

DEIRS Ltr#	Cmt#	Comment	Response
1951	1	We oppose the Bay Delta Conservation Plan in concept. Our review of the Draft BDCP Plan and its Draft EIR/EIS only heightens our opposition to the project, reinforcing our view that this project must not go 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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.
1951	2	Originally, the BDCP plan was conceived as a collaboration among south of Delta water export agencies. Their object was to increase exports from the Delta, using water supply "reliability" and ecosystem restoration as their stalking horse. Given the political power and influence of these large state, federal, and special district agencies, claims by BDCP officials that the Twin Tunnels will not increase water exports must be taken with many grains of salt. Our comments, attached, demonstrate that BDCP's Twin Tunnels project will increase contract-based deliveries in wetter years, and will increase Delta exports in dry and drought years as the Tunnels increase water transfer opportunities for California's water market. The Bay Delta "Conservation" Plan has little to do with conservation. Indeed, the very name of the project is disingenuous at best and deeply cynical at worst. Even the planned tunnels - which are essentially a means for draining the Delta of life-sustaining fresh water in the most expeditious way possible - are perversely referred to as "Conservation Measure 1."	See response to comment 1951-1 regarding the BDCP. The action alternatives could only divert the amount of water under the existing SWP and CVP water rights and in accordance with the existing and future related regulatory requirements based upon river water levels and flow, water available in the system, the presence of threatened and endangered fish species, and water quality standards. More information on the ranges of proposed water diversions, based on water year types and specific flow criteria, can be found in Chapter 3, Section 3.6.4.2, North Delta and South Delta Water Conveyance Operational Criteria, FEIR/EIS. By establishing a point of water diversion in the north Delta and new operating criteria, the project is designed to improve native fish migratory patterns and allow for greater operational flexibility. The proposed project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. Water deliveries from the federal and State water projects under a fully-implemented Alternative 4A are projected to be about the same as the average annual amount diverted in the last 20 years. Although the proposed project would not increase the overall volume of Delta water exported, it would make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline. Refer to Master Response 26 (Area of Origin).
1951	3	The BDCP project objective to export more water from the Delta is a foregone conclusion, essentially predetermined from the start of the project and advocated by major south of Delta water exporters referenced above.	See response to comment 1951-2 regarding exports under the proposed project.
1951	4	BDCP is an even worse deal for the Delta. Purporting to restore Delta ecosystems and protect its most vulnerable fish species, BDCP would instead further reduce natural Delta outflows to San Francisco Bay, helping push listed, vulnerable salmon, sturgeon, and resident fish species into permanent oblivion. The people of the Delta, especially its poorest and most economically vulnerable, would endure a ten-year construction period only to find that the remaining catchable fish species would be more contaminated with mercury and selenium than they now are today. They would find that their agricultural, recreational, and regional economies would be decimated by the disruption from BDCP construction activities.	See response to comment 1951-2 regarding exports under the proposed project. See Chapter 11 of the Final EIR/EIS for a discussion on aquatic species impacts. No significant and unavoidable impacts to fish species occur from the proposed project (4A). 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, has authority to determine if the proposed project meets the regulatory standards of CESA. See Master Response 14 regarding water quality impacts, including a discussion on selenium and mercury. 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. All

DEIRS Ltr#	Cmt#	Comment	Response
			<p>impacts would be minimized and mitigated to the degree feasible and are described under each alternative in the FEIR/SDEIS individual resource chapters and in Appendix 3B, Environmental Commitments, FEIR/EIS.</p> <p>See Chapter 16 for a discussion on socioeconomics impacts, Chapter 15 for a discussion on impacts to recreation and Chapter 14 for a discussion on impacts to agriculture.</p>
1951	5	<p>While BDCP now trumpets the risks to California's water supply of massive Delta levee failures due to earthquakes and sea level rise, BDCP lifts not a finger to address these supposed seismic levee issues. At the same time, the Department of Water Resources ignores seismic risks to other components of the State Water Project underlain by active seismic faults at the San Luis Reservoir and in the Tehachapi Range crossing of the California Aqueduct. By the 2030s the Delta residents will see their levees further deteriorated from being ignored by the state, fresh water supplies exported, prime farmlands converted, and beloved fishable, swimmable and drinkable places of recreation ruined from Delta exports to San Joaquin Valley agribusinesses and southern California suburban development. Instead of the thriving regional economy the Delta is today integrated into the state, regional and global economies-it would by the 2030s be a subject colony of the Bay Delta Conservation Plan self-appointed "authorized entities."</p>	<p>The Delta is not subject to the same degree of overall seismic risk (i.e., threat of ground shaking and surface fault rupture) as much of the Bay area. However, although there is little threat of surface rupture in the Delta, the hazard of seismic ground shaking is moderate to high, based on expected seismic shaking modeling results conducted by the U.S. Geological Survey and DWR. See Section 3E.2.4.2 Ground Acceleration (Ground Shaking) of Appendix 3E and Section 9.1.1.4.2 Earthquake Ground Shaking in Chapter 9 of the 2013 Public Draft BDCP EIR/EIS.</p> <p>A moderate to strong earthquake could cause simultaneous levee failures on several Delta islands, which would result in island flooding with resultant island flooding. In 2002, the Working Group on California Earthquake Probabilities estimated that an earthquake of magnitude 6.7 or greater has a 62 percent probability of occurring in the San Francisco Bay Area before 2032, and could cause 20 or more islands to flood at the same time.</p> <p>The proposed project does not purport to protect existing levees from seismic ground shaking. Although the proposed project is not intended to provide enhanced flood protection, it does intend to reduce the vulnerability of the water delivery system by making it less reliant upon the Delta levee system (and associated risks thereto). Further, the proposed project does not envision a change in the state's flood protection policies or programs. For more information on levee stability and seismic risk please see Master Response 16.</p> <p>See response to comment 1951-4.</p>
1951	6	<p>BDCP and its EIR/EIS are meant to sell the project and try to limit the potential for critical thinking by an otherwise skeptical public. They conceal the Twin Tunnels' ulterior purpose of increasing the State Water Project's delivery capacity for enlarging the market for cross-Delta water transfers from Sacramento Valley "willing sellers." They reveal that Delta exports won't just increase in the wetter years, they will rise in the drier years as the water market grows in proportion that the Delta is colonized and controlled by BDCP. But by selectively modeling only the contractual water volumes and not the non-contractual amounts transferred via the water market in drier times, BDCP would prefer the public think they are merely "protecting and restoring" supplies already under contract from the effects of climate change and sea level rise.</p>	<p>See response to comment 1951-2 regarding exports under the proposed project.</p> <p>As described in Chapter 3, Description of Alternatives, the action alternatives considered in the EIR/EIS do not include specific water transfers. The EIR/EIS acknowledges that water transfers would continue in a similar manner as historic transfers and in accordance with State and Federal laws and regulations. The EIR/EIS also acknowledges that the use of water transfers between agencies could increase in the future as SWP, CVP, and other surface water supplies are reduced due to climate change, sea level rise, and increased water demand in the Delta watershed, as described in Appendix 1E, Water Transfers in California: Types, Recent History, and General Regulatory Setting, and Appendix 5D, Water Transfer Analysis Methodology and Results, of the Draft EIR/EIS. Because specific agreements have not been identified for water transfers and other non-project voluntary water market transactions, project level analysis of impacts upstream of the Delta is highly speculative and this EIR/EIS does not constitute the CEQA/NEPA coverage required for any specific transaction. Rather, it provides an analysis of how transfers relate to the proposed project facilities. Any future water transfers will require separate approvals. The analysis of any potential upstream impacts is not a part of this EIR/EIS and must be covered pursuant to separate laws and regulations once the specific transfer has been proposed.</p> <p>For more information on water transfers please see Master Response 43. Also see Appendix 5A of the Final EIR/EIS and Master Response 30 regarding modeling.</p>
1951	7	<p>The BDCP fails to provide an adequate range of alternatives to new conveyance as required by the National Environmental Policy Act and the California Environmental Quality Act; the listed "alternatives" to the tunnels are simply variations on tunnel export capacities and operational rules, none of which have any basis in existing water quality</p>	<p>The alternatives included in the Public Draft EIR/EIS, RDEIR/SDEIS, and Final 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 Lead Agencies carefully considered all potential alternatives that were proposed during the scoping process and while the EIR/EIS was being prepared. Although many of the proposed</p>

DEIRS Ltr#	Cmt#	Comment	Response
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1952	1	Water supplies from Northern California that move across the Sacramento-San Joaquin Delta (the Delta) are vital to the economy of California, serving 25 million people from the Bay Area to the Mexican border and agriculture throughout the Central Valley.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
1952	2	The Delta is in a state of environmental stress due to the loss of wetlands habitat, invasive species, pesticide runoff, a depletion of native food supplies, pumping operations and other factors.	The commenter's opinion on the Delta is acknowledged.
1952	3	The decline in the Delta's health threatens this unique environment and water supplies that are key to the California economy.	No issues related to the adequacy of the environmental impact analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS were raised.
1952	4	The Delta's levees are not engineered to protect the State of California's water supply distribution system from a major earthquake, and multiple levee failures could disrupt water deliveries and the state economy for up to three years.	Please see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, for discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for a discussion on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Also, see Sections 6A.2 and 6A.3 for a discussion on existing levee improvement programs and funding mechanisms, which would not be affected by the BDCP/CWF. For more information on levee stability and seismic risk please see Master Response 16.
1952	5	<p>State and federal agencies, via the Bay Delta Conservation Plan (BDCP) process, have worked for years towards developing a comprehensive package of ecosystem and water system improvements to address both current conflicts in the Delta and long-term threats to the California's water supplies.</p> <p>The BDCP represents an effort to comply with state and federal environmental laws for 50 years through a cooperative effort to reverse the Delta's decline.</p> <p>The failure to take decisive actions would be an unacceptable risk to the environment of the Delta and the economy of California.</p>	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.
1952	6	<p>The preferred alternative of the State of California is the most promising plan developed to date to solve Delta challenges and resolve decades of conflicts between agricultural, urban and environmental water users with a comprehensive solution that achieves California's co-equal goals of a reliable water supply and a restored Delta ecosystem.</p> <p>The Anaheim City Council is supportive of the proposed twin-tunnel conveyance system that isolates and protects drinking water supplies and helps restore natural flow patterns in the Delta for the benefit of native species as well as the complementary habitat restoration, water quality and predator control measures outlined in the BDCP.</p> <p>The City Council of the City of Anaheim urges the State of California to move forward with the draft BDCP, specifically with support for Alternative Number 4, the State's preferred</p>	The preferred alternative is now Alternative 4A (i.e., the California WaterFix Project) and no longer includes an HCP. Issues raised by the commenter are further discussed in the following Master Responses: 31 (Compliance with Delta Reform Act), 28 (Operational Criteria), 44 (Decision Tree), and 5 (Costs of Implementation and BDCP Funding, Governance Structure and Implementation). The environmental documentation and project approval will be acted on by the decision makers from each lead agency at the conclusion of the CEQA and NEPA processes.

DEIRS Ltr#	Cmt#	Comment	Response
		alternative, and focus efforts on resolving those remaining issues needed to provide assurances that the plan will achieve California's co-equal goals of water supply reliability and ecosystem restoration in a cost effective manner.	
1953	1	The Bay Delta Conservation Plan (BDCP), seven years in the making, would prevent water delivery disruption by constructing three new screened intakes along the Sacramento River 35 miles north of the existing pumping plants. Twin tunnels buried up to 150 feet beneath the Delta's peat soil would carry the water south, ensuring that water supplies could be delivered even if climate change and other forces disrupt the interior Delta.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
1953	2	This plan would align water operations 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. Greater seasonal variability in flows would improve conditions for fish. Minimizing south Delta pumping would provide more natural east-west flow patterns. New diversions help protect critical water supplies against the threats of sea level rise and earthquakes.	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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. For detailed responses on the primary issues being raised with regard to the BDCP or Alternative 4, as well as a discussion of the current status of the draft BDCP Effects Analysis, please see Master Response 5.
1953	3	This plan would reduce the physical impact of a southern diversion point (risk of fish trapping) by adding north Delta diversion points to allow for greater operational flexibility to better protect fish. North Delta diversion points would reduce trapping of fish at the pumps.	The analysis in Chapter 11 of the EIR/EIS describes the potential effects of the various alternatives on fish entrainment.
1953	4	This plan would further reconnect floodplains to improve the production of important aquatic food sources for fish as well as spawning and rearing habitat, restore and develop new tidal habitat consisting of brackish and fresh-water tidal marsh and shallow subtidal habitat for native fish, return riverbanks to a more natural state through the addition of logs, trees, bushes, and channel margin habitat suitable for native fish, control invasive species and address other stressors to protect fish from predation and help restore the productivity of Delta waters.	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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.
1953	5	The City Council of the City of Hawthorne formally supports the positive benefits of the Bay Delta Conservation Plan in its preservation and diversion of the Delta water supply.	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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. For detailed responses on the primary issues being raised with regard to the BDCP or Alternative 4, as well as a discussion of the current status of the draft BDCP Effects Analysis, please see Master Response 5.
1954	1	Water supplies from Northern California that move across the Sacramento-San Joaquin Delta are vital to the economy of California, serving 25 million people from the Bay Area to the Mexican border and agriculture throughout the Central Valley.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
1954	2	The Delta is in a state of environmental stress due to the loss of wetlands habitat, invasive species, pesticide runoff, a depletion of native food supplies, pumping operations and	The commenter's opinion on the Delta is acknowledged.

DEIRS Ltr#	Cmt#	Comment	Response
		other factors.	
1954	3	The decline in the Delta's health threatens this unique environment and water supplies that are key to the California economy.	No issues related to the adequacy of the environmental impact analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS were raised.
1954	4	The Delta's levees are not engineered to protect the State's water supply distribution system from a major earthquake, and multiple levee failures could disrupt water deliveries and the state economy for up to three years.	Please see Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, for discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for a discussion on project consistency with USACE, CVFPB, and DWR flood standards and regulations. Also, see Sections 6A.2 and 6A.3 for a discussion on existing levee improvement programs and funding mechanisms, which would not be affected by the BDCP/CWF. For more information on levee stability and seismic risk please see Master Response 16.
1954	5	State and Federal agencies, via the Bay Delta Conservation Plan (BDCP) process, have worked for years towards developing a comprehensive package of ecosystem and water system improvements to address both current conflicts in the Delta and long-term threats to the State's water supplies. BDCP represents an effort to comply with State and Federal environmental laws for 50 years through a cooperative effort to reverse the Delta's decline. The failure to take decisive actions would be an unacceptable risk to the environment of the Delta and the economy 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.
1954	6	The State's preferred alternative is the most promising plan developed to date to solve Delta challenges and resolve decades of conflicts between agricultural, urban and environmental water users with a comprehensive solution that achieves California's Co-Equal goals of a reliable water supply and a restored Delta ecosystem. The City Council is supportive of the State's preferred Alternative Number 4 which calls for a proposed twin-tunnel conveyance system that isolates and protects drinking water supplies and helps restore natural flow patterns in the Delta for the benefit of native species as well as the complementary habitat restoration, water quality and predator control measures outlined in the BDCP. The City Council of the City of Santa Ana urges the state to move forward with the draft BDCP, specifically with support for Alternative Number 4, the State's preferred alternative, and focus efforts on resolving those remaining issues needed to provide assurances that the plan will achieve California's co-equal goals of water supply reliability and ecosystem restoration in a cost effective manner.	The preferred alternative is now Alternative 4A (i.e., the California WaterFix Project) and no longer includes an HCP. Issues raised by the commenter are further discussed in the following Master Responses: 31 (Compliance with Delta Reform Act), 28 (Operational Criteria), 44 (Decision Tree), and 5 (Costs of Implementation, BDCP Funding, Governance Structure and Implementation). The environmental documentation and project approval will be acted on by the decision makers from each lead agency at the conclusion of the CEQA and NEPA processes.
1955	1	I attended the presentation about the BDCP tunnel proposal on February 20th at the Castro Valley Library. I'm writing to you today to voice my strong opposition to the Delta tunnel water project. This is an unnecessary, damaging, and outrageously priced project. Jerry Meral, deputy secretary at the CA Natural Resources Agency said the tunnel plan won't ultimately help the Delta. How could it help the Delta when millions of acre-feet of water are diverted? CA voters defeated the Peripheral Canal and now we seem to have lost any say in stopping this terrible idea. I respectfully urge you and the governor to reconsider the BDCP tunnel proposal and stop this water-grab!	Since 2006, the proposed project has 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. 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--refer to Master Response 3 (Purpose and Need). The plan does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. The project is not the Peripheral Canal (refer to Master Response 36). Lastly, the project process was initiated by former Governor Arnold Schwarzenegger, who was twice elected by a majority of California voters. The process has continued under the administration of his successor, Edmund G. Brown, Jr., who has publicly stated his tentative support first for Alternative 4 (BDCP) as set forth in the Draft EIR/EIS and now for Alternative 4A (California WaterFix Project) as described in the RDEIR/SDEIS, though he has acknowledged the need to complete environmental review and to obtain public input prior to making any final decisions on the project. Hence, the project has

DEIRS Ltr#	Cmt#	Comment	Response
			been initiated and carried forward by two Governors acting on a mandate from the voters of the State as a whole. The environmental documentation and project approval will be acted upon by the decision makers from each lead agency at the conclusion of the CEQA and NEPA processes.
1957	1	<p>I would like to register my complaint about the proposed Delta by-pass Tunnel Project. I am old enough to remember that the voters of California rejected the Peripheral Canal project in the 1970s. This project proposed an open canal around the Delta. I see the tunnel project as nothing more than the same thing, just buried, where people cannot see the water leaving the northern region for the southern. The new project is no different than the old one, except that it will cost much more money!</p> <p>I cannot, understand how this project is to help "restore or maintain water quality" to the Delta. It bypasses fresh water around the delta and ships it to the south. This will lead to salt water intrusion which will destroy habitat for wild life, and reduce the quality of the water available to municipalities in the Delta region. This has been proven true during past drought periods where salinity levels reached unhealthy levels for months at a time. This project does nothing to remedy this, and in fact, has the potential to exacerbate the problem.</p> <p>If this project were to go to the voters, it would be rejected for potential cost/benefit and reduction of water quality. There is no need for this project. The state has recently gone through difficult financial cuts, and to spend billions on this project is a demonstration of fiscal irresponsibility.</p> <p>Do not allow this project to move forward.</p>	<p>The preferred alternative is now Alternative 4A (i.e., the California WaterFix Project) and no longer includes an HCP. Master Response 36 explains how the BDCP or the California WaterFix Project is different from the previously proposed Peripheral Canal. The purpose and need for this project is further elaborated in Master Response 3. For other matters raised by the commenter, refer to the following Master Responses: 14 (Water Quality), 5 (Overview of Restoration and Enhancement Activities), and 24 (Delta as a Place). In addition, refer to the RDEIR/SEIS including Sections 4, 5, and Appendix A (e.g., Chapter 11 [Fish and Aquatic Resources], Chapter 12 [Terrestrial Biological Resources], and Chapter 8 [Water Quality]). Appendix 3A describes the range of alternatives considered. Appendix 1B describes the potential for additional water storage and Appendix 1C describes conservation, water use efficiency, and other sources of water supply including desalination. While these elements are not part of the proposed project, they are important tools in managing California's water resources. Refer to Master Response 4 regarding the selection of alternatives analyzed and Master Response 6 regarding demand management. The project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. Socioeconomic effects of the various alternatives are described and assessed in Chapter 16 of the Draft EIR/EIS. A Draft BDCP Statewide Economic Impact Report has been published, and indicates that the project would result in a substantial economic net benefit to the State. The project has been initiated and carried forward by two Governors acting on a mandate from the voters of the State as a whole. The environmental documentation and project approval will be acted on by the decision makers from each lead agency at the conclusion of the CEQA and NEPA processes.</p>
1958	1	<p>We live on lower Roberts Island. According to the EIR/EIS Table 31.1, we are worried about the salt water impact on farming and only having seasonal water availability, while our water is being sent south to a desert. You are required by our savior water stakeholder to keep our water quality at acceptable levels. How do you plan to do this?</p>	<p>The water quality assessment in Chapter 8 of the DEIR/EIS and Section 4.2.7 of the RDEIR/SEIS assessed changes in salinity and potential effects on agriculture, including in the south Delta. Where significant impacts were identified, mitigation was introduced. For some alternatives, impacts remained significant and unavoidable. New alternatives introduced in the RDEIR/SDEIS (Alternatives 2D, 4A, and 5A) contained less than significant impacts for salinity after mitigation.</p>
1959	1	<p>My first concern is with the families that will be affected during the construction of this project.</p>	<p>No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.</p> <p>For more information regarding the proposed project's impacts on socioeconomics please see 4.3.12 Section 4 of the RDEIR/SDEIS.</p>
1959	2	<p>I feel desalination plants run on solar power have been overlooked. I believe desalination plants would have far less environmental impact than 10 years of digging without knowing the final impact of the project on the wildlife.</p>	<p>Please see Master Response 7, which describes why an alternative focused on desalination is not included in the EIR/EIS. Desalination is one strategy used in California to develop new supplies, yet it is not the primary solution for the State's water shortage due to many factors, including limited capacity and technology, high costs and energy demands, and regulatory uncertainty.</p>
1959	3	<p>Water conservation. Jobs created through water efficiency. For every 1 million spent on water efficiency 10 trillion gallons of water are conserved and approximately 220,000 jobs created.</p>	<p>The proposed 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. It is not intended to serve as a state-wide solution to all of California's water problems, and is not an attempt to address directly the need for continued investment by the State and other public agencies in conservation as well as other water supplies such a stormwater capture and recycling (as described in Section 1.1.C.3 of</p>

DEIRS Ltr#	Cmt#	Comment	Response
			Appendix 1C, Water Demand Management).
1960	1	I served on the California Department of Fish and Game Striped Bass Stamp Advisory Committee for about 15 years and the proposals contained in CM15 are quite disturbing. Where is the science? It is also clear that the history of the Bay-Delta ecosystem has not been considered because if it had you would be well aware that the salmon population did just fine co-existing with a thriving striped bass population for decades right up to the time that the State and Federal Water Projects came on line. No scientist with any integrity should want to be affiliated with the proposals contained in CM15. All of the published studies show that striped bass predation on salmon is de minimus. Kill all the striped bass and all the largemouth bass? Shame on you.	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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.
1961	1	Why is the federal, State, and local government not implementing farm/agriculture conservation programs that would provide the farmers to not farm the land in the Delta and let the land revert to habitat? These programs have been in place for many years (since the 1930s) in the Great Plains Region.	The lead agencies acknowledge this comment. However, it is not evident that the commenter is making a comment on the BDCP EIR/EIS.
1962	1	This is to oppose the BDCP plan, EIR and EIS because: Financing. There is no data on which to evaluate the true financing commitments. A new plan and EIR with financing should be prepared and presented. Cost. Full life-cycle costing is not available and it is vital to understand the cost of this fiasco.	Please see Master Response 5 regarding the adequacy of the cost estimates and their conservative assumptions. Please also see Master Response 5 regarding the adequacy of funding for the purposes of the state and federal regulatory requirements for the issuance of incidental take permits. The funding chapter of BDCP is not required to be a financing plan. The Lead Agencies would prepare separate financing plans to implement BDCP. 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. 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.
1962	2	Alternatives were not explored.	Please refer to Master Response 4 for information on the Alternatives analyzed in this EIR/EIS.
1962	3	Mitigation must be paid for by the contractors who sell the water, not taxpayers.	All mitigation associated with the 2013 public draft BDCP would be paid for by the participating state and federal water contractors, not the public (see Table 8-41 in Chapter 8). Please also see Master Response 5 regarding the proposed project's funding strategy.
1962	4	Fish and wildlife survival will be severely and negatively impacted and restoration has not proved to be an answer. Upstream impacts are not fully explained.	Since 2006, the proposed has 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. 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. The proposed project does not seek any new water rights nor include any regulatory actions that would

DEIRS Ltr#	Cmt#	Comment	Response
			<p>affect water rights holders other than DWR, Reclamation, and SWP and CVP contractors.</p> <p>Importantly, all water exported by the SWP and CVP is subject to 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.</p> <p>DWR's fundamental purpose of the proposed project 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 the Delta, and water quality within a stable regulatory framework, consistent with statutory and contractual obligations. 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. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project and Master Responses 26 and Master Response 25 for information on upstream impacts.</p>
1962	5	Ballot box--The voters must have an opportunity to consider and cast a ballot on this issue.	<p>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 is 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.</p> <p>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.</p> <p>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.</p> <p>For more information on public outreach efforts, please see Master Response 40.</p>
1963	1	I am a resident of Davis, CA, am deeply concerned about the BDCP "conservation" plan to build twin tunnels under the Delta, and urge you to reject the current EIS and EIR.	<p>The Lead Agencies respectfully disagree with the assertion that the documentation is fundamentally flawed and fails to disclose effects identified 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</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>There are many weaknesses to the BDCP "Tunnels" plan. I focus on the following severe deficiencies:</p> <p>Damage to the Delta and its Fish: There has not been an adequate or convincing empirical demonstration that taking water further north in the Delta, hence reducing water flows through the Delta, will achieve the stated objective of protecting fish and/or protecting the Delta. Instead, this project is more likely to destroy the Delta. The entire stated rationale for this project has not been demonstrated, and is counter to the opinion of respected biologists. Hence, the project is fatally flawed.</p>	<p>[Transparency]. 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 the California WaterFix Project, has been developed in response to public and agency input and is the new CEQA Preferred Alternative (see Section 4 of the RDEIR/SDEIS). The Draft EIR/EIS and the RDEIR/SDEIS do analyze the project's impacts to the Delta and its fish throughout the documentation, e.g., impacts to rivers/water flows and salmonids can be found in Chapter 6 (Surface Waters) and Chapter 11 (Fish and Aquatic Resources) in the Draft EIR/EIS and in Sections 4 and 5 of the RDEIR/SDEIS, along with Appendix A (Chapters 6 and 11) also of the RDEIR/SDEIS. The environmental documentation and project approval will be acted on by the decision makers from each lead agency at the conclusion of the CEQA and NEPA processes.</p>
1963	2	<p>Damage to Delta Agriculture: Chapter 14 "Agricultural Resources" describes the disproportionate value and benefit of Delta-area farmlands, which will be at risk due to the proposed project. It is inequitable and wrong to sacrifice one group of California's farmers for the benefit of others (and of other municipal areas) when alternatives exist.</p>	<p>Please see Master Response 18 regarding mitigation for BDCP impacts to agricultural resources.</p> <p>Also, please note that the preferred alternative is now Alternative 4A, which does not include a HCP. Therefore, Conservation Measures 2, 5, 13, 20, and 21 would not be implemented as part of this alternative, and thus the magnitude of effects under Alternative 4A would likely be substantially smaller than those associated with Alternative 4. The lead agencies are currently undergoing ESA Section 7 and CESA Section 2081(b) consultation with the fish and wildlife agencies.</p>
1963	3	<p>Significant and Unavoidable Adverse Impacts: Table 31-1 gives a long list of adverse impacts from this project. While the list of potential problems is credible, the list of "Proposed Mitigation(s)" is astoundingly incomplete and unconvincing. There are too many problems that lack adequate resolution for this project to continue forward.</p>	<p>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; however, a modified proposed project (Alternative 4A) is the preferred alternative.</p> <p>Under CEQA, feasible mitigation measures are required that could substantially lessen or minimize significant impacts. Mitigation measures are not required for effects which are not determined to be significant. For significant environmental effects that cannot be avoided, the EIR/EIS describes these in individual resource areas. Under CEQA, an agency may not approve a project with significant environmental impacts if there are feasible mitigation measures available which would substantially lessen those impacts. (Pub. Resources Code, § 21081, subd. (a); CEQA Guidelines, § 15092, subd. (b); see Santa Clarita Organization for Planning the Environment v. City of Santa Clarita (2011) 197 Cal.App.4th 1042, 1052-1053.) Thus, for every significant impact identified in an EIR, the agency must adopt all feasible mitigation measures that would substantially reduce the impact. Even with all feasible mitigation, however, the level of some impacts may still be higher than the threshold of significance identified in the EIR. For more information regarding significant and unavoidable impacts please see Master Response 10.</p>
1963	4	<p>Financing: It is inappropriate and a subversion of democracy to ask the public to comment on a plan for which the financing has not been determined. There is no financing commitment or Implementing Agreement for agencies to pay for the BDCP. There is no obligation bond, and no federal appropriation. Worse, there have been news reports of potential attempts to increase property taxes to pay for this project, without a vote of the people.</p>	<p>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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.</p>

DEIRS Ltr#	Cmt#	Comment	Response
1963	5	<p>These are just a few of this project's many fatal flaws. Perhaps the most offensive is the back-door way this project is being rammed through, with multiple attempts to hide the project from public view, surreptitiously move it forward (e.g. -- soil sampling on farmers' lands, which our Courts justifiably saw as inappropriate), make it difficult for the public to learn about and comment on this project, and -- in the future -- the murky ways that project costs (whose current estimates are most likely overly optimistic) will be transferred to general taxpayers.</p> <p>This is a deeply flawed project that should be immediately discontinued.</p>	<p>Since 2006, the proposed has 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 Master Responses 40 and Master Response 41 for comments pertaining to public outreach and the transparency of the planning process.</p> <p>The costs associated with the proposed BDCP are provided in Chapter 8 of the Final BDCP. Additional information on costs is provided in Master Response 5</p> <p>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.</p>
1964	1	<p>I have been speaking with several of the Delta Marina and Resort Owners as well as many of the local fishing guides for the last six months and we are extremely concerned that the current draft CM15 proposal does not address the negative impact on the multimillion dollar local fishing industry which is ultimately the Delta.</p> <p>CM15 doesn't address the fact that Striped Bass and Black Bass represent 95% + of the fishing interests in the Delta. Fishing is the # 1 industry in the Delta. So if you enact the Measures proposed you will significantly damage or destroy the Delta as a fishery, and therefore all of the Marinas, Restaurants, Shops and Businesses that support the biggest industry in the Delta will also be ruined. Families that have operated these businesses as a way of life for generations will be displaced.</p>	<p>As described under Impact REC-9, overall, as for other CMs targeting predator species, CM15/Environmental Commitment 15 efforts would not appreciably reduce Delta-wide abundances of predatory game fish such that recreational fishing would be adversely affected (refer to Chapter 11, Fish and Aquatic Resources, Section 11.3.4.2). Please also see Master Response 17 regarding striped bass. Socioeconomic impacts related to implementation of CMs2-22 and environmental commitments are described in Impact ECON-17.</p>
1964	2	<p>Through on going conversations with lifelong and well known fishing guides, as well as conversations groups like Cal State Sport Fishing Alliance, it is apparent that current practices being used to help increase/manage endangered species such as Salmon and Steelhead are inherently flawed. What the BDCP needs to realize is Striped and Black Bass have successful coexisted in the Delta for more than 130 years.</p>	<p>Please see Master Response 17 regarding striped bass.</p>
1965	1	<p>I specifically object to Conservation Measure 15 (CM15) in the Plan. This section lists specific ways to kill Striped and Black Bass by removing bag limits and size limits, electro shocking and capture kill. It proposes derbies to kill as many fish as possible. negative impacts on the Delta by doing this are not considered.</p> <p>Striped and Black Bass have successfully co-habituated in the CA Delta for over 130 years. Simple modification of release points for Salmon and Steelhead would dramatically increase the survival rates of endangered species.</p>	<p>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. 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.</p>
1965	2	<p>CM15 threatens the entire Delta Population, not just the fishery. An estimated 90% + of those fishing Delta do so for Striped and Black Bass. The BDCP as currently proposed will ruin all the businesses that support the striped bass, black bass AND the anadromous</p>	<p>As described under Impact REC-9, overall, as for other CMs targeting predator species, CM15/Environmental Commitment 15 efforts would not appreciably reduce Delta-wide abundances of predatory game fish such that recreational fishing would be adversely affected (refer to Chapter 11, Fish and Aquatic Resources,</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>salmonid fishery. All businesses would be impacted, marinas, restaurants, fuel stations, tackle shops, campgrounds, etc.</p> <p>If the proposed CM15 plan goes through, its not speculation the fishery will be damaged, its actually specified as the intended outcome.</p> <p>Do not enact any plan that will damage any striped bass or black bass fishery in the Delta.</p>	<p>Section 11.3.4.2). Please also see Master Response 17 regarding striped bass. Socioeconomic impacts related to implementation of CMs2-22 and environmental commitments are described in Impact ECON-17.</p>
1966	1	<p>Among many problems with this plan is Conservation Measure 15 (CM15). In this section, you list specific ways it will kill Striped and Black Bass by removing bag limits and size limits, electro shocking and capture kill. You even propose derbies to kill as many fish as possible.</p> <p>Striped and Black Bass have successfully co-habituated in the CA Delta for over 130 years. Simple modification of release points for Salmon and Steelhead would dramatically increase the survival rates of endangered species.</p>	<p>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. 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.</p>
1966	2	<p>CM15 threatens the entire Delta population, not just the fishery. An estimated 90% + of those fishing Delta do so for Striped and Black Bass.</p> <p>Ruin that, and you ruin all the businesses that support the fishery. All would be impacted would be Marina's, Restaurants, Those that sell fuel, Tackle, campgrounds, etc, etc, etc.</p> <p>I strongly urge that the plan be reworked to benefit, not destroy an important Delta fishery and business culture.</p>	<p>As described under Impact REC-9, overall, as for other CMs targeting predator species, CM15/Environmental Commitment 15 efforts would not appreciably reduce Delta-wide abundances of predatory game fish such that recreational fishing would be adversely affected (refer to Chapter 11, Fish and Aquatic Resources, Section 11.3.4.2). Please also see Master Response 17 regarding striped bass. Socioeconomic impacts related to implementation of CMs2-22 and environmental commitments are described in Impact ECON-17.</p>
1967	1	<p>I would like to voice my concerns about BDCP, especially CM15, the proposed removal of predatory fish.</p> <p>It should be obvious, even to the casual observer, that those predatory fish have been successfully coexisting with salmon for more than a century. This seems to me to be an example of scapegoating to cover up the real problems of water diversions for agricultural and residential use.</p>	<p>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. 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.</p>

