to move in excess of 100,000 cubic yards of rock and gravel through City streets for up to five years. The DEIS states there are adequate quarries to provide the needed material. There also is significant exposed rock between the existing high water mark and the proposed high water mark which could be excavated and barged to the Dam, thereby eliminating the need to disrupt surface streets. The DEIS needs to discuss this resource and method of material movement as an alternative that would lessen environmental impacts.

The DEIS references SR 151 and Lake Boulevard as the main routes to be used in conjunction with construction of the proposed project. Because SR 151 runs through the City's Central Business District, the preferred route for the movement of personnel and materials through the City is via Pine Grove Avenue west to Lake Boulevard.

COSL2-21

The City is concerned that Pine Grove Avenue and Lake Boulevard may not be structurally sufficient to handle the additional heavy vehicle trips that will be needed to transport materials. Mitigation should require analysis of the structural integrity of City roadways, particularly Pine Grove Avenue and Lake Boulevard, to ensure they are sufficient to accommodate the weight and frequency of project traffic. The analysis should be completed prior to commencing construction activities.

COSI 2-22

Because of the number and frequency of trucks that would travel SR 151, should that become the main access route for project-related traffic, there are several intersections that would operate at an unacceptable level of service (LOS). For example, the intersection of SR 151 and Shasta Way/Shasta Street; intersections along SR 151 between Cascade Boulevard and the Union Pacific Railroad within the City's Central Business District; and the intersection of SR 151 and Shasta Park Drive. These intersections need to be analyzed in terms of vehicular, bicycle and pedestrian safety with appropriate mitigation measures applied. Sight distance is a particular concern at many of these intersections.

COSL2-23

Mitigation measures should include the requirement for a pre-construction meeting between BOR and the City, and the requirement that the City be involved in review and approval of the Traffic Control and Safety Assurance Plan identified as mitigation in the DEIS

In addition, the City requests mitigation to require a Road Maintenance Agreement between BOR and COSL2-24 the City outlining a repair schedule and/or compensation methods for the repair of roadways that are degraded as a result of project-related traffic.

As a general comment, it should be noted that the underpass of the Union Pacific Railroad on SR 151 COSL2-25 has an impeded vertical clearance of 13'-9" which may divert additional large loads to Pine Grove Avenue.

#### HAZARDS / HAZARDOUS MATERIALS

The City is concerned with the introduction and transportation of highly flammable and/or explosive materials within a high fuel load area with limited access and surrounding steep terrain. The DEIS needs to provide the specific type, quantity and frequency of delivery of explosives and other hazardous waste and materials to and from the project site.

Lake Boulevard will be used as a main access route to the Dam during project construction. This stretch of roadway is developed primarily with single-family residential uses. In addition, Mountain Lakes High School is located on the northeast corner of Lake Boulevard and SR 151, and a heavily used community park is located just east of this intersection. A hazardous materials spill or fire in this area would be catastrophic.

Chapter 9, Hazards and Hazardous Materials and Waste, discusses this issue under Impact Haz-4 and identifies "Exposure of Sensitive Receptors to Hazardous Materials" as potentially significant.

Mitigation Measure Haz-4 includes the requirement that a public liaison be appointed to communicate hazardous material transportation routes related to project activities with the public. The mitigation measure should specifically state that a public meeting will be conducted at a location within the Čity of Shasta Lake.

#### Shasta Lake Water Resources Investigation **Environmental Impact Statement**

COSL2-27

The mitigation measure also states, in part, "Reclamation will coordinate hazardous materials transportation routes with...a representative from the Shasta Lake Elementary School..." Shasta Lake School is only one of the schools within the City limits. This list needs to be amended to include Gateway Unified School District, Central Valley High School, Mountain Lakes High School, Grand Oaks Elementary School and Shasta Lake School.

Although Chapter 22, Table 22-1 (Key Public Service Providers) includes Shasta Lake Fire Protection District under Fire Protection Services, no other section of the DEIS includes any reference to them. Chapter 22, Page 22-4, Line 6 needs to be revised to state "The Shasta Lake Fire Protection District provides fire protection within the City of Shasta Lake,..."

The Shasta Lake Fire Protection District (SLFPD) would be the first responder in the event of an emergency within the City. All applicable Chapters of the DEIS, including but not necessarily limited to Chapter 9 and Chapter 22, need to reference SLFPD in discussions of emergency services and fire protection.

COSL2-28

Mitigation Measure PS-2 (Provide Support to Public Services Agencies) states, "Reclamation will provide affected public services providers (e.g., law enforcement, fire protection, emergency services) with sufficient funding and support to ensure that levels of public services are not substantially degraded by construction activities. Reclamation will coordinate with affected providers to develop a mutual understanding of the amount and schedule of financial and administrative support required to reduce this impact to a less-than-significant level."

Provisions need to be included to ensure SLFPD, in addition to all other local services providers, is included in all discussions regarding the provision of emergency and fire protection services related to this project and all discussions related to reimbursement agreements for such services.

#### RECREATIONAL FACILITIES

COSL2-29

Centimudi Boat Ramp is a heavily used fishing and recreational access point for Lake Shasta near the Dam. Based on the past 25 years of water levels and taking into consideration the new high water mark proposed in CP-3 through 5, the DEIS should discuss how many days it is expected that the existing lower boat ramp will be under water on an annual basis. Also, it is the City's view that a certain amount of the new impound should be reserved for recreational use above the Dam until September 1 of each year. In addition, the City requests staging areas during construction be situated so parking at the boat ramps remains functional throughout the duration of project construction.

COSI 2-30

COSL2-31

The U.S. Forest Service (USFS) operates and/or permits numerous boat ramps, public accesses, cabins, and campgrounds around the Lake. The City recently learned the USFS is proposing to reduce the number of marinas on the Lake if the Lake level is raised. The USFS has been moving away from COSL2-32 developments that require maintenance and toward human exclusion. This is not appropriate on a manmade lake. The USFS should maintain and/or replace existing cabins, cabin leases, campgrounds, boat launches and docks, including any that are impacted by this project. Any reduction of private recreational opportunities on or around the Lake is not compatible with the goals of our City for future viability and growth.

COSI 2-33

The DEIS is devoid of descriptions of what will exist for recreational facilities upon project completion, and this needs to be further analyzed with appropriate mitigation measures incorporated. Secondary economic effects to the City of Shasta Lake as a result of the loss of resorts, marinas, campgrounds, restaurants, motels, grocery stores and service stations needs to be addressed.

COSL2-34

In addition, security devices have been added to each end of the Dam. The design of the raised roadway should consider security enhancements to the railings along the roadway and to the elevator towers above the powerhouse so tourists and local citizens could once again enjoy freer vehicular access across the Dam's roadway.

#### REAL ESTATE

The DEIS notes that private property takings are a concern. This understatement fails to delineate an acceptable path forward. BOR should have procedures in place to ensure that private property owners are made whole and those businesses desiring to continue to operate are accommodated. The DEIS needs to include a description of the property acquisition processes. This will improve transparency and allow interested parties to make informed decisions.

COSL2-35

The DEIS notes that raising the Dam 18.5 feet would inundate 160 buildings. Residences within 20 feet of the new pool elevation may also be relocated. The City seeks assurances that all such affected properties will be replaced in kind. Private property owners shall end up with acreage, frontage, improvements and access that equals or exceeds their existing holdings. The City understands such a provision would necessitate a special act of Congress. The DEIS should outline congressional actions which would be necessary to continue private property ownership at a new, higher elevation.

COSL2-36

There may be instances where septic systems and/or leach fields may be above the new high water mark but not have sufficient setbacks to meet State water quality mandates within the buffer zone. Provisions need to be made to relocate these facilities out of the buffer zone or provide exemptions that would allow them to remain.

#### **CUMULATIVE IMPACTS**

The DEIS does not include other proposed local projects in the cumulative impact analysis. There are currently at least two pending projects that should be considered cumulatively, and BOR should contact all local jurisdictions to discuss approved and pending projects that should be included in the analysis.

COSL2-37

For example, Shasta County is in the process of completing a Draft Environmental Impact Report (DEIR) for Moody Flats Quarry. This project site is adjacent to the City's northerly city limit, southeast of the Shasta Dam complex. The proposed Quarry also proposes to utilize SR 151 during a portion of their construction operations. In addition, the City is in the process of completing a DEIR for a mixed-use development on 600 acres at the northeasterly section of the City. This project could result in the construction of approximately 1,600 dwelling units and 200,000 square feet of commercial uses and should be considered in the cumulative impact analysis.

#### CONCLUSION

Due to the extensive nature of this project, it is anticipated BOR will be required to provide additional information, analysis and supporting studies and documentation in response to comments on the DEIS. For this reason, the City requests recirculation of the revised DEIS following incorporation of the additional information to allow the public opportunity for additional review and comment.

COSL2-38

Due to the voluminous nature of the DEIS and anticipated outreach to other members and groups in our community who may not have had an ample opportunity to review the DEIS, as discussed under Socioeconomic Impacts above, the City requests the revised DEIS be recirculated for a minimum of 90 days. Because many of our citizens do not have access to a computer or reliable transportation, the City requests a copy of the revised DEIS be provided to the Shasta Lake Gateway Library, 1646 Stanton Drive, Shasta Lake, CA, for public review.

#### Shasta Lake Water Resources Investigation Environmental Impact Statement

COSL2-38 If you have any questions, please feel free to contact me or John Duckett, City Manager, at CONTD. 530.275.7427.

Sincerely,

7...

Mayor

Members of the Shasta Lake City Council John S. Kenny, City Attorney John N. Duckett, Jr., City Manager Tom Miller, Assistant City Manager Jeff Tedder, City Engineer

William Bishop, Water Treatment Superintendent
Carla L. Thompson, AICP, Development Services Director
Adrian Rogers, Chief, Shasta Lake Fire Protection District

Brian Person, Area Manager, Bureau of Reclamation Northern California Area Office

#### Responses to Comments from City of Shasta Lake

COSL2-1: Mayor Farr, Reclamation thanks you for your detailed and thoughtful letter in response to the Draft Environmental Impact Statement (DEIS) for the Shasta Lake Water Resources Investigation (SLWRI). This document evaluates the potential physical, biological, cultural, and socioeconomic effects of implementing alternatives to modify the existing Shasta Dam and Reservoir, including taking no action. As described in your letter, the City of Shasta Lake (City) is located immediately south/southeast of the Shasta Dam complex, and serves as a "Gateway to the Dam." The City and the Shasta Dam complex share a long and interconnected history, and the City has received power from the Dam since 1946.

Reclamation recognizes that the City is not just located in the primary study area, but that actions taken at the Dam can have swift and substantial impacts on the residents of the City. Many of the homeowners, tenants, businesses, business organizations, local schools, and public health organizations located in the City could be considered "disadvantaged" by a variety of socioeconomic definitions, and Reclamation has made every effort to address comments from the City on economic disruptions and concerns about environmental justice. Comments about the City's water contract, electrical service, traffic/transportation, recreation, and real estate have also been added to the public record and given responses where required by NEPA.

The diligent and continued efforts of City staff and elected officials to participate and contribute to the planning efforts of the SLWRI have been critical to the effective refinement of the DEIS, and will be included in the Final Environmental Impact Statement (Final EIS).

Reclamation welcomes the continued involvement of the City going forward thorough the planning process.

COSL2-2: Potential impacts related to air quality, traffic, hazardous materials, loss of tourism revenues, and recreation are discussed in Chapter 5, "Air Quality and Climate;" Chapter 20, "Transportation and Traffic;" Chapter 9, "Hazards and Hazardous Materials and Waste;" Chapter 16, "Socioeconomics, Population, and Housing;" and Chapter 18, "Recreation and Public Access."

Please refer to Master Comment Response SOCIOECON-1, "Socioeconomic Effects to Shasta Lake Vicinity."

- **COSL2-3:** Please refer to Master Comment Response EJ-1, "Potential Effects to Disadvantaged Communities."
- **COSL2-4:** Please refer to Master Comment Response SOCIOECON-1, "Socioeconomic Effects to Shasta Lake Vicinity."
- **COSL2-5:** Please refer to Master Comment Response EJ-1, "Potential Effects to Disadvantaged Communities."
- COSL2-6: The commenter cited but did not provide a Supplemental Water Supply Feasibility Study (March 2007) in support of modifying the referenced City of Shasta Lake intake capacity. The information the comment author has provided in support of assertions made in the comment is not known to Reclamation at the time of this Final EIS and could not be found through library database queries, internet research and research in the Lead Agency data archives. The EIS did however rely on the best available science in support of the analysis that the comment is directed and absent any additional information to substantiate this comment, no response is required.
- **COSL2-7:** Chapter 21, "Utilities and Service Systems," Section 21.1.1, "Water Supply," of the EIS has been revised.
- **COSL2-8:** For all action alternatives, Chapter 21, "Utilities and Service Systems," Section 21.3.4, "Direct and Indirect Effects," of the DEIS describes Impact Util-1 (Damage to or Disruption of Public Utility and Service Systems Infrastructure), as it relates to the City of Shasta Lake.

Public utilities or service systems could be disrupted during construction activities that require a temporary shut-off for safety or mechanical purposes. This effect would be most likely to occur in the Shasta Lake and vicinity portion of the primary study area because of the amount of project construction in that area relating to local utilities and service systems relocation activities. Occasional disruptions of public utilities could also occur in the upper Sacramento River area because of

construction activities at Shasta Dam that require temporary power outages. Construction activities in the immediate vicinity of the Shasta Dam compound could occasionally affect the treatment and delivery of water to the City of Shasta Lake. This impact would be short term and would continue intermittently until project construction activities were completed. For CP 1, construction would take approximately 4.5 years. For CPs 2, 3, 4, and 5, construction would take approximately 6 months longer.

To minimize potential disruption of service and damage to the utilities and service systems infrastructure, project contractors would follow local, State, and Federal regulations pertaining to utilities and service systems location and construction. However, the magnitude of the project and number of utilities and service systems requiring relocation make it likely that utilities or service systems could be damaged or services disrupted. Therefore, this impact would be potentially significant.

Mitigation to avoid temporary disruption of service related to Impact Util-1 is described in Chapter 21, "Utilities and Service Systems," Section 21.3.5, "Mitigation Measures," of the DEIS. Implementation of mitigation measures Utility-1 and Utility-2 would reduce Impact Util-1 to a less-than-significant level for all action alternatives.

**COSL2-9:** As described in Chapter 2, "Alternatives," Section 2.2, "No-Action Alternative," of the DEIS, for all Federal feasibility studies of potential water resources projects, the NEPA No-Action Alternative includes existing facilities, conditions, land uses, and reasonably foreseeable actions expected to occur in the study area. Reasonably foreseeable actions include actions with current authorization, secured funding for design and construction, and environmental permitting and compliance activities that are substantially complete. Actions that do not fit within the above definition are not included in the No-Action Alternative or action alternatives. A feasibility study, such as the one referenced by the commenter, does not fit within the above definition.

**COSL2-10:** Please refer to Master Comment Response UR-1, "Effects to Water and Wastewater Infrastructure around Shasta Lake."

**COSL2-11:** There is no anticipated effect on the water quality or infrastructure of utilities downstream from Shasta Dam as a result of the project. The details of downstream water quality protection for intakes will be further developed during subsequent project phases if an alternative is authorized.

Please refer to Master Comment Response UR-1, "Effects to Water and Wastewater Infrastructure around Shasta Lake."

- **COSL2-12:** Please refer to Master Comment Response UR-1, "Effects to Water and Wastewater Infrastructure around Shasta Lake."
- **COSL2-13:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."
- **COSL2-14:** The SLWRI does not include as a primary or secondary objective an increase in base water allocations to local water supply purveyors in the Shasta Lake region. The EIS does evaluate impacts of the No-Action Alternative and all action alternatives on local utilities and provides mitigation measures as appropriate for impacts to local utilities. See Chapter 21, "Utilities and Service Systems," Section 21.3.4, "Direct and Indirect Effects," for a description of the impacts on utilities in the Shasta Lake region.
- **COSL2-15:** Text has been revised in Chapter 21, "Utilities and Service Systems," Section 21.1.5, "Electrical Service and Infrastructure," in the EIS.
- **COSL2-16:** Text has been revised in Chapter 21, "Utilities and Service Systems," Section 21.1.5, "Electrical Service and Infrastructure," in the EIS.
- **COSL2-17:** The editorial recommendations submitted by the comment author have been incorporated into Chapter 21, "Utilities and Service Systems," Section 21.1.5, "Electrical Service and Infrastructure," of the EIS.
- **COSL2-18:** Please refer to Master Comment Response GEN-7, "Rules and Regulations for Water Operations under Action Alternatives."
- **COSL2-19:** Please refer to Master Comment Response TRANS-1, "Potential Construction-Related Effects to Roadways and Traffic Congestion."
- **COSL2-20:** As discussed in Chapter 2, "Alternatives," of the DEIS, potential borrow sources were examined at a preliminary level and would need further sampling and testing to determine suitability and refine quantity estimates. A maximum haul route distance of 20 miles was assumed to evaluate a worst-case scenario of traffic impacts related to haul of borrow materials. Borrow sites will be refined during the final design and permitting phases of the project.
- **COSL2-21:** Please refer to Master Comment Response TRANS-1, "Potential Construction-Related Effects to Roadways and Traffic Congestion."

**COSL2-22:** Please refer to Master Comment Response TRANS-1, "Potential Construction-Related Effects to Roadways and Traffic Congestion."

**COSL2-23:** As discussed in Mitigation Measure Trans-1 in Chapter 20, "Transportation and Traffic" in the DEIS, Reclamation and its primary contractors for engineering and construction will develop a coordinated construction traffic control plan before construction starts to minimize the simultaneous use of roadways by different construction contractors for worker commute trips, material hauling, and equipment delivery, to the extent feasible.

**COSL2-24:** As discussed in Mitigation Measure Trans-5 in Chapter 20, "Transportation and Traffic" in the DEIS,

- The contractor(s) responsible to Reclamation for delivery of borrow material shall identify all proposed haul routes on a map. The map will identify the owner of the rights-of-way (ROW) that are proposed for use as haul routes. The contractor(s) will also prepare a pre-project condition report of the roadway segments to document the roadway conditions before construction.
- The contractor(s) shall notify the owner of the ROW in writing and request conditional approval to use the ROW as a haul route. The contractor(s) shall submit a copy of the written request to Reclamation for Reclamation's file.
- The contractor(s) shall implement the conditions of approval for use of the haul route ROW. Conditions may include constructing repairs to damaged lengths of roadway or the payment of fees to compensate for roadway wear resulting from truck trips. Before commencement of hauling activities, the contractor(s) shall submit a copy of the ROW owner's conditional approval to Reclamation for Reclamation's file.
- Within 90 days after hauling activities are completed (that is the haul route is no longer in use for the project term), the contractor(s) shall submit a project close-out report to Reclamation to document compliance with the conditions of approval. Reclamation will keep the project close-out report on file.

**COSL2-25:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."

COSL2-26: As discussed in Chapter 9, "Hazards and Hazardous Materials and Waste," of the DEIS, implementation of the action alternatives would result in potentially significant impacts to wildland fire hazards, accidental releases of hazardous materials or hazardous waste, and exposure of sensitive receptors to hazardous materials or hazardous waste. Mitigation would be used to reduce impacts associated with the project to a less-than-significant level. The details of project construction and operation as well as the mitigation measures will be further developed during subsequent project phases, if an alternative is authorized.

Mitigation Measure Haz-4 in Chapter 9, "Hazards and Hazardous Materials and Waste," of the EIS has been modified to include coordination with local agencies and organizations to address concerns related to routes that may be used to transport controlled substances (e.g., hazardous materials).

**COSL2-27:** Mitigation Measure Haz-4 in Chapter 9, "Hazards and Hazardous Materials and Waste," of the EIS has been modified to include coordination with local agencies and organizations to address concerns related to routes that may be used to transport controlled substances (e.g., hazardous materials).

**COSL2-28:** Chapter 22, "Public Services," Section 22.1.1, "Fire Protection Services," of the EIS has been modified to reference the Shasta Lake Fire Protection District.

Chapter 9, "Hazards and Hazardous Materials and Waste," and Chapter 22, "Public Services," of the EIS have been modified to include the Shasta Lake Fire Protection District in the discussion of emergency services and fire protection.

Mitigation Measure PS-2 in Chapter 22, "Public Services," of the EIS has been modified to include the Shasta Lake Fire Protection District and all other local service providers in discussions regarding emergency and fire protections services related to the project.

**COSL2-29:** Please refer to Master Comment Response REC-4, "Relocation of Recreation Facilities," and Master Comment Response REC-1, "Effects to Recreation at Shasta Lake."

**COSL2-30:** Please refer to Master Comment Response REC-9, "Relationship Between Recreation and Shasta Lake Water Levels."

**COSL2-31:** As stated in the DEIS Chapter 2, "Alternatives," Section 2.3.8, "Comprehensive Plan Construction Activities," scheduling and sequencing of recreation facility relocation or modification construction

activities will strive to minimize or avoid interruption of public access to recreation sites.

COSL2-32: Please refer to Master Comment Response REC-1, "Effects to Recreation at Shasta Lake," and Master Comment Response FSCABINS-1, "USFS Recreational Residence Tract Cabins in Preliminary Draft EIS and Draft EIS."

**COSL2-33:** Please refer to Master Comment Response REC-1, "Effects to Recreation at Shasta Lake," and Master Comment Response SOCIOECON-1, "Socioeconomic Effects to Shasta Lake Vicinity."

