

Final

Duplicate DEIS Public Comments Appendix

Shasta Lake Water Resources Investigation, California

Prepared by:

**United States Department of the Interior
Bureau of Reclamation
Mid-Pacific Region**



December 2014

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Duplicate DEIS Public Comments

This appendix presents copies of the duplicate form letters and duplicate comment letters received on the Shasta Lake Water Resources Investigation DEIS. Table 1, below, presents an index of the duplicate comments received organized by type (Elected, Federal, State, Tribe, Local, Organization, or Individual), and then alphabetically by name. The index indicates the comment abbreviation of the original comment letter that is provided in Chapter 33 of the EIS with responses, and the page that the duplicate comment appears in this appendix.

Table 1. Duplicate Comments on Draft EIS

Type	Affiliation	Name	Comment Abbreviation	Duplicate of	Page Number
Elected Official	California State Senate	Nielsen, Senator Jim	D-NIEL	E-NIEL	10
Federal Agency	Department of Energy, Western Area Power Administration, Sierra Nevada Region	Anderson, Sonja	D-WAPA	F-WAPA	12
Federal Agency	U.S. Environmental Protection Agency	Goforth, Kathleen Martyn	D-EPA	F-EPA	15
Federal Agency	Dept. of the Army, USACE Sacramento	Kelley, Matthew P.	D-USACE	F-USACE	22
Federal Agency	Shasta-Trinity National Forest, National Recreation Area Management Unit	Rezeau, Nathan	D-USFS2	F-USFS2	24
Tribe	United Auburn Indian Community of the Auburn Rancheria	Guerrero, Marcos	D-UAICAR	T-UAICAR	29
State Agency	CA Fish and Wildlife	Baker, Dawn	D-DFW	S-DFW	30
State Agency	Department of Transportation	Marcelino, Gonzalez	D-CTAN2	S-CTAN2	47
State Agency	Delta Stewardship Council	Messer, Cindy	D-DSC	S-DSC	49
State Agency	California Water Boards, State Water Resources Control Board, Division of Water Rights	Mrowka, Katherine	D-SWRCB	S-SWRCB	52
State Agency	State of CA Central Valley Flood Protection Board (CVFPB)	Punia, Jay S.	D-CVFB2	S-CVFB2	55
Local Agency	State Water Contractors (SWC)	Erlewine, Terry L.	D-SWC	L-SWC	60
Local Agency	Mayor, City of Shasta Lake	Farr, Mayor Larry J.	D-FARR	P-FARR	62
Local Agency	Santa Clara Valley Water District	Garcia, Sherwood	D-SCVWD	L-SCVWD	71
Local Agency	Stockton East Water District	Johnson, Michael	D-SEWD	I-SEWD	73

Table 1. Duplicate Comments on Draft EIS (contd.)

Type	Affiliation	Name	Comment Abbreviation	Duplicate of	Page Number
Local Agency	Santa Clara Valley Water District	Kao, Cindy	D-SCVWD	L-SCVWD	74
Local Agency	City of Shasta Lake	Miller, Tom	D-COSL1	L-COSL1	85
Local Agency	City of Shasta Lake	Miller, Tom	D-COSL3	L-COSL3	89
Local Agency	San Luis & Delta-Mendota Water Authority	Nelson, Daniel	D-SLDMWA	L-SLDMWA	92
Local Agency	Contra Costa Water District	Orloff, Leah	D-CCWD2	L-CCWD2	102
Organization/ Special Interest Group	Friends of the River	Center, Bob	D-FOTR1	O-FOTR1	105
Organization/ Special Interest Group	Pacific Gas and Electric Company, Law Department	Diamond, Betsie c/o Annette Faraglia, ESQ	D-PGE4	O-PGE4	108
Organization/ Special Interest Group	Pacific Gas and Electric Company	Diamond, Elizabeth	D-PGE6	O-PGE6	110
Organization/ Special Interest Group	Pacific Forest Trust	Doherty, Patrick	D-PFT1	O-PFT1	112
Organization/ Special Interest Group	Pacific Forest Trust	Doherty, Patrick	D-PFT2	O-PFT2	114
Organization/ Special Interest Group	Lake Shasta Caverns	Doyle, Matthew W.	D-SLBOA	O-SLBOA	123
Organization/ Special Interest Group	Friends of the River, California Wilderness Coalition	Evans, Steven L.	D-FOTR1	O-FOTR1	126
Organization/ Special Interest Group	Citizens for Clean Air	Flame, Rose	D-FLAM	O-CFCA1	162
Organization/ Special Interest Group	Friends of the Delta Watershed	Flame, Rose	D-FOTDW1	O-FOTDW1	171
Organization/ Special Interest Group	Citizens for Clean Air	hswriter@frontiernet.net	D-HSWR	O-CFCA1	176

Table 1. Duplicate Comments on Draft EIS (contd.)

Type	Affiliation	Name	Comment Abbreviation	Duplicate of	Page Number
Organization/ Special Interest Group	The California Parks Company	Koeberer, Kris	D-TCPC	O-TCPC	185
Organization/ Special Interest Group	Dale La Forest and Associates	La Forest, Dale	D-LAFO	O-LAFO	187
Organization/ Special Interest Group	The Nature Conservancy	Luster, Ryan	D-TNC	O-TNC	200
Organization/ Special Interest Group	Salt Creek Summer	Maggiore, Vince and Desiree LaGrone-Maggiore	D-SCSHA	O-SCSHA	252
Organization/ Special Interest Group	Save the California Delta Alliance (STCDA)	McCleery, Janet	D-STCDA	O-STCDA	255
Organization/ Special Interest Group	Sacred Land Film Project	McLeod, Toby	D-SLFP	O-SLFP	256
Organization/ Special Interest Group	Lakehead Community Development Association	Myers, Joe	D-LCDA	O-LCDA	318
Organization/ Special Interest Group	Natural Resources Defense Council	Obegi, Doug and Rachel Zwilling	D-NRDC1	O-NRDC1	321
Organization/ Special Interest Group	Porgans & Associates	Porgans, Patrick	D-PORG	O-PORG	343
Organization/ Special Interest Group	CA Farm Bureau Federation, Office of the General Counsel	Scheuring, Christian C.	D-CFBB	O-CFBB	346
Organization/ Special Interest Group	Environment Committee, Rotary Club of Redding	Smith, Randall R.	D-RCOR	O-RCOR	349
Organization/ Special Interest Group	Citizens for Clean Air	Strand, Celeste Draisner and Heidi	D-CFCA1	O-CFCA1	350
Organization/ Special Interest Group	Northern California Power Agency (NCPA)	Toenyas, Jerry	D-NCPA	O-NCPA	357
Individual		Abbe, Jessica	D-ABBE	I-ABBE	359
Individual		Adomite, Laurie	D-ADOM	I-MOSS1	361

Table 1. Duplicate Comments on Draft EIS (contd.)

Type	Affiliation	Name	Comment Abbreviation	Duplicate of	Page Number
Individual		Alderson, George	D-ALDE	I-TOSS	363
Individual		Ambrogi, Karen	D-AMBR	I-TOSS	365
Individual	Riverview Golf & Country Club	Anderson, Don	D-RGCC	I-RGCC	367
Individual		Anger, Robert	D-ANGE	I-MOSS1	368
Individual		Bahr, Larry	D-BAHR	I-TOSS	373
Individual		Ball, Jeff	D-BALL	I-TOSS	375
Individual		Barrett, John E. Barrett and Gail	D-BARRE	I-BARRE	377
Individual		Batchelder, Philip	D-BATC	I-TOSS	378
Individual		Beal, Marc P.	D-BEAL	I-BEAL	380
Individual		Beebe, Gordon	D-BEEB	I-TOSS	382
Individual		Bishop, Steve and Dorothy	D-BISH	I-BISH	384
Individual		Boudefoua, Ferhat	D-BOUD	I-BOUD	387
Individual		Brennan, Brien	D-BREN	I-MOSS1	391
Individual		Brennan, Dianne	D-BRENN	I-MOSS1	394
Individual	Esselen Tribe of Monterey County	Brennan, John	D-ESSE	I-ESSE	396
Individual		Brinkhurst, Jim and Cyndi	D-BRIN	I-TOSS	398
Individual		Burger, Bitsa	D-BURG	I-TOSS	400
Individual		Busby, Lois I.	D-BUSB	I-BUSB	402
Individual		Campbell, Kathryn Kirkman	D-KIRK	I-KIRK	403
Individual		Ceragioli, James S.	D-CERA2	I-CERA2	404
Individual		Ceragioli, Jim	D-CERA1	I-CERA1	405
Individual		Chen, Allen	D-CHEN	I-TOSS	406
Individual		Chitewere, Tendai	D-CHIT	I-CHIT	408
Individual		Christie, Keith,	D-KEIT	I-MOSS1	423
Individual		Cipra, Michael	D-CIPR	I-TOSS	426
Individual		Clarke, JoAnne	D-CLAR	I-CLAR	428
Individual		Clifford M. Hunter	D-HUNT	I-HUNT	432
Individual		Coleman, Judy	D-COLE	I-COLE	433
Individual		Cooper, Barbara	D-COOP	I-TOSS	435
Individual		Correia	D-CORR	I-MOSS1	437
Individual		Courtier, Christophe	D-COUR	I-COUR	439
Individual		Crosland, Richard	D-CROS	I-TOSS	441
Individual		Darling, Jeff	D-DARL	I-MOSS1	444
Individual		Denison, Lou Anna	D-DENI	I-TOSS	446
Individual		Dinh, Zack Haison	D-DINH	I-DINH	448
Individual		Donaldson, Michelle	D-DONA	I-MOSS1	450

Table 1. Duplicate Comments on Draft EIS (contd.)

Type	Affiliation	Name	Comment Abbreviation	Duplicate of	Page Number
Individual		Dylan, Keel,	D-KEEL	I-TOSS	453
Individual		Edmiaston, Mayrene	D-EDMI	I-EDMI	455
Individual		Emmons, John-Eric	D-EMMO	I-EMMO	456
Individual		Fagerskog, Carl	D-FAGE	I-TOSS	457
Individual		Fahner, Fredrick W.	D-FAHN	I-FAHN	461
Individual		Filipelli, Deborah	D-FILI	I-TOSS	462
Individual		Floyd, Kim F.	D-FLOY	I-TOSS	465
Individual		Fortino, Robert S. & Jane Phillips Fortino	D-FORT	I-FORT	467
Individual		France, Jeanne	D-FRAN1	I-FRAN1	468
Individual		Freeman, Kyri	D-KFREE	I-TOSS	469
Individual		G, Sujay	D-SUJA	I-MOSS1	471
Individual		Garabedian, Hrach	D-GARA	I-GARA	473
Individual		Garcia, Jesus	D-GARCI	I-GARCI	474
Individual		Gary, Klehr,	D-KLEH	I-MOSS1	475
Individual		Giesen, Erika	D-GIES	I-MOSS1	478
Individual		Goggins, Alan	D-GOGG	I-TOSS	481
Individual		Gowan, Jeffrey	D-GOWAN	I-TOSS	483
Individual		Gowan, Jnana	D-GOWA	I-TOSS	485
Individual		Green, Sue	D-GREE	I-MOSS1	487
Individual	Tsasdi Resort	Grey, David	D-TSAS2	I-TSAS2	489
Individual		Guerrero, Daniel	D-GUER	I-GUER	492
Individual		Gurries, Richard F. and Laurie L. Gurries	D-GURR	I-GURR	495
Individual	Shasta Marina Resort	Harkrader, John and Anna	D-SMR	I-SMR	496
Individual		Harte, Mary	D-HART	I-TOSS	499
Individual		Hauck, Jessica	D-HAUC	I-HAUC	501
Individual		Hazelton, Scott & Laura	D-HAZE1	I-HAZE1	502
Individual		Hazelton, Scott & Laura	D-HAZE2	I-HAZE2	504
Individual		Hebert, Allene	D-HEBE	I-MOSS1	505
Individual		Hekkelman, Jamie	D-HEKK	I-HEKK	507
Individual	Tom Hesseldenz & Associates	Hesseldenz, Tom	D-HESS	I-HESS	511
Individual		Hill, Zack	D-HILL	I-HILL	512
Individual		Hoaglund, Judy	D-HOAG	I-TOSS	513
Individual		Hodson, Brianne	D-HODS	I-HODS	515
Individual		Hollister, Sidney, J.P.	D-HOLL	I-MOSS1	517
Individual		Holmes, Joanna	D-HOLM	I-MOSS1	519
Individual		Holtzclaw, John	D-HOLTZ	I-TOSS	522

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Individual		Hunrichs, Paul G.	D-HUNR	I-TOSS	524
Individual		Imhof, Sheena	D-IMHO	I-IMHO	526
Individual		Irvine, Roblee and Al	D-IRVI	I-IRVI	529
Individual		Jones, May	D-JONE	I-TOSS	530
Individual		Kass, Sarah	D-KASS	I-MOSS1	532
Individual		Kendall, Enid and Arthur	D-KEND	I-KEND	534
Individual		Kisling, Tom & Mardi	D-KISL3	I-KISL3	535
Individual		Kohen, Eitam	D-KOHE	I-KOHE	536
Individual		Kohler, Richard A.	D-KOHL	I-MOSS1	539
Individual		Kossack, David S., PhD.	D-KOSS	I-TOSS	541
Individual		Kuelper, Carol	D-KUEL	I-TOSS	543
Individual		Kurcab, Kim	D-KURC	I-TOSS	545
Individual		Lambert, Harmony	D-LAMB	I-MOSS1	547
Individual		Larcade, Denise	D-LARCA	I-LARCA	550
Individual		Lee, Erin	D-LEE	I-MOSS1	554
Individual		Lehman, Audra	D-LEHM	I-TOSS	556
Individual		Li..., Kate B.	D-KATE	I-MOSS1	558
Individual		Linarez, Karen	D-LINA	I-TOSS	560
Individual		Lincke, Jack	D-LINC	I-TOSS	562
Individual		Lind, Pat	D-LIND	I-MOSS1	565
Individual		Lindley, Catherine	D-LINDL	I-LINDL	567
Individual		Linney, Doug	D-LINN	I-TOSS	568
Individual		Lorenzetti, Dennis	D-LORE	I-LORE	570
Individual		Lynn, Sue	D-LYNN	I-MOSS1	573
Individual		Mack, Callie	D-MACK	I-TOSS	575
Individual		MacNeil, Debbie	D-MACN	I-MACN	577
Individual		Marin, Gerardo O.	D-MARIN	I-MOSS1	578
Individual	Lakeshore Inn & RV	Marshall, Ross & Charlotte H.	D-LSIR	I-LSIR	580
Individual		Martin, Shirley	D-MART	I-MART	589
Individual		Maureen Sechrengost	D-SECH	I-SECH	590
Individual		McCarthy, Linda	D-MCCA	I-MOSS1	592
Individual		McDonald, Rob	D-NORC	I-NORC	595
Individual		McKee, Richard	D-MCKE	I-TOSS	596
Individual		McLaughlin, Michael	D-MCLA	I-MCLA	599
Individual		McPherson, Melanie	D-MCPH	I-MCPH	600
Individual		McVarish, Linda	D-MCVA	I-TOSS	601
Individual		Mitchell, Herbert	D-MITC	I-MITC	603

Table 1. Duplicate Comments on Draft EIS (contd.)

