DEIRS Ltr#	Cmt#	Comment	Response
1549	1	Is the Bay Delta Conservation Plan in response to habitat degradation of the Sacramento-San Joaquin Delta due to water export operations by the Central Valley Project (CVP) and the State Water Project (SWP)? If so, this draft Bay Delta Conservation Plan (BDCP) and its related DEIR/EIS lack necessary background information. It assumes everybody is familiar with the CVP, the SWP, why they were designed, how they actually function, how they adversely affect Delta ecology, and what part of the Delta is adversely affected. The document begins with how the respective agencies are going to interact with one another. It leaves me with the same feeling as coming into the middle of a conversation and not really understanding what's going on. There is no attempt in these documents to educate and orient the reader of why certain actions are necessary or appropriate. It left me with the feeling of "Trust us, we know what we are doing". Given the current level of distrust of government, there is a great need for clearer communication between government and the public; the term "Transparency" is used frequently and everywhere. Embrace that concept. Further, it is most unfortunate that this document was not written with the reader in mind. It has the perspective of how the respective agencies are going to interact during the process rather than clearly describing the conceptual framework that is guiding the design and operation of the new water distribution system. But what is the project? Where is the project description? Why is there a need for a Bay Delta Conservation Plan? Without this, there is no context upon which to judge the efficacy or the value of any particular proposed restoration action. If these restoration elements are not related to the new water distribution system project, but are considered simply because they are degraded and there may be money available through general Bay Delta activities to restore them, then be forthright and state that openly.	The commenter requests background information. Please see Draft EIR/EIS Appendix 1A, Primer on the Delta and California Water Delivery Systems, and Draft EIR/EIS Chapter 2, Project Objectives and Purpose and Need. Additionally, please refer to Master Response 3. The description of the proposed project is provided in Section 4 of the RDEIR/SDEIS. For comments pertaining to the range of alternatives evaluated, please refer to Master Response 4. For comments pertaining to the size and complexity of the document, please refer to Master Response 38. More information on how DWR has developed the project in an open and transparent manner is provided in Master Response 41.
1549	2	There are fundamental reasons that shape the design of the new water conveyance. The details that have not been decided must conform to these reasons or the new system will be compromised. The concepts behind the design and operation of the new water conveyance system should be the foundation of any document related to the new water conveyance system. Instead, the plan is filled with jargon, acronyms, and labels that as far as I can see are not defined. It is bureaucratese at its worst. This should not be how the agencies are going to interact with one another, but rather what factors should be considered in guiding the design and operation of a water redistribution system that avoids adverse impacts and fulfills these three major guiding objectives: 1. What is the best way to secure a firm water supply for California? 2.How can the new water system improve the ecological condition of the Delta (It is actually Deltas, since there are more than one)? and 3.How is tidal salt intrusion into the Delta going to be managed? This last principle is very important because it will largely determine what can be considered surplus water available for expanded consumptive demand and also guide water use planning so that natural systems are sustainable.	The project is not a comprehensive, statewide water plan, but is instead aimed at addressing many complex and long-standing issues related to the operations of the SWP and CVP in the Delta, including reliability of exported supplies. The project is just one element of the state's long-range strategy to meet anticipated future water needs of Californians in the face of expanding population and the expected effects of climate change with continued investment by the State and other public agencies in conservation, storage, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Demand Management Measures).
1549	3	A document such as this should be focused to inform the public because this massive project requires their acceptance and support. I think this document fails miserably in informing the public. The risk of confusion and disorientation on their part will ultimately	For information related to the size and complexity of the document, please refer to Master Response 38.

DEIRS Ltr#	Cmt#	Comment	Response
		foster resistance to the project that is badly needed by the entire state, making it infinitely more difficult to achieve. This document doesn't have to be so nebulous if you provide the factors and concepts that necessarily shape this project. These provide a general framework without more specific details that have yet to be decided. I think they would facilitate understanding for the public and also provide and outline for the planners and technicians involved with the project. If you find this framework helpful, incorporate these concepts into your next draft.	For information pertaining to public outreach, please refer to Master Responses 40 and 41.
1549	4	The water from the Sacramento River System should be used to secure the water supply because there is almost 3 ¾ more water available and it is of significantly higher water quality. The Sacramento Watershed contributes 21190 TAF (Sacramento River + Yolo Bypass) as Delta inflow each year, while the San Joaquin Watershed contributes 5660 TAF (San Joaquin River + Eastside streams) each year (Delta Atlas 1993). In addition, the waters of these two systems are so different in energy, current, temperature, total dissolved solids, and other characteristics that they do not mix downstream of the confluence until they reach Suisun Bay where the water is brackish (Li 2012, Li 2010). Brackish water is unsuitable for either irrigation or domestic use. It has been assumed for a long time that Banks pumping plant and Jones Pumping plant can capture significant amounts of Sacramento Delta water from their location 31 river miles upstream on the San Joaquin River. The export activities cannot capture significant amounts of Sacramento Delta water because the rivers do not mix downstream of BDCP Sherman Island and the amount of time available is too short. Therefore the maximum amount of water available is not 27,840 TAF annually, but only the 5660 TAF of annual surface runoff from the San Joaquin watershed. This means the water supply used for export will soon reach capacity, i.e., export volumes of 2,530 thousand acre feet (TAF) from Jones Pumping Plant and 2,490 TAF from Banks pumping Plant is 88.2% of the mean annual runoff of the San Joaquin watershed (5660 TAF) [Sacramento San Joaquin Delta Atlas 1993].	As described in this comment and in Chapter 6, Surface Water, in the Final EIR/EIS, the Delta inflows from the Sacramento River are greater than from the San Joaquin River. Overall, the CALSIM II model that simulates the action alternatives assumes that all senior water rights in the Delta watershed are provided prior to export of the SWP and CVP water contract deliveries. The only water available for the SWP and CVP water contract deliveries under the action alternatives would be from water under existing water rights issued by the State Water Resources Control Board to DWR and Reclamation for the SWP and CVP, respectively.
1549	5	The major direct adverse effect of water export operations from the Delta is flow reversal. This means changing the natural flow of a river so that it flows upstream. Both Jones Pumping Plant (CVP) and Banks Pumping Plant (SWP) are located about 31 River miles upstream on the San Joaquin River. These water export operations reverse flows in lowest 31 river miles all the major channels in the San Joaquin Delta. The amount of days that reverse flows occur is trending towards 300 days each year (San Francisco Estuary Project 1992). Flow reversals through pumping are possible because the San Joaquin River is almost pancake flat with a gradient of 0.016 from near Fresno to its confluence with the Sacramento River just West of Sherman Island. Water moved through the San Joaquin Delta by tributary inflow off the West Sierra slopes and outgoing tide. The San Joaquin River has no gradient and therefore no energy, no momentum, and low inertia; that is why it is easily pumped upstream. When the water export operations are relocated to the Sacramento River, the adverse effects associated with present water export operations will disappear from the San Joaquin Delta not reappear in the Sacramento Delta because the Sacramento River has a much higher gradient of 0.026 from near the city of Sacramento to its confluence with the San Joaquin River just West of Sherman Island. The Sacramento River has a significant higher gradient and consequently has more energy with higher momentum and higher inertia. It will be very difficult if not impossible to pump Sacramento River upstream. Therefore, by just by moving the export pumping facilities from the San Joaquin River to the Sacramento	As shown in Figures C-9-1 through C-9-6 in Appendix 5A, Section C, Modeling Results, of the Final EIR/EIS, Old and Middle River flows would generally become more positive under Alternatives 1 through 8 and more negative under Alternative 9 as compared to the Existing Conditions and the No Action Alternative.

DEIRS Ltr#	Cmt#	Comment	Response
		River, the adverse effects caused by flow reversal go away.	
1549	6	There are significant groups of fish of interest that are adversely affected in different ways by water export operations in the San Joaquin Delta: San Joaquin anadromous salmonids are harmed by flow reversals in the San Joaquin Delta. There are no flow reversals in the Sacramento Delta. While Sacramento watershed fall-run Chinook salmon production generally show some degree of increase over their respective baseline (1968-1992) production with some actually achieving the Doubling Goal. On the other hand, San Joaquin tributary fall-run Chinook salmon production, i.e., those runs in the Stanislaus, Tuolumne and Merced rivers are far less abundant than their baseline levels (See Anadromous Fish Restoration Program website). Since the general life histories of anadromous salmonids are similar, I use fall-run Chinook salmon data from AFRP because they are more available, but are also representative of what also happens to San Joaquin steelhead, a federally threatened species. Spring-run Chinook salmon were extirpated from the San Joaquin watershed when Friant Dam was constructed, but they still inhabit the Sacramento watershed as a Threatened species. There are notions to restore this species to the San Joaquin watershed under the San Joaquin River Restoration Project (SJRRP). The endangered Winter-run Chinook salmon is considered a Sacramento watershed fish. However, there is a small run of Chinook salmon that spawns in June and July downstream of New Hogan Reservoir on the Calavaras River, which is in the San Joaquin watershed. No other Chinook salmon spawn during this period (Healy 1991). Reverse flows or flows that move upstream rather than down in the San Joaquin Delta eliminates any downstream cues for the emigrating smolts so they can't find the ocean. Furthermore, the fish protection (salvage) facilities at both pumping plants are worthless because fish protection facilities of this type assumes there is a downstream so that migrating fish can bypass the export facilities and there is no downstream during water export operations that create reverse flows. Finally, the combination of inadequate instream flows and reverse flow make it very difficult for returning adults to find their natal streams. The Sacramento watershed supports the highest numbers of anadromous salmonids in California, so it is very important that relocating water export facilities do not harm these anadromous salmonid stocks. A representative summer current in the Sacramento River is around 2.5 feet per second (fps), making it very difficult and I think impossible for water export operations to create reverse flows in the Sacramento River. With no reverse flows in the Sacramento River, downstream cues to the ocean would remain. Attraction flows would be weak because of very low tributary releases, but at least they would be there for returning adults.	The new preferred alternative, Alternative 4A, includes a reduction in south Delta export pumping and a Head of Old River gate, which would lessen the incidence of reverse flows and increase the proportion of emigrating juvenile salmonids remaining in the main stem San Joaquin River. The North Delta Diversion would be operated in such a way that flows downstream would be maintained to avoid reverse flows.
1549	7	Green sturgeon, a federally listed threatened species, are present in the Sacramento watershed, but largely absent from the San Joaquin watershed. The lack of reverse flows in the Sacramento River removes this potential stressor on this species. With no reverse flows, it is now feasible to design and construct fish protection facilities that actually function. This is a necessary and mandatory mitigation feature of this project, particularly for Chinook salmon, steelhead and green sturgeon. Delta smelt, an endangered species, is a member of the Pelagic Organism Decline (POD). Preproject (before the original CVP and SWP), their population center was in the lower	An RDEIR/SDEIS was developed and circulated in 2015, which included 3 new non-HCP Alternatives including the new preferred alternative, 4A. The evaluation of the effects of Alternative 4A are included in the RDEIR/SDEIS. Note that Alternative 4A includes dual conveyance, i.e., exports from the proposed North Delta Diversion, as well as the south Delta export facilities.

DEIRS Ltr#	Cmt#	Comment	Response
		reaches of the San Joaquin Delta (Moyle 2003) where stream currents were placid even during tidal changes. I think that delta smelt that inhabit the Sacramento watershed are using marginal habitat and that was always so. San Joaquin water export operations created unnaturally high currents in the San Joaquin River that were extremely adverse to delta smelt, which are poor swimmers adapted to backwater conditions. Delta smelt would benefit when water is exported from the Sacramento River. The San Joaquin Delta will revert to backwater habitat, a habitat to which they were adapted and habitat conditions in the Sacramento Delta will not change much from present conditions with the new water export operations. The result will be restored habitat conditions in the San Joaquin Delta and no change in conditions in the Sacramento Delta for delta smelt. Longfin smelt, a federally threatened species, is also a member of the POD. They are stronger swimmers than delta smelt and are more marine in distribution (Moyle 2003). They spawn in the October through December period (Clemens and Wilby 1961) in the western Delta (Moyle 2003). I think the prolonged period of 300 days of reverse flows and the strong water export currents in the San Joaquin Delta in combination entrain almost all the fry. Moving the water export facilities to the Sacramento River would benefit longfin smelt by taking entrainment conditions away from known longfin smelt spawning areas. Young-of-the-year striped bass and threadfin shad are the remaining two members of the POD. Both species are planktivores, i.e., they eat plankton. Robust and diverse plankton communities require water with high residence time in order to develop. Water export activities in the San Joaquin Delta simply reduce water residence time. If the water export facilities are moved to the Sacramento Delta and no water is exported from the San Joaquin Delta, residence time of San Joaquin Delta water would increase thus facilitating development of robust and diverse plankton communities. The striped bass and threadfin shad would no longer starve from a depleted plankton community. Since Sacramento Delta water is flowing on a steeper gradient, there won't be a noticeable change in water residence time due to water export operations there. Due to the volumes of water exported, water residence time may even increase slightly due to lower flow levels in the river channel that would be reflected in lower stream velocity. I do not think that this will make much difference in plankton community development. I expect rapid population increases by all these fish species if the water export facilities are in the Sacramento watershed, state of the art fish protection facilities are in place and there is no water export from the San Joaquin Delta. One of the beneficial economic consequences would be fewer and/or shorter water delivery interruptions, making the water supply more firm without adding more water.	
1549	8	Controlling tidal intrusion into the Delta has had much interest and should not be ignored. Its relevance with this project is two considerations. One, tidal salt intrusion into the Delta must be kept West of Rock Slough to preserve domestic water supply for Antioch and Pittsburg. Two, amounts of flow necessary by season to kept salt West of that diversion point must be determined prior to any consideration of expanding water demand, i.e., determining what water is surplus and available for water development. Pittsburg and Antioch had their domestic water diversion just off shore of each city. Each city lost their domestic water diversions in the 1920s due to upstream water development that decreased outflow that functioned to keep those domestic water diversion sites permanently fresh. Ultimately, the initial CVP moved their diversions further East to Rock Slough where water was still fresh.	The water quality assessment of the diversion of Sacramento River water under the project alternatives addresses effects on salinity-related parameters in the Delta, including electrical conductivity (EC) and chloride, and compliance with related agricultural, fish and wildlife, and municipal and industrial use objectives in the Bay-Delta Water Quality Control Plan and degradation relative to these uses in Impact WQ-11 in Chapter 8, Water Quality. Where significant impacts to beneficial uses would occur due to the alternative, as opposed to other forces including climate change and sea level rise, mitigation to lessen those impacts is provided. Further, the proposed project has been modified since publication of the Draft EIR/EIS to Alternative 4A, which would have less than significant impacts on salinity-related parameters.

DEIRS Ltr#	Cmt#	Comment	Response
		Upstream water development has resulted in the outflow to San Francisco Bay to be half of historical (California State Lands Commission 1991). Any further water development means outflow to San Francisco Bay would be reduced to more than half of historical When you use more than half of anything, you must proceed with caution. I suggest that the amount of outflow sufficient to keep the Rock Slough diversion permanently fresh as the first bit of information needed to determine the amount of water available for further development. There are many advantages of using the entire outflow of the San Joaquin Delta to control tidal salt intrusion. One, the low energy San Joaquin Delta water resists tidal intrusion in a more consistent and predictable fashion than the high energy Sacramento Delta water. Because San Joaquin Delta water has no energy, its chief response to incoming tide is passive resistance that bends uniformly with the advancing incoming tide. It is easier to model and assess how much outflow is needed to keep Rock Slough fresh. In contrast, the higher energy Sacramento Delta water reacts violently with the incoming tide, creating an uneven interface that would be more difficult to model. Two, the San Joaquin Delta water quality is very low. It is filled with pesticide and fertilizer residues, so water- processing costs would be high. It would be better to use low quality water to control tidal intrusion and provide a valuable service rather than using high quality water that could be used for domestic purposes.	
1549	9	The Geographic Scope of the Plan Area is too restricted, and therefore incorrect. The original Central Valley Project diverted water away from the Delta at Friant Dam. Judge Karlton's decision to restore the San Joaquin River between Friant Dam to the confluence of the Merced River was based on the extreme level of diversion. However, like water, adverse effects from extreme flow diversion moves downstream through the San Joaquin Delta to the Pacific Ocean. Therefore, it would be wise to integrate the planning processes of the San Joaquin River Restoration Project with the Bay Delta Conservation Plan and others related to Delta water manipulation and Delta ecological improvement so that potential conflicts can be recognized and reconciled.	his comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1549	10	RELATIVE LEVEE SECURITY: Levees have been constructed more recently and are stronger in the Sacramento Delta than in the San Joaquin Delta. Since the Sacramento Watershed produces more water, streamflows are higher and floods occur more frequently. Consequently, the US. Army Corps of Engineers has been active with the Sac Bank Project repairing selected bank Problem areas. Although this is done in a piecemeal fashion, these levees have had design considerations such as flood frequency and expected flood elevations. In contrast, some San Joaquin Delta levees were manually constructed by manual labor without any design consideration and the quality of levee maintenance varies widely. If no water is exported from the San Joaquin Delta, the water delivery system is not related to San Joaquin Delta levee integrity and are therefore not held hostage by the specter of weak and faulty levees. The concern for these levees is reduced to public safety.	Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. Please see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Appendix 6A Sections 6A.6.1.2 and 6A.6.2for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Also, see Sections 6A.2 and 6A.3 for discussion on existing levee improvement programs and funding mechanisms, which would not be affected by the BDCP/CWF.

DEIRS Ltr#	Cmt#	Comment	Response
1549	11	SALT IMPORTATION INTO THE SAN JOAQUIN VALLEY: The State Water Resources Control Board (SWRCB) held workshops on salt importation into San Joaquin Valley in 2006. Over a million tons of salt are imported into the San Joaquin Valley each year. These salts accumulate in the soil, forcing farmers to seek and to grow more salt tolerant crops. Aside from minor amounts leached from the ground and local concentrations from confined animal facilities in the San Joaquin Valley, most of it comes from agricultural return flows with residues of fertilizer and pesticide in the San Joaquin River. If no San Joaquin Delta water is exported into the San Joaquin Valley, salt importation and consequent accumulation will cease to be a problem.	Discussion of effects from changes in salinity is presented in Chapter 14, Agricultural Resources, Section 14.3.3.2, Impact AG-2. Crop yields and crop selection on lands in the Delta affected by changes in salinity of agricultural water supply during operation and maintenance activities are described under this impact as well. Water quality modeling results indicate that it is unlikely that there would be increased frequency of exceedance of agricultural EC objectives in the western, interior, or southern Delta. However, there could be increased long-term and drought period average EC levels during the summer months in the Sacramento River at Emmaton under Alternative 4A relative to the No Action Alternative (ELT), which could adversely affect agricultural beneficial uses. Implementation of Mitigation Measure AG-1 would develop an Agricultural Lands Stewardship Plan maintain agricultural productivity and mitigate for loss of Important Farmland and land subject to Williamson Act contracts or in Farmland Security Zones, and Mitigation Measure WQ-11 (including Mitigation Measure WQ-11e) would avoid or minimize reduced water quality conditions and adaptively manage diversions at the north and south Delta intakes to reduce or eliminate water quality degradation in Western Delta.
1549	12	WATER PROCESSING COST: If all the water exported is from the Sacramento Watershed, water-processing costs will go down because of the high quality of the Sacramento water.	The effects on water treatment costs of changes in Delta water quality were not analyzed in the Draft EIR/EIS. However, as described in Appendix 8G, Chloride, chlorides generally decrease at the SWP Banks Pumping Plant intake and the CVP Jones Pumping Plant intake under the action alternatives as compared to the Existing Conditions and the No Action Alternative; and increase in some months at the CVP Rock Slough intake and the SWP Barker Slough intake.
1549	13	WATER RIGHTS: There is a problem with consumptive water rights. The State Water Resources Control Board has estimated that there are 300 million acre feet per year of surface water that is or will be authorized in one form or another now or in the very near future. The fundamental problem is that California produces only 73 million acre-feet of runoff each year, so water has been over-authorized by a factor of four. What makes this even worse is that riparian rights accounts for 73 million acre feet per year and that riparian rights use is under reported. Riparian rights cannot be changed because it is part of English common law that was incorporated in our state constitution when California became a state. Is the only remedy a statewide water rights adjudication? What a mess!	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
1549	14	FUNDING THE PROJECT: Funding for this project must be put on equal footing since the two primary objectives are to secure a water supply and improve the ecology of the Delta. The mechanism for acquiring funds for water development is well developed. Whereas how environmental activities are to be funded are nebulous. If you want a new water distribution system you must also pay for the promised ecological improvement as well. Remember this project has dual and coequal objectives.	Please see Master Response 5 regarding the estimated cost and to see the adequacy of the proposed project funding strategy. Please also note that BDCP and large-scale habitat restoration is no longer included in the preferred alternative, Alternative 4A. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. The EIR/EIS analyzes all alternatives, including Alternative 4A.
1550	1	East Contra Costa Irrigation District is party to a contract with the State of California, acting by and through the Department of Water Resources, for the assurance of a dependable water supply of suitable quality. This contract (the "Contract"), recognizes county of origin and water shed protection concepts and, essentially, guarantees 50,000 acre feet of water at a certain level of water quality at ECCID's point of diversion at Indian Slough ("ECCID's Point of Diversion"). Article 6(a)(ii) of the Contract, as amended February 7, 2000, provides : "DWR recognizes a pre-1914 appropriative right of ECCID to divert from the Delta for use on District lands as defined in Article l(c) of this contract, as amended. DWR shall furnish such water as may be required	This comment pertains to alternatives presented in the 2013 Draft EIR/EIS, in which Alternative 4 (also known as the BDCP) was considered the CEQA Preferred Alternative. Alternative 4A, also known as California WaterFix, has been developed in response to public and agency input and is the new CEQA Preferred Alternative. Alternative 4A is also the NEPA Preferred Alternative, a designation that was not attached to any of the alternatives presented in the 2013 Public Draft EIR/EIS. Alternative 4 remains a potentially viable alternative and is being carried forward in this RDEIR/SDEIS because it represents the original habitat conservation plan/natural community conservation plan (HCP/NCCP) alternative approach, and because it provides an important reference point from which the Alternative 4A, 2D, and 5A descriptions and analyses were developed. If the Lead Agencies ultimately choose the alternative implementation strategy and select an alternative presented in the RDEIR/SDEIS after completing the CEQA and NEPA processes, elements of

DEIRS Ltr#	Cmt#	Comment	Response
		within the District as defined in Article l(c) ofthis contract, as amended, up to 50,000 acre-feet per year at a rate of up to 250 cubic-feet-per-second, to the extent not otherwise available to ECCID under the water rights of ECCID." The Contract (dated January 7, 1981, as amended April 11, 1991 and February 7, 2000) provides that the State shall cease all diversions to storage in SWP reservoirs or release stored water from SWP reservoirs or cease all exports by the SWP from Delta channels, or any combination of these that will maintain water quality at ECCID's Point of Diversion. The impact of various alternatives being considered under the BDCP on ECCID's rights under the Contract should be analyzed, in particular as they relate to the water quality assurances provided therein to ECCID and, more specifically, at ECCID's Point of Diversion. The Draft EIR/EIS fails to evaluate water quality at ECCID's intake nor does it disclose whether the State's ability to maintain certain water quality is possible under the BDCP.	the conservation plan contained in the alternatives in the 2013 Public Draft EIR/EIS may be utilized by other programs for implementation of the long term conservation efforts. The State Water Resources Control Board, not DWR, is responsible for decisions relating to water rights. DWR holds water rights approved by the State Water Resources Control Board but does not have the power or authority to issue water rights to others. Additionally, the proposed project does not seek any new water rights nor include any regulatory actions that would affect water rights holders other than DWR, Reclamation, and SWP and CVP contractors. Importantly, all water exported by the SWP and CVP is the subject of the existing water rights of those two agencies. Exports do not come at the expense of other water rights holders. The proposed project and its alternatives analyzed in the EIR/EIS only include the use of water from existing SWP and CVP water rights or voluntary water transfers from other water rights holders. The proposed project and its alternatives do not reduce the protections for other water right holders. With respect to water quality, Chapter 8 of the Final EIR/EIS describes whether concentrations of various water quality constituents are expected to increase or decrease with the project, relative to existing conditions and the No Action Alternative. To the extent that concentrations of various water quality constituents are expected to increase, Chapter 8 describes whether these increases are expected to result in impacts to beneficial uses of water in the Delta. For constituents for which adverse impacts were expected, mitigation and other commitments, such as additional evaluation and modeling and consultation with water purveyors to identify additional measures to avoid and minimize or offset these impacts, were introduced to address those impacts. Additionally, adding intakes in the North Delta will allow for operational flexibility that can improve natural flow in the Delta. For more information regarding water quality see master Response 14 and for changes in delta exports please see Master Response 26.
1550	2	The BDCP's West Alignment Alternatives involve construction of facilities which would severely impact East Contra Costa Irrigation District's Point of Diversion and its distribution system, including its main canal and other facilities as shown on the marked copy of Sheets 14 and 15 of Figure M3-3. These impacts, including the potential need to relocate ECCID's Intake on Indian Slough, should be addressed. The Draft EIR/EIS fails to analyze or identify any feasible mitigation for this impact.	With respect to the alternatives evaluated in the 2013 DEIR/EIS, as indicated in Figure M3-3 (an attachment to this comment submittal), ECCID's point of diversion would be avoided under the western conveyance alignment by constructing a siphon under ECCID's facilities. Chapter 20 of the 2013 DEIR/EIS, Public Services and Utilities, indicates that the west alignment would have no effect on public utilities based on the Geographic Information System (GIS) analysis conducted for this alignment. Also, please note that although no decisions about alternative approval have been made as of the writing of the Final EIR/EIS, the preferred alternative Alternative 4A would not affect ECCID's facilities (see Chapter 20 of the Final EIR/EIS).
1550	3	ATT1: Map illustrating East Contra Costa Irrigation District Point of Diversion in respect to the Plan area.	This comment describes an attachment to the comment letter depicting the location of the ECCID facilities relative to the West Alignment (Alternatives 1C, 2C, and 6C). Regarding potential effects on these ECCID facilities, refer to Response 1550-2.
1550	4	ATT2: Map illustrating East Contra Costa Irrigation District facilities in respect to the Plan area.	This comment describes an attachment to the comment letter depicting the location of the ECCID facilities relative to the West Alignment (Alternatives 1C, 2C, and 6C). Regarding potential effects on these ECCID facilities, refer to Response 1550-2.
1551	1	The Municipal Water District of Orange County (MWDOC) is pleased to submit comments on the Draft Bay Delta Conservation Plan (BDCP) and Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS). Please note that our comments on the BDCP and Draft EIR/EIS interchangeably use the terminology "BDCP", "BDCP Process", "the Bay-Delta Fix" and the "decision-making process"	The commenter states their support for the project and its effects on water supply for Southern California. The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.

DEIRS Ltr#	Cmt#	Comment	Response
		to reflect the entire suite of efforts and decisions in a comprehensive manner. The Municipal Water District of Orange County (MWDOC) is a wholesale water supplier and resource-planning agency governed by a publicly elected seven-member Board of Directors. MWDOC is the third largest member agency of Metropolitan Water District of Southern California (MET). Its service area covers all of Orange County with the exception of the three original MET member cities of Anaheim, Fullerton, and Santa Ana. MWDOC and the "Three Cities" coordinate water management planning. MWDOC serves Orange County through 27 cities and water agencies and one investor-owned utility, including the Orange County Water District who manages the Lower Santa Ana River Groundwater Basin. MWDOC's mission is "to provide reliable, high-quality supplies [of water] from Metropolitan and other sources to meet the present and future needs [of Orange County] at an equitable and economical cost, and to promote water use efficiency for all of Orange County." This mission is implemented through coordinated water management and planning with appropriate investments in water use efficiency, water supply development, system reliability improvements and emergency preparedness. Our mission is supported by collaboration with our member agencies and through public outreach, water education and legislative advocacy.	
1551	2	MWDOC [Municipal Water District of Orange County] strongly supports the BDCP Preferred Alternative (No. 4) and opposes the No Action Alternative; It is critical to the state's economy and environment that both the State and federal government expeditiously follow through with the decision for adopting and implementing the BDCP. MWDOC strongly supports the BDCP Preferred Alternative (No. 4) with the expectation that the State and federal government will move steadily forward with its adoption by issuing the Record of Decision and Notice of Determination by the end of this year, and by implementing the Preferred Alternative in accordance with the BDCP schedule. We compliment the State and federal agencies and stakeholders in developing a thorough, comprehensive and balanced BDCP Preferred Alternative that will help achieve the co-equal goals of ecosystem restoration and water supply reliability. It is vital that the State of California and Federal Government follow through with this tremendous effort in collaborative planning as it is a once in a lifetime opportunity to resolve the long-standing Delta problems, and the cost of no action is too high. Our expectations are that the approximate $25 billion investment to implement and carry out the BDCP will result in greater certainty in California's water supply reliability, will make measurable improvements in water quality, and will restore significant environmental values in the Delta. The Preferred Alternative appropriately achieves the proper balance between the environmental needs of the Delta watershed with the water sup0ply reliability needs of the entire State of California.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.
1551	3	In spite of the world-class efforts of Orange County to provide greater water supply certainty for eight percent of California's population and the $200 billion economy they represent, Orange County remains dependent on imported water to meet approximately 45 percent of our average annual demand, with the SWP [State Water Project] deliveries from the Delta meeting approximately half of those needs. The Delta ecosystem and water supply conveyance problems have long been recognized, and have remained in a continuing state of degradation, conflict, and stalemate. Many years and hundreds of millions of dollars have been spent on study efforts with the Delta system continues to be used for	This comment is consistent with one of the fundamental purposes of the proposed project is to make physical and operational improvements to the SWP and CVP system in the Delta, and water supplies of the SWP and CVP for users located south of the Delta and Delta water quality consistent with statutory and contractual obligations of the SWP and CVP, as described in Section 2.3 of Chapter 2, Project Objectives and Purpose and Need, of the EIR/EIS.

DEIRS Ltr#	Cmt#	Comment	Response
		water conveyance in a manner for which it was not intended. The longer it takes to begin the resolution, the more expensive it will become. This stalemate has been punctuated by droughts, floods, economic losses, environmental degradation and litigation every decade since the construction of the SWP in the 1960's. We can no longer delay action in the Delta, and urge the State and federal government to quickly move forward with the Preferred Alternative. Failing to act and move forward is not an acceptable alternative.	
1551	4	MWDOC [Municipal Water District of Orange County] supports the proposed governance and implementation structure for the BDCP, as the large-scale Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) to be formed under federal and state Endangered Species Acts (ESA). Using the HCP/NCCP governance structure proposal will ensure that all of the project's environmental and water supply reliability goals and objectives are realized. The bottom line is that the BDCP Preferred Alternative (No. 4) offers the best solution to achieve greater supply certainty and the governance structure to provide necessary regulatory assurances. Moreover, it provides for a sustainable and balanced solution to achieve the State's policy of co-equal goals.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
1551	5	Co-Equal Goals: The BDCP must be implemented in a manner consistent with the State policy of co-equal goals. Preferred Alternative (No. 4) is consistent with the Delta Reform Act of 2009's co-equal goals. The BDCP and Preferred Alternative (No. 4) should be adopted and implemented because they comply with State law and the Sacramento-San Joaquin Delta Reform Act of 2009. The Delta Reform Act establishes one of the basic state goals for the Delta as seeking to: "Achieve the two coequal 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." Ref: California Public Resources Code Section 29702(a). The BDCP and the Preferred Alternative (No. 4) balance the co-equal goals established by the Legislature in the Delta Reform Act by proposing to improve 145,000 acres of Delta habitat and permitting new conveyance facilities which will provide operational flexibility and will improve water supply reliability from the Delta. While some critics of the BDCP have claimed that the plan unduly favors water supply interests and will permit State Water Contractors to export more water than is currently allowed, the BDCP and the Preferred Alternative do not provide a greater amount of water for export. The BDCP estimates that the average water supplies available for export will be 4.7 million acre-feet (MAF) to 5.6 MAF per year. This is the same average currently permitted for export through the Delta today.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
1551	6	The Delta Reform Act of 2009 established the State policy of co-equal goals to provide a more reliable water supply and to protect, restore and enhance the Delta ecosystem. Orange County's primary interests in the successful implementation of the BDCP are: 1. Restoration of the SWP [State Water Project] supply to pre-2008 capabilities before imposition of the 2008 delta smelt and salmon/steelhead Biological Opinions,	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could

DEIRS Ltr#	Cmt#	Comment	Response
		2. Assurances that the BDCP will provide greater supply certainty into the future without further significant mandated reductions in exports due to endangered species issues without a fair and balanced procedure, and 3. Protection of the export supply from both catastrophic outages to the Delta levee system from earthquakes and floods and from long-term seal level rise. While the project will not expand average annual exports, it will provide certainty in the water supply, protect export supplies from catastrophic outages, and allow for a "big gulp, little sip" approach to beneficiaries. Construction of a new north Delta intake for the SWP and Central Valley Project (CVP), a significant investment for beneficiaries, would protect this critical supply from earthquake, flood and seawater intrusion risks. It also would restore a greater level of export supply certainty and reliability by providing operation flexibility that will minimize environmentally damaging south Delta diversions and reverse flows. The "big gulp, little sip" approach will allow for greater exports when excess river flows would normally discharge to the ocean and smaller, but consistent and predetermined export levels when Delta flows at normal or lower than normal levels. This approach makes sense and helps mitigate the impact of the 2008 opinions, but not at the expense of the environment.	function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1551	7	New Facilities and In-Delta Operation Flexibility: The modernization of the Delta conveyance system is essential in order for habitat restoration and conservation to have its intended effect; Preferred Alternative (No. 4), which incorporates the 9,000 cfs three intake, twin tunnel conveyance system, provides the best balance between operational flexibility and modernizing the conveyance system for environment benefit and water supply reliability. The 9,000 cfs (cubic feet per second) three intake, twin tunnel conveyance system will add a new point of diversion in the north Delta area which will provide operational flexibility in how water is conveyed across the Delta. This will mitigate entrainment of fish under the current south Delta operations and will significantly curtail reverse flows. In addition, an improved conveyance system will allow the Delta to operate more naturally by minimizing conflicts between fish and water operations. This will better enable conveyance of high flows while minimizing fishery impacts. The project would substantially reduce the take of endangered species and would protect exports from earthquake, flood and sea-level rise into the future. We strongly support this foundational conservation element of the BDCP, and believe that the Proposed Alternative (No. 4) proposes the bet option for modernization of the conveyance system.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.
1551	8	Proposed Alternative (No. 4) provides the best option for operational flexibility, and will allow for the "big gulp, little sip" approach. Southern California has made significant investment in water storage and conveyance facilities, such as the Diamond Valley Reservoir, Inland Feeder and groundwater storage facilities, to allow conjunctive use storage during periods of high flows in the system. Implementation of the Preferred Alternative (No. 4) will enable a more efficient and protective location for diversion of high flows for downstream storage and subsequent dry period use than the current system can provide.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.
1551	9	The three proposed screened intakes in the northern Delta and proposed twin tunnels, combined with the enlarged improved SWP [State Water Project] Clifton Court forebay intake in the southern Delta, will provide the necessary flexibility to greatly reduce conflicts between fish and water operations. Reliance solely on the existing system is not	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.

DEIRS Ltr#	Cmt#	Comment	Response
		sustainable and would cause significant long-term harm to the fishery as well as adverse impacts on SWP deliveries, as has occurred since 1008. The screen intakes proposed by BDCP in the northern Delta will significantly mitigate reverse flows and south Delta diversion impacts. The Preferred Alternative (No. 4) will enable a more natural flow pattern through the Delta estuary.	
1551	10	The existing system is vulnerable to future sea level rise. Salinity intrusion, especially during extended dry periods, will worsen with sea level rise. With sea level rise, the ability of the existing system to meet the co-equal goals will be increasingly difficult. The Preferred Alternative (No. 4) system will help mitigate future salinity risks to water supply. In addition, the projected change in precipitation patterns to increasing rain and decreasing snow will limit the time availability windows for diversion and capture of available river flows. This change will require increased diversion rates and storage during periods when higher flows occur. This should be a recognized benefit of the BDCP and placed within its climate adaption strategy.	Please see Chapter 29, Climate Change, and Master Response 19.
1551	11	The Preferred Alternative (No. 4) should also provide facility protection from major flood events, up to a 200-year storm event. This will require establishing protective elevations at the Clifton Court Forebay as well as providing similar levels of protection at the recommended new north Delta diversion facilities. 200-year storm protection should be included in the BDCP.	The project seeks to avoid water supply disruption and protect water quality by modernizing and updating California's water delivery facilities to ensure 21st century seismic safety standards. All of the facilities under each alternative being studied under the EIR/EIS would be designed to meet 200-year flood protection and would use the latest seismic criteria and design methodologies to protect against earthquake damage.
1551	12	The 9,000 cfs [cubic feet per second] three-intake, twin-tunnel conveyance system would also protect the critical SWP [State Water Project] and CVP [Central Valley Project] supplies if massive Delta island levee failures should occur in the future from a major earthquake. The body of independent scientific evidence of the seismic risks in the Delta is growing. The best available science and engineering analysis of the Delta levee system has found that a major earthquake in the region would likely cause massive soil liquefaction, and failure of numerous levees resulting in relatively rapid seawater intrusion into Delta waterways and saltwater flooding of many islands. Under this scenario, SWP and CVP deliveries would be interrupted and significantly curtailed for up to three years resulting in severe economic damage to the state. The best available temporary solution would be a patchwork levee "pathway" that could only deliver a fraction of traditional supplies in the best-case scenario. Seismic preparedness is critical for this vulnerable segment of the statewide water delivery system, especially in the intervening years prior to completion of the tunnel system. The new northern Delta intakes and twin tunnels will protect future SWP deliveries and the economy of the state -- providing a valuable insurance policy to improve the reliability of the system from natural disasters. Delays in implementation of the BDCP should be avoided and the project implementation should be expedited. Approvals should not be unreasonably withheld.	The comment describes the benefits of the proposed project. It does not raise any environmental issue related to the EIR/EIS.
1551	13	Reduced Future Reliance: The 2009 Delta Legislation called for water agencies to reduce future reliance on the Delta, not to become 100 percent "self-reliant". The 2009 water package called for both reduced reliance and construction of improvements in the Delta. As part of the 2009 Delta legislation, water agencies are required to reduce their future dependence on the Delta. Over the past several years, agencies have worked to improve water use efficiency, develop alternative local supplies, and reduce their dependence on the Delta by changing the timing of water exports. These efforts are in compliance with California's policy "to reduce reliance on the Delta in meeting California's future water	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial

DEIRS Ltr#	Cmt#	Comment	Response
		supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency." Ref: California Water Code Section 85021. While efforts in these areas will continue, it is important to note that "reduced reliance" does not equate to and was never intended to require a move to 100 percent "self reliance." The 2009 Delta legislation did not intend or envision reduction or elimination in water exports from the Delta, but balanced the need for all of California to use its water resources wisely, and to reduce future pressures on the Delta ecosystem from future population and economic growth in the State. We (Municipal Water District of Orange County) have grown concerned over references to "self-reliance" as this is markedly different that "reduced future reliance, which was the intent of the law. The concept of "self-reliance" is troubling as the notion of co-equal goals was never intended to result in a future with significant reduction in exports from levels achieved before the 2008 bio-opinions. We would question whether this line of reasoning seeks to establish the pretext for ever-declining yields out of the SWP [State Water Project] and ever increasing unit costs, future stranding important supply investments on to our ratepayers and fundamentally damaging our ability to continue to optimize our local resources (i.e., salt management in recycled water and groundwater basins). It is our considered opinion that both improvement in supply that should be expected from the BDCP implementation and new local resource developments are necessary, as well as other longer-term federal/multi-state supply and conservation projects if we are to secure and improve our water and economic future for the benefit of a growing population.	feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1551	14	The recently released California Water Action Plan promotes increasing self-reliance through several measures, including providing a more reliable water supply that protects export supplies from catastrophic outages from earthquakes, major flood and rising sea levels. The California Water Action Plan focus highlights the importance of the BDCP to improve operational flexibility, protect water supplies and water quality, and restore the Delta ecosystem within a stable regulatory framework. It also goes on to state that as the Delta ecosystem improves in response to the implementation of the BDCP conservation measures, water operations would become more reliable, offering more secure water supplies. These are laudable goals of the BDCP, including restoration of export water supplies to levels that were realized before the 2008 Biological Opinions. It is now time for the State and federal government to achieve the 2009 legislation's co-equal goals of improving water supply reliability and ecosystem function by implementing the BDCP.	The Draft BDCP EIR/EIS and the Draft BDCP were prepared in a manner to comply with the 2009 Delta Reform Act, as described in Appendix 3I, BDCP Compliance with the 2009 Delta Reform Act, of the Final EIR/EIS. The range of alternatives in the Final EIR/EIS includes alternatives which result in reductions in SWP and CVP water deliveries south of the Delta as compared to the Existing Conditions and the No Action Alternative. However, SWP and CVP water deliveries would continue under all alternatives. It is important to note that the proposed project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Water Demand Management).
1551	15	Plan Implementation and Regulatory Assurance: The BDCP must provide the needed implementation and regulatory structure and assurances to achieve the co-equal goals as established by the State. MWDOC [Municipal Water District of Orange County] submits the following comments related to plan implementation, governance and assurances. Regulatory Assurances It is important to establish a more stable regulatory environment, which is one of the key goals of the BDCP. The BDCP offers a clear choice between a stable future and today's ineffective and adversarial species-by-species approach to regulation and ESA enforcement under Section 7 of the ESA. Under the BDCP, ESA regulations and provisions of the HCP/NCCP would provide for regulatory and economic assurances, and greater certainty for	Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. Numerous comments were received that focused on various elements of the BDCP. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. As such the proposed plan implementation process and regulatory assurances language are moot. For more information regarding the Collaborative Science and Adaptive Management Program please see

DEIRS Ltr#	Cmt#	Comment	Response
		public water supply and fish and wildlife agencies. The core Adaptive Management and Monitoring program is encouraged and should help to realize achievement of the co-equal goals. It is virtually impossible to ascertain and predict with any precision the outcome of the BDCP habitat restoration efforts and endangered species population dynamics, and such a standard should be required in the DEIR/DEIS. The BDCP must provide regulatory assurances commensurate with the significant investment to be made in both improved habitat facilities. We generally concur with BDCP Chapter 6 Plan Implementation structure and process. It is important that under the operation of the BDCP the identified changed circumstances, including the potential for new species listing, be incorporated within the BDCP with minimum impact on future water supply exports. Further, it is likely that unforeseen circumstances will be caused by factors other than water diversions. The plan recognizes this under Section 6.4.1 which states "… if unforeseen circumstances occur that adversely affect species covered by an HCP or NCCP, the fish and wildlife agencies will not require additional land, water or financial compensation or impose additional restrictions o the use of land, water or other natural resources." These provisions must be retained to assure fairness in the process.	Chapter 3 of the FEIR/EIS. For more information regarding Alternative 4 compliance with the Delta Reform Act and Alternative 4A consistency with the Delta Plan please see Appendix 3I, BDCP Compliance with 2009 Delta Reform Act, and 3J, Alternative 4A 9proposed Project) Compliance with the 2009 Delta reform Act, of the FEIR/EIS, respectively.
1551	16	Balancing and Proportionality In the discussion of Alternatives 4, 7 and 8 in DEIR/EIS Chapter 31 (starting at line 42, pg. 31-7 and ending at line 32 on pg. 31-8), the rationale for the Preferred Alternative (No. 4) is provided in terms of its balancing and proportionality between upstream salmonids, in-Delta species, and export area economy and environmental needs. In addition, the incidental take limits (ITL) should be set in some proportion to the population size of the listed species and should be adjusted accordingly based on population dynamics. This section further indicates that Preferred Alternative (No. 4) would be subject to the "scientific decision tree" mechanism to "…ensure minimization of adverse environmental effects to water exports in response to changing conditions and evolving scientific information." It is our understanding that the scientific decision tree analysis process would apply only to the delta smelt (fall outflow issue from 2008 USFWS Biological Opinion "Reasonable and Prudent Alternative") and Longfin smelt (spring outflow operations effects) (CM1). We would hope that improved data collection of the presence and abundance of thee fish be monitored over a reasonable habitat range rather than be limited to historical sampling points and procedures. We also recommend that flow changes must also be based on balancing and proportionality to the maximum extent practicable between upstream salmonids, in-Delta, and export area economy and environmental needs.	Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process. The preferred alternative no longer includes a decision tree or associated HOS, but does include a robust collaborative science and adaptive management plan designed to better understand key scientific uncertainties pertaining to Delta fish and operations, and provides a mechanism for adjustments to operations to ensure that the effects of the CVP and SWP are minimized with the new point of diversion. Initial criteria included in the preferred alternative are those that reduce reliance on the south Delta facilities once the new NDD is operational, addressing the entrainment issues that have occurred in the south Delta for several fish species, while maintaining outflows consistent with the current BiOps. For more information regarding permitting please see Master Response 45. For more information regarding the Collaborative Science and Adaptive Management Program please see Chapter 3 of the FEIR/EIS. The Lead Agencies will make the final decisions regarding the selection of an alternative (and therefore, an operational scenario) for the purposes of CEQA and NEPA. USFWS and NMFS have authority under the federal Endangered Species Act to determine whether the Proposed Project meets the regulatory standard of ESA Section 7, and CDFW, a CEQA responsible agency, has authority to determine if the Proposed Project meets the regulatory standards of CESA. Please see Section 4.1.2, Description of Alternative 4A, RDEIR/SDEIS

DEIRS Ltr#	Cmt#	Comment	Response
			for additional information on Proposed Project operations. Please see Master Response 28 and 5 for more information regarding operational scenarios and compliance with ESA respectively.
1551	17	Sound science is critical to the success of the BDCP. We (Municipal Water District of Orange County) strongly support the inclusion of independent scientific investigation and research to be included in the BDCP process. The current process of reliance on agency staffs and consultants, the Delta Science Program and independent science review panels, is very good, but it can further benefit from the inclusion of scientific investigations by researchers not part of these groups. We are also concerned that the models being used for the effects analyses may not fully consider all elements of the BDCP, as the models have recognized limitations and would likely underestimate the benefits of the BDCP. Outside expert opinions and independent research can only help the process and the process should be open to the inclusion of new scientific data and findings. We note on page 31-8 the statement "Although Alternatives 7 and 8 do not include operations base on the (scientific) decision tree concept, these two alternatives would include greater levels of guaranteed spring and fall Delta outflows, which have demonstrated strong correlations with increased abundances of Delta and Longfin smelt." We disagree with this assertion and do not believe this has been supported at an accepted scientific level. This statement should be clarified for each species where it occurs in the BDCP and DEIR/EIS. Only necessary outflows for migrating fish should be required.	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1551	18	Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP) Structure and Governance Establishing an HCP/NCCP in the Delta is the best vehicle for achieving the Delta's co-equal goals, and providing assurances that both environmental protection and water supply reliability will be achieved. It is important that the BDCP is being developed as a 50-year habitat conservation plan with the co-equal goals of restoring the Delta ecosystem and securing California water supplies. A habitat conservation plan is a proper vehicle for reaching these co-equal goals because it will bring the interested parties to the same table, and establish clear operating rules and conservation measures for the 50-year term proposed in the BDCP and its associated EIR/EIS. It is also important to note that the 50-year term proposed meets the objective declared by the Legislature in Water Code Section 85020, which requires that the water and environmental resources of the Delta be managed over the long term. There must be a strong voice for participating public water agencies in the BDCP process. There are good examples of multiple Permittee interests working collaboratively with resource agencies in southern California on Federal HCPs and State NCCP implementation. For example, the Metropolitan Water District of Southern California (MET) has Permittee status as part of a multi-state, multi-species HCP on the Colorado River because southern California's water supply reliability is tied to the success of the plan.	Please see Master Response 5 regarding governance and implementation. Numerous comments were received that focused on various elements of the BDCP. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. The EIR/EIS analyzes all alternatives, including Alternative 4A.
1551	19	In Orange County, agencies have successfully implement HCP/NCCPs incorporating assurances and representation for all participants. For example, in Orange County both the Santa Margarita Water District and Irvine Ranch Water District are participants in HCP/NCCP processes.	Please see response to Comment 706-22.