COSL2-34: Thank you for your comment on the DEIS for the SLWRI, we appreciate your time in responding to the document. Future security procedures and policies at Shasta Dam are outside the scope of this project. The designs for the proposed dam raise provide similar features as provided on the existing dam crest, including safety railings (which will meet current criteria) and access to the elevator towers. Final designs will address any required security enhancements. A response to this comment is not required under NEPA because the comment does not raise a significant environmental issue (NEPA Regulations 40 CFR Part 1503.4). This comment will be included as part of the record and made available to decision makers before a final decision on the proposed project.

**COSL2-35:** Please refer to Master Comment Response PLAR-1, "Effects to Private Residences and Businesses."

**COSL2-36:** Please refer to Master Comment Response LANDUSE-1, "Relocation of Septic Systems and Leach Fields."

**COSL2-37:** In response to public comment and information recently made available by the project proponents, the Moody Flats Quarry and the Mountain Gate at Shasta Mixed-Use Area Plan are included in the cumulative effects analysis and is described in Final EIS Chapter 3, "Considerations for Describing Affected Environment and Environmental Consequences, Section 3.2.9, "Cumulative Effects." Further, Moody Flats Quarry and Mountain Gate at Shasta Mixed-Use Area Plan are included in the cumulative effects analysis within related resources chapters of the FIES (Chapters 4-25), as appropriate.

Please refer to Master Comment Response ENG-2, "Borrow Materials."

**COSL2-38:** A digital copy of the DEIS is available at the Shasta Lake Gateway Library and a hard copy of the DEIS is available at the Shasta County Public Library, 27 Redding Library 28 1100 Parkview Avenue 29 Redding, CA 96001. If there are any future releases of information

the Shasta Lake Gateway Library will remain on the SLWRI mailing list.

Please refer to Master Comment Response NEPA-1, "Sufficiency of the EIS," Master Comment Response GEN-2, "Unsubstantiated Information," Master Comment Response GEN-4, "Best Available Information," and Master Comment Response COMMENTPERIOD-1, "Extend Comment Period."

# 33.9.5 City of Shasta Lake

#### City of Shasta Lake

P.O. Box 777 \* 1650 Stanton Drive Shasta Lake, CA 95019 Phone: 530-275-7457 Fax: 530-275-7435 Website: cityotshastalake.org COSL3

September 27, 2013

Ms. Katrina Chow, Project Manager
Bureau of Reclamation, US Department of Interior
Planning Division
2800 Cottage Way, MP 700
Sacramento CA 95825-1893

Subject: Draft EIS for Shasta Lake Water Resources Investigation

Dear Ms. Chow:

The Electric Utility of the City of Shasta Lake (City) thanks the Bureau of Reclamation (BOR) for the opportunity to provide comments on the Draft Environmental Impact Statement (DEIS) for the Shasta Lake Water Resources Investigation (SLWRI). This letter should be used to supplement the City's overall comments to the DEIS submitted under separate cover. The City will provide additional comments on issues directly related to power production as portrayed in the SLWRI. Below please find the City's comments:

#### Section S.4.2 Hydropower ES-8 Lines 24-33 [Comment 1]:

COSL3-1

This paragraph implies that the additional hydropower created by the project will contribute to satisfying the 33% renewable mandate established by Executive Orders S-14-08 and S-21-09. The City disagrees with this paragraph. Current California state legislation exempts the output of all large hydro-generation facilities in excess of 30 megawatts from being counted toward meeting the 33% renewable goal. Federal regulations do permit the inclusion of all hydro projects in meeting the Federal 33% renewable goal. California state law does not. It is recommended that any reference to renewable energy goals and the implication that the increased generation output resulting from the new impounds would meet these goals be deleted. These references are incorrect and misleading.

#### Section 21.1.5 Electrical Service and Infrastructure 21-17 Line 40 [Comment 2]:

COSL3-2

The City offers that the text should be corrected to read: "Pacific Gas and Electric Company (PG&E), the City of Redding (COR), and the City of Shasta Lake (CYSL) provide electrical service to Shasta Lake and vicinity." Further, please add that the City of Shasta Lake provides retail distribution service to Fisherman's Point, Centimudi Boat Ramp, and Digger Bay Marina.

COSL3-3

Page 1 of 3

#### Section 21.1.5 Electrical Service and Infrastructure 21-18 - [Comment 3]:

Please correct by adding:

"The City of Shasta Lake is the successor utility to the former Shasta Dam Area Public Utility District (PUD). The PUD contracted for power with the BOR at Shasta Dam in January 1947 to serve electrical energy to people and businesses as a result of constructing Shasta Dam. The PUD received 13.8kV service from the Shasta Dam switchyard on a leased-line arrangement which began the PUD's electric distribution service. Today, the City is a load serving entity and retail distribution provider of electrical energy to more than 4,500 homes and businesses. The City is located at the heart of the Central Valley Project (CVP), Shasta Division. Because Keswick Dam is co-located between CVP divisions, the City is affected by the operations of the Upper Sacramento River Division as well. The City has two points of delivery with the Western Area Power Administration (Western). One at the Flanagan 230/115kV transmission substation and the other at the Keswick Dam 115kV switchyard. The City owns and operates a 15-mile looped 115kV sub-transmission system which delivers energy to two 115/12kV substations stepping the voltage down for delivery to the City's end-users. The City is a preference customer and receives a base resource allocation from Western's Central Valley Project generation pool via the 2004 Marketing Plan for the Sierra Nevada Region. From the electric utility's inception (67 years ago), the utility has continually taken power supply from Shasta and Keswick Dams. The City has immense pride in being the homegrown customer of the BOR at Shasta Dam."

#### Section 23.2.1 Regulatory Framework - Federal 23-6 Lines 20-30 [Comment 4]:

COSL3-5

COSL3-4

The City requests additional discussion and clarification of Western's disposition of the additional excess generation as a result of raising the dam. The City seeks First Preference Customer rights with Western for all of the City's future electrical energy needs. The City's current needs represent a mere 1.5% of the existing power output of Shasta Dam. It only takes operating the five Shasta Dam turbines, at run-of-the river flows, 106 hours to meet the City's power requirements for an entire year. Other similarly situated utilities have already been granted first preference rights from other CVP projects. The City would appreciate the BOR's support in fulfilling this request.

COSL3-6

IComment 51: The City requests additional discussion and clarification regarding the Central Valley Project Improvement Act (CVPIA) and the SLWRI influence on the CVPIA. The City primarily takes issue with the requirement that the City invest \$200,000 annually into the CVPIA while raising the dam will benefit downstream entities that are not required to participate in the funding of CVPIA projects. Further, the CVPIA was never intended to be a perpetual program. The City is concerned that the premise of raising the dam is to benefit anadromous fish as well as the cold water pool which is duplicative to the CVPIA. Similarly, it was the initial construction of the Shasta Dam that prompted the need for the CVPIA. Therefore, will the raising of Shasta Dam further perpetuate the CVPIA? The City is opposed to any further funding of the CVPIA, or CVPIA extensions, related to the raising of Shasta Dam.

Page 2 of 3

# Section 23.3.2 Criteria for Determining Significance of Effects 23-9 Lines 19-37 and Table 23-1[Comment 6]:

COSL3-7

The City takes issue with the Criteria for Determining Significance of Effects by establishing a threshold of 5 percent for hydroelectric generation. The City contends that any reduction in generation output, or any increase in pumping energy usage that reduces excess energy for Western sales, will have a negative financial impact on the City. Further, any reduced hydroelectric generation will need to be replaced with more expensive generation supply. This is financially punitive by California's renewable portfolio standard and greenhouse gas emissions reduction program (aka Cap and Trade) requirements. The City estimates that for every MWh of replacement energy purchased by the City, the City will pay an additional \$50,000 above the normal power supply cost. While this estimate is specific to the City, all Western preference customers will be faced with similar situations. For this reason, we respectfully request revision of this threshold or changing the mitigation assignment to "S – Significant."

The Electric Utility of the City of Shasta Lake hopes that the BOR finds these comments in good order. Again, the City appreciates the opportunity to provide written comments on the DEIS. The City looks forward to working with the BOR as this proposed project moves forward. If you have any questions regarding the comments in this letter, please feel free to contact me at 530-275-7457 or John Duckett, City Manager, at 530-275-7427.

Respectfully submitted,

Tom Miller

Tom Mille

Electric Utility Director

c: Thomas Boyko, Sierra Nevada Regional Manager, Western Area Power Administration Shasta Lake City Council John S. Kenny, City Attorney John N. Duckett, Jr., City Manager Trent Drenon, Assistant Electric Utility Director

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# Responses to Comments from City of Shasta Lake

**COSL3-1:** Text has been revised in the "Executive Summary," Section S.4.2, "Project Need," of the EIS.

**COSL3-2:** Text has been revised in Chapter 21, "Utilities and Service Systems," Section 21.1.5, "Electrical Service and Infrastructure," of the EIS.

- **COSL3-3:** Text has been revised in Chapter 21, "Utilities and Service Systems," Section 21.1.5, "Electrical Service and Infrastructure," of the EIS.
- **COSL3-4:** Text has been revised in Chapter 21, "Utilities and Service Systems," Section 21.1.5, "Electrical Service and Infrastructure," of the EIS.
- **COSL3-5:** Please refer to Master Comment Response GEN-7, "Rules and Regulations for Water Operations under Action Alternatives."
- **COSL3-6:** Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies."
- COSL3-7: Chapter 23, "Power and Energy," Section 23.3.3, "Direct and Indirect Effects," of the DEIS contains several tables showing changes in CVP power generation and use from hydropower modeling under the various project alternatives. Results show that there would be an increase in net CVP system energy generation under the action alternatives. Net energy generation is calculated as difference in energy generation and usage. CP1 would produce the smallest increase (+0.9 percent) and CP4 would produce the largest increase (3.2 percent) in average annual net energy generation under both existing and future conditions. Overall, there would be no negative impact to energy generation from the CVP system.

# 33.9.6 East Bay Municipal Utility District

**EBMUD** 

From: Woodcoff, Bridget < bwoodcof@ebmud.com >

Date: Thu, Jul 11, 2013 at 9:50 AM

Subject: Shasta Investigation Request for Information To: "wmoore@usbr.gov" <wmoore@usbr.gov>

Name=Joe Miyamoto

e-mail=miyamoto@ebmud.com

title=Fisheries & Wildlife Manager

Organization=EBMUD

EBMUD-1 address=500 San Pablo Dam ROad

city=Orinda state=CA 94563

zip=

comments=Please send the Shasta Lake Water Resources Investigation EIS CD

# Responses to Comments from East Bay Municipal Utility District

**EBMUD-1:** The requested information was sent to the commenter.

## 33.9.7 Grassland Water District

10/18/13 DEPARTMENT OF THE INTERIOR Mail - Grassland Water District & Grassland Resource Conservation District Comments - Draft EIS for the Shasta L...





## Grassland Water District & Grassland Resource Conservation District Comments - Draft EIS for the Shasta Lake Water Resources Investigation

Lorrie J. LeLe <ljlele@adamsbroadwell.com>

Mon, Sep 30, 2013 at 10:52 AM

To: "BOR-MPR-SLWRI@usbr.gov" <BOR-MPR-SLWRI@usbr.gov>

Cc: "Ellen L. Trescott" <etrescott@adamsbroadwell.com>

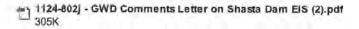
Please find attached comments related to the Draft EIS for the Shasta Lake Water Resources Investigation

### Regards,

Lorrie-J. LeLe, Assistant to Elen L. Trescott, Esq. Adams Broadwell Joseph & Cardozo 520 Capitol Mall, Suite 350 Sacramento, CA 95814 (916) 444-6201 ||Jele@adamsbroadwell.com

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## Shasta Lake Water Resources Investigation Environmental Impact Statement



September 30, 2013

## VIA E-MAIL

Katrina Chow, Project Manager U.S. Bureau of Reclamation, Planning Division 2800 Cottage Way Sacramento, CA 95825-1893 E-mail; BOR-MPR-SLWRI@usbr.gov

Re: Grassland Water District and Grassland Resource
Conservation District Comments on the Draft EIS for the
Shasta Lake Water Resources Investigation

Dear Ms. Chow,

#### 1. Introduction

Please accept these comments on behalf of the Grassland Water District and the Grassland Resource Conservation District ("GWD") regarding the U.S. Bureau of Reclamation's ("Reclamation") Draft Environmental Impact Statement ("DEIS") for the Shasta Lake Water Resources Investigation ("Project"). The two primary purposes of the Project are to increase survival of anadromous fish in the Sacramento River and improve water supply reliability for agricultural, M&I, and environmental water users.

GLWD-1

The DEIS considers five action alternatives that would raise Shasta Dam by between 6.5 and 18.5 feet, increasing water storage in Shasta Reservoir by 256 to 634 thousand acre-feet ("TAF").1 All five alternatives would increase the amount of carryover water stored in the cold-water pool in Shasta Reservoir, allowing Reclamation to meet temperature goals for anadromous fish in the Sacramento River. The Project would not involve increased flow releases for fish.

GLWD-1 CONTD

Regarding water supply reliability, under the first two Project alternatives Shasta Dam would be raised by 6.5 and 12.5 feet respectively. Water deliveries to Central Valley Project ("CVP") water service contractors would slightly increase overall (in some months deliveries would decrease for south-of-delta contractors). and during dry and critical years a significant portion of the increased storage in Shasta Reservoir would be reserved for "increasing M&I deliveries." This refers to deliveries to State Water Project ("SWP") contractors, which would result in larger "Table A" allocations.2 Table A reflects the maximum yield of the SWP, and the largest Table A amount is held by Metropolitan Water District of Southern California.3

Under the last three alternatives, Shasta Dam would be raised by 18.5 feet. The third alternative would not involve a specific reservation for M&I deliveries, while the fourth and fifth alternatives would include an M&I reservation.

#### Summary of Comments

GLWD-2

Presuming that environmental and cultural effects can be adequately mitigated, GWD supports raising Shasta Dam by 18.5 feet, because this would be the most cost-effective option and would result in the greatest increase in overall water supplies.4 Of the three 18.5-foot alternatives considered in DEIS, GWD favors alternative CP3, the "Agricultural Water Supply Reliability and Anadromous Fish Survival" alternative. This alternative would best conform to the requirements of federal Reclamation law and Reclamation's existing obligations to refuges and other CVP contractors, and would not prioritize the export of water

GLWD-1 CONTD

GLWD-2 CONTD

Actual water yield for delivery to contractors would be much lower. Project models estimate that raising the dam by 18.5 feet would yield approximately 67,000 acre-feet annually, and 125,000 in drought years

<sup>2</sup> DEIS p. 6-82 (the DEIS assumes that the reserved M&I storage capacity will be used "to provide deliveries for previously unmet SWP demands during dry and critical years"); see also DEIS, "Plan Formulation Appendix," p. 2-34.

http://baydeltaoffice.water.ca.gov/swpreliability/FINAL2011DRR DWR Review File-clean-6-25-12.pdf, pp. 17-18. \*DEIS, "Plan Formulation Appendix," p. 3-20.

## Shasta Lake Water Resources Investigation Environmental Impact Statement

GLWD-2 CONTD from CVP facilities to SWP customers at the expense of south-of-delta ("SOD") and other CVP contractors. The next best alternative is CP5.

GLWD-3

However, Reclamation cannot pursue this Project as currently proposed, to the benefit of fish and other environmental water uses, CVP contractors, and SWP contractors, without any proposed measures to augment the already deficient water supplies for refuge contractors. The DEIS is silent about Reclamation's legal and contractual obligation to achieve full water deliveries to the wildlife refuge areas identified in the Central Valley Project Improvement Act ("CVPIA"). This obligation must be an essential consideration when describing baseline conditions and defining Project objectives, impacts, and mitigation.

GLWD-4

The DEIS also contains significant flaws and misrepresentations about refuge water deliveries, refuge water demands, and the potential benefits that the Project will have on refuges. Finally, all of the Project alternatives presented in the DEIS, with the exception of Alternative CP3, are premised on the misplaced notion that SWP contractors with variable contract water supplies deserve greater benefits from the Project than SOD CVP contractors with equally variable water supply challenges.

GLWD-5

## 3. Reclamation has unavoidable legal and contractual obligations to achieve full water deliveries to refuges

GWD is the largest component of the Grassland Ecological Area ("GEA"). Comprising 240,000 acres, the GEA is the largest contiguous freshwater wetland complex west of the Rocky Mountains, hosting millions of migratory birds and shorebirds each year as well as a diverse resident population of wildlife, including many species that are listed as threatened and endangered. The GEA is listed as one of the United States' most important wetland areas under the international Ramsar Convention on Wetlands. The GEA is located in western Merced County and includes private, state, and federally owned wetland areas, all of which maintain long-term federal water service agreements with Reclamation.

GLWD-6

CVP water is provided to refuges under the mandate of the CVPIA (Title 34 of Public Law 102-575), for the specific purpose of mitigating the significant adverse effects on Central Valley wetlands associated with the construction and operation of the CVP, and the elimination of much of the natural hydrology that once flooded these wetlands seasonally. More than 90% of California's wetlands have been destroyed over the last 150 years, and it is critical that the few wetland areas that do remain be intensively managed to mimic what nature provided historically on a larger scale.

GLWD-7

The CVPIA directed Reclamation to deliver full Level 2 ("L2") refuge water supplies to refuges beginning in 1992, and full Incremental Level 4 ("IL4") refuge water supplies by 2002. Although the total amount of CVP water required for these designated refuges is only a fraction of the CVP's total yield. Reclamation has failed to carry out its mandate under the CVPIA. GWD and the other refuge contractors have received full water deliveries under their contracts only on very rare occasions. For example, GWD has received its full contract supply only once in the over twenty years since enactment of the CVPIA — in the extremely wet year of 2011. Moreover, Reclamation has failed to acquire permanent water entitlements to meet its IL4 delivery obligation, and instead relies on annual spot-market water purchases, for which competition by other water users is ever increasing.

GLWD-8

Unfortunately for the wildlife that depend on these refuge habitat lands, and as acknowledged in the DEIS, Reclamation has primarily focused on achieving compliance with its anadromous-fish-related obligations under the CVPIA,5 and has often overlooked and neglected its obligation to refuges. The DEIS is no different.

Below are excerpts from several of the refuge-related provisions of the CVPIA, which require Reclamation to include and prioritize increased refuge water deliveries as part of the Project:

Section 3406(g): All studies and investigations by Reclamation that evaluate the effects of "alternative operations" of the CVP, including "measures to enhance the firm yield of existing Central Valley Project facilities," shall "take into account and be fully consistent with the fish, wildlife, and habitat protection and restoration measures required by the CVPIA.

GLWD-9

Section 3406(d)(2): By 2002, Reclamation shall deliver full IL4 supplies to identified refuges. These supplies shall be "firm water supplies of suitable quality to maintain and improve wetland habitat areas."

Section 3406(b)(3): Reclamation shall "develop and implement a program," in coordination with its plan for doubling the production of anadromous fish, to fulfill Reclamation's obligation to deliver full IL4 supplies. The program may include "improvements in or modifications of the operations of the project."

Section 3404(a): Reclamation "shall not enter into any new short-term, temporary, or long-term contracts or agreements for water supply from the Central Valley Project for any purpose other than fish and wildlife" before

GLWD-8 CONTD <sup>5</sup> DEIS p. 6-16 (CVP operations reflect provisions of the CVPLA, "particularly" those that involve fish).

## Shasta Lake Water Resources Investigation Environmental Impact Statement

## GLWD-9 CONTD

Reclamation meets its obligation to secure and deliver full IL4 water supplies.

In addition to these legal mandates, Article 3 of Reclamation's CVP refuge contracts obligate Reclamation to acquire and deliver IL4 water supplies, and to do so with "at least equal" priority to the acquisition of water for any other environmental purpose:

## GLWD-10

"[Reclamation shall use its] best efforts to acquire the Incremental Level 4 Water Supplies and shall coordinate acquisitions of Level 4 Water Supplies with acquisitions of Environmental Water Account (EWA) water pursuant to the Operating Principles Agreement, dated August 28, 2000 attached to the Record of Decision for the CALFED Bay-Delta Program, dated August 28, 2000 and/or other acquisitions of water for environmental purposes to ensure that acquisitions of Incremental Level 4 Water Supplies have a priority at least equal to acquisitions of EWA and/or other environmental water each Year."

The DEIS fails to acknowledge, let alone attempt to comply with, Reclamation's IL4 water delivery obligations. The DEIS should be revised to acknowledge and comply with the following:

## GLWD-11

- Under federal law, the DEIS must take into account and be fully consistent with refuge water supply requirements under the CVPIA.
- Reclamation has an outstanding unmet legal obligation to provide firm IL4 water supplies (and in some cases firm Level 2 supplies) to refuges.
- In tandem with Reclamation's plan to double the production of anadromous fish, Reclamation is required to implement a program that fulfills its obligation to provide IL4 supplies to refuges.
- Reclamation is prohibited from entering into any new agreements for CVP water supplies until it has met its obligation to provide IL4 supplies to refuges.

### GLWD-10 CONTD

<sup>6</sup> Reclamation Contracts 01-WC-20-1754, -1755, -1756, -1757, and -1758, available at: http://www.usbr.gov/mp/cypia/3406d/env\_docs/index.html GLWD-11 CONTD Reclamation has a contractual obligation to give IL4 refuge water supplies "at least equal" priority as the acquisition of water for any other environmental purpose, including the fish restoration purposes of this Project.

## The DEIS contains numerous misrepresentations about refuge water supplies

GLWD-12

The DEIS includes a number of incorrect assumptions about refuge water entitlements and supplies. First, the water demand assumption in the CalSim II model, which is the model used to support the DEIS analysis, only considers L2 refuge supplies, and expressly excludes IL4 water supplies, even under future 2030 conditions. Not only is this an inaccurate depiction of refuge water supply requirements, it all but acknowledges that Reclamation has no plan to fulfill its IL4 obligations to refuges. In contrast, the CalSim II model does reflect the actual water demands of other CVP contractors, by incorporating their full contractual entitlements.