Type	Affiliation	Name	Comment Abbreviation	Duplicate of	Page Number
Individual		Moss, Paul	D-MOSS2	I-MOSS1	604
Individual		Moss, Paul	D-MOSS1	I-MOSS1	606
Individual		Muirhead, J. Fraser	D-MUIR	I-TOSS	608
Individual		Mungol, Indra R.	D-MUNG	I-MOSS1	609
Individual		Murphy, David	D-MURP	I-MURP	611
Individual		Narbutovskih, Anna	D-NARB	I-TOSS	613
Individual		Nishio, John N.	D-NISH	I-NISH	615
Individual		Nitta, Alex	D-NITT	I-TOSS	617
Individual		O'Connor, Sorca	D-OCON	I-MOSS1	619
Individual		O'Halloran, Elizabeth	D-OHAL	I-OHAL	621
Individual		Oselett, Barry	D-OSEL	I-TOSS	622
Individual		Oyung, Frank	D-OYUN	I-OYUN	624
Individual		Palmer, Gracious A.	D-PALM1	I-PALM1	625
Individual		Pantalone, Al	D-PANT3	I-MOSS1	626
Individual		Parks, Katie	D-PARK	I-PARK	628
Individual		Parrinello, Will	D-PARR	I-MOSS1	629
Individual		Pearce, John	D-PEAR	I-TOSS	631
Individual		Pedersen, Karen	D-PEDE	I-TOSS	633
Individual		Perkins, Lowell S.	D-PERK	I-PERK	635
Individual		Perkins, Michelle	D-PERK1	I-PERK1	636
Individual		Petratis, Mike and Jeannette	D-PETR	I-PETR	637
Individual		Phelps, Ed Smith & Virginia	D-PHEL1	I-PHEL1	638
Individual		Philip G. Marquis	D-MARQ	I-MARQ	639
Individual		Philip, Simon	D-PHILI	I-TOSS	641
Individual		Powell, Charles	D-POWE	I-TOSS	643
Individual		Quiros, Marcie	D-QUIR	I-MOSS1	645
Individual		Raven Stevens	D-STEV	I-STEV	647
Individual	Silverthorn Resort	Reha, Michael	D-SILV	I-SILV	648
Individual		Reid, Matt	D-REID	I-TOSS	649
Individual		Richard, Silke	D-RICH2	I-MOSS1	651
Individual		Roderick, Steve & Richard	D-RODE	I-RODE	653
Individual		Sagan, Minnie	D-SAGA	I-MOSS1	654
Individual		Sally, Debra	D-SALL	I-TOSS	656
Individual		Schaafsma, William R., Elizabeth Schaafsma	D-SCHAA	I-SCHAA	658
Individual		Schenck, Alan	D-SCHE	I-TOSS	660
Individual		Schillo, Noah	D-SCHI	I-TOSS	662

Table 1. Duplicate Comments on Draft EIS (contd.)

Type	Affiliation	Name	Comment Abbreviation	Duplicate of	Page Number
Individual		Seaborg, David	D-SEAB	I-TOSS	663
Individual		Searle, Richard C.	D-SEAR	I-MOSS1	665
Individual		Shanafelt, Callie	D-SHAN	I-MOSS1	667
Individual		Shetrawski, Heather	D-SHET	I-SHET	669
Individual		Silver, Dan	D-DSILV	I-TOSS	673
Individual		Sims, Sharon	D-SIMS	I-MOSS1	675
Individual	Environment Committee, Rotary Club of Redding	Smith, Randall R.	D-SMIT2	I-SMIT2	677
Individual		Spears, Connie	D-SPEA	I-TOSS	678
Individual		St. Amat, Tony	D-STAM	I-STAM	680
Individual		Stacy, Kline,	D-KLIN1	I-TOSS	683
Individual		Stacy, Kline,	D-KLIN2	I-TOSS	685
Individual		Stapleton, Michael	D-STAP	I-STAP	687
Individual		Steensma, Monica and Hugo	D-STEEL	I-STEEL	688
Individual		Stellar, Joni	D-STEL	I-TOSS	690
Individual		Stern, Herb	D-STERN	I-TOSS	692
Individual		Stone, Jeffrey	D-STON	I-TOSS	694
Individual		Straub, Carolyn	D-STRAU	I-TOSS	696
Individual		Su, Catherine	D-SU	I-SU	699
Individual		Sullivan, Terrie C.	D-SULL	I-SULL	701
Individual		Svoboda, Deborah	D-SVOB	I-SVOB	703
Individual		Swan, Narim	D-SWAN	I-MOSS1	707
Individual		Switzky, Joshua	D-SWIT	I-TOSS	709
Individual		Taaffe, Michael	D-TAAF	I-TOSS	711
Individual		Takaro, Mark	D-TAKA	I-TOSS	713
Individual		Thompson, David	D-DTHO	I-MOSS1	715
Individual		Thompson, Jon	D-THOMPS	I-TOSS	717
Individual		Thompson, Sarah Glenn	D-THOMP	I-MOSS1	719
Individual		Thrasher, Dianna	D-THRA	I-TOSS	721
Individual		Tollgaard, Alden S.	D-TOLL	I-TOLL	724
Individual		Unknown	D-BSW	I-MOSS1	728
Individual		Unknown	D-PAL	I-MOSS1	730
Individual		Unknown	D-MIUS	I-MOSS1	732
Individual		Unknown	D-JIM	I-MOSS1	734
Individual		Van Ry, Diana and Allan Tilton	D-VANR	I-TOSS	736

Table 1. Duplicate Comments on Draft EIS (contd.)

Type	Affiliation	Name	Comment Abbreviation	Duplicate of	Page Number
Individual		Vandrack, Jason	D-VAND	I-VAND	739
Individual		Veal, Chris	D-VEAL	I-VEAL	740
Individual	Law Offices of Stephan C. Volker, Attorney for the Winnemem Wintu Tribe	Volker, Stephan C.	D-WINN	I-WINN	742
Individual		Voorhees, Julia Catherine	D-VOOR	I-VOOR	798
Individual		Wade, Russ	D-WADE	I-WADE	802
Individual		Wagner, Margret and Fritz Greiner	D-WAGN	I-WAGN	803
Individual		Walicki, Joe	D-WALI	I-TOSS	804
Individual		Waugh, Alan	D-WAUG	I-TOSS	806
Individual		Wells, Russell	D-WELL	I-WELL	808
Individual		Wilkins, Frank	D-WILK	I-WILK	810
Individual		Williams, Jeanette	D-WILLI	I-WILLI	811
Individual	Public Water News Service	Wilson, Burt	D-PWNS	I-PWNS	812
Individual		Wolf, Vuku	D-WOLF	I-MOSS1	813
Individual		Woodard, Jessica	D-WOODA	I-WOODA	815
Individual		Wrisley, Gregg	D-WRIS	I-TOSS	818
Individual		Yowell, Joyce	D-YOWE	I-TOSS	820

Elected Official

D-NIEL Duplicate of E-NIEL

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California State Senate



SENATOR
JIM NIELSEN
FOURTH SENATE DISTRICT
REPUBLICAN CAUCUS WHIP

COMMITTEES
GOVERNMENTAL ORGANIZATION
VICE-CHAIR

BUDGET & FISCAL REVIEW
HEALTH
INSURANCE
VETERANS AFFAIRS

September 25, 2013

Ms. Katrina Chow, Project Manager
Bureau of Reclamation
2800 Cottage Way, MP-720
Sacramento, CA 95825-1898

Subject: Public comment regarding DEIS of Shasta Dam Raise

To whom it may concern:

I am writing to submit comments in regard to U.S. Bureau of Reclamation's (bureau) Draft Environmental Impact Statement (DEIS) on the Shasta Lake Water Resources Investigation (SLWRI) study examining the impacts of raising Shasta Dam. As a longtime supporter of increasing Northern California's surface water storage capacity, I appreciate that the bureau has laid out plans to raise this dam crest.

Inasmuch as the state's water needs continue to grow and the climate continues to be unpredictable, the bureau appropriately designates that a primary objective of increased surface water storage is to "increase supply and supply reliability for agriculture, municipal and industry, and to help meet current and future water demands." Raising the crest of the dam will provide a much-needed upgrade to a structure that, over its half-century lifespan, has seen the population it serves double from 20 million Californians to 38 million. Secondary goals that were necessarily identified by the bureau include improved water quality, flood management, expanded hydropower generation, and enhanced recreation.

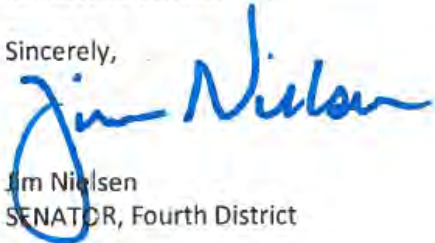
Of the five plans, three proposals (Comprehensive Plans 3, 4 and 5) call for a maximum 18.5 foot raise of the crest—which would effect a full pool increase of 20.5 feet and a capacity increase of 634,000 acre-feet. I am encouraged that the SLWRI found that an 18.5 foot raise would be "economically justified" and achievable, although each proposal has a different main focuses—some of which are more critical to the benefit of our state. While CPs 3, 4 and 5 do address the "secondary planning objectives," it is only CP3 which addresses agricultural water supply reliability as a key point of "focus." Unfortunately, CP3 does not boost water reserves for municipal and industrial (M&I) deliveries; M&I reserves for dry years are necessarily accounted for in CP5. Those are both objectives I would like to see met in the official proposal.

Additionally, it is my hope that the official proposal will expand findings on the process for managing the effect on private property holdings; in instances when eminent domain is applied, there must be assurances that property owners are properly compensated (taking into account all related expenses accrued, even those not necessarily required under state law, such as moving costs). I am also concerned about the impact on the existing marinas, boat ramps, resorts, campgrounds and trails; I would like to see further exploration of the impact on recreational fixtures and use along the lake. Similarly, the final proposal should include procedures for relocating local roads and bridges.

I am pleased that the bureau is considering the dam expansion. I believe that this undertaking is an investment that will provide gains far exceeding the \$1.2 billion price tag. The extra water storage capacity would advantage Californians statewide, from urban water users to farmers to ratepayers benefitting from increased hydroelectric generation. And while our state needs even more surface water storage than is accounted for by this proposal, this is a realistic first step.

Thank you for your consideration of my comments. If you have any questions about this matter, do not hesitate to contact me.

Sincerely,



Jim Nielsen
SENATOR, Fourth District

Federal Agency

D-WAPA Duplicate of F-WAPA



Department of Energy
Western Area Power Administration
Sierra Nevada Region
114 Parkshore Drive
Folsom, California 95630-4710

SEP 27 2013

Ms. Katrina Chow
Project Manager
Planning Division
Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95258

Dear Ms. Chow:

Western Area Power Administration (Western) appreciates the opportunity to review Reclamation's draft environmental impact statement for the proposed Shasta Lake Water Resources Investigation and is transmitting the following comments.

In general, at this point in the study process, Western believes that there are too many uncertainties in a number of other ongoing parallel, but inter-related regulatory processes to be able to provide as definitive comments as we'd like on the anticipated outcomes of each alternative future scenario identified in this study. Specifically, the economic and financial feasibility (especially from a cost allocation and repayment ability on the part of the reimbursable project beneficiaries) is going to be especially important in determining the ultimate feasibility of the project.

Western believes that reduced project accomplishments and increased costs associated with additional regulatory and environmental oversight, resulting in reduced project water accomplishments, have significantly eroded the historic margin between the cost of service and market prices for the Federal hydropower product.

A recent Department of Interior Inspector General's audit (Report No. WR-EV-BOR-0003-2012 released March 2013) indicated that the irrigation function for the Central Valley Project is currently not on track to fully recover its share of the allocated capital investment costs by the year 2030. The Inspector General found that, if Reclamation was unable to undertake the necessary corrective actions to the rates in a timely manner, the "increases to water contractors could create the potential for rates to exceed irrigation contractors' ability to pay and shift the repayment requirement to power users." If not corrected, and assuming current trends, the projected shortfall could range from a low of \$330 million to a high of \$390 million. Should this situation be allowed to occur, the overall economic and financial viability of the base Central Valley Project, notwithstanding any new project addition, could be significantly impacted more adversely than what is being assumed in this study.

The California State Water Resources Control Board (SWRCB) is actively considering new water flow standards in the Sacramento and San Joaquin River systems which when applied to this effort, could also impact not only the timing and reliability, but also the anticipated water and hydropower accomplishments of any proposed dam modification. A final decision in this process will undoubtedly impact the project's water and hydropower accomplishments. Depending on what flow standard is ultimately adopted by the SWRCB, it may be possible that some of the underlying assumptions used to generate the water and hydropower outputs for this study may need to be revisited and/or revised.

Additionally, Reclamation is currently in the process of reallocating the costs of the "Base" Central Valley Project facilities. The outcome of this effort could potentially affect not only the costs assigned to each authorized project purpose, but in addition, with respect to the power function, have an impact on financial feasibility since Reclamation law allows for the reassignment of any capital investment costs which are beyond the ability of the irrigators to repay to be reassigned for repayment to the preference power customers. Consequently, integrating any new costs associated with this new increment block, especially, if a potential for an irrigation cost reassignment opportunity exists, could add additional new financial burdens on the existing preference power customer base.

Coupled with increased environmental regulatory oversight on the project (e.g., consultation on a new biological opinion, implementation activities associated with the San Joaquin River Restoration Program, the Central Valley Project Improvement Act implementation activities, bypass releases, as well as other Endangered Species Act consultations), it is more likely than not, that in the future, water and hydropower accomplishments for the project, even given this new project addition, will decrease, impacting the price competitiveness of the Federal hydropower product, as the per unit cost of the water and hydropower product from the project could increase.

We noted with some interest that the report stated that existing hydropower facilities would need to be modified in order to enable them to continue to be able to take full advantage of the increased hydropower generation capability associated with each proposed project enlargement alternative.

We understand the desire of Reclamation to move forward. However, as Reclamation finalizes its feasibility report and moves to the next step in the process, Reclamation may want to consider revisiting the various future alternatives to ensure that the assumptions used in the analysis continue to make sense, are still relevant, and are consistent with any real-time changes which may be occurring in any ongoing parallel regulatory processes.

Particular attention may need to be paid to the economic and financial feasibility aspects of the project, as projected accomplishments are going to drive the ultimate decision as to whether to proceed with the project.

The viability of the project is contingent on project accomplishments and are going to be highly correlated to the various outcomes of the ongoing parallel processes that are currently underway. Consequently, when re-estimating benefit-cost ratios and attendant cost allocation and financial repayment responsibilities, Reclamation needs to ensure that it either has established a realistic environmental baseline on which to assess impacts, or in the alternative, to ensure that the baseline continues to make sense if a decision is made to move forward with this project.

Thank you for the opportunity to provide comments. We look forward to continuing to work and provide comments on your work products in the future.

Sincerely,

A handwritten signature in black ink that reads "Sonja A. Anderson". The signature is written in a cursive, flowing style.