DEIRS Ltr#	Cmt#	Comment	Response
1967	2	<p>The economic impact of CM15 would be huge, in communities that have few other economic resources. One day on the delta waters observing the number of anglers fishing for these predatory species should make that clear.</p> <p>Implementing CM15 would be disastrous financially, and it would not seriously mitigate the problem of lower salmonid populations. Let's address the real problems, instead of smoke screens.</p>	<p>As described under Impact REC-9, overall, as for other CMs targeting predator species, CM15/Environmental Commitment 15 efforts would not appreciably reduce Delta-wide abundances of predatory game fish such that recreational fishing would be adversely affected (refer to Chapter 11, Fish and Aquatic Resources, Section 11.3.4.2). Please also see Master Response 17 regarding striped bass. Socioeconomic impacts related to implementation of CMs2-22 and environmental commitments are described in Impact ECON-17.</p>
1968	1	<p>The BDCP EIR/EIS fails to claims a key risk to exports is due to risk of earthquakes and levee failures yet fails to address levee maintenance to avoid risk of loss of human life and property in the Delta itself.</p> <p>The earthquake bogey is false, which is clear from reviewing seismic charts, there is no major earthquake fault near enough to the Delta to do the kind of damage to the levees that is used in the EIR/EIS as a justification for the tunnels. In addition, the levees have been shown to not be subject to all failing in the case of an earthquake (recent shake tests). This "earthquake bogey" story started to become part of the BDCP shortly after the Katrina disaster in 2005 and was made up to build on the scare from that disaster.</p>	<p>Please see Appendix 6A, Section 6A.5.2, FEIR/EIS, for discussion on potential impacts of seismic events to the Delta. 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. Refer to Appendix 6A, Section 6A.6.2.1.3, FEIR/EIS, which discusses DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for a discussion on project consistency with USACE, CVFPB, and DWR flood standards and regulations.</p> <p>Section 6A.6 also includes a discussion on levees modified by construction of the California WaterFix (CWF), including responsibilities of the project proponents.</p> <p>Before and/or during construction of the CWF water conveyance facilities, project proponents will explore opportunities with local reclamation districts and the Central Valley Flood Protection Board (CVFPB) to address potential conflicts regarding levee maintenance, inspection, and flood fighting activities on project and non-project levees. DWR will look to enter into agreements with local reclamation districts with jurisdiction in the Delta to ensure levee management activities by both government and local agencies are not interrupted during construction of the water conveyance facilities. In addition, DWR will comply with all applicable flood protection requirements and regulations to ensure flood neutrality during construction and operations of the CWF.</p> <p>For more information on levee stability and seismic risk please see Master Response 16.</p>
1968	2	<p>The levees are in pretty good shape due to the ongoing maintenance program but there are areas that could use additional ongoing maintenance. Maintenance of major levees is required, not primarily for the water infrastructure but because of the major state infrastructure including highways, railroads, and communities that depend on them.</p> <p>The levees have not been falling down. Jones Tract levee had failed in 2004, and the BDCP information at that time used it to say the levees were going to start to fail at an increased rate. Well, the Jones Tract was the last levee failure we've had. It was repaired and was expensive to do so but was done due to major transportation infrastructure on the island (the railroad).</p> <p>The BDCP EIR/EIS should have ongoing levee maintenance and repair as part of it's costs since the water contractors will continue to export during some times of the year from Clifton Court Forebay using water that flows through the Delta. Failure to include levee maintenance and repair is a significant issue with the EIR/EIS.</p>	<p>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.</p> <p>Please see Chapter 2, FEIR/EIS, for the BDCP/CWF purpose and need, and Appendix 6A 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.</p>
1969	1	<p>I strongly oppose any and all regulation changes (Conservation Measure 15 CM15) that would remove gamefish status and protection for California's striped bass and delta large mouth bass - now protected and regulated as a sport fish(s) by the California Department of Fish and Wildlife (CDFW). As you know, the striped bass was legally introduced by our CDFW more than 150 years ago to enhance recreational angling. It is one of the most popular and available sport fishes in our state, cherished by thousands of sport anglers both resident and visiting.</p>	<p>Please see Master Response 17 regarding striped bass. Additionally, please note that the preferred alternative is now Alternative 4A and no longer includes an HCP or conservation measures.</p>

DEIRS Ltr#	Cmt#	Comment	Response
1969	2	There have been several recent scientific studies conducted to determine if predation by striped bass on Delta endangered species is significant and a major contribution to those fish's decline. The findings of those scientists, after reviewing all the data, concluded that predation by striped bass is a non-issue and is of no serious threat to those listed species. Some leading scientists have warned that removing this apex predator may cause more harm than good since stripers also help control other, more populous predators	The commenter does not provide the specific citations providing the stated conclusion; a recent review by Grossman et al. (2013) concluded that the available data do not provide unambiguous and comprehensive estimates of population-level effects in the Delta, i.e., there is uncertainty in the effect. Regardless, none of the alternatives analyzed in the EIR/EIS included broad-scale reduction in predatory fishes, only targeted actions at known predation hotspots. Alternative 4A, the new preferred alternative, includes localized reduction of predatory fishes and refuge at the proposed North Delta Diversion and in Clifton Court Forebay.
1969	3	<p>The economic benefits of our striped bass fishery are profound. Hundreds if not thousands of individuals, including small businesses rely on our striped bass fishery for a major part of their livelihood. Striped bass fishing guides such as I, are just one small example.</p> <p>The lists of businesses, ranging from tackle and bait sales, to boat sales and rentals; and RV Park and marina business is huge. In these stressed economic times it makes no sense to destroy a fishery that engenders such a broad economic web - it may well be the most economically valuable fishery we have in the State - even though it is as severely stressed as are all our Delta fisheries. Agriculture is not the only producer of jobs...</p> <p>Our striped bass fishery, in my view is probably more valuable in terms of angler satisfaction and participation than any other fishery within the state. It's a 12-month fishery that lends itself to every angling technique from bait-fishing to fly-fishing, ocean, bay, impoundments and Delta. No other fishery within our state can make this claim.</p>	Impacts related to fishing are discussed in Impact ECON-5. Please also refer to Master Response 17 regarding striped bass.
1969	4	I again, urge you to oppose any piece or pieces of legislation that would remove current regulations that protect California striped bass and large mouth bass. We need to increase their populations along with the populations of other stressed Delta fishes not destroy them.	Please see Master Response 17 regarding striped bass.
1969	5	The California Delta is one of the most important estuaries on the entire Pacific seaboard. As one of the leading Outdoors Writers in America, I've travelled the world over to fish and write articles about those experiences - nothing in my travels compares to our own California Delta.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
1970	1	The BDCP Plan will have a devastating affect on our community. The EIR grossly understates the impact ten years of construction will have on recreation and the Delta's economy. The EIR shows construction blocking favorite nearby waterski channels and "mitigation" is for boaters to use waterways far away. Most of the boaters don't have trailers to put their boats on and haul them to the other side of Delta. Discovery Bay is like a "ski-in/ski-out" community but on the water. Removing nearby access removes the value of the location. Large boats cannot be trailered or moved at all off-water so must have access from Discovery Bay. Longer-term the effects of dams and gates and lower water quality will negatively impact our economic community's base and negatively impact home sales and property values.	<p>Waterways will still be navigable during construction and operation of the proposed project. The proposed project would result in temporary impacts to boaters and on-water recreationists. However, the project includes plans to reduce those impacts as much as possible with implementation of environmental commitments to prepare and implement a water navigation plan and provide notification of construction and maintenance activities in waterways (Appendix 3B, Environmental Commitments). Additionally, Mitigation Measure TRANS-1a would reduce impacts on marine navigation by development and implementation of site-specific construction traffic management plans, including specific measures related to management of barges and stipulations to notify the commercial and leisure boating communities of proposed barge operations in the waterways.</p> <p>For operable gate sites, construction would be phased, allowing for at least half of the waterway to remain open at any one time. In this way, use of the waterway for recreational navigation would be allowed to continue during construction.</p> <p>Barge routes and landing sites will be selected by the construction contractor and will be expected to comply with the following</p>

DEIRS Ltr#	Cmt#	Comment	Response
			<p>criteria:</p> <ul style="list-style-type: none"> • Maximize continuous waterway access between departure port and shaft site • Maintain minimum waterway width greater than 100 feet (assuming maximum barge width of 50 feet) • Use of existing barge landings where possible • Minimum water depth of 6 feet
1970	2	<p>The BDCP Construction will negatively impact recreational opportunities. Since 2009 (or before - that is when I found out about it), plans related to the BDCP and water movement have proposed various dams and gates throughout the Delta that would block boat traffic altogether, such as the "Two-Gates Fish Protection Project". Advocates of the "Two-Gates" project claimed those gates weren't related to the BDCP yet the same gates were shown on BDCP maps at that time labeled "Salinity Gates" hence there was a definite relationship. There was no understanding by proponents of those gates the extreme impact they would have on boating and our boating community. The same is evident with the BDCP EIR/EIS. The categorization of issues totally misses the real impacts. The list of "mitigation" (Chapter 15) will in no way mitigate the injury caused to Discovery Bay homeowners, their home values, and their way of life.</p>	<p>Economic effects on recreation as a result of the proposed project are described in Chapter 16, Socioeconomics, and in Section 16.1.1.6, Economic Character of Recreation in the Delta.</p> <p>Further information can be found in the BDCP Draft Statewide Economic Analysis study that analyzes the project as an investment for the state as a whole. It can be found at http://baydeltaconservationplan.com/News/News/13-08-05/BDCP_Draft_Statewide_Economic_Analysis_Released.aspx.</p> <p>Use of operable gates are described in Impact Rec-3 in Chapter 15, Recreation. Mitigation Measure TRANS-1a would reduce impacts on marine navigation by development and implementation of site-specific construction traffic management plans, including specific measures related to management of barges and stipulations to notify the commercial and leisure boating communities of proposed barge operations in the waterways.</p> <p>While the environmental commitments would reduce impacts on water-based recreation (water-skiing, wakeboarding, tubing) in these areas by creating alternative recreation opportunities for those eliminated during construction, these impacts would be long-term and therefore considered significant and unavoidable.</p> <p>For more information regarding Delta as a Place please see Master Response 24.</p>
1970	3	<p>Dams/Gates: There is no guarantee that gates such as the "Two-Gates" or others will not be implemented as a result of the BDCP. The tunnels will remove more water from the Delta (water that will go around the Delta instead of through the Delta) causing salinity to intrude (as evidence this year with the drought). Gates halt boating activities. The EIR/EIS inadequately addresses the potential reasons gates may be implemented so that citizens can comment about their affects. The EIR also fails to analyze the issues/impacts such gates will cause. Dams and Gates are a short-term and long-term concern.</p>	<p>Use of operable gates are described in Impact Rec-3 in Chapter 15, Recreation. Mitigation Measure TRANS-1a would reduce impacts on marine navigation by development and implementation of site-specific construction traffic management plans, including specific measures related to management of barges and stipulations to notify the commercial and leisure boating communities of proposed barge operations in the waterways.</p> <p>While the environmental commitments would reduce impacts on water-based recreation (water-skiing, wakeboarding, tubing) in these areas by creating alternative recreation opportunities for those eliminated during construction, these impacts would be long-term and therefore considered significant and unavoidable.</p> <p>Clarifying text has been added to further describe the operable barrier, the boat lock usage, its impacts, and mitigation.</p> <p>Please refer to 4.3.4, Water Quality, Section 4 of the RDEIR/SDEIS regarding salinity or electrical conductivity impacts in the project area.</p>
1970	4	<p>Construction blocking key recreational waterways: According to Chapter 15, the "favorite" wakeboard/waterski slough near Discovery Bay is called by the locals "Twin Sloughs". It is two parallel sloughs, North Victoria Canal/South Woodward Canal), which is</p>	<p>The proposed project aims to allow the federal and state water projects to deliver more reliable water supplies, in a way less harmful to fish. Recreation would be impacted because of the proposed project. Waterways such as Victoria and Woodward Canals under Alternative 4 would be opened to recreationists</p>

DEIRS Ltr#	Cmt#	Comment	Response
		very busy during prime time. It is perfect for skiing due to the two-way traffic (which makes it safer for skiing/wakeboarding than open channels) plus tules on the side that quickly dampen wave action. This will be totally blocked during the years of construction with barges, etc. The "Alternates" in the EIR won't work since they are far away from where the boats are located in Discovery Bay back yards and marina. Proposed recreation mitigation does not benefit the South Delta (EIR Chapter 15).	and waterskiers once construction is complete. The Lead Agencies would include environmental commitments and mitigation measures to reduce impacts, as described in Impact Rec-3.
1970	5	Construction blocking key boating access for larger boats: According to Chapter 15, barges will also be on Middle River. There is no guarantee in the EIR that, for example, if the primary railroad bridge is down for maintenance that boaters will be allowed to go to the alternate bridge. Barges are shown in that area.	Waterways will still be navigable during construction and operation of the proposed project. The proposed project would result in temporary impacts to boaters and on-water recreationists. However, the project includes plans to reduce those impacts as much as possible with implementation of environmental commitments to prepare and implement a water navigation plan and provide notification of construction and maintenance activities in waterways (Appendix 3B, Environmental Commitments). Additionally, Mitigation Measure TRANS-1a would reduce impacts on marine navigation by development and implementation of site-specific construction traffic management plans, including specific measures related to management of barges and stipulations to notify the commercial and leisure boating communities of proposed barge operations in the waterways.
1970	6	Impacts to using the main South Delta anchorage, Mildred Island, during construction: EXAMPLE p.15-263: "Middle River" describes barge facility and operations that will constrict boat passage. It discusses alternate routes which fail to consider the impact on South Delta boating due to restricted access to the only large anchorage in the South Delta. Access to that anchorage is key to the South Delta economy and to recreation. That anchorage is not even labeled on any EIR maps. In addition, construction activities are planned near that anchorage which will also disrupt and ruin it for boating use. This affects not only Discovery Bay but also other South Delta marinas including those at Bethel Island, Bullfrog Marina, Tiki Lagoon, Turner Cut, and others. Proposed recreation mitigation does not benefit the South Delta (EIR Chapter 15).	No California WaterFix facilities are proposed for the area of Mildred Island anchorages, the nearest proposed barge landing site is at the north end of Bacon Island where boating access could be somewhat constrained but only on the southern side of Connection Slough. The northern portion of this waterway would not be affected. Construction activities on Bacon Island would be limited and is not expected to affect boating or other recreational activities including marinas because construction would be on islands separated from waterways by levees.
1970	7	Boating Safety during construction - The impact on navigation and safety in the Delta has not been adequately addressed. Blocking high-use recreational waterways will cause congestion in the other nearby waterways. Traffic in these areas is already significant. The EIR has not addressed the safety aspects of blocking these waterways and resulting safety issues.	Please refer to Chapter 19, Transportation for impacts of the project alternatives on marine traffic and navigation. Please refer to Chapter 15, Recreation for potential effects of the project alternatives on boating. Emergency Sheriff access will be maintained at all times during project implementation and operation.
1970	8	Other Boating Impacts during construction - Air quality impacts due to disruption of boating traffic have not been adequately identified and analyzed in the EIR/EIS. Boat traffic will be restricted due to construction activities and long-term operation of diversion structures and other structures. Numerous 5 mph zones will be put in place. Boaters will change their boating patterns to avoid these areas. This will cause increased boat travel, which will increase boat emissions. Larger diesel powered boats in particular will avoid these areas and travel farther to other areas of the Delta. The impact on boat traffic patterns and attendant increase in emissions has not been identified or analyzed.	As discussed in Chapter 15, Recreation, temporary speed zones and channel obstructions would occur during construction of CM 1. While these impacts could impede boat movement and restrict recreational opportunities, such as waterskiing, wakeboarding, and tubing, it is unknown to what extent recreationists will change their boating patterns, and as such, it would be speculative to quantify the impact of temporary boating restrictions on criteria pollutant and greenhouse gas emissions. For example, temporary speed zones may slow boat traffic, resulting in higher engine loads and minor emissions increases. Equally, the elimination of recreational opportunities (e.g., water skiing) near the intakes and other in-water features may reduce boating activity and result in corresponding emissions reductions. Quantifying changes in boating activity would also require a detailed inventory of existing marine activities in the project area, including, but not limited to 1) number of trips per vessel, 2) fuel consumption rate per vessel, 3) horsepower and engine characteristics per vessel, and 4) engine (propulsion and auxiliary) operating hours per vessel. This type of regional marine inventory is not available and is beyond the scope of a project-level environmental analysis. Since it is speculative to predict how individuals will react to boating and recreational restrictions (e.g., pursue an alternative location, elect not to participate in the activity), it is not possible to quantify with a reasonable degree of certainty the net emissions impact of changes in boating activity. Accordingly,

DEIRS Ltr#	Cmt#	Comment	Response
			consistent with CEQA Guidelines Section 15145, Speculation, a quantitative analysis of boating emissions is not included in the EIR/EIS. Per the comment, a qualitative discussion of potential changes in boating patterns and associated emissions has been added to Chapter 22, Air Quality and Greenhouse Gases.
1970	9	Invasive Weeds due to Low Delta Flows - Invasive weeds are currently a problem in the Discovery Bay bays and throughout the Delta due in part to low water flow caused by the years of excessive pumping from the delta. (This was confirmed during a recent Town Hall Meeting at Discovery Bay held by Jim Frazier, Assemblyperson, and attended by state scientists working on the invasive weed issues). These weeds clog boat props and engines, make it impossible to exit some of the shallower bays, cause issues during navigation and loss of revenue for marinas with clogged slips. Once the tunnels are operational, any water diverted around Discovery Bay's bays and South Delta waterways instead of through the Delta will obviously compound the issue. The relationship of low Delta Flows and Invasive Weeds is not adequately analyzed in the EIR.	The comment describes the effect of Delta pumping on invasive aquatic weeds. Water hyacinth and other aquatic weeds are presently widespread and pervasive in the Delta, and the project is not expected to spread or increase the severity of the infestation. Based on the water supply analysis (Chapter 5), water outflows from the Delta would remain the same as or would be higher than under current conditions. In addition, the project includes measures to reduce water hyacinth and other invasive aquatics – please refer to the discussion of CM 13 Invasive Aquatic Vegetation Control in Chapter 3, EIR/EIS. However, please note that the preferred alternative is now Alternative 4A, which no longer includes an HCP or an environmental commitment to invasive aquatic vegetation control.
1971	1	<p>Chapter 1 - Introduction.</p> <p>The Project Area is unclear, rendering the project description inadequate. Figure 1A-4 includes a map of most of the State of California, with no boundary lines for the Project Area. It is unclear if the whole map is included, just the highlighted waterworks, or the highlighted water works and certain areas surrounding them. Furthermore, the project description does not include a written description of boundaries for the Project Area, such that a member of the public and local officials cannot understand whether they are inside or outside the Project Area with any degree of certainty. The map should be changed so that it accurately shows the Project Area, or an adequate written description should be included.</p>	<p>This comment addresses Alternative 4 (known also as the BDCP) or analysis contained within the draft BDCP Effects Analysis. 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 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.</p> <p>The project area for the actions evaluated in this EIR/EIS is larger than the proposed project Plan Area because some of the effects of implementing the project would extend beyond the boundaries of this region. The project area consists of the following three geographic regions, as shown in Figure 1-4 of this Final EIR/EIS:</p> <ul style="list-style-type: none"> • Upstream of the Delta region. • Delta Region (referred to hereinafter as the Plan Area, and distinct from the larger Delta region considered for some areas, which consists generally of the statutory Delta, the Yolo Bypass north of the statutory Delta, and Suisun Marsh, as well as the Areas of Additional Analysis, which apply to several EIR/EIS alternatives). • SWP and CVP Export Service Areas. <p>Study areas have been more specifically defined for each resource (refer to Final EIR/EIS Chapters 5–30 for definitions of the study area particular to each resource topic).</p>
1971	2	The EIR/EIS does not disclose which water right permits will need to be modified in order to facilitate the operation of the BDCP. In addition, the EIR/EIS does not analyze whether such permit changes will cause injury to other legal users of water. The EIR/EIS should disclose which permits will be required to be modified to operate the BDCP. The EIR/EIS should be revised to include the impact of the changes to water right permits, including the analysis of injury to other legal water users.	<p>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. 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.</p> <p>Importantly, all water exported by the SWP and CVP is the subject of the existing water rights of those two</p>

DEIRS Ltr#	Cmt#	Comment	Response
			<p>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.</p> <p>For more information regarding changes in delta exports please see Master Response 26.</p>
1971	3	<p>The EIR/EIS does not disclose what changes to water quality control objectives or other regulations would be necessary for the implementation and operation of the BDCP. To the extent the implementation or operation of the BDCP relies upon increased flows from the changes to water quality objectives, the EIR/EIS must analyze the impacts of these changes to the upstream water users. Without this information, the Public and local officials cannot meaningfully understand and consider the issues raised by the proposed project.</p>	<p>For Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 5, 6A, 6B, 6C, 7, 8, 9, the electrical conductivity (EC) objective applicable at Emmaton is proposed to be moved to Threemile Slough. Alternatives 4, 4A, 2D, and 5A retain the Emmaton compliance location for EC. The preferred alternative is now Alternative 4A, thus, no change in water quality objectives is proposed. Alternative 4A has been developed in response to public and agency input. The EIR/EIS analyzes all alternatives, including Alternative 4A. Alternative 4A would have substantially less effect on Delta water quality such that significant impacts were only identified for 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. No significant water quality impacts were identified for the upstream of the Delta region for Alternative 4A.</p>
1971	4	<p>Chapter 3 - Description of Alternatives.</p> <p>It is unclear from the information presented in the EIR/EIS how the BDCP will function after it is built and implemented. For instance, it is not disclosed as to how much additional water will be available for export, how much additional water will actually be exported, which parties will benefit from the additional water, and to what extent, if at all, the south Delta intakes will continue to be used. Without this information the Public and local officials cannot meaningfully understand and consider the issues raised by the proposed project.</p>	<p>The project's proposed dual conveyance facilities (proposed north Delta Diversion and south Delta Diversion) would allow water to be moved through the Delta when conditions permit, and allow water to be diverted from the Sacramento River in the northern Delta when conditions in the south Delta do not permit diversions from the existing State Water Project and Central Valley Project facilities. The location of the north Delta diversion facility is less vulnerable to salinity intrusion, a potential impact of sea level rise, or levee failure, in the future. By establishing an alternative diversion point for exports, a great deal of water management flexibility is added. This added flexibility would provide more options for adaptively managing the Delta so that conditions can be optimized to provide the greatest benefits across all Delta water uses and habitat conditions.</p> <p>As noted above in response to comment 1971-2, all water exported by the SWP and CVP is the subject of the existing water rights of those two agencies. 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 aims to stabilize water supplies, and exports could only increase under certain circumstances. Water deliveries from the federal and state water projects under a fully-implemented Alternative 4A are projected to be about the same to the average annual amount diverted in the last 20 years. Although the proposed project would not increase the overall volume of Delta water exported, it would make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline.</p>
1971	5	<p>Chapter 5 - Water Supply.</p> <p>It is unclear whether water transfers are part of the BDCP or planned future actions, and the degree to which these transfers are considered in the environmental analysis. The EIR/EIS indicates that water transfers are planned after the implementation of the BDCP. The EIR/EIS also indicates that more water will be exported by the SWP and CVP after construction and implementation of the BDCP. However, the EIR/EIS states that any potential transfer will have its own separate EIR/EIS. If the potential transfer of water is necessary for the implementation or operation of the BDCP, the impact of the transfers should be analyzed in the EIR/EIS. At a minimum, the EIR/EIS should make clear how the environmental analysis will be tiered from the EIR/EIS. Without this information the Public and local officials cannot meaningfully understand and consider the issues raised by the proposed project.</p>	<p>The action alternatives do not include purchase of water for the SWP and CVP water users, including water transfers except for the long-term water transfer under the existing Lower Yuba River Accord. Future water transfers would be considered using separate environmental and engineering documentation. The Final EIR/EIS discusses overall generalized opportunities to transfer water across the Delta, but does not consider the specific sources, volumes, patterns, or users of the transferred water for future unidentified water transfers. Because specific agreements have not been identified for water transfers and other non-project voluntary water market transactions, project level analysis of impacts upstream of the Delta is highly speculative and this EIR/EIS does not constitute the CEQA/NEPA coverage required for any specific transaction. For additional discussion of the level of analysis in this EIR/EIS, please refer to Master Response 2. Rather, it provides an analysis of how transfers relate to the proposed water conveyance facilities. As indicated in Final EIR/EIS Appendix 5D, the analyses are conservative because it is not known if adequate water would be available from other water users for transfer. Any future water transfers will require separate approvals. The analysis of any potential upstream impacts is not a part of this EIR/EIS and must be</p>

DEIRS Ltr#	Cmt#	Comment	Response
			covered pursuant to separate laws and regulations once the specific transfer has been proposed. However, Delta operations would be in accordance with requirements of the appropriate federal and State agencies for available conveyance facilities, including any approved water conveyance facilities.
1971	6	The EIR/EIS must be revised to analyze impacts to water users upstream of the Delta including numerous communities like Manteca and water districts that supply water to agricultural users and Cities. Construction and implementation of the BDCP will, according to the EIR/EIS, allow for increased exports of water. It is unclear where this increased supply will come from. Assuming it could decrease the amount of water available to upstream water right holders, the EIR/EIS must be modified to discuss and analyze these potential impacts to upstream water users. Without this information, the Public and local officials cannot meaningfully understand and consider the issues raised by the proposed project.	Under the range of alternatives considered in the Final EIR/EIS, only water under existing water rights issued by State Water Resources Control Board to DWR and Reclamation could be delivered to SWP and CVP water contractors. The proposed project would not impact senior water users or groundwater users outside of the Delta. There are no guaranteed water flows to the SWP and CVP water contractors. The action alternatives were developed to deliver SWP and CVP water up to the upper limit of legal SWP and CVP contractual water amounts, with the understanding that full contract amounts would not be delivered on average for the alternatives considered in the Final EIR/EIS. For additional discussion of the purpose of the project, please refer to Master Response 3. No new water sources would be required.
1971	7	Chapter 6 - Surface Water. Neither Chapter 5 nor Chapter 6 analyzes the impact to communities like Manteca, resulting from the depletion or reduction of surface water that could occur due to the implementation of the BDCP or changes in DWR or Reclamation's water right permits. If no impact to these entities of this kind will occur, the EIR/EIS should state so, and explain the reason no such impact will occur. Without this information members of the Public and local officials cannot meaningfully understand and consider the issues raised by the proposed project.	In accordance with the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/EIS), all of the action alternatives would continue the operation of the SWP and CVP in accordance with the existing water rights and regulatory criteria adopted by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights (including water used by Manteca) and Area of Origin laws and requirements, as described in Chapter 5 and Appendix 5A, Section B of the EIR/EIS. The proposed project does not seek any new water rights nor reduction in total water rights issued to DWR and Reclamation. The amount of water that DWR and Reclamation can divert from the new north Delta facilities is set by Federal and State regulating agencies, federal Endangered Species Act compliance, and project design. Operations for the Proposed Project would still be consistent with the criteria set by the U.S. Fish and Wildlife Service and National Marine Fisheries Service biological opinions and State Water Resources Control Board Water Right Decision 1641 (D-1641), subject to adjustments made pursuant to the project and the adaptive management process, as described in Final EIR/EIS Chapter 5, Water Supply.
1971	8	Chapter 7 - Groundwater. The City of Manteca relies upon groundwater for over half of the water supply. The increased reliance upon groundwater within the region is driving increased regulation of groundwater resources. The EIR/EIS does not identify or analyze potential environmental impacts of the BDCP cumulatively with groundwater regulation. In addition, the BDCP does not analyze the impacts that future groundwater legislation will have on the viability of the BDCP project. Without this analysis the Public and local officials cannot meaningfully understand and consider the issues raised by the proposed project.	The proposed project would not impact senior water users or groundwater users outside of the Delta. Recent adoption of the Sustainable Groundwater Management Act will implement groundwater monitoring programs and require implementation of groundwater sustainability plans throughout California by 2022, and full implementation of the plans by 2042. The requirements for the groundwater sustainability plans are currently under development by DWR. As those plans are developed by local and regional agencies, separate environmental studies also will be completed. It is possible that the future water demands and uses could change after adoption of the groundwater sustainability plans; however, it would be speculative to include those assumptions in the action alternatives in the EIR/EIS. Implementation of the groundwater sustainability plans is considered in the cumulative impact analysis, however.
1971	9	Chapter 8 - Water Quality. The EIR/EIS assumes that San Joaquin River outflow will increase as a result of the BDCP or concurrent with the implementation of the BDCP. The statement that San Joaquin River flows will increase into the Delta is not explained or supported, and the impacts of this assumption are not analyzed. Because the EIR/EIS does not contain an explanation for this projected increase in San Joaquin River outflow, the environmental analysis based on increased San Joaquin River outflow is not supported. Without this analysis the Public and local officials cannot meaningfully understand and consider the issues raised by the	As shown in Final EIR/EIS Appendix 5A, Section C, the San Joaquin River flows at Vernalis decline under the No Action Alternative as compared to the Existing Conditions due to climate change and sea level rise. There are no changes in San Joaquin River flows under the action alternatives and the No Action Alternative because all of these alternatives include climate change and sea level rise assumptions. It appears that this comment may actually be referring to changes in Delta outflow from the San Joaquin River which increases due to reduced SWP and CVP Delta exports, as described in Final EIR/EIS Chapter 6.