GLWD-13

Similarly, the DEIS uses a depressed volume of annual SOD refuge demands: 304.6 TAF in 2005, reducing to 281.1 TAF in 2030.9 There is no basis for this underlying demand assumption, and certainly no basis for reducing refuge water demand over time. The total L2 and IL4 (together called "L4") water demand of the SOD refuges in the San Joaquin Basin, not including the Pixley and Kern refuges in the Tulare basin, is 345.5 TAF annually. Of this amount, 233.8 TAF is L2 water. 10 Whereas the DEIS appears to include the full contract amounts of agricultural and M&I water service contractors when estimating their current and future demands, the DEIS does not give the same consideration to refuges. 11 This inconsistency is unsupportable. Moreover, the biological-based water demands at refuges will not change over time, regardless of the level of development statewide.

GLWD-12 CONTD 7 DEIS "Modeling Appendix," Table 2-1, p. 2-3, fn. 6; see also DEIS "Hydrology, Hydraulics, and Water Management Technical Report," Table 1-25, pp. 1-35 to 1-37, fn. 1, listing only L2 contract obligations for refuges and not L4 water supplies; DEIS p. 6-39 (possible future actions could include "Firm L2 Federal refuge deliveries"). It also appears that the CalSim II model excludes under current demand conditions the L2 supplies for those refuges that Reclamation has not provided conveyance infrastructure needed to make full L2 deliveries.

GLWD-13 CONTD <sup>9</sup> DEIS p. 6-75.
<sup>19</sup> Exhibit "B" to Reclamation Contracts 01-WC-20-1754, -1756, and -1758, available at: <a href="http://www.usbr.gov/mp/cvpia/3406d/env\_docs/index.html">http://www.usbr.gov/mp/cvpia/3406d/env\_docs/index.html</a>

## Shasta Lake Water Resources Investigation **Environmental Impact Statement**

GLWD-14

The water demand assumptions in the CalSim II model and the DEIS must be revised to reflect the full contract demands of all CVPIA refuges, including IL4 supplies, both under current and future conditions. Simply because Reclamation delivers less than full contract supplies does not mean refuges have no demand for that water, or that full deliveries will not be made in the future.

GLWD-15

Second, the exclusion of full refuge demands in the CalSim II model results in an incorrect and misleading representation that refuges receive 100% of their contract entitlements every year, when in fact the opposite is true. 12 Furthermore, in the DEIS, the underestimated refuge demand leads to inaccurate conclusions about the changes in refuge contract allocations that may result from the Project in critical years.13 This analysis is flawed and must be corrected.

Third, the DEIS adopts two standards of significance for reductions in water supply reliability as a result of the Project, which are altogether inapplicable to refuges: (1) a 5 percent or greater reduction in average annual or average dry and critical year reliability; or (2) a greater than 10 percent reduction in average monthly water supply.14 These amounts are "assumed to represent a reduction that could not reliably be replaced from other sources, such as groundwater pumping or water transfers." 15 This is not the case for refuges. The managed wetlands that make up SOD refuges are not agricultural lands. They do not produce profitable crops and do not irrigate with groundwater. What little groundwater GWD has acquired within its boundaries is used by Reclamation to satisfy a small portion of the overall IL4 water needs of SOD refuges. All available water transfers are also pursued as IL4 supplies. This amount is currently not enough to sustain the water needs of refuges in the long term.

GLWD-16

Any decrease in CVP refuge water supplies will be difficult, if not impossible, to replace. Because refuges are already suffering a water deficit, even with all available groundwater and water transfers, and they cannot be managed optimally for wildlife, any decrease in refuge supplies as a result of the Project is a significant. environmental impact that should be fully mitigated.

GLWD-17

Fourth, the DEIS reaches an unsupported conclusion that water deliveries to refuges "would increase with an enlargement of Shasta Dam."16 The DEIS

CONTD

GLWD-15 12 DEIS "Hydrology, Hydraulics, and Water Management Technical Report," Table 1-26, p. 1-39. 13 DEIS p. 6-75 (simulated allocations "are calculated by dividing annual deliveries for each contract type by demand").

GLWD-16 H DEIS p. 6-35. 6 Ibid.

CONTD 18 DEIS p. 6-72.

GLWD-17

CONTD

7

## GLWD-17 CONTD

inappropriately groups SOD refuges with other CVP water service contractors in Tables 6-23 and 6-24, and concludes that overall, SOD refuges would see up to a three percent increase in L2 water deliveries.17 This is incorrect.

Under Reclamation's contracts with refuges, similar to CVP exchange contracts and settlement contracts, L2 water deliveries can only be reduced in critical years when Shasta Reservoir inflow is very low. Thus, the only relevant years for considering the Project's effect on L2 deliveries are those critical years when deliveries to refuges, exchange contractors, and settlement contractors are reduced. In the recent hydrological past, this has occurred in 1997, 1991, 1992, and 1994.18 The data presented in the DEIS indicates that with the Project, deliveries to refuges in two of those years would not change, but in the other two years, 1991 and 1992, deliveries of L2 water to refuges would be reduced by up to 6 percent. 19

### GLWD-18

The potential for the Project to result in such refuge water supply reductions should be identified as a significant impact. In critically dry years, it is even more difficult for Reclamation to secure IL4 water supplies through water transfers and similar means, because the overall demand for water is very high. Populations of migratory birds are overly strained in critically dry years due to systematic decreases in the amount of natural and managed wetland habitat. It is difficult to understand why a Project designed to increase overall water supply would include no dedication of critically needed IL4 water for refuges, and would result in a predicted decrease in L2 water supplies for refuges during critical years. In addition to conflicting with Reclamation's refuge water supply obligations, the adverse impacts on wildlife refuges are contrary to the description and stated purposes of the Project and have not been identified in the DEIS.

## GLWD-19

In order to comply with NEPA, at a minimum, the portions of the DEIS and supporting technical documents discussed above must be revised as follows:

> Refuge demand assumptions must include full L4 water entitlements and should not decrease over time.

### GLWD-17 CONTD

17 DEIS pp. 6-73 and 6-74 (it is clear from the key in the tables that follow, Tables 6-25 and 6-26, and from the CalSim II model and other statements in the DEIS, that the analysis only considers L2 supplies).

http://www.usbr.gov/mp/evo/vungvari/water allocations historical.pdf

## GLWD-18 CONTD

<sup>19</sup> DEIS Table 6-25, p. 6-77. The increase of 1% shown under CP5 in 1992 is not accurate because the table predicts an allocation of 74% that year, which is 1% below the minimum amount allowed by contract. Also, Table 6-26, the simulation of deliveries under 2030 conditions, is less accurate than Table 6-25, because it reflects artificially reduced future water demand at refuges (see DEIS p. 6-75.)

## Shasta Lake Water Resources Investigation Environmental Impact Statement

GLWD-20

 Refuges should not be depicted as currently receiving full 100% contract deliveries.

GLWD-21

 The two adopted standards of significance for reductions in water supply reliability should not be applied to refuges. Instead, impacts on refuges should be considered significant if any potential reduction in water deliveries may occur.

GLWD-22

- The DEIS conclusion that water deliveries to refuges would increase as
  a result of the Project must be supported by enforceable measures to
  assure that the Project will provide a permanent increase in IL4 refuge
  water supply. This increased amount should be no less than the
  amount of increased water supplies for CVP water service contractors
  or SWP Table A contractors, whichever is higher.
- Reserving significant amounts of water for increased SWP Table A
   deliveries is based on improper assumptions and misleading
   conclusions about the balance of benefits between SWP and CVP
   contractors, particularly SOD CVP contractors

Four of the five Project alternatives would reserve large volumes of water for M&I use by SWP contractors, allowing for an increased allocation of Table A water (Table A reflects the maximum yield of the SWP). The M&I reservation is intended to "improve the balance between agricultural and M&I water supply benefits" of the Project. For several reasons, the DEIS assumption that SWP M&I contractors would receive significantly less benefit from the Project than agricultural users without the proposed reservation of additional water is unsupported and inaccurate.

GLWD-23

Both the DEIS and underlying technical studies offer only a vague and conclusory statement regarding the proposed reservation of large volumes of water for SWP Table A contractors in the Project alternatives:

Since the release of the Draft Feasibility Report and Preliminary DEIS, water operations modeling [was] updated to reflect the following:

- · 2008 OCAP BA (Reclamation 2008)
- 2008 USFWS BO (USFWS 2008)
- 2009 NMFS BO (NMFS 2009)

· Additional changes in CVP and SWP facilities and operations, such as the enlarged Los Vaqueros Reservoir and implementation of the San Joaquin River Restoration Program.

Preliminary analyses based on these updated operations indicated shifts in the distribution of water supply benefits from M&I to agricultural uses, resulting in decreased M&I water supply benefits.

## GLWD-23 CONTD

Operations targeting increased M&I deliveries were based on existing and anticipated future demands, operational priorities, and facilities of the SWP, which provides M&I water to a majority of the State's population.20

In other words, the existing biological requirements for resident and anadromous fish, plus a few CVP and SWP-related projects, have somehow shifted the benefits of the Project away from M&I and toward agriculture. Also, the reservation of water for M&I use is based on "existing and anticipated future demands" and "operational priorities." Aside from the fact that no further support or explanation is offered for these conclusions, there are several problems with the DEIS's rationale.

## GLWD-24

First, the DEIS presumes that raising Shasta Dam, in and of itself, would take away water reliability from the SWP in dry and critical years. In particular, raising Shasta Dam by 18.5 feet would reduce water supply reliability for the SWP by 22.2 TAF in a dry or critical year.21 The DEIS provides no explanation for why this would be the case. How would improving the storage capacity of Shasta Reservoir have a negative water supply impact on SWP water users? For instance, if the increased water supplies were split evenly between CVP and SWP contractors, how would this reduce water supply reliability for the SWP?

## GLWD-25

Second, reserving significant amounts of water for M&I deliveries would give SWP contractors a "double boost," because the DEIS already assumes that without the Project, overall water deliveries to SWP Table A contractors will increase over time, while deliveries to SOD CVP contractors will decrease over time. The DEIS predicts that by 2030, without the Project, water exported through the CVP's Jones Pumping Plant will decrease by 34 TAF annually and by 88 TAF in dry and critical years, compared to existing conditions.22 It also predicts that by 2030, water

### GLWD-23 CONTD:

GLWD-24

CONTD → GLWD-25

CONTD

20 DEIS, "Plan Formulation Appendix," p. 5-8; similar explanation at DEIS pp. 2-18 to 2-19. 21 Ibid., referring to Table 5-4, and Table 5-4 (column labeled "CP3/CP5 No Storage Reserved for M&I," row labeled "Increased SWP Water Supply Reliability, Dry/Critical").

23 DEIS Tables 6-21 and 6-22 (total TAF exported under the "No Action Alternative" versus total exported under Existing Conditions).

GLWD-25 CONTD deliveries to SOD CVP contractors will be reduced by 42 TAF on average and 84 TAF in dry and critical years.<sup>23</sup> In contrast, the DEIS predicts that by 2030, without the Project, water exported through the SWP's Banks Pumping Plant will increase by 24 TAF annually (no prediction for dry and critical years), and deliveries to SWP Table A contractors will increase by 245 TAF on average and 88 TAF in dry and critical years.<sup>24</sup>

The DEIS does not explain the basis for these assumptions, but perhaps the explanation can be inferred from the discussion of the No-Project Alternative:

GLWD-26

"without developing cost-effective new sources, the growing urban population would increasingly rely on shifting water supplies from such areas as agricultural production to satisfy M&I demands."<sup>25</sup>

The DEIS assumes that market forces alone will lead to greater water reliability for M&I contractors and less water reliability for agricultural contractors. Thus, reserving Project water for M&I contractors would wield a double blow to SOD CVP contractors.

GLWD-27

Third, the so-called imbalance between Project benefits for agriculture and M&I appears to be based on a comparison between apples and oranges. When the DEIS refers to "M&I" water it means "previously unmet SWP demands during dry and critical years." Unmet demands under Table A occur because Table A is based on the maximum possible yield of the SWP. However, when the DEIS refers to "agricultural" water, it includes all CVP contractors, both north-of-delta with greater water reliability, and south-of-delta with much less water reliability. Thus, when the DEIS predicts that SWP Table A contractors will have a less reliable water supply and therefore deserve more water, it considers the most vulnerable and most variable of SWP contract allocations. But when the DEIS predicts that CVP contractors will have a more reliable water supply and therefore deserve less water, it considers CVP contract allocations overall, and not the more vulnerable and variable SOD contract allocations (which will receive very little benefit from the Project, particularly if it includes an M&I reservation). This tilts the analysis unfairly toward Table A contractors and away from SOD CVP contractors.

GLWD-28

Fourth, the statement in the DEIS that reserving water for M&I is partly based on "anticipated future demands" suggests an underlying Project purpose that

GLWD-25 CONTD→

 $^{23}$  DEIS Tables 6-23 and 6-24 (same method as fn. 20).

24 Ibid., Tables 6-27, 6-28, and 6-29 (same method).

GLWD-267 28 DEIS p. 5-14.

CONTD L

<sup>26</sup> DEIS p. 6-82; DEIS, "Plan Formulation Appendix," p. 2-34

GLWD-27 CONTD 11

GLWD-28 CONTD is not readily disclosed: to provide for future, anticipated M&I water demand through the SWP, rather than equitably meeting the existing demand of all contractors. It is unreasonable and contrary to the stated Project purposes to give priority to potential future M&I demand over existing refuge and agricultural needs. Although California's population is expected to increase, future M&I uses will be required to adjust to available water supplies through increased conservation or other restrictions or limitations on new development. The demand for agricultural products and healthy wetlands and wildlife resources, on the other hand, is a currently pressing need that must be addressed.

GLWD-29

The newly predicted "shifts in the distribution of water supply benefits from M&I Table A contractors to agricultural use" are based on unexplained and unsupported assumptions that require further supporting evidence to meet NEPA requirements. The DEIS should be revised to provide a straight-forward benefits analysis that takes into account the points raised above. Water supply from the Project should be distributed in accordance with present unmet demand, taking into consideration the fact that Reclamation is required by law to meet existing IL4 refuge water supply obligations.

Thank you for considering and responding to GWD's comments on the DEIS.

Ric Ortega General Manager

12

## Responses to Comments from Grassland Water District

**GLWD-1:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."

**GLWD-2:** Please refer to Master Comment Response GEN-5, "Some People Support Dam Raise and Others Oppose Dam Raise."

**GLWD-3:** Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies."

**GLWD-4:** Tables 6-7, 6-11, 6-12, 6-23, 6-24, 6-33, 6-34, 6-40, 6-41, 6-47, 6-48, 6-54, 6-55, 6-61 and 6-62 in the EIS Chapter 6, "Hydrology, Hydraulics and Water Management," have been expanded to show explicit changes in deliveries to Refuges under the project alternatives. Accordingly, the text describing changes in deliveries have been revised. Overall, these tables show that there would be no changes to Refuge deliveries on an annual average basis under any of the project alternatives. These tables also indicate minor changes in average monthly refuge deliveries. Such reductions would not occur in real time due to efficient water allocation and management schemes that cannot be simulate accurately in an operations model.

Also please see Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies," for a detailed explanation on how the refuge water demands are represented in the modeling.

**GLWD-5:** Please refer to Master Comment Response Master Comment Response WSR-1, "Water Supply Demands, Supplies, and Project Benefits," and Master Comment Response WSR-12, "Increasing Water Supply Reliability under Action Alternatives."

**GLWD-6:** Thank you for your comment. A response to this comment is not required under NEPA because the comment does not raise a significant environmental issue (NEPA Regulations 40 CFR Part 1503.4). Many comment authors expressed personal opinions, histories or experiences which are not appropriately addressed as part of the NEPA process. This comment will be included as part of the record and made available to decision makers before a final decision on the proposed project.

Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."

**GLWD-7:** Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies."

**GLWD-8:** Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies."

**GLWD-9:** Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies."

**GLWD-10:** Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies."

**GLWD-11:** Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies."

**GLWD-12:** Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies."

**GLWD-13:** Table 2-1 in Chapter 2, "CALSIM," of DEIS Modeling Appendix lists the assumptions used in the operations modelling using CalSim-II. It is stated in the modeling appendix that the refuge demands for the existing conditions are based on "Recent Historical Level 2 water needs" as calculated by Reclamation in 2007. For the future conditions, refuge demands are based on full Level 2 contract amounts. Under the future conditions, the demands are 23.5 TAF lower than the demands in the existing conditions. The differences in refuge demand between existing and future condition of 23.5 TAF is not a case of suppression of demands in the future. Rather, it indicates that the historical refuge water demands in the existing conditions are greater than the demands under the future conditions, based on firm level 2 water needs.

Incremental Level 4 demands are not considered in the operations modeling. Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies," for an explanation on why the incremental level 4 demands were not included.

**GLWD-14:** Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies."

GLWD-15: Table 2-1 in Chapter 2, "CALSIM," of DEIS Modeling Appendix lists the assumptions used in the operations modelling using CalSim-II. It is stated in the appendix that refuge demands assumed in the CalSim-II model are based on historical Level 2 water needs under the existing conditions and firm level 2 water needs under the future conditions. Refuge demands do not include incremental Level 4 requirements. Please refer to Master Comment Response CVPIA-1 for reasons why incremental refuge demands were not included in the operations modeling.

Table 1-26 in Hydrology, Hydraulics, and Water Management Technical Report presents data on historical water allocation to refuges for years

1997 to 2009 and are not modeled results. Table 6-25 in DEIS Chapter 6, Hydrology, Hydraulics and Water Management shows simulated annual delivery allocations to refuges based on operations modeling results. Table 6-25 shows that the simulated refuge water allocation could be less than 100 percent in normal years and less than 75 percent in few selective Shasta-Critical years. These differences in simulated refuge water allocations in few selective years are not true representation of real-time operations but an indication of modeling artifacts.

CalSim-II is primarily designed for evaluating long-term changes in system wide operations and such isolated small changes in deliveries do not indicate potential changes in real time conditions. These isolated reductions in simulated water supply to refuges are caused by limitations of the model to make real-time policy decisions under extreme stressed water supply conditions. These reductions, in real-time operations, would be avoided by making policy decisions on other requirements in prior months. In actual future operations, such reductions would not occur as the project operators would work in real time to satisfy legal and contractual obligations given then current conditions and hydrologic constraints.

**GLWD-16:** Please refer to Table 2-1 in Chapter 2, "CALSIM-II," of the DEIS Modeling Appendix which lists the various assumptions used in the operations modeling. It is assumed in the operations modeling using CalSim-II that the water allocation to refuges would be similar to senior water right holders such as CVP exchange contractors and settlement contractors. Based on this assumption, there would be a reduction in deliveries only during Shasta Critical years when the allocation would be reduced to 75 percent. This assumption remains unchanged under the project alternatives in both existing and future conditions which means that there would be no change (0 percent) in deliveries to Refuges under any of the project alternatives.

Operations modeling results presented in Chapter 6, "Hydrology, Hydraulics and Water Management," shows that refuge water allocation could be less than 100 percent in normal years and less than 75 percent in few selective Shasta-Critical years, these isolated differences in refuge water allocations are not true representation of real-time operations but an indication of modeling artifacts. In actual future operations, such reductions would not occur as the project operators would work in real time to satisfy legal and contractual obligations given then current conditions and hydrologic constraints. Therefore, there would be no impact to refuges under any of the project alternatives in both existing and future conditions.

The significance criteria ((1) a 5 percent or greater reduction in average annual or average dry and critical year reliability; or (2) a greater than

10 percent reduction in average monthly water supply) are therefore not applicable for evaluating reductions in water supply reliability to refuges.

**GLWD-17:** Tables 6-7, 6-11, 6-12, 6-23, 6-24, 6-33, 6-34, 6-40, 6-41, 6-47, 6-48, 6-54, 6-55, 6-61 and 6-62 in the EIS Chapter 6, "Hydrology, Hydraulics and Water Management," have been expanded to show explicit changes in deliveries to Refuges under the project alternatives. Accordingly, the text describing changes in deliveries have been revised. Overall, these tables show that there would be no changes to Refuge deliveries on an annual average basis under any of the project alternatives. These tables also indicate minor changes in average monthly refuge deliveries. Such reductions would not occur in real time due to efficient water allocation and management schemes that cannot be simulate accurately in an operations model.

GLWD-18: Please refer to Chapter 2, "CALSIM-II," of the DEIS Modeling Appendix which lists the various assumptions used in the operations modeling. It is assumed in the operations modeling using CalSim-II that the water allocation to refuges would be similar to senior water right holders such as CVP exchange contracts and settlement contracts and there would be a reduction in deliveries only during Shasta Critical years when the allocation would be 75 percent. However, operations modeling results presented in Chapter 6, "Hydrology, Hydraulics and Water Management," shows that refuge water allocation could be less than 100 percent in normal years and less than 75 percent in few selective Shasta-Critical years. These isolated differences in refuge water allocations are not true representation of real-time operations but an indication of modeling artifacts.

CalSim-II is primarily designed for evaluating long-term changes in system wide operations and such isolated small changes in deliveries do not indicate potential changes in real time conditions. These isolated reductions in simulated water supply to refuges are caused by limitations of the model to make real-time policy decisions under extreme stressed water supply conditions. These reductions, in real-time operations, would be avoided by making policy decisions on other requirements in prior months. In actual future operations, such reductions would not occur as the project operators would work in real time to satisfy legal and contractual obligations given then current conditions and hydrologic constraints.