DEIRS Ltr#	Cmt#	Comment	Response
		As one of the first communities in California to implement a HCP/NCCP, Orange County and the Central/Coastal HCP/NCCP demonstrated how the private and public sectors, including water agencies, can successfully partner with the resource agencies to allow for a holistic and broad-based ecosystem approach to habitat conservation and ecological protection while allowing for appropriate development and urban planning. The Central/Coastal HCP/NCCP in Orange County has demonstrated how substantial amounts of habitat can be conserved and restored based on an ecosystem approach, which better protects biological diversity and improves habitat for species of concern. Ultimately, the use of a similar HCP/NCCP, as proposed in the BDCP, will provide better ecosystem protection and restoration outcomes in the Delta. Orange County's Central/Coastal HCP/NCCP is also a prime example of how HCP/NCCPs ensure that the habitat protection and other operating parameters agreed to an HCP/NCCP are binding on all of the parties involved. Like the process proposed in the BDCP and the long-term 50-year permit discussed in its associated documents, the Central/Coastal HCP/NCCP is a long-term agreement with a permit in effect until 2071. As the coordinating entity for the management of the 37,000-acre reserve system under the Central/Coastal HCP/NCCP, the Nature Reserve of Orange County serves the important role of working to implement the HCP/NCCP on behalf of its signatories. Its role is to ensure that the agreed upon natural communities and species are protected, and that the permit requirements for the reserve are met. After more than a decade, the Nature Reserve of Orange County has continued to bring all of the interested parties to the same table to ensure that the agreement reached in the HCP/NCCP is respected. We believe that the BDCP HCP/NCCP can do the same for the interests in the Delta.	
1551	20	Authorized Entity Group Permitees, such as water providers, must have strong voice in the governance of the BDCP because water providers have a huge vested interest in the success of the effort as they are directly affected by the risk to water supply by its failure. Permittees are currently envisioned as key members of the "Authorized Entity Group" which, according to the BDCP documents, "will provide input and guidance on general policy and program-related matters, monitor and assess the effectiveness of the Implementation Office in implementing the Plan and foster and maintain collaborative and constructive relationships with fish and wildlife agencies, other public agencies, stakeholders, local governments and interested parties." This is good and effective governance and these provisions must be retained in the final plan.	Please see Master Response 5 regarding governance structure and implementation. Numerous comments were received that focused on various elements of the BDCP. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. The EIR/EIS analyzes all alternatives, including Alternative 4A.
1551	21	Permit Oversight Group Our understanding is that the Permit Oversight Group, consisting of representatives of state and federal fish and wildlife agencies, will ensure "that the BDCP is being properly implemented." This group has "final decision-making about real-time operations." The Permit Oversight Group is apparently empowered to shut down the water exports and change the permits without Permittee recourse. We believe this is flawed and inconsistent with meeting the co-equal goals. In early administrative draft version of the plan that were available to the public, there was an appeal process that would enable decisions to be reviewed by the Secretary of the Interior and Secretary of Commerce. We believe this appeals step is critical as Orange County and other across the state substantially depend on the SWP [State Water Project]	Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. See Master Response 5 for more information regarding the BDCP and the Preferred Alternative. As such the proposed plan implementation structure is moot. The Lead Agencies will make the final decisions regarding the selection of an alternative (and therefore, an operational scenario) for the purposes of CEQA and NEPA. USFWS and NMFS have authority under the federal Endangered Species Act to determine whether the Proposed Project meets the regulatory standard of ESA Section 7, and CDFW, a CEQA responsible agency, has authority to determine if the Proposed Project meets the regulatory standards of CESA. Please see Section 4.1.2, Description of Alternative 4A, RDEIR/SDEIS

DEIRS Ltr#	Cmt#	Comment	Response
		for their water supply. This change from earlier drafts would impose an unacceptable veto power without adequate recourse. The appeals process must be provided as before. Our concern Is best alleviated via a balanced process including the ability for appeals. The process must avoid the more rigid and case-by-case Section 7 consultation approach that we have experienced and the uncertainty it can create. The investment is too great to be vulnerable to unilateral actions driven solely by regulators without allowing the functioning of the BDCP plan to achieve the co-equal goals. As currently written, this provision appears to undermine the BDCP, and it needs to be revised along the lines as described.	for additional information on Proposed Project operations. Please see Master Responses 28 and 5 for more information regarding operational scenarios and compliance with ESA respectively. For more information regarding the Collaborative Science and Adaptive Management Program please see Chapter 3 of the FEIR/EIS. For more information regarding Alternative 4 compliance with the Delta Reform Act and Alternative 4A consistency with the Delta Plan please see Appendix 3I, BDCP Compliance with the 2009 Delta Reform Act, and 3J Alternative 4A (Proposed Project) Compliance with the 2009 Delta Reform Act, of the FEIR/EIS, respectively.
1551	22	Salinity Control Before construction of the CVP [Central Valley Project] and the SWP [State Water Project] reservoirs, salinity intrusion far into the Delta was a common occurrence during very dry years. Since the construction of Shasta and Oroville Reservoirs and with the 1978 SWRCB D-1485 water quality control decision, the CVP and SWP have provided broad salinity control benefits to the Delta that have helpd to protect in-Delta agriculture and domestic uses as well as export water quality, even as San Joaquin River flows were depleted by upstream diversion. We concur that salinity control is an important component of the BDCP. We also note that natural variability must be recognized within the BDCP and some relaxation of salinity control objectives must be allowed during severe droughts. In addition, with future sea level rise, the BDCP needs to provide for a gradual relaxation of the X2 salinity control point, as releasing more and more stored water, which is made possible by both the CVP and SWP, will cause increasingly greater shortages in water supply at increasingly greater economic impact to the state. The estuary would be expected to shift upstream with sea level rise and this should be accounted for in the 50-year permit period. The BDCP must recognize that the existing Delta agricultural areas may require some form of land use conversion into the future.	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1551	23	Recognize need for additional upstream storage. While not part of the BDCP plan, additional storage north and south of the Delta will be critical concurrent with improvements in conveyance to enable capture of high flows during wet periods for subsequent use. Additional storage will be especially important during periods of prolonged drought. Such facilities would be of statewide and national benefit, and both the State and federal government should financially contribute to their development. The BDCP should recognize the need for additional upstream and downstream surface storage to realize the full benefits of Preferred Alternative (No. 4). We support the development of future storage projects as stand-along projects outside of the BDCP Plan to help with meeting the co-equal goals.	Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. Please see Master Response 37 regarding why an alternative focused on creating additional storage, either in the Delta or elsewhere, was not included in the FEIR/EIS. Please see Master Response 4 for discussion of the scope of the proposed project and alternatives (such as water storage) that were not carried forward for analysis in this document due to the fact that required actions beyond the scope of the proposed project.
1551	24	Scientific Decision Tree and Project Yield: The BDCP holds the potential to stabilize SWP [State Water Project] and CVP [Central Valley Project] annual deliveries to between a range of 4.7 to 5.6 MAF [million acre-feet]. (Prior 20-year average deliveries were 5.2 MAF) and to stabilize them within this range over the 50-year permit period, but this depends upon the future outcome of "Scientific Decision Tree" studies that will refine future spring and fall outflows. The BDCP indicates that	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could

DEIRS Ltr#	Cmt#	Comment	Response
		without the BDCP the Delta will continue in ecosystem decline, future deliveries would be reduced between 3.4 to 3.9 MAF as the result of new listings, higher requirements for outflows during wet and above-normal precipitation years would be required, and using fixed limits on take rather than proportionate take based on actual population size and dynamics would be likely. The Decision Tree process is critical; water agencies require a seat at the table to represent the water supply and economic interests of the public that we, as public agencies, serve. Further, the water agencies have a high level of interest in ensuring that adaptability will result in regulatory agencies working collaboratively with the Permittees as provided for under the state and federal ESA laws for Habitat and Natural Community Conservation Plans. It is important to ensure that the process is not skewed and has not established pre-determined outflows and compliance locations.	function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1551	25	Plan Implementation and Regulatory Assurance: The BDCP must provide the needed implementation and regulatory structure and assurances to help achieve the co-equal goals. MWDOC [Municipal Water District of Orange County] submits the following comments related to plan implementation, governance and assurances. The BDCP and the 9,000 cfs [cubic feet per second] three intake, twin tunnel conveyance system would significantly improve export water quality by reducing total dissolved solids (TDS), bromide, dissolved organic carbon (DOC) and other contaminants that currently impact the south Delta. This is especially important for Orange County for a broad range of water management purposes. It is our understanding that future SWP [State Water Project] deliveries under the Preferred Alternative (No. 4) would realize a reduction in concentrations, on average, of approximately 20 percent from existing conditions. Reductions in TDS, bromide and DOC will help to sustain Orange County's groundwater basins, enhance recycling usage, and reduce treatment and consumer costs. Improving source water quality is an important value of the BDCP. Reductions in DOC and bromide in SWP water will lower disinfection by-product formation in public water systems. Compliance with these U.S. Environmental Protection Agency and California Department of Public Health regulated compounds requires expensive water treatment to meet public health requirements. Reducing DOC levels will also reduce chemical and energy usage in ozone or chlorine based disinfection processes saving the ratepayer money and reducing environmental impact. Further, given the high TDS and hardness levels in Colorado River water, lower TDS and softer SWP water is essential to help manage the long-term salt balance in southern California and Orange County groundwater basins, thereby, minimizing treatment costs, reducing penalty costs to consumers, and lowering the cost of recycled water projects. Lower TDS source water helps many of the elements of our Southern California reliability strategy, as well as achieving compliance with Regional Water Quality Control Board Basin Plan objectives and discharge limitations.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S. Please refer to Master Response 3 for a full discussion of the project's purpose and need.
1551	26	Water Quality Improvements and Regional Compliance with Section 85021 The Water Code directs that "Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts", reference California Water Code Section 85021. Orange County and Southern California have	The lead agencies acknowledge the comment's support for the BDCP.

DEIRS Ltr#	Cmt#	Comment	Response
		complied with the California Water Code by taking great strides to improve its regional self-reliance, but the BDCP and a reliable supply of imported water is still needed. Many of the opponents of the proposed BDCP process state that development of local supplies, water reuse, conservation and water use efficiency can take the place of the supply and reliability projects proposed in the BDCP. The reality is that the solution to California's water problems requires action on all of these fronts in addition to the BDCP. While California should continue to develop local supplies, improve water reuse, and move towards greater water use efficiency and conservation, those efforts would be hampered without the BDCP Preferred Alternative (No. 4) and the water quality improvements which will be obtained as a result of those projects and changes in operations. Expected water quality improvements in SWP supplies from the BDCP in reduced salinity, total organic carbon and bromide would result in water quality benefits and would promote water recycling and reuse. A reduction at the source means that these water quality challenges are less of a problem once the water is recycled, and would allow for better quality in the recycled water produced in Orange County and Southern California. A better quality recycled water will allow water to be used for a greater number of cycles. Orange County's future depends on high quality, reliable and affordable imported water supplies. If we do not have the expected high quality and reliable supply from the SWP that would be made possible by the BDCP, it would seriously jeopardize groundwater basin management and expanded local recycling projects, many of which may not be economically feasible without the high quality water received from the SWP. Moreover, a high quality SWP supply also supports long-term economic management and protection of groundwater basins from salinization and reduces overall consumer penalty costs from corrosion and scaling.	
1551	27	Cost Allocation: MWDOC supports the "beneficiary pays principle" in cost allocation for all responsible parties and beneficiaries All beneficiaries and responsible parties of the BDCP must contribute to the solution, including any diverter of water from the system (north or south of the Delta). Moreover, in Delta interests have been significant contributors to the modification of habitat, continue to discharge pollutants into the waterways, have caused the subsidence of the Delta islands and need for ever higher and unstable levees that risk both habitat and exports, and have benefited from operations of the projects. Accordingly, these interests have a moral and financial responsibility to directly participate in any solutions as do other responsible parties. Where habitat is to be created by modifying or restoring Delta islands to a more natural state, the in-Delta interests should work collaboratively to facilitate such actions. Further, any recipient of water should pay the cost of water conveyance improvements in line with the proportion of overall water supplies they receive. Economic values associated with end uses of the water should have no bearing on the cost allocation of the BDCP; it is solely a matter of paying one's share of the cost of development of the water supply. Furthermore, all Californians will benefit from a solution in the Delta through the improved habitat and reliable water supply that will be created; a stronger overall economy benefits everyone. Consequently, the State and federal government should step up to fund the costs of environmental and habitat improvements as well as providing funding support for flood	Funding of the BDCP is described in detail in Chapter 8, Section 8.3, Funding Sources, BDCP. In particular, Table 8-37 shows estimated cost allocations by entity, source, and project component. As shown, participating state and federal water contractors who would receive the direct benefits of the construction, operation, and maintenance of the water conveyance facilities (Conservation Measure 1) would pay for the entire estimated $16 billion in construction costs. The remaining costs (about $9 billion), which would pay for environmental and habitat improvements (Conservation Measures 2-22), whose benefits would be more widely shared by all Californians, would be funded by a variety of sources, including participating state and federal water contractors and a combination of state and federal funds. Numerous comments were received that focused on various elements of the BDCP. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Please note the preferred alternative is now Alternative 4A and no longer includes an HCP or conservation measures. Alternative 4A has been developed in response to public and agency input. The EIR/EIS analyzes all alternatives including Alternative 4A. Please see Master Response 5 for a discussion of project funding.

DEIRS Ltr#	Cmt#	Comment	Response
		control, levee improvements, fisheries, invasive species control and other programs within their jurisdictions.	
1551	28	Economy, Environment and Water Management: The State Water Project is critically important to the Orange County economy, environment and water management. Economic Irnpacts The BDCP and DEIR/DEIS "No Project Alternative" analysis should include an evaluation of the economic impact of not strengthening California's water supply and the impactthat "no action" has on the state's economic hubs as part of its overall evaluation. The BDCP evaluates the economic impact of the project's potential for growth inducement; however, it does not adequately take into account the economic impact of failing to secure water reliability for the state's economic centers. MWD OC urges inclusion of these impacts. The economy of California is largely driven by economic activity in the San Francisco Bay Area and Southern California. To put the economic contributions of these areas in perspective it is important to note that Los Angeles and Orange counties contribute roughly $766 billion to California's gross state product (GSP). The Bay Area contributes $534 billion, and San Diego County contributes $177 billion. These three areas alone comprise nea rly 75% of the state's $2 trillion GSP. Orange County has a population of 3.1 million people, approximately eight percent of California's entire population, and an economy with a gross domestic product of about $200 billion or 10 percent of the state's overall economy of $2 trillion. Orange County's share of California's non-farm businesses was about 10 percent in 2011, and in 2007 Orange County accounted for $49 billion (10 percent) of California's manufacturer's shipments and $98 billion (16 percent) of California's merchant wholesaler sales. In addition, Orange County is a major regional employment, higher education and tourism center. Orange County is an economic powerhouse for the state; the lifeblood of any economy is a reliable and secure water supply. MWDOC's [Municipal Water District of Orange County's] 2010 Urban Water Management Plan indicates water demand for municipal and industrial use is expected to increase from approximately 485,000 acre-feet per year (AFY) to nearly 568,000 AFY by 2035. For all of Orange County, the total demand of 627,000 AFY is expected to increase to 726,0 00 AFY by 2035. Regional and local innovative programs and investments in water use efficiency have saved an estimated 75,000 AFY to date in the county.	Please note that the socioeconomic effects of the No Action Alternative were qualitatively addressed for the South-of-Delta hydrologic units in Section 16.3.3.1, No Action Alternative, EIR/EIS. Furthermore, please note that the employment effects of increased water supply reliability under the proposed project were estimated in Section 5.2.4, Employment Impacts of Water Reliability, Bay Delta Conservation Plan Statewide Economic Impact Report. In effect, these estimates of employment gains attributable to stabilizing water supplies under the proposed project can also serve to characterize potential employment losses under future No Action conditions.
1551	29	The San Francisco Bay Area and Southern California depend heavily on the Bay-Delta with nearly one third of their water supplies coming from Delta exports, and the economic vitality of these areas is dependent upon a secure and reliable water supply. The bottom line is that a dependable water supply is essential to business operations and expansion that will continue to strengthen our state's economy and increase employment. The BDCP should take into account the economic cost of not providing a secure and dependable water supply in its economic impacts analysis. Given the importance of Southern California and the Bay Area to California's economy, the cost of no BDCP, without the Preferred Alternative	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable

DEIRS Ltr#	Cmt#	Comment	Response
		(No. 4), would be extremely large and would greatly exceed any economic benefits of other alternatives that were considered. It is also noteworthy that the Delta is a key water supply for 25 million California residents, largely located in the economic centers discussed above. The risk of a large earthquake in Northern California causing severe damage to the Delta grows greater with each day a comprehensive Delta solution is not implemented. If the State and federal government do not move forward on the BDCP, we are risking great environmental damage, a loss of substantial water supply to more than two-thirds of California's residents and businesses, and associated economic losses into the future.	range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1551	30	We risk severe and possibly permanent damage to our State's agricultural economy. The water from the Delta supports more than 5 million acres of California agriculture. These 5 million acres represents more than 80 percent of the United States' food production and more than 500,000 jobs. Loss of water as a result of failure in the Delta will mean California's agriculture will lose an essential water supply. That loss of water will result in millions of acres of unproductive land and a loss of jobs in communities which have already suffered great losses as a result of our most recent economic downturn and during the current severe drought. Without implementing the comprehensive environmental and conveyance solution proposed by the BDCP, we risk permanent damage to California's $44.7 billion agriculture industry.	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1551	31	The development of a secure and reliable water supply for the citizens of California is important to the economic vitality of our state. The BDCP will provide stability in California's water infrastructure by providing a process that can result in a more dependable, high quality SWP water supply.	Please see response to comment 1551-30.
1551	32	Orange County Environment and Water Management The recent droughts of 1977-78, 1987-92, 1999-00, 2007-08 and the current drought demonstrate the precarious nature of the federal, state, regional and local water supply systems serving California. Throughout the state, the current acute drought, natural climate variability and climate change, agricultural cutbacks due to lack of water and continuing groundwater overdraft, increasing population and need for an ever growing economy, have brought to the light that water supply solutions and challenges are looming larger and more complex. This has led many to an increasing recognition that we have entered an era of uncertainty and potential era of water scarcity if we do not plan for the future. Recent droughts and a greater understanding of climate change impacts have demonstrated that supply uncertainty and variability pose great risks to our economy and the natural environment. We remain confident that we have the combined ability to help solve these long-term problems. One key part of this solution is to fix the "broken Delta" through the program developed and recommended in the BDCP.	Please see response to comment 1551-30.
1551	33	MWDOC [Municpal Water District of Orange County] and its member agencies have made significant investments in local resources and water management. Orange County water	The Final EIR/EIS acknowledges a wide range of water conservation by municipal water agencies, such as in Orange County, in accordance with the State law. In addition, the proposed project is intended to be a part

DEIRS Ltr#	Cmt#	Comment	Response
		agencies are recognized leaders in water use efficiency, storm water conservation, groundwater basin management, wastewater management, water recycling and reuse, and advanced water treatment technologies. In north Orange County, the Orange County Water District is recognized as a world leader in indirect water recycling through their award winning Groundwater Replenishment System, a project that now recycles 72,000 AFY, is under construction to be expanded to recycle 100,000 AFY with plans to recycle up to 130,00 0 AFY [acre-feet per year] in the near future. These programs with imported water enable OCWD groundwater producers to meet about 70% of their water supply needs from the groundwater production. Conjunctive use of the basin with imported water and its utilization remains dependent on the availability of high quality imported water that can be replenished during wet periods. Through innovative, multi-agency approaches, MWDOC and its agencies develop, implement, and evaluate water use efficiency programs that provide multiple benefits, including improved irrigation efficiency, increased utilization of California Friendly landscapes, and pollution prevention through programs that help to reduce dry weather urban runoff. Our programs include educational classes on water-wise landscaping, irrigation performance reporting, water use surveys for hotels and industrial customers, and consumer incentives for water-efficient devices. To evaluate the effectiveness of such devices, MWDOC conducts studies to monitor water savings and urban runoff reduction. Through these efforts, Orange County's water use today is less than it was in 1990 even with population growth of 683,000 and jobs growth of 204,000 respectively. Overall, MWDOC has documented conservation of about 75,000 AF per year (active and passive). Despite these efforts, Orange County is still reliant on purchases of imported water from MET [Metropolitan Water District of Southern California] to meet about 45 percent of our current needs. About one-half this need is met from the SWP. South Orange County is much more reliant on imported water, having few local resources other than water recycling and a few small groundwater basins that are nearly fully developed. Regional recycling planning is underway to evaluate how best to maximize the use of recycled water in South Orange County. In addition, studies are underway for evaluating the feasibility of augmenting the groundwater supply from the San Juan Creek alluvial basin through replenishment with recycled water. The southern portion of Orange County despite its best efforts remains heavily dependent upon the Delta. A number of retail agencies in south Orange County are recognized leaders in water use efficiency and conservation based rate structures, water recycling, and water reliability projects. For example, Irvine Ranch Water District, Moulton Niguel Water District, El Toro Water District, Santa Margarita Water District, Trabuco Canyon Water District and the cities of San Juan Capistrano and San Clemente are recognized leaders in water recycling and management through the use of dual distribution systems and community planning.	of a state-wide solution to California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Water Demand Management).
1551	34	Orange County ratepayers have invested heavily in local resources in past years both directly and through MET [Metropolitan Water District of Southern California]. These	The Lead Agencies recognize the investments made to more efficiently use existing supplies, develop additional local supplies, and to store water for use during dry years.

DEIRS Ltr#	Cmt#	Comment	Response
		investments through MET water supply purchases helped fund the $2 billion Diamond Valley Reservoir and $1 billion Inland Feeder that allow SWP deliveries during wet periods to be delivered into storage Southern California reservoirs. In addition, at least $1 billion in local recycling and groundwater recovery projects have been made, including water use efficiency and conjunctive use since 1991. Combined, these investments provide the ability to efficiently use existing supplies, develop additional local supplies, and to store water in wet years for subsequent dry year use.	
1551	35	Orange County is exploring ocean desalination, another potential local supply. It is also a key feature of planning in Orange County with the innovative subsurface intake system being examined for the planned 15 million gallon per day Doheny Ocean Desalination Project in Dana Point and permitting of the 50 million gallon per day Poseidon Resources desalination plant in Huntington Beach. Despite all of these efforts and investments, Orange County will continue to be dependent upon imported water. Completion and successful implementation of the BDCP is paramount to achieving the reliability that supports water management in Southern California. These local investments have helped meet the water needs of a growing productive population and reduced the otherwise growing pressure on water imports - our agencies should not be "penalized" by additional mandated investments that do not recognize and account for investments that have already been made.	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1551	36	The "Implementing Agreement" is necessary to provide a contractual, legally-binding agreement that spells out the commitments and assurances as well as the terms and conditions for on-going implementation of the BDCP. Given the high level of BD CP investment, the water community needs reasonable certainty regarding the expected amount of water supply to be restored that was lost as a result of the 2 008 Biological Opinions. It should be clearly recognized in the implementation structure and agreement decision-making process that the new, screened North Delta intake system will not only greatly improve salinity control and water supply reliability from catastrophic levee failure and future sea level rise, but will avoid entrainment losses of fish as well as minimizing impingement losses from current south Delta diversions. In addition, the new intake system will provide much needed operational flexibility that will enable significant protections to endangered species as well as maintaining environmental and water quality benefits to the south Delta that are provided by the SWP and CVP. These benefits will be made possible through the ability to curtail south Delta endangered species take by changing the timing and diversion rate by use of the new North Delta intake system. Currently, endangered species take by the existing south Delta unscreened forebay diversion operations are controlled by reducing exports. The BDCP will provide a physical means to minimize south Delta diversions. In addition, the added operational flexibility will result in greatly reduced reverse flows and related, improved south Delta water quality, and improved export water quality. The Implementing Agreement needs to recognize these benefits to allow export diversions to be restored.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4).

DEIRS Ltr#	Cmt#	Comment	Response
1551	37	Comments In Support of Current Language (Areas where we agree with current Implementing Agreement provisions that should not be changed in ways that would weaken protections to water exports) Permit Oversight Group Members. It is appropriate that the state and federal fish and wildlife agency members of the Permit Oversight Group be either the named directors or administrators or designees that are duly authorized to exercise their authority. Delegation to staff members without such authority would lead to inefficiencies and decision-making gridlock.	Please see Master Response 45 for more information on permitting and Master Response 29 for more information on compliance of the proposed project with ESA. No additional response related to permit oversight group is required because no comments on the EIR/EIS are presented.
1551	38	Comments In Support of Current Language (Areas where we agree with current Implementing Agreement provisions that should not be changed in ways that would weaken protections to water exports) Real Time Operations Purpose. The stated purpose of Real Time Operations of "maximizing conservation benefits to covered fish species and maximizing water supplies" is appropriate. This reflects a fundamental purpose of the BDCP of restoring and protecting water supplies, and acknowledges that real time operations is a tool that can benefit water supply as well as fish species.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	39	Comments In Support of Current Language (Areas where we agree with current Implementing Agreement provisions that should not be changed in ways that would weaken protections to water exports) Real Time Operations Ultimate Decision. In the event of disagreement among agency directors over a proposed Real Time Operations adjustment, it is appropriate that the adjustment will not be made.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	40	Comments in support of current language (areas where we agree with current Implementing Agreement provisions that should not be changed in ways that would weaken protections to water exports). Adaptive Management Team Membership. Given the SWP and CVP Contractors' extensive responsibility in funding and implementing the Plan, it is fully appropriate that one SWP Contractor and one CVP Contractor be designated as voting members of the Adaptive Management Team.	Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. See Master Response 6, which notes that BDCP is no longer part of the Preferred Alternative. Accordingly the Adaptive Management Team is no longer proposed as an administrative entity. For more information regarding Implementation Structure please see the 2013 BDCP Public Draft Chapter 7. For more information regarding the Collaborative Science and Adaptive Management Program please see Chapter 3 of the FEIR/EIS.
1551	41	Comments In Support of Current Language (Areas where we agree with current Implementing Agreement provisions that should not be changed in ways that would weaken protections to water exports) Funding from the State of California and the United States. Consistent with the Planning Agreement and in recognition that the BDCP is a comprehensive and ambitious plan that provides significant benefits to the public generally, the Implementing Agreement appropriately provides that the State of California and the United States will be responsible for funding the Plan where not otherwise funded by the Authorized Entities.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	42	Comments in support of Current Language (Areas where we agree with current Implementing Agreement provisions that should not be changed in ways that would weaken	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the

DEIRS Ltr#	Cmt#	Comment	Response
		protections to water exports) Regulatory Assurances. The Implementing Agreement appropriately includes provisions that provide the Permittees with No Surprises and other assurances and protections, consistent with Endangered Species Act (ESA) and Natural Communities Conservation Planning Act (NCCPA) law and regulation.	primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	43	Comments In Support of Current Language (Areas where we agree with current Implementing Agreement provisions that should not be changed in ways that would weaken protections to water exports) Assurances Provided to Reclamation. Given Reclamation's integral role in the BDCP and in coordinated CVP/SWP operations, the assurances provided to the Bureau of Reclamation against additional expenditures of resources, to the maximum extent possible, are appropriate.	Please see response to Comment 1551-42.
1551	44	Ultimate Decision Making Authority and Signatories to the Implementing Agreement. (Page 1). It is not clear who will be obligating the commitments of the United States and the State of California that are beyond those of the Authorized Entities. It is recommended that the Secretary of the Interior and the Governor sign the agreement to help ensure that those commitments will be met. As stated in Section 1.0 of the Implementing Agreement, the level of agency signatory has not been determined and will be considered further. Staff suggests that the Governor, Secretary of the Interior, and the Secretary of Commerce should be the signatories for the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and the National Marine Fisheries Service, respectively. By having the Governor and the Secretaries sign on behalf of these state and federal agencies, it helps ensure that the United States government and the State of California live up to their obligations under the Implementing Agreement. As for the Authorized Entities (Department of Water Resources and State Water Project/Central Valley Project Contractors), it is more clear as to who has the ability to legally bind these entities. At minimum, when conflicts arise, decision-making must be moved to the highest levels possible.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5 which addresses comments on the BDCP.
1551	45	Covered Species, page 7, Sections 3.20 and 8.5.1, of the Implementation Agreement [IA], define Covered Species, as listed in Exhibit A. Since those species listed in Exhibit A link directly to the species for which the Permittees have been given "no surprises" protection, Exhibit A is important to understanding the risk being undertaken by the Permittees. Exhibit A was not attached to the IA, and should be released for review before the parties enter into the IA. Listing of all known species is critically important to provide broad coverage. Furthermore, amended language is needed to allow incorporation of currently unknown native species as Covered Species where restoration activities are shown to provide a benefit without going through the full amendment process. It is critical that the listing of Covered Species is as broad as possible based on current science and is sufficiently flexible to assure an efficient process.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	46	Unforeseen Circumstances. (Page 10). Section 3.51 of the Implementing Agreement defines "Unforeseen Circumstances" as those "changes in circumstances affecting a Covered Species or geographic area covered by the BDCP that could not reasonably have been anticipated by the Permittees, USFWS, or N M FS at the time of the BDCP's negotiation and	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA,

DEIRS Ltr#	Cmt#	Comment	Response
		development, and that result in a substantial and adverse change in the status of a Covered Species." Since the reasonably foreseeable changes in circumstance have been included in the BDCP, the definition should be modified to state that unforeseen circumstances are those "changes in circumstances affecting a Covered Species or geographic area covered by the BDCP that could not reasonably have been anticipated by the Permittees, USFWS, or NMFS at the time of the BDCP's negotiation and development, and were therefore not included in the BDCP, and that result in a substantial and adverse change in the status of a Covered Species."	please see Master Response 5.
1551	47	Bureau of Reclamation's Role. (Page 15). The Bureau of Reclamation is not a party to the Implementing Agreement. Section 5.0 of the outlines the role of the Bureau of Reclamation. It states that the Bureau will enter into a Memorandum, or similar agreement, with the Parties of the Implementing Agreement outlining the Bureau's roles and responsibilities. This memorandum or similar agreement should be attached to the Implementing Agreement as an exhibit and incorporated by reference into the Implementing Agreement, and this section should be changed to reference that exhibit.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	48	Take Authorizations. (Page 19). Section 8.2: Other Authorized Entities - Section 8.2 recognizes that certain third parties may seek take authorizations under the BDCP for ongoing operation of water diversions that are not associated with the SWP or CVP. These parties will be considered Other Authorized Entities. A sentence should be added clarifying that SWP/CVP Contractors shall not be held liable or be asked to take actions by USFWS, NMFS or CDFW as a result of Other Authorized Entities violating the terms and conditions of any take authorization issued by the Department of Water Resources. Also, the section references Exhibit C. Exhibit C has not been released, and should be released prior for review to finalization of the Implementing Agreement. Implementation and Conservation Measures Definitions - The definition of "Implementation" is not provided under the Definition section. It should be noted that it includes construction and operation /maintenance over the 50 year term of the permit. The definition of "Conservation Measures" should be more clearly defined that their implementation means that they meet the "maximum extent practicable" test.	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1551	49	Neutrality of Permitting and Decision Tree Outcomes. (Page 24). The provision related to Decision Tree Outcomes includes a reference to permit terms and conditions including the operational and flow criteria related to the high-outflow scenario. All Decision Tree outcomes should be described at an equal level of detail and fully evaluated with sound science before a decision is made. The high outflow scenarios should not be predisposed as being the permitted outcomes to be included as permit terms and conditions. Refer to MWDOC's [Municipal Water District of Orange County's] BDCP comment letter which raises this issue under "Balancing and Proportionality" and its importance with regard to the issue of outflows and an expanded monitoring program over a reasonable habitat range compared to the historical narrow and limited monitoring program that in all likelihood has understated the Delta an d Longfin Smelt populations as well as the effect of other stressors. Improved scientific understanding of the stressors impacting the smelt population is needed.	Alternative 4, which includes the decision tree, is no longer the preferred alternative. However, the potential effects of the range of outcomes included in this alternative are described in the RDEIR/SDEIS. The preferred alternative is now Alternative 4A.
1551	50	Real-Time Operations Adjustments (Page 27-29). Real time operations decisions should not	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and

DEIRS Ltr#	Cmt#	Comment	Response
		compromise the discretion of the Project Operators to maximize water supply benefits provided the requirements of BDCP are being met. Where exports are reduced due to real time adjustments, they should be made up later in the year through additional exports, so as to remain neutral. Given the SWP and CVP Contractors' vested interest and expertise in water operations, one SWP Contractor and one CVP Contractor should serve as voting (not non-voting) members on the Real Time Operations Team.	responsibilities of the various agencies under the BDCP (Alternative 4). For more information on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	51	Adaptive Management (Page 29-30). It is not clear how the limits for n on-flow actions of Adaptive Management will be defined. A monetary cap for n on-flow Adaptive Management Actions needs to be established. For water operations, the Implementing Agreement lists four resources sources and their priority of use. These sources are not defined and specifics on how they would be used and managed are not provided.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	52	Reserve System Lands and Funding (Page 42). The maintenance requirements/costs for the tunnels have not yet been finalized. Before implementation is begun, the cost and cost allocation for the Preferred Alternative (Alt. No. 4) should be fully understood. The final costs and performance objectives of the conveyance system must be reflected in contractual agreements to provide certainty that investments in the conveyance facilities result in adequate returns for State and Federal water contractors. This comment should also be addressed as it relates to the amount and who funds the non-wasting endowment required in Section 11.4.1.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	53	Changed Circumstances (Page 44). As the Implementing Agreement states, "Ecological conditions in the Delta are likely to change as the result of future events and circumstances that may occur during the course of the implementation of the BDCP." Section 12.0 should include a "no surprises" statement guaranteeing Permittees that the Fish and Wildlife Agencies will not require the permit holder to provide any additional land, water, or financial compensation nor impose additional restrictions on the use of land, water or other natural resource without the Permittee consent provided the Implementation Office acts as required in Section 12.1. Also there does not appear to be a division of responsibility between the Authorized Entities and the State and federal governments for implementing responses to Changed Circumstances. This should be addressed. Contributions for a changed circumstance action for any particular Conservation Measure should be on a pro-rata basis according to the overall funding for that measure.	Please see response to Comment 1551-46.
1551	54	Inadequate Funding and Rough Proportionality. (Page 47). Section 13.2 Inadequate Funding references the requirement for rough proportionality and permit suspension and revocation. This section needs to be revised as discussed below. Timing - The Implementing Agreement provides only 45 days to regain rough proportionality or develop an acceptable plan to do so. Given the scope and complexity of the BDCP, this timeframe is unreasonably short and unrealistic.	Please see response to Comment 1551-47. A specific metric is not required to determine when a failure of rough proportionality may trigger the suspension or revocation of the state or federal permit, in whole or in part. As described in BDCP chapters 6, 7, and 8, the state and federal wildlife agencies will work closely with the permittees to ensure that the BDCP is implemented properly and that adequate state and federal funds are being provided to ensure its success. If these state and federal funds are insufficient to meet the commitments in the plan, contingencies such as those described in Section 8.4.2 would be put in place. Note that the preferred alternative (Alternative 4A) no longer includes BDCP. The preferred alternative no longer requires that an IA be

DEIRS Ltr#	Cmt#	Comment	Response
			prepared.
1551	55	Inadequate Funding and Rough Proportionality. (Page 47). Section 13.2 Inadequate Funding references the requirement for rough proportionality and permit suspension and revocation. This section needs to be revised as discussed below. Suspension and Revocation Standard - No metric is provided for when a failure of rough proportionality would trigger a partial suspension or revocation of the Permits. Consistent with the shortfall in funding provision, a failure to maintain rough proportionality due to a shortfall in state or federal funding should not be a basis for partial suspension or revocation of the permits provided the Permittees are fully meeting their obligations.	Please see response to Comment 1551-54.
1551	56	Inadequate Funding and Rough Proportionality. (Page 47). Section 13.2 Inadequate Funding references the requirement for rough proportionality and permit suspension and revocation. This section needs to be revised as discussed below. Minimal Effect - Consistent with "no surprises" assurances, the Implementing Agreement should provide that as long as the Permittees are fully meeting their obligations, the permits may not be revoked or suspended. At a minimum, the meaning of "more than a minimal effect" needs to be defined in order to protect the Permittees' from backstopping the obligations of the state and federal government.	Please see response to Comment 1551-54.
1551	57	Inadequate Funding and Rough Proportionality. (Page 47). Section 13.2 Inadequate Funding references the requirement for rough proportionality and permit suspension and revocation. This section needs to be revised as discussed below. Funding Shortfalls - Section 13.2 states that "In the event of a shortfall in State or federal funding, a Fish and Wildlife Agency(ies) shall not suspend or revoke the State and/or Federal Permits or invalidate Reclamation's take statement if the shortfall in funding is determined to be likely to have no more than a minimal effect on the capacity of the Plan to advance the biological goals and objectives." This language allows the Permittee's permits to be revoked as a result of something outside of their control -- this needs to be changed to protect the Permittees. Also, the funding obligations of California and the United States are lumped together. The funding split between California and the United States needs to be identified.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	58	Authority of the Fish and Wildlife Agencies. The Fish and Wildlife Agencies maintain too much authority in decision-making with respect to Plan implementation based on their defined roles in the Permit Oversight Group and Adaptive Management Team. The proper role for the Fish and Wildlife Agencies with respect to Plan Implementation is advisory and to insure overall compliance with permit requirements.	This comment is related to permitting decisions and what agency roles in decisions making should be. No comments on the EIR/EIS content or environmental review process are presented and no additional response is necessary.
1551	59	Miscellaneous Provisions (Page 88 -93). The following provisions should be included in this section. Provision Needed Regarding Inconsistent Permits by State Board/Others - An "off-ramp" provision should be provided in the event permits inconsistent with the BDCP are ultimately issued by the State Water Board or others (e.g., USACOE).	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For more information on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	60	Miscellaneous Provisions (Page 88 -93). The following provisions should be included in this section.	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various

DEIRS Ltr#	Cmt#	Comment	Response
		Provision Needed Regarding Consistent Positions in Other Regulatory Proceedings - A provision is needed wherein the Parties agree not take positions inconsistent with the BDCP in other documents an d proceedings such as under NEPA, CEQA, Clean Water Act, Porter-Cologne Water Quality Control Act, and California Water Code.	elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1551	61	On page 45, the second paragraph under Section 13.0 indicates that the Permittees agree to provide such funds as may be necessary to carry out their obligations under the BDCP. This indicates an unlimited funding commitment and this is incorrect and should be clarified as noted under Section 13.1 of the Implementing Agreement.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For more information on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1551	62	On page 64 [of the Implementing Agreement], Stakeholders Council should also include at least one representative from Southern California in addition to Metropolitan Water District of Southern California.	This comment addresses the 2014 Draft Implementing Agreement (IA), a document detailing the roles and responsibilities of the various agencies under the BDCP (Alternative 4). For detailed responses on the primary issues being raised with regard to the IA, as well as a discussion of the current status of the IA, please see Master Response 5.
1552	1	The Sacramento Stormwater Quality Partnership (Partnership) appreciates this opportunity to provide comments on the December 13, 2013 Bay Delta Conservation Plan (BDCP) Public Review Draft and the associated Draft Environmental Impact Report/Environmental Impact Study (EIR/EIS), which incorporates the BDCP (EIR/EIS, page 1-2, footnote 3). The Partnership's review and comments focus on items that will affect operation of the Partnership's stormwater management programs, including those that impact water quality and the science and governance entities that would play an important role in protecting the Sacramento River-San Joaquin River Delta (Delta). The Partnership is comprised of the County of Sacramento and the incorporated municipalities that are co-Permittees in the municipal separate storm sewer system (MS4) National Pollutant Discharge Elimination System permit (NPDES No. CAS082597, Order No. R5-2008-0142). Many of these agencies are also submitting comments in separate letters; however, this letter specifically addresses the proposed Conservation Measure 19 (urban stormwater treatment) and other issues that would have significant impacts on our municipal stormwater programs. Comments in this letter are applicable to the BDCP document and the supporting EIR/EIS. Attachments 1 and 2 [ATT1 and ATT2] are specific comments on the BDCP and EIR/EIS, respectively, which are included and incorporated in our comments. The high quality of the American and Sacramento Rivers is a primary reason why the proposed BDCP intakes are located in the Sacramento River, which is adjacent to the Partnership permitted area. The Partnership's management programs described in our Stormwater Quality Improvement Plan (SQIP) [Footnote 1: Sacramento Stormwater Quality Partnership. Stormwater Quality Improvement Plan. Submitted to Central Valley Regional Water Quality Control Board. November 2009. http://waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/sacramento/r5-2010-0017_2009sqip.pdf] are highly effective in improving urban runoff quality. The	This is an introduction to the Sacramento Stormwater Quality Partnership (Partnership) comment letter, which identifies broad concerns that the Partnership has with the proposed project. Comments that raise specific issues regarding how the project would adversely affect the Partnership, and the responsibility of the project to address those effects, are addressed in subsequent responses.

DEIRS Ltr#	Cmt#	Comment	Response
		partnering agencies have strong working collaborations with each other as well as with neighboring communities. Examples of this cooperative regional approach include the Partnership's participation in the development of the region-wide municipal separate storm sewer system (MS4) permit, the Delta Regional Monitoring Program (RMP), the Central Valley Drinking Water Policy, and numerous other regional programs and information sharing. For example, the Partnership supports and participates in initiatives to address regional pesticides issues, including support of the "Our Water, Our World" program to provide integrated pest management resources to our residents and leading CASQA's efforts to encourage USEPA Office of Pesticide Programs and the California Department of Pesticide Regulation to improve pesticide regulation and protect water quality. While we recognize that a project of this size is complex and resource intensive, we have identified several presumptions and assertions within the BDCP and EIR/EIS documents, especially related to urban runoff and water quality, which are inaccurate or insufficiently supported. These issues could have profound effects on our stormwater management programs and local communities.	
1552	2	INSUFFICIENT JUSTIFICATION FOR CONSERVATION MEASURE 19 (CM19) CM19 is described in seven pages of the BDCP with little detail, with numerous inaccuracies on urban runoff contaminants and water quality regulations, and without any evidence that CM19 control measures could provide any measurable benefits to the covered species. Conservation Measure 19 (CM19, BDCP Section 3.4.19) intends to decrease urban runoff contaminant discharge to support Objective L2.4 to provide water quality to "help restore native fish habitat". However, there is no technical analysis demonstrating the potential benefits of CM19 aside from incomplete descriptions of pyrethroid research in upstream urban tributaries; this research has not demonstrated relevance to impacts on covered species in the Delta. No technical justification is provided for the primary inclusion of urban runoff sources as a Conservation Measure over all other contaminant stressor sources that are described throughout the BDCP and EIR/EIS but are absent as Conservation Measures. As proposed, CM19 provides no new benefits to downstream covered species. Furthermore, CM19 proposes measures that are already generally implemented by stormwater management programs and local planning departments with new development requirements. CM19 should be removed, because it is not justified as an action that would reasonably improve the covered species populations in the Delta. The proposed conservation measure fails to meet a reasonable expectation of beneficial impacts.	Please note, Alternative 4A, also known as California WaterFix, has been developed in response to public and agency input and is the new CEQA Preferred Alternative. Alternative 4A is also the NEPA Preferred Alternative, a designation that was not attached to any of the alternatives presented in the 2013 Public Draft EIR/EIS. Alternative 4 (BDCP) remains a potentially viable alternative and is being carried forward in this RDEIR/SDEIS because it represents the original habitat conservation plan/natural community conservation plan (HCP/NCCP) alternative approach, and because it provides an important reference point from which the Alternative 4A, 2D, and 5A descriptions and analyses were developed. If the Lead Agencies ultimately choose the alternative implementation strategy and select an alternative presented in the RDEIR/SDEIS after completing the CEQA and NEPA processes, elements of the conservation plan contained in the alternatives in the 2013 Public Draft EIR/EIS may be utilized by other programs for implementation of the long term conservation efforts. As proposed in the 2013 public draft BDCP, Conservation Measure 19 (CM19; Urban Stormwater Treatment) was a voluntary measure proposed by DWR and Reclamation to try and improve water quality conditions in the Delta for the covered fish. This measure was not required to mitigate for impacts to the covered species, so funding is also not required for the full 50-year permit term. The 2013 public draft of BDCP in Chapter 8 assumes that $50 million of funding for CM19 would begin in Year 3 of Plan implementation and continue until Year 15. The expectation was that if the program was successful during the first 12 years of funding, DWR and Reclamation would either voluntarily fund the program for a longer period, or find external funding sources to continue to the program. If implemented, an assessment would be conducted to fund the most cost-effective and biologically effective measures with willing recipients. This and other comments in this letter make numerous references to the need to perform comprehensive assessments and prioritization of the most beneficial means to reduce pollutant discharge to the Delta that would benefit covered fish. DWR and Reclamation agree with these recommendations but note that it is beyond the scope of any HCP/NCCP to perform such analyses. CM19 is proposed as one potential solution that, when combined with other existing programs, could improve water quality in the Delta and potentially benefit special- status species, including non-listed species. DWR and Reclamation will consider the studies and recommended analyses cited in this letter and will re-evaluate the potential benefits of CM19 relative to the costs. Note that CM19 is no longer included in the Proposed Action (Alternative 4A). If Alternative 4A is selected, CM19 would not be implemented. However, if a different alternative is selected that includes BDCP or CM19, DWR and Reclamation will take into consideration the suggested comments to revise the analysis of

DEIRS Ltr#	Cmt#	Comment	Response
			potential benefits of this conservation measure, and the consideration of other potential pollutants into the Delta which could be reduced through similar means to benefit the fish and other aquatic resources. See RDEIR/SDEIS, Section 4, New Alternatives: Alternatives 4A, 2D, and 5A, and Master Responses 4 (Alternatives) and 5 (BDCP) for additional information on development of the alternatives and the BDCP. Please see also Final EIR/EIS Appendix 3Gfor background information on the process of developing the BDCP Conservation Measures and 11F for discussion of substantive BDCP revisions. Chapter 8, Water Quality, of the Final EIR/EIS evaluates water quality impacts of the proposed project. Please also see Master Response 14 for additional information on water quality.
1552	3	The BDCP and EIR/EIS do not provide sufficient detail to reasonably conclude that the CM19 suggested best management practices (BMPs) would have any adverse or beneficial impact on water quality in the Delta. [Footnote 2: Delta Stewardship Council. Final Delta Plan. Page 230 recommendations "WQ R2. Identify Covered Action Impacts. Covered actions should identify any significant impacts to water quality."] Pesticides are identified as the primary "concern for fish" (BDCP page 3.4-327, lines 9-10) and as the basis for the need for CM19. The studies cited in the BDCP (Weston et al. 2005, Teh et al. 2005) do not show linkages between urban runoff and effects on covered species and therefore should not be used as justification for CM19. Most Sacramento urban runoff does not directly enter the Delta. As such, the conclusion that actions to reduce the amount of pollution in stormwater runoff entering Delta waterways will be of high benefit to delta smelt, white sturgeon, steelhead, and Chinook salmon (Essex Partnership, 2009) does not consider the fate and transport to points where impacts to covered species are of concern (BDCP page 3.4-332). Even if contaminant load sources are reduced, it is not established that there would be a downstream Delta benefit since contaminant degradation, dilution, adsorption to particulates, and other fate and transport processes would reduce any aquatic life effects (Werner, et al. 2008, page 32), which is consistent with pyrethroid experimental studies downstream. Urban runoff dilutes some pollutants and is only an intermittent exposure during the higher flow wet season.	Please see response to comment 1552-2 for discussion of the Alternative 4 (BDCP) as a potentially viable alternative, CM19 and water quality impacts.
1552	4	CM19 does not consider pesticide and other contaminant source control by the entities that manufacture, regulate, and control their use in urban and non-urban areas. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) gives the U.S. Environmental Protection Agency (EPA) authority to determine which pesticides can be used in the United States and how they can be used. The application and approval of pesticides are regulated by both the EPA and the California Department of Pesticide Regulation (DPR). Local agencies do not have the authority to limit the use of pesticides when applied according to these rules. If retained, CM19 should propose actions to better regulate and approve pesticide formulations and applications so that they will not have effects on covered species when used legally. The Central Valley Regional Water Quality Board recently adopted Basin Plan amendments that better acknowledge state and federal government responsibility. The Sacramento Stormwater Quality Partnership requests that references to pesticide source control acknowledge that municipalities are statutorily prohibited from regulating the use of pesticides, and that existing state and federal statutory authority for regulation of pesticides is sufficient only when it is properly exercised to prevent water quality impacts.	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative, CM19 and water quality impacts, including pesticides assessment.
1552	5	The BDCP does not acknowledge that the most effective "source control" approach to control many contaminants in urban runoff is product control by manufacturers and regulators. In particular, lead and pesticides have been controlled through product	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative, and water quality impacts, including pesticides assessment.