Sonja Anderson
Power Marketing Manager

D-EPA Duplicate of F-EPA



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

SEP 30 2013

David Murillo, Regional Director
Bureau of Reclamation, Mid-Pacific Region
2800 Cottage Way, MP-700
Sacramento, CA 95825

Subject: Draft Environmental Impact Statement for Shasta Lake Water Resources Investigation, California (CEQ# 20130196)

Dear Mr. Murillo:

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the Shasta Lake Water Resources Investigation. Our comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

As a crucial storage facility for the Central Valley Project, Shasta Lake is a vital part of California's water supply and economy, and a major influence on the beneficial uses of the Sacramento River. We are aware that Bureau of Reclamation has pursued feasibility studies regarding the enlargement of Shasta dam and reservoir as part of CALFED planning efforts and pursuant to several public laws since 1980. The Draft EIS evaluates five action alternatives that vary in terms of the height of the dam raise and the allocation of the additional water storage among various beneficial uses. We understand that Reclamation plans to identify a preferred alternative in the Final EIS.

Based on our review of the Draft EIS, we have rated all the Action Alternatives and the document as Environmental Concerns – Insufficient Information (EC-2). Please see the enclosed "*Summary of EPA Rating Definitions*". Our detailed comments and recommendations are enclosed. We recommend including aquatic habitat enhancements as elements of each project alternative, rather than as elements of only two alternatives. Augmenting spawning gravel and restoring aquatic habitat may benefit species as a cost-effectively and efficiently as controlling water temperature. We also recommend additional mitigation measures such as construction and operation of more advanced wastewater treatment plants, assistance with remedial efforts at abandoned mines, and watershed protection and enhancement projects that focus on reducing chronic sources of sediment.

EPA appreciates the opportunity to provide input on this project. We are available to discuss all recommendations provided. When the Final EIS is released for public review, please send one hard copy and one CD to the address above (Mail Code: CED-2). If you have any questions, please contact me at 415-972-3521, or contact Stephanie Skophammer, the lead reviewer for this project. Stephanie can be reached at 415-972-3098 or skophammer.stephanie@epa.gov.

Sincerely,



Kathleen Martyn Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosures: Summary of EPA Rating Definitions
Detailed Comments

cc: Katrina Chow, Bureau of Reclamation
Rocky Montgomery, U.S. Fish and Wildlife Service
Maria Rea, National Marine Fisheries Service
Patricia Bratcher, California Department of Fish and Wildlife
Philip Woodward, Central Valley Regional Water Quality Control Board
Kathy Mrowka, Central Valley Regional Water Quality Control Board
Michael Nepstad, U.S. Army Corps of Engineers

SUMMARY OF EPA RATING DEFINITIONS*

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

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

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

"EC" (Environmental Concerns)

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

"EO" (Environmental Objections)

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

"EU" (Environmentally Unsatisfactory)

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

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

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

"Category 2" (Insufficient Information)

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

"Category 3" (Inadequate)

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

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

U.S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR SHASTA WATER RESOURCES INVESTIGATION, CALIFORNIA SEPTEMBER 30, 2013

Alternatives

The Bureau of Reclamation evaluates five alternatives for raising Shasta Dam to various heights with the additional storage being allocated for agricultural uses, municipal and industrial uses, anadromous fish uses, or some combination thereof. The purpose and need for the project is to improve operational flexibility of the Delta watershed system by modifying the existing Shasta Dam and Reservoir to meet specified objectives. These dual objectives include, among others, increasing survival of anadromous fish and increasing water supply reliability. A suite of management measures common to all the alternatives includes modifying the temperature control device, reducing demand by allocating funds for water conservation efforts, and enlarging the cold-water pool (p. 2-24).

The Draft EIS states that the primary objectives are given equal priority (p. 2-5). All alternatives provide increased water supply reliability, and this screening criterion removed many alternatives from further consideration (see Scenarios Considered but Dismissed on page 2-99). We note, however, that only Alternatives CP4 and CP5 include aquatic habitat enhancements, such as augmenting spawning gravel and restoring riparian, floodplain, and side channel habitat - activities that may benefit the listed fish species in the most effective and cost-effective way other than controlling water temperature. It is not clear why these measures were not included in all the alternatives, as they would help to meet the objective of increasing the survival of anadromous fish, independent of dam augmentation.

Recommendation:

Consider including aquatic habitat enhancements for fish, such as those included in Alternatives CP4 and CP5, as part of all the alternatives. In addition to those already included in Alternatives CP4 and CP5, consider incorporating into all of the alternatives other instream aquatic habitat enhancements, such as anchored complex woody debris structures or erosion resistant vegetation near the mouths of the tributaries.

Water Quality

The Draft EIS states that vegetation clearing, relocation of activities, and wave-related shoreline erosion all have the potential to have short-term and long-term sediment impacts. Shoreline processes, including constantly changing reservoir levels that vary month to month and year to year, would provide a constant mechanism by which soil in the new area of inundation could be eroded into the lake, resulting in elevated levels of suspended sediment and turbidity. The quantity of sediment may be on the scale of millions of cubic yards; however, the Draft EIS states that these impacts cannot be quantified because of the size of the lake and the number of variables that influence sediment transport. The Draft EIS indicates that the direct and indirect impacts to surface water quality, including increased turbidity, could be significant, but would be less than significant after mitigation (p. 7-81). It is not clear how this was determined. The document does not provide sufficient details regarding the mitigation to assess its effectiveness or likelihood of success (p. 7-279).

Hydrologic changes from increased storage and release of water from Shasta Lake have the potential for channel incision and bank erosion below the dam. This is caused by trapping sediment behind the dam and changes in the hydrograph and river stage that effectively lowers the base level of the tributaries. Raising the dam would allow more winter runoff storage which could lower the river stage below the dam during runoff events in the tributaries downstream, causing channel incision, loss of beneficial gravel, and bank erosion.

These impacts may affect the beneficial uses assigned to Shasta Lake and downstream in the Sacramento River. These beneficial uses include drinking water supply, freshwater habitat, migration, and spawning. The Draft EIS does not provide specific mitigation measures related to water quality impacts that may occur as a result of the project. The only mitigation proposed is to prepare a Stormwater Pollution Prevention Plan and a remediation plan for historic mine features in the future.

Recommendation:

The Final EIS should provide a reasonable quantitative estimate of the sediment impacts expected from an enlargement of Shasta reservoir and disclose the likely results with regard to beneficial uses in the project area.

The Final EIS should explain how mitigation would lessen the impacts of erosion on water quality in the project area to less than significant. Mitigation actions that should be explored include construction and operation of more advanced wastewater treatment plants, assistance with remedial efforts at abandoned mines, and watershed protection and enhancement projects that focus on reducing chronic sources of sediment.

Endangered and Threatened Species

The US Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife, while not cooperating agencies, have been involved for many years and provided comments on feasibility reports and administrative drafts of the EIS. EPA understands that Reclamation intends to initiate consultation under the Endangered Species Act in the future but has not yet done so. On this note, EPA encourages Reclamation to continue to engage with the fish agencies to respond to the dual objectives, employ the best modeling, as well as provide appropriate mitigation for any adverse impacts to species. All of these issues should be addressed in the Final EIS.

SALMOD is the salmon production and mortality model used for the Shasta Enlargement EIS. SALMOD has significant limitations that are described in the appendix to the Draft EIS. For the benefit of the public and decision makers, these limitations should be discussed in more detail in the body of the Final EIS. For example, SALMOD is a comparative model, so any smolt increases should be described in a comparative fashion and the EIS should indicate that these are not firm population increases. SALMOD is not a life cycle model and it does not account for population trends over time nor how those trends may affect annual production. Additionally the Anadromous Fish Restoration Program has a goal of doubling salmon populations that has also been included in the Water Quality Control Plan as a water quality standard. The Final EIS should describe whether the actions of this project will have a significant impact on achieving this goal.

The Draft EIS indicates that a reduction in the magnitude, duration, or frequency of intermediate to large flows in the Sacramento River would occur as a result of a dam raise and that this is potentially significant (p. 11-269). Capturing more water in wet years would reduce peak flows, which are known to be highly beneficial to fish, as such flows activate floodplains and generally yield good recruitment years for anadromous fish. The reduction in flows in these years and the exposure of fish to more low water years (as some of the water is held in the reservoir and not released downstream) would likely have an adverse effect on juvenile salmonids and other species that rely on floodplain and bypass inundation for foraging. The mitigation proposed is to “develop and implement a mitigation and adaptive management plan to avoid and compensate the impact of altered flow regimes.”

Additionally, the anadromous fish benefits, as quantified in the Draft EIS, are minimal (i.e. winter run Chinook salmon Table 11-45 p. 11-285) and many of the impacts to these species are not quantified for clear comparison to the benefits.

Recommendations:

We urge Reclamation to coordinate with USFWS and NMFS on the timing of the Final EIS and the Biological Opinions. The Final EIS should provide an update on the consultation process. We strongly recommend including the Biological Opinion as an appendix.

Continue to consult with USFWS, NMFS, and CDFW to develop appropriate mitigation strategies to minimize the severity of the impacts of reduced peak flows. Mitigation and monitoring measures that would protect sensitive biological resources, including salmon, Shasta snow wren, bald eagle, and others should be identified in the Final EIS. Flow regimes should be developed that promote natural geomorphic processes necessary to restore riparian and floodplain habitat with the least negative effects.

The limitations of SALMOD should be more clearly stated and potential benefits of the dam enlargement should be accurately acknowledged in the context of all Reasonable and Prudent Measures, Salmon Recovery Program and the Salmon Doubling Goal considered by the fish agencies.

The negative impacts of modifying the hydrology such that there are fewer high flow events should be weighed against the benefits of increasing the cold water pool for anadromous fish and Delta smelt. It is unclear whether the proposed project has a net benefit or adverse impact to threatened and endangered anadromous fish.

The Final EIS should assess the actual impacts to fish, alongside the benefits, to generate a cumulative impact from the negative and positive impacts. For example, the benefits to anadromous fish are limited to a few critical and dry years.

Analysis of impacts should not conclude that, if the impact is greater than a 5% change but is still below the standard, there is no significant impact (e.g. Old Middle River and X2 Delta outflow standard). Scientific research has shown that these physical factors are highly correlated with aquatic life impacts.

National Historic Preservation Act

The Draft EIS states that hundreds of prehistoric resources, ancestral villages, sacred lands, and traditional cultural properties will be inundated or otherwise affected by a raise in Shasta dam and reservoir (p. 14-23). Consultation for tribal cultural resources is required under Section 106 of NHPA. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, to consult with the appropriate State Historic Preservation Officer/Tribal Historic Preservation Officer (SHPO/THPO). Section 106 of the NHPA requires that Federal agencies consider the effects of their actions on cultural resources, following regulation in 36 CFR 800.

Recommendation:

The Final EIS should discuss how Reclamation would avoid or minimize adverse effects on the physical integrity, accessibility, or use of cultural resources in the area. The Final EIS should

discuss how Reclamation plans to fulfill its obligations under NHPA, including any future tribal consultation.

Wetland Impacts and Mitigation

The Draft EIS states that approximately 51 acres of wetlands would occur in the impoundment and relocation areas, but that all information regarding jurisdictional waters is just preliminary (p. 12-65). It is unclear how many acres exist currently and whether any of these acreage values are based on a US Army Corps of Engineers-verified jurisdictional delineation.

The Draft EIS is inconsistent in its discussion of mitigation for wetland impacts. For example, specific Best Management Practices (BMPs) and other measures to reduce temporary construction-related impacts to “less than significant levels,” are described, while mitigation for permanent wetland losses is not as clearly addressed (p.12-179). A CWA Section 404 permit may be needed for this project. Unavoidable impacts to wetlands must be fully mitigated pursuant to Section 404 requirements. Note that mitigation should compensate for both permanent losses, and residual temporal losses following application of construction BMPs.

Recommendations:

EPA encourages integration of the NEPA and CWA Section 404 permitting process to reduce overall project review timelines and to provide more thorough analysis of potential aquatic resource impacts through the NEPA process. Although detailed wetland delineations may not be available until later in the CWA Section 404 permitting process, we recommend that the Final EIS disclose the expected acreage of both permanent (drawdown-related) and temporary (construction-related) wetland losses, as well as the basis for the wetland loss estimates. If estimates are not based on a Corps-verified jurisdictional delineation, the Final EIS should note that these estimates are preliminary and will be revisited in more detail during the Section 404 permitting phase using standard Corps protocols.

Ecosystem functions provided by the specific wetland areas that could be lost should be discussed, and measures that could mitigate such impacts should be identified. The Final EIS should depict the probable areas of wetland loss on maps.

Delete the section on page 3-47 that describes the MOU for the CALFED process and Section 404 permit decision. Any CWA Section 404 analysis that would occur as part of this project will need a new permit application and would not be tiered from the CALFED 2000 ROD.

Feasibility Reports

The Draft EIS states that Federal and State Feasibility Reports have been developed to provide detailed information on the potential project benefits and costs, the allocation of costs to potential project beneficiaries, and project participants. The identification of final project participants and beneficiaries and potential benefits and costs will influence the selection of the preferred alternative in the Final EIS.

Recommendation:

To ensure full public disclosure to support decision-making, we recommend that the conclusions of the Federal and State Feasibility Reports be summarized in the body of the Final EIS, and the Reports be included as appendices in the Final EIS.

D-USACE Duplicate of F-USACE



REPLY TO
ATTENTION OF

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

September 25, 2013

Regulatory Division SPK-2011-00667

Ms. Michelle Denning
U.S. Bureau of Reclamation
2800 Cottage Way
Sacramento, California 95825-1898

Dear Ms. Denning:

We are responding to your June 25, 2013, request for comments on the Draft Environmental Impact Statement (DEIS) for the Shasta Lake Water Resource Investigation (SLWRI). The Corps has reviewed the DEIS and requests that the following comments and recommendations be incorporated into the document.

The Corps of Engineers' jurisdiction within the study area is under the authority of Section 404 of the Clean Water Act for the discharge of dredged or fill material into waters of the United States. Waters of the United States include, but are not limited to, rivers, perennial or intermittent streams, lakes, ponds, wetlands, vernal pools, marshes, wet meadows, and seeps. Project features that result in the discharge of dredged or fill material into waters of the United States will require Department of the Army authorization prior to starting work.

The stated project purpose in the DEIS is, "to improve operational flexibility of the Delta watershed system through modifying the existing Shasta Dam and Reservoir to meet specified primary and secondary project objectives." However, the operational flexibility appears to be the need and is achieved through the real project purpose of water storage. The project purpose in the DEIS seems to predispose the only way to accomplish this is to raise Shasta Dam. By limiting the project alternatives considered to only the raising of Shasta Dam unnecessarily constrains the range of alternatives that must be considered under the Clean Water Act.

The range of alternatives considered for this project should include alternatives that avoid impacts to wetlands or other waters of the United States. The DEIS alternatives analysis should incorporate the requirements of the 404(b)(1) guidelines in order for the Corps to be able to utilize the analysis for permitting under Section 404 of the CWA.

EPA's 404(b)(1) guidelines (40 CFR 230.10) state that no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impacts to the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. An alternative is considered practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose. To comply with these guidelines the Corps can only issue a permit for the least environmentally damaging practicable alternative (LEDPA).

Additionally, in the Section 12.3.5 covering Mitigation Measures, the DEIS states that "when feasible jurisdictional waters of the United States would be avoided." The term "when feasible" as it pertains to avoidance and minimization of impacts to waters of the United States, should be eliminated from the document. The USEPA's 404(b)(1) guidelines and the 1990 MOU between the Corps and USEPA,

-2-

require that impacts to waters of the United States must be avoided and minimized to the maximum extent practicable in order to comply with the Clean Water Act.