**GLWD-19:** Please refer to Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies."

**GLWD-20:** Please refer to Chapter 2, "CALSIM-II," of the DEIS Modeling Appendix which lists the various assumptions used in the operations modeling. It is stated in the appendix that the refuges would have 100 percent allocation in all years except during Shasta Critical years when the allocation would be reduced to 75 percent.

**GLWD-21:** Please refer to Table 2-1 in Chapter 2, "CALSIM-II," of the DEIS Modeling Appendix which lists the various assumptions used in the operations modeling. It is assumed in the operations modeling using CalSim-II that the water allocation to refuges would be similar to senior water right holders such as CVP exchange contractors and settlement contractors. Based on this assumption, there would be a reduction in deliveries only during Shasta Critical years when the allocation would be reduced to 75 percent. This assumption remains unchanged under the project alternatives in both existing and future conditions which means that there would be no change (0 percent) in deliveries to Refuges under any of the project alternatives.

Operations modeling results presented in Chapter 6, "Hydrology, Hydraulics and Water Management," shows that refuge water allocation could be less than 100 percent in normal years and less than 75 percent in few selective Shasta-Critical years, these isolated differences in refuge water allocations are not true representation of real-time operations but an indication of modeling artifacts. In actual future operations, such reductions would not occur as the project operators would work in real time to satisfy legal and contractual obligations given then current conditions and hydrologic constraints. Therefore, there would be no impact to refuges under any of the project alternatives in both existing and future conditions.

The significance criteria ((1) a 5 percent or greater reduction in average annual or average dry and critical year reliability; or (2) a greater than 10 percent reduction in average monthly water supply) are therefore not applicable for evaluating reductions in water supply reliability to refuges.

**GLWD-22:** Tables 6-7, 6-11, 6-12, 6-23, 6-24, 6-33, 6-34, 6-40, 6-41, 6-47, 6-48, 6-54, 6-55, 6-61 and 6-62 in the EIS Chapter 6, "Hydrology, Hydraulics and Water Management," have been expanded to show explicit changes in deliveries to Refuges under the project alternatives. Accordingly, the text describing changes in deliveries have been revised. Overall, these tables show that there would be no changes to Refuge deliveries on an annual average basis under any of the project alternatives. These tables also indicate minor changes in average monthly refuge deliveries. Such reductions would not occur in real time due to efficient water allocation and management schemes that cannot be simulate accurately in an operations model.

Also please see Master Comment Response CVPIA-1, "Central Valley Project Improvement Act Firm Level 2 and Incremental Level 4 Refuge Water Supplies," for a detailed explanation on how the refuge water demands are represented in the modeling.

GLWD-23: CalSim-II, jointly developed by Reclamation and DWR for performing planning studies related to CVP and SWP operations, was updated between the release of the Preliminary Draft EIS and the DEIS. The Preliminary Draft EIS used Version 8D and the DEIS used the 2012 Benchmark Version of CalSim-II. The "shift in project benefits" mentioned by the commenter is a result of the updates to the modeling assumptions. The common assumptions for Version 8D can be found in the Preliminary Draft EIS Modeling Appendix Chapter 2, "CalSim-II," section, "Model Assumptions." The common assumptions for the 2012 Benchmark Version can be found in the DEIS Modeling Appendix Chapter 2, "CalSim-II," section, "Model Assumptions."

As described in the DEIS Modeling Appendix, CalSim-II assumptions were updated to incorporate provisions of the 2008 USFWS BO and 2009 NMFS BO. Related to systemwide operational criteria, this update was reflected in assumptions for (1) both CVP (agricultural and M&I) and SWP water allocations, and (2) CVP and SWP coordinated operations for the sharing of restricted export capacity for project-specific pumping. (As described in the Preliminary DEIS Modeling Appendix, CVPIA 3406(b)(2) only restricted CVP exports in CalSim-II Version 8D.) Reclamation and DWR developed the CalSim-II assumptions for implementation of the 2008 and 2009 BOs in cooperation with NMFS, USFWS, and CDFW.

GLWD-24: Water operations under SLWRI action alternatives are described in DEIS in Chapter 2, "Alternatives," Section 2.3, "Action Alternatives," and results of changes in deliveries to SWP Table A contractors under various project alternatives are shown in Table 6-29 in Chapter 6, "Hydrology, Hydraulics and Water Management." As shown in this table 6-29, SWP deliveries would increase under all alternatives except CP3 where SWP Table A deliveries would reduce by 8 TAF (0 percent) on an annual average basis and by 22 TAF (-1 percent) during dry and critical years, a difference of less than one percent. This is only seen under CP3 where the additional storage is retained for agricultural water supply reliability and to expand the cold-water pool in Shasta Reservoir for fisheries benefits with no additional water reserved for M&I.

As described in Chapter 2, the SLWRI No-Action Alternative and action alternatives would not include changes to any rules and regulations that govern operations at Shasta Dam in the form of flood control requirements, flow requirements, water quality requirements, water

supply and hydropower commitments. SLWRI alternatives would not increase existing maximum CVP or SWP contract quantities or expand the place of use and would not include changes to the CVP and SWP Coordinated Operations Agreement. However, through expanding Shasta Dam and reservoir, the CVP could operate more efficiently and store more water under its existing water rights during wet years. This could result in reductions in Delta surplus flows and unstored water for exports that would have otherwise been available for export for the SWP. Reclamation would not be required to mitigate for these decreases in deliveries, since they would be the result of the CVP exercising a greater portion of its existing water rights.

**GLWD-25:** Please refer to Master Comment Response Master Comment Response WSR-1, "Water Supply Demands, Supplies, and Project Benefits."

**GLWD-26:** Please refer to Master Comment Response Master Comment Response WSR-1, "Water Supply Demands, Supplies, and Project Benefits."

GLWD-27: CP3 and CP5 were formulated, in part, to "bookend" the range of potential operations. As described in Chapter 2, "Alternatives," Section 2.3.5, "CP3 – 18.5-Foot Dam Raise, Agricultural Water Supply Reliability and Anadromous Fish Survival" of the DEIS, because CP3 focuses on increasing agricultural water supply reliability and anadromous fish survival, none of the increased storage capacity in Shasta Reservoir would be reserved for increasing M&I deliveries. Operations for water supply, hydropower, and environmental and other regulatory requirements would be similar to existing operations. The additional storage would be retained for water supply reliability and to expand the cold-water pool for downstream anadromous fisheries.

CP3 would increase water supply reliability by increasing water supplies for CVP irrigation deliveries. This action would contribute to replacement of supplies redirected to other purposes in the CVPIA. CP3 would help reduce estimated future water shortages by increasing the reliability of dry and critical year water supplies for agricultural deliveries by at least 63,100 acre-feet per year and average annual deliveries by about 61,700 acre-feet per year. Almost half of the increased dry and critical year water supplies (28,000 acre-feet) would be for south-of-Delta agricultural deliveries, with the remainder for north-of-Delta agricultural deliveries. In addition, water use efficiency could help reduce current and future water shortages by allowing a more effective use of existing supplies. As population and resulting water demands continue to grow and available supplies continue to remain relatively static, more effectively using these supplies could reduce potential critical impacts to agricultural and urban areas resulting from

water shortages. Under CP3, approximately \$3.1 million would be allocated over an initial 10-year period to fund agricultural water conservation programs, focused on agencies benefiting from increased reliability of project water supplies.

As described in Chapter 2, "Alternatives," Section 2.3.7, "CP5 – 18.5-Foot Dam Raise, Combination Plan," of the DEIS, under CP5, the additional storage in Shasta Reservoir would be used to increase water supply reliability and to expand the cold-water pool for downstream anadromous fisheries. Operations for water supply, hydropower, and environmental and other regulatory requirements would be similar to existing operations, except during dry and critical years when a portion of the increased storage in Shasta Reservoir would be reserved to specifically focus on increasing M&I deliveries. In dry years, 150,000 acre-feet of the 634,000 acre-feet increased storage capacity in Shasta Reservoir would be reserved for increasing M&I deliveries. In critical years, 75,000 acre-feet of the increased storage capacity would be reserved for increasing M&I deliveries.

CP5 would increase water supply reliability by increasing water supplies for CVP and SWP irrigation and M&I deliveries. This action would contribute to replacement of supplies redirected to other purposes in the CVPIA. CP5 would help reduce estimated future water shortages by increasing the reliability of dry and critical year water supplies for agricultural and M&I deliveries by at least 113,500 acre-feet per year, and average annual deliveries by about 75,900 acre-feet per year. The majority of increased dry and critical year water supplies (88,300 acrefeet) would be for south-of-Delta agricultural and M&I deliveries. In addition, increased water use efficiency could help reduce current and future water shortages by allowing a more effective use of existing supplies. As population and resulting water demands continue to grow and available supplies continue to remain relatively static, more effective use of these supplies may reduce potential critical impacts to agricultural and urban areas resulting from water shortages. Under CP5, approximately \$3.8 million would be allocated over an initial 10-year period to fund agricultural and M&I water conservation programs, focused on agencies benefiting from increased reliability of project water supplies.

Please refer to Master Comment Response ALTR-1, "Range of Alternatives General."

**GLWD-28:** It is assumed, in the operations modeling using CalSim-II that the refuges receive up to the full Level 2 contract amounts in all years except in Shasta Critical years when the demands are reduced to 75 percent. In actual future operations, as has always been the case in the past, the project operators would work in real time to satisfy legal

and contractual obligations regarding the refuges given then current conditions and hydrologic constraints. The project purpose for SLWRI is readily disclosed in the DEIS (see Chapter 1, "Introduction").

Please refer to Master Comment Response ALTD-1, "Alternative Development- Water Supply Reliability," Master Comment Response P&N-1, "Purpose and Need and Objectives," and Master Comment Response EI-1, "Intent of NEPA Process to Provide Fair and Full Discussion of Significant Environmental Impacts."

GLWD-29: Water operations under SLWRI action alternatives are described in DEIS in Chapter 2, "Alternatives," Section 2.3, "Action Alternatives," and results of changes in deliveries to SWP Table A contractors under various project alternatives are shown in Table 6-29 in Chapter 6, "Hydrology, Hydraulics and Water Management." As shown in this table 6-29, SWP deliveries would increase under all alternatives except CP3 where SWP Table A deliveries would reduce by 8 TAF (0 percent) on an annual average basis and by 22 TAF (-1 percent) during dry and critical years, a difference of less than one percent. This is only seen under CP3 where the additional storage is retained for agricultural water supply reliability and to expand the cold-water pool in Shasta Reservoir for fisheries benefits with no additional water reserved for M&I.

Please refer to Master Comment Response ALTD-1, "Alternative Development- Water Supply Reliability," and Master Comment Response P&N-1, "Purpose and Need and Objectives."

## 33.9.8 Mountain Gate Community Services District



## Responses to Comments from Mountain Gate Community Services District

**MGCSD-1:** Please refer to Master Comment Response UR-1, "Effects to Water and Wastewater Infrastructure around Shasta Lake."

**MGCSD-2:** Please refer to Master Comment Response MAILINGLIST-1, "Addition or Change to the Mailing List."

## 33.9.9 City of Redding

REDD

## CITY OF REDDING

OFFICE OF THE CITY COUNCIL 777 Cypress Avenue, Redding, CA 96001 P.O. Box 496071, Redding, CA 96049-6071 530.225.4447 FAX 530.225.4463

September 18, 2013 F-200-200-050

BUREAU OF RECLAMAT S OFFICIAL FILE COPY RECEIVED SEP 2 0 2013

Ms. Katrina Chow Project Manager Bureau of Reclamation 2800 Cottage Way, MP-720 Sacramento, CA 95825

SUBJECT:

Draft Environmental Impact Statement for the Shasta Lake Water Resources

Investigation

Dear Ms. Chow:

The City of Redding (City) appreciates the opportunity to provide comments on the Draft Environmental Impact Statement for the Shasta Lake Water Resources Investigation (DEIS). The City is located at the base of Shasta Dam and Reservoir and subsequently enjoys many of the associated benefits. The City provides both domestic water and electricity to its residents through its municipally-owned utilities. Residents utilize the recreational opportunities offered at and around the Reservoir, while visitors help stimulate the region's economy. Water supply reliability and fisheries restoration have become significant issues facing California; therefore, developing a constructive path forward that benefits all regions of the state while maintaining the integrity of Northern California's resources is needed. The City has reviewed the DEIS and supports the Bureau of Reclamation's (BOR's) continuation of the process of exploring the enlargement of Shasta Dam and Reservoir, including further assessment of the costs and benefits of the project, including the potential allocation of cost to the City's utility customers.

REDD-2

REDD-1

As a Municipal and Industrial (M&I) contractor with the BOR, the Sacramento River meets over 50 percent of the City's annual water needs while the Central Valley Project (CVP) meets roughly 12 percent of the annual need. Although the various alternatives provide an increase in potential water supply during drought and critical years, the additional capacity available to M&I providers appears to be relatively small given the cost of the project (at most an additional 150,000 acre-feet during "Critical Years" at a project cost in excess of \$1 billion).

REDD-3

The City's electric utility receives nearly 8 percent of hydroelectric output from the CVP; this equals approximately 30 percent of the City's yearly power supply. Federal hydropower from the CVP system is the most cost-effective, renewable, and carbon-free resource currently in Classification

Project Control No Folder I.D. Date Input & Initials 20 SEP 2

Redding's power supply portfolio.

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Ms. Katrina Chow September 18, 2013 Page 2

REDD-4

In our initial review of the DEIS, it appears that Comprehensive Plans 3-5 achieve the BOR's primary and secondary objectives while maximizing water supply reliability and hydropower generation, increasing social benefits, and providing the greatest net annual economic benefits. The City supports the BOR's further exploration of these alternatives through the development of a Final Environmental Impact Statement and Feasibility Report. The benefit and cost to the City's utility customers is uncertain as the DEIS is silent on what providers will realize in additional water supply and electric generation capacity, and how the project cost will be allocated to CVP water and power customers. Cost allocation should be balanced with the benefits realized by M&I and agricultural water purveyors, as well as power contractors. Given that the costs of any project to enlarge the dam are significant, the City requests that the total cost and cost allocations are fully discussed with CVP water and power customers as the BOR moves forward and before any decisions are finalized. The City further encourages the BOR to reduce the impact to the recreational opportunities that the City's residents enjoy, both during and after construction.

REDD-6

REDD-5

We understand that the process will take many more years and will include congressional authorization. The City is appreciative of being included as a key stakeholder given the significant impact enlarging Shasta Dam and Reservoir would have on our community. We look forward to continued involvement in this process.

Sincerely

Rick Bosetti Mayor

c: Brian Person

G:\REU Admin Files\City Council\Staff Reports\2013\Bureau of Reclamation DEIS (Attach) 9-17-13

## Responses to Comments from City of Redding

**REDD-1:** Please refer to Master Comment Response GEN-5, "Some People Support Dam Raise and Others Oppose Dam Raise."

**REDD-2:** As described in COST/BEN-4, "Non-Monetary Benefits of Action Alternatives," SLWRI action alternatives provide benefits to multiple project objectives, including the two primary objectives and five secondary objectives. In addition to increasing M&I water supply reliability, alternatives increase agricultural and environmental water supply reliability, anadromous fish survival, hydropower generation, flood protection, recreation and improve ecosystem resources, and water quality.

As described in EIS Chapter 2, "Alternatives," and in the Plan Formulation Appendix, Chapter 5, "Comprehensive Plans," Section "Refinement of Comprehensive Plans for the DEIS," to improve M&I benefits, under CP1, CP2, CP4, and CP5, storage capacity in Shasta

Reservoir is reserved in dry and critical years specifically to increase M&I deliveries. In dry years 35,000 acre-feet (under CP1) to 70,000 acre-feet (under CP5) would be reserved for M&I deliveries and in critical years 70,000 acre-feet (under CP1) to 150,000 acre-feet (under CP5) would be reserved for M&I deliveries. Although under CP1, CP2, CP4, and CP5 specific storage capacity is only reserved for increasing M&I deliveries in dry and critical years, evaluations with CalSim-II indicate that under these alternatives, M&I deliveries would be increased in all water year types. Water year types, including "dry" and "critical" year types, are based on the Sacramento Valley Water Year Hydrologic Classification.

**REDD-3:** Comment noted.

**REDD-4:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record," Master Comment Response ALTR-1, "Range of Alternatives General," Master Comment Response ALTS-1, "Alternative Selection," and Master Comment Response COST/BEN-1, "Intent of EIS and Process to Determine Federal Interest."

**REDD-5:** Thank you for your comment. This comment will be included as part of the record and made available to decision makers before a final decision on the proposed project.

**REDD-6:** As stated in the DEIS Chapter 2, "Alternatives," Section 2.3.8, "Comprehensive Plan Construction Activities," inundated recreation facilities and associated utilities would be relocated before demolition to the extent practicable. Section 2.3.8 also states that scheduling and sequencing of recreation facility relocation or modification construction activities will strive to minimize or avoid interruption of public access to recreation sites.

#### 33.9.10 Redding Electricity Utility, City of Redding



From: Day, Justin < iday@ci.redding.ca.us> Date: Wed, Jul 31, 2013 at 12:07 PM

Subject: SLWRI Question To: kchow@usbr.gov

Cc: "Hadley, Elizabeth" < ehadley@ci.redding.ca.us>

Hello Katrina.

I hope you are doing well. I have left you a few voice messages, but it seems like we are having trouble connecting at the same time so I thought I would send you an email.

We are looking at providing official comments on the DEIS but wanted to make sure we had the right understanding of the document to provide those comments. If you could please address the following questions (or indicate where in the DEIS or Draft Feasibility Report I could find the information). that would be greatly appreciated:

REU-2

Costs; Have the estimated costs of each alternative changed since the feasibility study was released? Is there an estimated cost associated with the No Action Alternative? And what is the estimated time period that these costs will be applied (20 years?)?

a. Draft Feasibility Study Costs:

	CP 1	CP 2	CP 3	CP 4	CP 5
Total Construction Cost (\$ millions)	827	913	1064	1070	1073
Total Annual Cost (\$ millions)	42.6	46.4	53.7	54.0	54.1

2) Cost Allocations: Whereas we recognize that the allocations were just estimates in the feasibility study, have these estimates changed?

REU-4 a. Draft Feasibility Study Allocations:

	Irrigation Water Supply	M&I Water Supply	Fish and Wildlife Enhancement	Hydropower
% of Cost	12.4%	18.6%	61.2%	7.9%

b. Where the water supply cost allocations be further divided between North of Delta and South REU-5 of Delta users given each alternatives objectives?

c. With the 7.9% applied to Hydropower, is there a distinction between what portion will be REU-6 applied to CVP power and what portion will be applied to SWP power?

3) Trinity Flows: Will any of the alternatives directly affect the Trinity Flows? REU-7

4) Power Generation/Seasonal Flows: Whereas power generation sees a net yearly increase in each of the scenarios, is there any information on the breakdown of monthly power generation REU-8 changes based on each alternative (specifically CVP power)?

a. DEIS

	No Action	CP1	CP2	CP3	CP4	CP5
Net Power Increase (GWh/yr)		54	90	90	133	117
Net CVP Power Increase (GWh/yr)	-12	40	9	95	119	93

REU-9

5) Power generation during construction: The DEIS appears to address the overall impact on power generation as a result of each alternative (each demonstrating an increase in generation), but doesn't not appear to address any impact on power generation (specifically CVP power) during the construction period of each alternative. Will power generation be affected during construction and how so?

Thank you for your help and clarification as work to provide our comments on the DEIS. Please let me know if you have any questions and I look forward to your reply.

Sincerely, Justin P Day

### Justin P Day

Management Analyst Legislative & Regulatory Program Redding Electric Utility, City of Redding

Phone: (530) 638-3735 Email: jday@reupower.com

# Responses to Comments from Redding Electricity Utility, City of Redding

**REU-1:** Thank you for your comment on the DEIS for the SLWRI, we appreciate your time in responding to the document. During the public comment period additional information was available to Reclamation and the cost estimates were updated in the Final EIS. As stated in the DEIS Appendices Engineering Summary Appendix, Chapter 5, "Opinion of Probable Construction Cost," the price level used for the DEIS were April 2012. The Final EIS cost estimates have been updated using Reclamation cost indices. This comment will be included as part of the record and made available to decision makers before a final decision on the proposed project.

**REU-2:** Thank you for your comment on the DEIS for the SLWRI, we appreciate your time in responding to the document. There is no cost associated with the No Action Alternative; all current operations would be projected to continue with no increase in costs. This comment will be included as part of the record and made available to decision makers before a final decision on the proposed project.

**REU-3:** Please refer to Master Comment Response COSTEST-1, "Development of Cost Estimates."

**REU-4:** Thank you for your comment related to the preliminary cost allocation analysis completed for the Draft Feasibility Report (which was released to the public in February 2012).

Please see Master Comment Response COST/BEN-5, "Potential Project Financing."

**REU-5:** Thank you for your comment related to the preliminary cost allocation analysis completed for the Draft Feasibility Report (which was released to the public in February 2012).

Please see Master Comment Response COST/BEN-5, "Potential Project Financing."

**REU-6:** Thank you for your comment related to the preliminary cost allocation analysis completed for the Draft Feasibility Report (which was released to the public in February 2012).

Please see Master Comment Response COST/BEN-6, "Potential Project Financing."

**REU-7:** Table 6-7 in Chapter 6, "Hydrology, Hydraulics and Water Management." shows changes in simulated Trinity River flows under the project alternatives in both existing and future conditions. On a long-term average basis, there would be a marginal increase in Trinity River flows under the project alternatives as shown in Table 6-7. Overall there would be no negative impact to Trinity and Klamath River flows under the project alternatives.