DEIRS Ltr#	Cmt#	Comment	Response
		reformulation or discontinuation. Recent legislation (SB346) will phase out copper in brake pads, a significant contributor to urban runoff loads.	
1552	6	The BDCP and EIR/EIS do not comprehensively evaluate all sources of contaminants and therefore cannot adequately evaluate how to control contaminants through CM19. The BDCP does not present an analysis that evaluates the downstream covered species benefit of any contaminant source controls. As discussed in the EIR/EIS (Table 5.D.2-1 'Land Use and Typically Associated Containment Issues' (EIR/EIS page 5.D-2, Line 27), urban runoff is only one source of contaminants in the Delta and is an insignificant source for most of the identified contaminants of concern. However, other sources identified as significant have not been specifically included in the conservation measures. The reference documents refer to a number of other pollutants that are attributed to other sources and for which urban runoff is not known to be a significant contributor. For example, BDCP Table 3.4.19-2 references dissolved oxygen depression as a water quality impact; however, urban runoff likely does not contribute significantly to the downstream oxygen impairments. Another example is that CM19 is the only conservation measure identified with the Conservation Hatcheries Facilities covered activity for facilities construction (BDCP page 5.2-14); the role that urban stormwater (MS4 -- municipal separate storm sewer system) programs that are part of CM19 would have in mitigating construction of these facilities is not clear in the Effects Analysis and the referenced Appendix (5H). Only considering one of many sources without making direct connections between activities and outcomes is an imbalanced and flawed approach, especially when the relative impact of the selected source is not known or may be insignificant when compared to others. A computational model assessment of the benefits of all source control measures for all sources should be performed to examine the effect of sources on the downstream covered species. This evaluation should be conducted before determining the scope of a conservation measure on contaminant reduction.	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative, CM19 and water quality impacts. See Master Response 5 for discussion of BDCP effects.
1552	7	Contaminant sources, as a whole, and the entities that regulate and control their use and discharge, should be considered so that the most significant and cost-effective removal strategies are prioritized and addressed first. While we agree that continued reductions of discharged urban runoff contaminants is an important environmental effort (which is already underway), it is unrealistic to assume that reductions of one intermittent source would cost effectively result in significant or even measurable downstream changes. For example, the Central Valley Drinking Water Policy Workgroup evaluated urban and non-urban source control for multiple drinking water constituents of concern. The drinking water constituents of concern were then quantitatively modeled in hypothetical future conditions to evaluate the potential impact on the municipal water supply beneficial use. Hypothetical urbanization of the Central Valley did not cause significant changes to downstream water quality. [Footnote 3: Central Valley Drinking Water Policy Workgroup Synthesis Report. http://www.waterboards.ca.gov/rwqcb5/water_issues/drinking_water_policy/dwp_wrkgrp_synthesis_rpt.pdf. February 2012.]	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative and water quality impacts.
1552	8	The effectiveness of urban runoff BMPs (best management practices) in terms of specific urban runoff quality changes and Delta impacts was not evaluated. For example, typical structural control benefits vary between contaminants, and while a particular BMP may decrease urban runoff loading for one contaminant, it may increase the urban runoff loading for another contaminant. In the case of pesticides, a BMP designed to remove sediment bound pesticides might be completely ineffective for removing pesticides that remain in the dissolved phase. The BDCP should evaluate urban runoff BMPs for potential benefits to downstream Delta water quality. Without a sufficient understanding of the	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative and water quality impacts.

DEIRS Ltr#	Cmt#	Comment	Response
		downstream benefits, widespread implementation of additional BMPs is not justified.	
1552	9	The BDCP does not adequately define the physical area of the expected urban land use changes and the spatial extent of CM19 control strategy implementation. The BDCP refers only to restoration areas outside of the statutory Delta as included in the Plan Area and makes no references to the urban areas in the periphery outside of the statutory Delta. The control strategies listed in CM19 are generally the type of best management practices already included in new urban development, but the conservation measure does not acknowledge the legal and logistical challenges of large scale changes to already developed urban areas. The great preponderance of MS4 (municipal separate storm sewer system) drainage property is not municipally owned, and it is unclear how CM19 intends to implement private land use changes.	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative CM19 and water quality impacts. See Master Response 15 for effects of water quality changes on existing NPDES permit holders.
1552	10	There is no justification provided for the cost estimate for CM19 implementation, maintenance, or monitoring. The BDCP estimates approximately $50 million in CM19 stormwater treatment for all MS4 (municipal separate storm sewer system) programs over the 50 year plan. This level of funding significantly underestimates the scope of urban stormwater treatment that would be necessary to provide detectible downstream benefits. The two rounds of Proposition 84 funding totaled approximately $86 million in stormwater projects covering a much smaller area than the urban areas inside and upstream of the Delta. For a rough comparison, this funding covered not more than hundreds of acres of "stormwater treatment", and the urban area in the Delta and tributary watersheds are hundreds of thousands of acres. Moreover, no funding is proposed for the BDCP required effectiveness monitoring, and this can also be costly. The BDCP states that CM19 funding would come from existing Proposition 84 or 1E bonds and future water bonds. Because CM19 is inadequately described, it is not possible to evaluate the potential financial liability to local stormwater management agencies.	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative and CM19. Because of the voluntary nature of the program, the level of funding needed was highly uncertain. The funding level proposed in the 2013 public draft BDCP ($50 million) was determined based on the funding level provided by Proposition 84, not based on an assessment of need. Because of the voluntary nature of the program, such an assessment is not warranted. DWR and Reclamation expected that, if the full funding level was realized due to substantial interest in the program that additional funds could be sought and obtained to expand the program substantially beyond this initial level. The $50 million of funding by BDCP was only intended to last for 12 years (from year 3 to 15), not for 50 years. There would be no financial liability or burden to local stormwater management agencies because this is a voluntary grant program. Stormwater management agencies would be free to apply for and receive these grant funds if they wished. See Master Response 5 for additional information on funding.
1552	11	Because the area of CM19 implementation is unclear, it is not possible to accurately estimate its cost. Based on the results of previous Proposition 84 low impact development (LID) project funding and known costs of retrofit of existing development, $50 million would only fund improvements for a small fraction of the total urban or municipal area. The Central Valley Drinking Water Policy Workgroup estimated that best management practices (BMP) "treatment" for the entire urban area within the Central Valley would cost $14.9 billion by 2030. [Footnote 4: Geosyntec. Urban Runoff Source Control Evaluation for Central Valley Drinking Water Policy. Prepared for California Urban Water Agencies. March 2011. http://www.waterboards.ca.gov/rwqcb5/water_issues/drinking_water_policy/dwp_urban_sources_study.pdf] The discrepancy in cost and scope is significant and suggests that the proposed CM19 would be insufficient in scope and resources to demonstrate benefits to covered species. This large discrepancy in the uncertainty of benefits and cost to local agencies is indicative of the inadequate evaluation and insufficient justification for CM19.	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative and CM 19. See Master Response 5 for additional information on funding.
1552	12	Additional costs imposed on local agencies by CM19 may have potentially significant impacts that should be evaluated as part of the BDCP effects analysis and EIR/EIS water quality assessment (Chapter 8). For example, to the extent that the proposed CM19 places a significant fiscal burden on local agencies, those agencies may be forced to defer or forego other improvements or programs designed to improve water quality or protect the environment.	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative and CM 19. See Master Response 5 for additional information on the BDCP effects analysis and. For more information regarding water quality see Master Response 14.
1552	13	Comprehensive Evaluation of Contaminant Sources and Prioritization of Contaminant Bases	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative and CM 19. See Master Response 5 for additional information on the BDCP effects analysis. For

DEIRS Ltr#	Cmt#	Comment	Response
		Conservation (Control) Measures: The urban runoff-focused CM19 is not justified. CM19 does not sufficiently address SMART, "specific, measurable, achievable, relevant, and time-bound," biological objectives as stated (BDCP page 3.3-3, lines 3-8). The BDCP provides no means to assess the effectiveness of meeting the goals for CM19. Impacts to covered species from contaminant sources should be sufficiently understood to result in cost effective benefits before implementing control measures. The evaluation of contaminant-based control measures in the BDCP and EIR/EIS should include a robust evaluation through a stakeholder process with consideration to: * Technical evaluations of all reasonable contaminant control measures for all source categories, implementation methods, and their resulting water quality performance should be performed to characterize benefits and costs. * A computational fate and transport model that incorporates the technical source evaluations should be performed to examine the effect of sources and source control on downstream water quality. The evaluation should consider downstream Delta locations of interest to the covered species and the potential water quality impacts of the examined control measures. * An appropriate characterization of the impacts and uncertainty of impacts of all sources on the covered species should be performed. The BDCP chapter identifies pesticides as the contaminant of particular concern (page 3.4-.27, line 11) and bases its general characterization of urban runoff quality and pesticide impacts on pyrethroid pesticide research. The cited Weston research does not demonstrate that upstream urban runoff sources cause Delta covered species toxicity miles downstream from stormwater outfalls, but this research instead shows a decreasing toxicity signal from upstream sources. [Footnote 5: Weston DP1, Lydy MJ. Urban and agricultural sources of pyrethroid insecticides to the Sacramento-San Joaquin Delta of California. Environ Sci Technol. 2010 Mar 1;44(5):1833-40. doi: 10.1021/es9035573.] Once the existing and potential water quality conditions are known at the downstream Delta locations of interest, an evaluation of the specific benefits to the covered species should be performed. * Following the complete evaluation of contaminant sources and control effects on the covered species, the control measures should be prioritized based on the known benefits and costs of the control measures. This approach would also generate alternative contaminant control measures that could be used to better perform specific evaluations in the EIR/EIS. This evaluation of source controls and downstream benefits should be performed prior to including CM19 within the BDCP. The BDCP should designate funding to support stakeholder research, evaluations, and modeling so that any identified contaminant conservation measures can be appropriately evaluated.	more information regarding water quality see Master Response 14.
1552	14	Monitoring and Assessment Cost to Local Municipal Separate Storm Sewer System (MS4) Agencies: Local agency participation in planning conservation measures and other activities is vital to successful collaboration to restore and maintain the ecological health of the Delta. Further, implementation of the conservation measures to meet the Plan's goals will undoubtedly result in increased costs to local agencies to monitor and assess the effectiveness of the	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative. See Master Response 5 for additional information on the BDCP effects analysis. For more information regarding water quality see Master Response 14. See Master Response 15 for effects of water quality changes on existing NPDES permit holders.. A discussion of commitments addressing the non-environmental consequences of implementing the project

DEIRS Ltr#	Cmt#	Comment	Response
		water quality improvement related activities. Local agencies' ability to generate funding to conduct these additional activities is subject to potentially significant limitations, including Proposition 218 and Proposition 26. For example, the operation, maintenance, and improvement of MS4s typically is funded by storm drainage rates, and under Proposition 218, a local agency can only increase storm drainage rates after (1) conducting a notice and protest process with a protest rate below 50%, and (2) obtaining voter approval for the increase from a majority of the ratepayers subject to the rate or from two-thirds of the electorate. Thus, the BDCP should include developing relationships among agencies, mobilizing the flow of technical information, and providing sufficient funding and resources to support water quality outcomes. The BDCP should commit to participation with, and funding for, the Delta Plan, Delta Science Plan, and the Delta Regional Monitoring Program (RMP) and provision of additional resources (e.g., funding, monitoring, modeling, technical evaluation tools, etc. for local agencies) as a required action (i.e., not an additional action) with a known schedule. Source evaluation and effectiveness monitoring requirements should also be specifically funded by the BDCP, because the assessments are specific to covered species benefits.	are described in the Final EIR/EIS Appendix 3B, Section 3B.3.1.
1552	15	INSUFFICIENT COMMITMENTS FOR ADAPTIVE MANAGEMENT AND MONITORING PROGRAMS TO PROTECT UPSTREAM AND DELTA WATER QUALITY The BDCP will be one of the most divisive and resource intensive public policy and infrastructure projects in recent California history. Already, hundreds of millions of dollars have been spent on planning, engineering, and technical assessments. However, the Sacramento Stormwater Quality Partnership believes that the BDCP and EIR/EIS do not adequately commit, in level of detail or resources, to an ongoing assessment program that will provide quantitative assessments of effectiveness and evaluate the identified uncertainties of the BDCP. The BDCP Effects Analysis does not compute the baseline effect of the pollutant stressors that are the basis of a conservation measure; therefore, how will the Adaptive Management Team evaluate effects and effectiveness of the conservation measures? The BDCP admits that the Plan and its conservation measures (CMs) have considerable uncertainty with regard to ecosystem benefits and likely outcomes. [Footnote 6: BDCP, Chapter 3, 3.4.23, page 3.4-354, lines 8-12] Adaptive management is implemented to allow conservation measure flexibility, and the focus is defined as assessing achievement in meeting the biological goals and objectives. There will be opportunity for revising conservation measures and biological objectives. [Footnote 7: BDCP, Chapter 3, 3.4.23, page 3.4-354, lines 21-27] This places a critical role and powerful importance on adequately monitoring and assessing the system. Much of the monitoring and modeling in the BDCP, however, is relegated to a research action that should instead be discussed explicitly within the Effects Analysis with a mandated schedule. The adaptive management approach needs to have a transparent and comprehensive monitoring, modeling, and assessment program that can adequately quantify biological and water quality changes due to changes in flows, climate change, contaminant sources, physical changes, and reasonably anticipated beneficial use impacts. This should include verification of the effects analysis and an evaluation of the identified uncertainties. This assessment framework is not provided, even for the evaluation of current conditions, and there is no monetary commitment to provide such tools, data, and resources for the Stakeholder Council. The Science Program should allow bottom-up participation from local agencies; this is important so that joint solutions	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative. See Master Response 5 for additional information on the BDCP effects analysis and funding. For more information regarding water quality see Master Response 14. Please see also Master Response 33 for discussion of the adaptive management program.

DEIRS Ltr#	Cmt#	Comment	Response
		can be evaluated and implemented, as well as to avoid "serial engineering" by which one 'solution' causes another ecological or public policy problem. Local agencies should have a clear and significant role in BDCP decisions if modifications are considered to the CMs that will impact local agencies. The EIR/EIS also identifies significant issues and mitigation activities that rely on adaptive management. However, the EIR/EIS does not identify or commit to follow-up actions in cases where mitigation measures are not effective or water quality conditions degrade further and cause impacts to beneficial uses. The BDCP should include a clear, expanded description of the Adaptive Management program framework and the monitoring components and tools that will be used to make assessments, address uncertainties, identify unintended consequences of the BDCP, and propose changes to system operations. For example, a decision tree should be developed for interpreting scientific information relative to the management action and evaluating the certainty of the relationships, the benefit to covered species, and information needs and priorities. Within this decision tree, local agencies should have the ability to provide input and make management decisions when the outcomes affect them. Adaptive management can then be more effectively used in the EIR/EIS to describe mitigation activities.	
1552	16	INSUFFICIENT COMMITMENTS FOR ADAPTIVE MANAGEMENT AND MONITORING PROGRAMS TO PROTECT UPSTREAM AND DELTA WATER QUALITY There has not been a clear prioritization of management actions (conservation measures) to optimize available resources and mitigate effects to the covered species or other aquatic life impairments. Also, it is not clear from the BDCP whether CM1 can proceed with or without the other conservation measures, if they are not completed or fully funded. Additional information should be provided regarding the minimum number of conservation measures that are required to be implemented in order for CM1 to be operated, the course of action if funding is not secured for all the conservation measures, and whether CM1 exports can or will be restricted if other conservation measures are not successfully implemented.	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative. See Master Response 5 for additional information on the BDCP effects analysis. For more information regarding water quality see Master Response 14. The originally proposed habitat restoration measures and related Conservation Measures (CMs) (i.e., CM2 through CM21) would not be included as part of the Proposed Action, except to the extent required to mitigate significant environmental effects under CEQA and meet the regulatory standards of ESA Section 7 and California Endangered Species Act (CESA) Section 2081(b). However, restoration actions that are independent of Proposed Action will continue to be pursued as part of existing projects and programs. Examples of these include the 2008 and 2009 USFWS and NMFS BiOps (e.g., Yolo Bypass improvements and habitat enhancements, 8,000 acres of tidal habitat restoration), (2) California EcoRestore, and (3) the 2014 California Water Action Plan. For more information regarding the collaborative science and adaptive management program please see Chapter 3 of the FEIR/EIS. Please see also Master Response 33 for additional discussion of adaptive management. For more information regarding impacts to water quality and aquatic resources and its associated mitigation measures please see Chapter 8 and 11 of the FEIR/EIS, respectively.
1552	17	INSUFFICIENT COMMITMENTS FOR ADAPTIVE MANAGEMENT AND MONITORING PROGRAMS TO PROTECT UPSTREAM AND DELTA WATER QUALITY The existing Interagency Ecological Program (IEP) structure is not thoroughly reviewed and justified in the BDCP to improve assessments. Other BDCP cited documents [Footnote 8: Public Policy Institute of California. Stress Relief. Prescriptions for a Healthier Delta Ecosystem. April 2013.] have suggested formation of a Joint Powers Authority (JPA) that includes local agencies to develop the appropriate Delta science and assessments. For example, page 3.4-329, line 13 states that "The Adaptive Management Team will use results of effectiveness monitoring to determine if reducing stormwater pollution loads result in measurable benefits to covered fish species or their habitat and to identify adjustments to funding levels, control methods, or other related aspects of the program that will improve the biological effectiveness of the program." The form and technical basis for the assessment is not provided, and means of establishing relationships amongst sources,	See Response to Comment 1552-17.

DEIRS Ltr#	Cmt#	Comment	Response
		contaminant reductions and covered species is not identified. The BDCP should include development of a collaborative monitoring and assessment framework to support adaptive management. The BDCP also should be updated to include development of the baseline for assessments prior to implementation of any/all conservation measures.	
1552	18	INSUFFICIENT EVALUATION OF WATER QUALITY IMPACTS The BDCP evaluation of water quality impacts is insufficient and lacks clear methods and summaries of effects. The BDCP Effects Analysis does not provide sufficient justification for CM19, and the EIR/EIS does not sufficiently evaluate BDCP water quality impacts. The inadequacies include failure to consider detailed quantitative impacts for all constituents of concern, failure to consider impacts at locations on the Sacramento River near to and upstream of the proposed CM1 North Delta intakes, and failure to sufficiently evaluate temperature effects on the municipal drinking water (MUN) supply beneficial use. In general, the presentation of the Chapter 5 effects is highly fragmented and is based on cross-references to appendices. This inefficient organization makes it difficult to interpret results. The BDCP fails to assess water quality impacts on other beneficial uses (e.g., domestic and municipal drinking water) at areas just outside the Plan Area that will be impacted by CM1, CM2, and the related operational modifications to upstream reservoirs. In addition, the BDCP fails to assess the impacts of operational modifications to upstream reservoirs, including water storage and release patterns. Water storage and release patterns have a great impact on the river hydrology and Delta outflow [Footnote 9: BDCP, Chapter 2, 2.3.3.3.1, page 2-26, lines 18-20]. Furthermore, water storage and release patterns can have a significant effect on the quality of the water discharged to the downstream rivers (such as the Lower American River and Lower Sacramento River), as has been identified by the BDCP [Footnote 10: BDCP, Appendix 5C, 5C.0, page 5C.0-1, lines 4-11] and by Watershed Sanitary Surveys for those water bodies. Impacts to these rivers downstream of the reservoirs are evident in the BDCP temperature model runs of the project and alternatives; temperature impacts are projected to be even more significant in the future due to climate change impacts. The BDCP alternatives could also affect clarity (turbidity), organic carbon, metals, nutrients, and pathogens levels, as well as fate and transport impacts on other organics like pesticides [Footnote 11: Sacramento River Watershed Sanitary Survey 2010 Update, Section 3]. The BDCP did not conduct an assessment of contaminant sources to prioritize where conservation measures would be best implemented. Finally, there is no apparent evaluation of cumulative impacts and synergistic effects of water quality constituents acting simultaneously. These inadequacies should be addressed before implementation of the BDCP. The BDCP water quality evaluation should be expanded to include areas outside of the Plan Area that will be impacted by CM1, CM2, and the related operational modifications to upstream reservoirs; a broader scope of water quality constituents of interest; an assessment of sources of contamination; and an evaluation of cumulative and synergistic effects on water quality.	This comment raises a number of concerns with the scope and adequacy of the water quality assessments of CM1 and the other conservation measures in the EIR/EIS. These are addressed below. CM19, urban stormwater treatment is offered as a voluntary measure to help reduce stressors on covered fish species as part of the BDCP. Please note the preferred alternative is no longer the BDCP. Alternative 4A does not include CM19 as a project component. Therefore, this action would only be implemented if the BDCP or an alternative that includes an HCP/NCCP is approved. Regarding the use of quantitative versus qualitative methods in the water quality assessment and assessment of impacts to the Sacramento River upstream of the Delta, please see Master Response 14. Temperature changes were estimated for the EIR/EIS (see Chapter 11 and Appendix 29C of the 2013 Public Draft EIR/EIS). To the extent that these temperature changes would be expected to have a substantive effect on water quality constituents, they were considered in the water quality assessment in Chapter 8 of the 2013 Public Draft EIR/EIS and Section 4.3.4 of the RDEIR/SDEIS, and Chapter 8 of the Final EIR/EIS. This is the case for dissolved oxygen. For other constituents (e.g., pesticides), either the expected temperature changes were too small to make any substantive difference, or the effects of temperature changes are not able to be predicted, and incorporation into the assessment would be speculative. Regarding temperature effects to beneficial uses, including domestic and municipal drinking water, please see Master Response 14. As noted by the comment, because the action alternatives have the potential to affect turbidity, organic carbon, metals, nutrients, and pathogens, these constituents were assessed in detail for each alternative. Further, these constituents were assessed considering the degree to which reservoir storage and releases would differ relative to those occurring under the current system on the Sacramento River. Cumulative impacts to water quality were addressed at the end of Section 8.4.3, of the 2013 Public Draft EIR/EIS, Chapter 8, Water Quality. The cumulative impacts are in their own section in this Final EIR/EIS – see Section 8.3.5 of Chapter 8, Water Quality. The water quality assessment relies on applicable federal and state water quality criteria, as this represents the best available information for which to compare changes in constituent concentrations due to the project and assess potential effects of projected changes to beneficial uses. For constituents with no applicable water quality criteria (e.g., dissolved organic carbon, bromide, selenium), other relevant thresholds recognized by the scientific community (e.g., USEPA, state regulatory agencies) were applied. Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative. See Master Response 5 for additional information on the BDCP effects analysis. For more information regarding water quality see Master Response 14.
1552	19	INSUFFICIENT EVALUATION OF WATER QUALITY IMPACTS Lack of Quantitative Water Quality Assessments.	The Final EIR/EIS updates the water quality analysis presented in the Draft BDCP. The assessments of salinity-related parameters (bromide, chloride, and EC), dissolved oxygen, turbidity, mercury, selenium, and ammonia were provided for the upstream of Delta region, including Sacramento River, for all action

DEIRS Ltr#	Cmt#	Comment	Response
		There was a very limited water quality evaluation conducted as part of the BDCP. Temperature evaluations focused on species survival with no consideration of other beneficial uses, such as drinking water (disinfection by-product (DBP) formation in treated water) [Footnote 12: BDCP, Attachment 5.C.C.]. Salinity, dissolved oxygen, and turbidity [Footnote 13: BDCP, Attachment 5.C.D.] were evaluated as well as other constituents related to survival of the impacted species, including mercury, selenium and ammonia; however, these constituents were only evaluated in the Delta. [Footnote 14: BDCP, Appendix 5D]] The BDCP does not adequately evaluate the water quality impacts of the BDCP in the action area [Footnote 15: BDCP, Chapter 1, 1.4.1, page 1-21, lines 21-25], especially in the reach of the Sacramento River from Emmaton to Veterans Bridge. Computational watershed and surface water quality modeling for all constituents of concern should be performed to quantify potential changes and establish a monitoring program that can detect changes below impact or effect levels. An understanding of diversions, exports, and upstream sources and their relative contribution to downstream ecological issues is lacking. Modeling of sources and system dynamics, as was done in the Central Valley Drinking Water Policy, should be supported and further developed to plan activities and evaluate contaminant stressor impacts and controls. The BDCP should use more robust and widely accepted assessment tools to assess the potential impacts and evaluate performance of conservation measures through the permit term. These tools should be made available by the BDCP implementing agencies for use by all stakeholders.	alternatives in Chapter 8, Water Quality, in the EIR/EIS. Regarding temperature effects to beneficial uses, including drinking water uses, please see Master Response 14. As explained in Master Response 30, the assessments in the upstream of Delta region, including the Sacramento River, were conducted using qualitative methods. Quantitative modeling methods were used for certain constituents in the Delta region, using robust and widely accepted tools, as described in Section 8.3.1 of Chapter 8, Water Quality, of the Final EIR/EIS. The analysis of effects on aquatic resources caused by changes in constituents is included in Chapter 11. Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative. See Master Response 5 for additional information on the BDCP effects analysis. For more information regarding water quality see Master Response 14. See also Chapter 8, Water Quality of the Final EIR/EIS for evaluation of water quality impacts.
1552	20	INSUFFICIENT EVALUATION OF WATER QUALITY IMPACTS Incomplete Analysis in Areas Adjacent to CM1 and CM2. The BDCP does not substantially evaluate the effects of CM1 and CM2 in the "near- field" action area where these projects are proposed, specifically the Lower Sacramento River between Fremont Weir and the northern boundary of the statutory Delta. The BDCP concludes that the evaluated starting operations (ESO) water operations will have few to no effects on contaminants in the Delta (page 5.D-53). However, the evaluation should consider the impact of removing higher quality Sacramento River water and the increased contribution from lower quality San Joaquin River water into the Delta, especially in the areas adjacent to the proposed North Delta intakes and diversions. The area-specific impacts of the increased influence of the San Joaquin River on the Delta and effects near to the proposed BDCP North Delta intakes on the Sacramento River should be considered. The BDCP should be revised to include a more detailed water quality assessment of the impacts of CM1 and CM2 on the Lower Sacramento River and the North Delta.	Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative. See Master Response 5 for additional information on the BDCP effects analysis. For more information regarding water quality see Master Response 14. See also Chapter 8, Water Quality of the Final EIR/EIS for evaluation of water quality impacts.
1552	21	INSUFFICIENT EVALUATION OF WATER QUALITY IMPACTS EIR/EIS Water Quality Impact Assessment. The EIR/EIS asserts that it has conducted a comprehensive review and analysis of the effects of the proposed Delta conveyance alternatives on water quality (BDCP EIR/EIS Highlights, page 5); however, it is incomplete. There are numerous errors and omissions in the evaluation. The focus of the study is largely limited to select locations and did not sufficiently assess the impacts to water quality below the major reservoirs and upstream of the Delta, as well as the areas in the vicinity of the CM1 intakes and CM2 diversion. The	See Master Response 5 for additional information on the BDCP effects analysis. For more information regarding water quality see Master Response 14. See also Chapter 8, Water Quality of the Final EIR/EIS for evaluation of water quality impacts. For more information regarding modeling methodology see Master Response 30. Master Response 33 provides an outline for the adaptive management and monitoring program which is expected to provide a mechanism for making adjustments based on updated information going forward.

DEIRS Ltr#	Cmt#	Comment	Response
		water quality impacts described in EIR/EIS Chapter 8 have the following inadequacies: - Insufficient characterization of water quality impacts in the Lower Sacramento River from Veterans Bridge to Emmaton. - Insufficient use of available computational models to assess impacts on constituent concentrations rather than just hydrodynamics. - Inadequate summaries of water quality impact findings for baseline and alternatives. - Insufficient and erroneous characterization of several key constituents. Adequate water quality assessments should be performed to correct these insufficiencies and inadequacies so that the impacts can be correctly understood and it can be determined whether the proposed mitigation is adequate to minimize impacts to water quality. The Sacramento Stormwater Quality Partnership is providing specific comments on the EIR/EIS in Attachment 2 [ATT2] related to the sufficiency of the water quality analysis and supporting evaluations.	
1552	22	INSUFFICIENT EVALUATION OF WATER QUALITY IMPACTS Assessment Locations and Analysis of Impacts. The evaluation in the EIR/EIS water quality assessment (Chapter 8) needs to be expanded to provide an accurate and more complete assessment. Chapter 8 primarily bases water quality impact conclusions on a limited number of sample locations and does not perform a detailed analysis of impacts in the area around the proposed North Delta intakes on the Sacramento River, specifically between Emmaton and Veterans Bridge.	See Master Response 5 for additional information on the BDCP effects analysis. For more information regarding water quality see Master Response 14. See also Chapter 8, Water Quality of the Final EIR/EIS for evaluation of water quality impacts. For more information regarding modeling methodology see Master Response 30. Master Response 33 provides an outline for the adaptive management and monitoring program which is expected to provide a mechanism for making adjustments based on updated information going forward.
1552	23	INSUFFICIENT EVALUATION OF WATER QUALITY IMPACTS Computational Models and Water Quality Evaluation. The EIR/EIS states (page 8-130, lines 28-30) that the analysis is quantitative only where "modeling tools were developed and were available, and qualitatively assesses effects where appropriate modeling tools were unavailable". Many such computational models exist for many of the constituents and river reaches not evaluated in the EIR/EIS. A project of this scope and potential impact has the resources to develop and utilize these tools necessary for adequate analyses. The water quality evaluation presented in Chapter 8 of the EIR/EIS, and supported by numerous appendices, is insufficient in several ways: - Inadequate definition of constituents of interest and collection of adequate data (36 constituents with drinking water standards were not included in the Screening Analysis), - Inadequate assessment of contributions from various sources in the watersheds, and - Insufficient representation of all areas impacted by BDCP operations (specifically the areas upstream of the Delta and on the Sacramento River up to all major water intakes). In addition, the water quality analysis methodology utilized inappropriate data evaluation procedures, and the supporting water supply modeling is flawed in numerous assumptions,	See Master Response 5 for additional information on the BDCP effects analysis. For more information regarding water quality see Master Response 14. See also Chapter 8, Water Quality of the Final EIR/EIS for evaluation of water quality impacts. For more information regarding modeling methodology see Master Response 30. Master Response 33 provides an outline for the adaptive management and monitoring program which is expected to provide a mechanism for making adjustments based on updated information going forward. The screening analysis was designed to identify and assess all constituents that had available information sufficient to assess and that could potentially have significant or adverse impacts due to the project. It was not designed to necessarily assess every water quality constituent that exists that can pose a threat to water quality generally. If a water quality constituent was either present in any of the databases used, was identified in public scoping comments, was 303(d) listed, or was considered by best professional judgment to have available information sufficient to assess and could potentially have significant or adverse impacts due to the project, it was included in the screening analysis. Constituents not included in the screening analysis either do not have enough information available to assess, or are considered to have no potential for significant/adverse effects due to the project. Hydrodynamic effects of CM2 on water quality of the Lower Sacramento River were included in the assessment. Please see Chapter 8 Water Quality for more information regarding this resource.

DEIRS Ltr#	Cmt#	Comment	Response
		such as not including the hydrodynamic impacts of CM2 on the water quality of the Lower Sacramento River.	
1552	24	INSUFFICIENT EVALUATION OF WATER QUALITY IMPACTS Inadequate Summaries of Water Quality Impact Findings for Baselines and Alternatives. EIR/EIS Section 8.1.6 refers to two different baselines (the CEQA and NEPA baselines), and the evaluation of water quality impacts in 2060 yields information that is extremely difficult to understand or verify. A simple analysis of near term water quality changes from existing ambient water quality is needed to provide the public with understandable information, to provide context/grounding for the long-term impacts that are presented, and to allow a proper assessment of compliance with state and federal antidegradation policies.	For a detailed description of Baselines, please see Master Response 1.See Master Response 5 for additional information on the BDCP effects analysis. For more information regarding water quality see Master Response 14. See also Chapter 8, Water Quality of the Final EIR/EIS for evaluation of water quality impacts.
1552	25	The BDCP Chapter 5 Effects Analysis and its appendices are difficult to review due to organization problems, inconsistencies, and inadequate cross-referencing. For example, Chapter 5 includes many cross-references to other large documents without specific page numbers and sections. It is then a significant effort to review thousands of pages of appendices to try to find the referenced information with little assurance that it is the correct reference. The chapter makes the interpretation of net effects of BDCP implementation difficult at best. The Independent Panel charged with review of the Effects Analysis has stated that it "universally believes that by itself, Chapter 5... inadequately conveys the fully integrated assessment that is needed to draw conclusions about the Plan..." [Delta Science Program Independent Review Panel Report (DSP-IRP Report), BDCP Effects Analysis Review, Phase 3, March 2014, page 5]	Please see Master Response 38 regarding the length and complexity of the environmental document. For additional information on the BDCP effects analysis please see Master Response 5.
1552	26	Pesticides and Herbicides -- Technical Issues with Finding [for Alt 4]: Insufficient analysis of sources affecting Delta aquatic life. Page 8-83 lists a number of sources to the Delta, but it does not evaluate the relative contribution from these sources and the fate and transport of pesticides and herbicides in the Delta. The Weston, et al. research cited in the EIR/EIS primarily examines urban tributaries and locations near urban runoff outfalls and publicly owned treament works (POTW) effluent. Data collected by the Sacramento Stormwater Quality Partnership show significant concentration decreases of pyrethroids from the source to the Delta, such that river concentrations are lower than known effect levels. This is also consistent with the Department of Pesticide Regulation (DPR) findings in similar work. [Footnote 16: http://www.cdpr.ca.gov/docs/emon/surfwtr/presentations/ensminger_2014_jan_13_pyrethroid_trends.pdf]	This section of the 2013 Public Draft EIR/EIS is providing an overview of pesticide sources and factors that affect their presence in the affected water bodies. For additional information on the BDCP effects analysis please see Master Response 5. Please also refer to Master Response 14 regarding pesticide data in the Final EIR/EIS and Chapter 8, Water Quality.
1552	27	Pesticides and Herbicides -- Technical Issues with Finding [for Alt 4]: Inaccurate time period characterization. In several instances (page 8-83 line 40, Table 8-23, Table 8-24, Table 8-25, page 8-86 lines 12-19, page 8-164 lines 8-11), organophosphate (OP) pesticides data are evaluated prior to the 2005 California ban of urban uses (all diazinon and most chlorpyrifos uses). The use of this data may lead to inaccurate characterization of current concentrations. More recent data (i.e., 2005-2014) should be used to provide an accurate representation of existing conditions. It is not sufficient to say that pyrethroid pesticides will affect aquatic species in the same way as OP pesticides, since it is known that their environmental toxicity, half-life,	For additional information on the BDCP effects analysis please see Master Response 5. Please also refer to Master Response 14 regarding pesticide data in the Final EIR/EIS and Chapter 8, Water Quality.

DEIRS Ltr#	Cmt#	Comment	Response
		and transport modes are different.	
1552	28	Pesticides and Herbicides -- Technical Issues with Finding [for Alt 4]: Inaccurate and insufficient characterization of available data. Page 8-85 states that "Limited data and studies are available for characterizing the existing conditions of pesticide concentrations in the study area," which is misleading and inaccurate. This statement is repeated elsewhere and is not substantiated or investigated further (page 8-163, lines 35-37, page 8-165 lines 8-9). Data gaps should be clearly stated and prioritized such that they can be addressed through better research or collected as part of the BDCP Adaptive Management. This inaccurate and insufficient characterization is reinforced by the readily available data from a number of public sources. For example, the Sacramento Stormwater Quality Partnership collects Sacramento River data through the Coordinated Monitoring Program, USGS has an active Delta pesticide monitoring program [Footnote 17: http://ca.water.usgs.gov/projects/PFRG/CurrentProjects.html], the Department of Pesticide Regulation (DPR) also has active monitoring programs and available data in and around the Delta [Footnote 18: http://www.cdpr.ca.gov/docs/emon/surfwtr/surfcont.html], and areas upstream of the Delta are monitored through the Regional Water Quality Control Board's Irrigated Lands Regulatory Program [Footnote 19: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/water_quality_monitoring/index.shtml].	For additional information on the BDCP effects analysis please see Master Response 5. Please also refer to Master Response 14 regarding pesticide data in the Final EIR/EIS and Chapter 8, Water Quality.
1552	29	Pesticides and Herbicides -- Technical Issues with Finding [for Alt 4]: Failure to recognize the role of the California Department of Pesticide Regulation and U.S. Environmental Protection Agency (EPA) in regulating pesticide usage. Page 8-84 lines 23-33 describe Department of Pesticide Regulation (DPR) activities, but do not recognize that DPR and EPA approve pesticides for usage that local agencies are statutorily prohibited from restricting.	This text referred to by this comment is in the Environmental Setting and is intended to provide an overview of pesticide regulation relative to water quality protection. Therefore, no change to this section was made in response to this comment. For additional information on the BDCP effects analysis please see Master Response 5. Please also refer to Master Response 14 regarding pesticide data in the Final EIR/EIS and Chapter 8, Water Quality.
1552	30	Pesticides and Herbicides -- Technical Issues with Finding [for Alt 4]: State of knowledge regarding pesticide effects on the Pelagic Organism Decline (POD). The EIR/EIS summary of the Johnson, et al. report (2010) omitted a key finding regarding contaminants and the Pelagic Organism Decline (POD): Consequently, the results of the six comparisons for chemistry, toxicity, and histological data were placed into a weight of evidence context. The conclusion that is drawn from the analyses is that while contaminants are unlikely to be a major cause of the POD, they cannot be eliminated as a possible contributor to the decline. [Footnote 20: http://www.waterboards.ca.gov/rwqcb5/water_issues/delta_water_quality/comprehensive_monitoring_program/contaminant_synthesis_report.pdf] While this conclusion is not specific to pesticides, pesticides were the focus of the evaluation and predominate the robust dataset. Furthermore, it is inaccurate to characterize the state of knowledge on pesticides as insufficient for the purposes of the EIR/EIS. Certainly, there are adequate data and information to make meaningful and	A complete assessment of pesticides has been provided in the Final EIR/EIS Chapter 8, Water Quality. The assessment of pesticides has been conducted within the context of the current state of knowledge and its limitations, as described in Section 8.3.1.7, Constituent-Specific Considerations Used in the Assessment. Also see Master Response 14 regarding assessment approach for pesticides.

DEIRS Ltr#	Cmt#	Comment	Response
		quantitative assessments. Even the "dynamic state of the pesticide market" (page 8-164, line 23) can be well-quantified with detailed use, sales, and application rates that are reported every year.	
1552	31	Pesticides and Herbicides -- Technical Issues with Finding [for Alt 4]: Inaccurate and insufficient assessment of impact of State Water Project (SWP) and Central Valley Project (CVP) on pesticide use. Any changes in the available water for agriculture will change the timing and extent of pesticide application. Moreover, Impact WQ-21 (page 8-275 lines 26-29, page 8-463 lines 11-23, etc.) is considered a non-adverse impact though there is no evaluation of how decreases in flow (see Appendix 8L, Table 2) in the upstream areas will concentrate pesticides.	The paragraph preceding the text cited by this comment, with support from tables in Appendix 8L, discusses flow reductions in upstream areas, and the paragraph referenced by this comment provides conclusions regarding increases in pesticide concentrations based on those flow changes.
1552	32	Pesticides and Herbicides -- Technical Issues with Finding [for Alt 4]: Insufficient assessment of additive toxicity. The assessment also does not evaluate the additive toxicity component of pesticides that is included in current and proposed Total Maximum Daily Loads (TMDLs) and Basin Plan Amendments affecting the Plan and Study areas. [Footnote 21: http://www.waterboards.ca.gov/rwqcb5/water_issues/tmdl/central_valley_projects/central_valley_pesticides/20140103_cv_dc_bpa_stfrpt.pdf]. [Footnote 22: http://www.waterboards.ca.gov/rwqcb5/water_issues/tmdl/central_valley_projects/central_valley_pesticides/pyrethroid_tmdl_bpa/index.shtml] The aforementioned omissions and inaccuracies should be addressed and the EIR/EIS should include a quantitative assessment of changes in pesticide concentrations for the baseline and BDCP alternatives. A reasonable range of known pesticides should be considered in the context of additive toxicity as described in the Sacramento River Basin and San Joaquin River Basin Plan (page IV-34.00).	For the reasons provided in the Constituent-specific Considerations, Section 8.4.1.7 of the 2013 Public Draft EIR/EIS, now in Section 8.3.1.7 of the Final EIR/EIS, the nature of existing and future pesticide use and available information resulted in the pesticide assessment being qualitative, rather than quantitative. Hence, the assessment provides qualitative changes to pesticide concentrations and potential for exceedance of water quality objectives.
1552	33	Methylmercury (WQ-13) -- Technical Issues with Finding [for Alt 4]: Insufficient assessment of the effect of reservoir level on methylmercury and mercury concentration. Page 8-443, lines 9-15, states that there were not strong correlations between methylmercury concentrations and flow; however, a more relevant relationship might be with reservoir stage and/or inputs and operations of wetlands or wetland-like facilities. Since detailed modeling was not performed on the sources, sinks, and fate and transport of methylmercury, a broader range of analyses should be conducted to assess the impacts of the BDCP operations of CM1 as well as other conservation measures.	Because river flow and concentration data exist from which to evaluate correlations, and because the river flows originate from reservoir releases, changes in methylmercury upstream of the Delta focused on whether a relationship between methylmercury concentration and flow exists. For more information regarding water quality see Master Response 14 and for modeling methodology see Master Response 30.
1552	34	Methylmercury (WQ-13) -- Technical Issues with Finding [for Alt 4]: Insufficient assessment of compliance with Delta Methylmercury Total Maximum Daily Load (TMDL). The EIR/EIS does not address how CM1 would meet the requirements of the TMDL to	The Delta methylmercury TMDL specifies waste load allocations (WLAs) to the various sources of mercury to the Delta, including tributaries. The Central Valley Water Board Basin Plan notes that mercury control programs designed to achieve the allocations for tributaries will be implemented by future Basin Plan amendments. Methylmercury load allocations are based on water years 2000 through 2003, a relative dry period. Annual loads are expected to fluctuate with water volume and other factors. As a result, attainment

DEIRS Ltr#	Cmt#	Comment	Response
		decrease methylmercury concentrations in the Delta. Impact WQ-13 should be reevaluated based on other operational relationships (e.g., reservoir stage, turbidity, pH, etc.). Consistency with the TMDL should also be evaluated.	of these allocations shall be assessed as a five-year average annual load. Further, allocations will be revised during review of the Delta Mercury Control Program to include available wet year data. The modeled water and fish concentrations presented in Chapter 8 and Appendix 8I provide a direct, concentration-based, means for assessing how operations would impact water quality and human health.
1552	35	Methylmercury (WQ-14) -- Technical Issues with Finding [for Alt 4]: Insufficient assessment of mitigation measures. While several possible control approaches are discussed (page 8-446, lines 24-38), they are not evaluated in sufficient detail to assess the potential benefits or negative outcomes (e.g., reduced flow, secondary contaminants due to chemical dosing for methylmercury control, etc.).	See Master Response 4 for more information on alternatives development and for additional information on the BDCP effects analysis please see Master Response 5. For more information regarding water quality see Master Response 14.
1552	36	Methylmercury (WQ-14) -- Technical Issues with Finding [for Alt 4]: Insufficient assessment of compliance with Delta Methylmercury Total Maximum Daily Load (TMDL). The EIR/EIS does not address how CM2 through CM22 would meet the requirements of the TMDL to decrease methylmercury concentrations in the Delta or meet subarea wasteload allocations. Additional assessments of mitigation measures should be performed as part of the EIR/EIS water quality evaluation. Consistency with the TMDL should also be evaluated.	For more information regarding water quality see Master Response 14.
1552	37	Pathogens (WQ-19 and WQ-20) -- Technical Issues with Finding [for Alt 4]: Insufficient analysis of the effect of temperature increases on pathogen and surrogate concentrations and growth. Temperature modeling identified increases in several areas, including the upstream reservoirs and rivers; however, impacts to drinking water intakes were not specifically evaluated.	Please refer to Master Response 14 regarding temperature changes due to the project alternatives upstream of the Delta in the Sacramento and American rivers. Pathogen survival in surface waters is affected by a number of environmental factors (sunlight, pH, dissolved oxygen depending on pathogen), thus making predictions regarding effects of temperatures alone, particularly at the small changes anticipated due to the alternatives, on pathogens speculative, but anticipated to have little effect on pathogen growth. Thus, the focus of the pathogens assessment was source contributions.
1552	38	Pathogens (WQ-19 and WQ-20) -- Technical Issues with Finding [for Alt 4]: Inaccurate and incomplete general statements regarding pathogen decay rates. In multiple cases (page 8-208, lines 9-14), it is stated that pathogens may not be historically detected because of rapid die-off"; while this may be true for some bacteria, this broad statement does not adequately recognize the significantly lower decay rates of protozoa, such as Giardia and Cryptosporidium.	Regarding die-off, Impact WQ-19 in Chapter 8 has been modified in the RDEIR/SDEIS to clarify, “There may be natural/artificial barriers/processes that limit Cryptosporidium transport to water. Significant die off of those that reach the water may contribute to the low frequency of detection.” See Master Response 4 for more information on alternatives development and for additional information on the BDCP effects analysis please see Master Response 5. For more information regarding water quality see Master Response 14.
1552	39	Pathogens (WQ-19 and WQ-20) -- Technical Issues with Finding [for Alt 4]: Insufficient analysis of the impact of restoration areas on pathogen concentrations. Restoration areas are potential sources of pathogens from wildlife that are not considered and could pose an impact to beneficial uses. The Central Valley Drinking Water Policy (July 2013 Basin Plan Amendment) concluded that current conditions were supportive of the MUN (municipal and domestic water supply) beneficial use; however, the trigger values in the Policy could be exceeded with only small increases in observed intake concentrations	As noted by the commenter, the restoration areas have been acknowledged as a potential source of pathogens under the project alternatives.

DEIRS Ltr#	Cmt#	Comment	Response
		from the proposed restoration areas.	
1552	40	Pathogens (WQ-19 and WQ-20) -- Technical Issues with Finding [for Alt 4]: The pathogen assessment considers changes in Sacramento River flows in the Upstream of the Delta portion of Impact WQ-19. Also see responses to Comment Letter 1552, Comments 37, 38, and 39 Incomplete analysis of the impact of CM2 on pathogen concentrations. CM2 will impact the hydrologic conditions in the Lower Sacramento River and, thus, may impact the concentration of pathogens and surrogates in that area. An additional assessment of pathogens and surrogates related to restoration area impacts, decay rates, the effect of temperature, and the effect of CM2 should be performed as part of the EIR/EIS water quality evaluation.	The pathogen assessment considers changes in Sacramento River flows in the Upstream of the Delta portion of Impact WQ-19. Also see responses to comments 1552-37 through 1552-39.
1552	41	Dissolved Organic Carbon (WQ-17 and WQ-18) -- Technical Issues with Finding [for Alt 4]: Insufficient assessment CM1 effects on total organic carbon (TOC) based on reservoir operation. The EIR/EIS assumes that the lack of correlation of flows with organic carbon concentrations is a basis to conclude that CM1 will not change organic carbon concentrations (page 8-452, lines 8-14). However, if this correlation approach is used, a broader range of factors and more detailed examinations should be performed in critical areas. In the larger system, certain factors may offset each other, and the timing of effects over the larger system can also make these correlation evaluations less powerful.	See Master Response 4 for more information on alternatives development and for additional information on the BDCP effects analysis please see Master Response 5. For more information regarding water quality see Master Response 14. Please refer also to Master Response 30 for response to portions of comment addressing the assessment of organic carbon upstream of the Delta, including the Lower Sacramento River.
1552	42	Dissolved Organic Carbon (WQ-17 and WQ-18) -- Technical Issues with Finding [for Alt 4]: Insufficient scope of quantitative assessment The quantitative assessment of organic carbon was limited to the Delta and does not provide any meaningful evaluation of impacts to other areas adjacent to the Delta, such as the Lower Sacramento River that may be significantly impacted by CM1 and CM2.	Please refer to Master Response 30 for use of a qualitative assessment approach and adequacy of water quality assessment upstream of the Delta.
1552	43	Dissolved Organic Carbon (WQ-17 and WQ-18) -- Technical Issues with Finding [for Alt 4]: Mitigation measure WQ-17 is insufficient and vague. The proposed mitigation measure (page 8-458, lines 8-38) suggests means to reduce export of organic carbon from restoration areas and then concludes that this may be in conflict with the stated goals of the BDCP. While the BDCP provides limited environmental commitments to upgrade selected water treatment facilities located in the Delta, the assessment should be broader and provide a method to more specifically identify which treatment plants will require upgrades and how this approach is consistent with the Basin Plan and water quality regulations. The Central Valley Drinking Water Policy Workgroup prepared a detailed computational model of organic carbon in the Central Valley and Delta, which may assist with the needed evaluations.	Because Impact WQ-17 is less than significant, there is no Mitigation Measure WQ-17 for mitigation of operations-related impacts on dissolved organic carbon (DOC). Mitigation Measure WQ-18 is provided to address significant impacts to DOC from development of habitat restoration areas. It not possible to identify which, if any, drinking water treatment plants would require modifications to address DOC, as the areas that would experience higher DOC due to restoration actions is uncertain and dependent on siting and design. Please note that the BDCP is no longer the preferred alternative.

