

1 **Appendix 1B**

2 **Comments from State Agencies and**
 3 **Responses**

4 This section contains copies of comment letters from state agencies on the Draft
 5 Environmental Impact Statement (EIS) for the Coordinated Long-term Operation
 6 of the Central Valley Project (CVP) and State Water Project (SWP). Each
 7 comment in the comment letters was assigned a number, in sequential order. The
 8 numbers were combined with the agency name (example: CDFW 1). The
 9 comments with the associated responses are arranged alphabetically by agency
 10 name, and appear in the chapter in that order.

11 Copies of the comments are provided in Section 1B.1. Responses to each of the
 12 comments follow the comment letters, and are numbered in accordance with the
 13 numbers assigned in the letters. None of the comments from the state agencies
 14 included large attachments.

15 **1B.1 Comments and Responses**

16 The agencies listed in Table 1B.1 provided comments on the Draft EIS.

17 **Table 1B.1 State Agencies Providing Comments on the Draft Environmental Impact**
 18 **Statement**

Acronym	Commenter
CDFW	California Department of Fish and Wildlife
DSC	Delta Stewardship Council
DWR	California Department of Water Resources

1 **1B.1.1 California Department of Fish and Wildlife**



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EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



September 29, 2015

Theresa Olson
Conservation and Conveyance
Division Chief
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Dear Ms. Olson:

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE COORDINATED LONG-TERM OPERATION OF THE CENTRAL VALLEY PROJECT AND STATE WATER PROJECT

The California Department of Fish and Wildlife (Department) appreciates the opportunity to review the Draft Environmental Impact Statement for the Coordinated Long-term Operation of the Central Valley Project and State Water Project (DEIS) as prepared by the U.S. Bureau of Reclamation (Reclamation). The Department's comments are submitted pursuant to our authority as a trustee agency for fish and wildlife resources with jurisdiction over the conservation, protection, and management of fish and wildlife and the habitats on which they depend within the State of California.

CDFW 1

The Department implements the California Endangered Species Act (CESA), and in that role has issued several authorizations to the Department of Water Resources (DWR) for operations of the State Water Project (SWP) in the Delta. Pursuant to Fish and Game Code, section 2080.1, DWR requested and the Department issued consistency determinations on the U.S. Fish and Wildlife Service (FWS) 2008 Biological Opinion (BiOp) for Delta smelt and the National Marine Fisheries Service 2009 *Biological Opinion and Conference Opinion on the Long-term Operations of the Central Valley Project and the State Water Project* for Sacramento winter-run and Central Valley spring-run Chinook salmon, and other federally listed species.¹ The consistency determinations provide that no further authorization is necessary under CESA for DWR to take the state-listed species identified in, and in accordance with, the incidental take statements that are a part of the BiOps. The consistency determinations state that DWR would need to obtain a new consistency determination should the project described in the BiOps, or any conditions of the BiOps, including the Reasonable and Prudent Alternatives (RPAs), change.

¹ The SWP is currently authorized under an October 14, 2011 consistency determination for the FWS BiOp, No. 2080-2011-022-00, and an April 26, 2012 consistency determination for the NMFS BiOp, No. 2080-2012-005-00.

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In addition, pursuant to Fish and Game Code, section 2081, subdivision (b), in 2009 the Department issued DWR Incidental Take Permit (ITP) No. 2081-2009-001-03, authorizing take of CESA listed longfin smelt incidental to SWP Delta operations. Condition 4 of the ITP states that the ITP may require an amendment if there is any modification to the FWS BiOp.

CDFW 1
continued

Therefore, DWR's existing CESA authorizations would no longer be valid if Reclamation were to adopt any DEIS alternative that deviates from the No Action Alternative² (NAA). The Department's issuance of new or amended authorizations would require that the modified project meets CESA's standards, which include that all impacts of the authorized taking must be minimized and fully mitigated, and the project cannot jeopardize the continued existence of the species.

The Department recognizes and commends the considerable time and effort the preparers put into developing the DEIS as evidenced by the extensive information and modeling results contained within the document. Due to the large size of the document and time constraints, the Department technical staff focused review on Chapter 3: Description of Alternatives, Chapter 4: Approach to Environmental Analyses, Chapter 5: Surface Water Resources and Water Supplies, Chapter 6: Surface Water Quality, Chapter 9: Fisheries and Aquatic Resources, and related appendices.