**REU-8:** The Modeling Appendix, Attachment 18 - LTGen and SWP Power Model Output, of the DEIS includes monthly power simulation outputs for each month of the simulation period for each alternative described in the DEIS.

**REU-9:** Construction activities at Shasta Dam have been developed such that no reservoir level restrictions (e.g., lowering water levels) are required during the construction period. Feature designs and construction activities have been explicitly developed to allow the full range of water levels during the construction period. For example, a temporary bulkhead/coffer dam will be used to isolate the spillway during modification of the spillway crest and piers to allow exercising the full reservoir capacity during construction. Specific effects on hydropower generation would be dependent on hydrologic conditions during construction and thus would be managed adaptively.

## 33.9.11 Shasta County Board of Supervisors

SCBS

From: Glenda Tracy < <a href="mailto:gtracy@co.shasta.ca.us">gtracy@co.shasta.ca.us</a>
Date: Mon, Jul 1, 2013 at 1:40 PM
Subject: Shasta County Board of Supervisors
To: "kchow@usbr.gov" < <a href="mailto:kchow@usbr.gov">kchow@usbr.gov</a>
Cc: "dmurillo@usbr.gov" < <a href="mailto:dmurillo@usbr.gov">dmurillo@usbr.gov</a>

Correspondence and CDs regarding "Reclamation Managing Water in the West" were received in this office for the members of the Shasta County Board of Supervisors.

The current five board members received this information.

SCBS-1

However, it was also sent to two former supervisors (who are no longer with this office).

Please remove from your mailing list:

Glenn Hawes and Linda Hartman.

Thank you.

## Glenda Tracy

Chief Deputy Clerk of the Board Shasta County (530) 225-5550

## Responses to Comments from Shasta County Board of Supervisors

**SCBS-1:** Please refer to Master Comment Response MAILINGLIST-1, "Addition or Change to the Mailing List."

#### 33.9.12 **Shasta County Board of Supervisors**

SCBS2

DAVID A. KEHOE, DISTRICT 1 LEONARD MOTY, DISTRICT 2

PAM GIACOMINI, DISTRICT 3 BILL SCHAPPELL, DISTRICT 4 LES BAUGH, DISTRICT 5

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# Shasta County

## BOARD OF SUPERVISORS

1450 Court Street, Suite 308B Redding, California 96001-1673 (530) 225-5557 (800) 479-8009 (530) 225-5189-FAX

July 23, 2013

Ms. Katrina Chow, Project Manger Bureau of Reclamation Planning Division 2800 Cottage Way, MP 700 Sacramento CA 95825-1893

Subject: Draft EIS for Shasta Lake Water Resources Investigation

Dear Ms. Chow:

JUL 2🐠 2013

SCBS2-1

Shasta Dam and Shasta Lake are in Shasta County. These facilities provide water supplies, fisheries, flood control and recreational benefits to our community. We understand that a project has been proposed to raise Shasta Dam and thereby expand the reservoir. We have reviewed the June 2013 Draft Shasta Lake Water Resources Investigation (SLWRI) Environmental Impact Statement (EIS). This document is intended to facilitate informed decision making on the proposed project alternatives. We find that the following areas require additional development to achieve that end:

- Private property holdings;
- Recreational amenities;
- Local water intakes; and
  - Local roads and bridges.

### **Private Property**

SCBS2-2

The EIS notes that private property takings are a concern. This understatement fails to delineate an acceptable path forward. Reclamation should have procedures in place to ensure that private property owners are made whole. Please include a description of the property acquisition processes. This will improve transparency and allow interested parties to make informed decisions.

SCBS2-3

The EIS notes that an 18.5' raise would inundate 160 buildings. Residences within 20 feet of the new pool elevation may also be relocated. Shasta County seeks assurances that all such affected properties will be replaced in kind. Property owners shall end up with acreage, frontage, SCANNED

improvements and access that equals or exceeds their existing holdings.

Folder I.D. Date input & initials

## Shasta Lake Water Resources Investigation Environmental Impact Statement

Bureau of Reclamation July 23, 2013 Page 2 of 2

#### Recreation

SCBS2-5

Many of the proposed alternates would remove only some of the vegetation from inundated areas. Fisheries may temporarily benefit from this approach. Navigation would suffer. Additional land clearing, flotsam harvest and safety patrols would be appropriate mitigation measures.

SCBS2-6

The United States Forest Service (USFS) operates and/or permits scores of boat ramps, public accesses, cabins, and campgrounds around the Lake. The USFS has been moving away from developments that require maintenance and towards human exclusion. This is not appropriate on a manmade lake. The USFS should maintain and/or replace existing cabins, cabin leases, campgrounds, boat launches and docks, including any that are impacted by this project.

### Local Water Intakes

SCBS2-7

There are at least three municipal water supply intakes on Shasta Lake. They serve thousands of residents in adjoining communities. Small municipal and private wells may also be within the zone of inundation. The EIS needs to explicitly commit to relocating these facilities.

SCBS2-8

The proposed project would purportedly enhance the Cold Water Pool. Local water service area expansions and related transfers have been hampered because they could potentially deplete the Cold Water Pool. The EIR should quantify project impacts to the Cold Water Pool. Associated local water supply impacts should also be quantified.

## Local Roads and Bridges

SCBS2-9

The Lake is ringed by roads and bridges. These facilities provide access to hundreds of homes, businesses and other facilities around the Lake. Redundancy is lacking; there is often only one way in and out. Many of these roads and bridges are perched only a few feet above the existing water surface. The proposed project would raise the water surface to inundate and render them impassable. Even elevated facilities may be damaged by wave action. Homes and businesses would become inaccessible. This is unacceptable. All impacted roads and bridges will have to be relocated to maintain access to all occupied and/or significant facilities at all times. These relocation projects will have their own impacts. These are direct and foreseeable consequences of the proposed project. They need to be addressed in this EIR. This information should be tailored to each individual alternative.

Sincerely,

DAVID A. KEHOE, CHAIRMA

Board of Supervisors County of Shasta

State of California

DK/EBW/ldr

# Responses to Comments from Shasta County Board of Supervisors

**SCBS2-1:** Comment Noted.

**SCBS2-2:** Please refer to Master Comment Response PLAR-1, "Effects to Private Residences and Businesses."

- **SCBS2-3:** Please refer to Master Comment Response PLAR-1, "Effects to Private Residences and Businesses."
- **SCBS2-4:** Please refer to Master Comment Response PLAR-1, "Effects to Private Residences and Businesses."
- SCBS2-5: In Chapter 12, "Botanical Resources and Wetlands," Section 12.3.5, "Mitigation Measures," Bot-5, "Acquire, Preserve, and Restore Mitigation Lands for Loss of General Vegetation Habitats," describes the process to mitigate for vegetation removal and restoration. In Chapter 18, "Recreation and Public Access," Section 18.3.5, "Mitigation Measures," Rec-4, "Provide Information to Shasta Lake Visitors About Potential Safety Hazards in Newly Inundated Areas from Standing Timber and Stumps," describes the process to identify the remaining trees and stumps in untreated areas of the newly inundated zone, Reclamation will work with USFS to provide maps, bulletins, informational postings, and other media as deemed appropriate by USFS at boat ramps, marinas, and other developed Shasta Lake recreation sites.
- **SCBS2-6:** Please refer to Master Comment Response REC-1, "Effects to Recreation at Shasta Lake," Master Comment Response FSCABINS-2, "USFS's Authority over Privately Owned Cabins on USFS Lands," and Master Comment Response FSCABINS-3, "Relocation of Privately Owned Cabins on USFS Lands."
- **SCBS2-7:** Please refer to Master Comment Response UR-1, "Effects to Water and Wastewater Infrastructure around Shasta Lake."
- SCBS2-8: Please refer to Table 6-6 in Chapter 6, "Hydrology, Hydraulics and Water Management" of the EIS that contains results from reservoir temperature model (SRWQM) showing changes in Shasta Reservoir cold water pool volume under the various project alternatives. CalSim-II, a CVP/SWP system operations model was used to evaluate changes in water supply conditions in the Sacramento and San Joaquin River basins. Key modeling results related to changes in water deliveries to SWP and CVP contractors can be found in Chapter 6. Detailed outputs on water deliveries to various other project and non-project contractors were included in the DEIS Modeling appendix and as an attachment in electronic format.
- **SCBS2-9:** Please refer to Master Comment Response RBR-2, "Reduced Public Access Around Shasta Lake."

#### **Santa Clara Valley Water District** 33.9.13

10/18/13 DEPARTMENT OF THE INTERIOR Mail - Santa Clara Valley Water District's comments on Draft EIS for Shasle Lake Water Resources Investigation





# Santa Clara Valley Water District's comments on Draft EIS

for Shasta Lake Water Resources Investigation
Sherwood Garcia <sgarcia@valleywater.org> Mon, Sep 30, 2013 at 6:26 PN To: "BOR-MPR-SLWRI@usbr.gov" <bor-mpr-slwri@usbr.gov>, "kchow@usbr.gov" <kchow@usbr.gov> Cc: Cindy Kao <ckao@valleywater.org>, Joan Maher <jmaher@valleywater.org></jmaher@valleywater.org></ckao@valleywater.org></kchow@usbr.gov></bor-mpr-slwri@usbr.gov></sgarcia@valleywater.org>
Ms. Chow –
Please find attached the comment letter from Santa Clara Valley Water District (SCVWD) regarding the Draft Environmental Impact Statement for the Shasta Lake Water Resources Investigation. Also attached is the comment letter from the San Luis & Delta-Mendota Water Authority regarding the same subject.
If you have any questions regarding the SCVWD comments, please contact Ms. Cindy Kao at 408-630-2346.
We are sending you the original by mail.
Thank you,

Sherwood Garcia

10/18/13 DEPARTMENT OF THE INTERIOR Mail - Santa Clara Valley Water District's comments on Draft EIS for Shasta Lake Water Resources Investigation

Santa Clara Valley Water District

### SHERWOOD R. GARCIA

PROJECT ASSISTANT Imported Water Unit

Santa Clara Valley Water District

5750 Almaden Expressway, San Jose, CA 95118 (408) 630-2825 sgarcia@valleywater.org

### 2 attachments

- 093013 SCVWD Comment Ltr to USBR re Draft EIS-Shasta.pdf
- SLDMWA Comments on Shasta Draft EIS (final pdf reduced size).pdf 4789K

5750 Almoden Expressway, San Jose, CA 95118-3614 | (408) 265-2600 | www.valley.water.org



September 30, 2013

Ms. Katrina Chow, Project Manager
U.S. Bureau of Reclamation, Planning Division
2800 Cottage Way
Sacramento, CA 95825
E-mail: BOR-MPR-SLWRI@usbr.gov; kchow@usbr.gov

Subject:

Santa Clara Valley Water District's Comments on the Draft Environmental Impact Statement for the Shasta Lake Water Resources Investigation, Dated June 2013

Dear Ms. Chow.

Thank you for the opportunity to comment. This letter is in reply to the Bureau of Reclamation (Reclamation) notice, dated July 1, 2013, regarding the release of the June 2013 Draft Environmental Impact Statement for the Shasta Lake Water Resources Investigation (DEIS).

SCVWD-1

SCVWD-2

The Santa Clara Valley Water District (Santa Clara) supports the enlargement of Shasta Dam and Reservoir. Expansion of the reservoir has the potential to increase the flexibility of the Central Valley Project (CVP) and offset the effects of operating restrictions that have reduced the water supply available to meet the purposes of the CVP. We applaud Reclamation's efforts to produce the DEIS; however, there are several issues that must be addressed before the document is finalized. These are described in detail in the comment letter on the DEIS provided by the San Luis and Delta Mendota Water Authority (SLDMWA), dated September 30, 2013 (attached), which Santa Clara adopts and incorporates. Of particular concern is the lack of an alternative in the DEIS that is aimed at increasing the yield of the reservoir to serve the purposes of the CVP. As recommended in the letter of the SLDMWA, a new alternative should be crafted that reflects this approach, and the project purpose statement should be modified to focus on Improving the operational flexibility of the CVP. The CVP project purposes include protection of fish and wildlife, mitigation of project impacts, and support of irrigation and

SCVWD-3

We appreciate the opportunity to review the document and would be happy to meet to discuss our comments and concerns further.

municipal and industrial water needs, as well as power generation.

Sincerely,

Cindy Ka6

Imported Water Unit Manager

Attachment

Our mussion is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.



September 30, 2013

Katrina Chow, Project Manager
U.S. Bureau of Reclamation, Planning Division
2800 Cottage Way
Sacramento, CA 95825
Email: BOR-MPR-SLWRI@usbr.gov; kehow@usbr.gov

RE: Draft Environmental Impact Statement for Shasta Lake Water Resources Investigation (June 2013)

Dear Ms. Chow:

The San Luis & Delta-Mendota Water Authority (Water Authority) supports enlargement of Shasta Dam and Reservoir. Through the Central Valley Project (CVP), United States Bureau of Reclamation (Reclamation) develops water that: (1) protects, restores, and enhances fish, wildlife, and associated habitats in the Central Valley and Tririty River basins of California; (2) addresses impacts of the CVP on fish, wildlife and associated habitats; (3) supports agriculture; (4) supports municipal and industrial needs; and (5) generates power. Unfortunately, over the last three decades in particular, Reclamation's ability to develop water to meet these purposes, especially to provide water supply and hydropower, has been significantly compromised. If Congress authorizes enlargement of Shasta Dam and Reservoir, it should help restore the ability of Reclamation to operate the CVP to meet its purposes.

Character (Character)

Williams.

700 814 7616

<sup>&</sup>lt;sup>1</sup> The Water Authority submits this comment letter on behalf of its member agencies. The Water Authority was formed in 1992 as a joint powers authority and consists of 29 member agencies, 27 of which contract with Reclamation for supply of water from the federal CVP. The Water Authority's member agencies collectively hold contracts with Reclamation for the delivery of approximately 3.3 million acre-feet of CVP water CVP water provided to the Water Authority's member agencies supports approximately 1.2 million acres of agricultural land, as well as more than 100,000 acres of managed wetlands, private and public, in California's Central Valley. The Water Authority's member agencies also use CVP water to serve more than 1 million people in the Silicon Valley and the Central Valley. Each of the Water Authority member agencies is listed in Attachment.)

## Shasta Lake Water Resources Investigation Environmental Impact Statement

Katrina Chow, Project Manager U.S. Bureau of Reclamation, Planning Division September 30, 2013 Page 2

In most respects, the June 2013 Draft Environmental Impact Statement for the Shasta Lake Water Resources Investigation (Draft EIS) identifies the impacts on the human environment caused by enlargement of Shasta Dam and Reservoir. However, there are four critical areas where additional information or revisions are needed before the Draft EIS is finalized. The additional information and revisions will help demonstrate the importance of an enlarged Shasta Dam and Reservoir to the CVP, and specifically how this action will help restore the ability of Reclamation to operate the CVP to achieve its purposes.

1. <u>Purpose And Need</u>: The Draft EIS presents the purpose of the action as: "The purpose of the proposed action is to improve operational flexibility of the Sacramento-San Joaquin Delta (Delta) watershed system by modifying the existing Shasta Dam and Reservoir to meet specified primary and secondary project objectives." (Draft EIS at 1-5.) That statement is accurate, but Reclamation should refine it to reflect the federal interest in and Congressional authorization for Shasta Dam and Reservoir, as a part of the CVP. The Water Authority recommends the following:

"The purpose of the proposed action is to improve operational flexibility of the <u>Central Valley Project Sacramento San Joaquin Delta (Delta) watershed system</u> by modifying the existing Shasta Dam and Reservoir to meet specified primary and secondary project objectives."

- 2. Alternatives: The Draft EIS identifies a range of alternatives, which, when analyzed, presents information that was useful to the Water Authority and will undoubtedly be useful to Reclamation as it develops a Record of Decision. The Water Authority respectfully requests that Reclamation consider adopting an alternative that combines elements of the existing alternatives considered in the Draft EIS. Specifically, the Water Authority believes the purpose and need for the action, when considered with the federal interest in and Congressional authorization for the CVP, supports selecting an alternative that increases the height of Shasta Dam and Reservoir by 18.5 feet. The increased yield generated by the action should be dedicated, at the first and primary priority, to serve CVP purposes (i.e., all increased yield is considered part of the total annual CVP yield). Then, only if and for the period when the yield could not be beneficially used by CVP should Reclamation seek to sell that water to users outside of the CVP, including to the State Water Project. The temporary sale of the water would help to repay the Federal investment in the CVP, until it can be dedicated to CVP purposes.
- 3. <u>Sensitivity Analyses</u>: The enlargement of Shasta Dam and Reservoir will increase the yield of the CVP. However, as history has shown, how Reclamation beneficially uses that yield will likely change over time. The Draft EIS considers the ability of Reclamation to use the yield based on operations under the existing operational criteria, infrastructure, and specific regulations. While the Water Authority appreciates the need to analyze the effects of the action

<sup>&</sup>lt;sup>2</sup> The Water Authority supports including additional elements presented in the Draft EIS (e.g., Augment Spawning Gravel, Restore Riparian, Floodplain, & Side Channel Habitat, and/or Mitigation Measures) in the action.

Katrina Chow, Project Manager U.S. Bureau of Reclamation, Planning Division September 30, 2013 Page 3

with those constraints, the Water Authority recommends that, in addition, Reclamation conduct "sensitivity analyses" that consider the benefits to the CVP increased yield from enlargement of Shasta Dam and Reservoir with new infrastructure, different operational criteria, and different regulations. Such sensitivity analyses are appropriate for an action, like enlargement of Shasta Dam and Reservoir, which has such long-term planning and operational horizons.

4. Ability To Use Information In The Draft EIS For CEOA Compliance: The Draft EIS indicates: (1) Reclamation prepared it in accordance with the California Environmental Quality Act (CEQA), and (2) the Draft EIS could be used by any State of California agencies involved in reviewing and issuing permits or other approvals for the project. (Draft EIS at 1-1.) The Water Authority agrees. The information developed in the Draft EIS will substantially assist with CEQA compliance. However, the Draft EIS should be revised in three respects. First, the Draft EIS should acknowledge that the CEQA lead agency has the vested responsibility to ensure CEQA is satisfied, and, as a result, for example, the CEQA lead agency: (a) may identify alternatives (including the environmentally preferred alternative) and render conclusions different from those presented in the Draft EIS, and (b) has discretion to determine the significance of environmental impacts and potentially feasible mitigation for any such impacts. Second, the Draft EIS should leave open the possibility that the Draft EIS would be used, not only by "State of California permitting agencies", but also local agencies within California. And, third, aspects of the Draft EIS could be supplemented to better provide the information required under CEQA.

The Water Authority attaches hereto more detailed comments. (See Attachment 2.) I, or a member of my staff, will contact you to schedule a meeting during which we can discuss the Water Authority's comments.

Sincerely,

Daniel Nelson Executive Director

## ATTACHMENT 1

San Luis & Delta-Mendota Water Authority Member Agencies

Banta-Carbona Irrigation District Broadview Water District Byron Bethany Irrigation District (CVPSA) Central California Irrigation District City of Tracy Del Puerto Water District Eagle Field Water District Firebaugh Canal Water District Fresno Slough Water District Grassland Water District Henry Miller Reclamation District #2131 James Irrigation District Laguna Water District Mercy Springs Water District Oro Loma Water District Pacheco Water District Pajaro Valley Water Management Agency Panoche Water District Patterson Irrigation District Pleasant Valley Water District Reclamation District 1606 San Benito County Water District San Luis Water District Santa Clara Valley Water District Tranquility Irrigation District Turner Island Water District West Side Irrigation District West Stanislaus Irrigation District

Westlands Water District

#### ATTACHMENT 2

## I. The Draft EIS Provides Substantial And Important Information That Will Assist Reclamation With Its Decision On The Proposed Action

The Draft EIS does not identify a preferred alternative. The Draft EIS explains this is because the Council on Environmental Quality's Proposed National Objectives, Principles, and Standards for Water and Related Resources Implementation Studies calls for allowing public input before a final action is recommended or selected. (Draft EIS at 1-35.) This is wise policy. The Draft EIS considers three different expansion heights for Shasta Dam – 6.5 feet, 12.5 feet, and 18.5 feet. The analysis in the Draft EIS concludes that an 18.5 foot raise will yield more water for the CVP and thus more benefits for CVP purposes, including environmental, agricultural, and municipal uses, than lesser elevations for only a relatively modest additional cost – making the 18.5 foot height the most efficient and economical of those considered in the Draft EIS. The Water Authority agrees with that conclusion, and supports the 18.5 foot raise. However, specific refinements and additional analyses are recommended. The Water Authority provides comments in the cover letter and sections below with the hope they will improve the Draft EIS before Reclamation finalizes it and to assist Reclamation in developing its Record of Decision.

## II. The Draft EIS Would Benefit From Specific Refinements

A. The Draft EIS Should Be Revised To Reflect That Enlargement Of Shasta Dam And Reservoir Are Important Steps Toward Restoring Reclamation's Ability To Fulfill CVP Purposes Authorized by U.S. Congress

The enlargement action addresses a pressing need to improve Reclamation's ability to achieve the purposes for the CVP. Initially, in the Rivers and Harbors Act of 1937, Congress authorized the CVP for the purposes of "improving navigation, regulating the flow of the San Joaquin River and the Sacramento River, controlling floods, providing for storage and for the delivery of the stored waters thereof, for the reclamation of arid and semiarid lands and lands of Indian reservations, and other beneficial uses, and for the generation and sale of electric energy." (Act of August 26, 1937, Pub. L. No. 75 392, 50 Stat. 844, 850; see Rivers and Harbors Act of 1940, Pub. L. No. 76 868, 54 Stat. 1198, 1199-2000.) In 1992, these purposes were expanded to include the "mitigation, protection, and restoration of fish and wildlife." (Central Valley Project Improvement Act (CVPIA), Title 34 of Pub. L. No. 102-575, 106 Stat. 4706 (1992), § 3406(a)(1).) Today, Reclamation faces enormous challenges in fulfilling all of those CVP purposes, and, without such investments in the proposed action, doing so in the future is only going to become more difficult.