DEIRS Ltr#	Cmt#	Comment	Response
		proposed project.	
1971	10	<p>Chapter 11 - Fish and Aquatic Resources.</p> <p>The EIR/EIS contains no analysis concerning the estimated effectiveness of habitat restoration. Despite the fact that the EIR/EIS acknowledges some reasonable possibility that habitat restoration will fail, the EIR/EIS does not analyze the possibility of this occurring, nor what actions will be taken if it does. Without this analysis the public and local officials cannot meaningfully understand and consider the issues raised by the proposed project, because the public and local officials will not know how likely the environmental analysis is to be correct, nor what actions will be taken, if it is not.</p>	<p>The Recirculated Draft EIR/Supplemental Draft EIS released in 2015 introduced a new preferred alternative, 4A, which does not include a HCP or conservation measures. The alternative implementation strategy allows for other state and federal programs to address the long term conservation efforts for species recovery in programs separate from the proposed project. Alternative 4A would implement substantially less habitat restoration than Alternative 4. Please refer to Final EIR/EIS Chapter 3, Description of Alternatives for more detail. Please also refer to Master Response 33 regarding adaptive management.</p>
1971	11	<p>Chapter 21- Energy.</p> <p>The EIR/EIS is deficient because it does not analyze the impacts to energy based upon season or timing. The EIR/EIS's analyses impacts to energy resources based on the net energy used on a monthly or annual basis. This analysis fails to take into account the realities of California's energy grid, and patterns in the public's usage of energy. Energy usage peaks during particular times of year and during particular times of the day. The EIR/EIS should be modified to contain the impacts to energy resources during these peak periods. Without this analysis, the Public and local officials cannot meaningfully understand and consider the issues raised by the proposed project.</p>	<p>The energy effects evaluated in Final EIR/EIS Chapter 21 were based on monthly flow and reservoir storages calculated with the CALSIM-II model for each baseline and alternative. The description of CVP and SWP generation and pumping facilities mentioned some of the daily and seasonal (monthly) patterns of energy generation and use, as well as the variations in runoff from year to year. Hourly patterns of energy use were not included, but the basic operations of CAISO and other energy grid operators were mentioned in Draft EIR/EIS Section 21.1.4 Energy Transmission for the project pumping plants. The additional annual energy use provides an adequate metric for evaluating the effects and impacts of the alternatives.</p>
1971	12	<p>Level of Environmental Analysis is inconsistent.</p> <p>The EIR/EIS provides a program level analysis of some impacts, and a project level analysis to others; this inconsistency obscures the true impacts of the project. The EIR/EIS must be amended to analyze all impacts at a project level.</p>	<p>For information regarding project and program level analysis please see Master Response 2.</p>
1971	13	<p>Funding Disclosure and Analysis is Deficient.</p> <p>The EIR/EIS fails to provide any disclosure regarding how the BDCP project will be funded. The EIR/EIS must be amended to disclose and explain how each component of the BDCP will be funded. Included in this analysis, the EIR/EIS must disclose which parts of the project will be funded by the specific project proponent, the general schedule, the method of funding and which project components will be funded by bond or other public funding mechanisms.</p>	<p>Details about how the 2013 BDCP will be funded are described in the 2013 Draft EIR/EIS in Chapter 8. The 2013 Draft EIR/EIS was not required to disclose or describe the project's funding or financing plans. Please refer to Master Response 5 regarding the proposed project's funding strategy.</p>
1972	1	<p>Water supplies from Northern California that move across the Sacramento-San Joaquin Delta serve more than 25 million people from the Bay Area to the California-Mexico border.</p> <p>Of the 25 million people, roughly three million are supplied this critical imported water source by local Metropolitan Water District member water agencies serving Riverside County.</p> <p>The Bay-Delta is vital to the California economy and California's agricultural belt in the Central Valley.</p>	<p>No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.</p>
1972	2	<p>The Bay-Delta is in a state of environmental stress due to the loss of wetlands habitat, invasive species, pesticide runoff, a depletion of native food supplies, pumping operations</p>	<p>The commenter's opinion on the Delta is acknowledged.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		and other factors.	
1972	3	The decline of the Bay-Delta's health threatens this unique environment and water supplies that are key to the California economy.	No issues related to the adequacy of the environmental impact analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS were raised.
1972	4	The Bay-Delta's levees are not engineered to protect the state's water supply distribution system from a major earthquake, and multiple levee failures could disrupt water deliveries and the state economy for several years.	Please see Appendix 3E in the FEIR/EIS for information on potential seismic and climate change risks to the SWP/CVP water supplies.
1972	5	State and federal agencies, via the Bay Delta Conservation Plan process, have worked for seven years toward developing a comprehensive package of ecosystem and water system improvements to address both current issues in the Bay-Delta and long-term threats to the state's water supplies. The Bay Delta Conservation Plan represents an effort to comply with state and federal environmental laws for 50 years through a cooperative effort to reverse the Bay-Delta's decline. The failure to take decisive actions would be an unacceptable risk to the environment of the Bay-Delta and the economy 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.
1972	6	Now therefore, be it resolved, determined and ordered by the Board of Directors of Jurupa Community Services District that it supports the current Bay Delta Conservation Plan process and the concepts in the plan advanced by Governor Brown and Interior Secretary Jewell to ensure that the final Bay Delta Conservation Plan meets the co-equal goals of the ecosystem restoration for the Bay-Delta and reliable water supplies for 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.
1973	1	The BDCP fails to meet the "co-equal goals" of the Delta Reform Act of 2009. The Delta Reform Act of 2009 declares that State policy must serve two "co-equal goals": * Providing a more reliable water supply for California, and * Protecting, restoring, and enhancing the Delta ecosystem. These goals, the Legislature added, must be met in a manner that "Protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." The BDCP DEIR/EIS lists 52 "Adverse" impacts under NEPA to the Delta. These impacts are identified in Table 31.1 "Summary of Significant Unavoidable Adverse Impacts." With 52 Adverse impacts to the Delta, the BDCP fails to meet the policy of the "co-equal goals." It also violates the Legislature's mandate that the co-equal goals be met in a manner that "Protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." The BDCP places extremely onerous burdens on residents of the Delta. Under the BDCP, the Delta would suffer 52 Adverse impacts for the benefit of other regions. This fails the co-equal goals as required by the Delta Reform Act. On these grounds alone, the BDCP	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. For more information regarding the proposed project's compliance with the Delta Reform Act please see Master Response 31.

DEIRS Ltr#	Cmt#	Comment	Response
		should not be allowed to move forward as proposed.	
1973	2	<p>The BDCP violates California Water Code Section 85021.</p> <p>California Water Code Section 85021 states:</p> <p>The policy of the State of California is to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. 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.</p> <p>If water agencies commit their funding to financing the enormous costs of the BDCP, they will have less funding available to invest in local solutions such as recycling, conservation, stormwater capture and groundwater recharge. Californians will then be more dependent, not less, on Delta water supplies. The BDCP increases reliance on the Delta for meeting California's water needs and therefore violates California Water Code Section 85021.</p> <p>The BDCP DEIR/EIS should be denied certification because it fails to meet the co-equal goals and violates the California Water Code Section 85021. Please send the proponents back to the drawing board to develop a plan that conforms to the co-equal goals, reduces reliance on the Delta, and provides a balanced plan that people from all parts of the state, including people from the Delta, can support.</p>	<p>The Draft 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 Draft EIR/EIS.</p> <p>The range of alternatives in the Draft 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. 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). However, SWP and CVP water deliveries would continue under all alternatives.</p>
1974	1	It has been about 75 years since voter approval of the State Water Project (SWP), it should be noted that the SWP has never been completed as originally envisioned which has resulted in the operation of the Bay-Delta system of reservoirs, rivers, streams, canals, levees and pump stations to convey water in a manner that was never intended.	<p>The information in this comment is consistent with Appendix 1A, Primer on the Delta and California Water Delivery Systems, of the 2013 Draft EIR/EIS.</p> <p>No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.</p>
1974	2	<p>Under the framework of the Endangered Species Act and state environmental laws, two California Administrations have studied a variety of strategies for re-plumbing the heart of California's water delivery system and did so through hundreds of public meetings. After decades exploring all viable alternatives at a cost of over \$200 million in planning, with broad public involvement, and substantially reconfiguring the proposed BDCP process into a Habitat Conservation Program (HCP) and Natural Community and Conservation Planning Program (NCCP) coupled with implementation of a "Preferred Project Alternative".</p> <p>The Municipal Water District of Orange County strongly supports increased efforts by all cities and water districts in water use efficiency, conservation, water recycling, stormwater capture, groundwater storage, plus other local water supply expansion projects like brackish and ocean desalination, but realizes that development of these new supplies will not supplant the water supply from the SWP nor will it eliminate the critical need to fix the Delta problems.</p>	<p>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.</p> <p>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 conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage.</p> <p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.</p>
1974	3	This effort in 2014 may be the best opportunity for securing a comprehensive Statewide approach and solution to the variety of issues facing the Bay- Delta region.	Please note that the preferred alternative is now Alternative 4A (i.e., the California WaterFix Project) and no longer includes an HCP. 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
1974	4	The coequal goals of rehabilitating the Delta ecosystem and achieving water supply reliability must be achieved on independent paths, meaning that one cannot be sacrificed for the other and the goals and policies cannot keep changing. It is also recognized that a comprehensive set of rules must be established to operate the Delta for the benefit of the environment and water resources development.	The proposed project was developed to meet the rigorous standards of the federal and state Endangered Species Acts; as such it is intended to be environmentally beneficial, not detrimental. 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. 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.
1974	5	Assurances regarding supply reliability, changed conditions & decision- making are central to success of the BDCP process with many of the details of the future BDCP operations being speculative at this time, which necessitates a decision-making process that must balance investments and tradeoffs consistent with the following provisions: It is virtually impossible to predict the outcome of the BDCP habitat restoration efforts and endangered species population dynamics, and such a standard should not be required in the DEIR/DEIS. Furthermore, this means that changed circumstances under the operation of the BDCP, including the potential for new species listing, be incorporated in such a manner to result in a minimum impact on future water supply exports.	Please note that the preferred alternative is now Alternative 4A (i.e., the California WaterFix Project) and no longer includes an HCP. Please see Master Response 33 for information regarding adaptive management and Master Response 28 for information regarding operational criteria of the proposed project.
1974	6	The modernization of the Delta conveyance system, including intake of water from north of the Delta, flexibility of pumping operations in a dynamic fishery environment, reduced seismic risks from levee failure, and reduced impacts from climate variability are essential for habitat restoration, conservation and improvements in water reliability and water quality that will accrue in such a way to reduce impacts on fisheries and the ecosystem. These implementing provisions must recognize these benefits in such a way to allow export diversions to be restored.	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.
1974	7	Orange County has invested heavily to diversify our water portfolio but the Municipal Water District of Orange County realizes that the SWP is a critical source of low salinity water supply that is needed to support groundwater conjunctive use and water recycling and thus is an essential part of our water reliability strategy that sustains our citizens and businesses, economy, environment and water management - implementation of the BDCP is critical to Orange County's future.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
1974	8	Now therefore be it resolved that Municipal Water District of Orange County does hereby support the 9,000 cfs (cubic feet per second) twin tunnel Preferred Alternative (No. 4) provided reasonable assurances are included regarding governance and future decision-making in the process. The investment and decision-making must be structured to achieve a positive outcome for the SWP, the Permittees and the ecosystem restoration in a collaborative, partnership manner.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
1975	1	Please consider more facts for California's problem solving, economic concern for all statewide. My late father, a WW II Veteran and grower from an immigrant family, would say, it is "money down the drain". BDCP plans would impact our vineyard, homestead of 40 acres, about 10 miles from the planned construction. My late father said we have increased salt in the soil and that our well cannot go any deeper, at 35-50 feet. Also, crop dusting damage is in courts, regarding Delta winds. Such impacts affect Lodi area vineyards, nearby, while we are nearby, yet outside of the BDCP formal map.	Please see Master Response 3 regarding the BDCP purpose and need. Please see Master Response 18 regarding mitigation for BDCP impacts to agricultural resources.

DEIRS Ltr#	Cmt#	Comment	Response
1975	2	This request is for needed representation of Lodi and north San Joaquin County. We are only 20 miles from the heart of the Delta, on Highway 12, yet outside the BDCP map. Most guess the intakes and plans are for added water to 300-450 miles away. We hear about Fresno County farmers, but not Lodi in San Joaquin County.	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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.
1975	3	Please consider more required Alternatives for Southern Central Valley and Southern California. At the California Water Education Center, Mr. Moore, when asked, said there are 20 test points. That is for cost effective desalination (like over 100 countries do) in business job creation. Many matters have impact but are not resolved as required for Environmental Impact Reports (EIR/EIS), federal and state with NEPA.	Please see Master Response 7, which describes why an alternative focused on desalination is not included in the EIR/EIS. Desalination is one strategy used in California to develop new supplies, yet it is not the primary solution for the State's water shortage due to many factors, including limited capacity and technology, high costs and energy demands, and regulatory uncertainty.
1975	4	What are reasons against depreciation and to appreciation in Sacramento-N. San Joaquin Delta opportunities? for tourism or family recreation for generations, to waters of M. Twain-like retreats to island for families to cities; for fishing; farming; etc. Come to Delta river waterway, not favor drought-making concrete jungles. Note: Stop destructive intakes, tunnel plan, etc. along natural Delta of Sacramento-N. San Joaquin Counties with widespread flaws (EIR bullets, 2014); include representation for livelihoods in nearby counties (economic losses are unaccounted): fishing; marinas; recreational tourism (six hundred million dollar, restorethedelta.org dvd, 2012); shipping; food crops.	The socioeconomic effects of the proposed project are addressed in Chapter 16, Socioeconomics, EIR/EIS. In particular, effects of construction of the proposed project water conveyance facilities on agricultural employment and income in the Delta region, and mitigation for effects, are addressed in Impact ECON-1: Temporary effects on regional economics in the Delta region during construction of the proposed water conveyance facilities; effects on community characteristics are discussed in Impact ECON-3: Changes in community character as a result of constructing the proposed water conveyance facilities; effects on the recreation and tourism economy are discussed in Impact ECON-5: effects on recreational economics as a result of constructing the proposed water conveyance facilities; and effects on agricultural production values are discussed in Impact ECON-6: Effects on agricultural economics in the Delta region during construction of the proposed water conveyance facilities. The permanent operations and maintenance effects on these socioeconomic impact topics are discussed in Impact ECON-7, Impact ECON-9, Impact ECON-11, and Impact ECON-12. Additionally, effects on recreational resources, including specific businesses such as marinas, are addressed in Chapter 15, Recreation, EIR/EIS. (See Impact REC-1 and Impact REC-2 for impact discussions and mitigation.)
1975	5	In agronomics that is five billion dollars for Delta inside BDCP map, plus five billion dollar economy for Lodi area vintners, nearby, yet outside of BDCP map. The BDCP booklet had lists of many alternatives that referred to many pages, more than descriptions, but it seemed selective in scope. What are cost effective alternatives to California's Gold in Delta waters? Another letter gives a more detailed list for discussion.	Please see Master Response 3 regarding the BDCP purpose and need. Please see Master Response 18 regarding mitigation for BDCP impacts to agricultural resources. Please see BDCP EIR/EIS Chapter 16, Socioeconomics, for analysis of effects on agricultural economics in the Delta Region. Please refer to Master Response 5 regarding funding for the BDCP. Please note that the preferred alternative is now Alternative 4A, which does not include a HCP. The lead agencies are currently undergoing ESA Section 7 and CESA Section 2081(b) consultation with the fish and wildlife agencies.
1976	1	The Delta Ecosystem and Fish: There is no adequate or convincing empirical demonstration that taking water further north in the Delta, hence reducing water flows	The proposed project is being proposed to address the conflict between the ecological needs of a range of at-risk Delta species and natural communities, while providing for more reliable water supplies for people,

DEIRS Ltr#	Cmt#	Comment	Response
		through the Delta, will achieve the stated objective of protecting fish and/or protecting the Delta. Instead, this project is more likely to destroy the Delta. The entire stated rationale for this project has not been demonstrated, and is counter to the opinion of respected biologists. Water for people and fish can be obtained, and at far less cost and ecological damage, through conservation, retrofitting (including fish screens), recycling and other thoughtful, local projects	<p>communities, agriculture, and industry. The proposed project does not propose any changes to existing agricultural practices.</p> <p>Through the Legislature and through executive agencies, California has embraced water conservation on numerous fronts, as have many California water agencies. Many of these efforts are highlighted in Appendix 1C, Demand Management Measures, EIR/EIS, which describes conservation, water use efficiency, and other sources of water supply, including recycled water. While these elements are not proposed as part of the project, the Lead Agencies recognize that they are important tools in managing California's water resources.</p> <p>Please note that the preferred alternative is now Alternative 4A and no longer includes an HCP. Alternative 4A, also known as California WaterFix, has been developed in response to public and agency input and is the new CEQA Preferred Alternative.</p>
1976	2	Delta Agriculture: Chapter 14 "Agricultural Resources" describes the disproportionate value and benefit of Delta-area farmlands, which will be at risk due to the proposed project. It is inequitable and wrong to sacrifice one group of California's farmers for the benefit of others (and of other municipal areas) when, again, thoughtful and local alternatives exist at less cost	State constitutional restrictions require the reasonable and beneficial use of water and state law requires that water supplied from the Delta be put to beneficial uses. The Lead Agencies do not have the authority to designate what water deliveries are used for. Please refer to Master Response 34 regarding the potential uses of water delivered via BDCP proposed conveyance facilities.
1976	3	Significant and Unavoidable Adverse Impacts of the tunnels: Table 31-1 of the BDCP gives a long list of adverse impacts from this project. While this long list of problems is credible, the column of "Proposed Mitigation(s)" is astoundingly incomplete and unconvincing. To give but one mind-boggling yet typical example: for Problem GW-9, which endorses "Degrade groundwater quality," the mitigation listed is "No feasible mitigation to address this impact."	The EIR/EIS provides a summary of the significant and unavoidable impacts of action alternatives in Chapter 31. Table 31-1 identifies a number of significant and unavoidable impacts that could result from project implementation. The vast majority of the significant and unavoidable impacts also include mitigation measures to reduce the effect as much as possible. In some cases such as for Impact GW-9, Degrade Groundwater Quality, no feasible mitigation measures were identified to reduce this impact. As explained in Chapter 8, Groundwater, this is because some of the action alternatives that would result in a reduction of deliveries to areas south of the Delta could result in increases groundwater extraction in these areas that could affect groundwater quality. No feasible mitigation measures for this type of impact have been identified but this impact is not expected to occur for Alternative 4A, the preferred CEQA/NEPA alternative because surface water deliveries under this alternative are expected to increase slightly compared to the No Action Alternative conditions.
1976	4	Financing and Costs: There is no financing commitment or Implementing Agreement for agencies to pay for the BDCP. There is no obligation bond, and no federal appropriation. There is scrambling at the state level to attempt to reword proposed language for a bond vote under the pretense of being "tunnels neutral." Worse, news reports have exposed the fall-back position of increasing property taxes to pay for this project, under the guise that funding was guaranteed prior to the passage of Proposition 13. Lip service that "we would never impose these taxes, even though we could," is disingenuous at best	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).
1976	5	Offensively Undemocratic: The Peripheral Canal was voted down, with excellent reason, in 1982. This time, what is essentially the same attempt to divert water from the Delta is being rammed through under the radar and without a vote of the citizens of California. There have been multiple attempts to hide the project from public view and surreptitiously move it forward, including trespassing for soil sampling on farmers' lands (which our Courts justifiably saw as inappropriate), making it extremely difficult for the public to learn about and comment on this project (I still can't find where I can read other citizen or group comments, either pro or con), and, looking forward, the ways that the project's costs (whose current estimates are overly optimistic) will be transferred to general taxpayers	<p>Since 2006, the BDCP has 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.</p> <p>After the conclusion of scoping under CEQA and NEPA and prior to the release of public Draft BDCP and associated Draft EIR/EIS for public review and comment, State and Federal lead agencies sought to ensure transparency and public access throughout the interim planning years (2009-2013) by hosting public meetings, steering committee meetings, working group meetings and publication of preliminary and administrative drafts of both the BDCP and the EIR/EIS for informal public review. Although there is no specific requirement or guidance under state and federal environmental laws or policies to do so, meeting materials, meeting notes, meeting presentations, audio recordings of meetings, draft documents, and comment letters were made available to the public on the BDCP website. The correspondence included on</p>

DEIRS Ltr#	Cmt#	Comment	Response
			<p>the website included letters and reports from local governments', local, state and federal agencies, water and reclamation districts, elected officials, environmental non-governmental organizations, landowners and other stakeholders. Please see Master Response 41 for more information on project transparency.</p> <p>Please see Master Response 5 for details on project funding. This comment is an opinion on decision making for the proposed project. No comments on the EIR/EIS content are presented.</p>
1977	1	<p>There are two sections that attempt and fail to appropriately describe the communities and towns in the Delta. Specifically, these sections include page 17-11 the discussion provided about "rural centers" and page 17-18, Section 17.1.4.4 Residential. These sections should identify all of the communities that would be affected, but instead cites examples of the communities affected which appears to try to diminish the expanse of communities that will be affected. Each community in the Delta is unique in character and visual aesthetic; therefore, the impacts to each community will be different. These sections leave out important descriptions of Hood, Locke and Clarksburg. These communities will be heavily affected by the BDCP, particularly by the Department of Water Resources (DWR) preferred alternative (Alternative 4). Therefore, Chapter 17 should be revised to include a specific description of the visual aesthetic of each community in the Delta within the study area.</p>	<p>The intent of these sections were not to leave out communities or diminish effects. All affected communities are analyzed under Section 17.3, Environmental Consequences. The analysis describes rural communities in the Delta and provides examples, as indicated by saying "for example" on page 17-11 and "such as" in Section 17.1.4.4. These sections have been revised to include all communities that will have visual impacts, to be consistent with the impact analysis in Section 17.3, Environmental Consequences.</p>
1977	2	<p>Key Observation Point 12 (KOP 12) does not adequately represent the impact construction and operation of Intake 2 will have on the residents and visitors of Clarksburg. The photo taken is taken looking through one of the thickest vegetated areas on the levee. There is an area just to the north of the area this photo was taken near the Clarksburg Marina that is much less vegetated and provides sweeping open views of the river. Residents and visitors of Clarksburg often spend time to enjoy the views in this open area, sometimes while eating at the Dinky Diner. Simulations should be provided that will show the impacts to the views and visual character from this open area that is heavily used. This photo was clearly taken to obscure and diminish the potential impacts to Clarksburg. Therefore, this Key Observation Point should be revised to be taken from the area used by the community, photos should be retaken from the area used, and a simulation should be provided that will adequately represent the visual impacts to the community.</p>	<p>KOP 12 is taken from the location of where the Dinky Diner is located. This photo vantage is representative of both viewers at the pull-off and roadway viewers on CH E9. For reference, the white building shown in both the 2012 and 2013 photos on the west side of the road (right of the road in the photo) is Husick Hardware & General Store and the terra cotta tile shingles and flag pole of the house across from the pull-out can be seen in the July 2013 photo. At the time of the site visits (January 9-11, 2012 and July 29-30, 2013) the Dinky Diner was not in business. The Dinky Diner Facebook page indicates the grand opening was in April 19, 2014.</p> <p>The view from KOP 12 is looking directly toward Intake 2. Views of Intake 2 would be visible through gaps in the vegetation or if viewers are standing and leaning out and over the wooden fence at the top of the riverbank. However, shrubs and small trees line the riverbank along the fence line, the seating area for the diner is set back, and the area with the largest open gaps look directly across the river, toward the northeast.</p> <p>Vegetation at the southern end of the pull-out is thick at this location and views toward the southeast and Intake 2 include views of this vegetation, which do obscure views of the Intake, as shown in Figure 17-5. However, photos taken during the site visit and Google Street view both indicate that there is still fairly dense vegetation at this location even when looking slightly more east than what is shown in the photo for KOP 12 and this vegetation would prevent direct, unobscured and open views of the intake. The Clarksburg Marina has more direct views; however, the marina is gated for private access only and all simulations were prepared from public vantages. A simulation from KOP 12 would not illustrate a good view of the intake structure.</p> <p>Most views of project features from Clarksburg are partially to fully obscured by mature trees and shrubs, in addition to intervening development. However, more open views from both sides of the river do exist further north and south of Clarksburg, as indicated by other nearby KOPs.</p>
1977	3	<p>The rural character of the Delta is a place to be preserved and one of the critical pieces of that character is the dark night sky. Mitigation Measures AES-4a: Limit Construction to Daylight Hours Within 0.25 Mile of Residents and AES-4b: Minimize Fugitive Light from Portable Sources Used for Construction do not provide adequate measures to reduce the impacts to night sky posed by the project both during construction and during operation.</p>	<p>Please refer to Impact AES-4 that analyzes light and glare impacts, which first appears in the analysis for Alternative 1A on page 17-74. Page 17-75, lines 11-39, indicate that DWR will implement WREM No 30a. This measure indicates that "All artificial outdoor lighting is to be limited to safety and security requirements. All lighting is to provide minimum impact on the surrounding environment and is to be shielded to direct the light only towards objects requiring illumination. Lights shall be downcast, cut-off type fixtures with</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Dark night sky is an important aesthetic and visual resource in the Delta and there are additional feasible measures that can be taken to further reduce the impacts to dark night sky. First, a lighting mitigation plan should be prepared and shared with the public to outline all aspects of the project that will need lighting during construction and operation and provide the number of lights to be used, the Kelvin Color temperature of those lights and light monitoring should occur to ensure the project is in compliance with the lighting mitigation plan and the mitigation measures in the EIS/EIR. Second, selection of specific Kelvin color temperature lights is not even mentioned as a measure to reduce impacts. It is well known that selection of appropriate Kelvin color temperature lighting can significantly reduce the overall impacts to dark night sky during construction and operation. All lighting on the project should have a Kelvin color temperature of no greater than 3500 K. Reduction of Kelvin color temperature of lights is feasible and should be implemented on the project. Third, all lighting should follow the International Dark Sky Associations recommendations for approved fixtures for outdoor lighting particularly for permanent lighting, but also for construction lighting. Inappropriate lighting that is not managed to ensure protection of the night sky, if installed, will have one of the more profound impacts for the long term of this Project.</p>	<p>non-glare finishes set at a height that casts low-angle illumination to minimize incidental spillover of light onto adjacent properties, open spaces or backscatter into the nighttime sky. Lights shall provide good color rendering with natural light qualities with the minimum intensity feasible for security, safety and personnel access. All outdoor lighting will be high pressure sodium vapor with individual photocells. Lighting will be designed per the guidelines of the Illuminating Engineering Society (IES). Additionally, all lights shall be consistent with energy conservation and are to be aesthetically pleasing. Lights will have a timed on/off program or will have daylight sensors. Lights will be programmed to be on whether personnel is present or not.”</p> <p>Furthermore, WREM No 30a requires coordination and an architectural review process with local agencies (page 17-75, lines 15-18 of the DEIR/EIS). This applies to lighting design.</p> <p>Mitigation Measure AES-6b has been revised to establish that the project use lighting that is of a 3500 Kelvin color temperature or less.</p>
1977	4	<p>The community of Clarksburg relies entirely on individual groundwater wells as our source for residential potable water. Section 7.1.1 states that "Water is supplied to the Delta communities of Clarksburg....." This statement inaccurately characterizes the water supply process in Clarksburg and likely other communities of the Delta. Each household provides for their own water. The individual households pay for the drilling of wells, the permitting of wells, the energy to pump the water, the filtration and treatment and the continuous maintenance to ensure a supply of potable water to our homes. We supply our own water it is not supplied to us and in fact is our only way to get water. Impacts to this resource (e.g. lowering of groundwater that impacts our pumping ability or impacts to groundwater quality caused by the project) will have profound impacts economically to the people of Clarksburg. Many members of the community are not in a financial situation to personally address impacts to groundwater that either reduce access to water from their wells or change the water quality.</p>	<p>Section 7.1.1 of Chapter 7 Groundwater, indicates that private wells provide for the majority of potable water in Clarksburg. DWR recognizes that Clarksburg is not supplied by a municipal water system.</p> <p>Impact GW-1 provides information on the results of the groundwater modeling conducted for each alternative. The impact discloses that adverse impacts on groundwater wells could occur up to 2,600 feet from groundwater dewatering activities and states that dewatering could result in a reduction in surrounding groundwater levels by up to 20-feet. The lead agencies determined that this impact could be significant and have proposed mitigation to address the reduction in groundwater levels.</p> <p>Mitigation Measure GW-1 provides for monitoring the condition of groundwater supplies surrounding dewatering sites and for offsetting any losses in the form in the availability of groundwater used for domestic or agricultural purposes resulting from dewatering activities.</p>
1977	5	<p>On page 7-11, the EIS/EIR states that "an accurate accounting of groundwater used in the region is not available because wells are not metered"; however, it is apparent that not all appropriate measures were taken to obtain a factual accounting of the groundwater. Metering is not the only way to understand groundwater use and impacts. What is critical to me, as a homeowner in Clarksburg, is pumping rate and elevation change. It is clear that implementation of the BDCP will cause a change in depth to groundwater elevation. What is not clear is whether the EIS/EIR factually represents the elevation change over the lifetime of implementation of the Project partially because a factual representation of the existing conditions is not made available because the lead agencies appear not to have attempted to get that information from all reasonable sources. We were never asked any information about our well and would have been happy to provide it if asked. It appears that the lead agencies did not feel obligated to take all feasible measures to conduct the critical work needed to adequately characterize the existing groundwater conditions and levels in the Delta. This baseline assessment must be completed and at minimum a modeled analysis of impacts to groundwater associated with implementation of the BDCP must occur against the factual existing conditions in the Delta.</p>	<p>As described in Chapter 7 and Appendix 7A of the EIR/EIS, the CVHM-D model is used to compare groundwater conditions in the Delta under the action alternatives with conditions under the Existing Conditions and the No Action Alternative. Well logs near the construction sites and throughout the SWP and CVP service are not publically available; and detailed geologic data are not available in a universal level of detail for the study area. Therefore, the analysis was completed at a regional level for the comparison of alternatives. The EIR/EIS recognized the limitations of a regional evaluation used as part of the impact analysis. However, the Project Description for all of the alternatives includes commitments to conduct site-specific analyses during design, as described in Appendices 3B and 3C. During the design phase, DWR would conduct site-specific analysis to determine the extent of the potential conflicts related to conveyance facility construction, including locations of water supply, including individual wells, and drainage facilities. DWR would consult with local reclamation districts and land owners to ensure that construction activities would not conflict with existing wells and other facilities. It is possible, that some impacts may result in effects depending upon specific information that would be collected during design and construction phase. Mitigation measures have been identified in the EIR/EIS to reduce the impacts to less than significant as compared to Existing Conditions. Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 will reduce the severity of significant impacts in agricultural areas by implementing activities such as siting project footprints to encourage continued agricultural production and land uses; monitoring changes in groundwater levels during construction; monitoring seepage effects; relocating or replacing infrastructure in support of continued agricultural and other land use activities; identifying, evaluating, developing, and implementing</p>

DEIRS Ltr#	Cmt#	Comment	Response
			<p>feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional approaches.</p> <p>It also should be noted that this comment refers to information presented in Chapter 7 of the 2013 Draft EIR/EIS. At that time, the Project Description did not include use of slurry walls at construction sites to substantially reduce the effects of dewatering. Therefore, the Draft EIR/EIS stated that groundwater impacts due to conveyance construction and operation probably would not be able to be fully mitigated, and would remain significant and unavoidable under CEQA and adverse under NEPA. The Draft EIR/EIS included a mitigation measure suggestion to use slurry walls at the construction sites to reduce groundwater impacts during construction due to dewatering activities and during operations due to seepage from water storage areas. Results from groundwater modeling for Delta are presented in Chapter 7 and Appendix 7A in the EIR/EIS for construction of intakes, tunnel shafts, and forebay levees without installation of slurry walls.</p> <p>In the Final EIR/EIS, the Project Description for the Proposed Project (Alternative 4A) and Alternatives 2D and 5A were modified to include slurry walls. Slurry walls would be constructed around the construction site at the intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells. Dewatering wells also would be installed at construction sites associated with levees without the use of slurry walls. No dewatering would be required along the tunnel alignment. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. However, Mitigation Measures AG-1, GW-1, GW-5, and WQ-11 continue to be part of the implementation plans under Alternatives 2D, 4A, and 5A.</p> <p>As described in Mitigation Measure AG-1 in Chapter 14, Agricultural Resources, in the EIR/EIS, wells, pipelines, power lines, drainage systems, and other infrastructure that are needed for ongoing agricultural uses and would be physically adversely affected by project construction or operation would be relocated or replaced.</p>
1977	6	<p>On pages 7-47 to 7-52, mitigation measures to offset the impacts to groundwater in the "affected area" are presented. There are multiple concerns with the lack of effort given to present all feasible and reasonable mitigation measures associated with the project. First, given the lack of factual information about existing groundwater well conditions presented in the modeling of impacts, these mitigation measures must be revisited after the baseline conditions are appropriately assessed and impacts to groundwater associated with the project are appropriately identified</p>	<p>As described in Chapter 7, Groundwater, in the EIR/EIS, groundwater surveys would occur during the design phase to identify specific groundwater pre-construction conditions and potential effects on each well within the zone of influence of the dewatering operations. The revised Mitigation Measure GW-1 provides for a monitoring procedure and options for maintaining adequate water supplies for land owners that experience a reduction in groundwater production from wells due to construction-related activities.</p>
1977	7	<p>Mitigation Measure GW-1(MM-GW-1), provides no specificity on how this measure will be implemented. There is no clarity on monitoring or management of this measure. A plan must be in place and communicated to the public for public review, comment, and approval prior to starting construction. In addition, MM GW-1indicates that "the BDCP proponents will determine the location of wells within the anticipated area of influence of construction sites". Given the lack of appropriateness of the groundwater impact analysis enumerated above, it is not sufficient for the BDCP proponents to use the "anticipated area of influence" included in the analysis. The proponents must extend the region of wells to be included in the monitoring and mitigation associated with this measure at a minimum of 3 miles beyond the outer edge of the current anticipated affected area. In addition, to groundwater elevation monitoring, wells in this program should also be monitored for groundwater quality changes and if changes occur, there should be a clearly laid out plan for the BDCP proponents to offset that change.</p>	<p>As described in Chapter 7, Groundwater, in the Partially Recirculated Draft EIR/Supplemental Draft EIS, groundwater surveys would occur during the design phase to identify specific groundwater pre-construction conditions and potential effects on each well within the zone of influence of the dewatering operations. The revised Mitigation Measure GW-1 provides for a monitoring procedure and options for maintaining adequate water supplies for land owners that experience a reduction in groundwater production from wells due to construction-related activities, including dewatering. The monitoring would include both groundwater elevation and salinity. The effects of dewatering could be reduced through installation of seepage cutoff walls during dewatering. Implementing Mitigation Measure GW-1 would help address these effects; however, the impact may remain significant because replacement water supplies may not meet the preexisting demands or planned land use demands of the affected party. In some cases this impact might temporarily be significant and unavoidable until groundwater elevations recover to conditions similar to preconstruction conditions, which could require several months after dewatering operations cease. At this time, based on the CVHM model, it appears that the zone of influence would be approximately 0.5 miles from the dewatering activities. However, during design, more detailed hydrogeologic information will be reviewed to determine the actual zone of influence.</p>