CDFW 2

Based on the Department's limited review, our comments focus on the following general areas: policies, procedures, and regulations, environmental impact and effects analysis, dry year scenarios, and modeling. These general areas of concern inhibited the DEIS' ability to provide accurate and thorough review of project impacts and prevented meaningful comparisons between project alternatives. Please find more detailed comments below.

Policies, Procedures, and Regulations:

Trap and haul

Alternatives 3 and 4 of the DEIS contain trap and haul programs that would capture fishes that are listed under CESA and federal Endangered Species Act (ESA) in areas of the eastern Delta, and barge those fishes to release sites in the San Francisco Bay. The document lacks a clear description of the trap and haul procedures, as well as clear analyses of the potential effects of these actions on the target listed species and non-target species, most importantly at the population level.

CDFW 3

² The NAA is described as the coordinated long-term operation of the CVP and SWP under the current management direction and intensity, including full implementation of the RPAs set forth in the modified FWS and NMFS BiOps.

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There are limited studies available on the potential benefits to barging and there is much uncertainty on the effects to growth, survival, and stray rates of fish in addition to the mortality associated with handling and releasing these fish. Furthermore, trapping and barging listed species does not contribute to the Department's goal of providing improved habitat conditions for volitional passage. Trap and haul programs and barging are not part of the Department's routine operations and are only implemented under emergency conditions, such as drought, whereby natural, extreme conditions are likely to greatly reduce survival. Any translocation of fish would likely require state-level environmental review and permitting from the Department and would likely require Department staffing and resources for operations.

CDFW 3
continued

Fishing regulations, ocean harvest, and predator control programs

Alternatives 3 and 4 of the DEIS contain actions to change fishing regulations, ocean harvest, and implement predator control programs to reduce pressures on listed species. The Department has several concerns with the alternatives that contain these types of actions. First, the DEIS alternatives do not provide a clear description of the proposed control programs and regulatory changes, nor do they provide clear analyses of the potential effects of these actions on the target predators, non-target species, and the population level effects on listed species. Secondly, any fishing regulation proposal would require review and approval from the California Fish and Game Commission and potentially the Pacific Fisheries Management Council before implementation by the Department. Any alternatives that rely on regulatory changes outside of the authority of the project proponents to implement are uncertain to occur. Additionally, the effectiveness of predator control programs is highly uncertain and the population level effects on target predators are unknown. A key aspect of the Department's mission is to manage the state's fish and wildlife species for their use and enjoyment by the public; the analysis of any predator control program or changes in fishing regulations would need to clearly demonstrate that key recreational and commercial fisheries would remain viable.

CDFW 4

CDFW 5

As described at the Predation Workshop in 2013, there is significant uncertainty regarding the extent of predation pressures on Central Valley salmonids. Although there have been numerous studies on predation, the results are often conflicting, the population level effects are indeterminate, and the tagging technology is still insufficient to answer crucial remaining questions. Given this information, the Department acknowledges that predation is currently a challenge for some of the state's listed species. The Predation Workshop panel emphasized the effects of habitat conditions and ecosystem processes such as flow, temperature, water quality, and aquatic invasive species on predation rates and subsequent survival of listed species. These conditions also result in physiological stress and directly affect the condition of native fishes.

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The DEIS alternatives that suggest actions to implement predator control programs fail to acknowledge that predation can provide a key ecological function in an ecosystem and that only excessive predatory pressure should be addressed through management actions. The DEIS does not provide a sufficient analysis of the effects of the habitat variables on predation rates and native fish condition and does not sufficiently analyze the effects of alternative operations on these biotic and abiotic variables that drive predator populations and ultimately listed species population abundances. Reducing predator populations through control programs or changes in fishing regulations does not address the underlying issue of poor environmental conditions driven in part by operations.

CDFW 5
continued

Environmental Impacts and Effects Analysis:

In general the Department found that the lack of specific detail related to alternatives and how their component actions would be implemented made it difficult to assess the environmental consequences, and the lack of discussion of reasonably foreseeable future actions made it correspondingly difficult to evaluate the cumulative effects analysis sections.

CDFW 6

The Department is concerned that the NAA alternative does not adequately describe or analyze implementation of the RPAs. The DEIS assumes that RPAs will be implemented and that they will be beneficial, but does not provide specific discussion or analysis of the ways in which the full suite of RPAs would address adverse impacts of CVP and SWP operations.