DEIRS Ltr#	Cmt#	Comment	Response
1552	44	Dissolved Organic Carbon (WQ-17 and WQ-18) -- Technical Issues with Finding [for Alt 4]: Incomplete analysis of the impact of CM2 on organic carbon concentrations. CM2 will impact the hydrologic conditions in the Lower Sacramento River and thus may impact the concentration of organic carbon in that area. The BDCP should provide additional assessments of the effects of CM2 and related reservoir operations on organic carbon in localized areas; expansion of the quantitative assessment area is also necessary. The cumulative effects from CM1-CM22 should be evaluated for impacts to MUN (municipal and domestic water supply) beneficial uses. The Central Valley Drinking Water Policy Workgroup developed models of the organic carbon system that should be used as examples of an adequate approach for assessment. That group also evaluated the drinking water treatment requirements based on changes in source water that should be used for assessment of beneficial uses. [Footnote 23: http://www.waterboards.ca.gov/centralvalley/water_issues/drinking_water_policy/dwp_trtmnt_eval_rpt.pdf, Chapter 5]	See Master Response 5 for additional information on the BDCP effects analysis. For more information regarding water quality see Master Response 14. Please refer to Master Response 30 for use of a qualitative assessment approach and adequacy of water quality assessment upstream of the Delta. Effects of CM2 on organic carbon was addressed in Impact WQ-18 and mitigation was introduced to reduce impacts. Cumulative impacts to water quality and beneficial uses, including MUN, were addressed in the 2013 Public Draft EIR/EIS beginning on page 8-753, and in the RDEIR/SDEIS (Appendix A) in Chapter 8, Section 8.3.3.17.
1552	45	Electrical Conductivity (EC), Chloride, and Bromide (WQ-5, WQ-6, WQ-7, WQ-8, WQ-11, and WQ-12) -- Technical Issues with Finding [for Alt 4]: Inaccurate assessment of climate change impacts. The BDCP asserts (page 8-184, lines 9-12, page 8-187, lines 19-22, and page 8-194, lines 40-43) that the concentration of these constituents in the Sacramento River would not be impacted by climate change in the No Action Alternative. This is incorrect as EC, chloride, and bromide could all increase in the Sacramento River in the event of sea level rise, increased tidal amplitude, or increased reverse flow events. EC, chloride, and bromide assessments should be revised with shorter-term averaging and account for the potential impacts caused by climate change.	The assessment of bromide, chloride, and EC in the Delta used DSM2 modeling results, which extend throughout the tidally affected Delta to Freeport. Thus, the potential for increased bromide, chloride, and EC levels in the Sacramento River due to tidal influences and sea water intrusion was assessed. As described in the assessment for each constituent upstream of the Delta, where tidal influences are not present, bromide, chloride, and EC levels would not be expected to be affected by the project alternatives. For more information on alternatives development and for additional information on the BDCP effects analysis please see Master Response 5. For more information regarding water quality see Master Response 14.
1552	46	Temperature -- Technical Issues with Finding [for Alt 4]: Insufficient assessment of temperature changes on drinking water treatment. The analysis focuses on effects on aquatic life and does not include temperature as part of the water quality impact assessment for other beneficial uses, such as MUN (municipal and domestic water supply) (page 8-129, lines 17-20). The EIR/EIS should address the insufficient assessment of temperature effects on MUN beneficial uses.	For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding water quality see Master Response 14 for address of temperature changes and effects on MUN uses.
1552	47	Metals (WQ-27 and WQ-28) -- Technical Issues with Finding [for Alt 4]: Insufficient assessment of the effect of reservoir level on metals concentrations. Page 8-219, lines 34-42, state that there were no strong correlations of dissolved metals concentrations and river flow; however, a more relevant relationship might be between the reservoir stage and dissolved metals.	The water quality assessment provided in the Final EIR/EIS Chapter 8, Water Quality, Impacts WQ-1 through WQ-33 considered the potential effects of changing reservoir storage and river flows on the constituents assessed in detail. Please see Master Response 14 for additional response regarding the qualitative approach to the water quality assessment in the Upstream of Delta region. Changes to reservoir level for all action alternatives are presented in Appendix 5A, Section C, Modeling Results, in the Final EIR/EIS. The comparisons to No Action Alternative indicate the effects of the alternatives. The comparison of conditions under the action alternatives as compared to the Existing

DEIRS Ltr#	Cmt#	Comment	Response
		The EIR/EIS should evaluate metals concentrations and correlations with other operational parameters, such as reservoir stage, to fully evaluate impacts.	Conditions include the effects of the BDCP alternatives plus the effects of climate change and increased water demands in the Sacramento Valley that would occur by 2030. Because river flow and concentration data exist from which to evaluate correlations, and because the river flows originate from reservoir releases, changes in trace metals upstream of the Delta focused on whether a relationship between trace metal concentration and flow exists. No additional analysis is required to address this issue.
1552	48	Aluminum -- Technical Issues with Finding [for Alt 4]: Insufficient assessment of aluminum impacts to beneficial uses. Aluminum was not included in the analysis; however, aluminum concentrations in the Delta can sometimes exceed relevant aquatic life and drinking water objectives. This constituent is especially important to drinking water treatment since it is a primary coagulant used to remove solids, and changes in source water concentrations can impact treatability. Any projects disturbing soil, increasing turbidity, or using coagulants have the potential to increase aluminum concentrations and potentially impact beneficial uses. Aluminum should be evaluated for impacts through available modeling of the BDCP and alternatives.	Assessment of effects to aluminum is included in the 2015 RDEIR/SDEIS in Impact WQ-27. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding water quality see Master Response 14.
1552	49	Selenium (WQ-25 and WQ-26) -- Technical Issues with Finding [for Alt 4]: Insufficient analysis of unknowns and potential increases in selenium. The CM2-CM22 analysis concludes that selenium biotic uptake may be increased by the increased residence time in the restoration areas (8-286 lines 1-3) and then suggests that the restoration areas should be designed and operated as flow-through to minimize impacts. However, such operation may be inconsistent with the wetland needs and in some cases could result in the increased discharge of methylmercury and organic carbon while minimizing the habitat benefits of the restoration areas. The EIR/EIS's analysis of CM2 through CM22 should consider the cumulative impacts on each of the constituents and constraints for restoration area operation.	The assessment considers increased residence times and acknowledges constraints associated with restoration area site design, as the commenter notes. Avoidance and minimization measure 27 includes the development of selenium management and monitoring plans on a site specific basis, which will be developed to address these issues. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding water quality see Master Response 14.
1552	50	INCONSISTENCY WITH ANTIDEGRADATION POLICY AND WATER QUALITY REGULATION The BDCP and EIR/EIS assert that the documents are consistent with state and federal water quality regulations, because the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (State Water Board) were given the opportunity to contribute and review these documents. [Footnote 24: BDCP, Section 1.3.7.10, page 1-20, lines 27-30] However, the BDCP and EIR/EIS do not provide any documentation of this compliance assessment, and the BDCP and EIR/EIS do not clearly demonstrate consistency with state and federal antidegradation policies. Antidegradation policies have been issued at both the federal and state level. These policies are intended to protect existing water quality and associated beneficial uses. The federal policy is expressed as a regulation in 40 CFR [Section] 131.12. The federal antidegradation policy requires protection of existing in-stream uses and water quality necessary to protect those uses. The federal policy also requires maintenance and protection of water quality beyond that required to support propagation of fish, shellfish and wildlife, and recreation (i.e. meet "fishable, swimmable" standards) when high water quality exists, unless a state finds that lower water quality is necessary to accommodate important economic and social	Anti-degradation policy, as adopted by the State Water Resources Control Board in Resolution 68-16, applies to the granting of permits and licenses for unappropriated water and disposal of wastes into waters of the State. The policy states that water quality be protected absent a determination of specified findings. DWR will comply with the laws and policies regarding anti-degradation. If the Project is consistent with providing the maximum benefit to the people of the State of California, will not unreasonably affect beneficial uses, and will not result in a violation of applicable standards (currently set at 250mg/L under the 2006 Water Quality Control Plan), then the proposed project is consistent with the anti-degradation policy. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding anti-degradation analysis for water quality see Master Response 14. Alternative 4A would have substantially less effect on Delta water quality such that significant impacts were only identified for electrical conductivity (EC) at Emmaton and Prisoners Point, and mercury associated with the limited tidal habitat restoration that would be implemented. The significant impacts to EC are to be mitigated through real-time operations that could not be completely represented in the modeling on which the EC assessment is based.

DEIRS Ltr#	Cmt#	Comment	Response
		development. The State of California (State) policy, adopted in 1968 as a resolution of the State Water Board (Resolution 68-16), addresses the need to maintain high quality waters in California consistent with maximum benefit to the people of the State. USEPA Region 9 also provided guidance on implementing the antidegradation provisions. [Footnote 25: USEPA Region 9. Guidance on Implementing the Antidegradation Provisions of 40 CFR 131.12. June 3, 1987. http://water.epa.gov/scitech/swguidance/standards/adeg/upload/Region9_antideg_guidance.pdf] These guidance documents clearly suggest that projects like BDCP are required to meet antidegradation requirements. However, the BDCP does not explicitly state how the BDCP is consistent with the federal and state policies.	
1552	51	INCONSISTENCY WITH ANTIDEGRADATION POLICY AND WATER QUALITY REGULATION Applicability of Antidegradation. The USEPA Region 9 guidance document specifies that actions subject to antidegradation requirements include "3. Other "major Federal actions" (pursuant to NEPA and the Endangered Species Act)" and "4. Water quantity/water rights actions which affect water quality." Waters are classified in three "tiers" relative to the existing beneficial uses that are supported. Antidegradation is applied on a parameter-by-parameter basis. [Footnote 26: State Water Resources Control Board. Federal Antidegradation Policy. October 7, 1987. http://water.epa.gov/scitech/swguidance/standards/wqslibrary/upload/2009_16_3_waterscience_standards_wqslibrary_ca_ca_9_fed_anti_pol.pdf] Tier 1 (Section 131.12(a)(l)) waters are the minimum acceptable level where beneficial uses are protected. It is inconsistent with the antidegradation regulations to further degrade conditions such that the beneficial use is not supported. Tier 2 "high-quality waters" are those whose quality exceeds that necessary to protect the section 101(a)(2) goals of the Clean Water Act, regardless of use designation. Classification as a "Tier 2 high quality water" is assessed on a parameter-by-parameter basis and does not have to be a general condition for the water body. In "high-quality waters," under 131.12(a)(2), before any lowering of water quality occurs, there must be an antidegradation analysis. Water quality may not be lowered to less than the level necessary to fully protect the "fishable/swimmable" uses and other existing uses. Tier 3 waters are Outstanding National Resource Waters (ONRWs) that are provided the highest level of protection under the antidegradation policy. Section 131.12(a)(3) does not allow degradation of these waters. Tier 1 and Tier 3 waters cannot be degraded.	For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on Anti-degradation analysis for Water Quality.
1552	52	INCONSISTENCY WITH ANTIDEGRADATION POLICY AND WATER QUALITY REGULATION Specific Findings in EIR/EIS Supporting Need for Complete Antidegradation Analysis. The EIR/EIS performs a screening on a constituent-by-constituent basis to identify problematic constituents, but it does not follow with findings on antidegradation or justification for not considering it. For this screened subset of constituents, the EIR/EIS CEQA and NEPA findings are based on quantitative or qualitative assessment comparisons to water quality objectives. The constituent-by-constituent evaluation and screening process do not sufficiently address antidegradation analysis requirements. There are numerous instances where the BDCP should trigger a detailed antidegradation analysis, which would evaluate whether the proposed project is to the benefit of the people	Antidegradation analyses are the responsibility the State Water Resources Control Board and Regional Water Quality Control Boards as they make findings and decisions regarding water rights, changes in water quality objectives, and issue NPDES permits. Antidegradation analyses consider degradation relative to water quality criteria as well as socioeconomic impacts associated with not allowing the identified degradation to occur. The State or Regional Water Board, as appropriate, makes findings regarding the proposed regulatory action (e.g., new water quality objective or NPDES permit) weighing the identified degradation and socioeconomic impacts, relative to the benefit to the people of the state. For more information about antidegradation analysis, please see Master Response 14. The water quality assessment in the 2013 Public Draft EIR/EIS does make impact determinations relative to water quality degradation thresholds provided in Chapter 8, Section 8.4.2.3.

DEIRS Ltr#	Cmt#	Comment	Response
		of the State compared to an alternative. The BDCP, however, fails to adequately do so. For example, the EIR/EIS California Environmental Quality Action (CEQA) finding for methylmercury states that: Methylmercury is 303(d)-listed within the affected environment, and therefore any potential measurable increase in methylmercury concentrations would make existing mercury-related impairment measurably worse. Because mercury is bioaccumulative, increases in waterborne mercury or methylmercury that could occur in some areas could bioaccumulate to somewhat greater levels in aquatic organisms and would, in turn, pose health risks to fish, wildlife, or humans. (Page 8-447, lines 8-12) The EIR/EIS CEQA finding for dissolved organic carbon (DOC) states that: The potential for substantial increases in long-term average DOC concentrations related to the habitat restoration elements of CM4 through CM7 and CM10 could contribute to long-term water quality degradation with respect to DOC and, thus, adversely affect MUN (municipal and domestic water supply) beneficial uses. (Page 8-457, lines 37-40) These are but two specific examples of statements that occur throughout the EIR/EIS (see Attachment 2 [ATT2] for other examples) that document that concentrations will increase and worsen existing impairments or cause new impairments, which is inconsistent with both the Delta Methylmercury Total Maximum Daily Load (TMDL) and Basin Plan water quality objectives. The EIR/EIS does not directly address consistency with the antidegradation policies, but it instead implies consistency through the evaluation of water quality criteria: Each Regional Water Board's Basin Plan identifies numeric and narrative water quality objectives, together with the beneficial uses assigned to water bodies and the state antidegradation policy. (Page 8-17, line 7) It is not clear from this statement how the antidegradation determination and analysis were performed. No supplemental information is provided to demonstrate consistency with the antidegradation policies, which are codified regulations.	For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding antidegradation analysis for water quality, see Master Response 14.
1552	53	INCONSISTENCY WITH ANTIDEGRADATION POLICY AND WATER QUALITY REGULATION Antidegradation Tests and Analysis Components. The antidegradation policies require that existing (Tier 2) high quality waters be maintained to the maximum extent possible unless certain antidegradation findings are made. The requisite three pronged test includes demonstrating that any changes to water quality are: (1) consistent with the maximum benefit to the people of the State; (2) will not unreasonably affect beneficial uses; and (3) will not violate water quality standards. Additionally, the proposed project should consider the best practicable treatment or control (BPTC) necessary to assure that no pollution or nuisance will occur and that the highest water quality consistent with the maximum benefit to the people of the State will be maintained. This analysis of whether a proposed activity will degrade high quality waters needs to be completed prior to proceeding with the proposed project. The antidegradation analysis should make specific determinations of impacts to water quality and beneficial uses, as well as consistency with Total Maximum Daily Loads (TMDLs)	See response to comment 1552-22.

DEIRS Ltr#	Cmt#	Comment	Response
		and water quality regulations. If there are non-negligible impacts, it is necessary to evaluate alternatives that would mitigate or correct the impacts. Any impacts must be in the best interests for the people of the State as demonstrated through a socioeconomic impact analysis. The State Water Resources Control Board issued guidance (APU 90-04) to all Regional Water Quality Control Boards regarding the implementation of antidegradation policies in National Pollutant Discharge Elimination System (NPDES) permits. While APU 90-04 is specific to NPDES discharges, the analysis requirements provide guidance for structuring the minimum BDCP antidegradation analysis for these Tier 2 waters. The BDCP document, at a minimum, should be revised to include the applicable components of the "complete" analysis recommended in APU 90-04: - Determination of whether the project will produce minor effects which will not result in a significant reduction of water quality; and - Determination of whether proposed load increases are substantial. Factors to be considered in determining whether a project is necessary to accommodate important economic or social development and is consistent with maximum public benefit are: - Past, present, and probable beneficial uses; - Economic and social costs to maintain water quality compared to the benefits; - Environmental aspects of the proposed discharge; and - Consideration of feasible alternative control measures which might reduce, eliminate or compensate for negative impacts of the project.	
1552	54	INCONSISTENCY WITH ANTIDEGRADATION POLICY AND WATER QUALITY REGULATION Total Maximum Daily Load (TMDL) Compliance. The BDCP does not specifically evaluate compliance with the Delta Methylmercury TMDL, which specifies load allocations for subareas of the Delta. Several of the proposed conservation measures (2, 3, 4, 5, 7, 8, 9, 10, and 11) are restoration or habitat enhancement activities that have the potential to increase methylmercury concentrations within, or tributary to, the TMDL area. The BDCP does not propose how these activities will affect the subarea load allocations or the allocations for wetlands in the TMDL. Other TMDLs, such as those for pesticides, also are not specifically addressed and should be included in the evaluations when activities may not support the TMDL goals. The appropriate antidegradation analysis should be conducted with specific determinations of impacts to water quality, beneficial uses, and consistency with Total Maximum Daily Loads (TMDLs) and water quality regulations.	For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding water quality and anti-degradation analysis, please see Master Response 14.
1552	55	LACK OF MEANINGFUL ROLE FOR LOCAL AGENCIES IN BDCP GOVERNANCE The Sacramento Stormwater Quality Partnership recognizes and supports the proposal to include a Stakeholder Council for municipalities, non-governmental organizations, and the	Cities and counties in the Delta are incorporated into the proposed decision-making structure for Alternative 4 as part of the Stakeholder Council, an advisory body to the Authorized Entity. Please see Master Response 5 regarding the adequacy of the governance structure proposed for the 2013 public draft BDCP. See also

DEIRS Ltr#	Cmt#	Comment	Response
		general public (page 7-1, lines 37-39), as this provides outreach and opportunities to respond to decisions by the Program Manager, Adaptive Management Team, and Permit Oversight Group. However, the Partnership and the ratepayers we represent have a significant financial and natural resource stake in the outcomes of the BDCP and therefore need to be afforded a more significant role in BDCP implementation and assessments. As noted on BDCP (page 7-26, lines 5-9), the California Natural Resources Agency is working with counties to develop a program with more significant county involvement in BDCP implementation. The local municipalities have a similar stake as counties in water supply, land use, National Pollutant Discharge Elimination System (NPDES) regulation, and water quality issues and should be included in discussions regarding this implementation role. For example, the BDCP describes the implementation of CM19 for urban runoff treatment through NPDES permits (page 3.4-327, lines 17-24), which include comprehensive stormwater management and pollutant reduction programs. However, the BDCP does not provide technical development of a baseline for urban runoff effects on the covered species or a description of how future assessments of effectiveness would be made by the Adaptive Management Team (e.g., quantitative benchmarks, modeling tools, etc.). The far-reaching assertion of "implementation of CM19 through the NPDES permits" suggests an active role in permitting by the Implementation Office and direct tie-ins between the BDCP and MS4 permits. In this scenario, local agencies input of their scientific assessments is limited to their respective NPDES permit renewals, which is potentially well after the Adaptive Management Team has published its effectiveness assessments. Local government should be given a more significant role in management of the BDCP to the extent that the BDCP will impact local water supply, water quality, and land use planning. The role should allow local agencies representation on the adaptive management issues that impact them.	Master Response 11 for information regarding integration of local jurisdictions. A detailed description of the Collaborative Science and Adaptive Management Program is included in Chapter 3, Description of Alternatives, of the Final EIR/EIS.
1552	56	TECHNICAL ERRORS AND OMISSIONS The BDCP and EIR/EIS inaccurately characterize several issues as general knowledge. Characterization of Urban Runoff. On page 3.4.327, the BDCP states that "Stormwater runoff is a leading source of water pollution in the United States and is a large contributor to toxic loads present in the Delta (Weston et al. 2005; Amweg et al. 2006; Werner et al. 2008)". The Weston, et al. and Amweg studies neither evaluate the pesticide loading to the Delta nor conclude that stormwater is the "leading source of water pollution". On page 3.4.327, it is stated that "Pyrethroid chemicals used as pesticides on suburban lawns are of particular concern, and are delivered to the Delta system by runoff." The Werner et al. (2008, page 8) conceptual model report cites a Weston (2007) paper when stating that "Urban use of pyrethroid insecticides and subsequent transport into surface waters may be a significant contributor to the contamination of rivers with pyrethroids." However, the conclusion is actually not that such contamination has been confirmed through observational studies in the Delta, but rather that it may be possible. Characterization of the cited work as definitive is inaccurate. A better understanding of how urban runoff and pesticides affect covered species is necessary before designing and piloting control measures. A prioritization of control measures is necessary before their implementation. These Weston and Amweg studies evaluated upstream creek sediments, primarily outside of the Delta. Additional studies by the same researchers that evaluated instream water	Please see Master Response 38 regarding the length and complexity of the environmental document. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		column concentrations did not find the same toxicity signal in the downstream Delta, which is consistent with the Partnership's assessment through the SSQP and Coordinated Monitoring Program (CMP). To date, the connection between toxicity to covered species in the Delta and Sacramento urban runoff pyrethroid concentrations has not been established. It is a scientifically-unfounded technical leap to assume that urban runoff is a large contributor to covered species toxic loads in the Delta. In addition, this also ignores the significant benefits of water quality management programs upstream of the Delta, as noted at the beginning of these comments. The 2004 EPA 305(b) (EPA 2009) report, which is likely the basis for the assertion that stormwater runoff is a leading source, though it is not specifically cited, is inappropriately used. That report does not show urban stormwater runoff as the leading source for any of the receiving water types. The assessments in the EIR/EIS are primarily based on 303(d) impairment listing causes, which can be biased by more frequent sample collection and targeted source sample collection. The BDCP should provide more specific (e.g., primary source, page number, etc.) references to the general and definitive statements regarding urban runoff as a water quality issue and provide a more balanced evaluation to include the benefits of existing municipal stormwater management programs.	
1552	57	TECHNICAL ERRORS AND OMISSIONS The BDCP and EIR/EIS inaccurately characterize several issues as general knowledge. Historic Organophosphate (OP) Pesticide Data Not Relevant. Data from 2006, and before, are consistently used through the analysis and discussion to draw conclusions on pesticides. Page 5.D-48 the BDCP states: Surface water data indicate that concentrations are high for both diazinon and chlorpyrifos in back sloughs and small upland drainages, and concentrations are lower in both the main channels and main inputs to the Delta. High concentrations of chlorpyrifos also are found in Delta island drains, but concentrations of diazinon remain low in the same drains (McClure et al. 2006). In the past, elevated concentrations of diazinon and chlorpyrifos have been detected in the Sacramento and San Joaquin Rivers and in the Delta during particularly wet springs and after winter storm events (McClure et al. 2006). This could suggest that increased flow with accompanying increased suspended loads will result in increased mobilization of both diazinon and chlorpyrifos. Alternatively, the elevated concentrations may be attributable to irrigation or stormwater runoff from late winter/early spring dormant season spraying of orchard crops. Characterization of OP pesticides based on data collected prior to 2005 should not be considered as representative of current conditions, due to the fact that the urban use bans have been effective since 2005 and improved dormant orchard spray application guidance was implemented in 2000. More recent data is readily available to confirm the improved conditions for OP pesticide concentrations and should be referenced. The pesticide evaluation should be performed with a more recent data set that reflects current conditions. The BDCP and EIR/EIS should use robust datasets and evaluations that are available from the Department of Pesticide Regulation, U.S. Geological Survey, local	Please see Master Response 38 regarding the length and complexity of the environmental document. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		agencies, and regional partnerships.	
1552	58	TECHNICAL ERRORS AND OMISSIONS The BDCP and EIR/EIS inaccurately characterize several issues as general knowledge. Definition of the Plan Area and Inclusion of Conservation Measure Areas. The scope of the Plan Area is ambiguous with regards to areas directly impacted by conservation measures, and it is unclear if the omission of most of the urban Sacramento area is intentional. On page 1-3, the BDCP Plan Area is defined as covering "the Sacramento-San Joaquin Delta, as defined by California Water Code Section 12220 (statutory Delta), as well as certain areas in which conservation measures will be implemented such as Suisun Marsh and the Yolo Bypass" (Section 1.4.1, Geographic Scope of the BDCP and Figure 1-1). The referenced map does not identify significant upstream areas, but the use of "such as" implies "but not limited to." This statement and Figure 1-1 appear to confine the Plan Area to the legal Delta area and some restoration areas and suggests that the urban areas used for stormwater treatment in CM19 and the Lower Sacramento River downstream of Fremont Weir (CM2) are not included in the Plan Area. The description of the Plan Area should clearly define the actual areas or describe the implication to areas not within the Delta, but included in conservation measures or other BDCP actions. The Sacramento Stormwater Quality Partnership requests that the BDCP provide precise definitions of the Plan Area and justification for inclusion of the areas selected for the Plan Area.	Please see Master Response 38 regarding the length and complexity of the environmental document. For additional information on the BDCP effects analysis please see Master Response 5 well as a discussion of the current status of the draft BDCP Effects Analysis, please see Master Responses 5 and 31.
1552	59	TECHNICAL ERRORS AND OMISSIONS The BDCP and EIR/EIS inaccurately characterize several issues as general knowledge. Errors and Omissions. The Sacramento Stormwater Quality Partnership understands that a document the size and scope of the BDCP would have technical and editorial errors. Various errors and omissions are identified in Attachment 1 [ATT1] (BDCP) and Attachment 2 [ATT2] (EIR/EIS). These errors and omissions should be reviewed and addressed.	Please see Master Response 38 regarding the length and complexity of the environmental document. For information on the BDCP effects analysis please see Master Response 5.
1552	60	[ATT1: Attachment 1 -- Table of Sacramento Stormwater Quality Partnership Specific Comments on Bay Delta Conservation Plan]	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.
1552	61	[From ATT1:] Section: 1.1 Page: 1-3 Line: 15-33	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Analysis, please see

DEIRS Ltr#	Cmt#	Comment	Response
		Type: Scope Reference Document Text: The Plan Area covers the Sacramento San Joaquin Delta, as defined by California Water Code Section 12220 (statutory Delta), as well as certain areas in which conservation measures will be implemented such as Suisun Marsh and the Yolo Bypass (Section 1.4.1, Geographic Scope of the BDCP) (Figure 1-1). The infrastructure of the state and federal water projects form an integrated system that extends beyond the boundaries of the Delta; as such, the BDCP will affect water operations, species, and habitat both inside and outside of the Delta. While the Plan Area generally does not include areas upstream and downstream of the Delta, the Plan addresses the upstream and downstream effects of covered activities (Chapter 5, Effects Analysis) Comment: The statement implies that the project is confined to the legal Delta area; however, a number of the conservation measures, including CM19, include areas outside of this area. The description of the project area should clearly define the actual areas or describe the implication to areas not within the Delta, but included in conservation measures or other BDCP actions. Only a small fraction of the Sacramento urban area is within the legal Delta.	Master Responses 5 and 31.
1552	62	[From ATT1:] Section: 1.3.7.10 Page: 1-20 Line: 27-30 Type: Water Quality, Adaptive Management Reference Document Text: The State Water Board's participation in the development of the BDCP and in the environmental review process is intended to ensure consistency between the actions described in the BDCP and those required by the State Water Board as part of its water quality control planning and implementation activities. Comment: The BDCP document does not explain how the State Water Resource Control Board's participation ensures compliance with the Basin Plan, Total Maximum Daily Loads (TMDLs), or other laws and water quality requirements that include the State Antidegradation Policy. The BDCP should include a detailed analysis and assessment of compliance with water quality policy.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please refer to Master Response 14 regarding assessment of water quality degradation in the EIR/EIS, and the relevance of federal and state antidegradation policy considerations in the CEQA/NEPA process.
1552	63	[From ATT1:] Section: 1.6.2 Page: 1-40	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and Master Response

DEIRS Ltr#	Cmt#	Comment	Response
		Line: 1-7 Type: Water Quality, Adaptive Management Reference Document Text: The BDCP is built on and reflects the extensive body of scientific investigation, study, and analysis of the Delta compiled over several decades, including the results and findings of numerous studies initiated under the CALFED Bay-Delta Science Program and the Ecosystem Restoration Program, the long-term monitoring programs conducted by the Interagency Ecological Program (IEP), research and monitoring conducted by state and federal resource agencies resource agencies, water contractor scientists, and research contributions of academic investigators. Comment: The BDCP should identify the known science shortcomings and propose a means to fill these data gaps. Given the uncertainty in causes of covered species effects, a clear assessment of data gaps and necessary tools should be included in the BDCP.	33 for adaptive management
1552	64	[From ATT1:] Section: 2.3.2.1.5 Page: 2-18 Line: 6-17 Type: Water Quality, Adaptive Management Reference Document Text: Other sources of flows of toxic substances in the ecosystems of the Plan Area include wastewater treatment plants, urban runoff, and upstream sources. Although there is considerable uncertainty regarding the effects of some of these toxics on fish, at least three mechanisms have been identified through which toxics could affect fish. First, direct exposure to toxics could have negative impacts on fish, especially to more vulnerable life stages such as eggs and larvae. Second, toxic substance-induced mortality of zooplankton, a source of food for nearly all fish species at one or more life stages, could limit food to fish species and result in reduced growth rates, reproductive output, and survival rates. Third, the bioaccumulation of toxics such as mercury and selenium by Potamocorbula is well documented, and likely occurs in other organisms as well. Because some fish (e.g., sturgeon and splittail) and aquatic birds (e.g., surf scoter, American coot, and scaup) forage on organisms that bioaccumulate mercury and/or selenium, their tissue can bioaccumulate these toxics, thus reducing growth, reproduction, and survival (Luoma and Presser 2000). Comment: The statement regarding the uncertainty of the effects of toxics on fish should be expanded to identify where the uncertainty exists and broadened to include the uncertainty in fate and transport between sources and Delta effects. It will be important to understand the entire physical model from sources, fate and transport, and exposure period in order to improve conditions, provide effective conservation measures, and evaluate conservation	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For a more thorough discussion about aquatic resources, please refer to Master Response 17. For more information regarding water quality see Master Response 14. Please see Master Response 33 for a discussion of adaptive management.

DEIRS Ltr#	Cmt#	Comment	Response
		measure effectiveness. Identifying these data and understanding the gaps is important to improving the science.	
1552	65	[From ATT1:] Section: 3.1; 3.3; 3.4 Page: 3.1-4; 3.4-326 Line: 7-8; 17-18 Type: CM19 Reference Document Text: The BDCP Page 3.1-4 states, 'The conservation measures comprise the specific actions to be taken to meet the biological goals and objectives.' And, the Conservation Strategy (Section 3.4) specifies 22 Conservation Measures (CM). Urban Stormwater Treatment is Conservation Measure 19 (CM 19) and page 3.4-326 Line 17-18 states, 'The primary purpose of CM 19 is to contribute to Objective L2.5, which calls for water quality conditions within the Delta that help restore native fish habitat. Comment: Page 3.4-326 provides an improper reference. CM19 is included in Objective L2.4 not L2.5 (page 3.3-7).	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. See Response to Comment 1552-1 for discussion of CM 19.
1552	66	[From ATT1:] Section: 3.2.1.2 Page: 3.2-3 Line: 36-38 Type: CM19, Water Quality Reference Document Text: The BDCP is not intended to encompass the entire range of the covered species (except in the case of delta smelt), nor is it intended to address all of the stressors that have contributed to the decline of these species. Rather, it is focused on stressors that can be addressed feasibly within the Plan Area. Comment: The BDCP does not provide sufficient review of all of the stressors to demonstrate that all of the feasible measures have been considered.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. See Response to Comment 1552-1 for discussion of CM 19. For additional information about other stressors, refer to Master Response 23.
1552	67	[From ATT1:] Section: 3.2.3	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. For additional information about other stressors

DEIRS Ltr#	Cmt#	Comment	Response
		Page: 3.2-6 Line: 36-39 Type: Water Quality Reference Document Text: Changes in water quality have important direct and indirect effects throughout the estuarine ecosystem. Water quality in the Delta is affected by a variety of discharges from agricultural, industrial, and urban sources that have been linked to ecological changes (e.g., Thompson et al. 2000; Glibert 2010). Comment: The BDCP does not present a stressor source evaluation when developing the aquatic resources component of conservation measures. While several types of potential sources with "direct or indirect" effects are identified, only urban runoff was identified for inclusion as a conservation measure. In particular, the cited source for urban runoff impacts, (Thompson et al, 2000), was written prior to the use regulation changes to pesticides. Since the registration changes, incidences of aquatic species mortality related to urban runoff have declined as observed by the Sacramento Stormwater Quality Partnership (SSQP) and others statewide (Schiff, Kenneth; Bax, Beth; Markle, Phil; Fleming, Terry; and Newman, Jennifer (2007) "Wet and Dry Weather Toxicity in the San Gabriel River," Bulletin of the Southern California Academy of Sciences: Vol. 106: Iss. 3.). The BDCP should include a more extensive evaluation of the sources, fate and transport, and the impact on aquatic life beneficial uses for all sources, including diversion flows, atmospheric deposition, point sources, and nonpoint sources to determine if load reductions are feasible and would improve Delta conditions.	in the Delta, please refer to Master Response 23.
1552	68	[From ATT1:] Section: 3.2.3 Page: 3.2-6 Line: 36-38 Type: CM19, Water Quality Reference Document Text: Changes in water quality have important direct and indirect effects throughout the estuarine ecosystem. Water quality in the Delta is affected by a variety of discharges from agricultural, industrial, and urban sources that have been linked to ecological changes (e.g., Thompson et al. 2000; Glibert 2010). Comment: This statement does not include all of the sources and activities that can result in changes in water quality. The BDCP will result in reduced dilution in the Delta, which should be considered in the discussion of water quality.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. For additional information about other stressors, refer to Master Response 23.

DEIRS Ltr#	Cmt#	Comment	Response
1552	69	[From ATT1:] Section: 3.2.3 Page: 3.2-7 Line: 28-29 Type: Water Quality Reference Document Text: Improve passage of fish within and through the Delta by improving hydrodynamic and water quality conditions that can create barriers to movement and high susceptibility to predators. Comment: This statement should be clarified as to the water quality parameters of concern.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.
1552	70	[From ATT1:] Section: 3.2.3 Page: 3.2-7 Line: 40-41 Type: Water Quality Reference Document Text: In addition, it addresses specific stressors on covered fishes, such as impediments to fish passage, sources of unnatural mortality, and water quality impairments. Comment: This statement discusses that the BDCP addresses water quality impairments, but the BDCP does not provide sufficient evaluation of this topic.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.. For additional information about other stressors, refer to Master Response 23.
1552	71	[From ATT1:] Section: 3.2.3.3 Page: 3.2-10 Line: 18-27 Type: CM19, Water Quality Reference Document Text: Other measures include actions to increase dissolved oxygen in specific problem areas important to salmonid migration (CM14 Stockton Deep Water Ship Channel Dissolved Oxygen Levels), to contribute to overall Delta water quality improvements (CM12 Methylmercury Management, CM19 Urban Stormwater Treatment) to reduce illegal harvest	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		of covered fishes (CM17 Illegal Harvest Reduction), to reduce the number of small water diversions in the Plan Area (CM21 Nonproject Diversions), to develop new and expanded conservation hatcheries for delta smelt and longfin smelt for the purpose of establishing refugial populations that will not impair the genetic fitness of the wild stocks (CM18 Conservation Hatcheries), and to reduce the risk of new invasive species appearing in the Plan Area (CM20 Recreational Users Invasive Species Program). Comment: Based on the presented evaluation summary, CM12 and CM19 are included as conservation measures to "contribute to the overall Delta water quality improvements". While CM12 is focused on evaluating the effects of restoration areas created by the BDCP, there is no specific justification provided for inclusion of CM19. The benefit of CM19 to downstream water quality is not well established. The BDCP should provide a justification for inclusion of CM19 based on known or reasonably expected quantified downstream benefits compared to total implementation costs.	
1552	72	[From ATT1:] Section: 3.2.3.3 Page: 3.2-10 Line: 21-22 Type: CM19, Water Quality Reference Document Text: ... to contribute to overall Delta water quality improvements (CM12 Methylmercury Management, CM19 Urban Stormwater Treatment) Comment: Other feasible measures to contribute to overall Delta water quality improvement should be included in this discussion.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.
1552	73	[From ATT1:] Section: 3.2.3.3 Page: 3.2-10 Line: 22 Type: Error Reference Document Text: ... to contribute to overall Delta water quality improvements (CM12 Methylmercury Management, CM19 Urban Stormwater Treatment) to reduce illegal harvest of covered fishes ...	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: Missing comma between "(Stormwater Treatment)" and "to reduce illegal harvest of covered fishes".	
1552	74	[From ATT1:] Section: 3.3.1 Page: 3.3-2 Line: 2-5 Type: Adaptive Management Reference Document Text: Failure to achieve a biological goal or objective will not be a basis for a determination by the fish and wildlife agencies of noncompliance or for the suspension or revocation of the permits as long as the Permittees are properly implementing the BDCP and in compliance with the Implementing Agreement and the permit terms and conditions. Comment: The BDCP does not incentivize meeting biological goals to minimize degradation. For example if the BDCP is unable to fund CM3-CM22, how would the program change and what would the export limitations be? If climate change amplifies the effect of the BDCP and ecological strain on covered species, what incentive would be in place to implement changes to offset the amplified impacts?	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.For more information regarding adaptive management see Master Response 33. For more information about climate change adaptation strategies, refer to Master Response 19.
1552	75	[From ATT1:] Section: 3.3.2 Page: 3.3-3 Line: 3-8 Type: CM19 Reference Document Text: Biological objectives are expressed as specific outcomes that are expected to be achieved by the Plan for ecosystems, natural communities, covered species or species' habitat, or stressor attributes. Biological objectives are "SMART" - specific, measurable, achievable, relevant, and time-bound - to the maximum extent possible. Where a high level of uncertainty is associated with the measurability or achievability of an objective, that uncertainty is explicitly acknowledged in the objective, its associated rationale, or in both locations. Comment: CM19 does not sufficiently address SMART objectives as stated. There is not a specific linkage to specific water quality improvement needs and goals for urban stormwater.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14 For more information regarding adaptive management, see also Master Response 33.

DEIRS Ltr#	Cmt#	Comment	Response
		Since there's uncertainty in sources and goals for contaminant related stressor impacts and solutions, the BDCP should provide for additional research, evaluations, and modeling to provide a basis for urban stormwater treatment or other source reduction efforts.	
1552	76	[From ATT1:] Section: 3.3.4 Page: 3.3-7 Line: Table 3.3-1 Type: CM19, Water Quality Reference Document Text: Objective L2.4: Support improved ecosystems function in aquatic natural communities by implementing actions to improve water quality, including reducing dissolved oxygen impairments in the Stockton Deep Water Ship Channel, reducing pollutant loading by urban stormwater, and minimizing mobilization of methylmercury from lands in the reserve system. Comment: The basis for the urban runoff loading reduction objective is not provided in an assessment that evaluates sources of pollutants, their fate and transport, and benefits to Delta aquatic life. The objective combines the lack of preciseness in the potential benefits of the measure with a precise identification of one source. While pollutant reductions are an existing goal of municipal separate storm sewer system (MS4) programs, inclusion as a conservation measure is not necessary, provides no new benefits, and is not evaluated against other source control efforts. The general reference to urban runoff in this text should be removed.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14 For more information about standards governing mitigation measures and source control, see Master Response 22.
1552	77	[From ATT1:] Section: 3.3.4 Page: 3.3-5 to 3.3-34 Line: --- Type: CM19, Water Quality Reference Document Text: various Comment: There are many references to CM19 and justification based on pollutant loading, which is not supported in the BDCP. See previous comments on Objective L2.4 and its rationale.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. For discussion of CM19 please see Response to Comment 1552-1.
1552	78	[From ATT1:]	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 3.3.4 Page: 3.3-15 to 3.3-23 Line: Table 3.3-1 Type: CM19 Reference Document Text: Table 3.3-1. Conservation Strategy Goals and Objectives with Associated Conservation Measures Comment: CM 19 also is listed as being applicable to ten (10) 'Species-Specific Goals and Objectives' between pages 3.3-15 and 3.3-23. Because the listed contaminants were selected based on, '...the types of contaminants that have effects on fish.' (page 5.D-5), and stormwater (as shown in Table 5.D.2 1 and the rationale provided above) is not a significant source of those contaminants, CM19 should be deleted from each/all of the 'Species- Specific Goals and Objectives' namely: DTSM1.1, DTSM2.1, LFSM1.1, WRCS1.1, SRCS1.1, FRCS1.1, STHD1.1, GRST1.1, WTST1.1, and WTST3.1.	attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. For discussion of CM19 please see Response to Comment 1552-2.
1552	79	[From ATT1:] Section: 3.3.5.2 Page: 3.3-43 Line: 10-28 Type: CM19, Water Quality Reference Document Text: As stormwater runoff flows to the Delta, it accumulates sediment, oil and grease, metals (e.g., copper and lead), pesticides, and other toxic chemicals. Unlike sewage, stormwater is often not treated before discharging to surface water. Despite stormwater regulations limiting discharge volumes and pollutant loads, many pollutants still enter Delta waterways in stormwater. Of particular concern for fish species is the overuse of pesticides, some of which can have deleterious effects on the aquatic food chain (Weston et al. 2005; Teh et al. 2005). Pyrethroid chemicals used as pesticides on suburban lawns are of particular concern and are delivered to the Delta system by runoff. These chemicals at very low concentrations can have lethal effects on low trophic levels of the food chain (plankton), and mainly sublethal effects on covered fish species (Weston and Lydy 2010). Other urban pollutant sources, which can be transported directly or indirectly by stormwater runoff to the Delta, include nutrients from failing septic systems, and viruses and bacteria from agricultural runoff. As described in CM19 Urban Stormwater Treatment, the Implementation Office will provide a mechanism for implementing stormwater treatment measures that are intended to result in decreased discharge to the Delta of contaminants derived from urban stormwater, which is intended to improve water quality conditions in the Plan Area to the benefit of covered species.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. For discussion of CM19 please see Response to Comment 1552-2.

DEIRS Ltr#	Cmt#	Comment	Response
		The stormwater treatment measures to be implemented as part of CM19 Urban Stormwater Treatment will help the local jurisdictions within the Plan Area achieve compliance with National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) Phase I and Phase II permit conditions, which is expected to reduce pollutant loads of point and non-point source effluent discharged within the Plan Area. Comment: The provided rationale for the objective does not link urban runoff to downstream effects in the Delta, but rather the effect of pesticides on aquatic species. A more complete computational rationale is feasible and should be required before identifying one source of pollutants or pesticides for a conservation measure. Much of the Weston et al. work is limited to upstream tributaries that primarily convey urban runoff; study work downstream did not identify the same magnitude of effects. Again, there is a lack of precision on the understanding of the sources, fate and transport, and impact to aquatic life that does not support the source focus of CM19. Also, as stated, the objective accurately describes that MS4 NPDES permits already include provisions for pollutant reduction requirements and then states that CM19 will "help local jurisdictions ... achieve compliance with NPDES Permits". Please provide additional information on which parts of NPDES permits CM19 will assist compliance efforts. Please also provide a specific designation of the areas to which CM19 is intended to apply.	
1552	80	[From ATT1:] Section: 3.3.7.6 Page: 3.3-165 Line: 14-20 Type: CM19, Water Quality Reference Document Text: Exposure to toxins. Toxic chemicals are widespread throughout the Delta and may be present at a more localized scale in response to episodic events (e.g., stormwater runoff, point-source discharges). These toxic substances include mercury, selenium, copper, pyrethroids, and endocrine disruptors with the potential to affect fish health and condition and negatively affect steelhead distribution and abundance directly or indirectly. Sublethal concentrations may interact with other stressors (e.g., seasonally elevated water temperatures, predation, or disease) to increase vulnerability of steelhead to mortality. Comment: As described, a number of contaminant sources are present and act in a complex fashion. While reductions in the toxins noted are likely beneficial to downstream species, a better understanding of how the benefits of control programs can be measured is necessary to best understand the opportunities for effectively protecting covered species and other beneficial uses. More comprehensive evaluations should be performed by the BDCP prior to initiating actions with unknown benefits and high costs.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. For discussion of CM19 please see Response to Comment 1552-2.

DEIRS Ltr#	Cmt#	Comment	Response
1552	81	[From ATT1:] Section: 3.3.7.8.3 Page: 3.3-195 Line: 10-13 Type: CM19 Reference Document Text: Reducing pollutants in the Plan Area will be accomplished by implementing CM12 Methylmercury Management and CM19 Urban Stormwater Treatment, which will contribute to improving water quality and physical habitat parameters within the Plan Area, thus contributing to an increase to the extent of habitat potentially suitable for green sturgeon. Comment: The pollutant reduction strategy should be more carefully considered, especially as it relates to source control in CM12 and CM19. The relative benefit of reduction of any source categories to covered species was not performed. A detailed assessment should be performed to establish benefits to costs for a variety of sources.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. More information about contaminants and other stressors is outlined in Master Response 23.
1552	82	[From ATT1:] Section: 3.4.12.3 Page: 3.4-264 Line: Table 3.4.12-1 Type: Water Quality Reference Document Text: Effectiveness Monitoring Relevant to CM12 Comment: The conservation measure only evaluates the wasteload leaving the restoration areas and not the effect on downstream methylmercury concentrations in the water column or fish tissue. An additional assessment is necessary to support the BDCP and evaluate the effect on fish tissue concentrations.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.
1552	83	[From ATT1:] Section: 3.4.19.1 Page: 3.4.327 Line: 4-6	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also Master Response 23 for background on other stressors.