DEIRS Ltr#	Cmt#	Comment	Response
1977	8	As homeowners and community members in Clarksburg, California, we will be significantly impacted by this project in many ways. We are concerned that the Draft Environmental Impact Report/Environmental Impact Statement ("EIR/EIS") for the Bay Delta Conservation Plan (Nov. 2013) ("BDCP") has not appropriately analyzed specific environmental impacts to the Clarksburg community, our homes, and our family. For certain impacts analyzed the mitigation measures proposed are inadequate and not all feasible measures have been considered. We request that revisions should be made to the BDCP and EIR/EIS to address our concerns and that the document be released again for public comment prior to agency finalizing a decision on implementation of the BDCP	In response to public and agency input, a joint RDEIR/SDEIS was prepared in compliance with the requirements of CEQA and NEPA. This recirculated document updated analysis to respond to many of these comments. Before the selection and approval of an alternative considered, the Lead Agencies must comply with the necessary state and federal environmental review requirements. This document, along with the BDCP Draft EIR/EIS, and Final EIR/EIS are intended to provide sufficient CEQA and NEPA support for approval of the proposed project or any of the action alternatives for either compliance strategy. 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 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 20 trustee agencies under CEQA (State CEQA Guidelines Sections 15381 and 15386) and cooperating agencies under NEPA (e.g., USACE and EPA). See Master Response 9 for information on the analysis of cumulative impacts to Delta residents.
1978	1	Through the work with North Delta Cares it has become very apparent that the proposed Environmental outreach to lower socioeconomic or minority groups has failed. In the BDCP Executive Summary, it is stated that "Public Outreach is CENTRAL to meeting the identified goals for environmental justice. Minority and low-income populations in the affected area must be provided with adequate opportunities to participate in the NEPA process. Beyond Scoping meetings, translators were to be present. The BDCP website was to be translated into Spanish and a multilingual informational hotline was to be available to provide specifics on the project." To this date, July 29th 2014. Only an incredibly small portion of the website is translated into Spanish. Only 2 BDCP information sheets are translated into Spanish. The Hotline appears to be useless, as the information regarding the Hotline was NEVER published in Spanish or made available in areas where low income, Spanish speaking community members reside.	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.
1978	2	At the Public scoping meetings, there was NO Physical SIGN or indication for Spanish (or any other language) translation. Non English Speaking/reading residents walked into the meeting and back out. Over and Over again they walked in and out. They had no way of knowing translation was available. None of the Visuals, maps or explanations was translated in Spanish. Notice of the Scoping meetings was not made available in Spanish or any other language in my community.	Please refer to Master Response 40 for information pertaining to outreach and education about the proposed project. Please refer to Master Response 27 for information relating to public outreach efforts to non-English speaking communities.
1978	3	I have traveled extensively in the communities of Clarksburg, Hood, and Courtland. I have intentionally sought out non English speaking members of our community to gauge if they even understand that a project is proposed. Resoundingly, the answer has been "No, we are unaware of the project and have not seen or heard anything about it in my language." According to the BDCP EIR/EIS over 50% of our community members speak and read a language other than English as their primary. We ask that the BDCP plan be translated into Spanish and the other 8 primary languages spoken in the Delta.	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.
1978	4	After the plan is released translated, we ask that our fellow community members be afforded an opportunity and appropriate time to read and respond to the plan that will negatively affect our community and its members (regardless of the language they speak) for 10 years.	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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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

DEIRS Ltr#	Cmt#	Comment	Response
			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.
1979	1	<p>Role of the Bureau of Reclamation:</p> <p>Reclamation is defined as an "Authorized Entity" and is represented in the Authorized Entity Group, which has been established to provide oversight and guidance regarding implementation of the BDCP. As currently written, however, the Implementing Agreement (IA) excludes Reclamation as a party to the agreement, and indicates that Reclamation's roles and responsibilities in the implementation of the BDCP will be described in a forthcoming memorandum or similar agreement. The discussions on July 10, 2014, were helpful in providing a better understanding of this issue. The IA (and any future memorandum with Reclamation) should: 1) clearly articulate the roles and responsibilities of all entities involved in the implementation of the BDCP; 2) more clearly describe the regulatory assurances (if any) that will be provided to Reclamation and its contractors including the San Luis and Delta-Mendota Water Authority; and 3) more clearly describe the conservation assurances that Reclamation and its contractors will provide in return.</p>	<p>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 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.</p> <p>The Preferred Alternative (Alternative 4A) no longer includes the BDCP or an NCCP, so an Implementation Agreement is no longer required. Master Response 5 provides information about the BDCP including an overview of the Implementation Agreement prior to the BDCP being replaced by Alternative 4A as the Preferred Alternative. This includes a discussion of the governance structure and purpose of the Implementation Agreement.</p> <p>Issues related to funding commitments, the Lead Agencies have prepared a Mitigation Monitoring and Reporting Program that includes additional details and provides for those funding commitments. Please refer to the Final EIR/EIS.</p> <p>The preferred alternative was developed in response to agency and public input and includes an Adaptive Management Program. Please see Master Response 33.</p>
1979	2	<p>Funding Issues:</p> <p>The descriptions of funding commitments in both the IA and the BDCP are vague and difficult to understand, particularly for monitoring and adaptive management. The IA provides limited details and it is not clear how funding for effectiveness monitoring (IA Section 10.4.1) and compliance monitoring (IA Section 16) will be accomplished. Both sections incorrectly reference tables in Appendix 3.E of the BDCP. In Appendix 3.D, Table 3.D-1 (Compliance Monitoring Actions) and Table 3.D-2 (Effectiveness Monitoring Actions) of the BDCP do not appear to align with BDCP Chapter 8, Table 8-30, Cost Estimate for Effectiveness and Compliance Monitoring.</p> <p>For Adaptive Management, who will fund the Supplemental Adaptive Management Fund (SAMF) and on what timeline?</p>	See response to comment 1979-1 above.
1979	3	The Supplemental Resources Fund (SRF) appears to be a new feature that was not previously included in the BDCP documents. The IA states that the SRF will be used as part of real time operations for the purpose of maximizing conservation benefits to covered fish species and maximizing water supplies, which appears to be a positive addition	The Preferred Alternative (Alternative 4A) no longer includes the BDCP or an NCCP, so reference a SRF is no longer applicable to the preferred project which is not an HCP.. See response to comment 1979-1 above.

DEIRS Ltr#	Cmt#	Comment	Response
		worthy of support. Nevertheless, how will the SRF interface with the SAMF? And how will both the SAMF and the SRF interface with funding described in Chapter 8 of the BDCP? The IA should clearly describe how much money would be available to the SAMF and the SRF, as well the sources and timing for contributions to these funds.	
1979	4	The funding provided by the Authorized Entities (AEs) for CMs 2-22 is capped and it is not clear how shortfalls will be funded despite the fact that some costs are sure to escalate. In the event of shortfall, what effect will cutting back on, or not implementing some of the CMs, have on achieving the BDCP's biological goals and objectives? In addition, it appears that AE funding for CMs 2-22 could be shifted to offset funding shortfalls in CM1; is this what is intended?	See response to comment 1979-1 above.
1979	5	Retained Authority of Other Agencies: Other important regulatory agencies are not party to this Implementing Agreement (IA), particularly the State Water Resources Control Board (SWRCB). The IA does not address how potential future regulatory permits or requirements imposed by other regulators might impact assurances provided to the parties of the IA.	See response to comment 1979-1 above.
1979	6	The Implementing Agreement's Compliance with the NCCPA: The IA should provide a clear road map to the location in which each requirement of the NCCPA is addressed within either the IA or in specific provisions of the BDCP referenced in the IA. In Section 4.2.1 on page 13, the IA states: "...concurrent with its approval of the BDCP, the CDFW will establish a list of species that are authorized for take pursuant to [Fish and Game Code] Section 2835 and make specific findings to support coverage pursuant to [Fish and Game Code] Section 2820." However, the NCCPA requires that an Implementing Agreement for a Natural Communities Conservation Plan (NCCP) include "provisions defining species coverage, including any conditions of coverage, " neither of which is presented in the IA (See Fish and Game Code Section 2820 (b) (1)). We have reviewed both the East Contra Costa County HCP/NCCP (ECCC HCP/NCCP) Implementing Agreement (January 22, 2007), and the Santa Clara Valley Habitat Plan (SCV HCP) Implementing Agreement (August 14, 2012) as examples of other IAs. Both of these agreements included a list of the species covered by the NCCP or HCP.	See response to comment 1979-1 above.
1979	7	Is Section 10.3.7, pages 36-38, of the Implementing Agreement, which appears to place significant limitations on adaptive management for water operations, fully consistent with the NCCPA's requirement that the adaptive management strategy be designed "to assist in providing for the conservation of covered species and ecosystems within the plan area" (see Fish and Game Code Section 2820 (a) (2))?	See response to comment 1979-1 above.
1979	8	The required monitoring program is not well developed in the BDCP. The NCCPA (Natural Community Conservation Planning Act) requires a fully developed biological monitoring program that meets the detailed criteria specified in Fish and Game Code Sections 2820(a)(7), 2805(g), and 2820(b)(5).	See response to comment 1979-1 above.
1979	9	Section 11.0, pages 40-44 of the IA, does not appear to include "provisions for oversight of plan implementation for purposes of assessing mitigation performance, funding, and habitat protection measures" as stipulated in Fish and Game Code Section 2820 (b) (6).	See response to comment 1979-1 above.

DEIRS Ltr#	Cmt#	Comment	Response
1979	10	Section 14.4.1, Page 53 of the Implementing Agreement (IA): While assurances from the California Department of Fish and Wildlife are described, there do not appear to be the commensurate conservation assurances that are required by Fish and Game Code Section 2820 (f). In our review of the East Contra Costa County HCP/NCCP IA and the Santa Clara Valley HCP IA, we found that both documents included provisions explicitly describing the conservation assurances that are being provided by the signatories to those agreements. We recommend the BDCP IA also include a discussion of commensurate conservation assurances.	See response to comment 1979-1 above.
1979	11	Section 22.4, page 82 of the Implementing Agreement (IA) describes suspension or revocation of the state permit. It is not clear how this section meets the requirements in Fish and Game Code Section 2820 (b) (3), which states that an IA for an NCCP must include specific terms and conditions, which, if violated, would result in the suspension or revocation of the permit. Those terms, for example, include failure to provide adequate funding; failure to maintain rough proportionality between impacts on habitat or covered species and conservation measures; adopting, amending or approving any plan or project that is inconsistent with the BDCP without obtaining the wildlife agencies' concurrence; or exceeding the amount of take authorized under the BDCP permits.	See response to comment 1979-1 above.
1979	12	BDCP Governance and Implementation: As currently described within the draft BDCP, many future decisions depend on achieving consensus at many organizational levels before meaningful actions can be taken to implement the BDCP. The IA appears to take pains to ensure that issues in dispute are discussed, but methods to speed decision making or resolve disputes are not well described. The relationship between the Parties, the Authorized Entity Group (AEG), and the Permit Oversight Group (POG) needs clearer definition; e.g., who is in charge and when? The governance of the BDCP could be substantially improved with clearer, crisper lines of authority and responsibility.	See response to comment 1979-1 above.
1979	13	The relationship of the Delta Science Program (DSP) to the implementation of the BDCP is not clear. The Implementing Agreement should articulate a strong relationship between the DSP and the BDCP, especially its adaptive management program, its incorporation of best available science and, its use of independent peer review.	See response to comment 1979-1 above.
1979	14	According to the Implementing Agreement, the BDCP Adaptive Management Team (AMT) comprises management personnel, not scientists. The IA further states that "...the Adaptive Management Team will identify relevant policy, legal, and regulatory principles and will make decisions regarding routine or administrative matters consistent with the schedule, budget and the adaptive resources available..." In addition, there is no requirement to include scientists on the Technical Facilitation Subgroup of the Stakeholder Council, which will provide technical support to the AMT. These observations prompt the question: What is the role of science and scientists in implementing the BDCP?	See response to comment 1979-1 above. With regards to the development of an Adaptive Management Program, please refer to Master Response 33.
1979	15	How will decisions/disputes regarding the adaptive management and monitoring programs be managed/resolved? Both the adaptive management and monitoring programs could benefit from stronger involvement of science and scientists working closely with those responsible for implementation.	See response to comment 1979-1 and 14 above.
1979	16	Section 14.2.2, pages 14 and 15, of the IA [Implementing Agreement] state that the BDCP	See response to comment 1979-1 above.

DEIRS Ltr#	Cmt#	Comment	Response
		includes "a transparent, real-time operational decision making process in which fishery agencies ensure that applicable biological performance measures are achieved in a timely manner with respect to water system operations", consistent with the Delta Reform Act and Water Code Section 85321. Neither the BDCP nor the IA defines those biological performance measures. It would be helpful if the IA made clear what those performance measures are, where those performance measures are found in the BDCP, and how they relate to the operating criteria that will guide real-time decision making.	<p>For more information regarding the application and considerations of the Delta Reform Act, please review Master Response 31.</p> <p>The biological goals and objectives were developed over several years of input with resource agencies. The biological goals and objectives are not included under Alternative 4A, but are still relevant for Alternative 4 (BDCP), which remains a viable alternative and is the original habitat conservation plan/natural community conservation plan (HCP/NCCP) alternative approach, containing biological goals and objectives.</p> <p>For more information on the biological goals and objectives for the BDCP, please see Master Response 5.</p>
1979	17	The Implementation Office (IO) will provide logistical and technical support but will not administer the adaptive management and monitoring program. It is not clear what, if any, management control the IO will have over the adaptive management and monitoring program even though the Science Manager reports to the Program Manager. The relationship between the Program Manager and the Science Manager in general is not clear.	See response to comment 1979-1 and 14 above.
1980	1	<p>I honestly hate the fact that people want to build tunnels here in the Delta. This is not going to affect just one family. It's going to affect hundreds of families. I know that my opinion might not make a big difference, although I hope it does.</p> <p>Going back in time, many of my family members have worked for ranch owners here in the Delta area; great grandparents, grandparents, parents, aunts, uncles and cousins. I grew up here in the Delta area and it is such a wonderful and beautiful experience to grow up in a peaceful area. I am now married and have a child of my own and I am looking forward to having him grow up here as well. The Delta is not only a beautiful place, but it has great schools here too. Children who attend these schools are more likely to continue after high school, rather than schools in the city.</p>	Please see Master Response 3 for more information regarding the purpose and need of the proposed project.
1980	2	I think that if people begin constructing tunnels in the Delta area, they are just going to keep on destroying the natural beauty the earth has to offer us. They will not only be destroying homes to families, but they will also be destroying earth's nature.	The issue raised by the commenter addresses the merits of the project and does not raise any issues with the environmental impact analysis provided in the EIR/EIS documentation. The proposed project was developed to meet the rigorous standards of the federal and state ESAs, and 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. The plan does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts.
1980	3	If they build tunnels to take water away from the Delta, there will be a huge impact crisis towards families and ranchers because there will be less work for workers and less farming for ranchers. Look for a different option.	<p>As a plan prepared to meet the rigorous standards of the federal and state Endangered Species Acts, the proposed project is intended to be environmentally beneficial, not detrimental. 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.</p> <p>The project proposes to stabilize water supplies, and exports could only increase under certain circumstances. Water deliveries from the federal and state water projects under a fully-implemented Alternative 4A are projected to be about the same as the average annual amount diverted in the last 20 years. Although the proposed project would not increase the overall volume of Delta water exported, it would make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline.</p>
1981	1	As a resident of Clarksburg I am aware there are people who do not read English. Ch. 28.2.1.3 line 40 Environmental Justice. There is a distinct disadvantage to populations that do not read or speak English. I have been unable to find a "hot line" that provides a	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Spanish translation. Also, none of the meetings have had a Spanish translator--at least none of the information meetings I've been to.</p> <p>I am requesting that all BDCP and DEIR/EIS be published in Spanish and other languages as required by CEQA and NEPA. It's the law!</p>	
1982	1	<p>Chapter 28, Section 28.2, 1.3 of the Environmental Justice requires that all information from the BDCP be made available in languages other than English.</p> <p>As a Clarksburg resident and former rural delivery mail carrier, I am acutely aware that many members of our community speak languages other than English.</p> <p>These residents are not being made aware of the "Tunnel Project". They do not understand what is being planned and therefore are unable to comment. This is blatantly unfair and requires immediate resolution before you proceed any further. They need to be brought up to speed.</p> <p>Some of the languages needed are: Spanish, Russian, Chinese and there are others. These residents are an integral part of the agriculture community here.</p>	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.
1983	1	<p>I am a resident of the West Sacramento and Clarksburg areas, and I am writing because I am aware that there are non-English speaking and reading community members that cannot understand the current documents written in English. As written in Chapter 28, the environmental justice Section 28.2.1.3 line 40: states there is a multilingual hotline. However we have been unsuccessful in finding that. I am requesting the BDC Plan, and the EIS/EIR be published printed and made available in all other languages spoken in our community. As shown on citydata.com we know 23% of our residents speak Spanish, 8.8% are other Indo-European, and 6.2% are Asian.</p>	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.
1984	1	<p>I am a resident of the Clarksburg area, I am concerned that there are non-English speaking community members who have not been able to fully comprehend the Draft Bay Delta Conservation Plan. Currently, the Draft Bay Delta Conservation Plan and the associated Draft Environmental Impact Report has been provided in English. Given that a significant percentage of the community does not speak or read English, they do not have opportunity to evaluate the plan.</p>	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.
1984	2	<p>As written in Chapter 28 the environmental justice section 28.213 line 40 states there is a multilingual hotline yet this information has not been provided.</p>	<p>The commenter's opinion related to the BDCP and Draft EIR/S is acknowledged. The commenter's suggestions will be considered in the project decision-making process. Please refer to Section 28.3 of Chapter 28, Environmental Justice, which describes the outreach and noticing activities that occurred to reach environmental justice communities. These activities were consistent with EO 12898 and the obligations described under Section 28.4, Regulatory Setting, of this chapter, including Reclamation's NEPA guidance in the Draft NEPA Handbook requirements. Public outreach documents are available in six languages (in addition to English), on the website, located at: http://baydeltaconservationplan.com/2015PublicReview/2015PublicReviewInformationalMaterials/2015_Multi-Lingual.aspx. Additionally, project proponents have provided translators at public scoping meetings; the BDCP Website in Spanish; and a multi-lingual information hotline for project information in English, Spanish, Tagalog, Vietnamese, or Chinese (Mandarin), which is posted on the website.</p>
1984	3	<p>I am requesting that the BDCP EIS/EIR be made available in all printed and published languages in our community.</p> <p>According to Citydata.com, we know that 23% of residents in the Clarksburg area speak</p>	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.

DEIRS Ltr#	Cmt#	Comment	Response
		Spanish, 8.8% speak other indo-European languages, and 6.2% speak Asian languages. I believe that all community members regardless of the language they speak should have opportunity to read and evaluate the proposal and impacts.	
1985	1	In the Clarksburg district, we have many Spanish speaking individuals and families that need the BDCP EIR/EIS in Spanish. It needs to be in the actual EIR/EIS and not some type of synopsis. These individuals and families need to be aware of the project specifics and its effects analyses. At the very least, these documents need to be available in Spanish.	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.
1986	1	I am a West Sacramento resident and I believe the EIR and Bay Delta Conservation Plan needs to be translated into languages of our community including Russian, Spanish, etc., as written in chapter 28 Environmental Justice section 282.13 line 40. There are Latino and non-English speaking folks in our community that need to be aware of this plan as it will affect their daily lives. I attempted to call a supposed "hotline" set up and it didn't work. As shown on the City data website, it shows that 23% of residents in my area speak Spanish only.	The commenter's opinion related to the BDCP and Draft EIR/S is acknowledged. The commenter's suggestions will be considered in the project decision-making process. Please refer to Section 28.3 of Chapter 28, Environmental Justice, which describes the outreach and noticing activities that occurred to reach environmental justice communities. These activities were consistent with EO 12898 and the obligations described under Section 28.4, Regulatory Setting, of this chapter, including Reclamation's NEPA guidance in the Draft NEPA Handbook requirements. Public outreach documents are available in six languages (in addition to English), on the website, located at: http://baydeltaconservationplan.com/2015PublicReview/2015PublicReviewInformationalMaterials/2015_Multi-Lingual.aspx . Additionally, project proponents have provided translators at public scoping meetings; the BDCP Website in Spanish; and a multi-lingual information hotline for project information in English, Spanish, Tagalog, Vietnamese, or Chinese (Mandarin).
1987	1	I am significantly concerned that at none of the meetings or workshops I have been to have Spanish translations of materials been available. Nor were Spanish-speaking people available that were knowledgeable about the environmental impact of the BDCP project available for the large Spanish speaking population of the community in Clarksburg. As a resident of this community, I am aware that many Spanish-speaking and Spanish-reading residents do not read and/or speak in English. As a result the process required under CEQA and NEPA with regard to Spanish speakers (Spanish speaking only) has not been followed. In accordance with the law, I request that 1. all materials be made available in Spanish, 2. the material be recirculated for the full environmental comment period, and 3. public workshops and meetings required as part of the CEQA/NEPA process by completed again in Spanish. As an added note, one cannot assume that electronic access would be available to this community, so reasonable and appropriate efforts must be made with hard copy materials and verbal presentation to present the Spanish-only speaking community of the Delta with the impacts of this Project. You cannot just post electronically to a website and you must give appropriate time for consideration post-providing the Spanish-speaking community the materials.	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.
1988	1	As a resident of West Sacramento, and having lived and worked throughout Yolo County, I'm fully aware that there are many people who do not read English live here. This puts your public outreach documentation out of compliance with the concept of environmental justice, section 28.2.13 (Chapter 28) Line 40. There is no Spanish. In California? We also have one of the largest Russian communities in North America right here in West Sacramento. There is no Chinese (Mandarin or Cantonese). No Hmong. Without being able to communicate with these new Americans in their native language--you cannot expect to really be doing a job of public education. Get on the stick!	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.

DEIRS Ltr#	Cmt#	Comment	Response
1989	1	<p>It has been brought to my attention that many of our community members are not aware of the tunnel project nor understanding the explanations regarding the project because it is not written in any language except English. We demand resolution to this most important issue.</p> <p>As written in Chapter 28 Environmental Justice Section 28.2 1&3</p> <p>I am requesting information for BDCP be made available in English and other available languages besides English. Nearly 40% of our community members speak a language other than English at home. Russian, Spanish, Celtic, Polish, Hmong, Viet[namese], Korean to name a few would be a good start.</p>	<p>The commenter's opinion related to the BDCP and Draft EIR/S is acknowledged. The commenter's suggestions will be considered in the project decision-making process. Please refer to Section 28.3 of Chapter 28, Environmental Justice, which describes the outreach and noticing activities that occurred to reach environmental justice communities. These activities were consistent with EO 12898 and the obligations described under Section 28.4, Regulatory Setting, of this chapter, including Reclamation's NEPA guidance in the Draft NEPA Handbook requirements. Public outreach documents are available in six languages (in addition to English), on the website, located at: http://baydeltaconservationplan.com/2015PublicReview/2015PublicReviewInformationalMaterials/2015_Multi-Lingual.aspx. Additionally, project proponents have provided translators at public scoping meetings; the BDCP Website in Spanish; and a multi-lingual information hotline for project information in English, Spanish, Tagalog, Vietnamese, or Chinese (Mandarin).</p>
1990	1	<p>As a member of the Clarksburg community, I am aware that there are residents who do not read English. It is important that all documents related to the EIR must be published in all languages that might include all residents - as written in Ch 28.2.1.2 Line 40.</p> <p>I request that all residents be provided with documents printed in their dominant language. Citydata.com shows 23% of people in my area are language deficient.</p>	<p>The commenter's opinion related to the BDCP and Draft EIR/S is acknowledged. The commenter's suggestions will be considered in the project decision-making process. Please refer to Section 28.3 of Chapter 28, Environmental Justice, which describes the outreach and noticing activities that occurred to reach environmental justice communities. These activities were consistent with EO 12898 and the obligations described under Section 28.4, Regulatory Setting, of this chapter, including Reclamation's NEPA guidance in the Draft NEPA Handbook requirements. Public outreach documents are available in six languages (in addition to English), on the website, located at: http://baydeltaconservationplan.com/2015PublicReview/2015PublicReviewInformationalMaterials/2015_Multi-Lingual.aspx. Additionally, project proponents have provided translators at public scoping meetings; the BDCP Website in Spanish; and a multi-lingual information hotline for project information in English, Spanish, Tagalog, Vietnamese, or Chinese (Mandarin).</p>
1991	1	<p>It has been brought to my attention that many of our community members are not aware of the "Tunnel Project" nor understanding explanations regarding this project because it is not written in any language except English. We demand resolution to this most important issue.</p> <p>As written in Chapter 28 Environmental Justice Section 28.2.1.3</p> <p>I am requesting that information from BDCP be made available in languages other than English. Nearly 40% of our community members speak a language other than English at home.</p>	<p>The commenter's opinion related to the BDCP and Draft EIR/S is acknowledged. The commenter's suggestions will be considered in the project decision-making process. Please refer to Section 28.3 of Chapter 28, Environmental Justice, which describes the outreach and noticing activities that occurred to reach environmental justice communities. These activities were consistent with EO 12898 and the obligations described under Section 28.4, Regulatory Setting, of this chapter, including Reclamation's NEPA guidance in the Draft NEPA Handbook requirements. Public outreach documents are available in six languages (in addition to English), on the website, located at: http://baydeltaconservationplan.com/2015PublicReview/2015PublicReviewInformationalMaterials/2015_Multi-Lingual.aspx. Additionally, project proponents have provided translators at public scoping meetings; the BDCP Website in Spanish; and a multi-lingual information hotline for project information in English, Spanish, Tagalog, Vietnamese, or Chinese (Mandarin).</p>
1992	1	<p>My company (Amistad Ranches) located in the Delta (Courtland, CA) employs at times up to 80 employees. More than 90% who do not read or speak English. They are presently unable to access information (EIR/EIS) regarding BDCP because the plan is only written in English. Because their lives could be impacted very severely by the BDCP the plan should be made available in Spanish per Chapter 28 section 28.2.1.3 line 40.</p>	<p>The commenter's opinion related to the BDCP and Draft EIR/S is acknowledged. The commenter's suggestions will be considered in the project decision-making process. Please refer to Section 28.3 of Chapter 28, Environmental Justice, which describes the outreach and noticing activities that occurred to reach environmental justice communities. These activities were consistent with EO 12898 and the obligations described under Section 28.4, Regulatory Setting, of this chapter, including Reclamation's NEPA guidance in the Draft NEPA Handbook requirements. Public outreach documents are available in six languages (in addition to English), on the website, located at: http://baydeltaconservationplan.com/2015PublicReview/2015PublicReviewInformationalMaterials/2015_Multi-Lingual.aspx. Additionally, project proponents have provided translators at public scoping meetings; the BDCP Website in Spanish; and a multi-lingual information hotline for project information in English, Spanish, Tagalog, Vietnamese, or Chinese (Mandarin).</p>
1993	1	<p>I live and have a working farm in Clarksburg. It has been brought to my attention the environmental Justice Section 28.2.1.3 is only in English. I have many Spanish friends who have tried to understand the BDCP. I am requesting the Plan be in Spanish and other</p>	<p>The commenter's opinion related to the BDCP and Draft EIR/S is acknowledged. The commenter's suggestions will be considered in the project decision-making process. Please refer to Section 28.3 of Chapter 28, Environmental Justice, which describes the outreach and noticing activities that occurred to</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>languages listed on Citydata.com. We all want to be educated and would like to hear the truth. This plan has been so confusing. Everyone should have a chance to comment, not just English speaking. The environment is important that's why we live in Clarksburg.</p>	<p>reach environmental justice communities. These activities were consistent with EO 12898 and the obligations described under Section 28.4, Regulatory Setting, of this chapter, including Reclamation's NEPA guidance in the Draft NEPA Handbook requirements. Public outreach documents are available in six languages (in addition to English), on the website, located at: http://baydeltaconservationplan.com/2015PublicReview/2015PublicReviewInformationalMaterials/2015_Multi-Lingual.aspx. Additionally, project proponents have provided translators at public scoping meetings; the BDCP Website in Spanish; and a multi-lingual information hotline for project information in English, Spanish, Tagalog, Vietnamese, or Chinese (Mandarin).</p>
1994	1	<p>I am writing to strongly oppose the "Twin Tunnels" project (aka Bay Delta Conservation Plan) to redirect water from the Sacramento River, thereby threatening to dewater the Sacramento-San Joaquin Delta for the benefit of a few water contractors and agribusinesses.</p> <p>"It is horrifying that we have to fight our own government to save the environment."</p> <p>-- Ansel Adams</p> <p>The Bay Delta Conservation Plan proposes to construct two massive tunnels that would funnel water from Northern California to Southern California. This project puts Northern California watersheds at risk by further marginalizing the importance of free-flowing watersheds. The plan calls itself a comprehensive conservation strategy aimed at protecting dozens of species of fish and wildlife, but the 40,000-page document fails to disclose major irreversible impacts on fish, rivers, and the economic stability of the state of California. These tunnels would sharply reduce water flow throughout the delta and harm thousands of sensitive aquatic species, including chinook salmon, steelhead trout, smelt, and green and white sturgeon. The tunnels would also wipe out food sources and habitat for migratory birds and other wildlife that depend on a functioning delta ecosystem to survive. The project's heads justify this killing by proposing future habitat restoration even as they readily admit uncertainty about where and how to make such a plan work.</p> <p>"Our duty to the whole, including to the unborn generations, bids us to restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for the conservation of wildlife and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose and method."</p> <p>-- Theodore Roosevelt</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>The Lead Agencies respectfully disagree with the general assertion that the documentation is fundamentally flawed and fails to disclose major irreversible impacts 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]. Refer to Chapter 32 (Public Involvement, Consultation, and Coordination) in the Draft EIR/EIS and Master Response 40 (Public Outreach Adequacy). The preferred alternative is now Alternative 4A (i.e., the California WaterFix Project) and no longer includes an HCP. 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. The commenter is also referred to the following Master Responses: Master Response 3 (Purpose and Need), Master Response 4 (Alternatives Development), and Master Response 5 (Conservation Measure 1 as a CM, Overview of Restoration and Enhancement Activities). Appendix 3A of the Draft EIR/EIS and Sections 3 and 4 in the RDEIR/DSEIS discuss in detail the various alternatives considered. The BDCP and the California WaterFix Project have been developed with the goals of minimizing and avoiding incidental take of covered species to the maximum extent practicable and to provide for the conservation of each of the covered species in the Plan Area. Chapter 5, Effects Analysis, BDCP, describes the anticipated effects of the project on covered fish and wildlife species in consideration of the covered activities, included changes in outflow. Chapter 11, Fish and Aquatic Resources, and Chapter 12, Terrestrial Biological Resources, Draft EIR/EIS, describe effects of the BDCP and its alternatives on fish and wildlife species in the Plan Area (see also Section 4 and Appendix A-Chapters 11 and 12 in the RDEIR/SDEIS). For a discussion of irreversible and irretrievable commitments of resources, significant irreversible environmental changes, and significant unavoidable impacts to aquatic resources (including fishes) and to surface waters (rivers), see Chapter 31 (Other CEQA/NEPA Required Sections) of the Draft EIR/EIS and Appendix A (Chapter 31) of the RDEIR/SDEIS. Socioeconomics are addressed in Chapter 16 of the Draft EIR/EIS and Appendix A (Chapter 16) of the RDEIR/SDEIS.</p>
1994	2	<p>The \$25-\$60 billion tunnels will rely on taxpayers to fund most of this restoration at a time when our state cannot afford it. Water is a public trust resource, and taxpayers shouldn't have to shoulder the burden of this project while water contractors turn a profit from exporting the delta's water. Nor should an entire river be redirected for the sake of large-scale, unmeted agriculture and the oil industry.</p>	<p>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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>"Our government is like a rich and foolish spendthrift who has inherited a magnificent estate in perfect order, and then has left his fields and meadows, forests and parks to be sold and plundered and wasted."</p> <p>-- John Muir</p>	<p>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.</p>
1994	3	<p>River systems throughout California have been experiencing extreme drought conditions, and historic water rights have not been honored because of the lack of water in our rivers and reservoirs. Building two giant tunnels to transport water from the San Joaquin Delta will not carry out either of the plan's two main goals: to reliably transport more water to San Joaquin farms and Southern California cities or to restore the fisheries and ecology of the delta.</p> <p>"As we peer into society's future, we--you and I, and our government--must avoid the impulse to live only for today, plundering for our own ease and convenience the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow."</p> <p>-- Dwight D. Eisenhower</p>	<p>The action alternatives would only export water allocated to the SWP and CVP under existing water rights, as limited by hydrologic conditions and regulatory requirements issued by the State and federal agencies.</p> <p>The concept of providing increased predictability is part of the Project Objectives and Purpose and Need for the alternatives for the proponents of the project, as indicated in Chapter 35, Glossary, of the Final EIR/EIS, under the definition of "water supply reliability." This term is defined as "The occurrence of water supplies of sufficient quality and certainty to enhance or sustain a diverse portfolio of economic activity and ecosystem health and maintain quality of life." Please see Master Response 3.</p> <p>Please refer to Master Response 5. The proposed project is just one element of the state's long-range strategy to meet anticipated future water needs of Californians. The action alternatives could only deliver the amount of water diverted under the existing SWP and CVP water rights and in accordance with the existing and future related regulatory requirements, as described in Chapter 5, Water Supply. No changes would occur to other water rights holders (see Section 5.3.1 of Chapter 5 of the EIR/EIS).</p>
1994	4	<p>Building more irrigation infrastructure, as the plan proposes, will not fix drought problems in California. Instead, this project will exacerbate drought conditions, resulting in greater impacts on threatened and endangered fish, such as delta smelt and steelhead and chinook salmon, by reducing flows to impaired watersheds, draining estuaries that are essential to healthy river ecosystems, and allowing the continued operation of pumps that will kill fish that are protected under the Endangered Species Act.</p> <p>"Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our material resources, in the effort to keep our forests and our game beasts, game-birds, and game-fish--indeed, all the living creatures of prairie and woodland and seashore--from wanton destruction. Above all, we should realize that the effort toward this end is essentially a democratic movement."</p> <p>-- Theodore Roosevelt</p>	<p>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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.</p>
1994	5	<p>Overall, the tunnels are unnecessary and fiscally irresponsible. California's water crisis is best solved by adopting a combination of water conservation, efficiency, and reuse strategies for both cities and farms. The existing aquaduct could be reinforced and other local water projects like rainwater collection could be implemented instead, providing a much greater benefit at a lower cost. The state and nation should invest in these proven strategies, instead of wasting tax dollars and sacrificing our precious natural resources.</p>	<p>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. The proposed 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, and the recovery and conservation of threatened and endangered species</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Please, protect the Delta and deny this project's permit.</p> <p>"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."</p> <p>-- Aldo Leopold</p>	<p>that depend on the Delta.</p> <p>Although components such as desalination plants and demand management measures have merit from a statewide water policy standpoint, and are being implemented or considered independently through the state, they are beyond the scope of the proposed project. 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 conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage.</p> <p>Please see Master Response 4 for discussion of the scope of the proposed project and alternatives (such as desalination or 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. Also, refer to Master Response 6 and Appendix 1C for further information on demand management measures, including increasing agricultural water use efficiency and water conservation. Please see Master Response 5 regarding funding of the proposed project. For more information regarding purpose and need please see Master Response 3.</p>
1995	1	<p>I have an alternate plan to upgrade the existing Delta Canal that would bring more water to Southern California without taking more water from Northern California. It is cheaper than the tunnels, less dangerous and more environmentally friendly.</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.</p> <p>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 proposed project was developed to meet the rigorous standards of the federal and state Endangered Species Acts, as such it is intended to be environmentally beneficial, not detrimental. 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. For more information regarding purpose and need please see Master Response 3. For more information regarding cost please see Master Response 5.</p>
1996	1	<p>One only has to look to the many northern California communities attempting to survive this summer with severe water restrictions! In my little town of Twain Harte (95383) we may very well run out of water before the summer is over, and heaven help us if we don't get more than normal rain and snow this winter. My yard, once green and productive in the summer is now dry and brown. I shower with a bucket in an attempt to try and save a few of my many landscape plants. Even my natives are looking like they will not survive.</p> <p>Our county leaders failed to look to future water supplies to sever our growing population but this failure does not in any way justify building these tunnels and shipping much needed northern California water south to pad the already padded pockets of agribusiness! The people and our environment must come first, last, and always before profits.</p> <p>NO TUNNELS, no more water for Southern Cal. let them build desalination plants and shower with a bucket as we are doing!</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>The BDCP/California WaterFix 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 BDCP/California WaterFix 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 proposed project is not intended to serve as a statewide 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, Water Demand Management).</p>