The Water Authority's member agencies have long relied on CVP water, and, for at least the last two decades, have faced increasing challenges to maintain the agricultural and urban economies they support. Since the early 1990s, the quantity and reliability of water Reclamation can deliver to the Water Authority's member agencies for irrigation, municipal and industrial purposes has significantly declined. In addition, Reclamation's ability to secure water for wildlife refuges, specifically Level 4 refuge supplies, has been challenging. During that same

## Shasta Lake Water Resources Investigation Environmental Impact Statement

time period, significant responsibilities have been imposed on Reclamation to dedicate CVP water for the protection of anadromous and pelagic fish; these responsibilities at times create conflicts (i.e., dedication of water for Delta outflow versus reservation of water in reservoirs to maintain cold water for salmon). During this time of increased CVP responsibilities, anadromous and pelagic fish populations have not improved and in many cases have degraded. The Draft EIS recognizes these facts. (See e.g., Draft EIS at 1-13.) The additional yield from enlargement of Shasta Dam and Reservoir will reduce the conflict and tension between the existing beneficial uses of CVP water and be an important step towards restoring Reclamation's ability to achieve the purposes of CVP.

B. Reclamation Should Refine The Purpose Statement To Reflect The Importance Of Improving Reclamation's Ability To Operate The CVP To Meet Its Authorized Purposes

The Draft EIS includes a broad purpose statement, which is to "improve operational flexibility of the Delta watershed system through modifying Shasta Dam and reservoir to meet specified primary and secondary project objectives." (Draft EIS at 5.) This statement should be refined to focus on the CVP. Such a refinement would comport with and recognize that the action proposes to augment an existing CVP facility, and it would also be consistent with Congressional intent, including that specified in the CVPIA. (CVPIA § 3402 (discussing a purpose of the CVP is to improve operational flexibility, CVPIA § 3408(j) (providing for the development of a plan to improve CVP yield).)

C. Reclamation Should Assess The Sensitivity Of The Impacts Of The Alternatives To Changes In Operational Criteria, Infrastructure, And Specific Regulations

Consistent with the need to improve Reclamation's ability to operate the CVP to meet CVP purposes, Reclamation should assess the sensitivity of the alternatives with changes in operational criteria, infrastructure, and specific regulations. The Water Authority recognizes that at this time changes in operational criteria, infrastructure, and specific regulations may still be years away. However, the suggested sensitivity analyses would complement the existing analyses of the different expansion heights for Shasta Dam and are reasonable and appropriate given the long-term 100-year operational and planning horizons to inform the public and decision makers of the actual long-term potential benefits to CVP yield of enlarging Shasta Dam. At a minimum, Reclamation should consider the sensitivity of its estimates of increased CVP yield to: (1) relaxation in the restrictions currently imposed on the CVP pursuant to the federal Endangered Species Act, (2) changes in the manner the Department of the Interior implements CVPIA actions and programs, (3) increases in the capacity of the CVP to re-divert water conveyed to or through the Delta, and (4) changes in CVP operations, including those related to the coordinated operations of the CVP and State Water Project.

D. <u>Reclamation Should Consider An Alternative That Combines Several Existing Alternatives And Preserves Reclamation's Ability To Use All Yield From Shasta Enlargement To Meet CVP Purposes</u>

The Draft EIS includes a range of alternatives, which, when analyzed, presents information that was useful to the Water Authority and will undoubtedly be useful to

Reclamation as it develops a Record of Decision. Each alternative, however, presents a somewhat fixed set of future CVP operations to meet the CVP purposes. The Water Authority respectfully requests that Reclamation consider adopting an alternative that retains maximum operational flexibility that would essentially combine the operational parameters of several of the alternatives considered in the Draft EIS into a new alternative that gives Reclamation maximum flexibility to operate to any of the various CVP purposes, identified in the existing alternatives.

This is a reasonable alternative to include in the Draft EIS because of the 100-year planning period and operational life assumed for any alternative for Shasta Dam and Reservoir enlargement. For example, regulation of the CVP has and will likely continue to change over time. The burdens imposed on the CVP through biological opinions have evolved over time, and likely will continue to evolve. The State Water Resources Control Board's Bay-Delta Water Quality Control Plan is subject to regular review and update. New science and the benefits of restoration efforts may also cause changes in the current approaches to regulating CVP operations. These areas of regulation are further subject to change as new facilities or methods of CVP operation occur.

For these reasons, Reclamation should plan accordingly, and address the potential for changed circumstances in its NEPA analysis. That analysis and whatever alternative is selected should allow Reclamation the flexibility to dedicate the additional yield generated by the action to achieve CVP purposes, even if current constraints would prevent such uses.

## E. Reclamation Should Conduct An Assessment Of Existing Water Rights It Holds For The CVP Before Assuming New Water Rights Are Needed

The Draft EIS assumes Reclamation will need to apply for and obtain new water rights from the State Water Resources Control Board to develop additional yield with the enlarged Shasta Dam and Reservoir. (Draft EIS at 1-35.) That assumption may not be correct, and the administrative actions Reclamation may need to take before the State Water Resources Control Board, if any, will likely differ depending upon the action Reclamation adopts. The Water Authority requests that Reclamation provide an assessment of the existing water rights Reclamation holds for the CVP and their consistency with the alternatives before finalizing the Draft EIS.

## F. Reclamation Should Refine The Draft EIS To Acknowledge That The California Environmental Quality Act Lead Agency Will Make Independent Determinations

The Water Authority commends Reclamation for producing an environmental impact statement that substantially complies with the requirements of CEQA. The document will assist State and local agencies in complying with the California Environmental Quality Act (CEQA). In fact, CEQA authorizes and encourages use of an EIS in place of a separate EIR. (Public Resources Code §§ 21083.5, 21083.7.) However, there are several refinements that could be made to the Draft EIS, to better reflect CEQA mandates.

The Draft EIS should recognize that the CEQA lead agency has the ultimate responsibility to prepare and certify the environmental impact report. With lead agency designation comes the responsibility and the discretion to determine the significance of

environmental impacts and potentially feasible mitigation for any such impacts. The Draft ElS should state explicitly that Reclamation cannot make the CEQA determination vested with the CEQA lead agency (e.g., feasible alternatives, thresholds of significance, findings, conclusions). The lead agency must also make other determinations required by CEQA, such as identifying the environmentally preferred alternative, among others. In addition to reserving these determinations for the CEQA lead agency, Reclamation should include text in the FEIS that expressly acknowledges that the requirements of NEPA and CEQA differ, and that certain conclusions made by Reclamation under NEPA need not and may not be the same conclusions that the lead agency under CEQA will make when it exercises its independent discretion under CEQA. Finally, there are areas where augmentation would help improve the information needed to satisfy CEQA. The Water Authority welcomes the opportunity to discuss those areas with Reclamation.

# III. To Ensure Proper Consideration Of Alternatives, The Analysis In The Draft EIS Should Be Augmented

A. The Draft EIS Should Expand Its Discussion Of The Impacts Of Water Shortages
To The Human Environment

The no-action alternative could be supplemented to better present the ongoing negative effects caused by the existing inability of Reclamation to adequately and reliably serve agricultural, municipal and industrial water users. When the CVP was able to provide a reliable water supply, communities and viable local economies developed. But, reduced CVP water supplies have and continue to cause physical impacts related to the reliance on groundwater to substitute for lost CVP supplies. These include reduced groundwater levels from overdraft, surface subsidence, adverse impacts to crops and soil from reliance on poor quality groundwater, increased energy use, and impacts to air quality.

Shortages of CVP supplies have also caused changes in land use patterns, loss and destruction of permanent crops, and/or decreased production of existing crops. In response to reduced water supplies, farmers will fallow fields, reducing agricultural productivity directly results in layoffs, reduced hours for agricultural employees, and increased unemployment in agricultural communities. Reduced agricultural productivity also has indirect socioeconomic impacts for agriculture-dependent businesses and industries. In addition, unavailability of stable and sufficient water supplies reduces farmers' ability to obtain financing, which results in employment losses, due to the reduced acreage of crops that can be planted and the corresponding reduction in the amount of farm labor needed for that reduced acreage.

Reduced water supplies and the resulting employment losses also cause cascading socioeconomic impacts in affected communities, including increased poverty, hunger, and crime, along with dislocation of families and reduced tax-based revenues for local government services and schools. In the urban sector, reduced supplies or increased supply uncertainty can cause water rates to increase as agencies seek to remedy supply shortfalls by implementing measures to reduce demand and/or augment supplies. Connection fees and other one-time costs for new developments may also increase and further retard economic development. All these impacts were explained and found in recent federal court cases regarding NEPA impacts from reduced

CVP deliveries. (See e.g., The Consolidated Delta Smelt Cases, 717 F.Supp.2d 1021 (E.D. Cal. 2010), The Consolidated Salmonid Cases, 713 F.Supp.2d 1116 (E.D. Cal. 2010).)

Conversely, the impact analysis may not adequately capture the positive effects of improving the quantity or reliability of water to agricultural, municipal and industrial water users. In particular, the agricultural impact analysis provided in Chapter 10 of the Draft EIS does not adequately identify and explain the beneficial impacts on agriculture of delivering increased and more reliable CVP supplies that would result from Shasta Dam enlargement.

The description of the impacts to the human environment from the no action alternative and each action alternative should reflect the consequences for the human environment from shortages of CVP water. Failing to raise Shasta Dam and using additional yield to address those shortages will allow the significant adverse impacts to the human environment in the CVP service area, particularly on the west side of the San Joaquin Valley, to persist unabated. Conversely, the more an alternative will lessen CVP water supply shortages, the greater the potential benefit for the human environment in the CVP service area. Those relative consequences among alternatives should be described.

#### B. Reclamation Should Provide More Details About The Proposed Water Conservation Program

The Water Authority generally agrees with Reclamation's decision to include agricultural and urban water conservation in the action alternatives as a common management measure. (Draft EIS at 2-24.) However, Reclamation should clarify whether the analysis in the Draft EIS includes water conserved from this program in its estimates of the water supply increases from the action alternatives. If so, the conserved water should not be included in the cost allocation process, since those water supplies could be achieved without raising Shasta Dam. If not, the Draft EIS does not appear to provide an estimate of the water supplies generated solely by implementation of the water conservation program.

Further, the Draft EIS should describe the proposed water conservation program in more detail. What management practices or physical improvements will the program seek to implement? Would Reclamation implement these measures through existing contracts, new contracts, or some other mechanism? Also, will all CVP contractors be part of the program or only some subset? If these and other aspects of the program still need to be developed, the Water Authority would like to collaborate with Reclamation when it does so.

## C. Climate Change Modeling Should Be Expanded To Each Of The Alternatives

The Draft EIS Climate Change Modeling Appendix indicates that the effects of climate change were modeled on both CP4 and CP5, but not CP3. NEPA requires an equal level of analysis for alternatives, and therefore the Draft EIS should provide a similar analysis of the effects of climate change on CP3 that allows decision makers and the public to understand the likely environmental and socioeconomic effects of CP3 given reasonable estimates of future climate change. In addition, the Water Authority's recommended new alternative (see comment II-D above), once developed, would require a similar level of analysis.

## D. Additional Information On Costs And Benefits Would Improve The Economic Analyses

Information on economic costs and benefits, particularly the Draft Economic Valuation Appendix, would benefit from a more expansive discussion of the costs and benefits associated with improving the ability of Reclamation to operate the CVP to meet CVP purposes, in particular Reclamation's ability to improve water supply and reliability for municipal and industrial users of CVP water. The costs and benefits should not be limited to direct impacts, but should also consider the indirect and cumulative impacts within the communities dependent upon the CVP water.

## E. The Draft EIS Should Discuss Environmental Justice Issues Within Specific Communities

Chapter 24 of the Draft EIS discusses the environmental justice aspects of the various action alternatives. Its discussion is very general and may miss important impacts that occur within specific communities – both north and south of the Delta. For example, improved CVP water supplies and reliability will likely have important environmental justice implications for communities within the San Joaquin Valley, which have been particularly hard hit with economic distress caused by the reduction of CVP water supplies and reliability. Reclamation should consider revising the environmental justice discussion to disclose the implications of changes in water supply and reliability to specific communities, including the communities of Firebaugh, Mendota, Huron and Avenal.

#### IV. Specific Suggested Edits

Draft EIS Page	Suggested Change / Comment		
1-24	Add the following (emphasis added): " Clifton Court Forebay into		
	Bethany Reservoir. Some of the water delivered to Bethany Reservoir is		
	pumped at South Bay Pumping Plant for delivery through the South		
	Bay Aqueduct to SWP contracting agencies in the San Francisco Bay		
	Area. Most of the water delivered to Bethany Reservoir flows into the		
	California Aqueduct, the main conveyance facility of the SWP"		
3-17	Add the following (emphasis added): "Those three water districts		
	Milpitas, Santa Clara, and San Jose, among others."		
3-27	Correct the release of the BDCP EIR/EIS from "spring 2013" to "fall		
	2013".		
6-4	To be more complete, it is recommended that the Delta-Mendota Canal-		
	California Aqueduct Intertie be included in the description of CVP/SWP		
	service areas.		
2-45 and 2-46	CP3 is described as providing agricultural water supply reliability but no		
	improvement in increasing M&I deliveries. This conflicts with the planning		
	consideration on page 2-7: "Alternatives should strive to balance increased		
	water supply reliability between agricultural and M&I uses."		

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# Responses to Comments from Santa Clara Valley Water District SCVWD-1: Thank you for your comment.

Please refer to Master Comment Response GEN-5, "Some People Support Dam Raise and Other Oppose Dam Raise."

**SCVWD-2:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record," and Master Comment Response NEPA-1 "Sufficiency of the EIS."

**SCVWD-3:** Please refer to Master Comment Response ALTD-1, "Alternative Development-Water Supply Reliability," Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTS-1, "Alternative Selection."

**SCVWD-4:** Thank you for your comment.

Please refer to Master Comment Response GEN-5, "Some People Support Dam Raise and Others Oppose Dam Raise."

**SCVWD-5:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record," and Master Comment Response NEPA-1, "Sufficiency of EIS."

**SCVWD-6:** Reclamation sees no need to modify the basic project purpose. It is consistent with current authorizations and the CALFED Programmatic ROD.

Please refer to Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General."

**SCVWD-7:** The decision-makers will have the opportunity to select the alternative to recommend for Congressional Authorization. The EIS provides sufficiently detailed information on all the action alternatives, and the no action alternative to allow an informed decision consistent with national policies. You comment will be included in the record for the project.

Please refer to Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General," Master Comment Response ALTS-1, "Alternative Selection."

**SCVWD-8:** Operations of an enlarged Shasta Dam are currently proposed to comply with existing contracts, agreements (including the COA), existing laws, regulations and biological opinions. Reclamation is not proposing, as part of the SLWRI, to modify any existing agreements or contracts.

Please refer to Master Comment Response WSR-1, "Water Supply Demands, Supplies, and Project Benefits."

## **SCVWD-9:** Comment noted.

**SCVWD-10:** As stated in Chapter 2, "Alternatives," the DEIS included a No-Action Alternative which includes existing facilities, conditions, land uses, and reasonably foreseeable actions expected to occur in the study area. Reasonably foreseeable actions include actions with current authorization, secured funding for design and construction, and environmental permitting and compliance activities that are substantially complete. In addition, the DEIS analyzed a range of alternatives that looked at different operational scenarios (see the Plan Formulation Appendix, Chapter 5, "Comprehensive Plans"). Varying regulatory environments have also been addressed, based on best available information. For example, the National Marine Fisheries Service (NMFS) 2005 BO and Conference Opinion on the Long-Term Operations of the CVP and SWP (2005 NMFS BO) and U.S. Department of Interior, Fish and Wildlife Service (USFWS) 2004 Formal Endangered Species Act Consultation on the Proposed Coordinated Operations of the CVP and SWP (2004 USFWS BO) were analyzed in the Preliminary DEIS (released in 2011) whereas the NMFS 2009 BO and Conference Opinion on the Long-Term Operations of the CVP and SWP (2009 NMFS BO) and USFWS 2008 Formal Endangered Species Act Consultation on the Proposed Coordinated Operations of the CVP and SWP (2008 USFWS BO) were analyzed in the DEIS. In addition, potential implications of climate change we also evaluated in the DEIS (Climate Change Modeling Appendix).

**SCVWD-11:** Please refer to Master Comment Response CEQA-1, "CEQA Compliance."

**SCVWD-12:** Please refer to Master Comment Response CEQA-1, "CEQA Compliance."

**SCVWD-13:** Please refer to Master Comment Response CEQA-1, "CEQA Compliance."

**SCVWD-14:** Please refer to Master Comment Response CEQA-1, "CEQA Compliance."

**SCVWD-15:** Comment noted.

**SCVWD-16:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record," and Master Comment Response ALTS-1, "Alternative Selection."

**SCVWD-17:** Comment noted.

Please refer to Master Comment Response GEN-5, "Some People Support Dam Raise and Others Oppose Dam Raise."

**SCVWD-18:** Please refer to Master Comment Response NEPA-1, "Sufficiency of the EIS."

**SCVWD-19:** Comment noted.

Please refer to Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTD-1, "Alternative Development- Water Supply Reliability."

**SCVWD-20:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."

SCVWD-21: Comment noted.

Please refer to Master Comment Response GEN-5, "Some People Support Dam Raise and Others Oppose Dam Raise," Master Comment Response GEN-1, "Comment Included as Part of the Record."

**SCVWD-22:** Reclamation sees no need to modify the basic project purpose. It is consistent with current authorizations and the CALFED Programmatic ROD.

Please refer to Master Comment Response P&N-1, "Purpose and Need and Objectives," and Master Comment Response ALTR-1, "Range of Alternatives General."

SCVWD-23: As stated in Chapter 2, "Alternatives," the DEIS included a No-Action Alternative which includes existing facilities, conditions, land uses, and reasonably foreseeable actions expected to occur in the study area. Reasonably foreseeable actions include actions with current authorization, secured funding for design and construction, and environmental permitting and compliance activities that are substantially complete. In addition, the DEIS analyzed a range of alternatives that looked at different operational scenarios (see the Plan Formulation Appendix, Chapter 5, "Comprehensive Plans"). Varying regulatory environments have also been addressed, based on best available information. For example, the 2005 NMFS BO and 2004 USFWS BO were analyzed in the Preliminary DEIS (released in 2011) whereas the 2009 NMFS BO and 2008 USFWS BO were analyzed in the DEIS. In addition, potential implications of climate change we also evaluated in the DEIS (Climate Change Modeling Appendix).

Please refer to Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTS-1, "Alternative Selection."

**SCVWD-24:** The Alternatives in the DEIS were formulated to be consistent with the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies as described in the SLWRI Feasibility Report and to meet the requirements of NEPA.

Please refer to Master Comment Response ALTD-1, "Alternative Development-Water Supply Reliability," Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTS-1, "Alternative Selection."

**SCVWD-25:** The Alternatives in the DEIS were formulated to be consistent with the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies as described in the SLWRI Feasibility Report and to meet the requirements of NEPA.

Please refer to Master Comment Response ALTD-1, "Alternative Development-Water Supply Reliability," Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTS-1, "Alternative Selection."

**SCVWD-26:** Please refer to Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTS-1, "Alternative Selection."

**SCVWD-27:** Please refer to Master Comment Response WR-1, "Water Rights," and Master Comment Response CEQA-1, "CEQA Compliance."

**SCVWD-28:** Please refer to Master Comment Response CEQA-1, "CEQA Compliance."

**SCVWD-29:** Recommendations submitted by the comment author have been incorporated into the Water Supply Reliability discussion for the No-Action Alternative in Chapter 2, "Alternatives," Section 2.2, "No-Action Alternative," as well as in the Plan Formulation Appendix.

Please refer to Master Comment Response EI-4, "Socioeconomic and Associated Indirect Environmental Effects."

**SCVWD-30:** Recommendations submitted by the comment author have been incorporated into the Water Supply Reliability discussion for the No-Action Alternative in Chapter 2, "Alternatives," Section 2.2, "No-Action Alternative" as well as in the Plan Formulation Appendix.

Please refer to Master Comment Response EI-4, "Socioeconomic and Associated Indirect Environmental Effects."

**SCVWD-31:** Recommendations submitted by the comment author have been incorporated into the Water Supply Reliability discussion for the No-Action Alternative in Chapter 2, "Alternatives," Section 2.2, "No-Action Alternative," as well as in the Plan Formulation Appendix.

Please refer to Master Comment Response EI-4, "Socioeconomic and Associated Indirect Environmental Effects."

**SCVWD-32:** Please refer to Master Comment Response EI-4, "Socioeconomic and Associated Indirect Environmental Effects."

**SCVWD-33:** The DEIS impact analysis in Chapter 16, "Socioeconomic, Population, and Housing" discloses both the positive effects of improving the quantity or reliability of water to agricultural, municipal and industrial water users, as well as the on-going adverse effects of the no action alternative on CVP service areas and compares the relative impacts among the alternatives.

Please refer to Master Comment Response EI-4, "Socioeconomic and Associated Indirect Environmental Effects."

**SCVWD-34:** The commenter is correct that the Draft EIS does not include water conserved from the water conservation program in its estimates of the water supply increases from the action alternatives. As explained in Chapter 2, "Management Measures" of the Plan Formulation Appendix, water "saved" by conservation practices is often water that, without conservation, would have returned to the hydrologic system and become available for use by others. Therefore, the water conservation program will not actually increase water supplies and it is not included in the cost allocation process or in the estimates of water supplies increases from the action alternatives.