DEIRS Ltr#	Cmt#	Comment	Response
		Type: Error, CM19 Reference Document Text: Stormwater runoff is a leading source of water pollution in the United States and is a large contributor to toxic loads present in the Delta (Weston et al. 2005; Amweg et al. 2006; Werner et al. 2008). Comment: The Weston and Amweg studies cited neither evaluate the pesticide loading to the Delta nor conclude stormwater as a "leading source of water pollution". These initial studies looked at creek sediments outside of the Delta. Additional studies by the same researchers that evaluated instream water column concentrations did not find the same toxicity signal in the downstream Delta. To date, the connection between urban runoff pyrethroid concentrations and toxicity in the Delta has not been well understood. It is an unfounded technical leap to assume that urban runoff is a large contributor to toxic loads in the Delta. The 2004 U.S. Environmental Protection Agency 305(b) (EPA 2009) report, which is likely the basis for the assertion that stormwater runoff is a leading source, though it is not specifically cited, is inappropriately used. The report does not show urban stormwater runoff as the leading source for any of the receiving water types.	
1552	84	[From ATT1:] Section: 3.4.19.1 Page: 3.4.327 Line: 11-12 Type: Error, CM19 Reference Document Text: Pyrethroid chemicals used as pesticides on suburban lawns are of particular concern, and are delivered to the Delta system by runoff. Comment: No reference is provided for the statement. Pyrethroid transport over long distances is not established in current literature. Pyrethroids are legal for consumers to use as regulated by the U.S. Environmental Protection Agency (EPA) and the Department of Pesticide Regulation. It is not clear what studies identified this source as an impact to the Delta and why lawn use is described to be of more concern.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. More information about contaminants and other stressors is outlined in Master Response 23.
1552	85	[From ATT1:] Section: 3.4.19.1 Page: 3.4.327 Line: 14-16	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. . More information about contaminants and other stressors is outlined in Master Response 23. Please see response to comment 1552-2 for discussion of

DEIRS Ltr#	Cmt#	Comment	Response
		Type: Error, CM19 Reference Document Text: Other urban pollutant sources, which can be transported directly or indirectly by stormwater runoff to the Delta, include nutrients from failing septic systems, and viruses and bacteria from agricultural runoff. Comment: The last sentence incorrectly incorporates non-urban and non-runoff sources into urban runoff. A more effective approach would be to evaluate all contaminant sources to develop an approach that could effectively improve Delta conditions and protect beneficial uses. Source control should be strategic and informed rather than arbitrarily focused on limited data and generalizations. The Sacramento Stormwater Quality Partnership participated in the Central Valley Drinking Water Policy development that included the modeling, downstream benefit, and cost of control measures. This approach is recommended for the BDCP to characterize contaminants and their sources and to identify opportunities for effective management.	Alternative 4 (BDCP) as a potentially viable alternative.
1552	86	[From ATT1:] Section: 3.4.19.1 Page: 3.4.327 Line: 21-24 Type: Scope Reference Document Text: These permits require municipalities to develop and implement a stormwater management plan or program with the goal of reducing the discharge of pollutants to the maximum extent practicable under Section 402(p) of the Clean Water Act. CM19 will be implemented within the context of these comprehensive plans. Phase II of the regulations that established municipal separate storm sewer system (MS4) permits requires smaller municipalities and construction sites, referred to as Small MS4s, to comply with similar requirements. Comment: MS4 permitted agencies already have management programs and contaminant reduction programs in place, and CM19 is not necessary. An evaluation of the benefit to downstream covered species for a variety of source control measures is necessary to prioritize actions before they are required for any source types.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders.
1552	87	[From ATT1:] Section: 3.4.19.2.1 Page: 3.4-327	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. More information about contaminants and other stressors is outlined in Master Response 23. See also 15 for discussion of effects of water quality

DEIRS Ltr#	Cmt#	Comment	Response
		Line: 27-36 Type: CM19 Reference Document Text: Proposed actions will be reviewed by technical staff in the Implementation Office or by outside experts supporting the Implementation Office. Projects will be funded if the Implementation Office determines that they are expected to benefit covered species. Comment: CM19 does not provide any detail on how the determination would be made that an action could benefit covered species. A major concern is that CM19 could lead to actions required in National Pollutant Discharge Elimination System (NPDES) permits that are not beneficial or are inconsistent with existing water quality policies and permits. Such control measures may be costly with little effect, and there is no process discussed in the BDCP to make these cost/benefit assessments for control measures. Moreover, local agencies (stormwater entities) are not specifically represented in the Implementation Office and would not be able to directly participate in identification of the most effective control options. This essentially adds another layer of regulation for NPDES dischargers. Expertise in urban runoff control and a sophisticated understanding of local drainage systems is necessary to effectively manage control measures.	changes on existing NPDES permit holders.
1552	88	[From ATT1:] Section: 3.4.19.2.1 Page: 3.4-327 Line: 27-36 Type: CM19 Reference Document Text: (Omission from text) Comment: The conservation measure does not specify whether it is intended to be a retrofit of existing development or new construction. The municipal separate storm sewer system (MS4) can only affect land use through new building permits and new land development. CM19 does not provide enough detail on how it would be implemented by a MS4 agency area such that a reasonable cost estimate could be prepared. Large-scale retrofit is costly and does not always provide a water quality benefit. These costs can be better developed with available information such as the Central Valley Drinking Water Policy Workgroup urban runoff report (http://www.waterboards.ca.gov/centralvalley/water_issues/drinking_water_policy/dwp_urban_sources_study.pdf)	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders.
1552	89	[From ATT1:]	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 3.4.19.3 Page: 3.4-329 Line: 1-7 Type: CM19 Reference Document Text: Effectiveness monitoring will be conducted to evaluate progress toward advancing the biological objectives discussed below in Section 3.4.19.4, Consistency with the Biological Goals and Objectives. Individual stormwater entities will be responsible for conducting the monitoring necessary to assess the effectiveness of BDCP-supported elements of their stormwater management plans. Comment: The Conservation Measure requires the stormwater agencies to perform the effectiveness assessments without funding support from the BDCP proponents or the State of California and without a direct means to evaluate the effect of projects on covered species. The BDCP only suggests evaluating decreases in loads and improving urban runoff water quality. These assessments are too general to understand more complex downstream effects. Before conservation measures are initiated, a more detailed fate and transport model and a beneficial use assessment tool are necessary and should be developed by the BDCP to establish baseline conditions and effects. It is unreasonable to expect that one source group would develop these tools.	attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14.
1552	90	[From ATT1:] Section: 3.4.19.3 Page: 3.4-329 Line: 9-12 Type: CM19 Reference Document Text: The Implementation Office will provide ongoing review of monitoring, progress, and other relevant reports from the stormwater entities and will coordinate with the stormwater entities to adjust stormwater pollution reduction strategies and annual funding levels through the adaptive management process, as appropriate, based on this review. Comment: The role of the Implementation Office includes recommending changes to the stormwater entity programs. Further, the Adaptive Management Team provides the analysis of the stormwater entity-collected data. As stated, the burden of further data collection falls on the stormwater agencies, while the decision making and conclusion drawing power is elsewhere. Local agencies should be allowed meaningful advisory or oversight roles within the Implementation Office for those issues that affect them.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders. The role of the Implementation Office to implement CM19 would be purely in a data collection and reporting role, not decision making. CM19 is a grant program that would provide funds to qualifying storm water management agencies who voluntarily apply for these funds. If BDCP is part of the selected alternative, CM19 would be revised to reflect this. Please see also Response to Comment 1552-2.

DEIRS Ltr#	Cmt#	Comment	Response
1552	91	[From ATT1:] Section: 3.4.19 Page: 3.4-330 Line: Table 3.4.19-1 Type: CM19, Local Reference Document Text: Implement best management practices (BMPs) for urban stormwater runoff through local jurisdictions within the Plan Area (e.g., cities and towns) to achieve compliance with National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) and Phase II NPDES MS4 permit conditions. Comment: The description of the Conservation Measure references "NPDES" requirements several times, which suggests and could be interpreted by Regional Water Quality Control Board permit writers and enforcement staff to mean that the Conservation Measure participation is not voluntary. We agree that NPDES MS4 programs have successfully improved urban runoff quality and request that no new requirements be implemented within NPDES permits as they have not been justified.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders.
1552	92	[From ATT1:] Section: 3.4.19 Page: 3.4-330 Line: Table 3.4.19-2 Type: CM19, Error Reference Document Text: Reduction of pollutant loads in stormwater discharges will reduce a substantial source of nonpoint source pollutant loading in Delta tributary watersheds. Comment: Urban runoff (municipal separate storm sewer system (MS4) National Pollutant Discharge Elimination System (NPDES)) is not part of the non-point source (NPS) classification. Even if urban runoff load sources are reduced, it is not established that there would be a downstream Delta benefit as degradation, dilution, and other fate and transport process may sufficiently reduce the net effect. Moreover, for many aquatic life impacts, it is the concentration rather than the load that is "experienced," and urban runoff may dilute some pollutants or cause only an intermittent exposure period.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders.
1552	93	[From ATT1:]	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 3.4.19 Page: 3.4-332 Line: 2-16 Type: CM19 Reference Document Text: Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) analysis indicates that actions to reduce the amount of pollution in stormwater runoff entering Delta waterways will be of high benefit to delta smelt, white sturgeon, steelhead, and Chinook salmon (Essex Partnership 2009). Comment: The cited DRERIP documents were reviewed, and there was no indication that "reductions in the amount of pollution in stormwater runoff entering Delta waterways will be of high benefit". Those documents discuss the potential impacts to some aquatic life, but they do not evaluate the fate and transport from urban areas to the Delta. Much of the Sacramento urban runoff does not directly enter the Delta, and the conclusion does not consider the fate and transport to points where impacts to covered species are of concern. While reductions in pollutant and improvements to water quality are generally beneficial, this summary oversimplifies the discussion in the referenced document. Some of the Table 3.4.19-2 information references dissolved oxygen depression as the water quality impact; however, urban runoff likely does not contribute significantly to the downstream oxygen impairments (http://water.epa.gov/scitech/wastetech/guide/stormwater/upload/2006_10_31_guide_stormwater_usw_b.pdf). The reference documents also refer to a number of other pollutants that are not known to be significant effects from urban runoff or those that have other sources.	attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.
1552	94	[From ATT1:] Section: 3.4.23.3 Page: 3.4-356 Line: 10-15 Type: Adaptive Management Reference Document Text: Conservation measures that have been funded and implemented properly and, nonetheless, are not achieving their intended outcomes may be considered less than effective and not worth continuing to implement (or continuing at a reduced effort). Funding dedicated for conservation measures that later prove less than effective could be reallocated to further support more effective conservation measures, within the scope of the Plan commitments and consistent with available funding.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5. For more information regarding adaptive management and monitoring see Master Response 33.

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: The process of review and reallocation of funding seems reasonable and pragmatic. However, additional language is necessary to protect the agencies and programs that are implementing programs such as CM19. Given the potential costs for CM19 implementation, a more substantial role in oversight of adaptive management is reasonable for those issues that affect local agencies. The BDCP should provide conservation measure funding assurances for the take permit period or assurances to fund the cost to remove or demobilize a conservation measure that is identified as not worth continuing.	
1552	95	[From ATT1:] Section: 3.6.3.2 Page: 3.6-11 Line: 38-45 and 3.6.12 line 1 Type: COST Reference Document Text: The BDCP includes adequate budget for and assurances that sufficient funds will be available to carry out the monitoring and research activities necessary to implement the adaptive management and monitoring program (See Chapter 8, Implementation Costs and Funding Sources, for an accounting of costs and funding assurances). Integration of the BDCP monitoring and research program, where practicable, with the common activities of the Interagency Ecological Program (IEP), Delta Science Program and other relevant programs has been factored into the cost estimates. The funding structure and integration efforts are important elements of this Plan. Inadequate funding for the ecological monitoring needed to compare the outcomes of the alternative policies has proven to be a common impediment to successful implementation of other adaptive management programs (Walters 2007). Comment: We support that the BDCP should provide adequate funding of science programs that will develop independent and reliable science and assessments. We recommend including a detailed discussion of the role of the Delta Science Program and processes anticipated for evaluating BDCP assessments and adaptive management. The proposed budget is inadequate to properly manage adaptive management and be inclusive to local agencies. Commitment to funding and providing funding opportunities to groups like the Delta Regional Monitoring Program are critical to successful adaptive management and science programs.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response Please see also Master Response 33 for discussion of adaptive management.
1552	96	[From ATT1:] Section: 3.6.3.4.8 Page: 3.6-18 Line: entire	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. See Master Response 38 for discussion of the complexity of the environmental document and Master Response 11 for information about local plan integration.

DEIRS Ltr#	Cmt#	Comment	Response
		Type: Local Reference Document Text: --- Comment: We appreciate the approach discussed in this section to provide unbiased study products to be made available to the public. We note that the organizational structure does not provide for local agency participation in review of the products, and the process does not provide a clear description of how the scientific peer review will be objective and coordinated with other programs related to Delta science.	
1552	97	[From ATT1:] Section: 3.D Page: 3.D-2 Line: Table 3.D-1 Type: CM19 Reference Document Text: Compliance Monitoring Actions Comment: The table does not indicate that there are existing stormwater programs to address contaminants. Stormwater programs already include a wide range of program elements such as construction, industrial, illicit discharge, municipal operations, public outreach, and new development post construction standards and programs to control pollutant sources.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. See Master Response 15 for discussion of effects of water quality changes on existing NPDES permit holders. Please see also Master Response 11 for information about local plan integration. Additional discussion of source control is included in Master Response 22.
1552	98	[From ATT1:] Section: 3.D Page: 3.D-9 Line: --- Type: Adaptive Management Reference Document Text: Precise details of each of the effectiveness monitoring actions are not presented here and will be developed and then periodically updated through the adaptive management and monitoring program (Chapter 3, Section 3.6). Comment: While precise details may not be possible at this time, the discussion should include a range	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For more information regarding adaptive management and monitoring see Master Response 33.

DEIRS Ltr#	Cmt#	Comment	Response
		of possible effectiveness monitoring actions to present an anticipated level of effort and outcomes.	
1552	99	[From ATT1:] Section: 3.D Page: 3.D-10 Line: Table 3.D-2. Type: Water Quality Reference Document Text: Effectiveness Monitoring Actions Comment: The BDCP should monitor and assess downstream methylmercury concentrations and fish tissue concentrations to assess the effectiveness of the control measure meeting the regional wasteload allocations and the Total Maximum Daily Load (TMDL) fish tissue targets.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis see Master Response 5 and for methylmercury see Master Response 14. For more information regarding adaptive management and monitoring see Master Response 33.
1552	100	[From ATT1:] Section: 3.D Page: 3.D-25 Line: Table 3.D-2. Type: CM19 Reference Document Text: Metric: Decreases in stormwater constituents/pollutant loads such as total suspended sediment, oil and grease, total and dissolved metals (i.e., copper and zinc), pesticides and other toxic chemicals Comment: Decreases in urban runoff loads of these constituents already occur through existing programs. What would the baseline be for the comparisons? How would the metric account for year-to-year differences in rainfall? What tools would be used for calculation of loads and assessment of trends? The BDCP should provide the assessment funding and tools, as well as address both in Adaptive Management.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis see Master Response 5 and for water quality see Master Response 14. See Master Response 33 for discussion of adaptive management and mitigation monitoring.
1552	101	[From ATT1:] Section: 3.D Page: 3.D-25	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders. See Master Response 33 for discussion of adaptive

DEIRS Ltr#	Cmt#	Comment	Response
		Line: Table 3.D-2. Type: CM19 Reference Document Text: Implement best management practices (BMPs) for urban stormwater runoff through local jurisdictions within Plan Area (e.g., cities and towns) to achieve compliance with National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) and Phase II NPDES MS4 permit conditions. Comment: It is not clear what specific areas are included. The Plan Area only intersects with a relatively small urban area, especially in the Sacramento urban area. Also, BMPs for stormwater are already implemented; how would the BDCP affect BMP implementation requirements?	management and mitigation monitoring.
1552	102	[From ATT1:] Section: 3.D Page: 3.D-26 Line: Table 3.D-2. Type: CM19 Reference Document Text: Annual effectiveness monitoring and reporting, performed by the individual stormwater entities, for the duration of the BDCP permit term Comment: The effectiveness of stormwater programs is already determined as part of National Pollutant Discharge Elimination System (NPDES) permit requirements, though the methods and approach continue to adapt and evolve to allow for better assessments. This should not be required as part of the BDCP as it is an overall activity of the municipal separate storm sewer system (MS4) agency that is not tied to specific BDCP activities.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders. See Master Response 33 for discussion of adaptive management and mitigation monitoring.
1552	103	[From ATT1:] Section: 3.D Page: 3.D-26 Line: Table 3.D-2. Type: CM19 Reference Document Text: Individual stormwater entities will be responsible for performing annual monitoring of best management practices (BMPs) implemented at the local level for the duration of the BDCP	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders. See Master Response 33 for discussion of adaptive management and mitigation monitoring.

DEIRS Ltr#	Cmt#	Comment	Response
		permit term. Comment: Requirements for BMP monitoring may unnecessarily restrict agency resources over the BDCP permit term, as the performance of individual BMPs may be less important than the extent of implementation, an understanding of how the BMPs benefit downstream beneficial uses, or how the BMP affects covered species. Municipal separate storm sewer system (MS4) agencies already know much about the effectiveness of these activities and need flexibility over the next 50 years to adapt to changing conditions and improve programs. Strict annual reporting schedules should be removed as they will constrain resources and slow the adaptive management of stormwater. Because of the variability of stormwater quality and quantity, 5-10 year time frames are necessary to implement effective programs. The 50 year term is unreasonable to apply to these MS4 programs that do not benefit from the BDCP.	
1552	104	[From ATT1:] Section: 3.D Page: 3.D-26 (Table 3.D- 2) Line: CM-19, first occurrence in table Type: CM-19, Adaptive Management Reference Document Text: Effectiveness Monitoring Actions: Conduct ongoing review of monitoring progress, and other relevant reports from the stormwater entities. Metric: Decrease in stormwater constituents/pollutant loads such as total suspended sediment, oil and grease, total and dissolved metals (i.e., copper and zinc), pesticides and other toxic chemicals. Success Criteria: Reductions in stormwater constituents and pollutant loads within the Plan Area over time. Timing and Duration: Annual effectiveness monitoring and reporting, performed by the individual stormwater entities, for the duration of the BDCP permit term. Comment: The specified "monitoring action" is a review of reporting by others. The metric is vague and cannot be directly tied to effects on covered species. More robust tools and assessment methods are necessary to adequately assess changes in loads, improvements in water quality, and downstream benefits to covered species. The required monitoring and reporting over the entire BDCP permit term is a significant cost liability for local agencies and is not guaranteed to have benefits. Sacramento has only a small area in the Plan Area, and it is not clear how this requirement would be applied to just that area. The BDCP should perform a detailed evaluation of the benefit of all contaminant source controls on the covered species so that control actions can be prioritized relative to their cost.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders.. See Master Response 33 for discussion of adaptive management and mitigation monitoring.
1552	105	[From ATT1:]	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 3.D Page: 3.D-26 (Table 3.D- 2) Line: CM-19, second occurrence in table Type: CM-19, Adaptive Management Reference Document Text: Effectiveness Monitoring Actions: Fund individual stormwater entities in the Plan Area to implement best management practices (BMPs). Metric: Implement BMPs for urban stormwater runoff through local jurisdictions within the Plan Area (e.g., cities and towns) to achieve compliance with National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) and Phase II NPDES MS4 permit conditions. Success Criteria: Reductions in pollutant loads in urban stormwater effluent generated by local jurisdictions. Timing and Duration: Individual stormwater entities will be responsible for performing annual monitoring of BMPs implemented at the local level for the duration of the BDCP permit term. Comment: The BMPs would be implemented for the 50 year BDCP permit term, but the funding plan only covers 15 years and is insufficiently scoped and funded. The description does not acknowledge the issue of modifying privately owned land. The vagueness of the success criteria does not acknowledge the lack of nexus with benefits to covered species in the Delta. CM19 should be removed and replaced with a program to better identify contaminant management actions that can cost effectively benefit covered species.	attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders. See Master Response 33 for discussion of adaptive management and mitigation monitoring.
1552	106	[From ATT1:] Section: 3.D Page: 3.D-35 Line: Table 3.D-3 Type: CM19 Reference Document Text: Does reducing stormwater pollution loads result in measurable benefits to covered fish species or their habitat? Comment: The BDCP does not specify how the measurable benefits to covered species will be evaluated. This evaluation process should be performed before implementation of the BDCP to understand the current effect of urban runoff and other sources on current species. If this cannot be performed before implementation of the BDCP, what guarantees will be made to ensure that an adequate assessment is made beyond the current non-specific BDCP finding that "lower contaminant loads are better?" The BDCP should provide the assessment	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See Master Response 33 for discussion of adaptive management and mitigation monitoring.

DEIRS Ltr#	Cmt#	Comment	Response
		funding and tools, as well as address both in Adaptive Management.	
1552	107	[From ATT1:] Section: 4.2.4.8 Page: 4-82 Line: 2-7 Type: CM19 Reference Document Text: CM19 funds local projects that improve treatment of urban stormwater, but does not permit or authorize such projects. A project that requires in-water work is required to secure appropriate permits, including appropriate ESA consultation for any action with a federal nexus. Projects that do not require in-water work are expected to occur in developed areas that do not provide habitat for covered species. Accordingly, this conservation measure is not expected to result in incidental take of covered species or adverse modification of critical habitat. Comment: CM19 would further burden local agencies with additional environmental documentation and permitting costs. If CM19 is not removed, it should be significantly modified to require an evaluation of all contaminant sources and the cost/benefit of control strategies. For any identified control strategies, the BDCP should provide funding.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders.
1552	108	[From ATT1:] Section: 4.2.6 Page: 4-89 Line: 9-14 Type: CM19, Adaptive Management, Water Quality Reference Document Text: All BDCP monitoring activities undertaken by the Implementation Office are covered activities. All covered monitoring activities will be carried out in a manner consistent with protocols recommended by the Adaptive Management Team and approved by the fish and wildlife agencies. Monitoring activities currently proposed are detailed in Appendix 3.D, Monitoring and Research Actions. Comment: CM19 appears in Table 3.D-2. This excerpt implies that the Adaptive Management Team will have oversight over the monitoring and effectiveness assessments for CM19 and its "covered activities". Much of the Sacramento and Stockton urban areas are outside of the Plan Area, though the definition of a covered activity specifies that it must be in the Plan Area. Moreover, covered activities refer to actions for which "take is authorized". Overall,	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.. See Master Response 33 for discussion of adaptive management and mitigation monitoring.

DEIRS Ltr#	Cmt#	Comment	Response
		the wording and document structure have these kinds of confusing ambiguities that should be fixed to ensure that the municipal separate storm sewer system (MS4) agencies are not obligated to participate in the take permit.	
1552	109	[From ATT1:] Section: 5.2.7.1 Page: 5.2-14 Line: Table 5.2-4 Type: CM19, Water Quality Reference Document Text: Covered Action: Conservation Hatcheries Facilities Facilities construction Relevant Conservation Measure(s): CM19 Urban Stormwater Treatment Appendix: 5.H Comment: It is unclear why CM19 is the only conservation measure listed under this covered activity. It is an imbalanced approach to only consider one of many effects, especially when the relative impact of the selected source is not known compared to others.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also Response to Comment 1552-2 for discussion of CM19.
1552	110	[From ATT1:] Section: 5.2.7.2 Page: 5.2-15 Line: 41-43 & Table 5.2-4 Type: CM19, Adaptive Management, Water Quality Reference Document Text: Models used in the BDCP are listed and described in Table 5.2-5 along with a reference to the appendix where the models are applied. The models are categorized based on their general scope and intent. In addition, benefits and limitations of each model are listed in Table 5.2-5. Comment: Pollutant concentrations and loading from watershed areas where CM19 is proposed are not included in the modeling domain. Watershed sources and fate and transport are not adequately addressed in the selected models. Watershed Analysis Risk Management Framework (WARMF) or Hydrological Simulation Program-FORTRAN (HSPF) type model is necessary to understanding at least relative impacts from sources and fate and transport of the key pollutants addressed by this conservation measure.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also Master Response 30 for discussion of modeling.
1552	111	[From ATT1:]	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 5.2.7.4 Page: 5.2-16 Line: 16-19 Type: CM19, Adaptive Management, Water Quality Reference Document Text: Environmental models set the stage for the analysis of biological effects by describing key physical and chemical conditions across the Study Area. These conditions include flow, temperature, salinity, and turbidity. In the Delta, the analysis of physical conditions and biological effects is most often based on CALSIM II and Delta Simulation Model (DSM) 2 (Figure 5.2-3). Comment: The environmental and biological models should consider the effects of pollutants referenced by the conservation measures as stressors, including metals, pesticides, and others.	2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. For additional discussion about other stressors including water quality contaminants, see also Master Response 23.. See also Master Response 30 for discussion of modeling.
1552	112	[From ATT1:] Section: 5.2.7.5 Page: 5.2-23 Line: 2-14 Type: CM19, Adaptive Management, Water Quality Reference Document Text: Biological models are often linked to environmental models and characterize a biological change expected from the modeled change in physical conditions. Figure 5.2-4, for example, shows the biological models used to assess entrainment effects on delta smelt and the relationship to CALSIM II and DSM2. This figure also shows how biological models relate to specific life stages and reflect unique hypotheses about stressors and biological performance. Models used to evaluate entrainment (Appendix 5.B, Entrainment) and the effects of flow, temperature, salinity, and turbidity (Appendix 5.C, Flow, Passage, Salinity, and Turbidity) on biological performance fall into this category. Comment: The environmental and biological models should consider the effects of pollutants referenced by the conservation measures as stressors, including metals, pesticides, and others.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. For additional discussion about other stressors including water quality contaminants, see also Master Response 23. See also Master Response 30 for discussion of modeling.
1552	113	[From ATT1:] Section: 5.2.7.10	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master

DEIRS Ltr#	Cmt#	Comment	Response
		Page: 5.2-29 Line: 8-10 Type: CM19, Adaptive Management, Water Quality Reference Document Text: Although noting that assessing or ranking attributes (stressors) is very complex, the (2011) suggested that the relative importance of stressors could not be assessed, or prioritized, independent of the relative importance of the objective that is stressed. Comment: It should be noted that although the Delta Independent Science Board concluded that the ranking of stressors is feasible, this implies that contaminant control measures can be evaluated for at least their relative importance to water quality and for effects to the covered species. The Effects Analysis should evaluate any contaminant control measures before they are implemented as part of the BDCP.	Response 5 and for water quality see Master Response 14. For additional discussion about other stressors including water quality contaminants, see also Master Response 23. See also responses to Letters BDCP 1448 and/or RECIRC 2546.
1552	114	[From ATT1:] Section: 5.2.7.10.3 Page: 5.2.35 Line: 14-22 Type: Water Quality, Adaptive Management Reference Document Text: The overall conclusions regarding the effect of the conservation measures on covered fish species was made by weighting the conclusion regarding the environmental effects of conservation measures by the assumed importance of environmental change to the species. The logic of this process is illustrated in the following example: On the basis of quantitative and qualitative analyses in the appendices to this chapter, it is concluded that the BDCP will result in a positive (toward natural) change in an attribute, and, on the basis of the species attribute importance, change in that attribute is important to one or more life stages of a species. Therefore, it is concluded that the BDCP has an high change on that species/life stage. This conclusion is documented by computing a simple score: BDCP effect on an attribute times the importance of the attribute to the species/life stage. Comment: The proposed weighted scoring system is insufficiently described. A transparent and understandable evaluation process should be presented in the BDCP. The BDCP should develop computational water quality models for the cumulative effect of all combinations of conservation measures. The outputs of the models can be used for effect modeling on the covered species. The effects should then be compared to a baseline of current conditions without the take permit.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See Master Response 33 for discussion of adaptive management and mitigation monitoring. See also Master Response 30 for discussion of modeling.

DEIRS Ltr#	Cmt#	Comment	Response
1552	115	[From ATT1:] Section: 5.2.7.11 Page: 5.2-47 Line: Table 5.2-8 Type: Water Quality, Adaptive Management Reference Document Text: Qualitatively discussed in Appendix 5.D, Contaminants. Some uncertainty regarding white sturgeon sensitivity to water quality and whether current water quality conditions negatively affect white sturgeon. Thus, evaluating the response of white sturgeon to improved water quality conditions is difficult, and may be somewhat negative (low potential for effect). However, certain conservation measures to be implemented as part of BDCP will contribute to improved water quality, including CM19 Urban Stormwater Treatment, CM12 Methylmercury Management, and CM14 Stockton Deep Water Ship Channel Dissolved Oxygen Levels. So while the BDCP has a low potential for negative effects, certain conservation measures will be implemented to provide a benefit to covered fish species. Comment: The conclusion that the BDCP has a low potential for negative effects does not consider the area-specific impacts of the increased influence of the San Joaquin River and effects near to the BDCP intakes on the Sacramento River.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.
1552	116	[From ATT1:] Section: 5.D.0 Page: 5.D-ii Line: 14-20 Type: CM19, Adaptive Management, Water Quality Reference Document Text: Modeling results presented in Appendix 5.C, Flow, Passage, Salinity, and Turbidity, indicate that reduced dilution capacity in the Sacramento River at the Sacramento Wastewater Treatment Plant (WWTP) will result from changes in upstream reservoir operations associated with the evaluated starting operations (ESO), not from diversion of water to the Yolo Bypass or from north Delta intakes located downstream of the WWTP. Quantitative analysis presented in this appendix indicates that the Sacramento River will have sufficient dilution capacity under the ESO for both ammonia and pyrethroids to avoid adverse effects from these contaminants on the covered fish. Comment: The BDCP should look at water quality impacts due to changes in reservoir operations associated with operation of the Delta water diversions for the BDCP water agencies. The	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. For more information about the development of operational criteria and effects on aquatic resources, please see Master Response 17.See Master Response 33 for discussion of adaptive management and mitigation monitoring. See also Master Response 30 for discussion of modeling.

DEIRS Ltr#	Cmt#	Comment	Response
		last sentence in essence states that pyrethroids will not be an issue.	
1552	117	[From ATT1:] Section: 5.D.0 Page: 5.D-ii Line: 21-26 Type: CM19, Adaptive Management, Water Quality Reference Document Text: Restoration actions will result in some level of mobilization and increased bioavailability of methylmercury, copper, and pesticides (including organophosphate, organochlorine, and pyrethroid pesticides). Given current information, it is not possible to estimate the concentrations of these constituents that will become available to covered fish species, but review of the conceptual models for each of these contaminants indicates that the effects should be limited both temporally and spatially. The most problematic of these potential effects is methylmercury. To address this issue, the Plan includes Conservation Measure (CM) 12 Methylmercury Management. Comment: This discussion demonstrates the insufficiency of evaluation of the multiple sources of contaminants that should be considered, including the potential for restoration activities to contribute towards contaminant related issues for covered fish species. Conservation measures should be considered for other potential water quality impacts from the restoration projects, in addition to methylmercury.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See Master Response 33 for discussion of adaptive management and mitigation monitoring.
1552	118	[From ATT1:] Section: 5.D.1 Page: 5.D-1 Line: 11-12 Type: CM19, Adaptive Management, Water Quality Reference Document Text: This analysis focuses only on changes in contaminants that are directly attributable to the covered activities that could affect covered fish species. Comment: The analysis should include reservoir operational changes for the evaluated starting operations (ESO).	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.. See Master Response 33 for discussion of adaptive management and mitigation monitoring. See also Master Response 30 for discussion of modeling.
1552	119	[From ATT1:]	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 5.D.2.1 Page: Table 5.D.2-1 Line: 27 Type: CM19 Reference Document Text: Table 5.D.2-1 Land Use and Typically Associated Containment Issues Comment: The inclusion of urban stormwater as a CM in the absence of the other contaminant sources (e.g. historic mining, agriculture, and wastewater) discussed in Appendix 5.D implies that urban stormwater is the only significant source of contamination impacting native fish habitat; and, that improving urban runoff (in the absence of control strategies for other sources) will improve water quality sufficient to obtain the Objective (L2-4). In that significant water quality improvements for the selected contaminants of concern (listed below) cannot be effected by local stormwater programs (see rationale below), the rationale for inclusion of CM 19 in Objective L2.4 needs to be re-evaluated. As supported by literature and Table 5.D.2-1 'Land Use and Typically Associated Containment Issues' (page 5.D-2, Line 27): - Mercury and methylmercury: Legacy mining sources are recognized as the primary source, and reductions in stormwater concentration would have negligible benefit. - Selenium: Agricultural sources from areas with certain geologies are recognized as primary sources, and reductions in stormwater concentration would have negligible benefit. - Copper: Agricultural pesticides are recognized as a key source. Brake pads, which were identified as the primary source of copper in urban stormwater discharges, have been effectively addressed by the State of California through passage of SB 346. This legislation requires brake pad manufacturers to reduce the use of copper in brake pads sold in California to no more than 5% by 2021 and no more than 0.5% by 2025. - Ammonia/um: Agricultural and wastewater sources are recognized as the primary sources. Reductions in stormwater concentrations would have a negligible benefit.	attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.
1552	120	[From ATT1:] Section: 5.D.2.1 Page: 5.D-3 Line: 24-25 Type: CM19, Water Quality Reference Document Text: Historically, polychlorinated biphenyls (PCBs) often were associated with urban discharge, and these contaminants have been detected in fish tissues in San Francisco Bay, although	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		there is little research on PCB levels in the Delta. Comment: In Sacramento, PCBs are rarely detected in urban runoff, but are more frequently found in creek sediment from legacy sources. Urban runoff is not the current known source in the region, and any control measures would need to consider the clean-up issues in the creeks more than assessing urban runoff.	
1552	121	[From ATT1:] Section: 5.D.3 Page: 5.D-6 Line: 13-22 Type: CM19, Adaptive Management, Water Quality Reference Document Text: Where available field data and quantitative modeling tool were deemed sufficient to capture the relevant aspects of the constituent in estimating impacts, quantitative model results are presented along with a full discussion of the conceptual model for each constituent. Where quantification would lead to results with very high margins of error and uncertainty and would not appropriately inform or define the effects on covered fish species, effects were discussed only qualitatively with the objective of determining the probability of effects on covered fish species. Comment: Regardless of margin of error, relative impacts can be assessed between alternatives and the baseline. The BDCP should include a more detailed discussion of the modeling including the basis for finding quantitative modeling "inappropriate".	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See Master Response 33 for discussion of adaptive management and mitigation monitoring. See also Master Response 30 for discussion of modeling.
1552	122	[From ATT1:] Section: 5.D.3.2.2 Page: 5.D-9 Line: 7-8 Type: Water Quality Reference Document Text: Reduction of flows in the Sacramento River downstream of the north Delta intakes also may result in decreased dilution of contaminants in the Delta. Comment: We appreciate inclusion of this statement. This issue should be further evaluated in the	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		BDCP.	
1552	123	[From ATT1:] Section: 5.D.3 Page: 5.D-10 Line: Figure 5.D.3- 1 Type: CM19, Adaptive Management, Water Quality Reference Document Text: Generic Conceptual Model to Evaluate BDCP Contaminant Effects Comment: The conceptual model does not evaluate the degradation of contaminants or their binding to organic carbon. For example, copper and trace organics are known to bind in such a way that removes their bioavailability.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.
1552	124	[From ATT1:] Section: 5.D.4.3.1 Page: 5.D-38 Line: 14-20 Type: Water Quality Reference Document Text: Bruns et al. (1998) conducted water sampling between 1993 and 1995, compared both dissolved and total copper results against U.S. Environmental Protection Agency (EPA) Ambient Water Quality Criteria (AWQC) and other criteria, and reported concentrations below criteria from almost all locations, including the Sacramento River. Because the criteria are dependent on sample-specific water quality measurements (including hardness), the criteria varied between sampling episodes. Significantly higher copper levels (at least an order of magnitude higher than all other results) that exceeded criteria were reported for Prospect Slough at the head of the Yolo Bypass. Comment: Per the EPA objective, the copper water quality objective also considers dissolved organic carbon.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.
1552	125	[From ATT1:] Section: 5.D.4.5.2.2 Page: 5.D-46	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also Response to Comment 1552-2 for

DEIRS Ltr#	Cmt#	Comment	Response
		Line: 16-20 Type: CM19, Water Quality Reference Document Text: Given their affinity for soils, pyrethroids are not expected to spread far from the source area, and any suspension into the water column should be localized. Comment: This conclusion also applies to the urban runoff loading, which is predominantly outside of the Plan Area. When considering the benefit of urban runoff treatment (CM19), this highly attenuated effect on downstream areas should be considered.	discussion of CM19.
1552	126	[From ATT1:] Section: 5.D.4.5.2.3 Page: 5.D-46 Line: 12-14 Type: CM19, Water Quality Reference Document Text: Pyrethroid chemicals are used as pesticides in urban areas for pest control, and stormwater runoff has become an important source of pyrethroids in the Delta system. The purpose of CM19 Urban Stormwater Treatment is to provide treatment for stormwater to reduce input of contaminants. Thus, CM19 will result in decreased loading of pyrethroids to the Delta, although the level of this decrease cannot be defined at this time. Comment: There is not a clear connection between effects on covered species and urban runoff sources of pyrethroids; however, the inclusion of CM19 is based on the potential benefit. A more detailed assessment of the benefit is necessary compared to control of other sources. This assessment should also consider the cost of control measures.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also Response to Comment 1552-2 for discussion of CM19.
1552	127	[From ATT1:] Section: 5.D.4.7.1 Page: 5.D-48 Line: 18-35 Type: Water Quality Reference Document Text: Surface water data indicate that concentrations are high for both diazinon and chlorpyrifos in back sloughs and small upland drainages, and concentrations are lower in both the main	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		channels and main inputs to the Delta. High concentrations of chlorpyrifos also are found in Delta island drains, but concentrations of diazinon remain low in the same drains (McClure et al. 2006). In the past, elevated concentrations of diazinon and chlorpyrifos have been detected in the Sacramento and San Joaquin Rivers and in the Delta during particularly wet springs and after winter storm events (McClure et al. 2006). This could suggest that increased flow with accompanying increased suspended loads will result in increased mobilization of both diazinon and chlorpyrifos. Alternatively, the elevated concentrations may be attributable to irrigation or stormwater runoff from late winter/early spring dormant season spraying of orchard crops. Comment: Characterization of organophosphate (OP) pesticides based on data collected prior to 2005 should not be considered as representative of current conditions due to the fact that urban use bans have been effective since 2005. Numerous studies have characterized the lack of urban sources and absence of aquatic life effects from urban source OP pesticides.	
1552	128	[From ATT1:] Section: 5.D.4.9 Page: 5.D.50 Line: 21-23 Type: CM19, Water Quality Reference Document Text: Major sources of endocrine disrupting compounds (EDCs) in the Central Valley are thought to be pyrethroid pesticides from urban runoff (Oros and Werner 2005; Weston and Lydy 2010), wastewater treatment plants (Routledge et al. 1998), and rangelands (Kolodziej and Sedlak 2007). Comment: Previously, the document stated that pyrethroids are not mobile from the source site, and the sentence subject is the Central Valley rather than the Plan Area. Because this section is discussing fate and transport, the discussion should clearly discuss the location of the sources relative to the effect area of interest.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.
1552	129	[From ATT1:] Section: 5.D.4.9.1.1 Page: 5.D.51 Line: 3-5 Type: Adaptive Management Reference Document Text: Endocrine disruptors are a diverse group of chemicals, and it is not possible to evaluate fully	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.See also Response to Comment 1552-2 for discussion of CM19. See Master Response 33 for discussion of adaptive management and mitigation monitoring.

DEIRS Ltr#	Cmt#	Comment	Response
		the potential effects on the distribution and bioavailability of these chemicals from evaluated starting operations (ESO) water operations. Comment: If a quantitative assessment cannot be performed, a relative assessment that alternatives introduce should be performed. This relative assessment would evaluate the direction and rough magnitude of impacts and present results in a format that is easy to discern.	
1552	130	[From ATT1:] Section: 5.D.4.10 Page: 5.D.51 Line: 18-21 Type: CM19 Reference Document Text: Lead, polychlorinated biphenyls (PCBs), and hydrocarbons (typically oil and grease) are common urban contaminants that are introduced to aquatic systems via nonpoint-source stormwater drainage, industrial discharges, and municipal wastewater discharges. Comment: Municipal separate storm sewer system (MS4) systems are typically considered point sources, and it is unclear what is meant by non-point stormwater. Provide clarification of the intended source category.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also 15 for discussion of effects of water quality changes on existing NPDES permit holders.
1552	131	[From ATT1:] Section: 5.D.5.1 Page: 5.D.52 Line: 41, 1-3 Type: Water Quality Reference Document Text: Important to this picture is that taking lands out of agricultural use will result in an overall reduction of agriculture-related contaminant loading, including pesticides, copper, and in some cases, concentrated selenium in irrigation drainage. Comment: The net benefit of this land conversion should be better quantified and discussed.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See Chapter 16, Socioeconomics of the Final EIR/EIS for a discussion of the socioeconomic effects of the proposed project.
1552	132	[From ATT1:]	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 5.D.5.1 Page: 5.D-53 Line: 5 Type: Water Quality Reference Document Text: Evaluated starting operations (ESO) water operations will have few to no effects on contaminants in the Delta. Comment: The evaluation should consider the impact of removing higher quality Sacramento River water and the increased contribution from lower quality San Joaquin River water, especially in the areas downstream from and near to the proposed intakes.	attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14.
1552	133	[From ATT1:] Section: 5.D.5.3 Page: 5.D.59 Line: 4-11 Type: Water Quality, Adaptive Management Reference Document Text: As discussed throughout this appendix, the amount of contaminants that will be mobilized and made more bioavailable to covered fish species due to inundation of Restoration Opportunity Areas (ROAs) is uncertain. This uncertainty is most critical for methylmercury, and to a lesser extent for pesticides and other metals. For each of the contaminants, the chemical-specific and site-specific factors that will determine resultant effects vary. CM12 is included in the BDCP to support site-specific evaluation and monitoring of methylmercury production in restored areas. Data from this monitoring will assist in evaluating the effects of restoration actions and reduce the uncertainty associated with the potential exposure of covered fish to methylmercury mobilized by these actions. Comment: The evaluation should specify the uncertainties and how they can be evaluated through data collection and analysis. It is within the scope of the BDCP to develop computational models for this analysis and future assessments. Moreover, the BDCP should fully fund a substantial monitoring program for the term of the BDCP to evaluate the unknowns. No evaluation of contaminants was presented in this section or the BDCP that justifies inclusion of CM19. The uncertainties of CM19 were not evaluated, and a comprehensive evaluation of the benefit of contaminant reductions from a range of sources was not presented.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also Response to Comment 1552-2 for discussion of CM19. For more information regarding water quality see Master Response 14. See Master Response 33 for discussion of adaptive management and mitigation monitoring.

DEIRS Ltr#	Cmt#	Comment	Response
1552	134	[From ATT1:] Section: 5.D.5.3 Page: 5.D-59 Line: 4-11 Type: Adaptive Management, Water Quality Reference Document Text: 5.D.5.3 Uncertainties and Information Needs Comment: This section is insufficient. The BDCP should have a commitment to the research needed to address mobilization of contaminants due to inundation of Restoration Opportunity Areas (ROAs) and other activities. A comprehensive assessment of the uncertainties and information needs should be prepared so that the efforts can be prioritized for the purpose of inclusion in the BDCP.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See Master Response 33 for discussion of adaptive management and mitigation monitoring.
1552	135	[From ATT1:] Section: 7 Page: 7-1 Line: 37-39 Type: Local Reference Document Text: In addition, a Stakeholder Council will be created and regularly convened to enable public agencies, nongovernment organizations, interested parties, and the general public to provide ongoing input into the BDCP implementation process. Comment: Local public agencies will have costs associated with the BDCP and will be in the area of greatest impact and, thus, should have a more primary role in the Permit Oversight and/or Adaptive Management Team in cases where assessments or decisions affect these agencies.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5. The Permit Oversight group is composed of the regulatory agencies that issue the endangered species permits. Therefore, this group cannot include local public agencies. The Adaptive Management Team would be composed of representatives of the permittees, the fish and wildlife agencies, and relevant science organizations. Because of the scientific function of the Adaptive Management Team, it is also inappropriate for local public agencies to be part of that group. Please also see Master Response 5 regarding the adequacy of the governance structure proposed for the 2013 public draft BDCP. See also Master Response 33 regarding adaptive management and monitoring.
1552	136	[From ATT1:] Section: 7.1 Page: 7-2 Line: 15-17 Type: Local	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For information on BDCP governance please see Master Response 5.

DEIRS Ltr#	Cmt#	Comment	Response
		Reference Document Text: Various other parties, including the state and federal fish and wildlife agencies, other public agencies, nongovernment organizations, interested parties, and the public will be integral to the process of shaping decisions and effectuating actions set out in the BDCP. Comment: This broad statement and usage of "integral" suggests a level of influence that is not supported by the rest of the section. For example, many of the listed entities would only be permitted interaction through the Stakeholder Council. While the Stakeholder Council can comment on BDCP actions, they are not give authority to "effect actions". This sentence should be reworded to specify the authority that these entities are granted in the process (e.g., contribute to, provide non-binding feedback, etc.)	
1552	137	[From ATT1:] Section: 7.2.8 Page: 7-26 Line: 5-9 Type: Local Reference Document Text: [Note to reader: At the time of this Public Draft, the California Natural Resources Agency is working with representatives from Delta counties to identify an appropriate mechanism to involve Delta counties in Plan implementation. It is the intention of the agency to incorporate revisions to the implementation structure set forth in this chapter that address further Delta county participation in a final plan]. Comment: Because of its planning area size and proximity, the City of Sacramento and other local cities should also be further incorporated, like the counties, into the implementation structure.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For information on BDCP governance please see Master Response 5.
1552	138	[From ATT1:] Section: 8.1 Page: 8-1 Line: 39 Type: Local Reference Document Text: This public contribution is further justified by the fact that there are stressors contributing to the decline of the Delta ecosystem and dependent species that are not directly related to operations of the SWP and Central Valley Project (CVP).	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5.For more information about other stressors, see also Master Response 23.

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: The benefit of the BDCP to the local public is not clear and should be better quantified. It has not been demonstrated that local stressors would be significant in the absence of the SWP and Central Valley Project (CVP). This statement should be justified based on established science.	
1552	139	[From ATT1:] Section: 8.2.3.12 Page: 8-36 Line: 11-12 Type: Water Quality, Local Reference Document Text: The cost estimate for site characterization and soil sampling is $2.2 million. Costs are summarized in Table 8-17. Comment: The costs should consider restoration area management costs to minimize methylmercury discharges. CM12 is intended as a methylmercury management action, but the costs only cover initial assessments. For example, compliance with the Total Maximum Daily Load (TMDL) wasteload allocation will incur costs to implement control actions.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5. See Master Response 14 for additional discussion of water quality.
1552	140	[From ATT1:] Section: 8.2.3.19 Page: 8-46 Line: 14-15 Type: CM19 Reference Document Text: Estimated costs for urban stormwater treatment are $50 million (Table 8-24) Comment: The proposed cost is not adequate to implement wide-scale stormwater treatment and would likely have a negligible impact on Delta water quality. Municipal separate storm sewer system (MS4) agencies would only be legally allowed to implement projects on municipal properties. New development and redevelopment local requirements already generally conform to the requirements in CM19, and the cost is passed on to land developers and homeowners. Effectiveness assessment monitoring in downstream waters would be difficult and expensive. The assessment monitoring for CM19 should be funded by the BDCP.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14. For more information about other stressors, see also Master Response 23. Effects on existing NPDES permit holders are discussed in Master Response 15. Please see also Response to Comment 1552-2 for discussion of CM19.

DEIRS Ltr#	Cmt#	Comment	Response
1552	141	[From ATT1:] Section: 8.2.5 Page: 8-56 Line: Table 8-30 Type: CM19, Local Reference Document Text: Cost Estimate for Effectiveness and Compliance Monitoring Comment: The projected costs for methylmercury monitoring and assessments are too low. The BDCP should contribute to wider methylmercury assessments and fish tissue surveys to confirm that restoration areas are not contributing to elevated concentrations and the impairment. Because this is a long-term water quality problem, long term monitoring costs are likely, and an estimate of $2.2M over 50 years is insufficient. If the intent is to consider "potential" research if loading problems are identified, there should be better discussion of the conditions that would trigger these additional research actions.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for methylmercury see Master Response 14.
1552	142	[From ATT1:] Section: 8.2.5 Page: 8-56 Line: Table 8-30 Type: CM19 Reference Document Text: (Omission of monitoring costs for CM19) Comment: Demonstration of the effectiveness of stormwater treatment and related benefits to downstream receiving waters can be difficult and expensive. The BDCP should provide funding to support CM19 assessments.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14. Please see Response to Comment 1552-2 for discussion of CM19.
1552	143	[From ATT1:] Section: 8.2.5 Page: 8-57 Line: Table 8-31 Type: Error, Adaptive Management	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14. See Master Response 33 for discussion of adaptive management and monitoring.

DEIRS Ltr#	Cmt#	Comment	Response
		Reference Document Text: Cost Estimate for Potential Research Comment: The commitment to "potential" research is not explained. The research program should show a firm commitment to funding studies to support filling current and future information needs. This is important to ensure implementation actions during the near-term implementation period are invested where there is most benefit, and to support adaptive management for later implementation actions.	
1552	144	[From ATT1:] Section: 9.1.3 Page: 9-3 Line: 1-29 Type: ALT, Water Quality Reference Document Text: BDCP development began in 2006. During the development of the BDCP, the participants carried out a focused effort to identify and consider a range of alternative approaches to water conveyance infrastructure and operating criteria (CM13), as well as a number of different approaches to natural community restoration and enhancement. Development and evaluation of a range of alternatives was also guided by the Delta Reform Act. California Water Code Section 85320(b)(2) specifically requires including a comprehensive review and analysis of seven factors. Comment: The California Water Code Delta Reform Act provides minimum guidance for alternatives to evaluate, and the BDCP alternatives are too narrow. Additional alternative evaluation is required for Antidegradation and the EIR/EIS. While the CWC requirements seem narrow in evaluating the alternatives to take, it is reasonable to evaluate additional alternatives to conveyance. For example, the Alternatives to Take section does not investigate developing and evaluating other means of increasing water supply in the system, which includes more off-line storage, treatment of waste streams for reclamation, and development of regionally independent solutions (seawater filtration, reuse, etc.). In particular, the latter two are much hindered by water rights law, territorial ownership and water agreements, and the complexity of the water quality laws with the Basin Plan, Title 22, and Porter Cologne. Streamlining of the water quality and planning components will better encourage these regionally independent alternatives to take.	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis see Master Response 5. See Appendix 3I, BDCP Compliance with the 2009 Delta Reform Act, of the EIR/EIS and Master Response 31 for discussion of compliance with the Delta Reform Act. Please also see Master Response 6 for an explanation of why desalination or water demand management was not part of any alternatives evaluated in the EIR/EIS or RDEIR/SDEIS. Although Alternative 4A would not serve as habitat conservation plans/natural community conservation plans (HCPs/NCCPs) under ESA Section 10 and the NCCPA, it would achieve incidental take authorization under ESA Section 7 and CESA Section 2081(b). As a result, the Alternatives to Take analysis presented in the draft BDCP and required by Section 10 of the ESA is not applicable to the new preferred alternative, 4A. For additional information about anti-degradation analysis with respect to water quality, please refer to Master Response 14.
1552	145	[From ATT1:] Section: 10.3.1 Page: 10-5	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis see Master Response 5.For more information regarding adaptive management and monitoring see Master Response 33. Under the revised Preferred Alternative, adaptive management, monitoring, and research would be pursued

DEIRS Ltr#	Cmt#	Comment	Response
		Line: 4-12 Type: Adaptive Management Reference Document Text: For example, recommendations related to the development of new planning tools (e.g., hydrodynamic, ecosystem, species models) were not deemed practical because they could not be developed to a usable form within the timeframe of BDCP development. These planning tools, however, could be designed during BDCP implementation to inform development and implementation of specific actions in fulfillment of the conservation measures. The BDCP adaptive management program (Chapter 3, Section 3.6, Adaptive Management and Monitoring Program) calls for the development and use of such models. Comment: The determination that development of the tools was not feasible should be better explained. By delaying development of these tools and deferring characterization of baseline conditions later, the uncertainty of impacts can be extended until the BDCP impacts cannot be undone. There are existing efforts in the Drinking Water Policy, Central Valley Salinity Alternatives for Long-term Sustainability (CVSALTS), and others that could be used at least as a basis for some of the evaluations. If these tools can be developed for projects with smaller scopes, they should be required for the BDCP to remove uncertainty.	through a Collaborative Science and Adaptive Management Program described in a biological assessment and biological opinion reflecting outcomes of an interagency consultation between Reclamation, USFWS, and NMFS.
1552	146	[From ATT1:] Section: 10.3.7.3 Page: 10-14 Line: 19-28 Type: Water Quality, Water Supply, Local Reference Document Text: The report also suggests that a broader array of alternatives and options for managing water is needed in Delta water planning efforts, including improvements in water-use technology, reuse technology, economizing on water use, and various degrees of long-term species protection. Clearly, the full resolution of these issues lies beyond the purview of the BDCP, but the BDCP can make important contributions by clearly defining water allocations (as is done in CM1 Water Facilities and Operation), by setting performance goals for conservation of affected species and natural communities (as is done in Chapter 3, Section 3.3 Biological Goals and Objectives), and by active participation in regional decision-making processes (as addressed in many sections addressing cooperation with neighboring Habitat Conservation Plans (HCPs) and Natural Community Conservation Plans (NCCPs), the BDCP's relationship to the Delta Plan, and the BDCP's relationship with other scientific efforts in the Delta). Comment: The role of the BDCP and the water exports is fundamental to California water supply and support of all beneficial uses. The BDCP should evaluate the broader array of the	This comment describes an attachment to the comment letter that present comments on the BDCP document. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis see Master Response 5.Please also see Master Responses 6 and 7 for an explanation of why water demand management and desalination was not included as a proposed project component.