DEIRS Ltr#	Cmt#	Comment	Response
1997	1	<p>Southern California has taken more of its fair share of water for the past multiple decades, causing irreversible environmental damage as aquifers all over the southwest and west are drawn down for its benefit. It is well beyond time that northern California, not to mention the entire western US, to "Just say no" and insist that the southern half of the state learn to conserve and to use water more efficiently. Xeroscaping in private yards, closing of extraneous golf courses, shutting down wasteful public fountains - all these would help conserve water. And "big agriculture" in southern California must move from wasteful sprinkler systems to more efficient "drip" irrigation.</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>The action alternatives would only export water allocated to the SWP and CVP under existing water rights, as limited by hydrologic conditions and regulatory requirements issued by the State and federal agencies.</p> <p>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. The No Action Alternative and Alternatives 4H1, 4H2, 4H3, 4H4; 4A (Proposed Project); 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, as described in Appendix 5A, Section C, of the EIR/EIS.. 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. However, SWP and CVP water deliveries would continue under all alternatives.</p> <p>The Proposed Project is just one element of the state's long-range strategy to meet anticipated future water needs of Californians. As described in Section 1.1 of Chapter 1, Introduction, of the EIR/EIS, the proposed project was developed to improve water supply reliability by the project proponents. The action alternatives could only deliver the amount of water diverted under the existing SWP and CVP water rights and in accordance with the existing and future related regulatory requirements, as described in Chapter 5, Water Supply. No changes would occur to other water rights holders (see Section 5.3.1 of Chapter 5 of the EIR/EIS).</p>
1998	1	<p>I live in Southern California and I think this proposal - twin tunnels - stinks. I've been a conservationist for several decades, and I'm still blown away by how much wasted water I see on a daily basis. Homeowners watering their lawns at 3p when it's in the 90s; People hosing off their precious driveways and sidewalks - I assume they've not heard of a broom; Rainbirds and sprinklers which are either not adjusted or on too long, or both - why else would there be a water flow in the gutters? Asking us to conserve water just doesn't cut it. People in general tend to be unaware of much around them. As long as the state relies on voluntary compliance nothing will change. Force people to make changes in their water usage, and leave the water up north for the Delta - it's wildlife and birds, and those who enjoy their existence. Thank you.</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>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. The BDCP/California WaterFix 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. 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 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, Water Demand Management). The proposed project would not increase the amount of water to which SWP and CVP hold water rights for use allowed under their contracts and permits and approvals for refuge water supplies or other environmental purposes.</p>
1999	1	<p>Work done years in the future - if ever - will not prevent the devastation to plants and animals that depend on the Sacramento-San Joaquin Delta now. Endangered species could easily be driven to extinction.</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>The commenter's opinion related to the project is acknowledged. The Plan provides for implementing short-term, mid-term and long-term conservation actions that are intended to improve ecological conditions for species in the Plan Area.</p>

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2000	1	<p>The Tulare Kings County Hispanic Chamber of Commerce supports your efforts to solve California's water challenges. Tulare and Kings County relies heavily on the State Water Project for its water. We understand that while we continue to invest in conservation, Delta water remains the essential resource for Tulare and Kings County.</p> <p>The Sacramento - San Joaquin Delta region, through which we draw State Water Project supplies, is increasingly vulnerable. Environmental concerns are mounting and water supplies for 25 million people, businesses and farms throughout the state are in jeopardy.</p> <p>Thank you for recognizing that it is time for California to advance a new plan -- the Bay Delta Conservation Plan (BDCP) -- which will restore and protect the Delta environment and ensure that California has a reliable water supply for years to come.</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.</p> <p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS and is consistent with information presented in Chapter 2, Project Objectives and Purpose and Need, of the Final EIR/EIS.</p>
2000	2	<p>The construction of a new water conveyance is an essential element of the BDCP. The proposed twin tunnel system will protect public water supplies from earthquakes -- which the U.S. Geological Survey predicts in the coming years -- were they to trigger levee breaks and cause saltwater to intrude from San Francisco Bay. New intakes in the northern Delta will reduce conflicts with migrating fish species such as salmon. Regulatory stability will protect an estimated 1.1 million jobs throughout the state and it is estimated that construction projects and operations will create more than 137,000 jobs. Tulare and Kings County agriculture is essential to California's ability to feed itself and the world. Hispanic businesses need a reliable water supply to plan for expansion and create jobs. Failure to act and address our states water needs will lead to disaster.</p> <p>On behalf of the Tulare Kings County Hispanic Chamber of Commerce, we appreciate you taking the necessary steps to move the BDCP process forward.</p>	<p>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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.</p>
2001	1	<p>On behalf of the California State Council of Laborers, I am writing to express our strong support for California's proposed Bay-Delta Conservation Plan (BDCP) and specifically, Alternative 4 as outlined in the Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS).</p> <p>It has been more than 30 years since the State Water Project increased our water storage capacity, yet our population has increased drastically! It is vital that we begin making the needed investments to our state's water supply infrastructure, to ensure adequate drinking water supplies are in place to continue to move our economy forward, and to maintain our commitment of job creation in so many industries throughout the state.</p> <p>The BDCP will help our state meet its many water supply challenges by providing the funding to ensure clean, safe drinking water now--and for generations to come.</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.</p>
2001	2	<p>The Laborers have long maintained a position that is in-line with the state's commitment to protecting, restoring and enhancing the Delta ecosystem and providing California</p>	<p>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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. Numerous comments were received that</p>

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		<p>residents and businesses a reliable water supply.</p> <p>We can no longer afford to wait. Without the system improvements outlined in the BDCP Alternative 4, not only will the Delta fail to receive needed environmental restoration, but communities across the state will be at risk of water disruptions, major impact to our agricultural industry and food supply. There would be an impact on much needed development projects and we could potentially lose new industry investments in the state due to the lack of a clean, reliable water supply.</p>	<p>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.</p>
2001	3	<p>We respectfully urge you to move forward with Alternative 4 of the BDCP as quickly as possible, for the benefit of the citizens of the state and the long term economic prosperity moving forward into the future. It is clearly the most responsible plan to meet California's environmental and economic objectives, while ensuring safe and reliable water for our state's residents.</p>	<p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.</p>
2002	1	<p>The Los Angeles Latino Chamber of Commerce supports your efforts to solve California's water challenges. Los Angeles County relies heavily on the State Water Project for its water. We understand that while we continue to invest in conservation, Delta water remains the essential resource for Los Angeles County.</p> <p>The Sacramento - San Joaquin Delta region, through which we draw State Water Project supplies, is increasingly vulnerable. Environmental concerns are mounting and water supplies for 25 million people, businesses and farms throughout the state are in jeopardy.</p> <p>Thank you for recognizing that it is time for California to advance a new plan -- the Bay Delta Conservation Plan (BDCP) -- which will restore and protect the Delta environment and ensure that California has a reliable water supply for years to come.</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.</p> <p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS and is consistent with information presented in Chapter 2, Project Objectives and Purpose and Need, of the Final EIR/EIS.</p>
2002	2	<p>The construction of a new water conveyance is an essential element of the BDCP. The proposed twin tunnel system will protect public water supplies from earthquakes -- which the U.S. Geological Survey predicts in the coming years -- were to trigger levee breaks and cause saltwater to intrude from San Francisco Bay. New intakes in the northern Delta will reduce conflicts with migrating fish species such as salmon. Regulatory stability will protect an estimated 1.1 million jobs throughout the state and it is estimated that construction projects and operations will create more than 137,000 jobs.</p> <p>Our state's agriculture is essential to California's ability to feed itself and the world. Hispanic businesses need a reliable water supply to plan for expansion and create jobs. Failure to act and address our states water needs will lead to disaster. On behalf of the Los Angeles Latino Chamber of Commerce, we appreciate you taking the necessary steps to move the BDCP process forward.</p>	<p>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.</p>
2003	1	<p>In recent years, both state and federal project deliveries have been repeatedly interrupted and reduced due to operational conflicts with threatened and endangered Delta species. Since 2007, it is estimated that nearly 3.5 million acre feet of water that normally could have been delivered by the SWP was lost due to these conflicts. This water</p>	<p>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.</p>

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		<p>loss is roughly equivalent to a 35-year supply for the Calleguas service area - a startling and troubling reality!</p> <p>Additionally, both projects risk complete failure given the vulnerability of the Delta levee system to catastrophic earthquake and flood events - threatening water supplies for Southern California, the Bay Area, the Central Coast and the Central Valley for many years. These risks are clearly unacceptable, and conditions are expected to worsen with climate change unless steps are taken now to mitigate these concerns.</p>	
2003	2	<p>Southern California ratepayers have been investing in the State Water Project for more than four decades, and have additionally invested billions of dollars in regional storage and conveyance to allow Southern California to capture water when it is plentiful and reduce demands on imported supplies during dry and critically dry years. These investments are effectively stranded if water deliveries from the project continue to degrade.</p> <p>The proposed BDCP, being developed under provisions of the state and federal endangered species protection laws, is the most promising plan developed to date to solve these challenges and resolve decades of conflicts between agricultural, urban and environmental water users with a comprehensive solution that achieves California's Co-Equal goals of a reliable water supply and a restored Delta ecosystem for the benefit of all water users.</p> <p>The release of the public draft BDCP represents an important milestone in this eight-year stakeholder process. In exhaustive detail, the draft BDCP illustrates the complexity of the problems and the need for a comprehensive approach to resolve conflicts in the Delta through a multi-species habitat conservation plan that protects the state's water resources and infrastructure.</p>	<p>The commenter states that the project will balance the agricultural, urban, and environmental needs of the state. 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.</p>
2003	3	<p>We are supportive of the BDCP's proposed twin-tunnel conveyance system that isolates and protects drinking water supplies and helps restore natural flow patterns in the Delta for the benefit of native species, as well as the complementary habitat restoration, water quality and predator control measures outlined in the BDCP. We also support the plan's recognition that changing conditions in the Delta will require ongoing scientific review and real-time monitoring so the plan can effectively adapt over time to emerging science and the evolving ecosystem. The draft plan also provides an important framework for a range of operational outcomes and level of certainty necessary for a final plan to merit investment by participating public water agencies and by the state and federal governments.</p> <p>While key decisions remain relating to specifics on cost allocations, operations, outflow range, financing and other issues; the current draft details a workable solution to the challenges facing California's water resources and the Delta. The proposed BDCP is the most comprehensive effort ever undertaken to address the chronic water challenges facing the state and federal water projects in a manner that is protective of the Delta environment. We remain supportive of the efforts of Metropolitan and the other state and federal water contractors in the development of the BDCP and urge the state to move forward with the draft plan and focus on resolving those remaining issues needed to provide assurances that the plan will achieve California's co-equal goals of water supply reliability and ecosystem restoration in a cost-effective manner.</p>	<p>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 note that the new preferred alternative is now Alternative 4A (California WaterFix) and does not involve an HCP component. However, the lead agencies maintain that the new preferred alternative continues to meet the co-equal goals of a reliable water supply and a restored Delta ecosystem to benefit all water users.</p>

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2004	1	<p>In recent years, both state and federal project deliveries have been repeatedly interrupted and reduced due to operational conflicts with threatened and endangered Delta species. Additionally, both projects risk complete failure given the vulnerability of the Delta levee system to catastrophic earthquake and flood events -threatening water supplies for all of California for up to three years.</p> <p>The proposed BDCP, being developed under provisions of the State and federal end angered species protection laws, is the most promising plan developed to date to solve these challenges and resolve decades of conflicts between agricultural, urban and environmental water users with a comprehensive solution that achieves California's Co-Equal goals of a reliable water supply and a restored Delta ecosystem for the benefit of all water users.</p>	<p>This comment is consistent with information presented in Chapter 2, Project Objectives and Purpose and Need, in the BDCP EIR/EIS. Please note that the new preferred alternative is now Alternative 4A (California WaterFix) and does not involve an HCP component. However, the lead agencies maintain that the new preferred alternative continues to meet the co-equal goals of a reliable water supply and a restored Delta ecosystem to benefit all water users.</p>
2004	2	<p>We are supportive of the BDCP's proposed alternative #4 -- the twin-tunnel conveyance system that isolates and protects drinking water supplies and helps restore natural flow patterns in the Delta for the benefit of native species, as well as the complementary habitat restoration, water quality and predator control measures outlined in the BDCP.</p> <p>The proposed BDCP is the most comprehensive effort ever undertaken to address the chronic water challenges facing the state and federal water projects in a manner that is protective of the Delta environment.</p> <p>We urge the state to move forward with the draft plan and focus on resolving those remaining issues needed to provide assurances that the plan will achieve California's co-equal goals of water supply reliability and ecosystem restoration in a cost-effective manner.</p>	<p>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 note that the new preferred alternative is now Alternative 4A (California WaterFix) and does not involve an HCP component. However, the lead agencies maintain that the new preferred alternative continues to meet the co-equal goals of a reliable water supply and a restored Delta ecosystem to benefit all water users.</p>
2005	1	<p>In recent years, both state and federal project deliveries have been repeatedly interrupted and reduced due to operational conflicts with threatened and endangered Delta species. Additionally, both projects risk complete failure given the vulnerability of the Delta levee system to catastrophic earthquake and flood events -threatening water supplies for all of California for up to three years.</p> <p>The proposed BDCP, being developed under provisions of the State and federal end angered species protection laws, is the most promising plan developed to date to solve these challenges and resolve decades of conflicts between agricultural, urban and environmental water users with a comprehensive solution that achieves California's Co-Equal goals of a reliable water supply and a restored Delta ecosystem for the benefit of all water users.</p>	<p>This comment is consistent with information presented in Chapter 2, Project Objectives and Purpose and Need, in the BDCP EIR/EIS. Please note that the new preferred alternative is now Alternative 4A (California WaterFix) and does not involve an HCP component. However, the lead agencies maintain that the new preferred alternative continues to meet the co-equal goals of a reliable water supply and a restored Delta ecosystem to benefit all water users.</p>
2005	2	<p>We are supportive of the BDCP's proposed alternative #4 -- the twin-tunnel conveyance system that isolates and protects drinking water supplies and helps restore natural flow patterns in the Delta for the benefit of native species, as well as the complementary habitat restoration, water quality and predator control measures outlined in the BDCP.</p> <p>The proposed BDCP is the most comprehensive effort ever undertaken to address the chronic water challenges facing the state and federal water projects in a manner that is protective of the Delta environment.</p> <p>We urge the state to move forward with the draft plan and focus on resolving those remaining issues needed to provide assurances that the plan will achieve California's co-equal goals of water supply reliability and ecosystem restoration in a cost-effective</p>	<p>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 note that the new preferred alternative is now Alternative 4A (California WaterFix) and does not involve an HCP component. However, the lead agencies maintain that the new preferred alternative continues to meet the co-equal goals of a reliable water supply and a restored Delta ecosystem to benefit all water users.</p>

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2006	1	<p>manner.</p> <p>The Environmental Protection Agency fully supports the stated purpose of the BDCP effort: to produce a broad, long-term planning strategy that would meet the dual goals of water reliability and species recovery in this valuable ecosystem, and we recognize the potential benefits of a new conveyance facility. However, we are concerned that the actions proposed in the Draft EIS may result in violations of Clean Water Act water quality standards and further degrade the ecosystem.</p> <p>Our comments are consistent with those we have made in conversations that have taken place over the last few years among the agencies involved in managing the Delta. Many of our comments have also been made by others, both formally and informally, throughout the process, and we believe that they reflect a developing consensus within the scientific and regulatory communities. We are committed to continuing to work with you and other stakeholders toward a project proposal that meets the dual goals of water reliability and species recovery in the Bay Delta, and toward a well documented EIS that adequately informs decision-makers and the public, as required by NEPA.</p>	<p>The Lead Agencies appreciate EPA's involvement in the planning process as well as the commitment to stay involved moving forward.</p> <p>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. Where EPA comments submitted on the BDCP focus on elements outside the scope of the environmental analysis, or viability of the BDCP and other HCP/NCCP alternatives within the CEQA/NEPA context (e.g., request of specific revisions to the BDCP related to mapping or references), detailed responses are not provided. Further consideration will be given to these comments and appropriate revisions to the Draft BDCP made if an HCP/NCCP alternative is ultimately approved at the conclusion of the CEQA/NEPA process. Please refer to Master Response 5 for more information on BDCP.</p> <p>In regards to compliance with the Clean Water Act and degradation of the ecosystem, updated modeling has been done for Alternative 4A (and other non-HCP alternatives presented in the RDEIR/SDEIS) which more accurately reflects conditions under the alternative. The lead agencies believe that the modeling results show decreased salinity in the western Delta due to the reduced restoration acreages and operational assumptions.</p>
2006	2	<p>Clean Water Act Water Quality Standards</p> <p>The Draft EIS shows that operating any of the proposed conveyance facilities, which constitute Conservation Measure 1 (CM1), would contribute to increased and persistent violations of water quality standards in the Delta, set under the Clean Water Act, measured by electrical conductivity (EC) and chloride concentrations. We recommend that the Supplemental Draft EIS include one or more alternatives that would, instead, facilitate attainment of all water quality standards in the Delta. Specifically, we recommend that an alternative be developed that would, at minimum, not contribute to an increase in the magnitude or frequency of exceedance of water quality objectives, and that would address the need for water availability and greater freshwater flow through the Delta. Such an alternative should result in a decrease in the state and federal water projects' contributions to the exceedance of any water quality objectives in the Delta.</p> <p>We also note that, while CM1 would improve the water quality for agricultural and municipal water agencies that receive water exported from the Delta, water quality could worsen for farmers and municipalities who divert water directly from the Delta. In that regard, we recommend that the Supplemental Draft EIS consider measures to ensure that the project would not increase concentrations of bromide around the intake for the North Bay Aqueduct at Barker Slough. In addition, we recommend consideration of whether additional measures, such as operational modifications both upstream and downstream, are needed to avoid increasing mercury and selenium concentrations and bioavailability in the Delta.</p> <p>The Draft EIS indicates that CM1 would not protect beneficial uses for aquatic life, thereby violating the Clean Water Act. Total freshwater flows will likely diminish in the years ahead as a result of drought and climate change. Continued exports at today's prevailing levels would, therefore, result in even lower flows through the Delta in a likely future with less available water. We recommend that the Supplemental Draft EIS consider modified operational scenarios for CM1 alternatives that would have beneficial effects on covered fish populations during all life stages and attain water quality standards in the</p>	<p>Please see Master Response 47 regarding drought and California WaterFix, Master Response 19 regarding Climate Change, Master Response 14 regarding Water Quality, and Master Response 28 regarding Operational Criteria.</p> <p>The preferred alternative, Alternative 4A, no longer includes an HCP and large scale habitat restoration actions throughout the Delta that were shown to cause the majority of the water quality impacts of Alternative 4. The water quality impacts expected to occur under Alternative 4A, as well as Alternatives 2D and 5A, have been evaluated and the impacts disclosed in the RDEIR/SDEIS and Final EIR/EIS.</p> <p>The EC water quality impacts are discussed in Final EIR/EIS Chapter 8 Water Quality at Impact WQ-11: Effects on Electrical Conductivity Concentration Resulting From Facilities Operations and Maintenance. The EC objective that applies between Prisoners Point and Jersey Point applies in April and May of all water year types except Critical water years. When the model is predicting exceedances of the Prisoners Point objective, the maximum EC is about 600 uS/cm, which equates to roughly 120 mg/L chloride. This is well below municipal and industrial chloride objectives.</p> <p>Agricultural beneficial uses are protected by EC objectives provided in Table 2 of the Bay Delta WQCP. These are either year-round (Southern Delta) or begin on April 1 and extend to June, July, or August, depending on water year type. However, all objectives apply throughout April and May of all water year types, and the numeric value of the objective was originally based on a threshold at which the beneficial use was thought to be affected. The Lead Agencies have proposed Mitigation Measure WQ-11e to reduce potential residual significant impacts to a less-than-significant level.</p> <p>The RDEIR/SEIS and Final EIR/EIS also address bromide at Impact WQ-5: Effects on Bromide Concentrations Resulting from Facilities Operations and Maintenance. The analysis for changes in bromide concentrations in the western Delta attributable to Alternative 4A would not result in any substantial change in long-term average bromide concentration or exceed 50 and 100 µg/L assessment threshold concentrations by frequency, magnitude, and geographic extent that would result in adverse effects on any beneficial uses within affected water bodies.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		Bay Delta.	
2006	3	<p>Habitat Restoration</p> <p>The Draft EIS describes a general proposal to restore approximately 150,000 acres of wetlands, uplands, grasslands, and riparian areas in and around the Delta to offset the adverse impacts of the continued operations of the water projects. However, the Draft EIS does not indicate whether suitable acreage is available or whether restoration alone would be sufficient to recover fish populations. We are concerned over the sole reliance on habitat restoration for ecosystem recovery, recognizing that existing freshwater diversions and significantly diminished seaward flows have played a significant role in precluding the recovery of Bay Delta ecosystem processes and declining fish populations. We recommend that the Supplemental Draft EIS consider measures to ensure freshwater flow that can meet the needs of those populations and the ecosystem as a whole, and is supported by the best available science. We recommend that this analysis recognize the demonstrated significant correlations between freshwater flow and fish species abundance. We also recommend that the Supplemental Draft EIS include gradients of partial success for each habitat type to be restored, as supported by available science. The impacts could be re-evaluated relative to each alternative (CMs2-11) in light of these gradients and the likely success rates for each habitat restoration type.</p>	<p>The Recirculated Draft EIR/Supplemental Draft EIS released in 2015 introduced a new preferred alternative, 4A, which does not include a HCP or conservation measures. The alternative implementation strategy allows for other state and federal programs to address the long term conservation efforts for species recovery in programs separate from the proposed project. Alternative 4A would implement substantially less habitat restoration than Alternative 4. Please refer to Final EIR Chapter 3, Description of Alternatives, for more detail.</p> <p>The EIR/EIS considers temperature, WUA, and other factors to understand how changes in flow result in biological effects. Changes in flow don't necessarily translate to biological effects and the analysis does not assume it does without further investigation into potential mechanisms for effects. Please see Chapter 11 of the Final EIR/EIS for more information.</p> <p>Please see Master Response 5 regarding BDCP Conservation Measures and restoration, and Master Response 4 regarding Alternative Development.</p>
2006	4	<p>Alternatives</p> <p>The Draft EIS defines the alternatives in terms of the design and capacity of the proposed conveyance structure. Each alternative is paired with a particular operational scenario. The Environmental Protection Agency (EPA) agreed with this organizational construct early in the BDCP process, expecting that the Draft EIS would present a range of fully evaluated alternatives that clarifies the environmental and water supply tradeoffs being considered. The Draft EIS, however, focuses primarily on Alternative 4. It appears that the environmental impacts of certain other alternatives would be reduced if those alternatives were matched with more optimal operational criteria (for example, Alternative 5 with Operational Scenario F). Other reasonable alternatives could be developed by incorporating a suite of measures, including Integrated Water Management, water conservation, levee maintenance, and decreased reliance on the Delta. [footnote 1: The "Portfolio Approach" developed by a diverse set of stakeholders is one attempt to place Delta water management into the larger context of facilities investments and integrated operations. http://www.sdcwa.org/sitcs/default/files/files/news-center/top-issues/pmtfolio-based-bay-delta-conceptual-alternative_1-16-13.pdf] Such alternatives would be consistent with the purpose and need for the project, as well as with the California Bay Delta Memorandum of Understanding among federal agencies [footnote 2: http://www2.epa.gov/sitcs/productionfiles/documcnts/baydeltamouslysigned.pdf] and the Delta Reform Act of 2009.</p>	<p>The alternatives 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. The specific proposals that were considered but ultimately rejected by the Lead Agencies are discussed in EIR/EIS Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1. Appendix 3A thoroughly explains why various proposals were not analyzed in the EIR/EIS. In addition, Master Response 4 provides an overview of the alternatives development and screening process.</p> <p>The Lead Agencies will make the final decisions regarding the selection of an alternative (including 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 Chapter 3 of the Final EIR/EIS for additional information on Proposed Project operations.</p> <p>Refer also to Master Response 3 (Purpose and Need), Master Response 6 (Demand Management), and Master Response 44 (Decision Tree).</p>
2006	5	<p>Project-level Analysis</p> <p>The Draft EIS states that it includes a project-level analysis of environmental effects associated with CM1 (the conveyance facilities, which define the alternatives), and a programmatic-level analysis of 21 other Conservation Measures, including a suite of habitat restoration and aquatic stressors management initiatives. Programmatic-level inputs were used in some of the project-level analyses. The (U.S. Environmental</p>	<p>The impact assessment for Alternatives 4A, 2D, and 5A included in the RDEIR/SDEIS and Final EIR/EIS have been conducted at the project level which includes construction and operation of the water conveyance facilities, consistent with the project-level analysis of CM1 in the Draft EIR/EIS. Master Response 2 provides an overview of project v program-level assessments.</p> <p>Refer also to Master Response 5 regarding BDCP Conservation Measures.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		Protection Agency Region 9 recommends that the supplemental Draft EIS include project-level information and analyses for the conveyance tunnels, including the information necessary for permit decisions, to support the federal decision.	
2006	6	<p>Upstream/Downstream Impacts</p> <p>The federal and State water management systems in the Delta are highly interconnected, both functionally and physically. The Draft EIS does not address how changes in the Delta can affect resources in downstream waters, such as San Francisco Bay, and require changes in upstream operations, which may result in indirect environmental impacts that must also be evaluated. We recommend that the Supplemental Draft EIS include an analysis of upstream and downstream impacts.</p>	<p>The Plan Area is defined by the boundaries of the legal Delta with the addition of the Suisun Marsh area. The EIR/EIS project area includes the Plan Area, upstream of the Delta region and the SWP and CVP export Service Areas because some of the effects of implementing the proposed project or its alternatives would extend beyond the Plan Area. The analysis in the EIR/EIS includes impacts to Delta outflows, which ultimately reach the San Francisco Bay as well as impacts to Southern California and the San Joaquin Valley. In addition, the Final EIR/EIS, Chapter 8 Water Quality, Impact WQ-34: Effects on San Francisco Bay Water Quality Resulting from Facilities Operations and Maintenance and Environmental Commitments, provides an assessment of impacts on water quality parameters within San Francisco Bay that may be affected by operation of the proposed project. Refer also to Master Response 14 (Water Quality). The analysis of impacts of the proposed project and alternatives in the study area can be found in the Final EIR/EIS chapters 5-30. The CALSIM II modeling performed for conveyance facility operations takes into account projected future demand for water supply in areas upstream of the Delta (as part of the future No Action baseline) prior to calculating Proposed Project diversion estimates to ensure that no area-of-origin protections or upstream water rights are affected by project conveyance facilities. Please see Appendix 5A of the Final EIR/FEIS for additional modeling information. The appendix includes information regarding modeled upstream hydrologic conditions that would be expected to occur under each alternative.</p>
2006	7	<p>NEPA Effects Determination</p> <p>The Draft EIS presents NEPA Effects Determinations, but does not describe the decision rules that were used to make those determinations from the analytical information presented for each impact category. We recommend that the NEPA Effects Determinations and thresholds -- quantitative when possible -- be provided for each category so that it is clear why some estimated impacts result in one NEPA Effects Determination over another. We also recommend that the Supplemental Draft EIS explain whether all metrics are considered equal in the analysis or some are weighted. Please clarify whether negative impacts in one metric category translate into an adverse determination, regardless of the other metrics. Lastly, it would be helpful to include summary tables for each impact category so that the public and decision-makers can understand the metrics and their results and how they compare among alternatives.</p>	<p>Each resource chapter contains a Determination of Effects section. Where appropriate a quantitative threshold tied to a CEQA and NEPA determination is described. Where it is not possible to provide a quantitative threshold, several criteria are described as to what was utilized to determine an effect under NEPA (and significant impact under CEQA).</p> <p>The Executive Summary of the Final EIR/EIS includes a summary table of all the impact determinations, by resource topic, before and after mitigation, as well as a comparison table showing how select impacts compare across all alternatives.</p>
2006	8	<p>Adaptive Management</p> <p>The Draft EIS explains that the adaptive management program is a work in progress. The specific approach for an adaptive management program and its effect on environmental consequences is fundamental to the success of the BDCP and should be addressed during the NEPA process. We recommend that a more detailed adaptive management program be provided in the Supplemental Draft EIS, since the goal of species recovery relies significantly on an effective adaptive management program. As you develop the plan, include detailed information on the plan's objectives, explicit thresholds, alternative hypotheses, responsive actions, and designated responsible parties.</p>	<p>Scientific uncertainty exists regarding the Delta ecosystem, including the effects of CVP and SWP operations and the related operational criteria. To address this uncertainty, DWR, Reclamation, DFW, USFWS, NMFS, and the public water agencies will establish a robust program of collaborative science, monitoring, and adaptive management. It is assumed the Collaborative Science and Adaptive Management Program (AMMP) developed for Alternative 4A would not, by itself, create nor contributes to any new significant environmental effects; instead, the AMMP would influence the operation and management of facilities and protected or restored habitat associated with Alternative 4A.</p> <p>Collaborative science and adaptive management will support the proposed action by helping to address scientific uncertainty where it exists, and as it relates to the benefits and impacts of the construction and operations of the new water conveyance facility and existing CVP and SWP facilities.</p> <p>The collaborative science effort is expected to inform operational decisions within the ranges established by the biological opinion and 2081b permit for the proposed action. However, if new science suggests that operational changes may be appropriate that fall outside of the operational ranges evaluated in the biological opinion and authorized by the 2081b permit, the appropriate agencies will determine, within their</p>