CDFW 7

Similarly, the DEIS states that its cumulative impacts analysis includes the projects identified under the reasonably foreseeable future projects in Chapter 3.5, however the analysis in Chapters 4 and 5-22 provides little in the way of detail to explain how these projects were incorporated into or informed the analysis of each alternative.

CDFW 8

Longfin smelt

The effects analysis for Longfin smelt would benefit from analyses of changes to entrainment and/or entrainment related effects between scenarios. For example, Longfin smelt adults and larvae are particularly susceptible to entrainment into the south Delta during the December through February period. The DEIS does not address this issue, which is particularly concerning for alternatives which do not operate to the BiOps. The Department suggests conducting an analysis using a particle tracking model, such as DSM2, to estimate differences in entrainment between the NAA and the five alternatives.

CDFW 9

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The Department recommends using the methods found in the effects analysis of the California Department of Fish and Wildlife's 2009 Longfin smelt ITP for the SWP as a framework for an analysis to be included in the DEIS.³

CDFW 9
continued

Salmonids

Many of the flow and temperature effects on different life stages when compared between the NAA and Second Basis of Comparison (SBC) seem contradictory; based on our concerns with the modeling discussed further below, we suspect that many of the discrepancies are likely caused by uncertainties associated with the models which do not adjust results based on water operation actions that would be taken to meet requirements of the RPAs under the NAA. The Department recognizes the challenges of presenting alternatives in the context of changing conditions brought on by climate change, drought, and other conditions. However, it is imperative that the DEIS makes a meaningful and consistent effort to conduct these analyses to truly understand the impacts of the alternatives; this is especially true for the NAA since the NAA represents full implementation of the BiOps with the RPAs, many of which were targeted at addressing project operations under a changing climate.

CDFW 10

For example, at page 9-126 through 9-127, the DEIS explains that the NAA will have difficulties in meeting temperature requirements due to climate change, increased demand by 2030 and less water being diverted from the Trinity River. The DEIS goes on to describe a variety of measures under the RPAs that are meant to compensate for these effects. However, in the analysis that follows, comparing the NAA to the SBC, the DEIS concluded that temperature-related egg mortality was significantly higher under the NAA than under the SBC. Additionally, the DEIS concludes that temperature- and flow-related fry mortality, as well as temperature-related juvenile mortality was higher under the NAA when compared to the SBC. SALMOD also showed juvenile production would be the same under the NAA and SBC, which is contradictory to the expected outcome associated with RPA implementation. Furthermore, escapement and entrainment under the NAA were found to be similar to the SBC, despite reduced export rates.

³ CDFW's Effects Analysis for the Longfin smelt ITP is available at <http://www.dfg.ca.gov/delta/data/longfinsmelt/documents/LongfinSmeltIncidentalTakePermitNo.2081-2009-001-03.asp>.

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The BiOp RPAs were developed specifically to improve growth, survival, and general viability through changes in management of flows and temperature that reduce stressors on targeted life stages of listed fishes; therefore, it is unclear how future conditions without implementation of the RPAs (i.e., under the SBC) would have similar or higher benefits than future conditions with full implementation of the RPAs (i.e., the NAA). These results need further explanation and the modeling inputs need to be verified to account for all BiOp RPAs; if results seem contradictory, please provide clear rationale for the discrepancies within the discussion of the model results themselves, as well as in the summary of impacts. (See page 9-164.)

CDFW 11

Additionally, Section 9.4.1.5 briefly discusses fish passage and the impacts that dams have on access to available habitat and colder headwaters. This section cites Alternatives 3 and 4 as containing trap and haul activities that address these impacts, however those trap and haul activities do not target fish passage as it relates to dams and access to colder headwaters.

CDFW 12

Sturgeon

The analysis in Chapter 9 for sturgeon focuses specifically on the effects of changes in upstream temperature without consideration of the primary environmental driver underlying sturgeon population dynamics, namely the magnitude of winter-spring river flows. We recommend that the DEIS include a flow analysis that demonstrates how operations under each alternative affect mean monthly and seasonal flows at key riverine and Delta locations. This analysis should also display how the alternatives affect the frequency at which flows exceed certain thresholds necessary to produce strong year-classes. The Department is willing to assist in developing these analyses.