DEIRS Ltr#	Cmt#	Comment	Response
		alternatives; this evaluation and funding of additional technology and policy programs should in the least be coordinated with the California Water Plan or other state efforts to ensure that there are not oversights or gaps in the needed solutions to California's water challenges.	
1552	147	[ATT1: att1: List of acronyms used in Attachment 1.]	This comment describes an attachment to the comment letter No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
1552	148	[ATT2: Attachment 2 -- Table of Sacramento Stormwater Quality Partnership Specific Comments on Bay Delta Conservation Plan Environmental Impact Report and Environmental Impact Statement.]	All comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.
1552	149	[From ATT2:] Section: Highlights Page: 5 Line: --- Type: Water Quality, Water Supply Key Document Text: The environmental review process has the following key objectives: Identify environmental impacts. Identify economic impacts. Evaluate reasonable alternatives that could avoid or minimize those impacts. Develop mitigation (ways to reduce or avoid environmental impacts). Provide information for public review and comment. Disclose to decision makers the project impacts, mitigation, and public comments. Comment: The BDCP asserts that the environmental review process has identified environmental and economic impacts; however, this is not provided in the EIR/EIS. Also, it states that it has evaluated reasonable alternatives to avoid or minimize those impacts or provided mitigation, which is also not provided in the EIR/EIS.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. See Final EIR/EIS Chapter 16, Socioeconomics, for a description of the socioeconomics effects in the Delta region as a result of implementing the action alternatives. The study area for the socioeconomics analysis comprises Sacramento, San Joaquin, Yolo, Solano, and Contra Costa Counties, collectively referred to as the Delta region. The discussion of the Delta region describes the existing socioeconomic conditions of the statutory Delta and the surrounding Delta counties. Potential effects related to changes in SWP and CVP deliveries are also described for those hydrologic regions that receive water from the Delta: San Francisco Bay, Sacramento River, San Joaquin River, Central Coast, South Coast, Tulare Lake, South Lahontan, and Colorado River. See the other resource area chapters in the EIR/EIS for a description of environmental impacts as a result of implementing the action alternatives. See Final EIR Chapter 3, Description of Alternatives, Section 3.2, Alternatives Development Process, for a description of the development and screening of the alternatives analyzed in the EIR/EIS and Master Response 4.
1552	150	[From ATT2:] Section: Highlights Page: 5 Line: --- Type: Water Quality, Water Supply Key Document Text: Provided a comprehensive review and analysis of the following: ...The effects of Delta conveyance alternatives on water quality. Comment:	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		The BDCP asserts that the water quality review was comprehensive. However, there are many errors and omissions in the data assessment and a complete focus on Delta water quality for exporters, with very limited evaluation of upstream of Delta.	
1552	151	[From ATT2:] Section: ES Page: 1 Line: 19-21 Type: Water Quality, CM19 Key Document Text: The BDCP EIR/EIS has been prepared for the purpose of analyzing and disclosing the potential environmental effects and effects on the human environment associated with the alternatives and to identify potentially feasible ways to avoid, minimize, or mitigate adverse effects. Comment: While there are options available to manage stormwater (e.g., pollutant source control, runoff treatment, and maintenance of conveyance systems), some elements are beyond local agencies' control, including the timing, duration, and magnitude of rainfall or the air deposition of pollutants, such as mercury and some pesticides. Furthermore, some best management practices are effective on only some pollutants. Identifying a local management program as a mitigation for the BDCP provides the potential for inconsistent goals between the regulatory programs and those of CM19, which are focused on protection of the two smelt species of fish and green sturgeon by generally reducing stormwater loading.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14. Conservation Measure 19 (CM19) does not impose any requirements or financial burdens on local agencies because it is a grant program for voluntary applicants whose stormwater contributes to Delta waterways under NPDES MS4 stormwater permits. There is no mandate that entities must apply for and/or use funding provided as part of the program. Because CM19 is voluntary and designed to support the conservation requirement of the NCCP (in alternatives that include BDCP), funding for CM19 would come only from public statewide or federal sources. CM19 contributes to the conservation goals and objectives of BDCP; it is not mitigation for any impacts of the construction or operation of the water conveyance facility. The participating state and federal water contractors would not pay for CM19 as part of their mitigation obligations, nor would other local water management agencies. See also Response to Comment 1552-2 for additional discussion of CM19.
1552	152	[From ATT2:] Section: ES Page: 1 Line: 26-27 Type: Water Quality, Water Supply Key Document Text: The conservation strategy is designed to restore and protect ecosystem health, water supply, and water quality within a stable regulatory framework. Comment: The EIR/EIS states that the conservation strategy is to restore and protect water quality. Water quality should be protected upstream of the proposed North Delta intake, including all beneficial uses.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5 and for water quality see Master Response 14. See Master Response 34 for discussion of beneficial use of water.

DEIRS Ltr#	Cmt#	Comment	Response
1552	153	[From ATT2:] Section: ES Page: 1,3 Line: 19-21, 3-5 Type: Water Quality, CM19, Water Supply Key Document Text: The BDCP EIR/EIS has been prepared for the purpose of analyzing and disclosing the potential environmental effects and effects on the human environment associated with the alternatives and to identify potentially feasible ways to avoid, minimize, or mitigate adverse effects. Impacts on human, physical, and biological resource areas (see Section ES.8.1 for a list of resource areas/topics included in the evaluation) are presented in the document. Comment: The EIR/EIS has significant omissions on analysis and disclosure of the potential environmental effects and the effects on the human environment, and on identification of potentially feasible ways to avoid, minimize, or mitigate adverse effects.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5. Socioeconomic effects of the various alternatives are described and assessed in Chapter 16, Socioeconomics, of the Final EIR/EIS. When required, DWR would provide compensation to property owners for economic losses due to implementation of the proposed project. Construction of water conveyance facilities would be sequenced over approximately 10 years. Construction of individual components (e.g. intakes, tunnels) would range from one to six years. Temporary construction-related impacts include noise, visual, and transportation, among others. The construction-related impacts are disclosed in individual resource area chapters in the Final EIR/EIS. Please also see Final EIR/EIS Appendix 3B for discussion of environmental commitments, AMMs and CMs. Please see also Master Response 22.
1552	154	[From ATT2:] Section: ES.1.1 Page: 3 Line: 37-40 Type: Local, CM19 Key Document Text: For BDCP CM2-CM22, the EIR/EIS intends to present a program-level analysis consistent with the level of detail provided in the BDCP. Therefore, for CM2-CM22, the potential exists for additional CEQA/NEPA environmental review and associated permit actions to be required prior to implementing these conservation measures. Comment: The BDCP unfairly shifts environmental documentation costs to agencies performing conservation measures. As a program-level analysis, the BDCP should evaluate these costs and develop funding plans.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5. Please see Master Response 2 regarding the program-level vs. project-level analysis in the DEIR/EIS. These estimates are intended to capture the full cost of all conservation measures, regardless of whether they are designed to the project or program level.
1552	155	[From ATT2:] Section: ES.1.1 Page: 4	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also Response to Comment 1552-2 for discussion of CM19.. Please refer to Master Response 2 regarding program versus project levels of analysis. The CMs (or environmental commitments under the non-HCP

DEIRS Ltr#	Cmt#	Comment	Response
		Line: 8-9 Type: Local, CM19 Key Document Text: The degree of specificity in a program EIR s impact analysis need only to be as detailed as the description of the elements in the program (State CEQA Guidelines Section 15146). Comment: The EIR/EIS insufficiently assesses the impacts CM19. Examples of stormwater treatment are specific, but omit a number of current preferred means of managing stormwater. A detailed assessment would quantitatively evaluate the benefits and impacts of CM19 for a wide range of constituents and conditions.	alternatives) are analyzed on a programmatic level.
1552	156	[From ATT2:] Section: ES.1.1 Page: 4 Line: 14-16, 17-24 Type: Water Quality, CM19, Water Supply Key Document Text: NEPA and the Council on Environmental Quality's (CEQ) regulations for implementing NEPA (40 CFR 1502.14) require federal agencies to prepare an EIS for major federal actions that could significantly affect the quality of the human environment. The EIS must rigorously explore and objectively evaluate (CEQ 40 questions) the environmental effects of an action, including a range of reasonable alternatives, and identify mitigation measures to minimize adverse effects for the range of impacts of the proposal when they propose to carry out, approve, or fund a project that may have a significant effect on the environment. To ensure environmental effects of a proposed action are fairly assessed, the probability of the mitigation measures being implemented must also be discussed and the EIS and Record of Decision should indicate the likelihood that such measures will be adopted or enforced, and when they might be available (40 CFR 1502.16[h] and 1505.2). Comment: The EIR/EIS has significant omissions for the proposed actions that could significantly affect the quality of the human environment, the environmental effects of an action (including a range of reasonable alternatives), and identification of mitigation measures to minimize adverse effects for the range of impacts. The EIR/EIS should have a clear discussion of the means of compliance with these statutory requirements, including an assessment of the likelihood of implementation of each conservation measure and how the project would be modified if a conservation measure were not implemented.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. See also Response to Comment 1552-2 for discussion of CM19. For more information regarding Environmental Commitments please see Appendix 3B of the FEIR/EIS. The FEIR/S includes a wide range of alternatives, detailed descriptions of impacts, and a suite of mitigation measures, avoidance and minimization measures, and environmental commitments, which satisfy CEQA and NEPA requirements. The analysis evaluates the potential impacts that would occur if everything planned were implemented so as to conservatively disclose all potential impacts. All conservation measures (environmental commitments under the non-HCP alternatives) are planned to be implemented. The No Action Alternative evaluates future impacts that would occur if the proposed project was not implemented. Evaluating potential impacts that would result from not implementing parts of the project is not a requirement of CEQA or NEPA. Please refer to Master Response 22 regarding the adequacy of mitigation measures.
1552	157	[From ATT2:]	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information

DEIRS Ltr#	Cmt#	Comment	Response
		Section: ES.2.2.2.1 Page: 10-11 Line: 37-41, 1-2 Type: Water Quality, CM19 Key Document Text: In addition, urban development, large upstream dams and storage reservoirs, water diversions, hydraulic mining, and the development of a managed network of navigation, flood control, and irrigation canals have all affected water flow patterns and altered fish and wildlife habitat availability. These changes, coupled with higher water exports, declines in water quality from urban and agricultural discharges, and changes in the dilution capacity from managed inflows and diversions, have led to a decline in ecological productivity in the Delta. Comment: This broad statement is misleading and not entirely correct. Urban runoff quality has improved since the implementation of municipal stormwater management programs as demonstrated by the Sacramento Stormwater Quality Partnership. Agricultural interests could likely make the same assertion based on improved control measures. Moreover, the Central Valley Drinking Water Policy modeling, as summarized in a variety of reports suggests that urban development actually has a net benefit on a number of water quality constituents. The statement should be revised to match conclusions from other groups, including the Contaminant Synthesis Report (http://www.swrcb.ca.gov/centralvalley/water_issues/delta_water_quality/comprehensive_monitoring_program/contaminant_synthesis_report.pdf) and the Delta Science Program.	on the BDCP effects analysis please see Master Response 5 and for water quality see Master Response 14. See also Response to Comment 1552-2 for discussion of CM19.
1552	158	[From ATT2:] Section: ES.4.4 Page: 17 Line: 20 Type: CM19 Key Document Text: Provide, where feasible, quantitative targets and timeframes for achieving the desired outcomes. Comment: There are insufficient quantitative targets in CM19. The grant program should provide funding where there is most benefit for reducing contaminant related impacts to the specific species.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and potential funding sources, please see Master Response 5. See also Response to Comment 1552-2 for discussion of CM19.
1552	159	[From ATT2:]	See also Response to Comment 1552-2 for discussion of CM19.

DEIRS Ltr#	Cmt#	Comment	Response
		Section: ES.4.4 Page: 17 Line: 23-25 Type: CM19 Key Document Text: Provide metrics for the monitoring program by which to evaluate the effectiveness of the conservation measures and, if necessary, provide a basis to adjust the conservation measures to achieve the desired outcomes. Comment: There are insufficient metrics for effectiveness and basis for adjustments in CM19.	
1552	160	[From ATT2:] Section: ES.4.5 Page: 18 Line: 26-28 Type: Water Quality, CM19 Key Document Text: Species. Species-specific conservation measures are designed to reduce the adverse effects of various stressors on one or more covered species. These include measures addressing toxic contaminants, nonnative predators, illegal harvest, and genetic threats. Comment: CM19 should be more specific in addressing the sources of the contaminants impacting the specific covered species affected by urban runoff. It is not appropriate to include CM19 to generally see if reducing stormwater pollutant loading will help the two species or their habitats. A detailed assessment of the benefits of control measures to covered species from a range of source types should be performed before implementation of any contaminant-based control measure. This evaluation should prioritize actions and consider the cost of the control measure compared to the established benefit to the covered species.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding new sub-alternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. Please refer to Master Response 22 regarding the adequacy of mitigation measures. See also Response to Comment 1552-2 for discussion of CM19.
1552	161	[From ATT2:] Section: ES.4.5 Page: 18 Line: 34-36 Type: Water Quality, CM19	The text cited in this comment is from the 2013 Public Draft EIR/EIS Executive Summary and provides a summary description of conservation measures. These CMs were described generally as is customary for an HCP/NCCP and evaluated at a programmatic level in the EIR/EIS. Please refer to Master Response 2, which addresses project-level versus program-level analyses in the EIR/EIS.

DEIRS Ltr#	Cmt#	Comment	Response
		Key Document Text: The remaining conservation measures, CM12-CM21, are intended to reduce the adverse effects of various stressors, including but not limited to, environmental contaminants, nonnative predators, and illegal harvest on covered species. Comment: The evaluations provided in the BDCP and EIR/EIS are insufficient. Environmental contaminant reduction should look at all sources and prioritize efforts and resources where there will be most benefit.	
1552	162	[From ATT2:] Section: ES.8.3.2 Page: 48 Line: 35-38 Type: CM19 Key Document Text: In general, mitigation related to restoration and other activities in CM3- CM22 will be the responsibility of a larger group of agencies as set forth in relevant portions of the BDCP. Responsibilities for particular measures will be described in the Mitigation Monitoring and Reporting Program to be issued in connection with the Final EIR/EIS. Comment: The mitigation, monitoring, and reporting details are critical pieces that local agencies should have a chance to review. The cost of these activities is potentially significant. The BDCP proponents and the State should fund these efforts, not local agencies. The benefit of these studies is to evaluate the success with regard to covered species, which is a direct benefit to the BDCP proponents and the State and is not a direct benefit to the local agency ratepayers.	The funding sources for all conservation measures are described in the 2013 BDCP, Chapter 8. Local water agencies will not pay for mitigation or monitoring of the effects or effectiveness of BDCP. Please also see Master Response 5 regarding the adequacy of the BDCP funding strategy for the purpose of the regulatory authorizations under the federal ESA and state NCCP Act. Conservation Measure 19 (CM19) does not impose any requirements or financial burdens on local agencies because it is a grant program for voluntary applicants whose stormwater contributes to Delta waterways under NPDES MS4 stormwater permits. There is no mandate that entities must apply for and/or use funding provided as part of the program. Because CM19 is voluntary and designed to support the conservation requirement of the NCCP (in the BDCP Alternative), funding for CM19 would come only from public statewide or federal sources. The participating state and federal water contractors would not pay for CM19 as part of their mitigation obligations, nor would other local water management agencies. See Master Response 4 for more information on alternatives development and for additional information on the BDCP effects analysis please see Master Response 5. See also Response to Comment 1552-2 for discussion of CM19.
1552	163	[From ATT2:] Section: 1.5.1 Page: 1-12 Line: --- Type: Scope Key Document Text: 1.5.1 Upstream of the Delta Region. The Upstream of the Delta region is shown in Figures 1-5 through 1-8. This region comprises those areas in the SWP and CVP system upstream of the Delta. Operational changes at SWP facilities in this area may be necessary to move fresh	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5. CM 19 would fund stormwater treatment measures that could be implemented to reduce contaminant loading in the Delta. This CM is evaluated at a program-level and may require additional environmental review once specific actions are proposed. Please refer also to Master Response 2 related to project-level versus program level analyses in the EIR/EIS. See also Response to Comment 1552-2 for discussion of CM19.

DEIRS Ltr#	Cmt#	Comment	Response
		water through and/or around the Delta consistent with operations of CM1. Comment: The project area does not consider the land area tributary to the Plan Area or Project Area affected by the BDCP. In particular, the communities where CM19 is performed and upstream watersheds need to be addressed.	
1552	164	[From ATT2:] Section: 1.5.1 Page: Figure 1-7 Line: --- Type: Scope Key Document Text: Project Area definition Comment: The project area does not consider the land area tributary to the Plan Area or Project Area affected by the BDCP conservation measures. The Plan Area and Study area are not sufficiently described in the EIR/EIS. Areas should be defined with specific boundaries.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5. The CMs (or environmental commitments under the non-HCP alternatives) would occur within the plan area. The CMs (or environmental commitments under the non-HCP alternatives) are analyzed on a programmatic level; therefore, specific locations have not been selected yet. Please refer to Master Response 2 regarding program versus project levels of analysis.
1552	165	[From ATT2:] Section: 1.6 Page: 1-13 Line: 3-9 Type: Water Quality, Water Supply Key Document Text: In assessing environmental effects associated with CM1, the EIR/EIS also refers to environmental commitments and other BDCP conservation measures that are intended to reduce, avoid, or minimize these effects. Additional site-specific environmental compliance documents, however, will likely be required for implementation of some conservation measures (including, for example, wetland permitting actions by the Corps of Engineers). Additional information and/or documentation may be necessary during consideration of related permit application and decision- making processes. Comment: This statement indicates that the overall assessment of CM1 was completed assuming implementation of the other environmental commitments and CMs. It is unclear how CM1 can get project-level approval without the guaranteed implementation of the supporting conservation measures. If the other commitments and CMs are not implemented, the	Please see Master Response 2 regarding the program-level vs. project-level analyses, and the level of detail provided for CM1 and CM2-22 This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis see Master Response 5.See Master Response 4 for more information on alternatives development and for additional information on the BDCP effects analysis please see Master Response 5.

DEIRS Ltr#	Cmt#	Comment	Response
		assessment environmental effects of CM1 will not be accurate and would need to be re-evaluated.	
1552	166	[From ATT2:] Section: 3.2 Page: 3-4, 3-5 Line: 31-2 Type: Scope Key Document Text: Under these principles, the EIR needs to describe and evaluate only those alternatives necessary to permit a reasonable choice and "to foster meaningful public participation and informed decision making" (State CEQA Guidelines Section 15126.6[f]). Consideration of alternatives focuses on those that can either eliminate significant adverse environmental impacts or substantially reduce them; alternatives considered in this context may include those that are more costly and those that could impede to some degree the attainment of the project objectives (Section 15126.6[b]). CEQA does not require the alternatives to be evaluated at the same level of detail as the proposed project. Comment: A wider range of alternatives would be more meaningful, especially broader options such as offline storage and regionally independent supplies.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis, please see Master Response 5. As presented in Master Response 4 for discussion of the scope of the proposed project and alternatives (such as water storage) that were not carried forward for analysis in this document due to the fact that required actions beyond the scope of the proposed project. The alternatives included in the 2013 Public Draft EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The specific proposals that were considered but ultimately rejected by the Lead Agencies are discussed in Appendix 3A, Identification of Water Conveyance Alternatives: Conservation Measure 1. Refer to Master Response 6 for further information on demand management measures.
1552	167	[From ATT2:] Section: 3.3.1 Page: 3-17 Line: Table 3-2 Type: Scope Key Document Text: BDCP Covered Activities Comment: Please clarify why some conservation measures are not considered covered actions or activities and if there are future implications if a particular conservation measure was found to have an impact on covered species.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5.
1552	168	[From ATT2:] Section: 3.3.1	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. The Plan Area defines the area addressed in the BDCP HCP/NCCP. Effects of conservation measures and covered actions are fully

DEIRS Ltr#	Cmt#	Comment	Response
		Page: 3-18 Line: 8-12 Type: Scope Key Document Text: Consequently, the project area encompasses a larger geographic area than the Plan Area, comprising three defined regions: the Upstream of the Delta Region, the Delta Region (as defined in Chapter 1, Section 1.5, BDCP EIR/EIS Project Area -- generally referred to as the Plan Area), and the SWP and CVP Export Service Areas (Figure 1-4). Comment: The definition and justification for the Plan Area are insufficient. Some areas affected by the BDCP directly or indirectly through conservation measures are not included.	evaluated in the EIR/EIS whether the effects occur in the Plan Area or outside of it. For additional information on the BDCP effects analysis please see Master Response 5.
1552	169	[From ATT2:] Section: 3.3.2 Page: 3-18 Line: 38-40 Type: Scope Key Document Text: The covered activities outlined in Table 3-2 are included in the conservation measures (Table 3-3) and are discussed in detail in Section 3.6, Components of the Alternatives: Details. Comment: There is an unclear correspondence between covered actions and the conservation measures; however, it is implied that all conservation measures are covered actions.	BDCP Chapter 4, Section 4.2 defines covered activities as all activities associated with the conveyance and export of water supplies from the SWP's Delta facilities and with implementation of the conservation strategy, including all Conservation Measures. This is reflected in the EIR/EIS Chapter 3, Section 3.6. Please see Master Response 5 for additional detail on the BDCP and the alternatives involving an HCP component. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5.
1552	170	[From ATT2:] Section: 3.3.2.2 Page: 3-23 Line: 1-31 Type: Water Quality Key Document Text: Adaptive Management and Monitoring Program Comment:	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5.For more information on water quality see Master Response 14. More information regarding adaptive management can be found in Master Response 33.

DEIRS Ltr#	Cmt#	Comment	Response
		See comments on BDCP as it is referenced in this Section. [See ATT1]	
1552	171	[From ATT2:] Section: 3.4.3 Page: 3-39 Line: 29-31 Type: Scope Key Document Text: BDCP will implement measures intended to address the effects of other stressors (CM12-CM21; Tables 3-3 and 3-4) under all alternatives except the No Action Alternative. Section 3.6.3 provides a detailed description of these components. Comment: It is not clear if these conservation measures are considered "covered actions". Urban stormwater treatment, in particular, is not in the referenced table (Table 2 3-2).	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5.
1552	172	[From ATT2:] Section: 3.5.9.3 Page: 3-68 Line: 38-41 Type: CM19, Scope Key Document Text: Urban Stormwater Treatment (CM19) -- Under this conservation measure, the BDCP Implementation Office would provide a mechanism, through funding, for implementing stormwater treatment measures in urban areas that would result in decreased discharge of contaminants to the Delta. Comment: The proposed action does not specify the area nor location where it would take place. It is not possible to adequately evaluate the benefit, impacts, or costs of the alternative without a clear specification of the intended scope of the action.	The intended scope of CM19 is the entire Delta. Because it is a voluntary program, it is unknown where successful applicants will be located. See Master Response 4 for more information on alternatives development and for additional information on the BDCP effects analysis and funding sources, please see Master Response 5. For more information regarding project versus program level please see Master Response 2. Please see response to comment 1552-2 for discussion of Alternative 4 (BDCP) as a potentially viable alternative.
1552	173	[From ATT2:] Section: 3.6.3.8 Page: 3-162 Line: 30-31	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5.For more information regarding water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		Type: CM19 Key Document Text: Reducing pyrethroids and other chemicals from urban areas and stormwater, which would improve the health of covered fish species. Comment: It is not an established fact that urban runoff pyrethroids have effects outside of localized locations near to outfalls. In fact, the research cited in the BDCP documents by Weston and Lydy confirmed these localized effects. The benefits of "reducing the amount of pollution in stormwater runoff entering Delta waterways" need to be better understood before implementation of CM19 or any contaminant reduction strategy.	
1552	174	[From ATT2:] Section: 3.6.3.8 Page: 3-162 Line: 40-41 Type: CM19 Key Document Text: This conservation measure would be in effect over the 50-year BDCP period. Comment: The BDCP does not clearly state that CM19 would be in effect for the 50-year period, but it provides funding for only the first ten years. The EIR/EIS should clearly state if the benefits claimed for the EIR/EIS are based on this initial 10 years of funding or continued efforts for the entire 50 years, and who would then fund these continued efforts. Before implementation of any contaminant control measures, a detailed assessment on control of all types of sources and their benefit to the covered species should be performed. This evaluation should consider costs relative to benefits and prioritize any control measure recommendations.	Because CM19 is voluntary and designed to support the conservation requirement of the NCCP (in the BDCP Alternative), funding for CM19 would come only from public statewide or federal sources. The participating state and federal water contractors would not pay for CM19 as part of their mitigation obligations, nor would other local water management agencies. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis and funding please see Master Response 5.
1552	175	[From ATT2:] Section: 3.6.3.8 Page: 3-163 Line: 29-34 Type: CM19 Key Document Text: Implementation of this conservation measure will be informed through compliance and effectiveness monitoring and adaptive management, as described in Chapter 3,	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. See Master Response 33 for further discussion of adaptive management.

DEIRS Ltr#	Cmt#	Comment	Response
		Conservation Strategy, (Section 3.4.19) of the BDCP. The BDCP Implementation Office, in coordination with the fish and wildlife agencies, may discontinue effectiveness monitoring for this measure in future years if monitoring results indicate a strong correlation between reduction in stormwater pollution loads entering the Delta and responses of covered fish species. Comment: It is insufficient to assess effectiveness with correlations when so many other factors contribute to covered species health. Better assessment tools are needed to be developed and agreed upon before developing the conservation measures.	
1552	176	[From ATT2:] Section: 3D.2.2 Page: 3D-3 Line: 12-16 Type: Adaptive Management, Water Quality Key Document Text: As the NEPA baseline, the No Action Alternative, sometimes referred to as the future no action condition, considers no action conditions to include continuation of operations of the SWP and CVP as described in the 2008 U.S. Fish and Wildlife Service (USFWS) and 2009 National Marine Fisheries Service (NMFS) BiOps and other relevant plans and projects that would likely occur in the absence of BDCP actions and which are well-defined enough to allow for meaningful analysis. Comment: As per this definition, it seems that the DWR Reoperation Program should have been included as a relevant plan that would likely occur. The climate change analysis should have considered the potential operational adaptation and mitigation strategies in development. http://www.water.ca.gov/system_reop/	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding new subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. For additional information on the baseline see Master Response 1. The preliminary assessment of strategies are under development in the DWR System Reoperation Program; therefore, it would be speculative to include the climate change adaption strategies in the No Action Alternative in the FEIR/EIS. These changes also would not be consistent with the Project Objectives and Purpose and Need statement for the proposed project. Future changes in the SWP and CVP operations to respond to climate change and sea level rise would require separate engineering environmental analyses under CEQA and NEPA. For more information regarding climate change please see Chapter 29 of the FEIR/EIS . See also Master Response 19.
1552	177	[From ATT2:] Section: 5A.D.7 Page: 5A-D133 Line: 5-7 Type: Water Quality, Water Supply Key Document Text: For the selected sea level rise scenarios, three-dimensional UnTRIM Bay-Delta model was simulated to evaluate the Delta hydrodynamic and salinity conditions under historical conditions.	As noted in the Appendix 5A, Section A, Modeling Methodology, of the Draft BDCP EIR/EIS, the methodology used to consider the effects of projected sea level rise on the Delta hydrodynamics and water quality, included simulating the three-dimensional UnTRIM model and using the results to train (or corroborate) one-dimensional DSM2 model, and using the corroborated DSM2 model to study the BDCP EIR/EIS No Action Alternative and Alternatives 1 through 9. UNTRIM model results for different sea level rise scenarios is presented in the Draft BDCP EIR/EIS Appendix 5A, Section D Attachment 3, Evaluation of Sea Level Rise Effects using UNTRIM San Francisco Bay-Delta Model. The results shown in Figures 4.1-1 to 4.1-26 and 4.3-1 to 4.3-26 (in Appendix 5A, Section D, Attachment 3) indicate negligible change in salinity upstream of Cache Slough confluence on the Sacramento River under the 15cm and 45cm sea level rise cases. Even though there is no specific analysis performed on the changes to reverse flows due to the sea level rise, these salinity results indicate that there would likely be a negligible change in the upstream transport due to the sea level rise. Further, several analyses included in the BDCP EIR/EIS, which relied on the corroborated DSM2 model, indirectly demonstrate that the effects of the sea level rise by themselves are minimal on the upstream transport and backwater effects. For instance, Draft BDCP EIR/EIS Table C-29-2-1 in Appendix 5A, Section C, Modeling Results, which compares Sacramento River at Freeport, Monthly Averaged Daily

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: This evaluation should have been expanded to see how far upstream the projected effects of sea level rise extends, to determine if there is an increase in reverse flow impacts or an increase in the reach of the upstream of the Delta area that could be affected by reverse flows or backwater effects.	Minimum Elevation under the No Action Alternative at LLT (includes 45cm sea level rise) and Existing Conditions (no sea level rise), show that the minimum elevations will be higher with increased sea level. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding new subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. See Master Response 19 for further discussion of climate change.
1552	178	[From ATT2:] Section: 5A.D.10.2 Page: 5A-D157 Line: 9-14 Type: Water Quality Key Document Text: The results show that the effects on the upstream operations are primarily due to the climate change effect on the reservoir inflows, river temperatures, and the increased salinity intrusion in the Delta due to the projected sea level rise. The proposed BDCP operations did not impact the upstream reservoir conditions, both at end-of-May and end-of- September, because of the increased flexibility in the system. The proposed restoration under BDCP has limited effect on the overall system operations. Comment: The information presented in this section is unclear and difficult to review. The data cannot be reviewed to confirm the conclusion stated by the BDCP. This section should be revised to allow better review of the information.	Appendix 5A, Section D.10.2, Incremental Effects of Climate Change, Sea Level Rise, and Restoration on Operations, in the Final EIR/EIS presents a sensitivity analysis of model results by sequentially adding the major assumptions to the modeling. The model starts with the Existing Conditions plus projected increased water demands in the Delta watershed. Then, sea level rise, climate change, Fall X2, and tidal restoration are sequentially added to identify the sensitivity of each component on specific water operations. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding new subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. See Master Response 19 for further discussion of climate change.
1552	179	[From ATT2:] Section: 5A.D.10.3 Page: 5A-D167 Line: 8-11 Type: Water Quality Key Document Text: The incremental changes between the No Action Alternative and the BDCP Alternative without considering the projected changes in climate and sea level were found to be similar to the results presented in the EIR/EIS, which included the climate change and sea level rise effects. Comment:	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding new subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. See Master Response 19 for further discussion of climate change. Please refer to Master Response 1 and Appendix 3D (Defining Existing Conditions, the No Action/ No Project Alternative, and Cumulative Impact Conditions) for a discussion of the environmental baselines used in the EIR/EIS.

DEIRS Ltr#	Cmt#	Comment	Response
		The information presented in this section is unclear and difficult to review. The data cannot be reviewed to confirm the conclusion stated by the BDCP. This section should be revised to allow better review of the information.	
1552	180	[From ATT2:] Section: 8.1 Page: 8-1 Line: 4-5 Type: Water Quality Key Document Text: Chapter 8, Water Quality, describes the environmental setting and potential impacts of the BDCP on water quality in and upstream of the Sacramento-San Joaquin Delta. Comment: The BDCP purports that this Chapter describes impacts on water quality upstream of the Delta. Yet there is very little data evaluation to support such evaluation. This Chapter needs to be expanded to provide a complete evaluation of water quality upstream of the Delta in accordance with this statement.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding new subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. See Master Response 14 for further discussion of water quality.
1552	181	[From ATT2:] Section: 8.1.6 Page: 8-5 Line: 8-18 Type: Scope Key Document Text: In some instances, the NEPA and CEQA discussions differ for a particular impact discussion because NEPA and CEQA have different points of comparison (or "baselines" in CEQA terms). The NEPA point of comparison for each alternative is based on the comparison of the action alternative (Alternatives 1A through 9) at 2060, with the no action alternative which supposes conditions at 2060 in the absence of the proposed project. The CEQA baseline is based on the comparison of the action alternative (Alternatives 1A through 9) at 2060 with existing conditions. Consistent with this, the NEPA point of comparison accounts for anticipated climate change conditions at 2060, whereas the CEQA baseline is assumed to occur during existing climate conditions. Therefore, differences in model outputs between the CEQA baseline and the action alternative (Alternatives 1A through 9) are due primarily to both the impacts of proposed alternative as well as future climate change conditions (sea level rise and altered precipitation patterns). Comment: The alternatives examined are insufficient and do not constitute a reasonable range. The	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 1 for additional information on NEPA and CEQA baselines.

DEIRS Ltr#	Cmt#	Comment	Response
		alternatives should look at a broader range of alternatives for water quality in addition to the Delta Reform Act covered species-focused activities. Because the baseline is considered continued operation of the existing facilities, additional alternatives that support regionally independent solutions and less conveyance should be required for an adequate evaluation. This is also true for the Antidegradation Analysis.	
1552	182	[From ATT2:] Section: 8.2 Page: 8-5 Line: 20-26 Type: Scope Key Document Text: This section defines the environmental setting/affected environment for surface water quality, reviews the environmental and regulatory setting with respect to water quality, and provides an assessment of existing water quality conditions in the study area (the area in which impacts may occur), shown in Figure 1-4, which includes the Plan Area (the area covered by the BDCP), upstream of the Delta, and the State Water Project/Central Valley Project (SWP/CVP) Export Service Areas. Water quality conditions refer to the chemical and physical properties of the surface water in the study area. setting/affected environment for surface water quality, reviews the environmental and regulatory setting with respect to water quality, and provides an assessment of existing water quality conditions in the study area (the area in which impacts may occur), shown in Figure 1-4, which includes the Plan Area (the area covered by the BDCP), upstream of the Delta, and the State Water Project/Central Valley Project (SWP/CVP) Export Service Areas. Water quality conditions refer to the chemical and physical properties of the surface water in the study area. Comment: Earlier in Section 8.1.5, the text states that the tributary "watersheds" are covered in the assessment. In this section, it is stated that Figure 1-4 defines the study area. However, Figure 1-4 and the previous discussion include only the upstream waterways, but not the tributary watersheds, which would add a significantly larger area and is more accurate.	The study area is as defined as shown in Figure 1-4. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5.
1552	183	[From ATT2:] Section: 8.2 Page: 8-5 Line: 33-35 Type: Error Key Document Text: The term nonpoint source is defined to mean any source of water pollution that does not meet the legal definition of point source in Section 502(14) of the Clean Water Act (CWA)	Urban runoff is widely considered to be a nonpoint source (e.g., by USEPA and the State Water Resources Control Board). Although some of the urban runoff is captured and funneled to individual storm drains in some locations, not all locations have such drains, and some of the urban runoff itself is not captured and enters waterways directly. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. See Master Response 14 for further discussion of water quality.

DEIRS Ltr#	Cmt#	Comment	Response
		and includes urban and irrigation runoff. Comment: Stormwater covered National Pollutant Discharge Elimination System (NPDES) permits (MS4--municipal separate storm sewer system) is considered a point source within Section 502(14), which does not apply to agricultural "stormwater". Clean Water Act amendments in 1987 clarified this categorization.	
1552	184	[From ATT2:] Section: 8.2.1 Page: 8-6 Line: 20-22 Type: Scope, Water Quality Key Document Text: The Delta environment is much more complex and dynamic than the rest of the study area and requires a more detailed approach. Hence, the water quality conditions in the Delta were reviewed at a greater level of detail. Comment: The detailed assessment should occur in the areas where there are effects. While tidal influence adds complexity to the modeling, the higher level of detail is necessary upstream of the selected water quality locations (e.g., up to Veterans Bridge, etc.).	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding new subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. See Master Response 14 for further discussion of water quality.
1552	185	[From ATT2:] Section: 8.2.1.1 Page: 8-7 Line: 28-29 Type: Error Key Document Text: Section 8.1.2, Selection of Monitoring Stations for Characterization of Water Quality, includes detailed discussions of the selected water quality constituents of concern in the study area. Comment: Incorrect reference to previous section.	Chapter 8 sections of the Final EIR/EIS have been renumbered. Reference to Section 8.1.2, Selection of Monitoring Stations for Characterization of Water Quality in the Final EIR/EIS, is now correct.
1552	186	[From ATT2:]	Urban runoff is widely considered to be a nonpoint source (e.g., by USEPA and the State Water Resources Control Board). Although some of the urban runoff is captured and funneled to individual storm drains in some locations, not all locations have such drains, and some of the urban runoff itself is not captured and

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 8.2.1.4 Page: 8-13 Line: 22-23 Type: Error Key Document Text: Figure 8-6 shows land uses and major point sources (consisting primarily of municipal water treatment plants) and nonpoint sources (e.g., urban storm water runoff) of pollutants. Comment: Urban stormwater is considered a point source.	enters waterways directly. For additional information on water quality see Master Response 14.
1552	187	[From ATT2:] Section: 8.2.1.4 Page: 8-14 Line: 14-23 Type: Water Quality, Water Supply Key Document Text: Both variations in watershed hydrology and SWP and CVP operations affect the variability of water quality in the study area; also both SWP/CVP and non-SWP/CVP water diversions reduce the amount of water available for dilution and assimilation of contaminant inputs and hydrodynamic conditions associated with channel flows and tidal action in the Delta. Water quality can vary seasonally in response to winter-spring runoff and summer-fall lower-flow periods or seasonal agricultural practices and cropping; water quality also can vary from year to year as a result of precipitation and snowpack levels in the upper watersheds and the resulting releases from upstream reservoirs for water supply, flood management, and environmental obligations (e.g., fish flows, Delta water quality objective compliance), operations of the Delta Cross Channel, and seasonal and annual variations in SWP and CVP pumping rates. Comment: This text displays the wide variability in source water quality and supports the need to evaluate constituents for short term impacts. The use of long term averages in the water quality assessment in this chapter needs to be reconsidered, and the data should be reevaluated for shorter term impacts, such as the periods applicable for drinking water regulations.	The potential water quality impacts are evaluated in consideration of both short-term and long-term timeframes. In particular, the majority of the impact assessments are based on the results of the DSM2 modeling which provides monthly average changes in constituent concentrations. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For additional information on water quality see Master Response 14.
1552	188	[From ATT2:] Section: 8.2.1.4	This section provides an overview of the factors affecting water quality and, thus, is intentionally succinct. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information

DEIRS Ltr#	Cmt#	Comment	Response
		Page: 8-13, 8-14 Line: 16-40, 1-13 Type: Water Quality Key Document Text: Primary Factors Affecting Water Quality Comment: This section presents a summary of some of the potential sources of contamination in the watershed that could impact water quality and the associated constituents of concern. This section is not comprehensive and does not provide any relative comparison or assessment of the specific sources' ability to impact source water quality. Text should be added to qualify the discussion and discuss the presence of additional sources and constituents of interest, especially at more local levels.	on the BDCP effects analysis please see Master Response 5. For additional information on water quality see Master Response 14.
1552	189	[From ATT2:] Section: 8.2.1.6 Page: 8-21 Line: 20-37 Type: Error Key Document Text: (Omission) Comment: This section on other Water Quality Plans does not identify several critical water quality planning efforts that are relevant, including Central Valley Salinity Alternatives for Long-term Sustainability (CV-SALTS), salt and boron, pesticide and other Total Maximum Daily Loads (TMDLs), Delta nutrient objective development, and the Central Valley Drinking Water Policy.	This section addresses water quality control plans for the purpose of identifying sources of applicable water quality criteria. TMDLs are addressed in the Final EIR/EIS Section 8.1.1.7 and Central Valley Drinking Water Policy is addressed in Section 8.2.3.13. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For additional information on water quality see Master Response 14.
1552	190	[From ATT2:] Section: 8.2.1.7 Page: 8-23 Line: Table 8-2 Type: Error Key Document Text: (Omission)	This table is only addressing the portions of named water bodies that are within the Delta, not the entire watershed reach and no change is necessary.

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: The table title should include Sacramento and San Joaquin River tributaries that are referenced in table. It is unclear when the EIR/EIS evaluation is including these watershed reaches.	
1552	191	[From ATT2:] Section: 8.2.1.7 Page: 8-24 Line: Table 8-3 Type: Error Key Document Text: (Omission) Comment: Delta Methylmercury TMDL adoption status should be included.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on water quality see Master Response 14.
1552	192	[From ATT2:] Section: 8.2.1.8 Page: 8-26 Line: 39-42 Type: Error Key Document Text: The constituent-specific sections described subsequently (Section 8.1.3) characterize the potential effects on beneficial uses and various receptors, including known information regarding specific locations in the Delta most affected by the constituents. Comment: Reference to Section 8.1.3 appears in error.	Chapter 8 sections have been renumbered. Reference to the Final EIR/EIS Section 8.1.3, Existing Surface Water Quality, is now correct.
1552	193	[From ATT2:] Section: 8.2.2.2 Page: 8-27 Line: 34-36 Type: Water Quality, Water Supply	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For additional information on water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		Key Document Text: Based on data availability, data continuity, and geographic location, a total of 20 water quality monitoring stations were selected to characterize the water quality conditions in the study area (Figure 8-7). Comment: Limiting data collection to those sets easily accessed through DWR likely precluded a comprehensive data evaluation in the areas upstream of the Delta. These sites should have been supplemented with reputable local programs, such as current municipal and domestic water supply (MUN) users regulatory compliance monitoring data, to ensure a sufficient number of data points. (http://www.cdph.ca.gov/certlic/drinkingwater/Pages/EDTlibrary.aspx.) Moreover there are a number of active data collection efforts by California Department of Pesticide Regulation, the Coordinated Monitoring Program (Sacramento Stormwater Quality Partnership (SSQP) permit required river monitoring), and others.	
1552	194	[From ATT2:] Section: 8.2.2.2 Page: 8-31 Line: Table 8-6 Type: Scope, Water Quality Key Document Text: Delta Source Water Locations Comment: Selection of Sacramento River at Hood over the legislative definition of the Delta is inconsistent with the 'boundary' approach and excludes the upstream reach where a number of existing and proposed municipal drinking water intakes are located. The reach from I Street (or further upstream) to Hood should be evaluated in more detail as this is the area of increased impact from the BDCP intakes and other existing proposed intakes in the vicinity. Certainly, immediately upstream and downstream of the CM1 intakes should be evaluated.	Although Hood is downstream of the I Street Bridge, both locations are virtually always made up of 100% Sacramento River water, and thus have similar water quality for most constituents. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For additional information on water quality see Master Response 14.
1552	195	[From ATT2:] Section: 8.2.2.3 Page: 8-32 Line: 20-38 Type: Scope, Water Quality Key Document Text:	Although Hood is downstream of the I Street Bridge, both locations are virtually always made up of 100% Sacramento River water, and thus have similar water quality for most constituents. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For additional information on water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		However, these locations generally represent the water quality occurring at these perimeter locations in the Delta. Comment: Immediately upstream and downstream of the BDCP intakes should be evaluated in greater detail to understand with higher resolution the effects on water quality in this critical area. Hood is much further downstream than the I Street Bridge.	
1552	196	[From ATT2:] Section: 8.2.3 Page: 8-34 Line: 33-34 Type: Error Key Document Text: For more information on the comparisons made to the Existing Conditions modeling run for assessment purposes, see Section 8.3.3.2, Comparisons. Comment: This section reference is incorrect, needs to be reviewed and revised.	Reference has been changed to the Final EIR/EIS Section 8.3.2.2, Comparisons.
1552	197	[From ATT2:] Section: 8.2.3.8 Page: 8-58 Line: 35-37 Type: Water Quality Key Document Text: Data for most endocrine-disrupting compounds (EDCs), pharmaceutical and personal care products (PPCPs), and nitrosamines in the Delta and the north- and south-of-Delta locations are very sparse because most compounds are not typically part of water quality sampling programs. Comment: The previously mentioned water quality monitoring programs (DWR, Bay Delta and Tributaries Project (BDAT), Water Data Library (WDL)) do not have significant data on these constituents, but there is data available in the watershed from U.S. Geological Survey (USGS), municipal and domestic water supply (MUN) users, as well as some industrial dischargers (such as Aerojet on the American River). This data should have been collected to contribute to a more thoughtful evaluation of these constituents. References to studies outside of the Project Area are not technically supported due to the site specific nature of	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Additional consideration of EDCs and PPCPs is provided in the Final EIR/EIS Appendix 8C, Section 8C.1.5.4.

DEIRS Ltr#	Cmt#	Comment	Response
		the sources. http://www.cdph.ca.gov/certlic/drinkingwater/Pages/EDTlibrary.aspx, http://cida.usgs.gov/nawqa_public/apex/f?p=136:1:0, https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/CiwqsReportServlet?inCommand=reset&reportName=esmrAnalytical, http://www.ceden.us/AdvancedQueryTool	
1552	198	[From ATT2:] Section: 8.2.3.9 Page: 8-63 Line: Table 8-14 Type: Scope, Water Quality Key Document Text: (Omission) Comment: Data used is limited. However, significantly more data are available at the locations.	Please see Master Response 14 regarding presentation and use of data in the Environmental Setting section of the Final EIR/EIS Chapter 8.
1552	199	[From ATT2:] Section: 8.2.3.11 Page: 8-77 Line: 8-9 Type: Error, Water Quality Key Document Text: Peak concentrations are important to municipal drinking water purveyors because of regulations that require advanced treatment depending on total organic carbon (TOC) concentrations. Comment: It is stated elsewhere in the document that drinking water purveyors are concerned about annual averages of TOC, not peak concentrations. The median concentrations are most relevant to facility operation.	This paragraph cited refers to ambient concentrations of TOC and water purveyors' concerns with seasonal spikes, not regulatory compliance averaging periods. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5.
1552	200	[From ATT2:] Section: 8.2.3.11	The site is identified in the Final EIR/EIS as Footnote "a" of Table 8-20 as Hood/Greene's Landing.

DEIRS Ltr#	Cmt#	Comment	Response
		Page: 8-77 Line: Table 8-20 Type: Error Key Document Text: (Omission) Comment: The table does not indicate the Sacramento River site location.	
1552	201	[From ATT2:] Section: 8.2.3.11 Page: 8-78 Line: 22-23 Type: Error Key Document Text: The lowest observed mean concentrations of TOC in the Delta during the water years 2001-2006 ranged from 2.7 to 3.0 mg/L, occurring at the Sacramento River at Hood. Comment: It is not clear if the range of mean values at Hood is seasonal mean, annual mean, etc. It does not seem to match the median value shown in Table 8-20.	This sentence is referring to values presented on Figure 8-41, which show a mean TOC at Hood of 2.7 mg/L and a mean TOC at Mallard Island of 3.0 mg/L These are mean values of the data for the period of record shown in Figure 8-41, not seasonal or annual means.
1552	202	[From ATT2:] Section: 8.2.3.11 Page: 8-78 Line: Figure 8-42 Type: Error Key Document Text: (Presentation) Comment: In presenting side-by-side plots from different sites, it would be useful to use the same scale, especially if the intent is comparison. More information should be provided on whether monitoring programs have sample collection targets. For example, Sacramento River at Veterans Bridge is known to be biased to wet weather events.	The plots with the scales as shown allow for more readily discerning the annual variability in TOC, which is the purpose of these plots, as cited in Chapter 8 on p-8-79. These plots show all data during the period and, thus, any biases that may be present are shown.