**SCVWD-35:** The recommendations submitted by the comment author have been incorporated into Chapter 2, "Alternatives," Section 2.3.1, "Management Measures Common to All Action Alternatives," under the "Reduce Demand" measure and into the Plan Formulation Appendix. The water conservation program is to be further developed.

**SCVWD-36:** Please refer to Master Comment Response CC-1, "Climate Change Uncertainty and Related Evaluations."

**SCVWD-37:** Thank you for your comment. This comment appears to be related to the SLWRI Draft Feasibility Report, not the DEIS, which is the subject of these responses. As described in COST/BEN-2, "Comments Related to the SLWRI Feasibility Report," evaluations in

the SLWRI Final Feasibility Report were updated based on alternatives refinements and updated CVP and SWP operational assumptions included in the SLWRI DEIS, including the 2008 Long-Term Operation BA, 2008 USFWS BO, and 2009 NMFS BO. This comment was considered in the development of evaluations and documentation for the SLWRI Final Feasibility Report and associated Economics Appendix.

Please refer to Master Comment Response COST/BEN-2, "Comments Related to the SLWRI Feasibility Report."

**SCVWD-38:** As discussed in Chapter 6, "Hydrology, Hydraulics, and Water Management," the proposed action is expected to have less-than-significant or beneficial effects related to water supply deliveries. Therefore, no adverse environmental justice impacts associated with water supply deliveries are anticipated. Executive Order 12898 does not require an evaluation of the benefits of federal actions on minority and low-income populations.

**SCVWD-39:** Text has been revised in Final EIS.

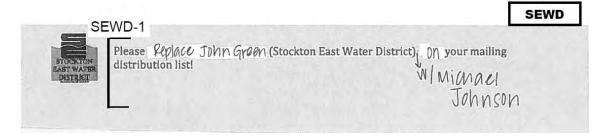
**SCVWD-40:** Text amended to reflect comment.

**SCVWD-41:** Text has been revised per comment.

**SCVWD-42:** Text has been revised in Final EIS.

**SCVWD-43:** Reclamation agrees that other SLWRI action alternatives are better able to meet the planning consideration of balancing increased water supply reliability between agricultural and M&I uses. As described in DEIS Chapter 2, "Alternatives," Section 2.1.6, "Development and Refinement of Comprehensive Plans," after the release of the Preliminary DEIS, action alternatives were refined based on several factors, including updates to CVP and SWP water operations and stakeholder input. During this time, significant input was provided by stakeholders requesting an alternative that focused primarily on CVP water supply reliability and did not include specific operations to increase SWP water supply reliability. Accordingly, water operations under CP3 were refined to provide a more CVP-centered alternative, which allowed for a greater range of focus and operations within the set of action alternatives evaluated in the DEIS. Based on current operational constraints and agreements, including the CVP and SWP Coordinated Operations Agreement, integration of CVP and SWP operations appears to maximize total increased water supply reliability and provide the greatest ability to balance increased water supply reliability between agricultural and M&I uses.

## 33.9.14 Stockton East Water District



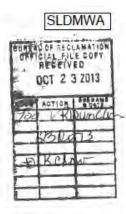
## Response to Comment from Stockton East Water District

**SEWD-1:** Please refer to Master Comment Response MAILINGLIST-1, "Addition or Change to the Mailing List."

## 33.9.15 San Luis & Delta Mendota Water Authority



September 30, 2013



Katrina Chow, Project Manager U.S. Bureau of Reclamation, Planning Division 2800 Cottage Way Sacramento, CA 95825

Email: BOR-MPR-SLWRI@usbr.gov; kchow@usbr.gov

RE: Draft Environmental Impact Statement for Shasta Luke Water Resources Investigation (June 2013)

Dear Ms. Chow:

The San Luis & Delta-Mendota Water Authority (Water Authority)' supports enlargement of Shasta Dam and Reservoir. Through the Central Valley Project (CVP), United States Bureau of Reclamation (Reclamation) develops water that: (1) protects, restores, and enhances fish, wildlife, and associated habitats in the Central Valley and Trinity River basins of California; (2) addresses impacts of the CVP on fish, wildlife and associated habitats; (3) supports agriculture; (4) supports municipal and industrial needs, and (5) generates power. Unfortunately, over the last three decades in particular, Reclamation's ability to develop water to meet these purposes, especially to provide water supply and hydropower, has been significantly compromised. If Congress authorizes enlargement of Shasta Dam and Reservoir, it should help restore the ability of Reclamation to operate the CVP to meet its purposes.

SLDMWA-1

The Water Authority submits this comment letter on behalf of its member agencies. The Water Authority was formed in 1992 as a joint powers authority and consists of 29 member agencies, 27 of which contract with Reclamation for supply of water from the federal CVP. The Water Authority's member agencies collectively hold contracts with Reclamation for the delivery of approximately 3.3 million acre-feet of CVP water. CVP water provided to the Water Authority's member agencies supports approximately 1.2 million acres of agricultural land, as well as more than 100,000 acres of managed wetlands, private and public. In California's Central Valley. The Water Authority's member agencies also use CVP water to serve more than 1 million people in the Silicon Valley and the Central Valley. Euch of the Water Authority member agencies is listed in Attachment 1.

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Project 3/4 Control No. /30950/6 Folder LD. /3 0927 Katrina Chow, Project Manager U.S. Bureau of Reclamation, Planning Division September 30, 2013 Page 2

SLDMWA-2

In most respects, the June 2013 Draft Environmental Impact Statement for the Shasta Lake Water Resources Investigation (Draft EIS) identifies the impacts on the human environment caused by enlargement of Shasta Dam and Reservoir. However, there are four critical areas where additional information or revisions are needed before the Draft EIS is finalized. The additional information and revisions will help demonstrate the importance of an enlarged Shasta Dam and Reservoir to the CVP, and specifically how this action will help restore the ability of Reclamation to operate the CVP to achieve its purposes.

SLDMWA-3

Purpose And Need: The Draft EIS presents the purpose of the action as: "The purpose
of the proposed action is to improve operational flexibility of the Sacramento-San Joaquin Delta
(Delta) watershed system by modifying the existing Shasta Dam and Reservoir to meet specified
primary and secondary project objectives." (Draft EIS at 1-5.) That statement is accurate, but
Reclamation should refine it to reflect the federal interest in and Congressional authorization for
Shasta Dam and Reservoir, as a part of the CVP. The Water Authority recommends the
following:

"The purpose of the proposed action is to improve operational flexibility of the Central Valley Project Sacramento San Joaquin Delta (Delta) watershed system by modifying the existing Shasta Dam and Reservoir to meet specified primary and secondary project objectives."

SLDMWA-4

2. Alternatives: The Draft EIS identifies a range of alternatives, which, when analyzed, presents information that was useful to the Water Authority and will undoubtedly be useful to Reclamation as it develops a Record of Decision. The Water Authority respectfully requests that Reclamation consider adopting an alternative that combines elements of the existing alternatives considered in the Draft EIS. Specifically, the Water Authority believes the purpose and need for the action, when considered with the federal interest in and Congressional authorization for the CVP, supports selecting an alternative that increases the height of Shasta Dam and Reservoir by 18.5 feet. The increased yield generated by the action should be dedicated, at the first and primary priority, to serve CVP purposes (i.e., all increased yield is considered part of the total annual CVP yield). Then, only if and for the period when the yield could not be beneficially used by CVP should Reclamation seek to sell that water to users outside of the CVP, including to the State Water Project. The temporary sale of the water would help to repay the Federal investment in the CVP, until it can be dedicated to CVP purposes.

SLDMWA-5 SLDMWA-6

3. <u>Sensitivity Analyses</u>: The enlargement of Shasta Dam and Reservoir will increase the yield of the CVP. However, as history has shown, how Reclamation beneficially uses that yield will likely change over time. The Draft EIS considers the ability of Reclamation to use the yield based on operations under the existing operational criteria, infrastructure, and specific regulations. While the Water Authority appreciates the need to analyze the effects of the action

SLDMWA-7

SLDMWA-5 CONTD The Water Authority supports including additional elements presented in the Draft EIS (e.g., Augment Spawning Grave), Restore Riparian, Floodplain, & Side Channel Habitat, and/or Mitigation Measures) in the action.

## Shasta Lake Water Resources Investigation **Environmental Impact Statement**

Katrina Chow, Project Manager U.S. Bureau of Reclamation, Planning Division September 30, 2013 Page 3

SLDMWA-7 CONTR

with those constraints, the Water Authority recommends that, in addition, Reclamation conduct "sensitivity analyses" that consider the benefits to the CVP increased yield from enlargement of Shasta Dam and Reservoir with new infrastructure, different operational criteria, and different regulations. Such sensitivity analyses are appropriate for an action, like enlargement of Shasta Dam and Reservoir, which has such long-term planning and operational horizons.

SLDMWA-B

SLDMWA-9

SLDMWA-10

SLDMWA-11

required under CEQA.

Ability To Use Information In The Draft EIS For CEQA Compliance: The Draft EIS indicates: (1) Reclamation prepared it in accordance with the California Environmental Quality Act (CEQA), and (2) the Draft EIS could be used by any State of California agencies involved in reviewing and issuing permits or other approvals for the project. (Draft EIS at 1-1,) The Water Authority agrees. The information developed in the Draft EIS will substantially assist with CEQA compliance. However, the Draft EIS should be revised in three respects. First, the Draft EIS should acknowledge that the CEQA lead agency has the vested responsibility to ensure CEQA is satisfied, and, as a result, for example, the CEQA lead agency: (a) may identify alternatives (including the environmentally preferred alternative) and render conclusions different from those presented in the Draft EIS, and (b) has discretion to determine the significance of environmental impacts and potentially feasible mitigation for any such impacts. Second, the Draft EIS should leave open the possibility that the Draft EIS would be used, not only by "State of California permitting agencies", but also local agencies within California. And, third, aspects of the Draft EIS could be supplemented to better provide the information

The Water Authority attaches hereto more detailed comments. (See Attachment 2.) 1, or a member of my staff, will contact you to schedule a meeting during which we can discuss the Water Authority's comments.

Sincerely.

Daniel Nelson Executive Director

## ATTACHMENT 1

## San Luis & Delta-Mendota Water Authority Member Agencies

Banta-Carbona Irrigation District
Broadview Water District
Byron Bethany Irrigation District (CVPSA)
Central California Irrigation District
City of Tracy
Del Puerto Water District
Eagle Field Water District
Firebaugh Canal Water District
Fresno Slough Water District
Grassland Water District
Henry Miller Reclamation District #2131
James Irrigation District

SLDMWA-12

Laguna Water District Mercy Springs Water District Oro Loma Water District Pacheco Water District Pajaro Valley Water Management Agency Panoche Water District Patterson Irrigation District Pleasant Valley Water District Reclamation District 1606 San Benito County Water District San Luis Water District Santa Clara Valley Water District Tranquility Irrigation District Turner Island Water District West Side Irrigation District West Stanislaus Irrigation District Westlands Water District

#### ATTACHMENT 2

I. The Draft EIS Provides Substantial And Important Information That Will Assist Reclamation With Its Decision On The Proposed Action

SLDMWA-13

SI DMWA-14

SLDMWA-15

The Draft EIS does not identify a preferred alternative. The Draft EIS explains this is because the Council on Environmental Quality's Proposed National Objectives, Principles, and Standards for Water and Related Resources Implementation Studies calls for allowing public input before a final action is recommended or selected. (Draft EIS at 1-35.) This is wise policy. The Draft EIS considers three different expansion heights for Shasta Dam – 6.5 feet, 12.5 feet, and 18.5 feet. The analysis in the Draft EIS concludes that an 18.5 foot raise will yield more water for the CVP and thus more benefits for CVP purposes, including environmental, agricultural, and municipal uses, than lesser elevations for only a relatively modest additional cost – making the 18.5 foot height the most efficient and economical of those considered in the Draft EIS. The Water Authority agrees with that conclusion, and supports the 18.5 foot raise. However, specific refinements and additional analyses are recommended. The Water Authority provides comments in the cover letter and sections below with the hope they will improve the Draft EIS before Reclamation finalizes it and to assist Reclamation in developing its Record of Decision.

## II. The Draft EIS Would Benefit From Specific Refinements

A. The Draft EIS Should Be Revised To Reflect That Enlargement Of Shasta Dam And Reservoir Are Important Steps Toward Restoring Reclamation's Ability To Fulfill CVP Purposes Authorized by U.S. Congress

SLDMWA-16

The enlargement action addresses a pressing need to improve Reclamation's ability to achieve the purposes for the CVP. Initially, in the Rivers and Harbors Act of 1937. Congress authorized the CVP for the purposes of "improving navigation, regulating the flow of the San Joaquin River and the Sacramento River, controlling floods, providing for storage and for the delivery of the stored waters thereof, for the reclamation of arid and semiarid lands and lands of Indian reservations, and other beneficial uses, and for the generation and sale of electric energy." (Act of August 26, 1937, Pub. L. No. 75 392, 50 Stat, 844, 850; see Rivers and Harbors Act of 1940, Pub. L. No. 76 868, 54 Stat. 1198, 1199-2000.) In 1992, these purposes were expanded to include the "mitigation, protection, and restoration of fish and wildlife." (Central Valley Project Improvement Act (CVPIA), Title 34 of Pub. L. No. 102-575, 106 Stat. 4706 (1992), § 3406(a)(1).) Today, Reclamation faces enormous challenges in fulfilling all of those CVP purposes, and, without such investments in the proposed action, doing so in the future is only going to become more difficult.

SLDMWA-17

SLDMWA-18

The Water Authority's member agencies have long relied on CVP water, and, for at least the last two decades, have faced increasing challenges to maintain the agricultural and urban economies they support. Since the early 1990s, the quantity and reliability of water Reclamation can deliver to the Water Authority's member agencies for irrigation, municipal and industrial purposes has significantly declined. In addition, Reclamation's ability to secure water for wildlife refuges, specifically Level 4 refuge supplies, has been challenging. During that same

#### SLDMWA-18

SLDMWA-18 CONTD

SLDMWA-19

time period, significant responsibilities have been imposed on Reclamation to dedicate CVP water for the protection of anadromous and pelagic fish; these responsibilities at times create conflicts (i.e., dedication of water for Delta outflow versus reservation of water in reservoirs to maintain cold water for salmon). During this time of increased CVP responsibilities, anadromous and pelagic fish populations have not improved and in many cases have degraded. The Draft EIS recognizes these facts. (See e.g., Draft EIS at 1-13.) The additional yield from enlargement of Shasta Dam and Reservoir will reduce the conflict and tension between the existing beneficial uses of CVP water and be an important step towards restoring Reclamation's ability to achieve the purposes of CVP.

B. Reclamation Should Refine The Purpose Statement To Reflect The Importance Of Improving Reclamation's Ability To Operate The CVP To Meet Its Authorized Purposes

The Draft EIS includes a broad purpose statement, which is to "improve operational flexibility of the Delta watershed system through modifying Shasta Dam and reservoir to meet specified primary and secondary project objectives." (Draft EIS at 5.) This statement should be refined to focus on the CVP. Such a refinement would comport with and recognize that the action proposes to augment an existing CVP facility, and it would also be consistent with Congressional intent, including that specified in the CVPIA. (CVPIA § 3402 (discussing a purpose of the CVP is to improve operational flexibility, CVPIA § 3408(j) (providing for the development of a plan to improve CVP yield).)

C. Reclamation Should Assess The Sensitivity Of The Impacts Of The Alternatives To Changes In Operational Criteria, Infrastructure, And Specific Regulations

Consistent with the need to improve Reclamation's ability to operate the CVP to meet CVP purposes, Reclamation should assess the sensitivity of the alternatives with changes in operational criteria, infrastructure, and specific regulations. The Water Authority recognizes that at this time changes in operational criteria, infrastructure, and specific regulations may still be years away. However, the suggested sensitivity analyses would complement the existing analyses of the different expansion heights for Shasta Dam and are reasonable and appropriate given the long-term 100-year operational and planning horizons to inform the public and decision makers of the actual long-term potential benefits to CVP yield of enlarging Shasta Dam. At a minimum, Reclamation should consider the sensitivity of its estimates of increased CVP yield to: (1) relaxation in the restrictions currently imposed on the CVP pursuant to the federal Endangered Species Act, (2) changes in the manner the Department of the Interior implements CVPIA actions and programs, (3) increases in the capacity of the CVP to re-divert water conveyed to or through the Delta, and (4) changes in CVP operations, including those related to the coordinated operations of the CVP and State Water Project.

D. Reclamation Should Consider An Alternative That Combines Several Existing Alternatives And Preserves Reclamation's Ability To Use All Yield From Shasta Enlargement To Meet CVP Purposes

The Draft EIS includes a range of alternatives, which, when analyzed, presents information that was useful to the Water Authority and will undoubtedly be useful to

SLDMWA-21

SLDMWA-20

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## Shasta Lake Water Resources Investigation Environmental Impact Statement

SLDMWA-21 CONTD Reclamation as it develops a Record of Decision. Each alternative, however, presents a somewhat fixed set of future CVP operations to meet the CVP purposes. The Water Authority respectfully requests that Reclamation consider adopting an alternative that retains maximum operational flexibility that would essentially combine the operational parameters of several of the alternatives considered in the Draft EIS into a new alternative that gives Reclamation maximum flexibility to operate to any of the various CVP purposes, identified in the existing alternatives.

SLDMWA-22

This is a reasonable alternative to include in the Draft EIS because of the 100-year planning period and operational life assumed for any alternative for Shasta Dam and Reservoir enlargement. For example, regulation of the CVP has and will likely continue to change over time. The burdens imposed on the CVP through biological opinions have evolved over time, and likely will continue to evolve. The State Water Resources Control Board's Bay-Delta Water Quality Control Plan is subject to regular review and update. New science and the benefits of restoration efforts may also cause changes in the current approaches to regulating CVP operations. These areas of regulation are further subject to change as new facilities or methods of CVP operation occur.

SLDMWA-23

For these reasons, Reclamation should plan accordingly, and address the potential for changed circumstances in its NEPA analysis. That analysis and whatever alternative is selected should allow Reclamation the flexibility to dedicate the additional yield generated by the action to achieve CVP purposes, even if current constraints would prevent such uses.

E. Reclamation Should Conduct An Assessment Of Existing Water Rights It Holds For The CVP Before Assuming New Water Rights Are Needed

SLDMWA-24

The Draft EIS assumes Reclamation will need to apply for and obtain new water rights from the State Water Resources Control Board to develop additional yield with the enlarged Shasta Dam and Reservoir. (Draft EIS at 1-35.) That assumption may not be correct, and the administrative actions Reclamation may need to take before the State Water Resources Control Board, if any, will likely differ depending upon the action Reclamation adopts. The Water Authority requests that Reclamation provide an assessment of the existing water rights Reclamation holds for the CVP and their consistency with the alternatives before finalizing the Draft EIS.

F. Reclamation Should Refine The Draft EIS To Acknowledge That The California Environmental Quality Act Lead Agency Will Make Independent Determinations

SLDMWA-25

The Water Authority commends Reclamation for producing an environmental impact statement that substantially complies with the requirements of CEQA. The document will assist State and local agencies in complying with the California Environmental Quality Act (CEQA). In fact, CEQA authorizes and encourages use of an EIS in place of a separate EIR. (Public Resources Code §§ 21083.5, 21083.7.) However, there are several refinements that could be made to the Draft EIS, to better reflect CEQA mandales.

The Draft EIS should recognize that the CEQA lead agency has the ultimate responsibility to prepare and certify the environmental impact report. With lead agency designation comes the responsibility and the discretion to determine the significance of

SLDMWA-25 CONTD

SLDMWA-26

environmental impacts and potentially feasible mitigation for any such impacts. The Draft ElS should state explicitly that Reclamation cannot make the CEQA determination vested with the CEQA lead agency (e.g., feasible alternatives, thresholds of significance, findings, conclusions). The lead agency must also make other determinations required by CEQA, such as identifying the environmentally preferred alternative, among others. In addition to reserving these determinations for the CEQA lead agency, Reclamation should include text in the FEIS that expressly acknowledges that the requirements of NEPA and CEQA differ, and that certain conclusions made by Reclamation under NEPA need not and may not be the same conclusions that the lead agency under CEQA will make when it exercises its independent discretion under CEQA. Finally, there are areas where augmentation would help improve the information needed to satisfy CEQA. The Water Authority welcomes the opportunity to discuss those areas with Reclamation.

## III. To Ensure Proper Consideration Of Alternatives, The Analysis In The Draft EIS Should Be Augmented

The Draft EIS Should Expand Its Discussion Of The Impacts Of Water Shortages.
 To The Human Environment

The no-action alternative could be supplemented to better present the ongoing negative effects caused by the existing inability of Reclamation to adequately and reliably serve agricultural, municipal and industrial water users. When the CVP was able to provide a reliable water supply, communities and viable local economies developed. But, reduced CVP water supplies have and continue to cause physical impacts related to the reliance on groundwater to substitute for lost CVP supplies. These include reduced groundwater levels from overdraft, surface subsidence, adverse impacts to crops and soil from reliance on poor quality groundwater, increased energy use, and impacts to air quality.

Shortages of CVP supplies have also caused changes in land use patterns, loss and destruction of permanent crops, and/or decreased production of existing crops. In response to reduced water supplies, farmers will fallow fields, reducing agricultural productivity directly results in layoffs, reduced hours for agricultural employees, and increased unemployment in agricultural communities. Reduced agricultural productivity also has indirect socioeconomic impacts for agriculture-dependent businesses and industries. In addition, unavailability of stable and sufficient water supplies reduces farmers' ability to obtain financing, which results in employment losses, due to the reduced acreage of crops that can be planted and the corresponding reduction in the amount of farm labor needed for that reduced acreage.