CDFW 13

White sturgeon

The white sturgeon life history account lacks sufficient detail on the importance of specific environmental attributes to sustaining the population, as well as how project facilities and operations contribute to incremental changes in those attributes. Section 9B.4.3 states that the white sturgeon populations are relatively stable. However, recent survey information clearly indicates that the white sturgeon population is actually in a state of severe decline, in large part due to the infrequency of high flow years associated with good production. This section should make clear the fact that existing reservoirs reduce the frequency and magnitude of these population-sustaining winter-spring high flow events, which has had both incremental and cumulative effects on white sturgeon. Section 9B.4.4 also lacks accurate population trend information vital to interpreting the differences in incremental effects between alternatives. In addition, Section 9B.4.3.3 does not address the outflow-related project operation impacts on overbite clam distribution and abundance.

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Lastly, the DEIS overstates the importance of the San Joaquin River drainage on production and distracts from the essential point that spawning and rearing in the Sacramento River system sustains the population.

CDFW 14

Dry Year Scenarios:

The DEIS inconsistently evaluates drought scenarios and their potential to exacerbate the impacts of alternatives on species. Chapter 6 briefly mentions potential changes in selenium concentrations and the effect on sturgeon during drought years. However, Chapter 9 instead simply states that the "abundance and habitat conditions for Delta smelt and other fish species in the Delta under the No Action Alternative in 2030 are difficult to predict" and that "currently low levels of relative abundance do not bode well for the Delta smelt or other fish species in the Delta in 2030." The DEIS should include a complete and consistent analysis of the ways in which drought would affect the impacts of the various alternatives on all species, especially given the recent dry years and the impact they have had on Delta smelt, winter-run Chinook Salmon, and other species, as well as the altered project operations implemented with the goal of balancing water supply with ensuring water quality standards and environmental protections. Much information has been learned and could be used to develop and evaluate drought scenarios consistently through the alternatives.

CDFW 15

Modeling:

Calibration, validation, time steps, and uncertainty

The models used in the DEIS analyses have vastly different temporal resolutions; as a result, linkage of these models requires aggregation/disaggregation of data which could cause significant errors in the modeling results. In addition, models with inappropriate time steps were used to draw conclusions about project effects on fisheries resources. For example, CalSim II uses a monthly averaging to analyze the effects of flow and water temperature on anadromous fish species, which fails to account for the needed daily or even hourly effects of these variables on critical life stages. Furthermore, the modeling does not account for compounding impacts on successive life stages within and between years; given that anadromous fishes are a multi-year species, the failure to account for additive impacts prevents sufficient determination of population level impacts.

CDFW 16

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In addition, many of the models used in the DEIS were not accompanied by sensitivity analyses, calibration results, or disclosure of all uncertainties, thereby further inhibiting our ability to determine effects directly attributable to the proposed actions versus modeling errors.

CDFW 16
continued

The Department appreciates the continued opportunity to work with you and your staff in developing the DEIS. Should you have any questions or need additional information, please contact Chad Dibble at (916) 445-1202 or by email at chad.dibble@wildlife.ca.gov.

CDFW 17

Sincerely,



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Chief

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1

2 **1B.1.1.1 Responses to Comments from California Department of Fish and**
3 **Wildlife**

4 **CDFW 1:** Comment noted.

5 **CDFW 2:** Please see responses to Comments CDFW 3 through CDFW 16.

6 **CDFW 3:** Comment noted. The description of the trap and haul program
7 assumptions and methodologies presented in Chapter 9 of the Draft EIS were not
8 extensive. Additional information has been included on the text from page 9-316
9 of the Draft EIS, and additional information has been provided in Appendix 9O of
10 the Final EIS. The additional information includes a discussion of the need for
11 review and potential permits from California Department of Fish and Wildlife
12 (CDFW) to translocate fish either by CDFW or other entities.

13 **CDFW 4:** The discussion in Section 3.4.5 of Chapter 3, Description of
14 Alternatives, has been modified in the Final EIS to include references of the
15 review and approval process for changes in harvest limits by other agencies,
16 including the California Fish and Game Commission and Pacific Fisheries
17 Management Council. It should be noted that under the National Environmental
18 Policy Act (NEPA), the range of alternatives evaluated in this EIS is not limited
19 by Reclamation's authorized purposes. Therefore, the range of alternatives
20 includes actions that Reclamation would require approvals and authorizations by
21 other agencies for implementation.