DEIRS Ltr#	Cmt#	Comment	Response
1552	203	[From ATT2:] Section: 8.2.3.12 Page: 8-80 Line: 16-19 Type: Water Quality Key Document Text: Most data that exist regarding pathogens are for coliform bacteria, which are indicators of potential fecal contamination by humans or other warm- blooded animals because of their relative abundance and ease of measuring in water samples. Comment: The text needs to be modified to add language to clarify that fecal coliform or E. coli are indicators of fecal contamination, not total coliform.	The sentence as written is correct. Total coliform is commonly tested as an indicator of fecal coliform presence.
1552	204	[From ATT2:] Section: 8.2.3.13 Page: 8-83 Line: 13-16 Type: Water Quality Key Document Text: Current use pesticides include carbamates (e.g., carbofuran), organophosphates (e.g., chlorpyrifos, diazinon, methyl parathion, malathion), thiocarbamates (e.g., molinate, thiobencarb), and more recently pyrethroids (e.g., permethrin, cypermethrin), a class of synthetic insecticides applied in urban and agricultural areas. Comment: The identification of current use pesticides is incomplete and does not consider use of the pesticides in the upstream watersheds. This process should be reevaluated to include Department of Pesticide Regulation (DPR) reporting (http://calpip.cdpr.ca.gov/main.cfm) to identify pesticides of key interest to various beneficial uses. The municipal and domestic water supply (MUN) use potential pesticides of interest for consideration of monitoring and/or evaluation in the Sacramento Valley have been identified to the Central Valley Regional Board as part of the Irrigated Lands Regulatory Program by the Sacramento River Joint Source Water Protection Program (TDC Environmental; Rice Pesticide Prioritization memo dated 9/13/13 and Sacramento River Watershed Pesticide Prioritization memo dated 10/7/13).	The list of pesticides is highlighting the predominant pesticides known to be used in the watershed. This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For additional information on water quality see Master Response 14. See also Master Response 33, which outlines adaptive management and monitoring approaches.
1552	205	[From ATT2:]	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 8.2.3.13 Page: 8-83 Line: 25-28 Type: Water Quality Key Document Text: The critical pathways for pesticides entering the rivers, streams, and the Delta include agricultural and urban stormwater runoff, irrigation return water, drift from aerial or ground-based spraying, and periodic release of agricultural return flows from rice production (Werner and Oram 2008). Comment: Another pathway documented by the Central Valley Regional Board in the Irrigation Lands Regulatory Program is seepage through levees (Rice Pesticides Program 2013 Annual Monitoring Report) and subsurface tile drains (Attachment A to the Waste Discharge Requirements (WDR) [R5-2014-XXXX] for Sacramento Valley Rice Growers), and these should be added to the text.	on the BDCP effects analysis please see Master Response 5. The pathways noted by the commenter are related to agriculture sources, which are reflected in the text cited by this comment. .For additional information on water quality see Master Response 14.
1552	206	[From ATT2:] Section: 8.2.3.13 Page: 8-83 Line: 35-36 Type: Water Quality Key Document Text: The timing of pesticide input to Delta waters is related to application rates, when pesticides are applied to farmed land, runoff events, and other transport processes (Kuivila and Jennings 2007). Comment: Another factor affecting pesticide input to waters is the application method as well as best management practices (such as pesticide hold times) implemented through management programs such as the Irrigated Lands Regulatory Program.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5.For additional information on water quality see Master Response 14.
1552	207	[From ATT2:] Section: 8.2.3.13 Page: 8-85 Line: Table 8-23	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For additional information on water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		Type: Error Key Document Text: Diazinon Concentrations, by Water Body Category Comment: Data is irrelevant and not representative of current conditions, because it is based on a 2006 study. More recent data should be used after the diazinon and chlorpyrifos bans became effective.	
1552	208	[From ATT2:] Section: 8.2.3.13 Page: 8-85 Line: Table 8-24 Type: Error Key Document Text: Table 8-24. Chlorpyrifos Concentrations, by Water Body Category Comment: Data are irrelevant and not representative of current conditions because it is based on a 2006 study. More recent data should be used after the diazinon and chlorpyrifos bans became effective.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For additional information regarding adaptive management, please see Master Response 33. For additional information on water quality see Master Response 14.
1552	209	[From ATT2:] Section: 8.2.3.13 Page: 8-85 Line: 4-5 Type: Water Quality Key Document Text: Monitoring efforts at the north-of-Delta stations since 2001 have resulted in no pesticide detections, while monitoring at the south-of-Delta stations resulted in various detections. Comment: This text needs to be expanded to explain that the evaluation was based on a few selected sites (four), and three of those were located above the major agricultural areas in the Central Valley. The conclusion that this is not a significant concern is based on too little data not sufficiently representing source contributions. This evaluation could easily be supplemented with data from the Central Valley Regional Board Irrigated Lands Regulatory	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. This section setting is providing an overview of pesticide conditions in the affected environment. Pesticides are of concern based on the available data and were assessed for each alternative in the 2013 Public Draft EIR/EIS and RDEIR/SDEIS. For additional information on water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		Program. http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/water_quality_monitoring/index.shtml	
1552	210	[From ATT2:] Section: 8.2.3.16 Page: 8-101 Line: 25-28 Type: Water Quality Key Document Text: Their study showed that cadmium, copper, and zinc were transported primarily in dissolved form upstream of major agricultural activities but primarily in colloidal form downstream. Iron and lead were transported primarily in colloidal form at all mainstem Sacramento River sites. Comment: The source analysis of the trace metals needs to be expanded to evaluate the contribution of the reservoirs to dissolved metal concentrations and better explain the transformation in downstream rivers.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. The statement cited by this comment is regarding the Sacramento River downstream of Shasta Dam and, thus, addresses metals in and released from Shasta Reservoir. Transformation processes in the ambient environment would continue with implementation of the project alternatives. The analysis of trace metals in Chapter 8 of the 2013 Public Draft EIR/EIS evaluated effects on metals based on the dissolved fraction. For additional information on water quality see Master Response 14. For additional discussion about adaptive management, please see Master Response 33.
1552	211	[From ATT2:] Section: 8.2.3.16 Page: 8-102 Line: 35-36 Type: Water Quality Key Document Text: Sources of copper contamination include natural deposits, industrial and urban wastewater, and urban stormwater runoff (Buck et al. 2006; U.S. Environmental Protection Agency 2009j). Comment: Another source of copper in the Central Valley watershed is from agricultural use as an herbicide (http://calpip.cdpr.ca.gov/main.cfm). This text needs to be expanded to include that source, and the evaluations need to be expanded. Senate Bill 346 initiated the phase out of copper in brake pads, which is a significant source of copper in urban runoff.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. No changes to the text have been made because this information regarding additional copper sources would not change the impact analysis. The water quality assessments for trace metals (including copper) considered the potential for source changes in upstream copper. For additional information on water quality see Master Response 14.
1552	212	[From ATT2:]	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 8.4.1 Page: 8-127, 8-128 Line: 37-40, 1-2 Type: Water Quality, Scope Key Document Text: 1. Would implementation of the Alternatives result in water quality changes to the Plan Area, Upstream of the Delta, or SWP/CVP Export Service Areas that would result in exceedances of water quality criteria/objectives, or substantially degrade water quality, of/by sufficient frequency, magnitude, and geographic extent as to cause or substantially contribute to significant adverse effects on the beneficial uses of water in these areas of the affected environment? Comment: This assessment is incomplete. Why is the assessment limited to the Plan Area? If there are effects in other areas they should be assessed as well.	on the BDCP effects analysis please see Master Response 5. The water quality assessment in the Final EIR/EIS Chapter 8, Water Quality, addresses three regions: Upstream of the Delta, Delta Region and SWP/CVP Export Service Areas in Impacts WQ-1 through WQ-33 for each alternative. In addition, Impact WQ-34 addresses water quality impacts to San Francisco Bay. For additional information on water quality see Master Response 14.
1552	213	[From ATT2:] Section: 8.4.1 Page: 8-128 Line: 3-4 Type: Water Quality, Scope Key Document Text: 2. Would implementation of the Alternatives result in beneficial effects on water quality in these areas? Comment: Does "beneficial effects on water quality" refer to support of beneficial uses? This phrase should be revised for clarity.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Beneficial effects on water quality mean that there would be an improvement or a reduction in a constituent or parameter of concern that would enhance conditions for one or more beneficial uses. No change to the text has been made in response to this comment. For additional information on water quality see Master Response 14.
1552	214	[From ATT2:] Section: 8.4.1 Page: 8-128 Line: 11-15 Type: Water Quality Key Document Text: Moreover, models available for use in addressing such questions have been previously	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. See Master Response 30 for more information on modeling. For additional information on water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		developed for the effects of operations of the SWP-CVP facilities for only a few water quality parameters (e.g., electrical conductivity (EC), dissolved organic carbon (DOC), and temperature) in defined portions of the affected environment (i.e., the Delta), and are poorly developed or not developed at all for nearly all other water quality parameters and locations, nor for most of the conservation measures proposed for implementation. Comment: There are other models that cover the same area for additional constituents (ammonia, nitrate, phosphorus, and others) or could be expanded to consider other constituents (methylmercury, pesticides, etc.). It is within the scope of this larger project to better develop these tools. The Central Valley Drinking Water Policy modeling efforts could be built on to better develop this. (http://www.waterboards.ca.gov/rwqcb5/water_issues/drinking_water_policy/dwp_wrkgrp_synthesis_rpt.pdf)	
1552	215	[From ATT2:] Section: 8.4.1 Page: 8-128 Line: 14-17 Type: Water Quality Key Document Text: Conservative parameters were evaluated using available models used for SWP-CVP planning and operations (i.e., California Water Resources Simulation Model [CALSIM II, Delta Simulation Model 2 [DSM2], and Reclamation's Temperature Model) wherever applicable, as well as constituents directly addressed by these models, and included electrical conductivity (EC), dissolved organic carbon (DOC), and temperature. Comment: DOC should not be considered a conservative constituent over large areas or time scales.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. The Final EIR/EIS describes how dissolved organic carbon (DOC) was modeled directly using DSM2. Simulation of DOC transport in DSM2 was successfully validated in 2001 by DWR (Pandey, 2001). DSM2 assumes DOC is a conservative parameter. For more information regarding the additional subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. For additional information on water quality see Master Response 14.
1552	216	[From ATT2:] Section: 8.4.1 Page: 8-128 Line: 28-30 Type: Water Quality, Adaptive Management Key Document Text: In general, the fewest water quality changes of importance are expected to occur Upstream of the Delta, followed by the SWP/CVP Export Service Areas, with the greatest number and	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. This statement is based on the fact that changes to water quality upstream of the Delta would be associated primarily with changes in reservoir storage and river flow, whereas in the Delta, substantial changes in source water fractions could occur, depending on project alternative, which could drive substantial water quality changes for some constituents of concern. The 2013 Public Draft EIR/EIS fully evaluates the potential for upstream effects on water quality constituents from operation of conveyance facilities for each alternative. The analysis shows that more effects occur in the Plan Area than in upstream areas. For more information on water quality see Master Response 14. See Master Response 33 for discussion of adaptive management.

DEIRS Ltr#	Cmt#	Comment	Response
		magnitude of water quality changes expected for the Plan Area. Comment: We are concerned about the assumption that it is expected that the fewest water quality changes of importance are expected to occur upstream of the Delta. Potential water quality changes associated with revised CVP and SWP system operations to upstream water bodies could be very significant to local users. This statement needs to be supported by water quality evaluations and verified in the future through the Adaptive Management program.	
1552	217	[From ATT2:] Section: 8.4.1 Page: 8-128 Line: 34-35 Type: Water Quality Key Document Text: Models are available to simulate hydrodynamic and water quality changes within the Delta region. Comment: Modeling should be performed in all BDCP affected areas so that all impacts can be sufficiently assessed. There are models such as Watershed Analysis Risk Management Framework (WARMF) that have also been developed for the watershed areas tributary to the Delta that were successfully integrated with CALSIM and DSM2.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Sufficient data and models are not available to evaluate every constituent addressed in Chapter 8, Water Quality, quantitatively. Further, the nature of the effects of the alternatives on changing flows and Delta source water fractions does not necessitate a quantitative approach. Please refer to Master Response 30 regarding the qualitative approach taken in the water quality assessment for certain constituents and for the upstream of and within the Delta region.
1552	218	[From ATT2:] Section: 8.4.1 Page: 8-129 Line: 3-13 Type: Water Quality Key Document Text: The constituents of concern in the affected environment included both physically and chemically conservative and non-conservative parameters. The concentrations of conservative constituent tend to not be affected substantially by physical, chemical, or biological mechanisms that would result in a loss of the constituent from the system. Thus, the concentrations of conservative constituents can be reasonably estimated and changes assessed with mass-balance accounting of the mixing of known volumes and concentrations of different water sources. Comment:	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. All modeling approaches include a certain amount of inherent uncertainty. The modeling approach used and uncertainties are discussed in the Final EIR/EIS section 8.3.1. Conclusions were qualified in light of this uncertainty in the assessment where necessary. For more information regarding new subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. See Master Response 14 for discussion of water quality.

DEIRS Ltr#	Cmt#	Comment	Response
		Conservative constituents can also have complex sources and sinks within the system that need to be accounted for, and simple mass balances over large areas and time periods must be accounted for in a model. This mass balance is essentially a conceptual model when it is used over these larger areas. The mass balance approach over large areas leads to additional uncertainty; incorrect conclusions can be drawn when time scales cannot be aligned properly.	
1552	219	[From ATT2:] Section: 8.4.1 Page: 8-129, 8-130 Line: 41-43, 1-4 Type: Water Quality Key Document Text: It was determined that the action alternatives would result in all three categories of potential water quality effects within the Plan Area. However, based on the description of BDCP alternatives (see Chapter 3, Description of Alternatives) for construction activities or other conservation measures in the Upstream of the Delta and the SWP/CVP Export Service Area, water quality changes were expected to be minimal and, hence, are not addressed in as much detail. For those Alternatives that include specific CM1 measures in the Plan Area, however, a project specific level of analysis is included. Comment: Insufficient information in the "Upstream of the Delta" areas is provided, especially impacts due to reservoir operations and reservoir stage. The areas just upstream from CM1 intakes past the CM2 diversions to the Feather River, in particular, could see thermal, flow, and reservoir impacts that could affect water quality and drinking water treatment. This reach of the river should be examined in detail.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding the additional subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. Master Response 30 includes discussion of the approach to water quality assessment in the water bodies upstream of the Delta.
1552	220	[From ATT2:] Section: 8.4.1 Page: 8-130 Line: 28-30 Type: Water Quality Key Document Text: Quantitatively evaluates constituents of primary concern where modeling tools were developed and were available for doing so, and qualitatively assesses effects where appropriate modeling tools were unavailable. Comment: Limiting assessment to available tools and science is insufficient for the scale of the project.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding the additional subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30 which includes a discussion of water quality assessment modeling.

DEIRS Ltr#	Cmt#	Comment	Response
		The EIR/EIS does not adequately discuss the evaluated tools.	
1552	221	[From ATT2:] Section: 8.4.1 Page: 8-130 Line: 17-21 Type: Water Quality Key Document Text: If the estimated water quality conditions for a constituent under an Alternative triggers one or more of the five water quality conditions defined as effects assessment criteria (NEPA) and thresholds of significance (CEQA) (see Section 8.3.2.3) at one or more of the assessment locations, then that Alternative was determined to have an adverse water quality effect (under NEPA) and a significant impact on water quality (under CEQA) for that water quality constituent or parameter. Comment: This section reference is incorrect, and needs to be reviewed and revised.	See Chapter 8, Water Quality, of the Final EIR/EIS.
1552	222	[From ATT2:] Section: 8.4.1.1 Page: 8-130, 8-131 Line: 38-41, 1-39 Type: Water Quality Key Document Text: (Ommissions) Comment: The model assessment should include additional models or frameworks to evaluate non-conservative constituents and larger model domains (Watershed Analysis Risk Management Framework (WARMF), Hydrological Simulation Program-FORTRAN (HSPF), etc.). Also, the areas nearest to the proposed intakes should have higher resolution modeling for the adjacent areas.	Please see response to Comment 1552-217.
1552	223	[From ATT2:] Section: 8.4.1.2 Page: 8-131	The modeling is described more fully in Appendix 5A of the Final EIR/EIS. The upstream boundary of DSM2 used in this project is the Sacramento River at Freeport This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. For more information regarding new subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. For additional information on

DEIRS Ltr#	Cmt#	Comment	Response
		Line: 41-43 Type: Water Quality, Scope Key Document Text: Water quality changes in the affected environment upstream from the north-Delta boundary, which includes the Sacramento River to Shasta Lake, the Feather River to Lake Oroville, and the American River to Folsom Lake, were primarily assessed qualitatively. Comment: The model domain and areas need to be described more specifically (e.g., Sacramento River at I Street to Keswick, etc.). Also, it is not clear where the 'detailed' modeling in the Sacramento Urban Area starts.	water quality see Master Response 14.
1552	224	[From ATT2:] Section: 8.4.1.3 Page: 8-132 Line: 14-17 Type: Water Quality Key Document Text: Using the methodology described below, changes in boron, bromide, chloride, mercury, methylmercury, nitrate, organic carbon, and selenium, within the Delta were determined quantitatively at 11 assessment locations (Figure 8-7), Comment: The referenced Figure 8-7 has more than 11 "monitoring" points identified, and it is unclear which constituents were evaluated. Please provide a table that shows the constituents, types (e.g., quantitative), and locations of the assessments.	A table showing the constituents and types (qualitative vs. quantitative) is provided as Table 8-61 of the 2013 Public Draft EIR/EIS. Figure 8-7 includes the 11 monitoring locations within the Delta, the 3 primary boundary locations (Sacramento River at Hood, San Joaquin River at Vernalis, and Suisun Bay at Bills Head Point near Martinez) of the Delta, and locations outside the Delta. Additionally, tables of the modeling results presented in the Appendices include the locations assessed quantitatively. For more information regarding the additional subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. For additional information on water quality see Master Response 14.
1552	225	[From ATT2:] Section: 8.4.1.7 Page: 8-145 Line: Table 8-42 Type: Error Key Document Text: Table Footnote C -- In some cases, data were reported as non-detects, and the entry contained an accompanying reporting limit. "Yes" indicates that at least one non-detect was replaced with the reporting limit in order to calculate summary statistics, while "No"	Use of one-half the detection limit is one common method for handling non-detect water quality data, and this approach was considered appropriate for the scale and scope of the boron analysis conducted. For more information regarding the additional subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30.

DEIRS Ltr#	Cmt#	Comment	Response
		indicates that this was not done, generally because no data were reported as non-detect. Comment: For the purposes of calculating summary statistics it is not accurate to substitute "non-detects" with the reporting limit. The table should be updated to use an alternate presentation that is more reflective of conditions. See <http://pubs.acs.org/doi/pdf/10.1021/es053368a> for a discussion of appropriate methods.	
1552	226	[From ATT2:] Section: 8.4.1.7 Page: 8-162 Line: 44 Type: Water Quality Key Document Text: Dissolved organic carbon (DOC) in the Delta is generally considered to act conservatively; thus, the mass-balance modeling approach employed. Comment: DOC is not a conservative constituent. Provide the basis for this assumption over the scope of the Delta residence time.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Simulation of DOC transport in DSM2 was successfully validated in 2001 by DWR (Pandey, 2001). DSM2 assumes DOC is a conservative parameter. For more information regarding the additional subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30. For more information on water quality see Master Response 14.
1552	227	[From ATT2:] Section: 8.4.1.7 Page: 8-163 Line: 35-37 Type: Water Quality Key Document Text: Assessing pesticide-related effects is substantially challenged by: 1) limited available monitoring data in the Delta and other water bodies of the affected environment, and 2) a continually changing pesticide use market. Comment: Although there are many challenges associated with assessing pesticide effects, monitoring data is not a controlling issue in the Central Valley. The Central Valley Regional Board Irrigated Lands Regulatory Program has collected and evaluated large amounts of data that should have been reviewed as part of this assessment. These evaluations can contribute to a	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please refer to Master Response 14 regarding assessment approach for pesticides.

DEIRS Ltr#	Cmt#	Comment	Response
		better understanding of the priorities and vulnerabilities of the watershed. http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/water_quality_monitoring/index.shtml and http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/monitoring_plans_reports_reviews/index.shtml	
1552	228	[From ATT2:] Section: 8.4.1.7 Page: 8-164 Line: 23-32 Type: Water Quality Key Document Text: Perhaps more challenging than a limited monitoring effort is the dynamic state of the pesticide market. Regulatory and pest resistance pressures have left the pesticide market, namely the insecticide market, in a state of flux. Pesticide use varies from year to year depending on numerous external factors such as climate and associated pest outbreaks, cropping patterns, and economic trends in housing construction and urban development. Layered upon this year-to-year variation is an overall trend of decreased organophosphate (OP) insecticides use and increased pyrethroid use, primarily due to the early regulatory phase-out of many OP insecticide uses initiated in early 2000. The market has yet to balance and reach equilibrium, and what limited and relatively short-term monitoring data that is available ultimately only represents a snapshot of a trend in the gradual replacement of many OP uses with that of pyrethroids. Until markets stabilize, trends will inevitably continue to develop. Comment: Pesticide use is registered and relatively well understood. While urban uses are difficult to track, product availability is a good indicator. The "equilibrium" actually seems to be reached relatively quickly, and the noted paragraph should be further researched and updated for accuracy.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please refer to Master Response 14 regarding assumptions for future pesticide use and the qualitative assessment approach for pesticides.
1552	229	[From ATT2:] Section: 8.4.1.7 Page: 8-164, 8-165 Line: 44-46, 1-7 Type: Error Key Document Text: And finally, if transported to surface waters, sufficient amounts of pesticide must be present that once diluted by surface water flows, the resulting concentration is of a magnitude	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. The text being cited in this comment is in Section 8.4.1.7 of the 2013 DEIR/EIS, now in Section 8.3.1.7 of the Final EIR/EIS, Constituent-Specific Considerations, which is within the Methods for Analysis section of Chapter 8. There are no conclusions being presented here; rather this section is describing factors considered in the pesticide analysis common across all alternatives. Effects of CM1 on pesticides are addressed in Impact WQ-21 and considered changes in water flows and source fractions relative to thresholds presented in Section 8.4.2.3. For more information on water quality see Master Response 14.

DEIRS Ltr#	Cmt#	Comment	Response
		capable of eliciting a measurable effect in aquatic life. All of these factors contribute in the end to the potential for adverse beneficial use effects, but of the many factors involved, CVP/SWP operations only affect river flows and, thus available dilution. In an estuary environment, where substantial dilution capacity typically occurs, duration of aquatic life exposure in addition to pesticide concentration is important. While the capacity of the Delta to dilute pesticide inputs is largely unaffected by CVP/SWP operations, the duration of exposure, or residence time, can be affected by operations. Therefore, in the Delta, changes in source water fractions represent long- term changes in exposure potential. Comment: Concentrations of contaminants could increase in areas of lesser flow downstream from the North Delta intakes as the higher quality Sacramento River water is exported. Therefore, the qualitative conclusion should be that an increase is expected due to CM1.	
1552	230	[From ATT2:] Section: 8.4.1.7 Page: 8-165 Line: 22-24 Type: Water Quality Key Document Text: Effects of alternatives on pesticides are primarily incidental and indirect, as existing and future sources of pesticide loading are largely unrelated. Comment: Concentrations could increase in areas of lesser flow downstream from the intakes as the higher quality Sacramento River water is exported. Therefore, the qualitative conclusion should be that an increase in pesticides is expected.	See response to comment 1552-229.
1552	231	[From ATT2:] Section: 8.4.2.1 Page: 8-174 Line: 1 Type: Water Quality Key Document Text: Table 8-61 Comment: Footnote 'e' needs to be revised to include chromium and iron.	Chromium and iron have been added to Footnote “e.”

DEIRS Ltr#	Cmt#	Comment	Response
1552	232	[From ATT2:] Section: 8.4.2.2 Page: 8-174 to 8-175 Line: 9-10, 1-2 Type: Water Quality Key Document Text: The CEQA baseline, "Existing Conditions", is defined in Appendix 3D, and for the purposes of the quantitative water quality assessments, is represented by Existing Conditions modeling runs, not historical water quality monitoring data as presented in Section 8.1.3. Comment: The section reference is incorrect and needs to be reviewed and revised. Also, it is unclear why modeling output was used over real data to provide the basis for the Existing Conditions water quality assessment.	An editorial error caused all internal section referencing in Chapter 8 of the 2013 Public Draft EIR/EIS to be incorrect. Section references have been corrected throughout the document. The primary reasons why historical water quality data are not used to define existing conditions for quantitative constituents are: 1) the SWP and CVP system operates differently in the past couple of years than it did in the past, due to court decisions and Biological Opinions, and 2) there is not a sufficiently long period of time since the SWP and CVP system have been operated under the rules in place today to characterize water quality under the range of hydrologic conditions expected. Modeling allows simulation of current operational constraints and rules over the full range of expected hydrology, thus providing a better description of true "Existing Conditions" against which to compare modeled project conditions for quantitative constituents. Thus, the use of CALSIM and DSM2, and associated models, is considered to be the best available method to assess water quality conditions under baseline conditions and conditions with a set of proposed changes in physical facilities and operations for those constituents. For constituents assessed qualitatively, Existing Conditions is defined according to historical monitoring data and a qualitative understanding of the environment as it existed at the time of the Notice of Preparation. Chapter 8 of the Final EIR/EIS has been updated to include the above explanation for why Existing Conditions were defined according to model results for quantitative constituents.
1552	233	[From ATT2:] Section: 8.4.2.3 Page: 8-177 Line: 30-35 Type: Water Quality Key Document Text: As such, effects criterion/threshold #1 will identify significant impacts under CEQA when water quality under an alternative is anticipated to change substantially, thereby causing adverse effects to beneficial uses, and will avoid making such determinations when the violation of a water quality standard is too infrequent, low in magnitude, and/or isolated geographically to actually cause any adverse effects on beneficial uses of the water body or water body segment. Comment: It is not clear what the phrase "low in magnitude" is intended to refer to relative to water quality standard exceedances. The 303(d) impairment listing guidance does not consider the magnitude of exceedances when finding impairments to beneficial uses. More specific guidance that demonstrates consistency with water quality regulation should be used and cited so that the review can properly evaluate the assessment of water quality impacts.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. The application of threshold 1 must be considered in its entirety. As described in the 2013 Draft EIR/EIS on page 8-177 in lines 22-35, "low in magnitude" is one of several factors that were considered relative to effects on beneficial uses. Clean Water Act section 303(d) impairments were addressed via threshold 4 on page 8-176; application of this threshold is described on page 8-176, lines 37-44. See Master Response 14 for more information on water quality.
1552	234	[From ATT2:] Section: 8.4.3.1	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. he basis for the focus of the pesticide assessment is provided in the "Pesticides" sub-section of the Final EIR/EIS Section 8.3.1.7,

DEIRS Ltr#	Cmt#	Comment	Response
		Page: 8-210 Line: 2-3 Type: Water Quality Key Document Text: Therefore, the pesticide assessment focuses on the present use pesticides for which substantial information is available, namely diazinon, chlorpyrifos, pyrethroids, and diuron. Comment: The basis for selection of present use pesticides assessed in this report is insufficient. More information needs to be presented to explain why other pesticides of interest were not included, other than a lack of data for the limited sites included in the data evaluation.	Constituent-Specific Considerations Used in the Assessment. See Master Response 14 for address of pesticide assessment rationale.
1552	235	[From ATT2:] Section: 8.4.3.9 Page: 8-408 Line: 19-30 Type: Water Quality Key Document Text: Under Alternative 4, over the long term, average annual delta exports are anticipated to range from an increase of 112 thousand acre-feet (TAF) under scenario H1 to a decrease by 730 TAF under scenario H4 relative to Existing Conditions, and an increase by 815 TAF under scenario H1 to a decrease of 27 TAF under scenario H4 relative to the No Action Alternative. Since, over the long-term, between 47 (scenario H1) and 49% (scenario H4) of the exported water will be from the new north Delta intakes, average monthly diversions at the south Delta intakes would be decreased because of the shift in diversions to the north Delta intakes (see Chapter 5, Water Supply, for more information). The result of this is increased San Joaquin River water influence throughout the south, west, and interior Delta, and a corresponding decrease in Sacramento River water influence. This can be seen, for example, in Appendix 8D, ALT 4, H3 - Old River at Rock Slough for ALL years (1976-1991), which show increased San Joaquin River (SJR) percentage and decreased Sacramento River (SAC) percentage under the alternative, relative to Existing Conditions and the No Action Alternative. Comment: The analysis should report and evaluate in more detail the effects on hydrodynamics in the Sacramento River up to the I Street Bridge, due to the fact that the significant reduction in Sacramento River flows downstream of Hood will certainly increase tidal influences on the upstream reach. The evaluation should include points between Emmaton and I Street.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. The text cited in this comment is a summary of the hydrodynamic effects of the alternative, to provide context for the changes in water quality described for this alternative in the Final EIR/EIS Chapter 8. See Master Response 30 regarding the domain of hydrodynamic modeling for the Sacramento River.
1552	236	[From ATT2:]	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not

DEIRS Ltr#	Cmt#	Comment	Response
		Section: 8.4.3.9 Page: 8-439 Line: 36-44 Type: Water Quality Key Document Text: River flow rate and reservoir storage reductions that would occur under Alternative 4, Scenarios H1-H4, relative to Existing Conditions, would not be expected to result in a substantial adverse change in electrical conductivity (EC) levels in the reservoirs and rivers upstream of the Delta, given that: changes in the quality of watershed runoff and reservoir inflows would not be expected to occur in the future; the state's aggressive regulation of point-source discharge effects on Delta salinity-elevating parameters and the expected further regulation as salt management plans are developed; the salt-related Total Maximum Daily Loads (TMDLs) adopted and being developed for the San Joaquin River; and the expected improvement in lower San Joaquin River average EC levels commensurate with the lower EC of the irrigation water deliveries from the Delta. Comment: It is unclear if the regulatory programs and water quality policies described are intended as a mitigation measure. Regulatory programs like Central Valley Salinity Alternatives for Long-term Sustainability (CV-SALTS) will be dramatically affected by the BDCP and will likely require a "grand" solution to prevent the continued accumulation of salts in the Central Valley. Operation of the water exports has amplified the problem, and the BDCP should also address this long-term issue. It is insufficient to assume that salt accumulation will resolve itself through regulatory programs. Further, the proposed mitigation measures are continued assessment and investigative approaches that do not commit to actual reductions in salinity.	already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. The regulatory programs identified in the text are a component of the conditions under which the project alternatives would operate, not mitigation. Alternative 4A has been developed in response to public and agency input. Alternative 4A would result in substantially lesser water quality impacts to salinity-related parameters, including EC, as compared to the preferred alternative in the 2013 Public Draft EIR/EIS. Alternative 4A would still have significant impacts to EC; however, feasible mitigation measures were introduced to reduce the identified impacts to less than significant levels to protect beneficial uses and achieve compliance with SWRCB D-1641 standards.
1552	237	[From ATT2:] Section: 8.4.3.9 Page: 8-446 Line: 17-21 Type: Water Quality Key Document Text: BDCP Conservation Measure 12 (CM12) addresses the potential for methylmercury bioaccumulation associated with restoration activities and acknowledges the uncertainties associated with mitigating or minimizing this potential effect. CM12 proposes project-specific mercury management plans for restoration actions that will incorporate relevant approaches recommended in Phase 1 Methylmercury Total Maximum Daily Load (TMDL) control studies.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality.

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: As a bioaccumulate, the load of methylmercury should be considered as well in the evaluation of impacts, including detailed assessments at locations in the Delta and upstream. The effects of the restoration areas are not adequately characterized in the water quality analysis. The effects should be estimated to provide a better sense of the uncertainty and potential range of loads and concentrations associated with the BDCP actions. At a minimum, the EIR/EIS should evaluate consistency with the Delta Methylmercury TMDL allocations for each of the subregions and how the BDCP would impact compliance with the TMDL targets for each area.	
1552	238	[From ATT2:] Section: 8.4.3.9 Page: 8-446, 8-447 Line: 3-42, 1-2 Type: Water Quality Key Document Text: Impact Water Quality-14: Effects on Mercury Concentrations Resulting from Implementation of CM2-22 Comment: The evaluation concludes that there are adverse impacts and significant uncertainties, but it does not propose mitigation measures to reduce methylmercury loads or concentrations. The Delta is impaired for methylmercury with no available assimilative capacity. For consistency with the Antidegradation Policy, the evaluation should consider mitigation measures to reduce the potential load increase. Numerous mitigation measures (e.g., offset in other historic source locations) should be considered as part of the Total Maximum Daily Load (TMDL) Phase 1 evaluation. If, after the evaluation, the cost of mitigation is not to the benefit of the people of California, the basis for this finding should be documented and clearly state its consistency with the State and Federal Antidegradation Policies.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality.
1552	239	[From ATT2:] Section: 8.4.3.9 Page: 8-447 Line: 3-8 Type: Water Quality Key Document Text: There would be no substantial, long-term increase in mercury or methylmercury concentrations or loads in the rivers and reservoirs upstream of the Delta or the waters exported to the CVP and SWP service areas due to implementation of CM2-CM22 relative to	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality. For more information regarding new subalternatives modeling results from the RDEIR/SDEIS to the FEIR/EIS please see Appendix 5F of the FEIR/EIS and Master Response 30.

DEIRS Ltr#	Cmt#	Comment	Response
		Existing Conditions. However, in the Delta, uptake of mercury from water and/or methylation of inorganic mercury may increase to an unquantified degree as part of the creation of new, marshy, shallow, or organic-rich restoration areas. Comment: The Sacramento River reach between Veterans Bridge and Emmaton is not adequately characterized and is not consistent with the previous NEPA finding of adverse effects due to uncertainty, since this reach would be affected by the restoration areas that introduce the uncertainty. Throughout this assessment, this reach is not evaluated sufficiently.	
1552	240	[From ATT2:] Section: 8.4.3.9 Page: 8-451 Line: 27-31 Type: CM19, Water Quality Key Document Text: Because urban stormwater is a source of nitrate in the affected environment, CM19, Urban Stormwater Treatment, is expected to slightly reduce nitrate loading to the Delta, thus slightly decreasing nitrate-N concentrations relative to the No Action Alternative. Implementation of CM12-CM18 and CM20-CM22 is not expected to substantially alter nitrate concentrations in any of the water bodies of the affected environment. Comment: Urban wet weather runoff is generally low in nitrates, and the conclusion that CM19 would reduce nitrate concentrations is unfounded. A reference should be provided that demonstrates that urban wet weather runoff is high in nitrates should be provided. In some cases, especially in the San Joaquin River, urban runoff dilutes river concentrations. Many CM19 and current low impact development (LID) control measures are intended to reduce flows. Restoration areas use groundwater that is higher in nitrates for habitat flows.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality. For more discussion about CM19 refer to Response to Comment 1552-2.
1552	241	[From ATT2:] Section: 8.4.3.9 Page: 8-456 Line: 12-20 Type: CM19, Water Quality Key Document Text: Implementation of CM12-CM22 would not be expected to have substantial, if even measurable, effect on dissolved organic carbon (DOC) concentrations upstream of the Delta, within the Delta, and in the SWP/CVP service areas. Consequently, any negligible increases in DOC levels in these areas of the affected environment are not expected to be of sufficient	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality. The discussion of CM12-CM22 effects is separate from the discussion of CM2-CM11 effects under Impact WQ-18; hence, there is a conclusion regarding the effects of CM12-CM22 on DOC that is separate from the effects of CM2-CM11. There is no contradiction in conclusions occurring for this impact discussion.

DEIRS Ltr#	Cmt#	Comment	Response
		frequency, magnitude and geographic extent that they would adversely affect the municipal and domestic water supply (MUN) beneficial use, or any other beneficial uses, of the affected environment, nor would potential increases substantially degrade water quality with regards to DOC. Comment: This conclusion statement is inaccurate and misleading, and the assessment is insufficient. The conclusion seems in contrast to some conclusions in CM2-CM5 and CM7-CM12 that could affect organic carbon. In some cases, increases of 0.5 mg/L were projected that could impact MUN beneficial uses by requiring additional water treatment. This increase is a substantial fraction of current concentrations. A more detailed assessment should be performed to evaluate the impact on beneficial uses.	
1552	242	[From ATT2:] Section: 8.4.3.9 Page: 8-458 Line: 8-38 Type: Water Quality Key Document Text: The BDCP proponents will also establish measures to help guide the design and creation of the target wetland habitats. At a minimum, the measures should limit potential increases in long-term average dissolved organic carbon (DOC) concentrations, and thus guide efforts to site, design, and maintain wetland and riparian habitat features, consistent with the biological goals and objectives of the BDCP. For example, restoration activities could be designed and located with the goal of preventing, consistent with the biological goals and objectives of the BDCP, net long-term average DOC concentration increases of greater than 0.5 mg/L at any municipal intake location within the Delta. Comment: As presented, mitigation measure Water Quality-18 notes that it may not be possible to include the measure in light of other BDCP goals. Furthermore, there are insufficient assurances in place on how the BDCP will monitor future changes in DOC and causes of impairments to municipal drinking water intakes. This potential DOC increase (0.5 mg/L) is a significant impact that should be considered in a detailed antidegradation analysis and modeling study. Potential treatment at sources or intake costs should also be considered as part of the antidegradation analysis to ensure that this potential degradation of water quality is to the benefit of the people of California.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality, including antidegradation analysis.
1552	243	[From ATT2:] Section: 8.4.3.9 Page: 8-462	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality. No mitigation is proposed, because changes in pathogen levels are anticipated to be less than significant.

DEIRS Ltr#	Cmt#	Comment	Response
		Line: 21-26 Type: Water Quality Key Document Text: Because of a great deal of scientific uncertainty in the loading of coliforms from these various sources, the resulting change in coliform loading is uncertain, but it is anticipated that coliform loading to Delta waters would increase. Based on findings from the Pathogens Conceptual Model that pathogen concentrations are greatly influenced by the proximity to the source, this could result in localized increases in wildlife- related coliforms relative to the No Action Alternative. Comment: Mitigation should be required based on the uncertainty of coliform and pathogen source changes from new restoration areas and the conclusion that restoration areas would increase concentrations of pathogens. The July 2013 Basin Plan Amendment includes narrative objectives for Giardia and Crytosporidium and trigger levels for investigative action. The CEQA and NEPA impact assessment is insufficient because these objectives are not properly evaluated and the finding of "not adverse" is inconsistent with the State and Federal Antidegradation Policy due to the fact that alternatives are not evaluated to determine whether the project is to the benefit of the people of California.	Even though there is uncertainty that precludes quantification of pathogen changes, the projected localized increases in pathogen concentrations are not expected to substantially change in response to changing reservoir storage, river flows, or Delta source water fractions (see Impact WQ-19 and WQ-20 for all alternatives). Also, see response to comment 1552-22.
1552	244	[From ATT2:] Section: 8.4.3.9 Page: 8-464 Line: 11-14 Type: Water Quality Key Document Text: Monitoring for pyrethroid insecticides in main-stem rivers is limited and detections are rather few. With the replacement of many traditionally organophosphate (OP) related uses, however, it is conservatively assumed that pyrethroid incidence and associated toxicity could ultimately take a pattern of seasonality similar to that of the chlorpyrifos or diazinon. Comment: There is much data in the Sacramento Delta collected in the last five years by the CMP (15-20 data points). Pyrethroids have a different transport mechanism, decay rate, effect levels, and application pattern, and it is not reasonable to assume that "toxicity patterns" would be similar to OP Pesticides.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality and use of data and the qualitative assessment approach for pesticides. See also Master Response 33 outlining adaptive management.
1552	245	[From ATT2:] Section: 8.4.3.9 Page: 8-467	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. The challenges associated with the pesticide assessment are addressed in the “Pesticides” sub-section of Section 8.3.1.7, Constituent-Specific

DEIRS Ltr#	Cmt#	Comment	Response
		Line: 25-28 Type: Water Quality Key Document Text: Because long-term average pesticide concentrations are not expected to increase substantially, no long-term water quality degradation with respect to pesticides is expected to occur and, thus, no adverse effects on beneficial uses would occur. This impact is considered to be less than significant. No mitigation is required. Comment: The EIR/EIS does not adequately nor sufficiently discuss the uncertainty of this broad conclusion. There are a number of factors that may require additional pesticide use such as invasive weed productivity interfering with CM1 or CM2 operation due to climate change, increased agricultural applications due to climate change, and the unknown effect of the changes in flow patterns that may alter "scour" and dilution of pesticides already in the system. This finding is inaccurate since a number of the conservation measures may increase pesticide concentrations, and it is not clear whether or when each conservation measure will be completed.	Considerations. Please refer to Master Response 14 regarding adequacy of qualitative assessment for certain constituents, including pesticides. Effects of other conservation measures, including invasive aquatic vegetation control (CM13), are addressed in Impact WQ-22.
1552	246	[From ATT2:] Section: 8.4.3.9 Page: 8-467 Line: 25-28 Type: Water Quality Key Document Text: Because long-term average pesticide concentrations are not expected to increase substantially, no long-term water quality degradation with respect to pesticides is expected to occur and, thus, no adverse effects on beneficial uses would occur. This impact is considered to be less than significant. No mitigation is required. Comment: The uncertainty with the broad conclusion is not sufficiently evaluated. There are reasonable conditions which may lead to increases in pesticides that should be evaluated. It is misleading to draw this broad conclusion based only on qualitative assessments when quantitative approaches are feasible and data are available. The EIR/EIS should perform a quantitative computational modeling effort to evaluate pesticide concentrations.	Please see response to comment 1552-245.
1552	247	[From ATT2:] Section: 8C.1 Page: 8C-1	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality.

DEIRS Ltr#	Cmt#	Comment	Response
		Line: 4-5 Type: Water Quality Key Document Text: A constituent "screening analysis" was performed as the first portion of the overall analysis of water quality effects of implementing the Alternatives. Comment: This process is fundamentally flawed as it was focused on evaluating only the data that was readily available at the few sites selected for ease of data acquisition. There was limited data available at the selected sites upstream of the Delta in the Sacramento River system. There is significantly more data readily available in the Sacramento Valley, as presented in other comments herein. The process should have identified water quality constituents of concern, based on the applicable beneficial uses, and then targeted data collection on those constituents in order to determine the water quality effects of the BDCP.	The primary consideration for the constituent screening process was to determine which constituents had potential to be affected by implementation of the action alternatives and evaluated 182 water quality constituents/parameters (p. 8C-1, lines 7-8 and 20 of Appendix 8C of the 2013 Public Draft EIR/EIS).
1552	248	[From ATT2:] Section: 8C.1.1 Page: 8C-1 Line: 35-38 Type: Water Quality, Scope Key Document Text: However, for consistency and due to data availability concerns, the input data for the screening analysis was limited to two data sets that were publically available via the web and managed by a public agency (i.e., data from the DWR Water Data Library and the Bay Delta and Tributaries Project [BDAT]). Comment: Although these data sets do provide ease of obtaining and consistency in evaluation, neither program is focused on evaluating the municipal and domestic water supply (MUN) beneficial use; therefore, the data sets are insufficient in terms of the number of constituents and the number of data points to assess the water quality impacts to that and other beneficial uses. The data collection should have targeted key constituents and geographic areas where additional data should have been obtained from other reliable programs such as California Department of Public Health (CDPH) compliance monitoring and Central Valley Regional Water Board Waste Discharge Requirements (WDR) and National Pollutant Discharge Elimination System (NPDES) permit monitoring.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality. The databases relied upon for the assessments were selected because they provided a sufficient number of data points in a consistent manner that minimized bias.
1552	249	[From ATT2:] Section: 8C.1.1.1 Page: 8C-2	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. The assessment of impacts of the project alternatives on pesticide concentrations upstream of the Delta was conducted qualitatively and relied, in

DEIRS Ltr#	Cmt#	Comment	Response
		Line: 5 Type: Water Quality, Scope Key Document Text: Table SA-1 Comment: The Sacramento River upstream of the Delta is solely represented by five sites located within the Delta (at Hood and Greene's Landing) and therefore not representative of upstream conditions. For example, there are significant differences in water quality, such as presence and detectability of pesticides from upstream agriculture, which cannot be assessed at the Delta sites for potential impacts to upstream water quality from reduced dilution. This analysis was too limited in scope and should have been expanded to target key geographic areas upstream of the Delta.	part, on changes in flow, not specific pesticide data sets. The data sets referred to in the comment characterized inflows to the Delta. Please refer to Master Response 14 regarding adequacy of qualitative assessment for certain constituents, including pesticides.
1552	250	[From ATT2:] Section: 8C.1.2 Page: 8C-3 Line: 2-4 Type: Water Quality Key Document Text: Because modeling performed in support of the Environmental Consequences impact assessments assumed no new sources of water quality constituents, water quality concerns arise primarily through altered mixing of Delta source waters. Comment: The broad statement is misleading and should be corrected. New sources may exist in the restoration wetlands and other conservation measures. What is the basis for assuming that there are no new sources? Pathogens, methylmercury, organic carbon, and potentially increased use of groundwater to offset upstream supply restrictions during droughts are all constituents where new sources (restoration areas, water supply changes, etc.) should be considered as part of the EIR/EIS.	The text states that modeling performed assumed no new sources, i.e., that constituents were conservative. The text does not state that there are no new sources of constituents, only that they were not modeled. To the extent that new sources are present, these were discussed qualitatively, as described in the text.
1552	251	[From ATT2:] Section: 8C.1.3.1.2 Page: 8C-6 Line: 14-18 Type: Water Quality	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality.

DEIRS Ltr#	Cmt#	Comment	Response
		Key Document Text: Available tools were considered appropriate for modeling only those constituents that could be assumed to be conservative (i.e., not transformed into a new constituent or lost as water flows through the system). Constituents of concern that could not be analyzed through quantitative modeling, or for which it was determined that quantitative modeling was not necessary for an environmental impacts determination, were carried forward for qualitative analysis. Comment: This is an unnecessary limitation. The BDCP should be required to collect additional data and develop modeling tools for all constituents of concern.	
1552	252	[From ATT2:] Section: 8C.1.3.5 Page: 8C-8 Line: 14-16 Type: Water Quality Key Document Text: Non-detect constituents carried forward from screening in Step 3 and additional constituents of concern not analyzed for in the dataset (e.g., pyrethroids and dioxins) were assessed against the following triggers for potential detailed assessment. Comment: The process for selecting additional constituents of concern needs to be described. There are many drinking water constituents with regulatory standards that were not included and should have been evaluated and considered for inclusion that are not included in Table SA-9 (See comment on Step 1 evaluation).	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality. The rationale for selecting additional constituents of concern is provided in Appendix 8C, Section 8C.1.3.5 in lines 17-23 of the Final EIR/EIS.
1552	253	[From ATT2:] Section: 8C.1.3.6 Page: 8C-8 Line: 30-31 Type: Water Quality Key Document Text: Determine if adequate modeling tools, relative to the physical/chemical properties of the constituent, exist to perform a quantitative assessment in the Delta. Comment:	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality. For a more detailed discussion about strategies for adaptive management, see Master Response 33.

DEIRS Ltr#	Cmt#	Comment	Response
		Please provide a basis for making this determination of adequate modeling tools and which tools were evaluated and why they were not found to be adequate. Certainly, such tools should be available for adaptive management, and beginning with these tools now would provide much needed information.	
1552	254	[From ATT2:] Section: 8C.1.3.6 Page: 8C-8 Line: 32-34 Type: Water Quality Key Document Text: Determine if a quantitative assessment is necessary to determine the potential environmental impact (e.g., when all source water concentrations are similar, then the mixed condition is predictable without quantitative modeling). Comment: The suggested approach that modeling is only necessary for hydrodynamics (i.e., blended sources of the same magnitude are essentially 'mixed') does not consider non-conservative processes or the additive effects of some toxicants. All assessments should be based on quantitative approaches.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality and Master Response 30 on modeling.
1552	255	[From ATT2:] Section: 8C Page: 8C-22 Line: Table SA-6. Type: Water Quality Key Document Text: (Error) Comment: The basis for calculation of means and standard deviations for constituents with non-detects or not detected in any samples is not provided.	See Appendix 8C, page 8.C-2, line 21. See Appendix 8C of the Final EIR/EIS.
1552	256	[From ATT2:] Section: 8C Page: 8C-22	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality.