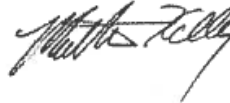
Based on our review of the DEIS it appears the delineation of waters of the United States that will be affected by the raising of Shasta Dam is only partially complete. As we commented during review of the Administrative Draft of the DEIS the investigations should be completed and provided to the Corps for verification. The DEIS stated the investigations will be completed and included in the FEIS. The delineation of waters of the United States should be completed and included in the DEIS so that the documents can be adequately reviewed by both the agencies and the public as part of the NEPA review process. The delineation should not be provided as new information the FEIS. Without the completed reports included in the DEIS the document's assessment of impacts to waters of the United States as a result of the proposed project are incomplete.

The DEIS identifies that at this time there have been no mitigation measures developed to mitigate for the loss of waters of the United States as a result of this project. The DEIS states that additional discussion of mitigation for the loss of waters of the United States will be included in the FEIS. As we commented in our review of the Administrative DEIS, at a minimum a conceptual mitigation proposal to off-set impacts to waters of the United States should be developed and included in the DEIS. This information should be available for the agencies and public review and comment. Without at least a conceptual plan we are unable to evaluate if mitigation for the loss of waters of the U.S. is even possible or if the mitigation itself may have impacts that should be considered in the DEIS. The mitigation proposal should not be provided as new information in the FEIS.

At this time unless the DEIS is revised to incorporate the above recommendations and changes, it does not appear that the Corps will be able to sign the Record of Decision and adopt the SLWRI FEIS for our permit requirements.

Please refer to identification number SPK-2011-00667 in any correspondence concerning this project. If you have any questions, please contact me at the Redding Regulatory Office, 310 Hemsted Drive, Suite 310, Redding, California 96002, by email at Matthew.P.Kelley@usace.army.mil, or telephone at 530-223-9534. For more information regarding our program, please visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,



Matthew P. Kelley
Senior Project Manager

cc:

Ms. Katrina Chow, U.S. Bureau of Reclamation, 2800 Cottage Way, Sacramento, California 95825-1898
Mr. Jason Brush, U.S. Environmental Protection Agency, WRT-8, 75 Hawthorne Street, San Francisco, California 94105-3901
Ms. Stephanie Skophammer, U.S. Environmental Protection Agency, WRT-8, 75 Hawthorne Street, San Francisco, California 94105-3901

D-USFS2 Duplicate of F-USFS2

Shasta Lake Water Resources Investigation DEIS Comment Form - Version July 2013							
Reviewer Name:	Virginia Beres	Julie Kierstead Nelson	Cindy Luzietti	Nathan Rezeau			
Reviewer Email:	vberes@fs.fed.us	jknelson@fs.fed.us	cluzietti@fs.fed.us	nrezeau@fs.fed.us			
Reviewer Agency:	Forest Service	Forest Service	Forest Service	Forest Service			
Reviewer Mailing Address:							
Date:	Sept 26, 2013	Sept. 20, 2013	Sept 17, 2013	Sept. 29, 2013			
ITEM	REVIEWER	CHAPTER TITLE	CH #	PG #	Line #	TEXT	COMMENT
1	vberes	Land Use	17	5	6	Lakeview	Lakeview Marina is gone. The entire document should be searched for this marina to ensure all references have been removed.
2	vberes	Land Use	17	5	9	the STNF to decommission Digger Bay and construct a new marina at Turntable	Is this why the "windows" plates show Digger Bay as slated for abandonment? I don't believe Digger Bay is to be abandoned.
3	vberes	Land Use	17	5	17	USFS operates recreation residential tracts at Salt Creek...	The USGS map may spell Didallas Creek "Didallas" but the recreation tract is spelled "DIDALLIS". Didallas Creek Bridge can remain but a search and replace should be done for the recreation residence tract spelling.
4	vberes	Land Use Alternatives	2	80		Figure 2-5. Table 5-3 "Turntable Bay"	Digger Bay is not slated for abandonment Any new development at Turntable Bay might not be called Turntable Bay Marina as an existing business may be relocated there. Also "Developments" should not be capitalized.
5	vberes	Summary	0	108		Table 19-3 "Turntable Bay Marina"	Any new development at Turntable Bay might not be called Turntable Bay Marina as an existing business may be relocated there. Also "Developments" should not be capitalized.
6	vberes	Aesthetics	19	93		Plate 39	Digger Bay Marina is not slated for abandonment Facility consolidation will only be considered after all feasible undeveloped relocation sites have been considered.
7	vberes	Engineering Appendix Plates		39		Decisions about whether individual affected facilities would be modified or relocated would be addressed in conjunction with USFS, based on overall effects on the features of individual facilities as well as operational needs. Some relocated facilities may be consolidated within other existing facilities, rather than being relocated at a currently undeveloped area. All plans for replacing of facilities would be evaluated and approved by USFS.	
8	vberes	Engineering Appendix		34	7		

Shasta Lake Water Resources Investigation DEIS Comment Form - Version July 2013						
Reviewer Name:	Virginia Beres	Julie Kierstead Nelson	Cindy Luzziatti	Nathan Rezeau		
Reviewer Email:	vberes@fs.fed.us	jknelson@fs.fed.us	cluzziatti@fs.fed.us	nrezeau@fs.fed.us		
Reviewer Agency:	Forest Service	Forest Service	Forest Service	Forest Service		
Reviewer Mailing Address:						
Date:	Sept 26, 2013	Sept. 20, 2013	Sept 12, 2013	Sept. 29, 2013		
ITEM	REVIEWER	CHAPTER TITLE	CH #	PG #	Line #	COMMENT
9	vberes	Engineering Appendix		33	14	<p>Where is the large chart that Reclamation, MWH and the FS worked on that showed what recreation facilities are affected and the proposed action for them? The draft document we have doesn't have a title but one of the row headers is titled "Shasta Recreation Facilities -- Basis for 18.5 Cost Estimate" and the footer states that it is for discussion purposes only, do not distribute.</p> <p>Table 18-1 - Kamloops Camp</p> <p>This is the only reference to Kamloops Camp in draft (not in the "windows" plates either. This camp, under FS special use permit, is located on FS lands and will be highly impacted by the PA and needs to be addressed as an impacted facility. This was an oversight.</p>
10	vberes		18	5		<p>Updated Region 5 USFS Sensitive Species list was released in July, and effective Aug. 16, 2013; EIS & Botany Technical Report will need editing to reflect changes to USFS status.</p> <p>please add that it is also USFS S</p> <p>no longer USFS S</p> <p>no longer USFS S</p> <p>add to table--currently being ranked. Known to occur in project area</p>
11	JK Nelson	Botanical Resources & Wetlands/Surv	12	33	16	<p>Considered Sensitive or Endemic by USFS</p>
12	JK Nelson	Table 12.3 Plant Species of Concern	12	34		Northern clarkia
13	JK Nelson	Table 12.3 Plant Species of Concern	12	34		Pacific fuzzwort
14	JK Nelson	Table 12.3 Plant Species of Concern	12	34		English Peak greenbriar
15	JK Nelson	Table 12.3 Plant Species of Concern	12	34		Erythranthe taylora
16	JK Nelson	Botanical Resources & Wetlands/Surv	12	76	31	<p>In a subsequent court-mandated settlement agreement (2011)</p> <p>Settlement agreement was voided; Survey & Manage program has reverted to 2001 ROD standards & guidelines</p>

Shasta Lake Water Resources Investigation
 Duplicate DEIS Public Comments Appendix

Shasta Lake Water Resources Investigation DEIS Comment Form - Version July 2013									
Reviewer Name:	Virginia Beres	Julie Kierstead Nelson	Cindy Luzietti	Nathan Rezeau					
Reviewer Email:	vberes@fs.fed.us	jknelson@fs.fed.us	cluzietti@fs.fed.us	nrezeau@fs.fed.us					
Reviewer Agency:	Forest Service	Forest Service	Forest Service	Forest Service					
Reviewer Mailing Address:									
Date:	Sept 26, 2013	Sept 20, 2013	Sept 12, 2013	Sept 29, 2013					
ITEM	REVIEWER	CHAPTER TITLE	CH #	PG #	Line #	TEXT	COMMENT		
17	cluzietti	Land Use	17	2	17	Late Successional Reserve	It is misleading to label as just LSR since the Land Allocation is called "Late-Successional Reserves, Managed Late-Successional Areas, and other Threatened, Endangered, or Sensitive Species" in the Forest Plan, and the areas in the Shasta Unit of the NRA were designated for bald eagles and peregrine falcon, and do not contain habitat for late-successional and old-growth related species2		
18	cluzietti	Land Use	17	2	30	STNF LRMP direction for administratively withdrawn area.....	if you are quoting this from page 4-112 of the LRMP, it applies to all allocations of the Shasta Unit NRA not just Administratively Withdrawn, and does NOT apply to all of the STNF as this sentence says.		
19	cluzietti	Land Use	17	5	16	operates	change to "manages"		
20	cluzietti	Land Use	17	5	28		There were more than 5 claims that predated the withdrawal when the NRA was created. Are you saying there are 5 claims that are still active? I don't believe that are any claims that are active in the NRA anymore--would you be able to give us the locations of these 5 claims?		
21	cluzietti	Land Use	17	5	32	36 CFR	This is NOT in 36 CFR, it is in 43 CFR.		
22	cluzietti	Land Use	17	5	30	operating plans	operating plans are required under the regs for locatable minerals (36CFR228 Subpart A) not leaseable		
23	cluzietti	Land Use	17	8	19	Chappie-Shasta	The BLM manages all of the Chappie-Shasta OHV Area.		

Shasta Lake Water Resources Investigation DEIS Comment Form - Version July 2013									
Reviewer Name:		Virginia Beres		Julie Kierstead Nelson		Cindy Luzziatti		Nathan Rezeau	
Reviewer Email:		vberes@fs.fed.us		jknelson@fs.fed.us		cluzziatti@fs.fed.us		nrezeau@fs.fed.us	
Reviewer Agency:		Forest Service		Forest Service		Forest Service		Forest Service	
Reviewer Mailing Address:									
Date:		Sept 26, 2013		Sept. 20, 2013		Sept 12, 2013		Sept. 29, 2013	
ITEM	REVIEWER	CHAPTER TITLE	CH #	PG #	Line #	TEXT	COMMENT		
24	cluzziatti	Land Use	17	9	5	land ownership adjustments	if you are going to use this goal you need to include the information on page 4-19 of the Forest Plan which speaks to land ownership adjustments in the NRA (the desired future condition is clarified by the Standards and Guidelines) and the resource objectives that land ownership adjustments are supposed to support. "Within and adjacent to the NRA acquire available, undeveloped private lands needed to fulfill the management goals and objectives of the recreation resource program. Acquire those parcels of land that are specifically needed: (a) for public development; (b) to protect major visual resource values; (c) to protect prime wildlife habitat; and (d) to preserve important cultural values and make them available for public enjoyment."		
25	cluzziatti	Land Use	17	9	25	Provide special management for late successional reserves.....	Add "Late-Successional Reserves and Threatened, Endangered, and Selected Sensitive Species" at front of sentence as that is the name of the management prescription. You have the management prescription title under all the other land allocations.		
26	cluzziatti	Land Use	17	29	26	It should be noted that even where site specific.....	Every project or activity must be consistent with the applicable plan components. Determining consistency and resolving inconsistency is found in		
27	Nrezeau	Recreation	18	66	8, 18, 19	recreation residence would be affected	A survey for recreation residence structures is recommended, similar to what was done for the Lakehead community, so that impacts to recreation residences can be refined.		
28	Nrezeau	Recreation	18	Tables 18-3 and 18-8		Campgrounds	Mariners Point Campground is not listed in any of the impacts tables. Mariner's Point is a developed campground, unlike the other shoreline campgrounds, that will be impacted by inundation and should be listed as impacted.		

Shasta Lake Water Resources Investigation
 Duplicate DEIS Public Comments Appendix

Shasta Lake Water Resources Investigation DEIS Comment Form - Version July 2013									
Reviewer Name:	Virginia Beres	Julie Kierstead Nelson	Cindy Luziotti	Nathan Rezeau					
Reviewer Email:	vberes@fs.fed.us	jknelson@fs.fed.us	cluziotti@fs.fed.us	nrezeau@fs.fed.us					
Reviewer Agency:	Forest Service	Forest Service	Forest Service	Forest Service					
Reviewer Mailing Address:									
Date:	Sept 26, 2013	Sept 20, 2013	Sept 12, 2013	Sept 29, 2013					
ITEM	REVIEWER	CHAPTER TITLE	CH #	PG #	Line #	TEXT	COMMENT		
29	Nrezeau	Alternatives, & Engineering Appendix 2 & Eng App.	73	73	Table 2-10	Lakeshore Drive	Due to significant community interest from private residents and business owners, it is recommended that a proposed/ conceptual plan for the realignment of Lakeshore Drive be included as an Engineering Appendix Plate.		
30	Nrezeau	Aesthetics and Visual Resources	19	4	20	there are 10 marinas on Shasta Lake	There are 9 not 10 marinas on Shasta Lake. Please correct to 9 marinas.		

Tribe

D-UAICAR Duplicate of T-UAICAR

Shasta Lake Draft EIS

Inbox x

Marcos Guerrero <mguerrero@aubumrancheria.com>

Aug 19 (2 days ago) ★



to me: [redacted]

Hello Ms. Chow,

In order to accurately assess the potential for your project to impact Native American resources I would like to take a look at the cultural resources inventory and management reports. This includes any survey, evaluation, or mitigation reports, include but not limited to PAs, MOA, HPTPs, and HPMPs.

Thanks you for your patience,

With respect,

Marcos Guerrero, RPA, THPO
Cultural Resources Manager
United Auburn Indian Community of the Auburn Rancheria
10720 Indian Hill Road
Auburn, CA 95603
Office: (530) 883-2364
Cell: (916) 300-8792
Fax: (530) 885-5476

Nothing in this e-mail is intended to constitute an electronic signature for purposes of the Electronic Signatures in Global and National Commerce Act (E-Sign Act), 15, U.S.C. §§ 7001 to 7006 or the Uniform Electronic Transactions Act of any state or the federal government unless a specific statement to the contrary is included in this e-mail.