1 **CDFW 5:** The uncertainty associated with predator control programs as well as
2 their potential for unintended consequences are acknowledged in the Final EIS.
3 The concerns expressed in this comment are consistent with the discussion of
4 predator control on page 9-274 of the Draft EIS. The EIS acknowledges the
5 uncertainty regarding the extent of predation on listed species, the influence of
6 habitat loss, and the potential for unintended consequences of a predator control
7 program.

8 **CDFW 6:** The alternatives are described in Section 3.4 of Chapter 3, Description
9 of Alternatives. Additional details about the No Action Alternative are provided
10 in Appendix 3A: No Action Alternative: Central Valley Project and State Water
11 Project Operations. Details about the operational assumptions for all of the
12 alternatives are presented in and Appendix 5A, Section B, CalSim II and DSM2
13 Modeling Simulations and Assumptions. The cumulative effects actions are
14 described in Section 3.5 of Chapter 3; and the effects of implementing
15 Alternatives 1 through 5 with the cumulative effects actions as compared to
16 implementation of the No Action Alternative with the cumulative effects actions
17 are presented in the next to last section of each of the resource chapters
18 (Chapters 5 through 21).

19 **CDFW 7:** The No Action Alternative and Alternative 5 assume that the 2008
20 U.S. Fish and Wildlife Service (USFWS) Biological Opinion (BO) Reasonable
21 and Prudent Alternative (RPA) and the 2009 National Marine Fisheries Service
22 (NMFS) BO RPA will be implemented. However, most of the actions listed in
23 the RPAs would not be implemented in Alternatives 1, 3, and 4 and the Second
24 Basis of Comparison; and some of the actions would not be implemented in
25 Alternative 2. Comparison of resource conditions under Alternative 1 as
26 compared to the No Action Alternative in Chapters 5 through 21 indicate
27 differences between alternatives with and without RPA actions.

28 **CDFW 8:** The discussion of cumulative effects analyses in Chapters 5 through 21
29 have been modified to provide more clarity in the Final EIS.

30 **CDFW 9:** As documented in Grimaldo et al (2009), combined Old and Middle
31 River flows are strongly correlated with the annual adult delta smelt, longfin
32 smelt, and age-1 striped bass salvage. Chapter 9, Fish and Aquatic Resources,
33 includes a discussion of entrainment assessment for Longfin Smelt based on Old
34 and Middle River flow comparisons between the alternatives and No Action
35 Alternative and Second Basis of Comparison (see Table 9.4). The results of this
36 analysis indicate that Alternatives 1, 3, and 4 would have more adverse impacts
37 on Longfin Smelt as compared to the No Action Alternative than Alternatives 2
38 and 5.

39 **CDFW 10:** It is unclear as to which model output and for which species this
40 comment refers to, but it appears to be the SALMOD output for winter-run
41 Chinook Salmon as the patterns in mortality described are consistent with the
42 SALMOD analyses for that species and not the other runs of Chinook Salmon.
43 No conclusion was presented regarding the “significance” of these results in the
44 EIS. Some of the RPA actions cannot be simulated in the models; therefore, the

1 results of the models are considered in conjunction with the results of a qualitative
2 analysis. The results of the quantitative and qualitative analysis are similar in
3 nature to previous reports.

4 The comment notes the lack of a strong distinction between the water temperature
5 results for the No Action Alternative and the Second Basis of Comparison, and
6 questions why the No Action Alternatives does not perform better for fish given
7 the RPA actions intended to improve conditions. The analysis results can be
8 explained in part by the similar flow conditions associated with both scenarios, as
9 described in Chapter 5, Surface Water Resources and Water Supplies. This
10 similarity in flow is translated into similar temperatures. In addition, the RPA
11 actions not specifically included in the CalSim II and temperature models were
12 addressed in the introductory discussions of the impact analysis, but not
13 specifically discussed under each alternative in Chapter 9, Fish and Aquatic
14 Resources. The text in the Final EIS has been modified to provide more clarity on
15 the effects of the RPA actions that were not included in the models.

16 **CDFW 11:** The assumptions of inclusion of the RPA actions in the CalSim II and
17 DSM2 models are presented in Appendix 5A, Section B, CalSim II and DSM2
18 Modeling Simulations and Assumptions. The models and assumptions for the
19 models are presented in Appendices 6B through 6E and Appendices 9C through
20 9O. The modeling results do not include consideration of the non-flow related
21 actions under the No Action Alternative that are intended to benefit fish, such as
22 fish passage. The analysis of effects on fish contained in Chapter 9 of the Draft
23 EIS qualitatively assesses the influence of those actions where appropriate,
24 particularly the potential effects of fish passage. Text changes are included in the
25 Final EIS to provide that additional clarification for the effects of the actions not
26 included in the numerical models.