DEIRS Ltr#	Cmt#	Comment	Response
			<p>respective authorities, whether those changes should be implemented. An analysis of the biological effects of any such changes will be conducted to determine if those effects fall within the range of effects analyzed and authorized under the biological opinion and 2081b permit. If NMFS, USFWS, or DFW determine that impacts to listed species are greater than those analyzed and authorized under the biological opinion and 2081b permit for the proposed project, consultation may need to be reinitiated and/or the permittees may need to seek a 2081b permit amendment. Likewise, if an analysis shows that impacts to water supply are greater than those analyzed in the EIR/EIS, it may be necessary to complete additional environmental review to comply with CEQA or NEPA. The general framework for the adaptive management program is presented in the Final EIR/EIS and will be refined through the CESA 2081(b) take permit and the ESA Section 7 processes, as well as the SWRCB change in point of diversion water rights process.</p> <p>Please see responses to comment letter 1448 for a comprehensive response to comments from the Independent Scientific Review Panel on adaptive management. Refer also to Master Response 33 (Adaptive Management) and Chapter 3 (Description of Alternatives).</p>
2006	9	<p>Environmental Protection Agency remains committed to working with the federal and state lead agencies to develop an environmentally sound, scientifically defensible, and effective plan for restoring the Bay Delta ecosystem and achieving greater water supply reliability. Please note that, because you are preparing a Supplemental Draft EIS, which we anticipate will address many of the issues raised about this Draft EIS, including the issues we have outlined here, EPA will defer our rating until the Supplemental Draft is circulated for public review and comment. We have also enclosed more detailed comments and recommendations for your consideration.</p> <p>We are available to discuss our comments and recommendations. Please send one hard, and one electronic, copy of the Supplemental Draft EIS to this office at the same time it is officially filed with our Washington D.C. Office.</p>	<p>The Lead Agencies have worked with EPA on addressing the concerns raised in this letter and in subsequent discussions and appreciate EPA's involvement in the planning process as well as the commitment to stay involved moving forward. No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.</p>
2006	10	<p>Water Quality Impacts</p> <p>Adverse Impacts</p> <p>Chapter 8 indicates that all project alternatives would result in adverse, significant, unmitigated effects to water quality and one or more beneficial uses within the affected water bodies. For example:</p> <ul style="list-style-type: none"> -The proposed changes in water management would measurably exacerbate impairment of agricultural and aquatic life beneficial uses in the South Delta and Suisun Marsh (p. 8-439); -Bromide, chloride, dissolved organic carbon, and electrical conductivity (EC) are expected to increase due to changes in hydrodynamics as a result of the implementation of the CM1 Alternative 4 (pp.8-420, -428, -454, and -439). In addition, the feasibility of mitigation actions for EC is uncertain (p. 8-441); therefore, the net effect to overall salinity levels is unclear; -Mercury, pesticide, and selenium exposure levels may increase and be cumulatively significant (p. 8-446, -767, -768); and -Water quality degradation resulting from the increased pumping of freshwater from the North Delta could cause increases in water treatment costs (p. 8-420). 	<p>Draft EIR/EIS Chapter 8 Water Quality does present mitigation measures for identified significant impacts to reduce impacts where possible. Further, each constituent assessment completed for water quality evaluates the changes in water quality with respect to thresholds of significance, which address water quality degradation and beneficial use effects.</p> <p>The water quality assessment for each of the noted constituents has been updated in the RDEIR/SDEIR and Final EIR/EIS to reflect the most current hydrologic modeling conducted for the alternatives. Chapter 8 Water Quality of the RDEIR/SEIS and Final EIR/EIS also include mitigation measures and environmental commitments that address water quality impacts.</p> <p>Please see Master Response 22 regarding Mitigation, Master Response 14 regarding Water Quality, Master Response 18 Agricultural Impact Mitigation, and Master Response 22 Mitigation Measures.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>All Bay Delta Estuary waters are impaired due to numerous contaminants, including pesticides, manufacturing compounds, metals (including selenium), pathogens, nutrients/low dissolved oxygen, invasive species, salinity, and toxicity from unknown sources. Without adequate mitigation, these impairments would be exacerbated by any of the alternatives evaluated in the Draft EIS. Poor water quality in the Bay Delta Estuary and its tributaries adversely affects terrestrial and aquatic ecosystems, drinking water, recreation, industry, agriculture, and the local, state, and interstate economy.</p> <p>Recommendation: Discuss mitigation measures that would reduce the projected adverse impacts on water quality, and discuss whether the proposed actions would contribute to impairments of beneficial uses or further degrade water quality.</p>	
2006	11	<p>Salinity (Electrical Conductivity, Chloride) and Bromide</p> <p>Water Quality Standards Exceedances and Degradation</p> <p>The Bay Delta Water Quality Control Plan (WQCP) contains EC objectives for the Delta to protect agricultural and fish and wildlife beneficial uses, and chloride objectives to protect municipal and industrial water supply beneficial uses. Bromide, a significant precursor to brominated disinfection byproducts, is subject to CALFED Drinking Water Program goals (p. 8-42). The Draft EIS estimates that EC, chloride and bromide concentrations would increase under CM1 Alternative 4, relative to the No Action Alternative and Existing Conditions for Delta locations. The document predicts increased exceedances of numeric water quality standards, which suggests that CM1 Alternative 4 would result in a loss of protection for municipal, agricultural, and aquatic life beneficial uses. Specifically, CM1 Alternative 4 would result in:</p> <p>A 17% increase in days out of compliance with the agricultural EC standard at Emmaton (p. 8- 252 lines 6-7). The EC objective at Emmaton is intended to protect agricultural beneficial uses, but also has ancillary benefits to aquatic life. Increasing noncompliance days would further contribute to existing EC water quality impairments in the western Delta, and degrade beneficial use protection for agricultural and aquatic life beneficial uses.</p>	<p>The Final EIR/EIS proposes Alternative 4A as the preferred alternative. Alternative 4A would result in substantially lesser water quality impacts to salinity-related parameters, including EC as compared to the alternatives evaluated in the Draft EIR/EIS. Alternative 4A would still have significant impacts to EC, although the modeled periods that EC objectives would be exceeded are less than that modeled for Alternative 4. 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. These mitigation measures are WQ-11: Avoid or Minimize Reduced Water Quality Conditions, WQ-11e: Implement Real-time Operations, Including Adaptively Managing Diversions at the North and South Delta Intakes, to Reduce or Eliminate Water Quality Degradation in the Western Delta, and WQ-11f: Adaptively Manage Head of Old River Barrier and Diversions at the North and South Delta Intakes to Reduce or Eliminate Exceedances of the Bay-Delta WQCP Objective at Prisoners Point. These measures are described in Final EIR/EIS Chapter 8 and additional detail is provided in the CWF Mitigation Monitoring and Reporting Plan.</p> <p>Please also see Master Response 34, Beneficial use of Water and Master Response 22 (Mitigation Measures).</p>
2006	12	<p>Salinity (Electrical Conductivity, Chloride) and Bromide</p> <p>Water Quality Standards Exceedances and Degradation</p> <p>The Bay Delta Water Quality Control Plan (WQCP) contains EC objectives for the Delta to protect agricultural and fish and wildlife beneficial uses, and chloride objectives to protect municipal and industrial water supply beneficial uses. Bromide, a significant precursor to brominated disinfection byproducts, is subject to CALFED Drinking Water Program goals (p. 8-42). The Draft EIS estimates that EC, chloride and bromide concentrations would increase under CM1 Alternative 4, relative to the No Action Alternative and Existing Conditions for Delta locations. The document predicts increased exceedances of numeric water quality standards, which suggests that CM1 Alternative 4 would result in a loss of protection for municipal, agricultural, and aquatic life beneficial uses. Specifically, CM1 Alternative 4 would result in:</p> <p>A 7% increase in days exceeding the municipal chloride standard (250 milligrams per liter (mg/L) mean daily maximum) at Contra Costa Canal Pumping Plant #1 (p. 8-243 line 26) and "substantial degradation during the months October through December when</p>	<p>The commenter summarizes the EC, chloride, and bromide analyses in Chapter 8 of the Draft EIR/EIS for Alternative 4. As noted above, Alternative 4A has been identified as the preferred alternative and Chapter 8 of the RDEIR/SDEIS and Final EIR/EIS includes an assessment of the changes in the water quality constituents noted in the comments (many of the reduced water quality impacts are due to the fact that, as compared to Alternative 4, Alternative 4A does not propose large scale habitat restoration as part of an HCP). Operation under Alternative 4A would result in fewer water quality impacts when compared to Alternative 4. Please see comment 2006-2.</p> <p>Objectives that apply at Contra Costa Pumping Plant #1 ensure that the municipal and industrial beneficial use of surface water in the west Delta is protected, relative to salinity. Los Vaqueros Reservoir is not a named water body in the Basin Plan and does not contain surface water beneficial uses. Furthermore, the project does not cause direct effects in Los Vaqueros Reservoir; rather, effects are indirect and are due to CCWD diversion of water from the Delta into the reservoir. Therefore, the assessment did not directly assess effects to Los Vaqueros Reservoir, but did assess effects of the project on surface water near CCWD intakes that divert water into the reservoir. CCWD has a goal of 65 mg/L chloride in water delivered to customers. This goal is not a state or federal water quality objective. The chloride assessment in the Draft EIR/EIS includes an assessment of degradation on a monthly average basis for the entire period modeled and the drought period modeled that evaluated use of assimilative capacity relative to the WQCP objective of</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>average concentrations would be near, or exceed, the objective" (p. 8-243 lines 33-34 and Appendix 8G, 27 Table CI-9).</p> <p>A doubling of the frequency of exceeding the lower municipal chloride standard at Antioch and Contra Costa Canal Pumping Plant #1: "All of the Alternative H1-H4 Scenarios would result in substantially increased chloride concentrations in the Delta such that frequency of exceeding the 150 mg/L Bay-Delta WQCP objective would approximately double" compared to Existing Conditions (p. 8-429) and the No Action Alternative (Appendix 8G Table CI-64).</p>	<p>250 mg/L that applies year-round. Adverse impacts were identified where degradation would result in substantially increased risk for adverse effects to municipal and industrial beneficial uses, including at Antioch and CCWD Pumping Plant #1, which are of concern to the commenters. Thus, the Draft EIR/EIS discloses adverse effects associated with chloride degradation where they would occur. It should be noted also that CCWD and DWR have entered into a settlement agreement that further reduces any water quality effects to CCWD facilities through the creation of an additional means for CCWD to access water through the Freeport diversion facility and an access point on California WaterFix facilities.</p> <p>Finally, for chloride, project alternatives evaluated in the Draft EIR/EIS (Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, 9) were considered to have significant and unavoidable impacts in the Delta due in part to water quality degradation occurring in the western Delta, and for some alternatives, exceedance of the 150 mg/L chloride objective. Various analyses and improvements to the assessment were added, as described in Section 2.2.1 of the RDEIR/SDEIS and as incorporated into this Final EIR/EIS. Alternatives 2D, 4A, and 5A did not show significant impacts for chloride from substantial degradation or objective exceedance in the western Delta, and thus impacts for chloride are considered less than significant.</p>
2006	13	<p>Salinity (Electrical Conductivity, Chloride) and Bromide</p> <p>Water Quality Standards Exceedances and Degradation</p> <p>The Bay Delta Water Quality Control Plan (WQCP) contains EC objectives for the Delta to protect agricultural and fish and wildlife beneficial uses, and chloride objectives to protect municipal and industrial water supply beneficial uses. Bromide, a significant precursor to brominated disinfection byproducts, is subject to CALFED Drinking Water Program goals (p. 8-42). The Draft EIS estimates that EC, chloride and bromide concentrations would increase under CM1 Alternative 4, relative to the No Action Alternative and Existing Conditions for Delta locations. The document predicts increased exceedances of numeric water quality standards, which suggests that CM1 Alternative 4 would result in a loss of protection for municipal, agricultural, and aquatic life beneficial uses. Specifically, CM1 Alternative 4 would result in:</p> <p>Increased EC levels in Suisun Marsh, exacerbation of the existing EC water quality impairment, and degradation of aquatic life beneficial use protection (p. 8-438 and Appendix 8H-27). "The most substantial EC increase would occur at Beldon Landing with long-term average EC levels increasing by 1.3-6.0 milliSiemens per centimeter (mS/cm), depending on the month and operations scenario, at least doubling during some months the long-term average EC relative to Existing Conditions" and the No Action Alternative (p. 8-43 8).</p>	<p>The commenter summarizes the EC, chloride, and bromide analyses in Chapter 8 of the Draft EIR/EIS for Alternative 4. As noted above, Alternative 4A has been identified as the preferred alternative and Chapter 8 of the RDEIR/SDEIS and Final EIR/EIS includes an assessment of the changes in the water quality constituents noted in the comments. Operation under Alternative 4A would result in fewer water quality impacts when compared to Alternative 4. Modeled impacts of operating Alternative 4A on electrical conductivity, chloride, and bromide are provided in impacts WQ-11, WQ-7, and WQ-5, respectively.</p> <p>Chapter 6 (Surface Water) describes waters of the Sacramento River and the San Joaquin River basins, including the Delta and Suisun Marsh, that could be directly or indirectly affected by SWP and CVP operations and environmental commitments identified in the project Alternatives. Please see Master Response 14 regarding Water Quality.</p>
2006	14	<p>Salinity (Electrical Conductivity, Chloride) and Bromide</p> <p>Water Quality Standards Exceedances and Degradation</p> <p>The Bay Delta Water Quality Control Plan (WQCP) contains EC objectives for the Delta to protect agricultural and fish and wildlife beneficial uses, and chloride objectives to protect municipal and industrial water supply beneficial uses. Bromide, a significant precursor to brominated disinfection byproducts, is subject to CALFED Drinking Water Program goals (p. 8-42). The Draft EIS estimates that EC, chloride and bromide concentrations would increase under CM1 Alternative 4, relative to the No Action Alternative and Existing Conditions for Delta locations. The document predicts increased exceedances of numeric water quality standards, which suggests that CM1 Alternative 4 would result in a loss of protection for municipal, agricultural, and aquatic life beneficial uses. Specifically, CM1</p>	<p>Please see response to comment 2006-12 and 13. As disclosed in Chapter 8 Water Quality Impact WQ-5: Effect on Bromide Concentrations Resulting from Facilities Operations and Maintenance, long-term average bromide concentrations at Barker Slough would increase under Alternative 4A, although the increases would be relatively small (<1%). Although the frequency of exceedance of 50 µg/L would increase from 35% to 40% at Barker Slough; there would be no increased exceedance of the 100 µg/L threshold.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Alternative 4 would result in:</p> <p>Higher quality water to those receiving the exported water, but adverse impacts on those who rely on water directly from the Delta: "the operations and maintenance activities under Scenario H1-H4 of Alternative 4 would cause substantial degradation to water quality with respect to bromide at Barker Slough... and could necessitate changes in water treatment plant operations or require treatment plant upgrades" (p.8-420).</p>	
2006	15	<p>The EC and chloride analyses in the Draft EIS provide some confusing results. For example, the 16- year average EC concentration (mass balance) at Emmaton is 887 micromhos per centimeter ($\mu\text{mhos/cm}$) for CM7, and 935 [$\mu\text{mhos/cm}$ for CM8, even though outflow (an indicator of freshwater flow to the estuary) is twice as high for CM8. Similarly, chloride concentrations predicted for CM7 (mass balance and EC-chloride relationship) at Antioch on the San Joaquin River are slightly lower than those for CM8.</p>	<p>Draft EIR/EIS Chapter 8 Water Quality at Impact WQ-8: Effects on Chloride Concentration Resulting from Implementation of CM2-CM-22 addresses impacts of the conservation measures on chloride levels and concludes that implementation of the measures would not result in a significant impact on EC and chloride.</p> <p>The preferred alternative is now Alternative 4A and no longer includes an HCP that included large scale habitat restoration through CM 2 - 22. Therefore, the water quality effects of Alternative 4 (BDCP) are greatly reduced or eliminated with Alternative 4A (California WaterFix).</p> <p>Please see Master Response 5 regarding BDCP Conservation Measures.</p>
2006	16	<p>The water quality chapter of the Draft EIS does not evaluate the Alternatives against the full suite of Water Quality Objectives for Fish and Wildlife Beneficial Uses, which are found in Table 3 of the Bay Delta Water Quality Control Plan. The Delta outflow objective is discussed in Chapter 5 Water Supply, and a brief discussion of Delta outflow objective is in the HCP for only the CEQA Preferred Alternative 4.</p>	<p>The Final EIR/EIS Chapter 8 Water Quality, Section 8.3.1 Methods for Analysis, provides an overview of the process for identifying, screening, and carrying forward the water quality constituents for detailed assessment. A constituent screening analysis was conducted on 182 water quality constituents/parameters. The screening analysis determined which constituents, including some found in Table 3 of the Bay Delta Water Quality Control Plan, had no potential to exceed the thresholds of significance by implementation of the alternatives and, thus, did not warrant further assessment. This analysis identified a list of "constituents of concern" that were further analyzed as part of assessing their potential water quality related impacts under the alternatives. For a detailed description of the approach employed in the constituent screening analysis, see Appendix 8C, Screening Analysis.</p>
2006	17	<p>Recommendations: Describe mitigation measures that would prevent the proposed project from resulting in increased exceedances of water quality objectives in the already-degraded Delta. These measures may include reducing exports to provide more outflow and mitigate salinity intrusion.</p> <p>Explain the differences in the predictions among CM1 alternatives, including why twice as much outflow would result in higher salinity concentrations for Alternative 8 relative to Alternative 7. Disclose the confidence intervals for the mass-balance and EC-chloride relationship approaches for predicting future concentrations of EC and chloride.</p> <p>Evaluate all CM1 alternatives with respect to all water quality standards listed in Tables 1-3 of the Bay-Delta Water Quality Control Plan, and indicate whether each standard would be met under each alternative.</p>	<p>The RDEIR/SDEIS and Final EIR/EIS propose Alternative 4A as the preferred alternative. Alternative 4A would result in substantially lesser water quality impacts to salinity-related parameters, including EC and chloride, as compared to the preferred alternative in the 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.</p> <p>Alternative 8 would have higher long-term average outflow than Alternative 7 for January–June, while Alternative 7 would have higher long-term average outflow than Alternative 8 for July–December (Appendix 5A section C7). On a long-term average basis, salinity is generally quite low in the Sacramento River at Emmaton in January–June, and thus increases in outflow during this time would not substantially lower salinity further (that is, the salinity cannot decrease below the salinity in the Sacramento River during these times). On the contrary, salinity is generally higher during July–December, and thus an increase in outflow during this time would have a larger effect on decreasing the salinity. Taken together, even though the total outflow is higher under Alternative 8 than under Alternative 7, due to the timing and pattern of outflow and salinity, the long term annual average salinity is slightly higher under Alternative 8 at Emmaton than under Alternative 7.</p> <p>Text was added into Final EIR/EIS Chapter 8 Section 8.3.1.3, Plan Area, and Section 8.3.1.7, Constituent-Specific Considerations Used in this Assessment, regarding modeling uncertainty associated with the mass-balance and regression methods of calculating chloride concentrations. EC was directly modeled by DSM2 and thus the mass balance and regression methods were not used to model EC levels.</p> <p>Of the objectives contained in Tables 1 through 3 of the Bay-Delta Water Quality Control Plan, the</p>

DEIRS Ltr#	Cmt#	Comment	Response
			parameter-based objectives (chloride and EC) are evaluated in Impacts WQ-7 (chloride) and WQ-11 (EC) for each alternative. The flow rate, Delta outflow, export limits and Delta Cross Channel gate closure were addressed via operations modeling, as described in text added to Section 8.3.1.1, Models Used and Their Linkages, in a sub-section titled Use of CALSIM II and DSM2 for Assessment of Meeting of Bay-Delta WQCP Water Quality Objectives. Because it is ultimately the resulting quality of the water that can be related to beneficial use effects, only the parameter-based objectives are discussed in Chapter 8, Water Quality.
2006	18	<p>Mitigation Effectiveness</p> <p>Appendix 8H "Electrical Conductivity" states that, although the modeling results show exceedences of water quality D-1641 standards, the project proponents "intend" to operate the State Water Project and Central Valley Project facilities by fine tuning reservoir storage and exports in real time to meet the standards (p. 8H-1). The water quality objectives that would be met in this manner are not specified, nor is an estimate provided of the impact of this measure on water supply. Furthermore, the Draft EIS includes the caveat that "if sufficient operational flexibility to offset chloride increases is not feasible under Alternative 4 operations, achieving chloride reduction pursuant to this mitigation measure would not be feasible under this Alternative" (p.S-430). A similar caveat is stated regarding bromide (p. 8-422). These statements suggest that the water supply exports that define the Alternative 4 operational scenario would be given higher priority than meeting water quality standards, thus rendering that scenario potentially inconsistent with the protection of beneficial uses.</p> <p>Recommendations: Clearly identify the water quality objectives that the proponents intend to meet by fine-tuning reservoir storage and exports in real time, and clearly state this intention as an enforceable commitment. Reconcile the conflicting caveats regarding operational flexibility with this commitment.</p> <p>Provide an estimate of the amount of water that would be needed to meet water quality standards during periods when the modeling predicts exceedences, and describe how the use of water for this purpose would impact water diversions for upstream and downstream users. Include a comparison against drought years.</p> <p>Provide historical data to illustrate how D-1641 standards have been met in the past, including the number of times that DWR has submitted Temporary Urgency Change Petitions with the State Water Board requesting modification of requirements of D-1641 because of drought conditions.</p>	<p>The RDEIR/EIS and Final EIR/EIS include an assessment of Alternatives 4A, 2D, and 5A. Alternative 4A has been identified as the preferred alternative. The assessment of impacts on electrical conductivity for Alternative 4A has been updated to reflect that alternative's operational scenarios. These changes were provided in RDEIR/SEIS and are updated and presented in the Final EIR/EIS Chapter 8 Water Quality Impact WQ-11: Effects on Electrical Conductivity Concentrations Resulting from Facilities Operations and Maintenance. The impacts of operations on electrical conductivity would be addressed through implementation of mitigation measures MM WQ-11 and MM WQ-11e, both of which are explained in Chapter 8. The measures are also described in greater detail in the Mitigation Monitoring and Reporting Plan.</p> <p>Although the modeling of the proposed operations of the water conveyance facilities show exceedences of the requirements of the SWRCB Decision-1641 (D-1641), real time operations will ensure that all SWRCB requirements are met. The Lead Agencies do not attempt to speculate on possible increased water quality standards above what is currently required by the SWRCB. D-1641 was issued as part of the SWRCB's implementation of the 1995 Bay-Delta Plan. The Plan was developed to "provide comprehensive, multi-species, ecosystem protection for the Bay-Delta Estuary". Based on coordination with DFW, and to ensure operations "fully mitigate" for effects to listed species, proposed operations are anticipated to include an average of over 300 TAF of Delta outflow above D-1641 requirements for the months of March-May. Through the project planning process, DWR, Reclamation, DFW, USFWS, and NMFS have come to better appreciate the complexities of achieving water quality goals while advancing critical actions for fisheries recovery, including habitat actions in the Delta and the need to provide new infrastructure that will better protect the species while meeting California's coequal goals of providing a more reliable water supply, and protecting, restoring and enhancing the Delta ecosystem. Through the Bay Delta WQCP update, SWRCB is in the process of addressing future outflow needs that may go beyond what is required of the State Water Project and the Central Valley Project as related to the proposed new diversion and the agencies look forward to working with EPA in the Bay Delta WQCP update process to further ensure that these dual goals are achieved.</p> <p>Master Response 14 provides additional information regarding the water quality analysis and in particular addresses the salinity effects analysis.</p>
2006	19	<p>Mitigation Relationship to Water Quality Standards</p> <p>The Environmental Protection Agency understands that the modeling for the water quality analysis was based on an assumption that the Emmaton EC water quality standard compliance point would be moved four miles upstream to Three Mile Slough, as DWR is anticipated to request. We also understand that DWR will request that the State Water Resources Control Board include this compliance point change as part of the Phase II update to the Bay Delta Water Quality Control Plan. The State Board will review this request, as will the EPA. We are concerned that the intended mitigation for the water quality violations at Emmaton relies on a change in the compliance point. We consider the movement of the compliance point to Three Mile Slough a relaxation of the EC standard because it would potentially permit four miles of additional salinity intrusion</p>	<p>The change in compliance point from Emmaton to Threemile Slough is no longer a component of preferred alternative. As indicated in the RDEIR/SDEIS and Final EIR/EIS, the compliance point for the assessment of EC impacts for Alternatives 4A, 2D, and 5A is Emmaton.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>into the upper estuary, which could have negative impacts on multiple beneficial uses.</p> <p>Recommendations: Explain the technical, scientific, and policy reasons for using Three Mile Slough in DSM2 modeling for assessing EC compliance at Emmaton. Describe how EC was estimated at Emmaton under the No Action Alternative and for Existing Conditions if it was not directly estimated using DSM2; and interpret the comparison of EC at Three Mile Slough in CM1 operational scenarios to EC at Emmaton.</p> <p>Identify all of the water quality standards, including EC at Emmaton, which the BDCP assumes will be modified. Disclose the process for obtaining a modification of a water quality standard.</p>	
2006	20	<p>Impacts of Changes to the Salinity Gradient (X2)</p> <p>The salinity gradient, approximated by X2[footnote 1: X2 refers to the distance from the Golden Gate up the axis of the estuary to the point where daily average salinity is 2 parts per thousand at 1 meter off the bottom (Jassby et. al. 1995).], has an inverse relationship with many diverse bay and estuarine fishes, including the threatened and endangered species that are the conservation targets of the BDCP. As X2 decreases (i.e., moves out to sea) habitat conditions for some species improve and relative abundance increases [footnote 2: Jassby AD, Kimmerer WJ, Monismith SG, Am10r C, Cloem JE, Powell TM, Schubel JR, Vendlinski TJ. 1995. Isohaline position as a habitat indicator for estuarine applications. Ecological Applications 5(1): 272-289; Kimmerer, W. J. 2002. Effects of freshwater flow on abundance of estuarine organisms: Physical effects or trophic linkages? Marine Ecology Progress Series 243:39-55; Kimmerer WJ, Gross ES, MacWilliams ML. 2009. Is the response of estuarine nekton to freshwater flow in the San Francisco Estuary explained by variation in habitat volume? Estuaries and Coasts 32: 375-389.]• Because the location of X2 is closely tied to freshwater flow through the Delta, the proposed project would have a strong influence on this parameter, yet the Draft EIS does not analyze each alternative's impacts on aquatic life in the context of this relationship.</p> <p>Examination of the predicted changes in monthly average X2 for each CM1 operational scenario, A through G, would help determine how the quantity and quality of estuarine habitats and relative fish abundance would change under those scenarios for multiple fish species. It would also be useful to estimate the range of monthly average X2 values (and/or monthly Delta outflow) for each Alternative and compare it to the pattern of freshwater flows and salinity gradients that characterized a reference time period when resident and migratory fish populations were in comparatively better condition.</p> <p>The operational scenarios that more closely mimic the reference period freshwater flow and salinity gradient pattern could be expected to produce aquatic conditions and habitats that benefit native and migratory fishes and support important food web processes at all ecosystem levels.</p> <p>Freshwater flow may be one of the best tools available in the short term to improve fish populations and protect aquatic life beneficial uses prior to the completion of planned restoration projects, given its widely cited importance to ecosystem recovery. Relative fish abundance responses to freshwater flow can be estimated using regression equations provided in peer reviewed literature and</p> <p>government reports. [footnote 3: United States Fish and Wildlife Service, September 27, 2005, Recommended Streamflow Schedules To Meet the AFRP Doubling Goal in the San</p>	<p>The proposed project and range of alternatives consider outflow requirements as a part of project operations. This is also factored in through the requirements set by the RPAs from the 2008/2009 BiOps issued by USFWS and NMFS. The current regulatory standards issued by D-1641 and Water Quality Plan issued by the SWRCB and approved by EPA are used in this document to determine whether there would be significant impacts associated with the proposed project and alternatives. The modeling used for operations uses D-1641 as a required obligation in Delta operations. To the extent that X2 has been correlated to a specific species, or estuarine condition affecting species, the impact analysis has incorporated this correlation. This includes Kimmerer 2009, Feyrer 2011, and a host of other references that provide more detailed background relative to the importance of X2 as an ecosystem indicator.</p> <p>Relationships between X2 and habitat or abundance of covered and noncovered aquatic species was included in the EIR/EIS, as an example impacts AQUA-5 (delta smelt), AQUA-22 (longfin smelt), and AQUA-203 (noncovered aquatic species). Effects on the downstream bays also were assessed in the RDEIR/SEIS and Final EIR/EIS, Appendix A, Chapter 11, impact AQUA-218 as well as Chapter 8, Water Quality, Impact WQ-34. The commenter is referred to the updated analysis in Chapter 11 of the Final EIR/EIS, as well as the analysis presented in the California WaterFix Biological Assessment. See also comment 2006-3 and 6.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Joaquin River Basin (FWS 2005), pp. 27 available at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/docs/sjrf_spprtinfo/afpr_2005.pdf; Jassby AD, Kimmerer WJ, Monismith SG, Armor C, Cloem JE, Powell TM, Schubel JR, Vendlinski TJ. 1995. Isohaline position as a habitat indicator for estuarine applications. <i>Ecological Applications</i> 5(1): 272-289; Kimmerer, W. I 2002. Effects of freshwater flow on abundance of estuarine organisms: Physical effects or trophic linkages? <i>Marine Ecology Progress Series</i> 243:39-55; Kimmerer WJ, Gross ES, MacWilliams ML. 2009. Is the response of estuarine nekton to freshwater flow in the San Francisco Estuary explained by variation in habitat volume? <i>Estuaries and Coasts</i> 32: 375-389.] The equations do not directly include the effects of tidal marsh and floodplain restoration on fish populations; therefore, in their current form, they would be most useful for evaluating the impacts of flow variations prior to the completion of restoration projects. We anticipate that the ability to measure the benefits of restoration projects will improve after the projects are started and measurements and monitoring data become available.</p> <p>The Draft EIS does not evaluate potential downstream effects of CM1 Alternatives on San Francisco Bay fish populations. The description of impacts to San Francisco Bay from Delta Outflow changes (p. 1 1-132) stops at Suisun Bay even though outflow affects relative abundance of San Francisco Bay fishes such as Bay shrimp, starry flounder, and Pacific Herring. Some of these populations may be negatively affected by reduced outflows associated with CM1 alternatives, and the effect of restoration CMs (2-12) on these fish populations may or may not be beneficial.</p> <p>Recommendations: Describe the estuarine salinity gradient and how it defines important aquatic habitats, including marine, low salinity zones, and migratory corridors for target fishes. Describe its relevance to important aquatic life communities, including phytoplankton and zooplankton.</p> <p>Describe the Delta outflow objective in the Water Quality Chapter, including a description of the "X2" concept, recognizing that the "X2" concept provides the foundation for the Delta outflow objective and is the basis for protecting springtime estuarine habitat for resident and migratory fishes, which are the targets of the BDCP.</p> <p>Include a year-round salinity gradient and/or Delta outflow analysis for each CM1 alternative. This can be accomplished using information already generated for the BDCP EIS. [footnote 4: Information needed to support salinity gradient and Delta outflow analyses appears to have been developed by completed modeling efforts for BDCP. The salinity gradient and low salinity zone are discussed in the HCP; X2 and Delta outflow are CALSIM outputs; a 3-dimcnsonal model (UnTRIM) was used in Appendix 5A (Part D, Attachment 3 "Evaluation of Sea Level Rise Effects using UNTRIM San Francisco Bay-Delta Model") to predict salinity gradient changes in climate change scenarios; and a spring Delta outflow comparison was provided for the longfin smelt analysis in the Draft EIS. The longfin smelt analysis in Chapter 11 includes a comparison of average monthly spring Delta outflow between CEQA and NEPA baselines and the HI - H4 operational scenarios.] Compare the results to a defined and supported reference period to determine how closely each scenario may mimic the salinity gradient and/or monthly outflow pattern. Alternatively, use three-dimensional modeling that maps the salinity gradient within the estuary on a monthly time step for all CMJ alternatives. This would make it possible to estimate the size and location of salinity zones, such as the low salinity zone, under different operational scenarios; however, it is not clear if this approach could be easily</p>	