State Agency

D-DFW Duplicate of S-DFW

Attachment 3 Shasta Lake Water Resources Investigation Draft Environmental Impact Statement - June 2013 Wildlife Resources Technical Report Comments							
Reviewer Name: Jennifer Carlson, Patricia Bratcher, and Richard Us Reviewer Email: Patricia.Bratcher@wildlife.ca.gov, Richard.Us@wildlife.ca.gov Reviewer Agency: CDFW Reviewer Mailing: 601 Locust St., Redding, CA 96001 Date: August 2013							
ITEM	REVIEWER	CHAPTER TITLE	CHAPTER NUMBER	PAGE NUMBER	LINE NUMBER	TEXT	COMMENT
1	CDPW	Wildlife Resources Technical Report	1	1-5	15	The California Natural Diversity Database	Info from both the CNDDDB and the USFWS ES Database (ESA Species list) needs to be requested, as the species presence list is over 5 years old.
2	CDPW	Wildlife Resources Technical Report	1	1-6	Table 1-1	Table 1-1	Table 4-7 of the MSCS identifies vernal pools as a habitat type within the Natural Seasonal Wetland Habitat Type. Vernal pools occur within the primary study area (in and near Redding, for example) and should be included within this table.
3	CDPW	Wildlife Resources Technical Report	1	1-6	Table 1-1	Table 1-1	There is very little description about what purpose Table 1-1 serves or how it will be used or interpreted. Clarification needed.
4	CDPW	Wildlife Resources Technical Report	1	1-9	Tables 1.2 and 1.3	Table 1.2 and 1.3	These tables show summary of wildlife habitat in the impoundment area as well as the relocation areas. Does this also reflect the acres of habitat that would be inundated? If so, specifying that would be helpful because it is not evident to me. It would be useful to include a total acreage value by habitat type. The totals of acres by lake arms isn't all that useful from a wildlife perspective.
5	CDPW	Wildlife Resources Technical Report	1	1-11	Figure 1.2a	Figure 1.2a to 1.2f	These maps are very hard to read due to the scale. Perhaps breaking up the maps into more sections and zooming in would be better. Shouldn't there be more "affected" habitat in the inundation zone that what is shown?
6	CDPW	Wildlife Resources Technical Report	1	1-30	15	Oak woodlands	The habitat section is very sparse in terms of details on this habitat type. Including a little more detail would be preferable including species occupying this habitat.
7	CDPW	Wildlife Resources Technical Report	1	1-38	Table 1-4	Northern goshawk	The potential for occurrence states that it is known to occur in the upper McCloud arm but does not specify if this is in the primary study area or not. Please clarify.
8	CDPW	Wildlife Resources Technical Report	1	1-41	37	Shasta salamander	Take and loss of Shasta salamander (SS) is discussed and known from 39 sites surveyed to date. The survey methods were not discussed in detail and the information about the size of the populations at the site is not given presented, thus it is not possible to calculate the actual take and loss of the SS. This species may be quite limited in its ability to migrate and thus the genetic diversity of the species throughout the study area should be investigated. There may be unique genetic populations dispersed within the impact area that would guide the design of mitigation options. It is likely that this species incurred significant habitat losses when Shasta Dam was built and filled. Further enlargement of the dam will cause further decline in the species habitat that needs to be estimated and included in full assessment of impacts to the species. SS habitat includes subterranean habitat to which access is important during the dry summer months. Therefore the inundation and destruction of habitat must account for the loss of subterranean habitat even if the water level does not completely submerge the habitat.
						Comment #8 cont'd	All sites must be enumerated and sites that may be above full pool elevations must be identified as to whether subterranean habitat would be destroyed such that survival of the site is reduced or rendered impossible. These sites must also be included in mitigation calculations.

Shasta Lake Water Resources Investigation DEIS Comment Form--Wildlife Resources Technical Report						
9	CDPW	Wildlife Technical Report	1	1-41		<p>Impacts to the terrestrial mollusks are presented in terms of CWHR habitats and acreage yet there is no discussion about the actual sites where these mollusks were located and what microhabitat conditions exist on site to allow their existence. These mollusks are not equally and evenly distributed across within the habitat of any of the habitat types. They will undoubtedly be found in varying distribution and abundance within and between habitats. Analysis of these variables is needed both to identify complete impacts to the species and for determination of complete mitigation. Additional discussion must include the range of each species and the fraction of destruction to the totality of known populations of each species. These species also would have incurred extirpation of populations with the original construction of Shasta Dam. Estimates of the original destruction of species and the likely remaining is needed to accurately assess the cumulative effects of proposed future actions. Additional analysis should include assessment of what limits may exist for each species,</p> <p>such as elevation, because certain species may not be able to exist at the same densities at higher elevations where temperatures and moisture would be subject to greater variation. All of this information is needed to develop complete and species specific mitigation plans.</p> <p>The statement is made that the carnivore surveys and detections of fisher for this project are the southeastern-most occurrences. This is an untrue statement and needs to be removed. Fishers have been detected south of the Fountain Fire area. Detections were both on public and private land, south of Burney and north of Shingletown. Several detections of fisher have been recorded in this area.</p> <p>The effects to this and other species needs to be re-evaluated once a project footprint is finalized. To date, the location of sites to be mined for minerals to create cement is not completed, nor are the footprint of relocated facilities, roads, etc. In addition, due to the potential change in water management (including CP4, which includes a dedicated pool for natural resource uses), the potential for effect is largely incomplete. Upon completion of the actual project footprint and management plan, this an other documents that assess effects to species and special habitats needs to be redone. Similarly, using water to manage for one species (e.g. winter-run Chinook) may have negative effects on another species (e.g. bank swallow). This also needs to be analyzed.</p> <p>For the CARLF, only protocol surveys can determine presence/absence as per ESA, so this determination is pre-decisional. Foothill yellow-legged frogs are known to occur in the valley section of tributaries on the west side of the Sacramento River, so this determination is wrong.</p> <p>The species range of this species, as per DFW mapping websites, shows it extending up into the middle of Tehama County, which is just below Shasta County. In addition, migratory patterns should be taken into account, since this species is known to occur (nest) in the Klamath Basin.</p> <p>The BLM Land and Resource Management Plan for the Redding Field Office should also be included on this list. BLM manages land on Clear Creek and along the Sacramento River, in addition to inholdings near and/or around Shasta Lake. Similarly, the USFS Mendocino National Forest manages a piece of property adjacent to Red Bluff Diversion Dam. Reference to its Land Management Plan should also be included. Similarly, there are extensive areas of land managed along the river by the Department of Water Resources, the Department, and State Parks.</p>
						<p>Terrestrial Mollusks</p>
						<p>Comment #9 cont'd</p>
10	CDPW	Wildlife Resources Technical Report	1	1-67	16	<p>Pacific fisher</p>
11	CDPW	Wildlife Resources Technical Report	1	1-68	Table 1-5	<p>Table 1-5</p>
12	CDPW	Wildlife Resources Technical Report	1	1-68	Table 1-5	<p>Table 1-5, California Red-legged frog (CARLF)</p>
13	CDPW	Wildlife Resources Technical Report	1	1-69	29	<p>Swainson's Hawk</p>
14	CDPW	Wildlife Resources Technical Report	1	1-107	25	<p>Land Management</p>

Shasta Lake Water Resources Investigation
 Duplicate DEIS Public Comments Appendix

72	CDEW	Rebut: Attachment 7 - Mitigation Resources Technical	Attachment 7	A2-7	Table A7-7	<p>also used to be addressed. A list of specific projects can be identified and included in the CDEW report. Table on the CDEW for the CDEW for the CDEW. As per W2C2, specific projects are identified in the CDEW for the CDEW. The CDEW report is over 2 years old. See also comment 266 comments below. This table is incomplete and needs to be updated to include additional</p>
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Page 3 Shasta Lake Water Resources Investigation DEIS Comment Form--Wildlife Resources Technical Report						
16	CDFW	Wildlife Resources Technical Report: Attachments 1-7	Attachment 2	A2-6		Purple martin The statement is made that 14-57% of the known nesting colonies for purple martin is along the Shasta Lake shoreline. That seems like a significant part of the nesting habitat for a species that is state-listed Species of Special Concern.
17	CDFW	Wildlife Resources Technical Report: Attachments 1-7	Attachment 2	A2-7		Shasta salamander It is not clear specified in the species life history, like for the other species, the extent of the locations or numbers of the shasta salamander detections. Please elaborate on the extent of the detections that would be inundated.
18	CDFW	Wildlife Resources Technical Report: Attachments 1-7	Attachment 4	Attachment 5		General Comment CNDDB should not be the only source of info to determine whether or not a species is present. It is only as good as what is reported by people. USFS records, Audubon studies, Christmas bird count data, and WHR should also be investigated to determine potential presence. I have personally seen black-crowned night herons in the Redding vicinity, and it is a species identified in the MSCS, as are several others below.
19	CDFW	Wildlife Resources Technical Report: Attachments 1-7	Attachment 5	Attachment 5		State and Federal lists of Special-status wildlife The lists in the referenced attachment for both state and federal species are outdated. These lists expired in 2007, which is at least 4 years out of date. Please include an updated list within the last year.
20	CDFW					General Comment They have not adequately addressed the effects on wildlife as far as quantification of the effect and lack of detail on impacts.
21	CDFW					General Comment As far as I can tell, they have not adequately addressed the species in DFW's 2008 letter including: Shasta salamander, peregrine falcon, purple martin, bald eagle, and bank swallow. They did address additional species, i.e. deer range, but could include a map showing these special habitats that will be impacted.
22	CDFW	General	Throughout			Maps It would be easier to understand what is going on if the maps were not broken up into 10 different smaller maps. One large map would be more helpful when looking at the project at least for the Shasta Lake and vicinity area.
23	CDFW	General	Throughout			The wildlife habitat description section could be improved. There are some major inconsistencies among the habitat types described as far as some that include species occupying the habitat, and others do not. Some of the habitat descriptions list the vegetation species that make up the habitat type and others do not. Habitat descriptions at a minimum should include an extensive description of what features make it the habitat it is.
24	CDFW	Wildlife Resources Technical Report	General Comment			Shasta salamander Take and loss of Shasta salamander is discussed and known from 39 sites surveyed to date. The survey methods were not discussed in detail, and the information about the size of the populations at the sites is not presented. Therefore, it is not possible to calculate the actual take and loss of the species.
25	CDFW	Wildlife Resources Technical Report	General Comment			Shasta salamander This species may be quite limited in its ability to migrate, so the genetic diversity of the species throughout the study area should be investigated. There may be unique genetic populations dispersed within the impact area that would guide the design of mitigation options. It is likely that this species incurred significant habitat losses when Shasta Dam was built and filled. Enlargement of the dam will cause further decline in the species habitat that needs to be estimated and included in full assessment of impacts to the species.
26	CDFW	Wildlife Resources Technical Report	General Comment			Shasta salamander Shasta salamander habitat includes subterranean habitat to which access is important during the dry summer months. Therefore, the inundation and destruction of habitat must account for the loss of subterranean habitat even if the water level does not completely submerge the habitat. All sites must be enumerated and sites that may be above full-pool elevations must be identified as to whether subterranean habitat would be destroyed such that survival of the site is reduced or rendered impossible. These sites must also be included in mitigation calculations.

Shasta Lake Water Resources Investigation
 Duplicate DEIS Public Comments Appendix

Page 4 Shasta Lake Water Resources Investigation DEIS Comment Form--Wildlife Resources Technical Report						
27	CDFW	Wildlife Resources Technical Report	General Comment		Peregrine Falcon	Effects to this species and other raptors were not clearly identified. This includes the potential for effect by construction-related impacts during the nesting season. Mitigation measures should include at least one preconstruction survey for this species within the disturbance area boundary and a buffer sufficient to address the potential for disturbance, as supported by scientific literature and/or in accepted peregrine falcon management plans. Clarification is needed on when this preconstruction survey would occur.
28	CDFW	Wildlife Resources Technical Report	General Comment		Bald Eagle	Although the bald eagle is no longer listed under ESA, it remains listed as Endangered pursuant to CESA. It is also a fully protected species pursuant to FGC Section 3511 and is provided protection pursuant to the Federal Bald and Golden Eagle Protection Act (16 U.S.C. 668a-d). The FR, Technical Reports/Attachments, and future environmental documents need to fully analyze the effect of a loss of habitat and nest trees on individuals and on the population in general, and analyze the entire project footprint (primary study area and extended area combined) to make an overall determination of effects of the project on bald eagle.
29	CDFW	Wildlife Resources Technical Report	General Comment		Purple martin	Purple martin could be similarly affected by inundation. The total inundation of snags used by purple martin would result in a temporary, if not permanent, loss of nesting habitat for purple martin, although new habitat could eventually be created after trees are inundated and die. There are very few colonies within Shasta County; Shasta Reservoir represents 1.4% to 51% of the total interior Northern California population of western purple martin (Williams 1998). No mitigation seems to be proposed for the direct loss of nest trees that will be inundated by Alternatives CP1-CP5. If feasible, mitigation measures must be implemented to offset this impact (which is identified as significant).
30	CDFW	Wildlife Resources Technical Report	General Comment		Bank Swallow	The FR and Technical Reports/Attachments contain contradictions and relies upon improper information with regard to the potential impact on listed species. An example of this is the impact to the State-listed Threatened bank swallow (Riparia riparia). Use of monthly flow models cannot reflect the daily or hourly flow fluctuations caused by dam releases that can destroy a nesting colony. The 2008 Administrative Draft Environmental Impact Statement/Environmental Impact Report (ADEIS/IR) (Reclamation 2008) identified a potentially significant impact.
31	CDFW	Wildlife Resources Technical Report	General Comment		Bank Swallow	The Sacramento River is estimated to support about 75% of the State's bank swallow population (Garrison 1998). The Department considers the combination of a loss of high flows, which encourage bank erosion, and daily flow fluctuations caused by dam releases during nesting, a potentially significant impact.

Attachment 5 Shasta Lake Water Resources Investigation DEIS Comment Form- CDFW Version June 2013

CDFW Water Quality Technical Report Comments

Reviewer Name: Jeffrey Shu
 Reviewer Email: jeffrey.shu@wildlife.ca.gov
 Reviewer Agency: CA Dept. of Fish and Wildlife
 Reviewer Mailing Address: 830 S Street., Sacramento, CA 95814
 Date: Sept 2013

ITEM	REVIEWER	CHAPTER TITLE	CHAPTER NUMBER	PAGE NUMBER	LINE NUMBER	TEXT	COMMENT
1	CDFW	Water Quality Technical Report Abbreviations and Aconyms	0	iii	N/A	OCAP Operations and Criteria Plan	OCAP Operations, Criteria and Plan
2	CDFW	Water Quality Technical Report Abbreviations and Aconyms	0	iv	N/A	X2 estuarine habitat	X2 location of 2 psu salinity isohaline
3	CDFW	Water Quality Technical Report Chapter 1. Affected Environment	1	1-4		trace metals and heavy metals	To make it more clear that the same thing is being talk about throughout the document, the document should refer metals as either trace metals, heavy metals or simply "metals".
4	CDFW	Water Quality Technical Report Chapter 1. Affected Environment	1	1-4	41	The quality of water in the Sacramento River is relatively good.	There is no context what "relatively good" means. 2010 303(d) list say that the Sacramento River is impaired for unknown toxicity. CALFED 2000a states that acute toxicity from acidic drainage water from abandoned mine tailing have resulted in fish kills and contribute to long-term growth and reproduction impacts to fish.
5	CDFW	Water Quality Technical Report Chapter 1. Affected Environment	1	1-5	10	Table 1-1	The water quality objectives are still not correct per Table III-1 and Table III-2 from the 2009 Basin Plan. The footnote for the metal objectives should state they are measured as dissolved concentrations and are hardness-based criteria. Would be nice to cite data that is more current.
6	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-5	Table 1-1 footnote b	Basin Plan Water Quality Objective	The applicable Basin Plan objective for the Sacramento River at Red Bluff is what is described as "Sacramento River from Keswick Dam to Hamilton City". The dissolved oxygen objective from June 1st to August 31st for this specific water body is 9.0 mg/l. The dissolved oxygen saturation objective is 95% or above saturation when natural conditions are lower than 9.0 mg/l during the same time period.