27 **CDFW 12:** The sentence regarding the trap and haul program has been removed
28 from Section 9.4.1.5 and a new section (9.1.4.60) to discuss the trap and haul
29 program was added to the Final EIS. In addition, a new appendix (Appendix 9O)
30 detailing the qualitative analysis of the trap and haul program has been added to
31 the Final EIS.

32 **CDFW 13:** In response to this comment, the description of impact mechanisms
33 and impact analyses for sturgeon were augmented to include a flow analysis. The
34 details and results of the analysis are presented in Appendix 9P of the Final EIS.
35 An interpretation of the results in relation to the potential for effects of operations
36 on sturgeon under each of the alternatives has been included in the impact
37 analyses for sturgeon in Section 9.4 of Chapter 9 in the Final EIS.

38 In response to this comment, Section 9B4.3 has been revised to remove the
39 assertion that White Sturgeon populations are relatively stable and Section 9B4.4
40 includes more recent information on population trends for White Sturgeon and the
41 possible mechanisms for the noted decline.

42 **CDFW 14:** The text on page 9-89 of the Draft EIS was revised to clarify the
43 relevance of the San Joaquin River drainage on production of White Sturgeon.

1 **CDFW 15:** The modeling tools used to analyze impacts on aquatic resources are
2 based on the application of CalSim II, a model that assesses changes in hydrology
3 under various operational scenarios based in an 82-year period of record. The
4 period of record includes a full range of hydrologic conditions and water year
5 types, including severe drought.

6 It is recognized that droughts have occurred throughout California's history, and
7 are constantly shaping and innovating the ways in which Reclamation and DWR
8 balance both public health standards and urban and agricultural water demands
9 while protecting the Delta ecosystem and its inhabitants. The most notable
10 droughts in recent history are the droughts that occurred in 1976-77, 1987-92, and
11 the ongoing drought. More details have been included in Section 5.3.3 of Chapter
12 5, Surface Water Resources and Water Supplies, and Section 9.3.8 of Chapter 9,
13 Fish and Aquatic Resources, in the Final EIS to describe historical responses by
14 CVP and SWP to these drought conditions and changes in fisheries resources.

15 **CDFW 16:** The physical models developed and applied in the EIS analysis are
16 generalized and simplified representations of a complex water resources system.
17 The models are not predictive models (in how they are applied in EIS); therefore
18 the results cannot be considered as absolute within a quantifiable confidence
19 interval. The model results are only useful in a comparative analysis, which is
20 appropriate for a NEPA analysis and comparison of alternatives. As indicated in
21 the comment, accounting for the compounding effects on successive life stages
22 within and among years is important. It is acknowledged that the generalized
23 models alone cannot be used to address these effects, but few tools are available
24 that account for life cycle effects. These effects were considered in the EIS for
25 winter-run Chinook Salmon by applying lifecycle models IOS and OBAN. These
26 models account for successive life stages and produce comparative estimates of
27 escapement potential (see Appendices 9H and 9I). In addition to these life cycle
28 models, the effects on successive life stages within the same life cycle of Chinook
29 Salmon are accounted for in the SALMOD and egg mortality models.

30 In recent years, there has been considerable emphasis placed on development of
31 modeling tools to evaluate environmental changes associated with CVP and SWP
32 operations. The modeling tools applied in the EIS are the same as those used in
33 the most recent applications (e.g., Bay Delta Conservation Plan EIR/EIS). The
34 modeled scenarios in the EIS are variations of the scenarios recently modeled.
35 The relatively coarse level of resolution and degree of uncertainty associated with
36 these models reflect the difficulty in representing a complex water system and the
37 inherently uncertain ecosystem responses. Nonetheless, these tools represent the
38 best available and appropriate tools for this application. The details of these
39 models and their limitations are presented in Appendix 5A, Appendices 6B
40 through 6E, and Appendices 9C through 9O.

41 **CDFW 17:** Comment noted.