DEIRS Ltr#	Cmt#	Comment	Response
		<p>compared to a reference period using the same modeling tools.</p> <p>Include at least one-dimensional salinity gradient and Delta outflow analyses for the fish species evaluated in Chapter 11. Define and support an agreed upon relative reference period for the analyses.</p> <p>Use the referenced flow-abundance tools to predict a range of potential fish abundance changes under each operational scenario for CM1. The Kimmerer 2002 relationships should be used to evaluate potential downstream impacts to Bay fish populations. Provide the results of these analyses and explain that they do not include benefits of habitat restoration or entrainment reductions from minimizing use of south Delta pumping facilities when they cause the most harm for salmonids. [footnote 5: For more information, see EPA's comments to the State Water Resources Control Board regarding the State's effort to improve aquatic life beneficial use protection by modifying and/or adopting new water quality standards for flow in the Delta. See letter from US EPA to SWRCB, December 11, 2012, available at [url] EPA presentation to SWRCB available at [url]]</p>	
2006	21	<p>Potential Increases in Methylmercury Formation and Transport</p> <p>EPA agrees that restoring wetlands and floodplains in and near the Delta is an essential component of reviving the Estuary's health; however, nearly all the locations targeted for habitat restoration in the Delta have been, or are at risk of being, contaminated with mercury from historical mining sources and ongoing air deposition from industry. Sport fish in the Delta are already burdened with higher concentrations of mercury than anywhere else in the State, [footnote 6: SWAMP- Surface Water Ambient Monitoring Program] and the presence of this powerful neurotoxin in the food web poses a threat to public health and the ecosystem as a whole. For this reason, health advisories have been issued for the Delta and several upstream rivers.</p> <p>The BDCP relies heavily on proposed restoration in Yolo Bypass to mitigate for the adverse impacts of the CM1 Alternatives on fish populations, noting that the Bypass is one of the places in the Delta that shows the most potential for providing floodplain benefits for fish, including salmon (BDCP p. 2-80). The Draft EIS, however, says that the Yolo Bypass may contribute up to 40% of the total methylmercury production in the entire Sacramento watershed (p. 25-63). The State Water Board has also observed that, when the Yolo Bypass is flooded, it becomes the dominant source of methylmercury to the Delta, and that restoration activities could exacerbate the existing mercury problem. [footnote 7: P. 29 Periodic Review of the 2006 Water Quality Control Plan, State Water Resource Control Board] While EPA strongly supports restoration of aquatic habitat in the Delta, caution must be exercised to ensure that it does not result in unintended consequences that adversely affect water quality. Minimizing the formation and mobilization of methylmercury in wetlands is critical. Given the already high levels of mercury in the system, restoration in certain locations should be avoided if methylmercury production cannot otherwise be reduced or mitigated. For this reason, the BDCP's restoration acreage goals may not be attainable.</p>	<p>The comment is acknowledged, and the Lead Agencies agree that minimizing the formation and mobilization of methylmercury in wetlands is critical. The following alternatives include Yolo Bypass restoration: 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, 9.</p> <p>Alternatives 2D, 4A, and 5A do not include Yolo Bypass restoration as part of the alternatives. Conservation Measure 12 is intended to minimize methylmercury production in restored areas. The methylmercury related impacts of implementing Environmental Commitments under Alternatives 4A, 2D, and 5A are disclosed in RDEIR/SDEIS and Final EIR/EIS Chapter 8 Water Quality at Impact WQ-14. As stated within the impact discussion, the potential types of effects on mercury would be generally similar to those described under Alternative 4 (see Section 8.3.3.9). However, the magnitude of effects on mercury and methylmercury at locations upstream of the Delta, in the Delta, and the SWP/CVP Export Service Areas related to habitat restoration would be considerably lower than described for Alternative 4 due to the relatively smaller area of habitat restoration to be implemented under Alternative 4A compared to Alternative 4. However, even though the only habitat restoration proposed by Alternatives 4A, 2D, and 5A is to mitigate potential impacts and meet endangered species and Clean Water Act required replacement habitat, restoration actions have the potential to increase water residence times and increase accumulation of organic sediments that are known to enhance methylmercury bioaccumulation in biota in the vicinity of the restored habitat areas. Design of restoration sites for the proposed project and many of the alternatives would be guided by Environmental Commitment 12, which requires development of site-specific mercury management plans as restoration actions are implemented. The effectiveness of these actions is uncertain, although the potential to reduce methylmercury concentrations exists based on current research. Because there remain uncertainties related to site-specific restoration conditions and the effectiveness of Environmental Commitments 3, 4, 6-12, 15, and 16, the potential for increases in methylmercury concentrations in the Delta in the vicinity of the restored areas for the proposed project (even with greatly decreased habitat restoration acreages), is still considered to be adverse.</p> <p>Master response 14 provides additional background on the mercury effects including a discussion of the Central Valley Water Board Methylmercury TMDL Program.</p>
2006	22	<p>The DEIS underestimates the potential impacts of methylmercury on covered species and public health. Quantification of the methylmercury contributions from the proposed restoration were not provided in the document (this is acknowledged on p. 8-260), and</p>	<p>Please see response to comment 21 and 23. Master response 14 provides additional background on the mercury effects including a discussion of the Central Valley Water Board Methylmercury TMDL Program, and</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>the methylmercury NEPA Effects determinations rely on the success of unproven mitigation methods (CM12) that are currently under development to minimize formation and transport of methylmercury from Yolo Bypass, Cache Slough Complex, and the Cosumnes River Restoration Opportunity Areas (p.3-154). In the AQUA-8 "Effects of Contaminants Associated with Restoration Measures" evaluation of the impact of methylmercury, selenium, and other contaminants on delta smelt, the analysis of Alternative 1A concludes that methylmercury impacts to delta smelt and winter-run Chinook salmon are "uncertain" (p. 11-277, 11-343). The analysis for Alternative 1A (and subsequent alternatives) [footnote 8: Analyses for subsequent alternatives refer back to the analysis for Alternative 1A.] states that restoration actions (CM2, CM4-CM7, and CM10) may increase production, mobilization, and bioavailability of methylmercury in the aquatic system, but that many effects are unknown at this time.</p> <p>Research studies in the Yolo Bypass that were conducted by the US Geological Survey found methylmercury production values in Yolo Bypass managed wetlands and agricultural lands to be "among the highest ever recorded in wetlands." [footnote 9: Alpers, C.N., Fleck, J.A., Marvin-DiPasquale, M., Stricker, C.A., Stephenson, M., and Taylor, H.E., Mercury cycling in agricultural and managed wetlands, Yolo Bypass, California: Spatial and seasonal variations in water quality: Science of The Total Environment, Volume 484, 15 June 2014, Pages 276-287] The Yolo Bypass mercury bioaccumulation study [footnote 10: Ackerman, J. "Agricultural Wetlands as Potential Hotspots for mercury bioaccumulation: experimental evidence using caged fish" Environmental Science and Technology 2010, 44, 1451-1457.] reported that all caged and wild fishes sampled had methylmercury fish tissue concentrations greater than the small fish tissue objective in the Delta Methylmercury Total Maximum Daily Load (0.03 micrograms per kilogram (µg/kg) wet weight). [footnote 11: The Delta Mercury and Methylmercury TMDL contains two fish tissue objectives that target specific beneficial uses. The average methylmercury concentrations shall not exceed 0.08 and 0.24 mg methylmercury/kg, wet weight, in muscle tissue of trophic level 3 and 4 fish, respectively (150-500 mm total length). These objectives are protective of (a) people eating 32 g/day (eight ounces, uncooked fish per week) of commonly eaten, legal size fish, and (b) all wildlife species that eat large fish. Small fish (less than 50 mm in length) - 0.03 mg methylmercury/ kg, wet weight, in muscle. The average methylmercury concentrations shall not exceed 0.03 mg methylmercury/kg, wet weight, in whole fish less than 50 mm in length. Large fish (150 - 500 mm total length)- 0.08 and 0.24 mg methylmercury/ kg, wet weight, in muscle. These objectives target protection of sensitive wildlife that eat fish.] In addition, 59% of wild fishes and 82% of caged fishes had methylmercury concentrations greater than 0.20 µg/g wet weight, which is a threshold above which fish health is impaired. [footnote 12: Frayer, W. E.; Peters, D. D.; Pywell, H. R. Wetlands of the California Central Valley status and Trends: 1939 to mid-1980's; U.S. Department of the Interior, Fish and Wildlife Service: Washington, DC, 1989.] Finally, 52% of caged fish and 26% of wild fish had fish tissue concentrations greater than observed thresholds that reduce bird reproduction [footnote 13: Albers, P. H.; Koterba, M. T.; Rossmann, R.; Link, W. A.; French, J. B.; Bennett, R. S.; Bauer, W. C. Effects of methylmercury on reproduction in American kestrels. Environ. Toxicol.Chem.2007, 26, 1856-1866; Burgess, N. M.; Meyer, M. W. Methylmercury exposure associated with reduced productivity in common loons. Ecotoxicology 2008, 17, 83-91, as cited in Ackerman, J. "Agricultural Wetlands as Potential Hotspots for mercury bioaccumulation: experimental evidence using caged fish" Environmental Science and Technology 2010, 44, 1451-1457.] and greater than the large fish tissue objective (intended to protect human health and wildlife consumers). These results suggest that increasing production, transport, and bioavailability of methylmercury through</p>	<p>Master Response 4 provides information regarding Alternative Development.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		restoration actions could result in adverse effects to human health and the environment.	
2006	23	<p>The Environmental Justice Chapter of the Draft EIS provides conflicting information and conclusions regarding whether or not the BDCP alternatives would create conditions conducive to increased bioaccumulation of mercury in Delta fish species, and whether such bioaccumulation would be cumulatively significant for increasing the body burden (pp. 28-22, 25, 103) in fish. The U.S. Geological Survey Yolo Bypass bioaccumulation study referenced above* showed that the majority of wild and caged fishes had methylmercury tissue levels above the public health threshold for trophic level 3 fish and very close to the public health threshold for trophic level 4 (large) fish. Although the Delta is posted with fish advisories, people who rely on fishing for subsistence may consume more than the advisory recommends. Although the Draft EIS acknowledges that "restoration actions are likely to result in increased production, mobilization, and bioavailability of methylmercury in the aquatic system" (p. 25-64), it concludes that there would be no adverse effects on public health to any populations (p. 25-64, p. 28-22). This conclusion is inconsistent with the potential for increased methylmercury production, bioaccumulation, and effects to Environmental Justice communities, and the proposed mitigation actions described do not address the potential for significant negative effects to human health.</p>	<p>Additional details on increases in methylmercury, bioaccumulation in fish, and subsistence fishing have been added to Chapter 28 in the RDEIR/SDEIS under each applicable alternative. As described in Section 28.5.1.4 of Chapter 28, an associated increase in human consumption of mercury caused by these alternatives would depend upon the selection of the fishing location (and associated local fish body burdens), and the relative proportion of different Delta fish consumed. Different fish species would suffer bioaccumulation at different rates associated with the specific species, therefore the specific spectrum of fish consumed by a population would determine the effect of increased mercury body burdens in individual fish species. These confounding factors make demonstration of precise impacts on human populations infeasible. However, because minority populations are known to practice subsistence fishing and consume fish exceeding US EPA reference doses, any increase in the fish body burden of mercury may contribute to an existing adverse effect. Because subsistence fishing is specifically associated with minority populations in the Delta compared to the population at large this effect would be disproportionate on those populations for Alternative 4A, the new preferred alternative. This potential effect would be adverse.</p> <p>Furthermore, implementation of CM12, Methylmercury Management, would minimize effects because it provides for project-specific mercury management plans including a QA/QC program, and specific tidal habitat restoration design elements to reduce the potential for methylation of mercury and its bioavailability in tidal habitats.</p>
2006	24	<p>Recommendations: Acknowledge that particular areas may not be suitable for restoration or that the acreages of proposed restoration may need to be reduced if such areas prove to be large contributors of methylmercury to the Delta ecosystem.</p> <p>Summarize recent research and current literature relevant to the potential for methylmercury impairment under existing conditions and future conditions; the potential impacts on covered fishes that use the Yolo Bypass; and the potential for bioaccumulation impacts to higher order species and human health.</p> <p>Describe the existing methods that show potential for reducing formation and transport of methylmercury, and the CMs to which they could be applied. Further describe the range of potential reductions that could be expected from CM12 methods for minimizing methylmercury formation and transport.</p> <p>Reconcile the Draft EIS's conflicting conclusions regarding the likely impact of the BDCP alternatives on the conditions conducive to bioaccumulation of methylmercury, and provide the basis for these conclusions.</p>	<p>Please see response to comment 2006-21 and 2006-23 for information regarding the assessment of methylmercury.</p>
2006	25	<p>Describe and commit to water column and fish and invertebrate tissue monitoring for mercury and methylmercury to support adaptive management actions. Include a commitment to ensure that adequate warning signs are posted in appropriate languages regarding the risks of consuming fish caught in the Delta, and provide further outreach to minority populations about these risks. Such outreach should include meaningful involvement by the affected populations.</p>	<p>Master Response 14 provides additional information regarding the mercury effects analysis conducted for the DEIR/EIS and for Alternatives 4A, 2D, and 5A. In addition, implementation of CM12, Methylmercury Management, would minimize effects because it provides for project-specific mercury management plans including a QA/QC program, and specific tidal habitat restoration design elements to reduce the potential for methylation of mercury and its bioavailability in tidal habitats.</p>
2006	26	<p>Selenium</p> <p>Soils on the west side of the San Joaquin Valley are high in selenium. As a result, it is present in agricultural drainage and enters the Delta in the San Joaquin River at Vernalis. When mobilized in the environment and transformed to organic, bioavailable forms, selenium is highly bioaccumulative and can be toxic to organisms at very low levels of</p>	<p>As previously stated, the new preferred alternative is Alternative 4A and no longer includes an HCP which results in a substantial reduction in associated habitat restoration (and the potential water quality impacts associated with the BDCP (Alternative 4)). The assessment of selenium has been updated in the RDEIR/SDEIS and Final EIR/EIS and is reflected in Chapter 8 Water Quality at Impact WQ-25: Effects on Selenium Concentration Resulting from Facilities Operations and Maintenance. The RDEIR/SEIS and Final EIR/EIS include updated analysis of effects of operations on selenium exposure and risk to all species. Relative to</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>chronic exposure. The BDCP proposes to bring additional reliable water to the west side of the San Joaquin Valley. This would result in a greater volume of water and greater loads of selenium being discharged to the San Joaquin River. Although available data show that the maximum selenium concentration at Vernalis is not exceeding the current water quality objective of 5 micrograms per liter (µg/L) [footnote 14: 4-day average for above normal and wet year types and a monthly mean for dry and below normal water year types.] (p. 8-96), the operations of the proposed project would contribute significantly more selenium-laden San Joaquin River water to the Delta (p. 8-226). In addition, EPA is in the process of updating its national recommended chronic aquatic life criterion for selenium in freshwater to reflect the latest scientific information, which indicates that toxicity to aquatic life is driven by dietary exposures. As of this writing, a peer review draft of the updated criterion is undergoing public review, with comments due to the Environmental Protection Agency in July 2014. Following consideration of comments received, the draft criterion will be revised, as appropriate, and released as a draft criterion for public review.</p>	<p>Existing Conditions and the No Action Alternative (ELT and LLT), Alternative 4A would result in essentially negligible changes in water (and therefore most biota) selenium concentrations in the Delta, with no exceedances of benchmarks for biological effects.</p> <p>Please also refer to Master Response 14 regarding the approach to conducting the selenium effects analysis, and in particular how upstream effects were treated.</p>
2006	27	<p>The Environmental Protection Agency is concerned that the potential effects of selenium on covered species, especially green sturgeon, are underestimated in the Draft EIS. The analysis discusses increased residence time of selenium in Suisun Bay and concludes that the impacts of the proposed restoration measures on green sturgeon are "not adverse"; but does not discuss the south Delta, which would receive increased loads of selenium under all CM1 alternatives (p. 11-526). The increased loads, combined with increased residence time, could lead to greater selenium absorption in clam tissue, which is a primary food item of sturgeon (p. 11-257). Adverse effects of elevated selenium on early life stages of green sturgeon have been documented [footnote 15: Linares, J., Linville, R. Eenennaam, JV, Doroshov, S. 2004 Selenium effects on health and reproduction of white sturgeon in the Sacramento-San Joaquin estuary. Final Report for Project No. ERP-02-P35.].</p> <p>Likewise, impacts of increased selenium loads to salmonids are not adequately addressed in the Draft EIS. Although salmonids do not eat clams, they are sensitive in all their life stages (figure 12 in Presser, Luoma 2010). [footnote 16: Presser TS and Luoma SN 2010 Ecosystem-Scale Selenium Modeling in Support of Fish and Wildlife Criteria Development for the San Francisco Bay-Delta Estuary, California USGS Administrative Report.] One objective of the San Joaquin River Restoration Project (SJRRP) is to manage the river to restore salmon migration. The increased drainage of selenium-enriched water from the West side of the San Joaquin Valley that would likely result from the BDCP could compromise this effort.</p> <p>Recommendations: To mitigate for the project's impacts to selenium levels in the estuary as a result of the BDCP operations, consider reviving and funding the Bureau of Reclamation's Land Retirement Program [footnote 17: http://www.usbr.gov/mp/cvpia/3408h/index.html] to remove from cultivation and irrigation large areas of selenium laden lands on the West side of the San Joaquin Valley. This would save irrigation water, reduce discharges of selenium into the San Joaquin River basin, and advance attainment of selenium reduction targets [footnote 18: http://www.gpo.gov/fdsys/pkg/FR-2000-05-18/htmVOO-1106.htm] set by EPA and the Central Valley Regional Water Quality Control Board. Evaluate the extent to which restoration of these "retired" lands to the native plant community could also contribute to the recovery of threatened and endangered plants and animals listed by FWS. Consider analyzing the cost/benefit of implementing treatment technologies vs. land retirement.</p>	<p>The preferred alternative is now Alternative 4A and no longer includes an HCP which results in a substantial reduction in associated habitat restoration (and the potential water quality impacts associated with the BDCP (Alternative 4)). Updated selenium analysis indicates that relative to Existing Conditions and the No Action Alternative (ELT and LLT), Alternative 4A would result in essentially negligible changes in water (and therefore most biota) selenium concentrations in the Delta, with no exceedances of benchmarks for biological effects. Because there are no significant impacts to selenium, no mitigation is provided.</p> <p>Please refer to Master Response 14 for additional information on how the selenium affects analysis was conducted and updated.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Although cost/benefit analyses are not required under NEPA, such an analysis may be useful to decision makers and the public in this case.</p> <p>Reanalyze the proposal to develop wetlands as part of the conservation plan, taking into account the increased amount of agricultural drainage water from selenium-enriched lands that would enter these areas in the Delta as a result of BDCP operations, and the potential for selenium build-up and availability.</p> <p>Discuss hydrodynamics and increased residence time of selenium in the San Joaquin River in the southern Delta and its potential impact on clam uptake of selenium, bioaccumulation in sturgeon, and the potential for population effects.</p> <p>Reference and summarize the available literature regarding the impacts of selenium on sturgeon, especially with respect to early life stages, and consider such impacts in the analysis of increased selenium loading.</p> <p>The evaluation of the Alternatives should consider the objectives of ongoing or proposed projects and programs that are intended to improve Bay Delta water quality and fish and aquatic resources. Disclose potential conflicts with such projects or programs, as well as ways in which such conflicts could be avoided or minimized. In particular, the potential for competing management objectives between the BDCP and the SJRRP should be comprehensively analyzed and described.</p>	
2006	28	<p>Additional Water Quality Impacts</p> <p>The conclusion that there would be no impact to dissolved oxygen concentrations in reservoirs (p. 8-192, lines 6-15) is unsupported given that three major reservoirs are predicted to experience a 10% increase in dead pool under the No Action Alternative.</p> <p>Recommendation: Describe how predicted dead pool conditions in reservoirs may impact dissolved oxygen concentrations and other contaminant concentrations that may increase in these extreme conditions, and revise the impact conclusions, as appropriate.</p>	<p>RDEIR/SDEIS and Final EIR/EIS Impact WQ-9; Effects on Dissolved Oxygen Resulting from Facilities Operations and Maintenance has been modified to include discussion regarding how changes in reservoir storage would be anticipated to affect dissolved oxygen levels in the reservoirs. For Alternative 4A, the impact assessment (found in the RDEIR/SDEIS and updated for the Final EIR/EIS) concluded that the impacts on DO would be considered less than significant. Please refer to Chapter 8, Water Quality, in the Final EIR/EIS, Impact WQ-9, for more information on results from the dissolved oxygen analysis. Please see Master Response 25 for more information regarding the effects on upstream reservoirs.</p>
2006	29	<p>It is not clear whether residence time was considered in the impact assessment of water quality contaminants such as pesticides and metals. It appears that southern Delta residence times would increase due to increased use of the north Delta pumps (and decreased use of south Delta pumps), limiting freshwater inputs to, and movement of water in, the south Delta. These conditions could increase residence time of water moving through the southern Delta, which would increase aquatic life exposure to contaminants such as pesticides and selenium.</p> <p>Recommendation: Explicitly state whether or not residence time was included in assessments of contaminant impacts on aquatic life and other beneficial uses in the water quality analysis. If residence time was not considered, explain why it was not included and how increasing residence time could increase negative effects of contaminants as a result of CM1 operations.</p>	<p>Please refer to Master Response 14, which includes description of changes in the document related to residence time, and specifically in relation to selenium. A specific assessment of residence time changes was not included for metals or pesticides because there is no information on the record to indicate that residence time changes would lead to a potentially significant impact to metals or pesticides in the Delta. In addition, there is no information on the record to indicate that these constituents are causing toxicity in the Delta currently that would be made worse with exposure changes through the residence time analysis, nor is there information on the record as to whether conditions that are currently non-toxic would be made toxic by these changes.</p>
2006	30	<p>Fish and Aquatic Resources</p> <p>Aquatic Resources Beneficial Uses</p>	<p>The NEPA effects determinations in the Draft EIR/EIS that resulted in a "not determined" conclusion have been updated in the RDEIR/SDEIS and Final EIR/EIS, and include a NEPA and CEQA determination for each impact, which was based on the appropriate comparison to either the NEPA or CEQA baseline. For a</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Data and other information provided in the Draft EIS indicate that that all CM1 alternatives may contribute to declining populations of delta smelt, longfin smelt, green sturgeon, and winter-run, spring-run, fall-run and late-fall run Chinook salmon. Impact analyses in Chapter 11 show that entrainment, rearing, and migration conditions for these species are estimated, for many of the action alternatives, to be similar to, or worse than, existing conditions and sometimes worse than the future no action condition. Some of the NEPA effects that are described as "not determined" for some alternatives are very similar to effects that are described as "adverse" for other Alternatives. Data regarding the impacts on fish is provided in various tables, and the summary statements made in the text do not always accurately reflect the information in those tables.</p>	<p>description on the methodology for reaching impact conclusions, please see Section 11.3.2.2 in Chapter 11 of the Final EIR/EIS. Following the methodology in Section 11.3.2.2 and the guidelines presented in Section 11.3.3, Determination of Effects, all impacts to covered fish species under the preferred alternative, 4A, were determined to be less-than-significant and not adverse. The Chapter 11 impact analyses demonstrated there would be no detectable population effects on the fish species referenced in this comment. For additional analysis of fish species listed under the ESA and CESA, please see the Biological Assessment for the California WaterFix and the Section 2081(b) Application for Incidental Take for the California WaterFix Project.</p>
2006	31	<p>Longfin Smelt Abundance</p> <p>Long-term and recent sharp declines in fish abundance have been cited by the lead federal agencies, their partners, and EPA as evidence of collapse in the Bay Delta ecosystem. Longfin smelt relative abundance is estimated to decline for all but one of the CM 1 alternatives in most water year types (and in the average of all water year types) when compared to Existing Conditions. [footnote 19: Table 11-1A-8 page 11-297 "Estimated differences between scenarios for longfin smelt relative abundance in FMWT or Bay Otter Trawl," Table 11-2A-7 page 11- 764, Table 11-3-7 page 11-1097, Table 11-4-8 page 11-1308; Table 11 -5-7 page 1 1-1742; Table 1 1-6-8 page 11-1951; Table 1 1-7-7 page 1 1-2227, Table 1 1-8-8 page 1 1-2492; Table 11 -9-8 page 1 1-2768.] Alternative 8 is the only Alternative that has a predicted relative abundance increase for Longfin smelt relative to Existing Conditions. In comparison to the No Action Alternative, four CM1 Alternatives are predicted to result in declines in the Longfin smelt abundance index, while five CM1 Alternatives are predicted to result in positive changes to that index. Despite these predictions, the Draft EIS concludes that the impact on Longfin smelt abundance would be "not determined" for all CM1 alternatives for the NEPA effects determination. This conclusion disregards the predicted differences among the Alternatives in comparison to the No Action Alternative, and the predominantly negative impacts in comparison to Existing Conditions.</p>	<p>As stated in response to comment 30, conclusions for all impacts found to be "not determined" in the Draft EIR/EIS were updated and provided in the RDEIR/SEIS and Final EIR/EIS. For more information regarding impacts to aquatic resources and its associated mitigation measures please see Chapter 11 of the Final EIR/EIS.</p> <p>It should be noted that the comparison of project alternative effects to the No Action Alternative (NAA) is a more appropriate comparison due to the inclusion of future climate change, sea level rise, and water demand assumptions, which are not included in Existing Conditions. Under the preferred alternative, 4A, Mitigation Measure AQUA-22D (see Chapter 11) will ensure initial operations set delta outflow such that longfin smelt abundance would not be reduced. For additional information, please see the California WaterFix CESA 2081(b) incidental take analysis for a description on how DWR's spring outflow criteria as part of the longfin smelt mitigation will ensure similar outflows in the March-May period compared to the NAA to avoid potential effects to longfin smelt, meeting both the requirements of CEQA/NEPA and CESA..</p>
2006	32	<p>Entrainment of Juvenile Delta Smelt</p> <p>The summary table on page 11-55 of the Draft EIS states that Alternative 4's flow-related effects on fish would lead to "beneficial impacts" with respect to entrainment of delta smelt. While the prediction for Alternative 4 shows somewhat less entrainment in comparison to the No Action Alternative, the predicted difference is much smaller for juveniles than for adults, and Alternatives 1, 2, 7, and 8 are predicted to result in substantially less entrainment at all life stages. Compared to Existing Conditions, Alternative 4 is predicted to result in increased entrainment of delta smelt, especially juveniles. It is unclear how increases in juvenile entrainment would result in overall beneficial impacts. Entrainment estimates provided in the Draft EIS show reductions in adult entrainment, but increases in juvenile entrainment for all Alternatives except Alternatives 7 and 8, compared to Existing Conditions, and for Alternatives 3 and 5, compared to the No Action Alternative. The discussion in the text provides the caveat that "entrainment is expected to remain at or below the levels currently experienced by fish... there are very few instances where there would be increases, but these are substantially offset by decreases during other periods" (p.II-53).The analysis does not describe the relative importance of reducing entrainment of each life stage (adult and juvenile) to the overall population. No comparison among Alternatives is provided, nor</p>	<p>With respect to Alternative 4, the CEQA impact conclusion (as compared to Existing Conditions) was less than significant, not beneficial as the commenter suggested (Table 11-4-SUM1). The RDEIR/SDEIS included 3 new non-HCP Alternatives, including the new preferred alternative, 4A. The evaluation of the effects of Alternative 4A is included in the RDEIR/SDEIS and Final EIR/EIS, and is consistent with the conclusions found under Alternative 4. Differences in entrainment estimates among project alternatives are a result of different operational scenarios and/or conveyance facilities that are assumed for each project alternative. A full description of the project alternatives can be found in Chapter 3 of the Final EIR/EIS. As shown in Chapter 11, modeling results indicate Delta smelt entrainment under Alternative 4A would be lower during most water year types compared to the NAA, with the expectation of dryer years, which juvenile Delta smelt entrainment would be similar to the NAA. For additional analysis on changes in juvenile Delta smelt entrainment in the south Delta, please see Chapter 6 in the California WaterFix Biological Assessment.</p> <p>Section 11.0.2.1 in Chapter 11, Final EIR/EIS, provides a summary of effects for each alternative, and the Executive Summary includes a table comparing various Chapter 11 impact determinations across project alternatives.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>does the Draft EIS explain why some Alternatives, such as Alternatives 7 and 8, show much larger reductions than other alternatives in both juvenile and adult entrainment.</p>	
2006	33	<p>Impacts on Delta Smelt Rearing Conditions</p> <p>The Draft EIS forecasts changes to rearing conditions for delta smelt by estimating the change in available fall abiotic habitat with and without estimated habitat restoration benefits relative to the two baselines: Existing Conditions and No Action Alternative. CM1 alternatives with "Fall X2" operational criteria are predicted to increase fall rearing habitat relative to the No Action Alternative. These include CM1 Alternatives 2, 4 H4, and 5-9. Alternatives 6 (isolated facility, eliminates south Delta exports) and 7 (enhanced flows) show the highest predicted increases in fall rearing habitat. The absolute values of fall rearing habitat or significance thresholds are not provided.</p> <p>Recommendations: Modify operational scenarios for CM1 alternatives to develop at least one alternative that would have more certain and beneficial effects on covered fish populations during all life stages.</p> <p>Present the predicted impacts to each of the covered fish species and impact categories (entrainment, spawning, rearing, migration), for all the alternatives and baselines in comparative form, sharply defining the issues and providing a clear basis for choice among options by the decision-makers and the public (40 CFR 1502.14).</p> <p>Provide absolute value estimates and proportional changes, in addition to relative changes from baselines, for predictions under each CM1 Alternative.</p> <p>Describe the scientific basis of, and uncertainty associated with, any assumptions made in the analysis, including in the development of the No Action Alternative. This may include, for example, data regarding current entrainment levels of all covered fish species at all life stages in all water year types.</p>	<p>There are no quantitative thresholds applicable across all potential conditions evaluated for delta smelt. The impacts of the alternatives related to fish and Aquatic species is based on monthly operational modeling performed to compare the relative potential for effects to habitat conditions. The methods used to make the determinations were further explained in the RDEIR/SDEIS and can be found in the Final EIR/EIS (see response to comment 2006-30). With respect to modification of operational scenarios for CM1 to have more certain and beneficial effects, any alternative will have uncertainty related to potential effects, because of the nature of the mechanisms involved; such uncertainty is recognized, for example, in the adaptive management program (see Section 3.6.4.4, Chapter 3, Final EIR/EIS, and Master Response 33 for more information). Given that the analyses related to operational modeling are comparative (alternative compared to NAA, for example), they are not meant to be taken as absolute predictions. In the case of delta smelt rearing habitat, the absolute values of habitat index are not representations of habitat area, but is weighted by the quality of the habitat. The scientific basis and uncertainty of analytical assumptions was discussed in the public draft BDCP (see Chapter 5.5 for covered fishes, for examples). In addition, Chapter 11 in the Final EIR/EIS describes some of the uncertainties surrounding outflow-abundance relationships for Delta smelt. Chapter 11 also describes the assumptions and uncertainties of the various models utilized in the aquatic resources impact analyses.</p> <p>The Final EIR/EIS includes comparison of alternatives for some of the resource issues (including various aquatic resource impact determinations) in the Executive Summary and includes comparison of alternatives discussions and comparative tables at the beginning of each Final EIR/EIS resource chapter.</p>