SLWRI DEIS Comments by CDFW - Water Quality									
7	CDFW		Water Quality Technical Report Chapter 1 affected Environment	1	1-7	20-21		RBPP to Knights Landing is listed as an impaired water body under the EPA's Section 303(d) list for mercury and unknown toxicity.	The 2010 303(d) list for RBPP to Knights Landing now includes DDT, dieldrin, mercury, PCBs, and unknown toxicity.
8	CDFW		Water Quality Technical Report Chapter 1 affected Environment	1	1-7	23-25		The parameters of concern in the Sacramento River from Knights Landing to the Delta include diazinon, mercury, and unknown sources of toxicity.	The 2010 303(d) list for Knights Landing to Delta now includes chlordane, DDT, dieldrin, mercury, PCBs, and unknown toxicity. It no longer includes diazinon. Also, it's not listed for "unknown sources of toxicity" although it does state the source of the unknown (water) toxicity is unknown.
9	CDFW		Water Quality Technical Report Chapter 1 affected Environment	1	1-14	13-15		Table 1-2	The estimated area, if summing Horse Creek, Town Creek, and Little Backbone Creek, should add up to 2.38 miles. Shasta Lake is 27335 acres. If you are assessing potential pollutant sources to Shasta Lake, you should include Pit River which contributes sources of agricultural pollutants. The citation should be updated to SWRCB 2010.
10	CDFW		Water Quality Technical Report Chapter 1 affected Environment	1	1-15		17	West Straw Creek	Typo. Should be "West Squaw Creek".
11	CDFW		Water Quality Technical Report Chapter 1 affected Environment	1	1-16	12-18		CVRWQCB determination	This is an outdated determination. The 2010 303(d) list has removed cadmium, copper, and zinc as impairments but added unknown toxicity as an impairment of the upper Sacramento River between Keswick Dam and Cottonwood Creek. Only the upper Sacramento River between Cottonwood Creek and Red Bluff is listed for mercury as this was the part of the upper Sacramento River where fish tissue samples were collected.
12	CDFW		Water Quality Technical Report Chapter 1 affected Environment	1	1-17		2	mercury (CVRWQCB 2002)	"chlordane, DDT, dieldrin, mercury, PCBs, and unknown toxicity (SWRCB 2010)."

Page 3 SLWRI DEIS Comments by CDFW - Water Quality							
13	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-17	3-11	Delta waterways	<p>All of the Delta waterways, including the western Delta, fall under the CVRWQCB jurisdiction. There are also other pollutants of concern that impair the Delta waterways. There are no sources of mercury from agriculture; they are primarily from abandoned mines. Agriculture is the primary source of pesticide pollution. The Delta is also impaired by invasive species.</p>
14	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-17	12	CVP/SWP Service Areas	<p>Influences on the south Delta water quality should also include, tidal influences, island inundation, from operations of diversion facilities and water storage facilities, in addition to the mentioned sources in the previous sections. Selenium in the CVP/SWP Service Areas is affected by agricultural uses of groundwater which is then drained into the San Joaquin River. The document should be careful with interchanging the terms water quality with salinity. Also, not sure if this section is supposed to only discuss metal pollution or is to include pesticide and nutrient pollution.</p>
15	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-23	4-13	Two agencies with key planning roles...	<p>CALFED doesn't exist any more. The state legislation SB X7 1 enacted the Sacramento-San Joaquin Delta Reform Act of 2009 and replaced CALFED with new co-equal goals of more reliable water supply and a healthy ecosystem and new implementing agencies. The primary Delta planning agencies are the Delta Protection Commission, Sacramento-San Joaquin Delta Conservancy, and the Delta Stewardship Council. The Delta Stewardship Council's Delta Plan is the primary planning document. Delta Vision Strategic Plan is the framework for the planning documents and implementing Delta agencies.</p> <p>Other Delta documents include: o The Delta Protection Commission's Land Use and Resource Management Plan for the Primary Zone of the Delta ("RMP") o The Delta Protection Commission's Land Use and Resource Management Plan for the Primary Zone of the Delta ("RMP") o The 2012 Central Valley Flood Protection Plan ("CVFPP") o The 2011 Habitat Management, Preservation and Restoration Plan for the Suisun Marsh ("Suisun Marsh Plan"); and o The Suisun Marsh Preservation Act of 1977.</p>
						Comment 15 cont'd	

SLWRI DEIS Comments by CDFW - Water Quality						
16	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-25	34	<p>control of nonpoint source pollution</p> <p>The most prevalent contaminants in the Sacramento River basin are for organophosphate pesticides (agricultural runoff) and trace metals (acid mine drainage), for which TMDLs currently are being considered.</p>
17	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-28	18-19	<p>Should be "control of point source pollution". Runoff from construction and industrial activities is classified as a point source as the discharge goes into a storm drain or man-made ditch that discharges to a water body. These activities require a 402 NPDES permit. If the activity moved dredge or fill material into a water of this US, it would require a 404 permit and 401 certification. A 401 certification would be required regardless of, dredge or fill, as long as a project has hydromodification impacts or modification to a FERC hydropower facility, which would be the primary result of this project.</p> <p>The Upper Sacramento River TMDL for Metals has been in place since April 2002 and some contaminants have been removed from the 303(d) list. The Sacramento and Feather Rivers TMDL for diazinon and chlorpyrifos (organophosphate pesticides) has been in place since August 2008.</p>
18	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-32	6	<p>Last revision was October 2011 http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr.pdf</p> <p>6 September 2009</p>
19	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-32	15-31	<p>Should make the beneficial uses terms consistent between the two water bodies to make the list of uses more comparable.</p> <p>Shasta Lake is: municipal and domestic supply, irrigation, hydropower generation, water contact recreation, noncontact recreation, freshwater habitat (warm and cold), spawning habitat (warm and cold), wildlife habitat</p> <p>Sacramento River is: municipal and domestic supply, irrigation and stock watering, industrial service supply, hydropower generation, water contact recreation and canoeing and rafting, noncontact recreation, freshwater habitat (warm and cold), migratory habitat (warm and cold), spawning habitat (warm and cold), wildlife habitat, navigation</p> <p>list of beneficial uses</p>

Page 5 SLWRI DEIS Comments by CDFW - Water Quality						
20	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-34	1-8	<p>The 15-mile reach of the Sacramento River from Keswick Dam downstream to Cottonwood Creek is impaired for unknown toxicity. It is no longer impaired by cadmium, copper, and zinc. The 16-mile reach of the Sacramento River from Cottonwood Creek to Red Bluff is impaired by mercury and unknown toxicity. See comment 17.</p> <p>The Sacramento River downstream from RBPP is impaired by DDT, dieldrin, mercury, PCBs, unknown toxicity, and chlordane. It is not impaired by diazinon.</p>
21	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-34	9-16	<p>Primary Study Area</p> <p>Extended Study Area</p>
22	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-34,35	26-40,1-27	<p>This section is essentially duplicative of page 1-32 lines 5-31 and page 1-33 lines 1-4 but with more detail.</p>
23	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-34	28-29	<p>The most recent edition, the fourth edition, was adopted in 1998 and amended in 2004.</p> <p>"The most recent edition, the fourth edition, was adopted in 1998 and amended in 2011."</p>
24	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-35,36	32-40,1-2	<p>This section cites Clean Water Act which is federal law and is already mentioned at page 1-25 lines 14-27. The more appropriate citation for state law would be Porter-Cologne Act and Chapter 28 Certifications. Under subsection 3855, applications for water quality certifications shall be filed with the State Water Board Executive Director, who will forward copies to the appropriate Regional Water Board Executive Officer.</p>
25	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-36	3-8	<p>Clean Water Act Section 401 Water Quality Certification</p> <p>Waste Discharge Permit</p> <p>Under California law, waste discharge requirements (WDRs) are required for some discharges in addition to those subject to NPDES permits. Discharges, such as those affecting groundwater or in a diffused manner (e.g., erosion from soil disturbance or waste discharges to land), must file a Report of Waste Discharge with the Regional Water Board in order to obtain WDRs. The Regional Water Board may waive filing of a Report of Waste Discharge but once a report is filed it must either waive or adopt WDRs.</p>

Shasta Lake Water Resources Investigation
 Duplicate DEIS Public Comments Appendix

SR	CDEM	Environment Chapter 7 affected Technical Report Water Quality	7	J-3E	8-7D	Pollution Prevention Plan General Permit: Storm Water Individual Storm Water	the Federal action. Since these are part of NREZ permits they are better explained in
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Page 6 **SLWRI DEIS Comments by CDFW - Water Quality**

27	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-37	3	Missing header	The paragraph starting on line 3 should have a header of "Water Right Decision 1275".
28	CDFW	Water Quality Technical Report Chapter 1 affected Environment	1	1-37	13	1995 Water Quality Control Plan	Explanation of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary Water Quality Control Plan should revolve around the current 2006 version which incorporates D-1641 as part of the implementation plan. This section should also mention the current update process to revise flow criteria to improve water quality.

Shasta Lake Water Resources Investigation
Duplicate DEIS Public Comments Appendix

Attachment 7 Shasta Lake Water Resources Investigation DEIS Comment Form- CDFW August 2013							
Geologic Technical Report Comments							
Reviewer Name: Mark Smelser							
Reviewer Email: Mark.Smelser@wildlife.ca.gov							
Reviewer Agency: California Department of Fish and Wildlife							
Reviewer Mailing Address: 601 Locust St., Redding, CA 96001							
Date: Aug 2013							
ITEM	REVIEWER	CHAPTER TITLE	CHAPTER NUMBER	PAGE NUMBER	LINE NUMBER	TEXT	COMMENT
1	CDFW	Geologic Technical Report	General	N/A	N/A		A geologist licensed in the State of California is not identified as being responsible for the preparation of the Geologic Technical Report. In particular, the Appendix that describes shoreline erosion. Both the report and appendix includes interpretations and opinions regarding slope stability, geologic hazards, and future erosion. Such interpretations and opinions fall under the professional responsibilities of a state licensed geologist or geotechnical engineer. Consequently, such an individual should be formally identified.
2	CDFW	Geologic Technical Report	General	1-9	18-25		The Geologic Technical Report erroneously attributes geologic data to Hackel (1966) when the true reference should be Irwin (1966, p. 23). The reliance on the 1966 reference and the use of outdated terms (e.g., Eastern Klamath Belt instead of Eastern Klamath Terrane) demonstrates that limited research was conducted in the preparation of the report. There has been a significant amount of geologic work conducted within the Klamath Mountains Geomorphic Province over the past several decades, which should be incorporated in this document. Please see USGS Open File Report 2003-306 (Irwin 2003) for an excellent bibliography on geologic research in the Klamath Mountains.
3	CDFW	Geologic Technical Report	General	1-19 to 1-20	39-40; 1-2		The Geologic Technical Report states that the nearest "active" fault to Shasta Dam is the Battle Creek fault zone and they use the term "active" as defined by the Alquist-Priolo Earthquake Fault Zoning Act (AP Act). Review of California's fault activity map (Jennings and Bryant 2010) shows the Battle Creek Fault zone as not exhibiting evidence of surface rupture within the last 11,000 years. Therefore, the Battle Creek fault is not an "active" fault as defined by the Act. The "active fault" declaration in the report again demonstrates limited research and a lack of oversight in the report preparation by a state licensed geologist. Moreover, to state that this fault zone is active and therefore imply the necessity for specific regulatory actions as defined in the AP Act could create undue concern in the inhabitants of the Red Bluff area.
4	CDFW	Geologic Technical Report	General	1-20	1-9		This discussion does not make sense, and additional clarification is required. Specifically, how does a 6.5 moment magnitude earthquake on the Battle Creek fault result in a 7.3 moment magnitude earthquake at Shasta Dam?
5	CDFW	Geologic Technical Report	General	1-22	19-24		The discussion of mass wasting etc. is important and comes up again in the shoreline erosion attachment. While Figure 1-4 and Tables 1-6 and 1-78 document the presence of the landslides and related features, the information provided does not allow for an evaluation of these features as potentially significant environmental impacts that may be triggered, or exacerbated by a higher lake level. More specifically, the first step in assessing whether or not such features represent a potentially significant environmental impact is to document the spatial relationship between these features and resources of value (i.e., natural environments or infrastructure). This does not appear to have been completed.
6	CDFW	Geologic Technical Report	General	1-26	1		Strictly speaking, the Alquist-Priolo Act does not show areas of faulting. The A-P Act requires that the State Geologist establish regulatory earthquake fault zones and those zones are depicted on maps known as Earthquake Fault Zones (after 1994) or Special Studies Zones (prior to 1994). The zones are plotted on standard USGS 1:24,000 scale 7.5-minute quadrangle maps, and individual maps are referenced by the name of the particular USGS 7.5 minute quadrangle map.

Page 2		CDFW Comments on SLWRI DEIS - Geologic Report				
7	CDFW	Geologic Technical Report	General	1-27 3-4	N/A	<p>The Geologic Technical Report references a "Great Valley thrust fault system". Such a "system" is not formally documented within California's fault activity map (Jennings and Bryant 2010), but is recognized in the database of potential earthquakes (USGS OFR 96-705). This system is generally considered to be a zone of folds and "blind" thrust faults that while capable of slipping and causing seismic shaking are typically not associated with ground surface rupture. Therefore, a few additional clarifying statements should be included with this discussion of the Great Valley thrust fault system.</p> <p>The Foothills fault system is not "active" (i.e., demonstrated surface displacement within the last 11,000 years). In order to avoid confusion, please use the term active only when referring to faults that are designated by the California Geological Survey (i.e., Alquist-Prilo Act) as having surface displacement within the Holocene (last 11,000 years). The term <i>potentially active</i> is used to define faults that exhibit evidence of surface displacement during the last two or three million years. Please review the Fault Activity Map of California (CGS, Geologic Data Map No. 6, 2010) for more on this.</p>
8	CDFW	Geologic Technical Report	General	1-29 34-35	N/A	<p>Please define the term "droughty".</p>
9	CDFW	Geologic Technical Report	General	1-45 3		<p>This report should identify the professional individuals who are responsible for the preparation of this report.</p>
10	CDFW	Geologic Technical Report-Appendix 1	General	N/A	Shoreline Erosion	
11	CDFW	Geologic Technical Report-Appendix 1	General		Shoreline Erosion	<p>Montgomery, Sidle, references are missing</p>
12	CDFW	Geologic Technical Report-Appendix 1	General	2-5 31	Shoreline Erosion	<p>There are awkward or incomplete sentence regarding impacts and soil productivity, please rewrite.</p> <p>This sentence is awkward and does not appear to make sense; please review. More importantly, "large landslides" destabilized by both mining and shoreline erosion represent a potentially significant impact. Sediment input into the lake is an obvious concern, but we need more information regarding whether or not reactivation of the landslides would adversely impact mines, roads, and other infrastructure elements. While Figure 1-4 of the main report shows the areas of mass wasting, the scale of that maps is too small to adequately show the spatial relationship between mass wasting and infrastructure which is necessary to best understand landsliding as a potential significant environmental impact.</p>
13	CDFW	Geologic Technical Report-Appendix 1	General	2-5 32-33	Shoreline Erosion	<p>The historic shoreline erosion rate is stated to be approximately 90 cubic yards per acre per year. Using a few assumptions related to the stated dimensions of the measured sites, my rudimentary calculations reduce that figure down to roughly 0.7-inch per square foot of shoreline per year, and that value appears reasonable. Using the acres as the spatial unit is a bit confusing in that it does not appear that any of the measured sites were that large. Additionally, it is difficult to intuitively contemplate shorelines in terms of acres given that they are typically perceived as relatively narrow bands around the lake. Please consider using a more intuitively obvious set of units, and perhaps add a little bit more detail to the dimensions used in the areal volume calculations.</p>
14	CDFW	Geologic Technical Report-Appendix 1	General	3-5 24-26	Shoreline Erosion	