1 **1B.1.2 Delta Stewardship Council**



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RE: Coordinated Long-Term Operation of the Central Valley Project and State Water Project Draft Environmental Impact Statement

Dear Mr. Nelson:

The Delta Stewardship Council (Council) respectfully submits comments on the draft Environmental Impact Statement for the Coordinated Long-Term Operation of the Central Valley Project and State Water Project (DEIS), analyzing the impacts of implementing the 2008 U.S. Fish and Wildlife Service and 2009 National Marine Fisheries Service Biological Opinions, including their Reasonable and Prudent Alternatives (RPAs).

DSC 1

The Council is an independent California state agency tasked with furthering the state's coequal goals for the Delta through implementation of the Delta Plan, a comprehensive, long-term management plan for the region. As defined in California Water Code section 85054, the State's coequal goals include providing a more reliable water supply for California, and protecting, restoring and enhancing the Delta ecosystem. As described in the Delta Plan and in a set of guiding principles, being developed by the Council, on water conveyance, storage and operations, water operations including exporting water through or from the Delta should:

- Be balanced. It should enhance the Delta ecosystem, including restoring more natural flows, and increase the reliability with which water available for export supplies can be exported.
- Be flexible. It should be able to adapt to changing conditions (hydrological, climate change, and ecosystem needs) both near-term and in the future while continuing to provide benefits to the ecosystem and reliably convey available water supplies.

"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

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- More closely match water supplies available to be exported, based on water year type and consistent with the coequal goal of protecting, restoring, and enhancing the Delta ecosystem.
- Provide real benefits to the ecosystem, in contrast to protecting the ecosystem from further degradation.

DSC 1
continued

In light of these principles, the Bureau should consider the most comprehensive and balanced approach for implementing the biological opinions to protect key endangered or threatened aquatic species. The Bureau may wish to consider several individual elements included in Alternatives 3, 4, and 5 such as;

DSC 2

- Implementing predator control programs for Black Bass, Striped Bass, and Pikeminnow to protect salmonids and Delta smelt, including establishment of new catch limits.
- Modify the requirements of the U.S. Army Corps of Engineers related to removal of vegetation on levees to allow for the planting of trees and shrubs along the levees, and installation of vegetation, woody material, and root re-enforcement material on the levees instead of riprap for erosion protection.

The Delta Plan calls for similar efforts including;

- Regulatory policy **ER P5 (Avoid Introductions of and Habitat Improvements for Invasive Nonnative Species)**. This policy requires that the potential for new introductions of or improved habitat conditions for nonnative invasive species, striped bass, or bass, as a result of ecosystem restoration, must be fully considered and avoided or mitigated in a way that appropriately protects the ecosystem.
- Recommendation **ER R6 (Regulate Angling for Nonnative Sport Fish to Protect Native Fish)**. The Delta Plan recommends that the California Department of Fish and Wildlife should develop, for consideration by the Fish and Game Commission, proposals for new or revised fishing regulations designed to increase populations of listed fish species through reduced predation by introduced sport fish. The proposals should be based on sound science that demonstrates these management actions are likely to achieve their intended outcome and include the development of performance measures and a monitoring plan to support adaptive management.
- Recommendation **ER R4 (Exempt Delta Levees from the U.S. Army Corps of Engineers' Vegetation Policy)**. This Delta Plan recommendation calls for considering the ecosystem value of remaining riparian and shaded riverine aquatic habitat along Delta levees, the U.S. Army Corps of Engineers should agree with the California Department of Fish and Wildlife and the California Department of Water Resources on a variance that exempts Delta levees from the U.S. Army Corps of Engineers' levee vegetation policy where appropriate.

Appendix 1B: Comments from State Agencies and Responses

Ben Nelson
Bureau of Reclamation, Bay-Delta Office
September 29, 2015
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Agencies such as the California Department of Fish and Game (DFW) and the Department of Water Resources (DWR) are already undertaking efforts related to these topics such as predatory fish research (DFW) and levee improvement efforts along the Sacramento River that include the use of vegetation and other biological elements (DWR). These efforts could be coordinated with to further achieve the objectives of the biological opinions.

DSC 2
continued

Council staff will continue to track progress on finalizing this DEIS and welcome any opportunities to coordinate with staff from the Bureau of Reclamation. If you have any questions or comments please contact me at (916) 445-0258 or cindy.messer@deltacouncil.ca.gov.