SLDMWA-28

SLDMWA-27

Reduced water supplies and the resulting employment losses also cause cascading socioeconomic impacts in affected communities, including increased poverty, hunger, and crime, along with dislocation of families and reduced tax-based revenues for local government services and schools. In the urban sector, reduced supplies or increased supply uncertainty can cause water rates to increase as agencies seek to remedy supply shortfalls by implementing measures to reduce demand and/or augment supplies. Connection fees and other one-time costs for new developments may also increase and further retard economic development. All these impacts yiere explained and found in recent federal court cases regarding NEPA impacts from reduced

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## Shasta Lake Water Resources Investigation Environmental Impact Statement

SLDMWA-28 CONTD CVP deliveries. (See e.g., The Consolidated Delta Smelt Cases, 717 F.Supp.2d 1021 (E.D. Cal. 2010), The Consolidated Salmonid Cases, 713 F.Supp.2d 1116 (E.D. Cal. 2010).)

SLDMWA-29

Conversely, the impact analysis may not adequately capture the positive effects of improving the quantity or reliability of water to agricultural, municipal and industrial water users. In particular, the agricultural impact analysis provided in Chapter 10 of the Draft EIS does not adequately identify and explain the beneficial impacts on agriculture of delivering increased and more reliable CVP supplies that would result from Shasta Dam enlargement.

SLDMWA-30

The description of the impacts to the human environment from the no action alternative and each action alternative should reflect the consequences for the human environment from shortages of CVP water. Failing to raise Shasta Dam and using additional yield to address those shortages will allow the significant adverse impacts to the human environment in the CVP service area, particularly on the west side of the San Joaquin Valley, to persist unabated. Conversely, the more an alternative will lessen CVP water supply shortages, the greater the potential benefit for the human environment in the CVP service area. Those relative consequences among alternatives should be described.

## B. Reclamation Should Provide More Details About The Proposed Water Conservation Program

SLDMWA-31

The Water Authority generally agrees with Reclamation's decision to include agricultural and urban water conservation in the action alternatives as a common management measure. (Draft EIS at 2-24.) However, Reclamation should clarify whether the analysis in the Draft EIS includes water conserved from this program in its estimates of the water supply increases from the action alternatives. If so, the conserved water should not be included in the cost allocation process, since those water supplies could be achieved without raising Shasta Dam. If not, the Draft EIS does not appear to provide an estimate of the water supplies generated solely by implementation of the water conservation program.

SLDMWA-32

Further, the Draft EIS should describe the proposed water conservation program in more detail. What management practices or physical improvements will the program seek to implement? Would Reclamation implement these measures through existing contracts, new contracts, or some other mechanism? Also, will all CVP contractors be part of the program or only some subset? If these and other aspects of the program still need to be developed, the Water Authority would like to collaborate with Reclamation when it does so.

## C. Climate Change Modeling Should Be Expanded To Each Of The Alternatives

SLDMWA-33

The Draft EIS Climate Change Modeling Appendix indicates that the effects of climate change were modeled on both CP4 and CP5, but not CP3. NEPA requires an equal level of analysis for alternatives, and therefore the Draft EIS should provide a similar analysis of the effects of climate change on CP3 that allows decision makers and the public to understand the likely environmental and socioeconomic effects of CP3 given reasonable estimates of future climate change. In addition, the Water Authority's recommended new alternative (see comment II-D above), once developed, would require a similar level of analysis.

 D. Additional Information On Costs And Benefits Would Improve The Economic Analyses

Information on economic costs and benefits, particularly the Draft Economic Valuation Appendix, would benefit from a more expansive discussion of the costs and benefits associated with improving the ability of Reclamation to operate the CVP to meet CVP purposes, in particular Reclamation's ability to improve water supply and reliability for municipal and industrial users of CVP water. The costs and benefits should not be limited to direct impacts, but should also consider the indirect and cumulative impacts within the communities dependent upon the CVP water.

E. The Draft EIS Should Discuss Environmental Justice Issues Within Specific Communities

Chapter 24 of the Draft EIS discusses the environmental justice aspects of the various action alternatives. Its discussion is very general and may miss important impacts that occur within specific communities – both north and south of the Delta. For example, improved CVP water supplies and reliability will likely have important environmental justice implications for communities within the San Joaquin Valley, which have been particularly hard hit with economic distress caused by the reduction of CVP water supplies and reliability. Reclamation should consider revising the environmental justice discussion to disclose the implications of changes in water supply and reliability to specific communities, including the communities of Firebaugh, Mendota, Huron and Avenal.

## IV. Specific Suggested Edits

SLDMWA-34

SLDMWA-35

	Draft EIS Page	Suggested Change / Comment
SLDMWA-36	1-24	Add the following (emphasis added): " Clifton Court Forebay into Bethany Reservoir. Some of the water delivered to Bethany Reservoir is pumped at South Bay Pumping Plant for delivery through the South Bay Aqueduct to SWP contracting agencies in the San Francisco Bay Area. Most of the water delivered to Bethany Reservoir flows into the California Aqueduct, the main conveyance facility of the SWP"
SLDMWA-37	3-17	Add the following (emphasis added): "Those three water districts Milpitas, Santa Clara, and San Jose, among others."
SLDMWA-38	3-27	Correct the release of the BDCP EIR/EIS from "spring 2013" to "fall 2013".
SLDMWA-39	6-4	To be more complete, it is recommended that the Delta-Mendota Canal- California Aqueduct Intertie be included in the description of CVP/SWP service areas.
SLDMWA-40	2-45 and 2-46	CP3 is described as providing agricultural water supply reliability but no improvement in increasing M&1 deliveries. This conflicts with the planning consideration on page 2-7: "Alternatives should strive to balance increased water supply reliability between agricultural and M&I uses."

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# Responses to Comments from San Luis & Delta Mendota Water Authority

**SLDMWA-1:** Thank you for your comment.

Please refer to Master Comment Response GEN-5, "Some People Support Dam Raise and Other Oppose Dam Raise."

**SLDMWA-2:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record," and Master Comment Response NEPA-1 "Sufficiency of EIS."

**SLDMWA-3:** Reclamation sees no need to modify the basic project purpose. It is consistent with current authorizations and the CALFED Programmatic ROD.

Please refer to Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General."

**SLDMWA-4:** The decision-makers will have the opportunity to select the alternative to recommend for Congressional Authorization. The EIS provides sufficiently detailed information on all the action alternatives, and the no action alternative to allow an informed decision consistent with national policies. You comment will be included in the record for the project.

Please refer to Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTS-1, "Alternative Selection."

**SLDMWA-5:** Operations of an enlarged Shasta Dam are currently proposed to comply with existing contracts, agreements (including the COA), existing laws, regulations and biological opinions. Reclamation is not proposing, as part of the SLWRI, to modify any existing agreements or contracts.

Please refer to Master Comment Response WSR-1, "Water Supply Demands, Supplies, and Project Benefits."

**SLDMWA-6:** Comment noted.

**SLDMWA-7:** As stated in Chapter 2, "Alternatives," the DEIS included a No-Action Alternative which includes existing facilities, conditions, land uses, and reasonably foreseeable actions expected to occur in the study area. Reasonably foreseeable actions include actions with current authorization, secured funding for design and construction, and environmental permitting and compliance activities that are substantially complete. In addition, the DEIS analyzed a range of alternatives that looked at different operational scenarios (see the Plan Formulation Appendix, Chapter 5 "Comprehensive Plans"). Varying regulatory environments have also been addressed, based on best available information. For example, the National Marine Fisheries Service (NMFS) 2005 BO and Conference Opinion on the Long-Term Operations of the CVP and SWP (2005 NMFS BO) and U.S.

Department of Interior, Fish and Wildlife Service (USFWS) 2004 Formal Endangered Species Act Consultation on the Proposed Coordinated Operations of the CVP and SWP (2004 USFWS BO) were analyzed in the Preliminary DEIS (released in 2011) whereas the NMFS 2009 BO and Conference Opinion on the Long-Term Operations of the CVP and SWP (2009 NMFS BO) and USFWS 2008 Formal Endangered Species Act Consultation on the Proposed Coordinated Operations of the CVP and SWP (2008 USFWS BO)were analyzed in the DEIS. In addition, potential implications of climate change we also evaluated in the DEIS (Climate Change Modeling Appendix)

**SLDMWA-8:** Please refer to Master Comment Response CEQA-1, "CEQA Compliance."

**SLDMWA-9:** Please refer to Master Comment Response CEQA-1, "CEQA Compliance."

**SLDMWA-10:** Please refer to Master Comment Response CEQA-1, "CEQA Compliance."

**SLDMWA-11:** Please refer to Master Comment Response CEQA-1, "CEQA Compliance."

**SLDMWA-12:** Comment Noted.

**SLDMWA-13:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record," Please refer to Master Comment Response ALTS-1, "Alternative Selection."

**SLDMWA-14:** Comment noted.

Please refer to Master Comment Response GEN-5, "Some People Support Dam Raise and Others Oppose Dam Raise."

**SLDMWA-15:** Please refer to Master Comment Response NEPA-1, "Sufficiency of the EIS."

**SLDMWA-16:** Comment noted.

Please refer to Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTD-1, "Alternative Development- Water Supply Reliability."

**SLDMWA-17:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."

**SLDMWA-18:** Please refer to Master Comment Response GEN-5, "Some People Support Dam Raise and Others Oppose Dam Raise,"

Master Comment Response GEN-1, "Comment Included as Part of the Record."

**SLDMWA-19:** Reclamation sees no need to modify the basic project purpose. It is consistent with current authorizations and the CALFED Programmatic ROD.

Please refer to Master Comment Response P&N-1, "Purpose and Need and Objectives," and Master Comment Response ALTR-1, "Range of Alternatives General."

SLDMWA-20: As stated in Chapter 2, "Alternatives," the DEIS included a No-Action Alternative which includes existing facilities, conditions, land uses, and reasonably foreseeable actions expected to occur in the study area. Reasonably foreseeable actions include actions with current authorization, secured funding for design and construction, and environmental permitting and compliance activities that are substantially complete. In addition, the DEIS analyzed a range of alternatives that looked at different operational scenarios (see the Plan Formulation Appendix, Chapter 5, "Comprehensive Plans"). Varying regulatory environments have also been addressed, based on best available information. For example, the 2005 NMFS BO and 2004 USFWS BO were analyzed in the Preliminary DEIS (released in 2011) whereas the 2009 NMFS BO and 2008 USFWS BO were analyzed in the DEIS. In addition, potential implications of climate change we also evaluated in the DEIS (Climate Change Modeling Appendix).

Please refer to Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTS-1, "Alternative Selection."

**SLDMWA-21:** The Alternatives in the DEIS were formulated to be consistent with the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies as described in the SLWRI Feasibility Report and to meet the requirements of NEPA.

Please refer to Master Comment Response ALTD-1, "Alternative Development- Water Supply Reliability," and Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTS-1, "Alternative Selection."

**SLDMWA-22:** The Alternatives in the DEIS were formulated to be consistent with the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation

Studies as described in the SLWRI Feasibility Report and to meet the requirements of NEPA. The DEIS was based on the best available science.

Please refer to Master Comment Response ALTD-1, "Alternative Development-Water Supply Reliability," and Master Comment Response P&N-1, "Purpose and Need and Objectives," and Master Comment Response ALTR-1, "Range of Alternatives General."

**SLDMWA-23:** Please refer to Master Comment Response P&N-1, "Purpose and Need and Objectives," Master Comment Response ALTR-1, "Range of Alternatives General," and Master Comment Response ALTS-1, "Alternative Selection."

**SLDMWA-24:** Please refer to Master Comment Response WR-1, "Water Rights," and Master Comment Response CEQA-1, "CEQA Compliance."

**SLDMWA-25:** Please refer to Master Comment Response CEQA-1, "CEQA Compliance."

**SLDMWA-26:** Recommendations submitted by the comment author have been incorporated into the Water Supply Reliability discussion for the No-Action Alternative in Chapter 2, "Alternatives," Section 2.2, "No-Action Alternative" as well as in the Plan Formulation Appendix.

Please refer to Master Comment Response EI-4, "Socioeconomic and Associated Indirect Environmental Effects."

**SLDMWA-27:** Recommendations submitted by the comment author have been incorporated into the Water Supply Reliability discussion for the No-Action Alternative in Chapter 2, "Alternatives," Section 2.2, "No-Action Alternative" as well as in the Plan Formulation Appendix.

Please refer to Master Comment Response EI-4, "Socioeconomic and Associated Indirect Environmental Effects."

**SLDMWA-28:** Recommendations submitted by the comment author have been incorporated into the Water Supply Reliability discussion for the No-Action Alternative in Chapter 2, "Alternatives," Section 2.2, "No-Action Alternative" as well as in the Plan Formulation Appendix.

Please refer to Master Comment Response EI-4, "Socioeconomic and Associated Indirect Environmental Effects."

**SLDMWA-29:** Please refer to Master Comment Response EI-4, "Socioeconomic and Associated Indirect Environmental Effects."

**SLDMWA-30:** The DEIS impact analysis in Chapter 16, "Socioeconomic, Population, and Housing" discloses both the positive effects of improving the quantity or reliability of water to agricultural, municipal and industrial water users, as well as the on-going adverse effects of the no action alternative on CVP service areas and compares the relative impacts among the alternatives.

Please refer to Master Comment Response EI-4, "Socioeconomic and Associated Indirect Environmental Effects."

**SLDMWA-31:** The commenter is correct that the Draft EIS does not include water conserved from the water conservation program in its estimates of the water supply increases from the action alternatives. As explained in Chapter 2, "Management Measures" of the Plan Formulation Appendix, water "saved" by conservation practices is often water that, without conservation, would have returned to the hydrologic system and become available for use by others. Therefore, the water conservation program will not actually increase water supplies and it is not included in the cost allocation process or in the estimates of water supplies increases from the action alternatives.

**SLDMWA-32:** The recommendations submitted by the comment author have been incorporated into Chapter 2, "Alternatives," Section 2.3.1, "Management Measures Common to All Action Alternatives," under the "Reduce Demand" measure and into the Plan Formulation Appendix. The water conservation program is to be further developed.

**SLDMWA-33:** Please refer to Master Comment Response CC-1, "Climate Change Uncertainty and Related Evaluations."

**SLDMWA-34:** Thank you for your comment. This comment appears to be related to the SLWRI Draft Feasibility Report, not the DEIS, which is the subject of these responses. As described in COST/BEN-2, "Comments Related to the SLWRI Feasibility Report," evaluations in the SLWRI Final Feasibility Report were updated based on alternatives refinements and updated CVP and SWP operational assumptions included in the SLWRI DEIS, including the 2008 Long-Term Operation, 2008 USFWS BO, and 2009 NMFS BO. This comment was considered in the development of evaluations and documentation for the SLWRI Final Feasibility Report and associated Economics Appendix.

Please refer to Master Comment Response COST/BEN-2, "Comments Related to the SLWRI Feasibility Report."

**SLDMWA-35:** As discussed in Chapter 6, "Hydrology, Hydraulics, and Water Management," the proposed action is expected to have less-than-significant or beneficial effects related to water supply deliveries.

Therefore, no adverse environmental justice impacts associated with water supply deliveries are anticipated. Executive Order 12898 does not require an evaluation of the benefits of federal actions on minority and low-income populations.

**SLDMWA-36:** Text has been revised in Final EIS.

**SLDMWA-37:** Text amended to reflect comment.

**SLDMWA-38:** Text has been revised per comment.

**SLDMWA-39:** Text has been revised in Final EIS.

**SLDMWA-40:** Reclamation agrees that other SLWRI action alternatives are better able to meet the planning consideration of balancing increased water supply reliability between agricultural and M&I uses. As described in DEIS Chapter 2, "Alternatives," Section 2.1.6, "Development and Refinement of Comprehensive Plans," after the release of the Preliminary DEIS, action alternatives were refined based on several factors, including updates to CVP and SWP water operations and stakeholder input. During this time, significant input was provided by stakeholders requesting an alternative that focused primarily on CVP water supply reliability and did not include specific operations to increase SWP water supply reliability. Accordingly, water operations under CP3 were refined to provide a more CVP-centered alternative, which allowed for a greater range of focus and operations within the set of action alternatives evaluated in the DEIS. Based on current operational constraints and agreements, including the CVP and SWP Coordinated Operations Agreement, integration of CVP and SWP operations appears to maximize total increased water supply reliability and provide the greatest ability to balance increased water supply reliability between agricultural and M&I uses.

## 33.9.16 State Water Contractors

September 27, 2013

Submitted via email: KChow@usbr.gov

Katrina Chow, Project Manager United States Department of the Interior Bureau of Reclamation, Mid-Pacific Region 2800 Cottage Way, MP-700 Sacramento, CA 95825

Re Draft Environmental Impact Statement: Shasta Lake Water Resources Investigation

Dear Ms. Chow:

The State Water Contractors ("SWC") appreciate the opportunity to submit these comments regarding the US Bureau of Reclamation (Reclamation) Draft Environmental Impact Statement (DEIS) for the Shasta Lake Water Resources Investigation (SLWRI).

As stated in the DEIS, the purpose of the document is to evaluate the potential environmental effects of alternative plans to enlarge Shasta Dam and Reservoir to: (1) increase anadromous fish survival in the upper Sacramento River; (2) increase water supplies and water supply reliability for agricultural, municipal and industrial, and environmental purposes; and (3) address related water resource problems, needs, and opportunities. As described in the DEIS, implementation of the SLWRI would involve a potential dam raise ranging from 6.5 to 18.5 feet and related reservoir enlargements ranging from 256 to 634 thousand acre feet. The DEIS discloses potential effects of SLWRI implementation on areas of interest to the SWC, including the hydrology, water quality, and fisheries and aquatic resources of the Sacramento-San Joaquin Delta (Delta) and the water management capability of the State Water Project (SWP).

The SWC is an organization representing 27 of the 29 public water entities<sup>1</sup> that hold contracts with the California Department of Water Resources (DWR) for the delivery of water from the State Water Project (SWP). Collectively, the members of the SWC provide all, or a part, of the water supply delivered to

In SWC members are: Alameda County Flood Control & Water Conservation District, Zone 7; Alameda County Water District, Antelope Valley East Kern Water Agency; Casitas Mimicipal Water District on behalf of the Ventura County Flood Control District Castate Lake Water Agency; Central Coast Water Authority on behalf of the Santa Barbara County Flood Control & Water District, City of Yuba City, Coachella Valley Water District, County of Kings; Crestine-Lake Arrowhead Water Agency; Debert Water Agency; Dudley Ridge Water District, County of Kings; Irrigation District, For Metropolitan Water District of Southern California; Mojave Water Agency, Napa County Flood Control & Water Conservation District; Oak Flat Water District; Palmdale Water District; San Bernardino Valley Municipal Water District; Son Gabriel Valley Municipal Water District; San Gorgonio Pass Water Agency; San Luis Obispo County Flood Control & Water Conservation District; Santa Clara Valley Water District; Solano County Water Agency; and, Tulare Lake Basin Water Storage Parinter.

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SWC-2

SWC-1

Ms. Katrina Chow September 27, 2013 Page Two

SWC-2 CONTD approximately 25 million Californians, roughly two-thirds of the State's population, and to over 750,000 acres of irrigated agriculture. The members of the SWC provide this water to retailers, who, in turn, serve it to consumers throughout the San Francisco Bay Area, the San Joaquin Valley, the Central Coast, and Southern California.

SWC-3

The SWP water supply delivered through the Delta constitutes a significant portion of the water supplies available to SWC members. As a result, the SWC is very interested in matters affecting the ability of the SWP to deliver water supply through the Delta. The water management and delivery capability of the SWP is closely tied to that of the Central Valley Project (CVP) through the Coordinated Operations Agreement (COA), which defines how the two projects share available water supply and joint responsibility for meeting Delta and senior water right obligations. Since Shasta Dam and Reservoir is a major facility of the CVP, implementation of the SLWRI and associated changes in CVP and SWP operations are of particular interest to the SWC.

SWC-4

The DEIS shows that under all SLWRI alternatives, changes from the existing condition are consistently less than 1% for important SWP resources including Oroville Reservoir storage, Feather River flows, exports through Banks Pumping Plant, and deliveries to SWP contractors. Additionally, the DEIS shows that Delta hydrology, hydrodynamics, and water quality are similarly minimally affected by implementation of the SLWRI.

SWC-5

The SWC recognizes the importance of and need for additional storage north of the Delta. Additional storage north of the Delta can provide important operational flexibility and help address cold water pool, in-stream flow, and water temperature constraints which can help improve both water supply and fishery conditions. Indeed, the DEIS shows that implementation of the SLWRI will generally improve conditions for the federally Endangered Species Act (ESA) listed spring and winter run Chinook salmon.

SWC-6

Based on the effects associated with implementation of the SLWRI disclosed in the DEIS, the SWC support continued investigation of the SLWRI alternatives and look forward to reviewing the Final EIS and Final Feasibility Report.

We appreciate your consideration of our comments. If you have any questions, please feel free to contact me at (916) 447-7357.

Sincerely,

Terry L. Erlewine General Manager

## Responses to Comments from State Water Contractors

**SWC-1:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."

**SWC-2:** Comment Noted.

**SWC-3:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."

Shasta Lake Water Resources Investigation Environmental Impact Statement

**SWC-4:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."

**SWC-5:** Please refer to Master Comment Response GEN-1, "Comment Included as Part of the Record."

**SWC-6:** Please refer to Master Comment Response GEN-5, "Some People Support Dam Raise and Others Oppose Dam Raise."