Shasta Lake Water Resources Investigation
Duplicate DEIS Public Comments Appendix

Attachment 7 Shasta Lake Water Resources Investigation DEIS Comments—CDFW—Version June 2013							
Botanical Resources and Wetlands Technical Report Comments							
Reviewer Name: Richard Lis, Brad Henderson Reviewer Email: Richard.Lis@wildlife.ca.gov, Brad.Henderson@wildlife.ca.gov Reviewer Agency: CA Dept. of Fish and Wildlife Reviewer Mailing Address: 601 Locust St. Redding, CA 96001 Date: Sept. 2013							
ITEM	REVIEWER	CHAPTER TITLE	CHAPTER NUMBER	PAGE NUMBER	LINE NUMBER	TEXT	COMMENT
1	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-1		This area is referred to as the "impoundment area"	The total acreage of the 1,090-foot impoundment area (i.e., the new lake) should be provided here along with the total acreage of existing terrestrial areas proposed to be inundated (3,000 acres inundated and 3,338 acres of relocation areas?).
2	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-1		"relocation areas"	Total acreage of relocation areas should be provided here
3	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-1		Subsequently botany studies have been expanded into select areas	Please identify number of acres. Identify what percentage of existing terrestrial areas was surveyed. Please identify why the entire area was not surveyed? Surveys should be comprehensive over the entire site, including areas that will be directly or indirectly impacted by the project. Refer to CDFW's protocols for vegetation and plant surveys (2009) and incorporate by reference
4	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-7		Table 1-1	Impacts: MB 456.59, BEA 91.67, SA 719.61, MCA 435.32, SCA 242.49, PA 527.54, Total: 3000.76
5	CDFW	"	1	1-8		Text including Barren and other types	This discussion and all following discussions for each land coverage/MCV type would be much more useful if the following information is included: 1. total acreage within the primary project area; 2. total acreage proposed to be altered or impacted via construction, inundation, etc.; 3. Whether the plant community is considered to be sensitive by any state or federal agency (could be denoted in the tables as well).
6	CDFW	"	1	1-24		Gray, Pine	Include the scientific name the first time a species is mentioned in the body of the text.
7	CDFW	"	1	1-27		Upper Sacramento River	Please identify if there is some definition for this portion of the project area - i.e., how far beyond the banks of the Sacramento River is the assessment area???
8	CDFW	"	1	1-29		Sensitive natural communities may be of special concern to these agencies and conservation organizations for a variety of reasons,	The document should include vegetation communities declining on a statewide level considered special concern (S1-S3 rank). For example, guidance on assessing sensitive plant communities can be found at http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_background.asp
9	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-29		Figures 1-3a through 1-3i map the potential locations of sensitive plant communities along the Sacramento River	What about sensitive plant communities in the impoundment area?? Why have they not been mentioned? The maps below show an excessive amount of detail for species locations completely outside of the Sacramento River. Life histories for many species depicted are completely unrelated to the River and to this project. Furthermore, the CNDDDB is NOT a public dataset, and should not be included on maps that will be made public in reports and other documents. The "Data Use Guidelines" document outlines appropriate ways to put the CNDDDB data on maps, and provides details on the symbology. http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp
10	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-30		Locator Map	These maps need to be substantially cleaned up to depict important resources within a narrowly defined area subject to project effects. This report should not depict tadpole shrimp locations for a project on the Sacramento River. The lack of detail for sensitive species occurrences within the impoundment area, where project impacts will be direct and substantial is a major omission. Including so much unrelated information is a distraction. Focus on the real issues and the impacts.
11	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-51		These habitat types are tracked in the CNDDDB	Please state why off-site animal occurrences being mapped in a plant report. This is not necessarily true. Please read the following link which provides more accurate information regarding jurisdictional determinations and rare natural communities http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_background.asp

Page 2						
SLWRI DEIS Comment Form--CDFW--Botanical Resources and Wetlands Technical Report						
12	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-72	22 et ff.	<p>What about sensitive plant communities in the impoundment area?? Why have they not been mentioned? The maps below show an excessive amount of detail for species locations completely outside of the Sacramento River. Life histories for many species depicted are completely unrelated to the River and to this project. Furthermore, the CNDDB is NOT a public dataset, and should not be included on maps that will be made public in reports and other documents. The "Data Use Guidelines" document outlines appropriate ways to put the CNDDB data on maps, and provides details on the symbology. http://www.dfg.ca.gov/biodata/cnddb/mapsanddata.asp. These maps need to be substantially cleaned up to depict important resources within a narrowly defined area subject to project effects. This report should not depict tadpole shrimp locations for a project on the Sacramento River.</p> <p>Specific survey reports are mentioned for surveys conducted in 2009 and 2010 on <i>Neviusia clifforti</i> and <i>Vaccinium sp.</i>; however, these reports are not cited and appear to be unavailable and, these survey reports are cited here as reference to <i>Vaccinium sp.</i> but not discussed above in reference to <i>Neviusia clifforti</i>. These reports and data sets from these reports must be made available and summaries of these reports should be added to the EIR/EIS to validate claims and assertions based upon them.</p>
13	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-72	35 et ff.	<p>NSR conducted several botanical survey</p> <p>Special-status plant species detected during the surveys...in Attachment 3.</p>
14	B. Henderson	"	1	1-72		<p>Please identify how many total acres have been surveyed to date and what percentage of the direct impact area this represents.</p>
15	CDFW	"	1	1-72		<p>Why are they not discussed here? Sensitive plants detected within the proposed inundation area will suffer a direct loss and should be a primary focus of this report. To put different effects analyses and discussion in different documents makes a complete review of the effects difficult to do.</p>
16	CDFW	"	1	1-72		<p>This sentence does not make sense - what is meant by "based on"?</p>
17	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-72		<p>Please identify why surveys were conducted outside the project area? Why not inside the project area? This discussion should start with whether these species are known from the project area and whether would they be impacted. Secondly, this section should state whether in the opinion of NSR the project area supports potential habitat. The off-site survey and genetic analysis should come later.</p>
18	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-73		<p>Please identify what species were observed during these surveys.</p>
19	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-74	14 et ff.	<p>Discussion of <i>Neviusia clifforti</i> in this section should include discussion of the fact that it is likely that the current distribution of populations of <i>N. clifforti</i> is some reduced fraction of the original population distribution that existed prior to the completion of Shasta Dam and the filling of Shasta Lake. (Although this is briefly mentioned in the Cumulative Effects section of the Draft EIS, p. 12-171, where the brevity may be appropriate, it needs to be more thoroughly discussed in the sections discussing the species and remnant populations as they exist today.) The filling of Shasta Lake very likely exterminated many populations of <i>N. clifforti</i>. Of significance is that most of the 23 extant populations occur near the periphery of Shasta Lake, suggesting that its distribution was not historically at much higher elevations and that the remaining populations have may be near some environment limits that are reflected in the observed elevational limits. Discussion of these issues should be included in the affected environment as they are important for assessing levels of significant deleterious effects and for evaluation of any proposed mitigation measures.</p>
20	CDFW	"	1	1-74		<p>Please clarify if these were previously known or were identified during project-related surveys.</p>
21	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-74		<p>Please identify who conducted the surveys</p>
22	CDFW	Botanical Resources and Wetlands Technical Report, Affected Environment	1	1-100		<p>It would be useful to provide an acreage figure for the impoundment and relocation areas outside of the existing lake here. Again, it would differentiate between areas of permanent loss versus temporary impacts to the existing Shasta Lake.</p>
23	CDFW	"	1	1-100		<p>This reference was updated in 2012.</p>
24	CDFW	"	1	1-112		<p>This can be done only if the federal BO is consistent with the provisions of CESA.</p>

Shasta Lake Water Resources Investigation
 Duplicate DEIS Public Comments Appendix

Page 3 SLWRI DEIS Comment Form—CDFW—Botanical Resources and Wetlands Technical Report						
25	CDFW	"	1	1-112	Project impact on these species are not considered significant.	Reword as "Impacts to these species are considered significant."
26	CDFW	"	1	1-112	Paragraph, California Department of Fish and Game Designations Attachment 2, "List of Plant Species Observed in the Shasta Lake and Vicinity Portion of the Primary Study Area"	Much of the discussion in this paragraph is incorrect. For example, plants are not included. Refer here for the correct information: http://www.dfg.ca.gov/wildlife/nongame/iss/
27	CDFW	"	2	2-1		Move attachment 2 to the body of the text.

D-CTAN2 Duplicate of S-CTAN2

STATE OF CALIFORNIA - CALIFORNIA STATE TRANSPORTATION AGENCY

Edmund G. Brown Jr., Governor

DEPARTMENT OF TRANSPORTATION
 OFFICE OF COMMUNITY PLANNING
 1657 RIVERSIDE DRIVE
 REDDING, CA 96001
 PHONE (530) 229-0517
 FAX (530) 225-3020

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720	✓	DUMCM
		25 Sep 13
		to K Chow



Flex your power!
 Be energy efficient!

September 19, 2013

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

IGR/CEQA Review
 Sha-Admin
 Shasta Lake Water Resources Investigation
 Draft Environmental Impact Statement
 SCH# 2013082040

Dear Ms. Chow:

Thank you for the opportunity to review the Shasta Lake Water Resources Investigation Draft Environmental Impact Statement (DEIS) to consider five alternatives to raise Shasta Dam.

Our concerns relate primarily to traffic and circulation impacts. Impact Trans -5 recognizes that accelerated degradation of surface transportation facilities in the primary study area may occur (p. ES-113, 20-34). This impact is potentially significant to State Route (SR) 151 (Shasta Dam Boulevard) that begins at Shasta Dam and ends at Interstate 5 (I-5), 6.9 miles away. Other routes that could be affected include I-5, SR 273, SR 299, and SR 44. The impact will depend on where material sources will be transported from. As described in the DEIS, 95-177 truck trips per day for 4.5 to 5 years would occur with a maximum haul route distance of up to 20 miles (p. 20-9). We agree with Mitigation Measure Trans-5 to identify and repair roadway segments damaged by the project. We also suggest that prior to commencing operations a pre-project condition report of the roadway segments should be prepared to document the before construction roadway conditions. Based on the potential impact to the aforementioned routes, we agree that the contractor(s) shall notify the owner of the right of way (ROW) in writing and request conditional approval to use the ROW as a haul route. Before commencement of hauling activities 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 (pp. 20-52, 53). Caltrans is the owner/operator of the State routes and requests that an interagency meeting be required to agree on a maintenance agreement for the routes impacted by the project.

I-5/Pit River Bridge - The alternatives address bridge pier and bearing protection modifications to the I-5/Pit River Bridge. These modifications would provide protection to the bearings and are more fully described in the Engineering Summary Appendix (pp 4-12-14). However, the modifications would result in added maintenance responsibilities. We request that an interagency meeting be required to agree upon a maintenance agreement for the new facilities proposed to modify the I-5/Pit River Bridge.

Scenic Highways - Page 19-73 states that both I-5 and SR 151 are designated as State Routes eligible for official scenic highway designation. SR 151 is a State designated scenic highway. ~~please correct this reference.~~ The correct reference is made on page 19-84.

SCANNED

Classification	214 ENV-6-20
Project	13043191
Control No.	1230427
Folder I.D.	
Date Input & Initials	24 SEP 2013 AV

"Caltrans improves mobility across California"

Shasta Lake Water Resources Investigation
Duplicate DEIS Public Comments Appendix

Ms. Katrina Chow
Shasta Lake Water Resources Investigation
Draft Environmental Impact Statement
SCH# 2013082040
September 19, 2013
Page 2

If you have any questions, or if the scope of this project changes, please call me at (530) 225-3369.

Sincerely,

A handwritten signature in black ink, appearing to read 'Marcelino', with a long horizontal flourish extending to the right.

MARCELINO GONZALEZ
Local Development Review
Office of Community Planning
District 2

D-DSC Duplicate of S-DSC



DELTA STEWARDSHIP COUNCIL
A California State Agency

980 NINTH STREET, SUITE 1500
SACRAMENTO, CALIFORNIA 95814
WWW.DELTACOUNCIL.CA.GOV
(916) 445-5511

September 30, 2013

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

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Executive Officer
Christopher M. Knopp

**RE: Staff Comments on Draft Environmental Impact Statement
For the Shasta Lake Water Resources Investigation**

Dear Ms. Chow:

Thank you for giving the Delta Stewardship Council (DSC) the opportunity to review and provide comments on the draft Environmental Impact Statement (EIS) for the Shasta Lake Water Resources Investigation, which proposes to raise Shasta Dam and carry out habitat enhancements for anadromous fish species. DSC staff has reviewed the draft EIS and herein submits its comments.

By way of background, the California Legislature created the DSC in 2009 to adopt and implement a legally enforceable plan (Delta Plan) to further the achievement of the State's coequal goals of providing a more reliable water supply for California and protecting, restoring and enhancing the Delta ecosystem in a way that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. As you know, federal law now also incorporates the coequal goals (P.L. 112-074, Sec. 205). Although located upstream of the Delta, this project would impact California's coequal goals in several ways. Our comments below describe these impacts:

Consistency with the coequal goals: The project objectives as stated in the EIS are consistent with the coequal goals. Evaluations by the Natural Resources Agency have reported that other actions under consideration to achieve the co-equal goals, such as the proposed Bay Delta Conservation Plan, will be more valuable if they are complemented by additional storage. We are, however, aware that the U.S. Fish and Wildlife Service¹ believes the EIS overstates the potential benefits of this project to anadromous fish, and that the Department of Fish and Wildlife has expressed concerns that the analysis is incomplete². Both agencies

¹ U.S. Fish and Wildlife Service March; 7, 2013

² California Department of Fish and Wildlife; February 8, 2013

"Coequal goals" means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."

- CA Water Code §85054

Shasta Lake Water Resources Investigation
Duplicate DEIS Public Comments Appendix

Katrina Chow
U.S. Bureau of Reclamation
September 30, 2013
Page 2

have commented that dedicated cold water pool storage should be released to meet temperature requirements rather than for water supply purposes. We also are informed that DWR believes the alternatives identified the EIS may not comply with California Public Resource Code § 5093.542. We urge the Bureau to give due consideration to the comments provided by these agencies.

Additional in-stream storage: The project would provide significant additional in-stream water storage upstream of the Delta. This could result in overall improvement in the reliability of water supplies diverted from the Delta, and could improve the average quality of the water in the Delta as well. The degree and extent to which these improvements occur would depend upon how the Central Valley and State Water Projects are operated, and would vary from year to year.

Reduced flood damage along the Sacramento River: The USBR also plans to use the additional storage capacity to help reduce flood damage along the Sacramento River, which would help reduce peak flows and flooding potential in the Delta. Again, the actual effect would vary from year to year depending on rainfall patterns, other improvements to the Sacramento River Flood Control Project, and how the Central Valley and State Water Projects are operated. This enhanced flood management capacity will grow in value as California's climate changes.

Meeting water quality goals for the ecosystem: Greater availability of water to meet ecosystem water quality goals in the Delta could have a beneficial effect on the Delta as well, depending on project operation. The project's increase in the cold water pool is intended to improve the survival of anadromous fish survival in the upper reaches of the Sacramento River. Additional water from the Shasta Reservoir could also be used for other environmental purposes in the Bay-Delta system (e.g. salinity control, especially during a Delta emergency).