Sincerely,



Cindy Messer
Deputy Executive Officer
Delta Stewardship Council

1

2 **1B.1.2.1 Responses to Comments from Delta Stewardship Council**

3 **DSC 1:** Comment noted.

4 **DSC 2:** Discussion in Section 9.3.4.12.9 of Chapter 9, Fish and Aquatic
5 Resources, of the EIS includes information related to the 2013 expert panel
6 review of predation conditions and research approaches.

7 Discussion in Section 10.3.3.1.2 of Chapter 10, Terrestrial Biological Resources,
8 of the EIS has been modified by including more detailed discussion of changes
9 under the U.S. Army Corps of Engineers vegetation policy. This information is
10 currently provided in Section 10.4.1.4 of Chapter 10 and Section 3.4.6.2 of
11 Chapter 3, Description of Alternatives.

1 **1B.1.3 California Department of Water Resources**

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

EDMUND G. BROWN JR., Governor

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791



September 29, 2015

Mr. Ben Nelson
Natural Resources Specialist
Bureau of Reclamation, Bay Delta Office
801 I Street, Suite 140
Sacramento, California 95814-2536

Re: Cooperating Agency Review of the Public Draft Environmental Impact Statement (DEIS) on the Coordinated Long-term Operation of the Central Valley Project and State Water Project, Comments by Department of Water Resources

Dear Mr. Nelson:

We are providing the following general comments on the subject Draft Environmental Impact Statement (DEIS). Additional detailed comments were provided previously on the Administrative Draft EIS (ADEIS) in July 2015. We thank Reclamation for including many of the comments we had on the ADEIS in the draft document.

DWR 1

- As we mentioned in our ADEIS comments, we want to restate and again emphasize the need to include an Alternative 6 in the EIS. DWR and Reclamation worked together on the proposed modifications to several of the actions in both the 2008 USFWS BiOp and the 2009 NMFS BiOp which we had anticipated being included in the EIS. For example, DWR provided Reclamation with a proposal to modify Action 4 of the 2008 USFWS BiOp, which is the Fall X2 measure, in late 2014 and provided proposed text for Fall X2 for the EIS Project Description in January 2015 (see attachment). DWR also discussed modifications to Old and Middle River export restrictions in set out in Action IV.2.3 of the 2009 NMFS BiOp with Reclamation staff at various meetings. DWR also provided suggested changes to Action IV.4.2 in the 2009 NMFS BiOp as recently as November 2014. While it is our understanding that an Alternative 6 was not included due to lack of time to complete modeling and analysis, DWR has offered modeling support to Reclamation for this effort as far back as May, 2013 and we continue to do so for future efforts in this regard.

DWR 2

- The DEIS does not include an accurate discussion of the regulatory environment. In Appendix 3A where it describes the Agreement between the United States of America and the State of California for coordinated operation of the Central Valley Project and the State Water Project (COA). We ask that the description be brought up to date to reflect the current operations.

DWR 3

2

Ben Nelson
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If you have further questions please contact me at Paul.Marshall@water.ca.gov, (916) 653-1099, or Mark Holderman of my staff at Mark.Holderman@water.ca.gov, (916) 653-7247.

Sincerely,



Paul A. Marshall, Chief
Bay-Delta Office

Cip/darlas/mholderman/cvpswp comments final 9-29-2015

1

2 **1B.1.3.1 Responses to Comments from Department of Water Resources**

3 **DWR 1:** Comment noted.

4 **DWR 2:** On October 9, 2015, the District Court granted a very short time
5 extension to address comments received during the public review period, and
6 requires Reclamation to issue a Record of Decision on or before January 12,
7 2016. This current court ordered schedule does not provide sufficient time for
8 Reclamation to include additional alternatives, which would require recirculation
9 of an additional Draft EIS for public review and comment, nor does Reclamation
10 believe additional analysis is required to constitute a sufficient EIS. Reclamation
11 is committed to continue working toward improvements to the USFWS and
12 NMFS RPA actions through either the adaptive management process,
13 Collaborative Science and Adaptive Management Program (CSAMP) with the
14 Collaborative Adaptive Management Team (CAMT), or other similar ongoing or
15 future efforts.

16 **DWR 3:** The description of the Coordinated Operations Agreement (COA) in
17 Appendix 3A, No Action Alternative: Central Valley Project and State Water
18 Project Operations, of the EIS, has been modified to reflect recent CVP and SWP
19 operations.