DEIRS Ltr#	Cmt#	Comment	Response
		Line: Table SA-6. Type: Water Quality, CM19 Key Document Text: (Observation) Comment: Very limited chlorpyrifos, diazinon, and bacteria data were included in the screening process, and most all data were reported as non-detect. No pyrethroid data were included. The use of this limited dataset conflicts with assertions made throughout the EIR/EIS and the BDCP that pesticides are present. The data used for the EIR/EIS is misleading, inconsistent, and inadequate.	For more information regarding water quality see Master Response 14.
1552	257	[From ATT2:] Section: 8C Page: 8C-22 to 8C-27 Line: --- Type: Water Quality Key Document Text: Table SA-6 Comment: A review of this data set shows that there are numerous constituents with results that are obviously out of range. This data needs to be inspected further to identify inconsistent data points. Examples at the Sacramento River site include high results for asbestos, chloride, bromide, and sulfate. Other issues recommended for review include high detection limits for Giardia and Cryptosporidium, non-detectability for total and fecal coliform and E. coli (which are ubiquitous), and the lack of total fraction metals for nickel and selenium.	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality. While some data may appear to be out of range, for the screening assessment all data were assessed, so as not to arbitrarily eliminate constituents from further assessment. For constituents that were assessed quantitatively (e.g., boron, bromide), additional data review was performed and questionable data points were removed if they would have biased the modeling approach. This is addressed in the tables within the "Constituent-Specific Considerations Used in the Assessment" (Final EIR/EIS Section 8.3.1.7). Note that Table SA-6 includes values for total selenium. No data for total nickel were provided in the data set relied upon for this assessment.
1552	258	[From ATT2:] Section: 8L.1 Page: 8L-2 to 8L-3 Line: --- Type: Water Quality, Scope Key Document Text: Tables 2, 3, and 4 Comment:	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. For additional information on the BDCP effects analysis please see Master Response 5. Please see Master Response 14 for additional information on water quality. Given the constituent-specific considerations outlined in the Final EIR/EIS, Section 8.3.1.7 common to the pesticide assessment for all alternatives, conducting the assessment considering changes in flow in two time periods (summer and winter) is sufficient for the qualitative assessment of pesticides.

DEIRS Ltr#	Cmt#	Comment	Response
		Pesticide use in the Central Valley varies greatly by crops produced and geographic distribution. Splitting the flow analysis for dilution into two seasons is insufficient to evaluate the range of potential impacts. The evaluation should have included four seasons (winter, spring, summer, and fall) to more accurately relate dilution potential to seasonal applications of pesticides.	
1552	259	[ATT2: att1: List of acronyms used in Attachment 2.]	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
1553	1	Despite well-intended efforts producing results from "ineffective" to "effective" our conservation, ground water pumping, brown water recycling and Bay Delta plans cost $Billions and produce wholly inadequate amounts of water for California's growth, if not, survival. We need new water sources and new sources are achievable.	As described in Section 1.4.1 of Chapter 1, Introduction, of the EIR/EIS, the SWP and CVP have managed and operated the water facilities to protect, conserve, and restore environmental resources while delivering water under contractual obligations and water rights. In addition to the effect of SWP and CVP operations, other Delta conditions have contributed to degradation of the Delta ecosystem, including presence of nonnative species, barriers to fish migration, changes in Delta water quality, diversions without fish screens, predation and illegal harvest of native fish, and hatchery management practices. The project does address improved water supply reliability and Delta environmental resources.
1553	2	Currently, an ocean submerged fresh water pipeline is under construction between Turkey and Cyprus (pipe is made of composite material and will lay at a 900 foot depth); an additional ocean submerged fresh water pipeline is planned between Turkey and Israel. NASA/Jet Propulsion Laboratary has conducted preliminary feasibility studies of an ocean submerged pipeline from the Columbia River to the Shasta Reservoir…approximately 1% of Columbia River water flow dumping into the Pacific Ocean would create about 2 million acre feet of new fresh water for California. This is as high a priority as the Bay Delta project.	The ocean pipeline project is beyond the scope of the proposed project. Please see Master Response 3 for a discussion of the Purpose and Need of the proposed project. Also, see Master Response 4 for discussion of the scope of the proposed project and alternatives that were not carried forward for analysis in this document due to the fact that required actions beyond the scope of the proposed project.
1555	1	I am strongly opposed to the twin tunnels and hope that you will deny the permit. The Delta ecosystem should not be destroyed for, the sake of Agricultural interests in the South. There are citizens in the northern half of the state who depend on the health of the Delta for their livelihoods, and they should be represented as well. Destroying the food supply for wildlife affects the lives of the humans in the area too. Please deny the permit and let's look for a better design that will share an already over-subscribed water supply more equitably.	The action alternatives could only change the amount of water diverted under the existing SWP and CVP water rights and the existing and future related regulatory requirements. Reservoir operations and diversions by the SWP and CVP are regulated by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and State Department of Fish and Wildlife to protect aquatic resources and other beneficial uses. The amount of water to be diverted is determined by these agencies based upon river water levels and flow, water available in the system, the presence of threatened and endangered fish species, and water quality standards (see Chapter 3, Section 3.6.4.2, North Delta and South Delta Water Conveyance Operational Criteria, EIR/EIS) The proposed project was developed to meet the rigorous standards of the federal and state Endangered Species Acts, as such the proposed project is intended to be environmentally beneficial. By establishing a point of water diversion in the north Delta and new operating criteria to improve water volume, timing, and salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility.
1556	1	The "Project" is purported to be a Comprehensive Conservation Plan for the Sacramento San Joaquin Delta, meeting the requirements of a Habitat Conservation Plan (HCP) and Natural Community Conservation Plan (NCCP), and analyzed in the present EIR/EIS. However, Placer County is concerned that the emphasis in the analysis of the objective of a new diversion and conveyance system reveals itself as the actual "project " that is being analyzed in this EIR/EIS. This is particularly evident in the alternatives analysis that includes massive export bypass conveyance features as a common feature to all alternatives of an HCP/NCCP for the Delta. Bypass facilities to continue water exports to serve junior water rights is not a fundamental requirement for species recovery in the Delta but it is for a water	First of all, the commenter is incorrect insofar as it suggests that the Lead Agencies are determined to build new conveyance facilities but have not been forthright in saying as much. DWR has always been clear that, as stated on page 2-2 of the DEIR/EIS, "DWR's fundamental purpose in proposing the BDCP is to make physical and operational improvements to the SWP system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and CVP south-of-Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations." (Emphasis added.) Through the Delta Vision process described on page 1-9 of the DEIR/EIS, a Blue Ribbon Task Force appointed by Governor Schwarzenegger concluded, after much deliberation, that "[n]ew facilities for conveyance and storage, and better linkage between the two, are needed to better manage California's water resources for

DEIRS Ltr#	Cmt#	Comment	Response
		bypass project. This diversion and conveyance system/bypass project, if approved, would allow the State Water Project (SWP) and Central Valley Project (CVP) to bypass the Delta for water export operations. By not identifying the true nature of the "project " within the project description of this EIR/EIS and instead characterizing it as a HCP/NCCP, the draft EIRIEIS violates the California Environmental Quality Act (CEQA) and National Environmental Protection Act (NEPA). By failing to provide and analyze: 1) an accurate purpose and need (P&N) statement, 2) a full without-project (WOP) conditions analysis, 3) a full range of alternatives, 4) disclosure of the full scope of impacts of the actual "project'', and 5) identification of all feasible mitigation these documents do not fulfill the statutory obligations of CEQA or NEPA.	both the estuary and exports." This recommendation informed the legislative process that, in 2009, culminated in the enactment of the Delta Reform Act, which in numerous places calls for new Delta conveyance. (See, e.g., Cal. Wat. Code, §§ 85020[f], 85304, 85320[b[[2][B].) The Delta Vision Task Force's recommendations and the Delta Reform Act in turn have informed the multi-year process in which, at one time, the Lead Agencies were recommending the BDCP (DEIR/EIS Alternative 4), but which, at present, they are recommending the California Water Fix (RDEIR/SDEIS Alternative 4A) (see below). Given the importance of new conveyance, the Lead Agencies have included some form of new conveyance in most of the action alternatives proposed in the DEIR/EIS and RDEIR/SDEIS. This was entirely appropriate. (See In re Bay Delta Programmatic Environmental Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1166 ["a lead agency may structure its EIR alternative analysis around a reasonable definition of underlying purpose and need not study alternatives that cannot achieve that basic goal"].) Importantly, the BDCP was developed to meet the standards of the federal Endangered Species Act and state Natural Community Conservation Planning Act, and as such the BDCP is intended to be, on balance, environmentally beneficial. Establishing a point of water diversion in the north Delta and new operating criteria, as provided under Conservation Measure 1 of the BDCP (Alternative 4) and under the new proposed project (Alternative 4A), is designed to improve native fish migratory patterns and allow for greater operational flexibility to avoid or lessen impacts on sensitive fish species while providing more reliable water supplies. Please note, however, that the proposed project (Alternative 4A) no longer includes an HCP or NCCP component. The new preferred alternative, 4A, would enable DWR to construct and operate new conveyance facilities that improve conditions for endangered and threatened aquatic species in the Delta while at the same time improving water supply reliability, consistent with California law (see, e.g., Cal. Wat. Code, § 85001[c]). Implementing the conveyance facilities would help resolve many of the concerns with the current south Delta conveyance system, and would help reduce threats to endangered and threatened species in the Delta, including entrainment at south Delta export facilities. For instance, implementing a dual conveyance system would align water operations, and their location, to better reflect natural seasonal flow patterns by creating new water diversions in the north Delta equipped with State-of-the-art fish screens, thus reducing reliance on south Delta exports during times of the year when listed aquatic species are present and most vulnerable. For more information on mitigation measures to minimize construction and operational-related impacts to fish species, including Delta and longfin smelt, please see Chapter 11, EIR/EIS. Thorough analyses of this alternative, along with Alternatives 2D and 5A, have been conducted and are presented in the published RDEIR/SDEIS and Final EIR/EIS. Please see Master Response 3 regarding the project purpose and need. Also, please see Master Response 4 regarding the range of alternatives analyzed, including the No Project/No Action Alternative, Master Response 1, Environmental Baselines, for discussion of the existing conditions baseline (CEQA), and Master Response 22, Mitigation, Environmental Commitments, Avoidance and Minimization Measures and Alternative-Specific Environmental Commitments.
1556	2	The purpose and need should be re-written to state that the true purpose of the Project is to facilitate a sustainable water supply future for export customers through a bypass system, if this is the true purpose of the proposed project	Please see response to comment 1556-1. The purpose of the project accurately described in the EIR/EIS. Please see Master Response 3 regarding the project purpose and need.
1556	3	The without-project (WOP) conditions should focus on water supply and habitat in the future in all of the affected physical areas: I) each of the watersheds feeding the Delta, 2) the Delta itself, and 3) export areas. WOP conditions should be based on the present set of operating rules, regulation s, agreements, and water rights, and in the presence of climate change and growth projections. As written, the WOP analysis in the public review draft ignores a number of senior and area of origin water rights, Federal Energy Regulatory	The "without-project" conditions analysis was carried out in the Draft EIR/EIS through the development and evaluation of the Existing Conditions, the No Action Alternative (NAA) (under NEPA), and the No Project Alternative (NPA) (under CEQA). Please see Appendix 3D of the Final EIR/EIS that explains how each element (Existing Conditions, NAA, and NPA) was defined. In particular, details are summarized in Table 3D-1 (Summary of SWP and CVP Operations included in Existing Conditions and No Action Alternative for the

DEIRS Ltr#	Cmt#	Comment	Response
		Commission (FERC) permit conditions, and fisheries flow and temperature requirements on the American River, the Yuba River and Bear River where Placer County has both participatory license obligations (American) and water contracts (Yuba and Bear via Pacific Gas & Electric water rights).	BDCP EIR/EIS). Noted in that table are operations of SWP and CVP and FERC licenses, including the Oroville Project. Because of the state and federal statutes, differences can arise between what constitutes the NAA versus the NPA; however, in general, operating rules, regulations, climate change, etc. are included. The full description of the NAA and the NPA can be found in Section 3.5.1 of the Draft EIR/EIS. A listing of Existing Conditions assumptions for ongoing programs and policies is presented in Table 3D-2, while Table 3D-3 identifies Existing Conditions assumptions for annual actions. The study areas included in the EIR/EIS analyses is identified in Section 4.2.1.2 of the Draft EIR: upstream of the Delta, the Delta, and the SWP and CVP service areas. With the subsequent development of Alternative 4A (the California WaterFix), the RDEIR/SDEIS also includes two NAAs (long-term and short-term). For more details on these alternatives without project implementation, see Section 4.2 (Impacts of No Action Alternative Early Long-Term) in the RDEIR/SDEIS and Master Response 4 (Alternative Development). Please see Master Response 1 (Baselines) regarding the environmental baselines used in the EIR/EIS. With respect to water rights being part of the without-project conditions analysis, the State Water Resources Control Board, not DWR, is responsible for decisions relating to water rights. DWR holds water rights approved by the State Water Resources Control Board but does not have the power or authority to issue water rights to others or to infringe upon water rights held by others. The proposed project does not seek any new water rights nor include any regulatory actions that would affect water rights holders other than DWR, Reclamation, and SWP and CVP contractors. Importantly, all water exported by the SWP and CVP is the subject of the existing water rights of those two agencies. Exports do not come at the expense of other water rights holders. The proposed project and its alternatives analyzed in the EIR/EIS only include the use of water from existing SWP and CVP water rights or voluntary water transfers from other water rights holders. The proposed project and its alternatives do not reduce the protections for other water right holders. Please see Master Responses 26, Area of Origin, and 32, Water Rights Issues, for further discussion. The amount of water that can be diverted from the new north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the proposed project would still be consistent with the criteria set by the FWS (2008) and NMFS (2009) BiOps and State Water Resources Control Board Water Right Decision 1641 (D-1641), subject to adjustments made pursuant to the adaptive management process as described in the 2008 and 2009 BiOps (RDEIR/SDEIS Executive Summary ES.2.2). In addition to permitting constraints on daily operations of the SWP and CVP, DWR must maintain proper performance and bypass flows across fish screens when endangered and threatened fish species are present within the north Delta facilities area. The intake fish screens drive the overall size of the intake structure on the riverbank, and have been numbered and sized to permit water to flow through the screens within a predetermined flow regime set by California Department of Fish and Wildlife and fish screen criteria set by NMFS (BDCP Appendix 5B Section 3.B.3.3). For more information regarding changes in delta exports please see Master Response 26.
1556	4	As currently drafted, the without project analysis is presented in such a way that it is not possible to understand the impacts of the project alternatives. A full range of project alternatives that would meet the revised Purpose and Need should be investigated. This must include one or more alternatives that would reduce exports, and one alternative that would eliminate exports, in favor of regional supply development (including ocean desalting), and right-sizing agricultural operations to their water availability . Exports are supported by junior water rights on the system, so it is not unreasonable to expect them to be cut back in shortage situations. In fact, long-standing appropriative water rights law would demand that. As presented, the range of alternatives is inadequate	The alternatives and related impacts included in the EIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. Contrary to the commenter's assumption, the document does include alternatives that would reduce exports by increasing Delta outflows or holding more water in upstream reservoirs (see, e.g., Alternatives 7 and 8). No alternative would eliminated exports, however, as doing so would be totally contrary to the project objectives and purpose and need. Please note, too, that the California WaterFix (Alternative 4A), and not the BDCP, is the preferred alternative and no longer includes an HCP/NCCP. Alternative 4A has been developed in response to public and agency input. With respect to alternatives development, please see Master Response 4. Resource areas are addressed separately in the Draft EIR/EIS and RDEIR/SDEIS for each alternative. Where impacts are determined to be

DEIRS Ltr#	Cmt#	Comment	Response
			significant, environmental commitments and mitigation measures will be implemented to avoid and/or offset these effects, where feasible. With respect to other options, specific proposals that were considered but ultimately rejected by the Lead Agencies are discussed in Appendix 3A, Identification of Water Conveyance Alternatives--Conservation Measure 1. Appendix 3A thoroughly explains why various proposals were not analyzed in the EIR/EIS, including the NRDC Portfolio-Based Proposal, Congressman Garamendi's Water Plan, and other similar concepts that would require actions that are beyond the scope of the proposed project. While these elements are not proposed as part of the proposed project, the Lead Agencies recognize that they are important tools in managing California's water resources. For more information regarding water demand management, including desalination, please see Master Responses 6 (Demand Management) and 7 (Desalination). Please note that the BDCP/California WaterFix is not the sole project in California tasked with improving California's water supply future. Although the proposed project, if approved, would be a critically important tool for managing California's water resources, it is not intended as a statewide solution to California's water supply reliability problems. In fact, the proposed project is just one element of the state's long-range strategy to meet anticipated future water needs of Californians in the face of expanding population and the expected effects of climate change. For more information regarding the state's responses to reduced south of delta water supplies please see Appendix 5B of the Final EIR/EIS. The proposed project would stabilize water supplies, and exports could only increase under certain circumstances in which hydrological conditions result in availability of sufficient water and ecological objectives are fully satisfied. It is projected that water deliveries from the federal and state water projects under the proposed project would be about the same to the average annual amount of water that would be diverted under the No Action Alternative (i.e. 2025 conditions without the Proposed Project). It is projected that Delta exports from the federal and state water projects would either remain similar or increase in wetter years and decrease in drier years under Alternative 4A as compared to exports under No Action Alternative (ELT) depending on the capability to divert water at the north Delta intakes during winter and spring months. The estimated changes in deliveries for Alternative 4A are provided in the RDEIR/SDEIS section 4.3.1 and Appendix A, Chapter 5, Water Supply. Although exports under the proposed project would be similar to the amount of water exported in recent history, it would make the deliveries more predictable and reliable, while reducing other stressors on the ecological functions of the Delta. On the subject of potential impacts on upstream water rights holders, see the response to comment 1556-3.
1556	5	Impacts to all affected areas should be identified and analyzed. Specifically, for Placer County's interests and concerns, all potential impacts to the American River watershed and its jurisdictions including Placer County, and the cities and water agencies within Placer County, should be identified and analyzed. The public review Draft EIR/EIS currently does not analyze impacts to the American River watershed, its stakeholders, or its ecosystems. Because of the lack of an analysis and disclosure of potentially significant impacts, the County does not know the scope of impacts to Placer County. The County does know that its water rights, Federal Energy Regulatory Commission covenants, and fisheries requirements have not been considered in the without project analysis.	Please see Chapter 3 Mapbook Figures in 2013 Public Draft EIR/EIS. Placer County is not included within the Plan Area. The proposed project would not affect upstream water rights. Senior water rights deliveries to Placer County users in the Bear and American River watersheds are included in the basic hydrologic assumptions in the CALSIM II model. For deliveries from SWP and/or CVP facilities or downstream of SWP and/or CVP reservoirs, the CALSIM II model prioritized deliveries to senior water rights holders (e.g., Placer County Water Agency) prior to meeting environmental criteria for SWP and CVP operations or deliveries to SWP and CVP water contractors. The CALSIM II model for the No Action Alternative and action alternatives includes projected changes in hydrology upstream of the Folsom Lake due to climate change which is anticipated to reduce snowfall and increase rainfall as compared to Existing Conditions. The CALSIM II model for the No Action Alternative and action alternatives includes projected changes due to increased use of senior water rights and higher priority CVP water for municipal and industrial users due to projected population growth which is consistent with water demand projections in the Urban Water Management Plans and Agricultural Water Management Plans submitted to DWR by 2012 which include approaches to meet the 20 percent per capita urban water use by 2020. The majority of the projected increased municipal and agricultural water

DEIRS Ltr#	Cmt#	Comment	Response
			demand north of the Delta is predicted to occur in the American and Bear rivers watersheds. The Final EIR/EIS evaluates the changes in hydrology due to climate change and increased water demand that would occur with or without the Project through the comparison of conditions under the Existing Conditions to conditions under the No Action Alternative, including changes to end of September Folsom Lake water elevations, as shown in Appendix 5A, Section C, of the EIR/EIS. The climate change and water demand assumptions would be the same in the No Action Alternative and all of the action alternatives. The changes due to implementation of the action alternatives on Folsom Lake surface water elevations and American River flows are presented in Appendix 5A, Section C, and changes in water temperatures are presented in Appendix 11D of the Final EIR/FEIS. Please see Master Response 26, Area of Origin, as well as response to comment 1556-3.
1556	6	If, upon re-formulation of this project, the Proponents still propose an HCP/NCCP for the Delta, they must not transfer habitat impacts to other regions. On the American River, for example, the document demonstrates that Folsom Reservoir will reach dead pool in I 0% of the years under the BDCP operating assumptions (Appendix 29C-l 7a Folsom Reservoir storage). This would dry and over-warm the Lower American River and imperil salmon and steelhead runs.	Please see response to comment 1556-1. The dead pool conditions presented in the CALSIM II model results in the EIR/EIS are developed from calculated monthly average reservoir volumes. Because the model only calculates and reports SWP and CVP water operations at an average monthly basis, the model cannot simulate changes that occur on a weekly basis by water users and SWP and CVP operations. In addition, the model cannot make decisions that occur in real-time, such as drought operations during the ongoing drought. Instead the model includes average operating criteria for all dry periods, and does not reflect specific changes. The dead pool conditions occur in the No Action Alternative as compared to the Existing Conditions because the model includes changes in precipitation without making changes in water diversion patterns. The EIR/EIS analysis considers changes between the frequency of dead pool conditions under the alternatives and the No Action Alternative (both with the same climate change assumptions) to determine if the changes are adverse or beneficial. Additionally, as shown in Chapter 5, Figure 5-12, Folsom Lake End of September Storage, of the 2013 Public Draft BDCP EIR/EIS, the proposed project does not increase the frequency of "dead pool" conditions in the Folsom Lake compared to the No Action Alternative. The increased occurrences of "dead pool" conditions in the future either with or without the proposed project are primarily attributable to sea level rise, climate change and higher demands associated with water rights (primarily in El Dorado, Placer, and Sacramento counties), and not due to proposed project. Please see Master Responses 19 and 25 for more information regarding climate change and GHGs and upstream reservoir effects respectively.
1556	7	The Folsom Reservoir dead pool issue must be addressed. It is presented in the Draft EIR/EIS as a without project condition, which is flawed. Senior water rights, FERC permit conditions, and American River ecosystem requirements trump Delta and expo11 requirements under both WOP and with-project conditions. Many of the water agencies reliant on those senior water rights do not have a second supply of water, so continually running Folsom Reservoir to dead pool would threaten the health and safety of a substantial population ; over 500,000 in Placer County alone. Several of the agencies in Placer County are underlied by solid bedrock , so groundwater is not available or sustainable in many parts of Placer County. Long-standing area of origin water rights protections provide for increased diversions to American River stakeholders, gradually decreasing the amount available for others on the SWP and CVP systems, including exporters. That has always been the understanding under which the CVP and SWP were constructed and licensed.	Please see responses to comments 1556-1 through 6. All of the existing reservoir operation criteria are assumed to be consistent under the Existing Conditions, No Action Alternative, and all action alternatives. However, due to climate change, population growth and implementation of the action alternatives, changes in surface water elevations are anticipated under the action alternatives as compared to the Existing Conditions and No Action Alternative, as presented in Appendix 5A, Section C, of the EIR/EIS. As described in response to comment 1556-6, the increased frequency of potential dead-pool conditions primarily occurs due to climate change and population growth which would occur with or without the action alternatives; and therefore, are not mitigated by the project. Please review Master Response 26, Area of origin.
1556	8	Granting a 50-year operating and incidental take permits to the SWP would place the full burden of future changes to climate, habitats, threatened and endangered species populations, regulations, and adaptations, on the shoulders of the other water users in the watershed, nearly all of which are senior to the SWP in priority.	Please note that Alternative 4A, also known as California WaterFix, has been developed in response to public and agency input and is the new CEQA Preferred Alternative. Alternative 4A is also the NEPA Preferred Alternative, a designation that was not attached to any of the alternatives presented in the 2013 Public Draft EIR/EIS. Alternative 4 (BDCP) remains a potentially viable alternative and was carried forward in this RDEIR/SDEIS and Final EIR/EIS because it represents the original habitat conservation plan/natural community conservation plan (HCP/NCCP) alternative approach, and because it provides an important reference point from which the Alternative 4A, 2D, and 5A descriptions and analyses were developed and

DEIRS Ltr#	Cmt#	Comment	Response
			presented for public and agency review and comment in the RDEIR/SDEIS. If the Lead Agencies ultimately choose the alternative implementation strategy and select an alternative analyzed in the RDEIR/SDEIS and Final EIR/EIS after completing the CEQA and NEPA processes, elements of the conservation plan contained in the alternatives in the 2013 Public Draft EIR/EIS may be utilized by other programs for implementation of the long term conservation efforts. For further responses to comments on the BDCP, please see Master Response 5 (BDCP). Under all action alternatives (including those alternatives with HCP and NCCP assumptions as well as Alternative 4A), senior water rights deliveries to Placer County users in the Bear and American River watersheds are included in the basic hydrologic assumptions in the CALSIM II model. For deliveries from SWP and/or CVP facilities or downstream of SWP and/or CVP reservoirs, the CALSIM II model prioritized deliveries to senior water rights holders (e.g., Placer County Water Agency) prior to meeting environmental criteria for SWP and CVP operations or deliveries to SWP and CVP water contractors., please see response to comment 1556-5.
1556	9	Other alternatives exist which result in a sustainable water supply for exporters. Agricultural interests can and should right size their operations to the sustainable water yield available to them. In addition, urban exporters have affordable alternatives, including recycled water, conjunctive use of local storm and floodwater, and seawater desalting. Export curtailment is a reasonable alternative and must be investigated to meet the intent of CEQA and NEPA.	Please see responses to comments 1556-1 and 1556-4.
1556	10	Placer County and the incorporated cities within Placer County have approved General Plans that reflect the current conditions and projected growth that also meets the Sacramento Area Council of Governments (SACOG) Blueprint conditions as the accepted balance of growth for the region's future. Numerous legal agreements that reflect those growth plans have been executed based on the assumed accessibility of the senior water rights and capabilities to deliver water during all types of years. The BDCP objectives and the environmental analysis are inconsistent with these adopted plans and agreements. If the BDCP water conveyance facilities are built as proposed in the draft EIR/EIS, it is likely to be very detrimental to the quality of life, economic vitality, and public health conditions of Placer County.	Please see responses to comments 1556-1 through 8. As explained, the proposed project will not adversely affect senior water rights or the capability of senior water rights holders to deliver water. Please see Master Response 25 for more information regarding upstream reservoir effects. Please see Master Response 11 (Applicability of City and County General Plans) regarding general plans.
1556	11	The effect of draining Folsom Reservoir would place Placer County in the position of using more groundwater than expected, where it is available in the western part of the County. The County has, for decades, relied upon the use of treated surface water for urban and suburban development, even in the western portion of the County and with the County's available water rights, anticipated that the County could continue to grow by primarily relying upon surface waters. The results of more groundwater use would be to overdraft the County's basin. In addition, other adjacent regional groundwater basins would also have to pump more groundwater, which would increase the likelihood of the potential for contaminated groundwater at the former McClellan AFB site to leak into Placer's healthy basin.	Most of the action alternatives would only result in changes to SWP and CVP water rights to the extent required to obtain a change in point of diversion to add new intakes, but none will affect the rights of other legal users of water. However, the projected water demands in the No Action Alternative and all of the EIR/EIS alternatives include the assumptions that water conservation will be implemented by 2060 in accordance with State law as compared to the Existing Conditions, as described Section 30.1.3 of Chapter 30, Growth Inducement and Other Indirect Effects, of the EIR/EIS, including a reduction of per capita urban water demand by up to 20 percent. These changes would result in reduced storage, including “dead pool” conditions, in SWP and CVP reservoirs upstream of the Delta even without action alternatives. It is understood that in areas that use both surface water and groundwater, groundwater use increases when surface water availability declines, especially during extremely dry periods. In the Sacramento Valley watersheds, the change in surface water supplies would be associated with climate change and not implementation of the action alternatives. Therefore, groundwater use changes were assumed to not be caused by the alternatives and were therefore not evaluated in detail in the EIR/EIS. Additionally, please refer to the response to comment 1556-7. Please see Master Response 25 for more information regarding upstream reservoir effects.
1556	12	Missing from the list of impacts is 1) the loss of the Middle Fork American River Project's (MFP) ability to generate power during times required by the California Independent System Operator, such as peak times in summer, and 2) the loss of power revenues needed to	As described in response to comment 1556-5, senior water rights deliveries to Placer County users in the Bear and American River watersheds upstream of Folsom Lake (including senior water rights for the existing Middle Fork American River Project) are included in the basic hydrologic assumptions in the CALSIM II

DEIRS Ltr#	Cmt#	Comment	Response
		ensure operations of the MFP are stable during low water years	model. For deliveries from SWP and/or CVP facilities or downstream of SWP and/or CVP reservoirs, the CALSIM II model prioritized deliveries to senior water rights holders (e.g., existing Middle Fork American River Project) prior to meeting environmental criteria for SWP and CVP operations or deliveries to SWP and CVP water contractors. The normal operations of the Middle Fork American River Project are not expected to be interrupted or limited by the use of additional energy for project pumping facilities or by changes in surface water levels caused by the project. While the energy demand will be increased, the local generation facilities (including the MFP) available to the CAISO will remain unchanged. Please see Master Response 25 for more information regarding upstream reservoir effects.
1557	1	I am the Mayor of the City of Kingsburg, California. I am writing to demonstrate that I support the goals of the Bay Delta Conservation Plan (BDCP). The San Joaquin Valley's economy and that of the State depend on water. Many of my constituents work in the agriculture industry and our entire region is at a critical juncture.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental analysis provided in the EIR/S.
1557	2	I agree with the co-equal goals of securing reliable water supplies through a new Delta conveyance system, and restoring the Sacramento-San Joaquin Delta ecosystem. The Bay Delta Conservation represents the best opportunity to provide a long-term solution to California's water needs. I encourage the state and federal governments to move this important plan forward.	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1558	1	National Marine Fisheries Service and other state and federal agencies should refuse to issue permits that will allow the Bay Delta Conservation Plan (BDCP) and its ill-conceived twin tunnels to go forward. The BDCP is a blueprint for taking water from an already over-committed system with a wide variety of significant, adverse effects upon the Delta ecosystem, involved fisheries and the regional economy. Funding to implement the BDCP scheme is speculative. Despite the best efforts of the BDCP's proponents to keep the public at arm's length from knowledge about those serious flaws, people are becoming aware and not liking what they see.	The Lead Agencies respectfully disagree with the general assertion that the documentation is fundamentally flawed as stated by the commenter. The documentation generated by this proposed project has undergone extensive public and scientific input, discussion, and transparency, including the posting of administrative draft chapters online and providing many more opportunities for public participation than is normally required by the CEQA/NEPA processes (see Master Response 41 [Transparency]). Since 2006, the BDCP and subsequently the California WaterFix Project have been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists, and more than 600 public meetings, working group meetings and stakeholder briefings. Please refer to Chapter 32 (Public Involvement, Consultation, and Coordination) in the Draft EIR/EIS and Master Response 40 (Public Outreach Adequacy). Alternative 4A, also known as California WaterFix, has been developed in response to public and agency input and is the new CEQA Preferred Alternative (see Section 4 of the RDEIR/SDEIS). Alternative 4A is also the NEPA Preferred Alternative, a designation that was not attached to any of the alternatives presented in the Draft EIR/EIS. Alternative 4 (AKA BDCP) remains a potentially viable alternative and is being carried forward in this RDEIR/SDEIS because it represents the original HCP/NCCP alternative approach, and is an important reference point from which the Alternative 4A, 2D, and 5A descriptions and analyses were developed (see Section 3 of the RDEIR/SDEIS). If the Lead Agencies ultimately choose the alternative implementation strategy and select an alternative presented in the RDEIR/SDEIS after completing the CEQA and NEPA processes, elements of the conservation plan contained in the alternatives in the Draft EIR/EIS may be utilized by other programs for implementation of the long-term conservation efforts. As implementation of the proposed project or any of the action alternatives will require permits and approvals from public agencies other than the Lead Agencies, the CEQA

DEIRS Ltr#	Cmt#	Comment	Response
			and NEPA documents are prepared to support the various public agency permit approvals and other discretionary decisions. These other public agencies are referred to as responsible agencies and trustee agencies under CEQA (State CEQA Guidelines Sections 15381 and 15386) and cooperating agencies under NEPA (e.g., USACE and EPA). For more information please on the CEQA and NEPA process, see 1.1.5 of Section 1 Introduction of the RDEIR/SDEIS. For other issues raised by the commenter, refer to the following Master Responses: Master Response 3 (Purpose and Need), Master Response 5 (Conservation Measure 1 as a CM, Overview of Restoration and Enhancement Activities), Master Response 35 (Beneficial Use of Water), Master Response 28 (Operational Criteria), Master Response 25 (Upstream Reservoir Effects), Master Response 17 (Impacts on Smelt, Terrestrial Impacts and Mitigation), Master Response 5 (Costs of Implementation, Funding).
1558	2	The fundamental problems with the BDCP are: the premise that removing most of the inflow to the Delta is somehow good for the Delta, San Francisco Bay, and fisheries (it isn't); the notion that water supplies are improved by the project (which provides no new water and creates winners among the takers and losers throughout the Delta); and the totally foolish idea that Californians are happy to pay billions upon billions of dollars (including possible rate increases and property tax hikes), despite the lack of secured financing for an expensive public works project for the essentially exclusive benefit of few Corporate Welfare Queens.	To improve Delta habitat conditions, Alternatives 1, 2, 3, 4, 6, 7, and 8 evaluated in the EIR/EIS decrease monthly total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months; and increase flows in the winter months when the river flows are high. Overall, the average annual Delta exports are less in Alternatives 2, 4 (H2, H3, H4), and 5 through 9 than under Existing Conditions, as shown in Figure 5-17 of Chapter 5, Water Supply, of the EIR/EIS. The project is just one element of the state's long-range strategy to meet anticipated future water needs of Californians in the face of expanding population and the expected effects of climate change. The project is not a comprehensive, statewide water plan, but is instead aimed at addressing many complex and long-standing issues related to the operations of the SWP and CVP in the Delta, including reliability of exported supplies. It is important to note that the project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in conservation, storage, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Demand Management Measures). Please refer to Master Response 5 for more information about funding.
1558	3	Before take permits can be issued under a Habitat Conservation Plan, it must be shown that there is sufficient funding for all proposed activities, with identification of all financial contributors and planned allocation of funds. Beware of the Implementing Agreement that BDCP planners eventually submit, because they have not provided the public a reasonable amount of time to evaluate the funding proposal before the close of the EIR/EIS comment period. This means all public comments are made on a plan for which there is no financing commitment.	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1558	4	The State and federal water contractors are adamant that the diversion tunnels should be built because they have spent a quarter of a billion dollars promoting it (via the draft BDCP and environmental documents) Yet the engineering for the actual tunnels is only 10% complete. This is a poor basis for estimating the cost of building the tunnels that are the centerpiece of the plan. Further, the emerging consensus among the state's water stakeholders, including purveyors at the receiving end, is that the project will wind up in	The BDCP Engineering team has utilized the services of several consulting engineers, tunnel contractors and members of its own team with suitable expertise on the subject of tunnel design, construction and cost estimating. Based on this work, the existing geotechnical data base, consisting of more than 300 sample sites throughout the project area, are sufficient to make conservative conceptual design (10% design) assumptions on the characteristics of the ground, the key tunnel and shaft design features, and probable tunnel construction methodologies. With this information collectively analyzed, conservative estimates of

DEIRS Ltr#	Cmt#	Comment	Response
		court for years, if not decades (and perhaps even beyond the 50-year window of a "take" permit). That will add enormous costs at the risk of considerable uncertainty.	construction methodologies and costs have been made, including anticipated TBM advance rates, anticipated shaft construction requirements, anticipated tunnel segment fabrication requirements, and anticipated site and utility work needed to support the tunneling activities. The BDCP Engineering team acknowledges that additional geotechnical information is needed to further refine tunnel cost estimates. The current tunnel cost estimates are based on the assumption that design activities will commence immediately upon completion of the CEQA process, and construction will follow shortly after design is complete. If significant delays to the project occur, then cost estimates will have to be reexamined.
1558	5	It is no surprise that water users that would be the beneficiaries of BDCP are balking at paying for a massively expensive project which does not guarantee more water. With the effects of prolonged drought now in plain sight, it is obvious to users that the tunnels will not result in a more reliable supply of less water, despite suspensions of water protections for fish and upstream users. Metropolitan Water District (MWD) member agencies in Southern California are seeking their own water supply alternatives. They could opt out of taking water from the state water project, resulting in MWD failing to meet its financial obligations to the BDCP. Similarly, agricultural users in the San Joaquin Valley have clarified that they will not be able to pay for the cost of water delivered by the tunnels. When contractors fail to meet their financial obligations for the project, taxpayers will get stuck with the bill. Taxpayers, particularly those who see no direct benefit from the project, will feel a strong aversion to participating. The speculative financing for the BDCP is thus a fatal flaw.	This comment relates to funding for the BDCP and possible decision outcomes that would occur following completion of the Final EIR/EIS. No issues related to the adequacy of the environmental impact analysis in the EIR/EIS were raised.
1558	6	The water contractors have redefined ecosystem work as a public benefit in the hopes of getting someone else to pay for the habitat restoration portions of the BDCP. They are looking to federal assistance and public bonds to cover the plan's habitat restoration (while overlooking the habitat destruction brought on by the infrastructure investments). There is no guarantee whatsoever that California voters will approve a water bond in 2014 or later years, or that any bond they might approve will include BDCP funding. Furthermore, it is highly doubtful that Congress will fund $4 billion toward a habitat conservation plan for California as assumed by the BDCP.	This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. Alternative 4 remains a viable alternative. A modified proposed project (Alternative 4A/California WaterFix) is being considered. Numerous comments were received that focused on various elements of the BDCP. Where the comments focused on elements of the BDCP that overlap with the elements of Alternatives 2D, 4A, or 5A (e.g., CM1 as it comprises of the North Delta Diversions, tunnels, and supporting facilities), specific responses are presented. Where comments raised issues as to whether the BDCP and other HCP/NCCP alternatives in the 2013 Draft EIR/EIS were potentially feasible and could function as an alternative for purposes of meeting CEQA and NEPA's requirements to analyze a reasonable range of alternatives to the proposed project (e,g., issues regarding the BDCP Effects Analysis or financial feasibility), responses are presented generally in Master Response 5. Where comments submitted on the BDCP were focused on elements outside the scope of the environmental analysis or viability of the BDCP and other HCP/NCCP alternatives within the context of CEQA/NEPA (e.g., request of specific revisions to the BDCP related to mapping or references), no specific responses are provided and further consideration will be given to these comments, and any revisions to the Draft BDCP would only be made, if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.
1558	7	The massive list of significant and unavoidable adverse impacts (Table 31-1 of the BDCP) is a clue that "habitat restoration" is a code word for an environmental disaster. It demonstrates that the 2009 Delta Reform Legislations' intent to protect the Delta as an evolving place (CA Water Code 85020(b)) is not met. California voters have proven over and over again they are reluctant to be stuck with the bill for large, expensive public works projects with questionable benefits, particularly projects that promise both environmental and financial mayhem.	Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input. The EIR/EIS analyzes all alternatives, including Alternative 4A. The originally proposed habitat restoration measures and related Conservation Measures (CMs) (i.e., CM2 through CM21) would not be included as part of the Proposed Action, except to the extent required to mitigate significant environmental effects under CEQA and meet the regulatory standards of ESA Section 7 and California Endangered Species Act (CESA) Section 2081(b). However, restoration actions that are independent of Proposed Action will continue to be pursued as part of existing projects and programs. Examples of these include the 2008 and 2009 USFWS and NMFS BiOps (e.g., Yolo Bypass improvements and habitat enhancements, 8,000 acres of tidal habitat restoration), (2) California EcoRestore, and (3) the 2014

DEIRS Ltr#	Cmt#	Comment	Response
			California Water Action Plan. For more information regarding significant and unavoidable impacts please see Master Response 10. For more information regarding the proposed project's compliance with the Delta Reform Act please see Master Response 31. For more information regarding Environmental Commitments please see Appendix 3B of the FEIR/EIS.
1558	8	The BDCP documents are supposed to enable the public to comment. But the documents are inadequate because the public is kept in the dark about how the scheme will be paid for and whether it can be implemented successfully. This does not make sense. Because the BDCP does not provide a financing commitment and since no one wants to pay for the boondoggle that is the BDCP, fisheries agencies should refuse to issue permits that would enable it to go forward.	Prior to construction of the proposed project, the EIR/EIS must be certified and adopted by the implementing agencies, and permits must be obtained. However, a public vote it not required to move forward. California Water Code section 12934, subdivision (d)(3), of the Burns-Porter Act and Water Code section 11260 of the Central Valley Project Act authorize DWR to build water facilities in the Delta, as part of the State Water Project, and give DWR broad discretion as to what those facilities may involve. Thus, DWR has the authority to build the proposed project without a public vote. Even so, the proposed project is the result of more than seven years' collaboration and consultation with numerous stakeholders, agencies, public water agencies and environmental organizations. The organizations that have participated in the Steering Committee, public meetings or written letters to provide input on the Plan include: American Rivers, Bay Institute, Defenders of Wildlife, The Endangered Species Coalition, Environmental Defense Fund, The Golden Gate Salmon Association, National Audubon Society, Natural Resources Defense Council, the Nature Conservancy, and Planning and Conservation League. The feedback was used to guide the development and subsequent revisions of the Proposed Project and its associated EIR/EIS to reflect concerns addressed from the various groups. All of the documents, studies, administrative drafts, and meeting materials have been posted online since 2010 in an unprecedented commitment to provide public access and government transparency. Although the RDEIR/SDEIS, EIR/EIS and much of the proposed project has been drafted by scientists working for a private consulting firm (ICF) working for the Lead Agencies, the Agencies' scientists have been intimately involved, and their judgments are reflected throughout the EIR/EIS and the proposed project itself. The State is most interested in putting forth the best project that meets the goals of ecosystem improvement and water supply reliability. To the degree that the current Plan is endorsed by some environmental organizations serves as confirmation that the proposed plan protects species, habitats and the Delta ecosystem in a way that is compatible with their goals. The website includes correspondence from agencies and NGOs received prior to the start of the formal comment period. Comments received during the comment period are to be included in the Final EIR/EIS. For more information on public outreach efforts, please see Master Response 40. For information pertaining to funding of the current proposed project, please refer to Master Response 46. Please refer to Master Responses 42 and 43 for information related to outreach, transparency of the planning process and stakeholder engagement.
1559	1	Cemex is pleased to support the advancement of the Bay Delta Conservation Plan (BDCP). The BDCP is an important step in addressing California's water challenges. The Sacramento-San Joaquin Delta ("Delta") supplies water for 25 million Californians and the economies of the San Francisco Bay Area, the Central Valley, and Southern California. The current system employs dirt levees that are more than 100 years old to separate vital fresh water from San Francisco Bay salt water. Should these levees be breached, fresh water	See Response to Comments to Dr. G. Fred Lee, Dr. Anne Jones-Lee, EWC, Michael Jackson on behalf of CSPA, California Water Impact Network, AquAlliance, County of San Joaquin, South Delta Water Agency, Central Delta Water Agency, Restore the Delta, Earth Law Center and Friends of the River. The responses to the comments may be found within this Final EIR/EIS.

DEIRS Ltr#	Cmt#	Comment	Response
		in the Delta could be rendered useless for a year or more.	
1559	2	The BDCP, which will build two tunnels to transport fresh water under the Delta, is an important step in protecting California's drinking water, environment, and economy. The underground tunnels will provide much greater security in the face of geologic or climate change related events.	Starting with the Screening Analysis in Appendix 8C, the water quality assessment addressed 182 constituents. From that Screening Analysis, the following constituents were carried forward for detailed assessment: ammonia, boron, bromide, chloride, dissolved oxygen, electrical conductivity, mercury, nitrate, pathogens, pesticides, phosphorus, selenium, trace metals, turbidity and TSS, and Microcystis. Thus, the assessment considers the full range of water quality impacts that could occur due to the project alternatives. Text has been added to Section 8.3.1.1, Models Used and Their Linkages, and "Quantitative Assessments" within Section 8.3.1.3, Plan Area, of Chapter 8, Water Quality, describing validation of the models used for the assessment, and modeling limitations and uncertainty. Also, since publication of the DEIR/S, additional sensitivity analyses were incorporated to identify the causes of certain previously identified EC objective exceedances, which are provided in Appendix 8H, Electrical Conductivity, and referenced in the EC Impact WQ-11 for each alternative. For additional information regarding water quality, please see Master Response 14.
1559	3	The BDCP will help mitigate decades of environmental damage by proliferating diverse wildlife restoration, improving vegetation and fostering adaptation to effects of climate change. Restoring declining species will likely ease the burden of federal water delivery restrictions and increase the availability of water for drinking and agriculture. The protection of the Delta environment will have an immediate impact on water volume, distribution and quality, which will provide significant economic benefits in addition to the aforementioned environmental improvements.	The quoted language from Chapter 25 pertains to constituents to be considered for water quality assessment. Please see response to comment 1599-2 regarding the technically valid consideration of constituents.
1559	4	The water delivered by the BDCP will fuel significant portions of California's construction and agriculture industries, and will bring over 155,000 jobs to Sacramento, San Joaquin and Contra Costa counties alone. The improvements resulting from the BDCP will contribute to the creation and protection of nearly one million full-time equivalent jobs through immediate construction, secondary and tertiary uses over its 50-year implementation period.	The range of alternatives included in the EIR/EIS includes alternatives which would reduce SWP and CVP water exports and deliveries south of the Delta as compared to the Existing Conditions and the No Action Alternative. The No Action Alternative and Alternatives 4H1, 4H2, 4H3, 4H4; 5; 6A, 6B, 6C; 7; 8; and 9 would result in less SWP and CVP water deliveries south of the Delta than under Existing Conditions (shown in Tables 5-5 and 5-8). Similarly, Alternatives 6A, 6B, 6C; 7; 8; and 9 would result in less SWP and CVP water deliveries south of the Delta than under the No Action Alternative (shown in Tables 5-6 and 5-9). The range of alternatives included in the BDCP Draft EIR/EIS also includes alternatives which would increase Delta outflow as compared to the Existing Conditions and the No Action Alternative. The No Action Alternative and Alternatives 2A, 2B, 2C; 4H2, 4H3, 4H4; 5; 6A, 6B, 6C; 7; 8; and 9 would result in greater average annual Delta outflow than under Existing Conditions (shown in Tables 5-5 and 5-8 and Figure 5-4). Similarly, Alternatives 6A, 6B, 6C; 7; 8; and 9 would result in greater average annual Delta outflow than under the No Action Alternative (shown in Tables 5-6 and 5-9 and Figure 5-4). Model simulation results for the proposed project alternative (4A) indicate that long-term average and wet year peak outflows would increase in winter months with a corresponding decrease in spring months because of the shift in system inflows caused by climate change and increased Delta exports as compared to Existing Conditions. In other year types, Alternative 4A would result in higher or similar outflow because of the spring outflow requirements. In summer and fall months, Alternative 4A would result in similar or higher outflow because of changes in export patterns and OMR flow requirements and export reductions in fall months, and also because of the Fall X2 requirements in wet and above normal years. The incremental changes in Delta outflow between Alternative 4A and Existing Conditions would be a function of both the facility and operations assumptions (including north Delta intakes capacity of 9,000 cfs, less negative OMR flow requirements, enhanced spring outflow and/or Fall X2 requirements) and the reduction in water supply availability due to increased north of Delta urban demands, sea level rise and climate change. Results for the range of changes in Delta Outflow under Alternative 4A are presented in more detail in Appendix 5A, BDCP EIR/S Modeling Technical Appendix, of the Draft EIR/EIS.

DEIRS Ltr#	Cmt#	Comment	Response
			The assessment of water quality impacts provided in Chapter 8 account for the changes in diversions, relative to existing conditions and the NAA, which are captured in the CALSIM II and DSM2 modeling that support the water quality assessments. With regards to water quality, please see Master Response 14. Please also see significant and unavoidable impacts, please see Master Response 10.
1559	5	We are facing the worst droughts in California's history without an effective conservation strategy. As a result, the Delta's ecosystem is at its breaking point. Supporting this common sense, cost effective project will help ensure safe and reliable drinking water for future generations. After eight years of review and debate, it is time to finalize the Bay Delta Conservation Plan. We urge you to join us in supporting this important project.	Please see Master Response 33 regarding the adaptive management and monitoring program. Note that Alternative 4A alters the structure of the adaptive management and monitoring program, relative to the BDCP proposal. The final plan incorporates lessons learned, integration with existing research and decision-making efforts, and provides a clear linkage between scientific uncertainties, research actions, and adjustments in management actions as necessary. It is assumed the Adaptive Management Program developed for Alternative 4A would not, by itself, create nor contribute to any new significant environmental effects; instead, it would influence the operation and management of facilities and protected or restored habitat associated with Alternative 4A.