Finally, we note that one of the requirements of the NMFS Biological Opinion for salmon³ is to explore "long-term passage prescriptions at Shasta Dam and re-introduction of winter-run into its native habitat in the McCloud and/or Upper Sacramento rivers." It appears that none of the alternatives address this issue. We recommend the final EIS specifically evaluate such alternatives. In addition, the final EIS should acknowledge that enlarging Shasta Reservoir would affect both the value of potential actions to improve fish passage at Shasta Dam and to re-introduce winter-run into the McCloud and/or Upper Sacramento rivers if the enlarged reservoir floods potential spawning and rearing areas upstream of the current reservoir.

³ "Biological Opinion and Conference Opinion on the Long-term Operations of the Central Valley Project and State Water Project" page 275, bullet 1 (National Marine Fisheries Service, 2009).

Katrina Chow
U.S. Bureau of Reclamation
September 30, 2013
Page 3

Again, thank you for the opportunity to provide our comments on this EIS. Please contact Carl Lischeske at (916) 445-5891 if you need further information.

Sincerely,

A handwritten signature in cursive script that reads "Cindy Messer".

Cindy Messer, Deputy Director

D-SWRCB Duplicate of S-SWRCB



State Water Resources Control Board

SEP 17 2013

In Reply Refer to:
KDM: A005625

Ms. Katrina Chow
U.S. Bureau of Reclamation
2800 Cottage Way, MP-700
Sacramento, CA 95825-1893

Dear Ms. Chow:

COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) FOR SHASTA LAKE WATER RESOURCES INVESTIGATION

The State Water Resources Control Board (State Water Board), Division of Water Rights (Division) has reviewed the DEIS for the Shasta Lake water resources investigation. The DEIS evaluates six alternatives for raising the existing Shasta Dam and Shasta Reservoir. Shasta Reservoir has a current capacity of 4,550,000 acre-feet (af). The maximum enlargement under consideration is 634,000 af. Thus, the maximum enlarged capacity would be 5,184,000 af.

Division staff evaluated U.S. Bureau of Reclamation's water rights for Lake Shasta to determine whether the project would require an additional appropriative water right. The Lake Shasta water rights for consumptive use purposes (irrigation, domestic, municipal, etc.) are under permits issued on Application 5626, 9363 and 9364. Power generation is covered by the permits issued on Applications 5625 and 9365.

The table below lists the Lake Shasta water rights (storage element only). The water rights for Lake Shasta are subject not only to individual water right limits, but also to combined right limits. The table below also lists the water rights (storage element only) that are part of the combined right limitation terms:

Water Right	Uses	Storage Quantity In af per annum (afa)	Project
5625	Power	3,190,000	Shasta
9365	Power	1,303,000	Shasta
	<i>Total Power</i>	<i>4,493,000</i>	

FELISA MARTINEZ, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95813-0100 | www.waterboards.ca.gov



Ms. Katrina Chow

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SEP 17 2013

5626	Municipal, etc.	3,190,000	Shasta
9363	Municipal, etc.	310,000	Shasta
9364	Municipal, etc.	1,303,000	Shasta
	<i>Total Municipal, etc.</i>	<i>4,803,000</i>	
9366	Municipal, etc.	0	Contra Costa Canal
9367	Municipal, etc.	0	Contra Costa Canal
9368	Municipal, etc.	0	Tracy Pumping Plant

The combined right limits are as follows:

- The total amount of water to be appropriated by direct diversion and by storage under permits issued pursuant to Applications 5626, 9363, 9364, 9366, 9367 and 9368 shall not exceed 6,500,000 af per annum of which not in excess of 3,450,000 afa shall be by direct diversion. The maximum combined rates of direct diversion and redirection of stored water shall not exceed 22,200 cubic feet per second.
- Applications 5625, 5626 and 9363: The total amount of water to be appropriated by storage under permits issued pursuant to Applications 5625, 5626, 9363, 9364 and 9365 shall not exceed 4,493,000 afa.
- Applications 9364 and 9365: The total amount of water to be appropriated under permits issued pursuant to Applications 5625, 5626, 9363, 9364 and 9365 shall not exceed 4,493,000 afa.

The water rights authorize specific quantities for collection to storage annually. The rights do not state the size of the facility that the water will be stored in. Consequently, provided that Reclamation does not exceed its diversion limits, additional water rights are not needed based solely on enlargement of the reservoir size. Should Reclamation determine that it will annually collect more than a combined total of 4,493,000 af to storage in the enlarged reservoir, or exceed the other annual combined right limits listed above, an additional appropriative right is required.

Table 6-5 provides simulated average end-of-month Shasta Reservoir Storage under existing condition (2005) and future condition (2030). This data indicates that the reservoir retains more water in storage under all alternatives considered in the DEIS than under the no action alternative. Inasmuch as carryover storage remains in the reservoir, new collection of a like amount would not occur. Nonetheless, Division staff requests that Reclamation provide documentation that the project can be operated under existing rights. To document this, Division staff requests that Reclamation provide a monthly diversions table covering the modeling period of the DEIS showing that the reservoir enlargement project can be operated within the annual combined right limits listed above. Thank you in advance for the information.

Ms. Katrina Chow

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SEP 17 2013

If you require further assistance, please contact Katherine Mrowka at (916) 341-5363 or by email at kathy.mrowka@waterboards.ca.gov. Written correspondence or inquiries should be addressed as follows: State Water Resources Control Board, Division of Water Rights, Attn: Katherine Mrowka, P.O. Box 2000, Sacramento, CA, 95812-2000.

Sincerely,

ORIGINAL SIGNED BY:

Katherine Mrowka, Senior
Permitting and Licensing Section
Division of Water Rights

cc: Valentina Cabrera-Stagno
Environmental Protection Agency
Cabrera-Stagno.Valentina@epa.gov

Stephanie Skophammer
Environmental Protection Agency
SKOPHAMMER.STEPHANIE@EPA.GOV

Lisa Holm
U.S. Bureau of Reclamation
Lisa M Holm (lholm@usbr.gov)

Ray Sahlberg
U.S. Bureau of Reclamation
rsahlberg@usbr.gov

D-CVFB2 Duplicate of S-CVFB2

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CENTRAL VALLEY FLOOD PROTECTION BOARD

FACSIMILE COVER SHEET

3310 El Camino Ave., Rm. 151
 SACRAMENTO, CA 95821
 (916) 574-0609 FAX: (916) 574-0682
 PERMITS: (916) 574-0685 FAX: (916) 574-0682

DATE: September 30, 2013	TOTAL NUMBER OF PAGE(S) INCLUDING COVER SHEET 5
To: Ms. Katrina Chow Project Manager Bureau of Reclamation, Mid-Pacific Region	
FAX NUMBER: (916) 978-5094 (fax)	PHONE NUMBER: (916) 978-5067 (office)
FROM:	
NAME: James Herota Senior Environmental Scientist	Telephone: (916) 574-0651 FAX No.: (916) 574-0682
<p>COMMENTS: Please accept the enclosed comments on the Shasta Lake Water Resources Investigation Draft Environmental Impact Statement (DEIS) June 2013 (78 Federal Register 39315; Document Number: 2013-15659) submitted on behalf of the California Central Valley Flood Protection Board.</p> <p>Let me know if you have any questions.</p>	
Original to Follow YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
<p><i>Note: If you have not received all the facsimile pages, please contact me at the telephone number listed above.</i></p>	

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

EDMUND G. BROWN JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD

3310 El Camino Ave., Rm. 151
SACRAMENTO, CA, 95621
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-2390 FAX: (916) 574-0682



September 30, 2013

Ms. Katrina Chow
Bureau of Reclamation
2800 Cottage Way
Sacramento, California 95825

Subject: Shasta Lake Water Resources Investigation
Draft Environmental Impact Statement (DEIS) June 2013;
78 Federal Register 39315; Document Number: 2013-15659

Dear Ms. Chow:

The Central Valley Flood Protection Board (Board) staff appreciates the opportunity to review and comment on the subject document. We understand the proposed Shasta Lake Water Resources project is intended to improve operational flexibility of the Delta watershed system through modifying the existing Shasta Dam and Reservoir.

Our comments are intended to clarify the Board's authority for regulatory compliance. Shasta Dam and Lake are part of the Central Valley Project, which is exempt from Board jurisdiction per California Code of Regulations, Title 23 (CCR 23) Section 2(c) and (d). The Board may, however, have concerns about adverse flooding impacts downstream of Keswick Dam, along the Sacramento River to the Delta, due to sedimentation, erosion, and modified ecosystem resource impacts from operation of the proposed project. As a result, the Board may require encroachment permits to be obtained by State agencies, non-federal, and non-government agencies.

Regulatory Compliance

According to the Regulatory Framework, as described in the project's Draft Environmental Impact Statement (DEIS) on page 3-60, "*Under CCR Title 23, the Central Valley Flood Protection Board (formerly called the State of California Reclamation Board), issues encroachment permits to maintain the integrity and safety of flood control project levees and floodways that were constructed according to the flood control plans adopted by the board or the California Legislature.*" This description only partially describes the Board's authority.

Recommendation – Board staff recommends revising this description as follows:

- The Board enforces standards for the construction, maintenance, and protection of adopted flood control plans that will protect public lands from floods. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River, the San Joaquin River, and designated floodways (California Code of Regulations, Title 23, Section 2). The Board has all the responsibilities and authorities

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Ms. Katrina Chow
 September 30, 2013
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necessary to oversee future modifications as approved by the U.S. Army Corps of Engineers (Corps) pursuant to assurance agreements with the Corps and the Corps' Operation and Maintenance Manuals under Title 33 Code of Federal Regulations, Section 208.10 and Title 33 United States Code, Section 408.

- The Board, in cooperation with the Corps, is responsible for controlling flooding along the Sacramento and San Joaquin Rivers and their tributaries. The Board maintains the integrity of the existing flood control system and designated floodways through its regulatory authority by issuing permits for encroachments. Construction and habitat restoration projects within the jurisdiction of the Board are required to meet standards for the construction, maintenance, and protection of adopted plans of flood control that will protect public lands from floods. The State, through the Board, shares in the costs of construction, assumes responsibility for ensuring the operation and maintenance of the facilities, and holds the federal government harmless from liability. For the Board's flood management projects, the Board delegates operation and maintenance to the Department of Water Resources (DWR), or local maintaining agencies.

Effects on Flood Flows

1. Impacts to Regulated Streams

The DEIS discusses the potential impacts on biological resources, however, it fails to analyze impacts to regulated streams under Board jurisdiction in accordance with CCR 23, Section 112, including the Sacramento River below Keswick Dam and the tributaries to the Sacramento River between Keswick Dam and Red Bluff. These streams include Battle Creek (Tehama County), Bear Creek (reach within designated floodway of the Sacramento River), Clear Creek (Sacramento River to Whiskeytown Dam), Cow Creek (Shasta County to 0.6 miles upstream of Millville Plains Road), Cottonwood Creek (Shasta and Tehama county border to Dutch Gulch Dam), and Cottonwood Creek South Fork (Tehama County).

Recommendation – Board staff recommends that the DEIS analyze impacts to regulated streams under Board jurisdiction in accordance with CCR 23, Section 112.

2. Impacts due to Mitigation Measure Geo-2 (CP2)

According to DEIS Mitigation Measure Geo-2 (CP2), page 4-97: *"Replace Lost Ecological Functions of Aquatic Habitats by Restoring Existing Degraded Aquatic Habitats in the Vicinity of the Impact. The loss of 18.5 miles of intermittent and perennial streams (including 6.2 miles of streams with a gradient less than 7 percent) will be mitigated by compensating for the impact by replacing or providing substitute resources or environments. Compensation will be accomplished by restoring and enhancing the aquatic functions of existing, degraded aquatic habitats in or near the Shasta Lake and vicinity area. Examples of techniques that may be used include channel and bank stabilization, channel redirection, channel reconstruction, culvert replacement and elimination of barriers to fish passage, and enhancement of habitat physical structure (e.g., placement of woody debris, rocks). The nature and extent of the restoration and enhancement activities will be based on an assessment of the ecological functions that are lost as a consequence of implementing this alternative. Implementation of this mitigation measure would reduce Impact Geo-2 (CP1) to a less-than-significant level."*

Ms. Katrina Chow
September 30, 2013
Page 3 of 4

The DEIS includes mitigation measures that may have adverse impacts on flood flows in waterways under Board jurisdiction. It is foreseeable that implementation of these mitigation measures may result in significant adverse impacts to flood flows.

Recommendation – Board staff recommends revising Mitigation Measure Geo-2 to include a long term management plan to manage flood flows during peak flood conditions to minimize flood damage. Riparian preservation and enhancement in mitigation areas within floodways may expose people or structures to potential substantial adverse effects, including the risk of loss, or injury, or death. The long term management plan should include a Safe Harbor Agreement that would allow the channel and levee maintaining agencies to conduct maintenance in the event of the need for take of covered or listed species due to required maintenance.

3. Impacts due to Mitigation Strategy under Development

Page 1-35 of the DEIS states "*Off-Site Mitigation for Impacts on Biological Resources, Details about off-site opportunities to mitigate impacts on biological resources in the primary study area are not yet available. Potential mitigation lands containing wetland and special-status species habitat comparable to those that would be affected by the project have been identified near the study area. A comprehensive mitigation strategy is currently under development. Additional discussion of how these lands may be applied as mitigation and at what ratios will be provided in future documents. A discussion of mitigation for loss of habitat through preservation and enhancement in mitigation areas will be included in future documents.*"

Because the comprehensive mitigation strategy is not yet available for review, Board staff is unable to determine whether feasible alternatives or mitigation measures will be presented to lessen adverse impacts on flood flows.

Request – Board staff requests that you provide the comprehensive mitigation strategy to Board staff for review upon its completion. Additional mitigation measures for channel and levee improvements and maintenance to prevent and/or reduce hydraulic impacts may be required.

4. Impacts due to Change in Flow Regimes

Page 11-72 of the DEIS states, "*By altering reservoir storage and releases, the project would change flow regimes in downstream waterways. In turn, these alterations to the flow regime could affect fishery resources and important ecological processes on which the fish community depends, particularly their instream and seasonal floodplain habitats along waterways immediately downstream from reservoirs.*"

Board staff is concerned about the potential for increased sedimentation and erosion within floodways under Board's jurisdiction due to direct and indirect effects of altering reservoir releases and changes in flow regimes.

Recommendation – Board staff recommends including mitigation measures to minimize peak flood flows during flood season, primarily from November 1 through April 15.

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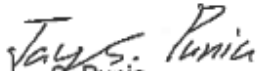
Encroachment Permits

Non-federal, non-governmental, and State agencies are required to obtain a Board Encroachment Permit in accordance with CCR 23. Federal agencies should consult with Board staff and consideration should be made early in the project design phase to provide maximum flexibility to avoid increasing potential adverse flood impacts.

Copies of the Board's Encroachment Permit Application forms and complete text of our Regulations can be found on the Board's website at <http://www.cvfpb.ca.gov/regulations/>.

If you have any questions regarding these recommendations or requests, please contact Ali Porbaha, Senior Engineer, at (916) 574-2378, or Mohammad.Porbaha@water.ca.gov, or James Herota, Senior Environmental Scientist, at (916) 574-0651, or James.Herota@water.ca.gov.

Sincerely,


Jay S. Punia
Executive Officer

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, California 95814