2006	34	<p>NEPA Effects Determinations</p> <p>The NEPA Effects Determinations provided in the Draft EIS are not always consistent with the impacts described. We list a few examples below.</p> <p>Alternative 1 AQUA-5: Effects of Water Operations on Rearing Habitat for Delta Smelt: The description of impacts reports a 22% loss of rearing habitat (p. 11-265), which suggests that the impact should be considered adverse if proposed habitat restoration does not produce anticipated benefits. Instead, Table 11-1A-SUM2 (page 11-16) lists the NEPA Effects Determination as "Not Determined." The NEPA Effects discussion on page 11-265 does not explicitly state that the NEPA Conclusion is "not determined."</p> <p>Alternative 1 AQUA-21 Effects of Water Operations on Entrainment of Longfin Smelt: The description of impacts shows that entrainment is estimated to increase for juvenile Longfin smelt in dry (1 4%), below normal (46%), and above normal (33%) water year types (Table 1 1- 1A"6), and the Summary text on page 1 1-295 states, "It is concluded that these changes in Longfin smelt entrainment would be adverse under Alternative 1A." The subsequent NEPA Effects statement comes to a different conclusion, "The overall effect of the Alternative 1A operations scenario would not be adverse to Longfin smelt." Table 11-1A-SUM2 also lists the NEPA conclusion for entrainment of Longfin smelt as "not</p>	<p>The RDEIR/SDEIS and Final EIR/EIS include revisions to the NEPA and CEQA conclusions as appropriate to ensure consistency across alternatives analyses between NEPA and CEQA analysis (and that in the Biological Assessment and 2081(b) Incidental Take Application) and to provide a NEPA conclusion for each impact. Additionally, the methods section was updated to better describe how conclusions were developed given the multiple lines of evidence often used for impact assessments. See Sections 11.3.2.2 and 11.3.3 in Chapter 11 of the Final EIR/EIS for more information.</p> <p>In addition, Section 11.0.2.1 in Chapter 11, Final EIR/EIS, provides a summary of effects for each alternative, and the Executive Summary includes a table comparing various Chapter 11 impact determinations across project alternatives.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>adverse."</p> <p>Impact AQUA-22: Effects of Water Operations on Spawning, Egg Incubation, and Rearing Habitat for Longfin Smelt. The NEPA Effects discussion predicts reductions of 8 to 10 percent in relative abundance of Longfin smelt for Alternative 1A, suggesting an adverse impact on this species from Alternative 1A. No NEPA conclusion is explicitly stated in this section (p. 11-295); however, Table 11-1A-SUM2 (page 11-16) lists the NEPA conclusion as "not determined."</p> <p>Furthermore, throughout the document, different NEPA Effects Determinations are provided for similar impact descriptions. For example, in the discussion of "Effects of Water Operations on Migration Conditions for Winter-Run Chinook Salmon", the Draft EIS concludes that Alternatives 1 and 8 would have "adverse" NEPA Effects and Alternatives 7 and 4 would have "not determined" NEPA Effects, even though the estimated NEPA effects are quantitatively similar for the multiple metrics evaluated. It is not apparent how the lead agencies decided that one impact was beneficial and another adverse.</p> <p>Recommendations: Describe the decision making process and decision rules used to make NEPA Effects Determinations from the analytical information presented for each impact category. Define the NEPA Effects Determinations and provide thresholds -- quantitative when possible --for each category so that it is clear why some estimated impacts result in one NEPA Effects Determination over another. Explain whether all metrics are considered equal in the analysis or some are weighted. If negative impacts in one metric category translate into an adverse conclusion, regardless of the other metrics, this should be disclosed. Include summary tables for each impact category so that the reader can see the metrics and their results and how they compare among alternatives.</p> <p>Compare the NEPA Effects Determinations with the narrative text describing the metrics and NEPA Effects among all alternatives for each impact category (e.g., AQUA-42 above) to ensure that decision rules and methods are used consistently.</p>	
2006	35	<p>Analytical and Presentational Issues</p> <p>Defining the Project Proposal</p> <p>The proposed project evaluated in the Draft EIS is not fully defined. The Environmental Protection Agency is aware that interagency discussions with the project proponents regarding key aspects of the proposed project are ongoing. Many of the undefined aspects of the BDCP are fundamental to the potential environmental impacts of the proposal. For example, it is EPA's understanding that potential agreement, in advance, to a certain range of exports is under consideration in the HCP discussions. While an Implementation Agreement has been released for public comment, it is incomplete and is still being discussed by the involved parties. The Implementation Agreement's financing and decision making elements are important for public disclosure because they affect the likely implementation and success of mitigation and environmentally beneficial activities, yet these effects are not described for public review in the DEIS.</p> <p>In addition, given the large scale nature of the construction activities associated with the BDCP, "minor" changes in proposed project design or operation can make a significant difference in the potential environmental impacts.</p> <p>Recommendation: Fully describe the proposed project and reasonable alternatives,</p>	<p>Implementing agreements are a requirement under the California Natural Community Conservation Planning Act (NCCPA), and are routinely executed under the ESA Section 10 (HCP) permitting process, but is not necessary for implementation of the preferred alternative, Alternative 4A. Since the current proposed project (Alternative 4A) is no longer a NCCP or HCP, an implementing agreement was not released with the RDEIR/SDEIS or Final EIR for the project. If an HCP alternative is chosen at the end of the CEQA/NEPA process, updated information on the conservation plan, including the Implementation Agreement, may be necessary prior to final approval.</p> <p>The proposed project (Alternative 4A) and alternatives are fully described in RDEIR/SEIS and Final EIR/EIS Chapter 3, Description of Alternatives.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		including information that is integral to decisions that are being made about the proposed project design and operations.	
2006	36	<p>The Draft EIS explains that the adaptive management program is a work in progress (p. 3D-9, BDCP p. 3.4-32). The specific approach for an adaptive management program and its effect on environmental consequences is a fundamental issue that should be addressed during the NEPA process. Given that species recovery depends largely on the success of the adaptive management program, it is essential that a more fully formulated adaptive management program be described in the EIS.</p> <p>Recommendation: Describe the adaptive management program in detail, including clear objectives, explicit thresholds, alternative hypotheses, and designated responsible parties. In addition, explain any limitations imposed on the adaptive management program by the Implementation Agreement, and explain how those limitations affect the integrity of the adaptive management program.</p>	<p>The CA Water Fix would utilize an adaptive management program that would address the CWF joint ESA Biological Opinion (BiOp) and 2081(b) Incidental Take Permit (ITP), and the CVP/SWP 2008/2009 BiOps and CESA authorizations. Collaborative science and adaptive management will support the proposed project by helping to address scientific uncertainty where it exists, and as it relates to the benefits and impacts of the construction and operations of the new water conveyance facility and existing CVP and SWP facilities. The adaptive management program is described in detail in Chapter 3, Description of Alternatives, Section 3.6.4.4, Adaptive Management and Monitoring Program. . Please see Master Response 33 for more information on adaptive management and monitoring.</p>
2006	37	<p>Alternatives Analysis</p> <p>The Draft EIS states that alternatives in the document are "evaluated at an equal level of detail, as required by NEPA" (p. 3-5); however, the lead federal agencies' Progress Assessments indicate that the operational components of the alternatives were subjected to different levels of analysis. For example, iterative modeling runs were conducted for Operational Scenario H (solely associated with the CEQA Preferred Alternative 4) that were not run for other Operational Scenarios.</p> <p>The Draft EIS defines the Alternatives in terms of the design and capacity of the proposed conveyance structure. Each alternative is then paired with a particular operational scenario. The Environmental Protection Agency agreed with this organizational construct early in the BDCP process, expecting to see a range of Alternatives that could present the environmental and water supply tradeoffs being considered. Instead, the DEIS focuses primarily on Alternative 4. It appears that the environmental impacts of certain other Alternatives would be reduced if those Alternatives were matched with more optimal operational criteria (for example, Alternative 5 with Operational Scenario F); however, the DEIS does not attempt to optimize the other Alternatives for environmental and water supply benefits. Other reasonable Alternatives could be developed by incorporating a suite of measures, including water conservation, levee maintenance, and decreased reliance on the Delta. [footnote 20: The "Portfolio Approach" developed by a diverse set of stakeholders is one attempt to place Delta water management into the larger context of facilities investments and integrated operations.] Such Alternatives would be consistent with the purpose and need for the project, as well as with the California Bay-Delta Memorandum of Understanding among federal agencies [footnote 21: http://www2.epa.gov/sites/production/files/documents/fbaydeltamousigned.pdf] and the Delta Reform Act of 2009.</p> <p>Recommendations: Work with State and federal partners to modify and further analyze the proposed Operational Scenarios to improve the precision and utility of the aquatic life analyses for all the operational alternatives.</p> <p>If differences in the level of analysis remain among the Alternatives, disclose, and explain the reason for those differences.</p> <p>Evaluate the environmental impacts of pairing each Alternative with more optimal</p>	<p>Please see Master Response 4 for more information regarding the development of the project alternatives. The alternatives 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. The potentially feasible alternatives analyzed in the EIR/EIS were chosen for the relative ability to meet the project objectives and purpose and need as well as the ability to avoid or substantially reduce the potential significant impacts of the proposed project. 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, Draft and Final EIR/EIS. Appendix 3A thoroughly explains why various proposals, including "the portfolio approach," were not analyzed in the EIR/EIS.</p> <p>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, factoring in the entire administrative record that includes the results of the ESA Section 7 process and the input from CDFW through the CESA process. 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. In addition, the SWRCB has independent authority under both California water rights and water quality laws to review and approve the proposed project, if approved after the CEQA/NEPA process. Please see Chapter 3 of the Final EIR/EIS for additional information on Proposed Project operations.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		operational criteria.	
2006	38	<p>Comparison of Alternatives</p> <p>The Draft EIS does not clearly present the alternatives and their respective environmental impacts in a clear and comparative manner. Because technical results are not synthesized and displayed in a comparative format, it is difficult for the reader to compare the predicted effects of CM1 alternatives.</p> <p>Further compounding the difficulty is the fact that the Draft EIS uses two very different baselines (Existing Conditions and No Action), pursuant to CEQA and NEPA regulations, and neither baseline is clearly defined. The assumptions that inform the baseline descriptions are spread throughout the document (Chapter 4, Appendix 4D, Appendix 5A, and Appendix 3A). Although Chapter 4 attempts to summarize the baselines, the summary is confusing, and references appendices that are hundreds of pages long. The baseline assumptions form the basis for all impact assessments; therefore, their lack of clarity creates an underlying uncertainty in the document's analyses and conclusions.</p>	<p>Each chapter of the RDEIR/SEIS and Final EIR/EIS includes a summary comparison of impacts. The summary comparison includes a textual discussion supplemented with comparative figures which allow the reader to compare impacts across all alternatives evaluated. The figures provide comparisons between each alternative and existing and no action baselines.</p> <p>A detailed discussion on the CEQA and NEPA baselines used in the EIR/EIS is provided in Chapter 4, Approach to the Environmental Analysis, section 4.2.1.1, "CEQA and NEPA baselines." Because CEQA and NEPA differ in its direction to the lead agency on what the appropriate point of comparison is for determining the impacts of the proposed project and alternatives, in many instances the "baseline" for determining impacts under CEQA will be different than that chosen by the federal lead agency for meeting the requirements of NEPA. Please also refer to Master Response 1 for additional information regarding environmental baselines used in the EIR/EIS analyses.</p>
2006	39	<p>The Draft EIS considers many other types of uncertainties, including those related to long-term climate change and human behavior, however, the treatment of uncertainty is confusing and exhibits a strong tendency to assume outcomes favorable to the proposed project. Uncertainties are expressed by "non-determined" NEPA conclusions, but they are not explicitly detailed in the body of the Draft EIS. EPA has repeatedly raised concerns about the treatment of uncertainty in the Draft EIS, and the Delta Independent Science Board and an independent panel commissioned by the Delta Science Program recently expressed similar critiques. [footnote 22: Delta Independent Science Board Review: [url] Independent Science Panel Review: [url]] Notably, the Panel concluded that the Effects Analysis of the BDCP (as incorporated by reference into the EIS) is "fragmented in its presentation, inconsistent with its technical appendices, and... inadequately conveys the fully integrated assessment that is needed to draw conclusions on the Plan due to incomplete information."</p> <p>Recommendations: Include, in the body of the document, summary tables comparing the effects of all CM1 alternatives and the No Action Alternative to the applicable water quality standards and other relevant environmental impact indicators, and compare and contrast the alternatives with respect to one another in the text. This discussion should inform potential mitigation strategies by identifying which alternatives would need more or less mitigation to comply with environmental objectives. Clearly explain the underlying assumptions inherent in the baselines. We suggest that this be presented in Chapter 4.</p> <p>Explicitly acknowledge uncertainties encountered in the analyses, explain what has been or could be done to eliminate or reduce those uncertainties, and disclose any assumptions made in the face of uncertainties that could not be eliminated.</p>	<p>All impacts reported in the RDEIR/SDEIS and the Final EIR/EIS include a NEPA determination. The impact assessment methods section included within each resource chapter includes a discussion of the methods used to assess impacts and if necessary a discussion of limitations in the assessment. Regarding the BDCP, substantial efforts were made to incorporate uncertainty into the BDCP effects analysis through summary diagrams explicitly showing levels of uncertainty of the effects of the BDCP that were derived from the uncertainty associated with the importance of attributes and the change in the attributes that may result from implementation of the BDCP.</p> <p>Each chapter of the RDEIR/SEIS and FEIR/EIS includes a summary comparison of impacts. The summary comparison includes a textual discussion supplemented with comparative figures which allow the reader to compare impacts across all alternatives evaluated. The figures provide comparisons between each alternative and existing and no action baselines.</p> <p>In addition, the CA Water Fix would utilize an adaptive management program that would address uncertainties related to the changing understanding of species needs as well as the potential future conditions related to climate change and human behavior that may affect sensitive species. Collaborative science and adaptive management will support the proposed project by helping to address scientific uncertainty where it exists, and as it relates to the benefits and impacts of the construction and operations of the new water conveyance facility and existing CVP and SWP facilities. The adaptive management program is described in detail in Chapter 3, Description of Alternatives, Section 3.6.4.4, Adaptive Management and Monitoring Program. Please see Master Response 33 for more information on adaptive management and monitoring. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.</p>
2006	40	<p>Scope of Impact Analysis</p> <p>The scope of analysis in the Draft EIS does not fully consider upstream and downstream impacts of the proposed actions in the Delta. As evidenced by the intergovernmental response to California's ongoing drought, the state and federal water projects are functionally and physically interconnected. For example, actions that Central Valley Project (CVP) operators take from the Trinity River have implications for South of Delta CVP and SWP deliveries, and operational changes in the Delta require upstream</p>	<p>Upstream impacts were addressed throughout the DEIR/EIS, RDEIR/SDEIR, and FEIR/EIS.</p> <p>Changes in hydrologic conditions measured against both the CEQA and NEPA baselines was conducted for each alternative. This information was then used as part of the impact assessment conducted for other resource topics, including Chapter 5 Water Supply, Chapter 6 Surface Water, Chapter 7 Groundwater, Chapter 8 Water Quality, Chapter 10 Fish and Aquatic Resources, Chapter 12 Terrestrial Resources, Chapter 15 Recreation, and Chapter 21 Energy. The methods section included within each resource chapter provides an overview of the steps followed to conduct the CEQA and NEPA impact assessment including the</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>adjustments in project operations. Based on the Environmental Protection Agency's ongoing discussions with the federal lead agencies, we understand that the U.S. Bureau of Reclamation is continuing to evaluate its broad operational response to the proposed changes in the Delta, for both near term and longer term operations. Upstream operational changes caused by BDCP implementation could have significant environmental and water supply impacts in the upstream areas, and these impacts must be disclosed in the DEIS. Similarly, the BDCP activities are expected to have impacts on downstream aquatic resources in San Pablo and San Francisco Bay, primarily by changing the magnitude and timing of outflow and by altering the mix of contaminant inputs from upstream (see discussion of selenium, above.)</p> <p>Recommendation: Explicitly recognize the integrated nature of the watershed and the water supply projects operating in the watershed, and analyze the upstream and downstream impacts, in particular to water supply and aquatic resources.</p>	<p>application of upstream hydrologic data.</p> <p>The RDIER/EIS and Final EIR/EIS was updated to include a discussion of downstream impacts.</p>
2006	41	<p>Integrated Water Management</p> <p>The BDCP effort has been ongoing since 2006. Initially, its broad goals were (a) the preparation of an HCP for continued operation of the state and federal water projects, and (b) a change in the mode of conveyance of export water through the Delta. As evidenced by the Alternatives Screening Criteria, as well as Water Supply Chapter 5 of the Draft EIS, there is now also a strong water supply enhancement component to the BDCP. That is, the project proponents appear to be anticipating that the CEQA Preferred Alternative 4 of the BDCP would result in the same or greater water exports (ranging from a decrease of 1% to an increase of 1.8%) than would be available in the absence of the BDCP (Table 5-9). Since the goals of a project drive the scope of the Alternatives that must be evaluated in the NEPA process (as well as in the subsequent Clean Water Act Section 404 permitting process), the Environmental Protection Agency believes that a more robust discussion and evaluation of the water supply component of this project is warranted in the EIS.</p>	<p>It may be a mischaracterization to label the BDCP (or Alternative 4A) with a “strong water enhancement component.” The north Delta diversion facilities and associated conveyance facilities described as CM1 in the BDCP and is part of Alternative 4A would provide for increased operational flexibility as the existing south Delta diversion facilities become more restricted due to endangered species and water quality needs, as well as sea level rise due to climate change. The new facilities would also protect against potential earthquake events affecting water deliveries south of the Delta. Integrated water management is an important component in addressing future water supply needs of California and the operational flexibility that the California WaterFix brings to SWP and CVP operations is an important element of integrated water management.</p> <p>Alternative 4A, the proposed project, will maintain compliance with Delta outflow regulatory requirements for all water years with the use of the North Delta intakes, as described in Chapter 5, Water Supplies, and Chapter 6, Surface Water. A detailed discussion of the specific Delta outflows under a range of seasons and water year types is contained in Appendix 5A. Figures 5-17 and 5-19 of Chapter 5, Water Supply, of the EIR/EIS present the average annual SWP and CVP Delta exports for longer average annual conditions and dry/critical water year types. As shown in Figures C-11-1 through C-11-6 of Appendix 5A, Section C, CALSIM II and DSM2 Model Results, of the EIR/EIS, the north Delta intake tunnels would not be fully utilized except for several months in wet years. As shown in Figure C-11-6, the north Delta intakes would have minimal flows that would be required for maintenance of the pumps during critical dry years. 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).</p>
2006	42	<p>California is moving quickly towards integrated water management, yet it is not clear how, as currently drafted, the BDCP conveyance component is consistent with this approach. Although the Draft EIS acknowledges California's progress in Demand Management in Appendix 1C, demand management is not incorporated into the project alternatives. Alternatives, such as the Portfolio Alternative, that proposed a more comprehensive and integrated approach to meeting the stated dual goals of the BDCP, were not evaluated.</p> <p>Recommendations: Explain how the proposed changes in conveyance and exports fit within the larger integrated water management plan for California. Include a more comprehensive consideration of, and response to, suggested alternatives such as the "Portfolio Alternative" and discuss the demand scenario driving the Delta export facilities.</p>	<p>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. The proposed 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, and the recovery and conservation of threatened and endangered species that depend on the Delta.</p> <p>Although components such as desalination plants and demand management measures have merit from a statewide water policy standpoint, and are being implemented or considered independently throughout the state, they are beyond the scope of the proposed project. 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</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Include a consideration of the significant water conservation efforts Statewide and in the export areas.</p>	<p>conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage. For more information regarding alternatives development, see Master Response 4; for more information on desalination/water demand management please see Master Response 6.</p> <p>As discussed in response to comment 37, the alternatives included in the Final 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. 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 BDCP/CWF.</p>
2006	43	<p>Habitat Restoration</p> <p>We are concerned that the analysis assumes a 100 percent success rate for habitat restoration, which is not consistent with our experience, or supported by restoration ecology and conservation biology academic literature and scientific investigation. The potential adverse impacts of CM1 operations would be greater than projected in the DEIS in the likely event that restoration of the Bay Delta ecosystem is not 100 percent successful.</p> <p>Recommendations: Discuss restoration methods, performance metrics, and documented success rates for each habitat restoration type proposed.</p> <p>Work with the federal and state wildlife agencies to develop analytical methods to evaluate gradients of partial success for each habitat type. Re-evaluate the impacts of each Alternative (CMS2-11) in light of these gradients and the likely success rates for each habitat restoration type. Incorporate the results into final conclusions about the impacts of BDCP alternatives.</p>	<p>The analysis for CMs 2-21 was completed at a programmatic level. Please refer to Master Response 2 and Section 4.1.2 of Chapter 4, Approach to the Environmental Analysis, for more details on the assumptions included in the analysis of these environmental commitments. The RDEIR/SDEIS, released in 2015, introduced a new preferred alternative, 4A, which does not include a HCP or conservation measures. The alternative implementation strategy allows for other state and federal programs to address the long term conservation efforts for species recovery in programs separate from the proposed project. Therefore, substantially less restoration will occur under Alternative 4A, as described in Chapter 3, Alternatives. Please also refer to Master Response 33 regarding adaptive management. Please refer to Chapter 3, Alternatives, for additional detail about the habitat restoration proposed under Alternative 4A.</p>
2006	44	<p>Aquatic Species Recovery</p> <p>Although not explicitly stated in the Draft EIS, the primary premise of the BDCP appears to be the hypothesis that endangered and threatened fish populations in the San Francisco Estuary can be protected from further degradation by habitat restoration without increasing freshwater flow to the Estuary. As noted in the Executive Summary, restoration of more than 150,000 acres of habitat is proposed under most BDCP alternatives. Only moderate changes in freshwater flows (Delta outflow) to the Estuary are proposed under any of the alternatives. In particular, all sub-alternatives for CEQA Preferred Alternative 4) would result in less Delta outflow compared to the No Action Alternative (DEIS Table 5-9).</p> <p>The habitat restoration-only premise is inconsistent with broad scientific agreement, reflected in EPA's Delta Action Plan [footnote 23: http://www2.epa.gov/sites/production/files/documents/actionplan.pdf], that existing freshwater flow conditions in the San Francisco Estuary are insufficient to protect the aquatic ecosystem and multiple fish species, and that both increased freshwater flows and aquatic habitat restoration are needed to restore ecosystem processes in the Bay Delta and protect native and migratory fish populations. [footnote 24: This broad scientific agreement is illustrated in the following reports: (a) Public Policy Institute of California (20 13) Scientist and Stakeholder Views on the Delta Ecosystem "a strong majority of scientists prioritizes habitat and flow management actions that would restore</p>	<p>Commenter states that the unstated "hypothesis" of the BDCP relates to protecting endangered and threatened fish populations through habitat restoration, rather than increasing freshwater flow to the Estuary. As described in Master Response 5. The BDCP was proposed to meet the project objectives and purpose and need while meeting the requirements of Section 10 of the ESA and the CNCCPA. It was not proposed to be the state's sole answer to the decline of fisheries dependent on the Delta. The BDCP was proposed in reliance of input from the Services as to species needs, starting with the existing RPAs associated with the 2008/2009 Biological Opinions and also as protected beneficial uses through the SWRCB's Bay Delta WQCP. With the RDEIR/SDEIS and introduction of non-HCP alternatives and a new preferred alternative, the proposed project does not have the same focus on contributing to species' recovery as the BDCP necessarily had to in order to meet ESA and NCCPA requirements. However, Alternative 4A does address existing species concerns that are framed in the existing conditions and No Action Alternative presentations.</p> <p>Various parts of Chapter 11, Fish and Aquatic Resources, have been revised since the release of the Draft EIR/EIS. Chapter 11, Final EIR/EIS, includes updated descriptions of the models and methods used in the subsequent impact analyses. Information on the flow, passage, salinity, and turbidity analytical methods can be found in Section 11.3.2.2, in addition to the benefits and limitations of each method, including the longfin smelt X2-abundance regression. Please also see the Biological Assessment and Section 2081(b) Incidental Take Permit Application.</p> <p>To the extent that there are published relationships between specific species and flows in the Delta, they</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>more natural processes within and upstream of the delta" (p. 2). http://www.ppic.org/content/pubs/report/R_413 EHR.pdf (b) State Water Resources Control Board (2010) Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem Flows Report, p.7. "Both flow improvements and habitat restoration are essential to protecting public trust resources [defined as "native and valued resident and migratory species habitats and ecosystem processes" p. 10]. (c) National Academy of Sciences Natural Resource Council Committee on Sustainable Water Management in California's Bay-Delta (2012) Report: Sustainable Water and Environmental Management in California's Bay-Delta "...sufficient reductions in outflow due to diversions would tend to reduce the abundance of these organisms ["these organisms" = 8 Bay Delta aquatic species at various trophic levels]." Page 60 and "Thus, it appears that if the goal is to sustain an ecosystem that resembles the one that appeared to be functional up to the 1986-93 drought, exports of all types will necessarily need to be limited in dry years, to some fraction of unimpaired flows that remains to be determined." Page 105 (d) California Department of Fish and Wildlife (2010) Quantifiable Biological Objectives and Flow Criteria "...current Delta water flows for environmental resources are not adequate to maintain, recover, or restore the functions and processes that support native Delta fish." Page 1 in Executive Summary]</p> <p>The Draft EIS acknowledges the importance of freshwater flow to fish species abundance, but is inconsistent in describing its analyses of the benefits of habitat restoration versus increased freshwater flow. For example, page 11 -202, lines 24 to 28 state that "although it is recognized that there are statistically significant correlations between freshwater flow and abundances of several fish species (e.g., Kimmerer 2002, FWS 2005), these correlations were not used in the EIR/EIS analysis to estimate fish population responses to alternatives because they do not directly include the effects of tidal marsh and floodplain restoration on fish populations." Elsewhere (e.g., p. 11 -297), the document states that the Kimmerer 2002 model was used for the analysis. Correlations that do not include the effects of restoration were rejected for some analyses, but not for others.</p> <p>Recommendation: A consistent approach that recognizes the demonstrated significant correlations between freshwater flow and fish species abundance should be used to analyze all of the Alternatives. Describe the analytical approach and provide the rationale for, and implications of, any deviations from it.</p>	<p>have been used for the assessment on impact on aquatic resources reported in Chapter 11, Final EIR/EIS.</p>
2006	45	<p>Project-level decision-making:</p> <p>The Draft EIS indicates that it provides a project level analysis of the proposed changes in conveyance (CM1) and a programmatic analysis of other BDCP elements. The level of engineering detail provided for the tunnels is not commensurate with the level of site-specific information typically provided in an EIS for a project that would require federal permits. For example, actions that would result in impacts to aquatic resources (e.g., grading, dredging, trench and fill, boring, spoils piling, levee work, excavation, etc.) are not detailed or quantified at a project-level of detail (e.g., limited information is provided regarding acres and/or linear feet of estimated impacts to waters of the US, the volume of sediment proposed for disposal sites, or the size and length of intakes, p. 3-92; 3C-3). Where reusable tunnel material sites are estimated for the pipelines and the forebays, they are estimated only for the preferred alternative and "may" be on the order of thousands of acres (p. 3-96). We do not believe the information provided in the Draft EIS is adequate to support a full assessment of the project-level impacts and mitigation opportunities, or to determine whether the project, as proposed, would satisfy</p>	<p>Master Response 2 provides additional discussion regarding what constitutes a project-level and program-level assessment and why the BDCP Draft EIR/EIS, RDEIR/SDEIS and Final EIR/EIS successfully achieved a project-level analysis for CM-1. The lead agencies also recognize that additional information may be required to complete the permitting process. Appendix 1F Supplemental Information for USACE Permitting Requirements has been added to the RDEIR/SDEIS and Final EIR/EIS which describes the steps required to secure permits under the CWA.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>requirements for requisite authorizations and permits. Given the lack of project-level information, the Environmental Protection Agency agrees with the Corps that supplemental NEPA review will be needed before a Section 404 permit or Clean Water Act section 408 "Letters of Permission" could be issued. [footnote 25: See Corps comments on the Draft EIS July 16, 2014 and July 29, 2014]</p>	
2006	46	<p>The use of programmatic inputs to project-level analyses in the Draft EIS also substantially limited the predictive power of evaluations that were intended to provide project-level precision. For example, Section 8.4.1.7 "Constituent-Specific Considerations Used in the Assessment" states that the modeling to predict water quality effects (salinity) of CM1 operational scenarios relied on estimates of impacts from implementation of other conservation measures, specifically CM2 (Yolo Bypass Floodplain Restoration) and CM4 (tidal marsh restoration), which are evaluated in the Draft EIS at a programmatic level (p. 8-153). A representative estimate of the location and amount of tidal marsh restoration was used to predict water quality effects under each CM1 operational scenario. The programmatic nature of the CM4 input, which is based on an assumed 100 percent success rate, represents only one potential future configuration of tidal marsh restoration. The actual success rate and physical location(s) of tidal marsh restoration will have varying impacts on water quality elements such as salinity. The representative locations and amounts of CM4 and CM2 that were used for CM1 water supply modeling were not disclosed in the Draft EIS, nor has any feasibility analyses been cited that describes the availability of suitable sites in the restoration opportunity areas. The uncertainties introduced by the use of CM4 programmatic estimates raises concerns over the reliability of water quality modeling results, and whether the analysis presented in the Draft EIS is sufficient to support federal permit decisions.</p> <p>Despite the substantial impact that the physical location of tidal marsh habitat restoration may have on water quality elements such as salinity, the Draft EIS does not describe how the locations for CM4 estimates were chosen or how likely it is that CM4 would result in the targeted amount of restoration (65,000 acres). A tidal marsh restoration success rate of less than 100 percent may yield very different results for predicted salinity values under each CM1 operational scenario. Typical success rates for wetland restoration have been reported to be substantially lower, e.g., on the order of 20-60 percent, and full restoration may require decades [footnote 26: J.L. Lockwood and S.L. Pimm (1999), When Does Restoration Succeed? (Chapter 13 in Ecological Assembly Rule: Perspectives, Advances, and Retreats; and Angel Borja & Daniel M. Dauer & Michael Elliott & Charles A. Simenstad (2010) Medium- and Long-term Recovery of Estuarine and Coastal Ecosystems: Patterns, Rates and Restoration Effectiveness, Estuaries and Coasts (2010) 33:1249-1260.], yet this underlying uncertainty associated with the predicted salinity values is not characterized in the Draft EIS.</p>	<p>The locations of the tidal restoration actions evaluated in the BDCP Draft EIR/EIS Alternatives 1 through 9 are described in Final EIR/EIS Appendix 5A_D, (D.6), Evaluation of Tidal Marsh Restoration Effects using RMA Bay-Delta Model. The basis of selection of these sites for the purpose of the EIR/EIS analysis is presented in Appendix 3G, Background on the Process of Developing the BDCP Conservation Measures. The ecological success of any given restoration site does not affect the tidal prism that would result from breaching and therefore, the rate of success would not influence the salinity results. The resulting tidal prism (based on the tidal restoration assumptions in the described sections) was reflected in DSM2 modeling of electrical conductivity and source water fractions for the Delta assessment locations, on which the water quality assessment of Alternatives 1 through 9 in Chapter 8 is based.</p> <p>Please note the preferred alternative is now Alternative 4A (California WaterFix) and no longer includes the substantial tidal habitat restoration under the BDCP. Please refer to Chapter 8, Water Quality, for a detailed analysis of the potential impacts resulting from water conveyance facilities operations and maintenance, and the project's Environmental Commitments, analyzed separately.</p>
2006	47	<p>The envisioned CM-1 tunnels would require one of the largest construction projects in the nation, which would occur in the upper portion of a sensitive estuary. The proposed structure includes elements (e.g., intake facilities and fish screens) that have never been constructed in the Sacramento River at this scale, yet the Draft EIS provides only a qualitative analysis of construction-related water quality impacts. This is inconsistent with the intent of the Draft EIS to support project-level decision making, which necessitates project-level analysis. Assessment of construction-related impacts is a basic element of project-level analysis, yet the Draft EIS provides no quantitative estimates of the amounts of soil, sediment, and contaminants that would be discharged to water bodies during CM1 construction, nor a rationale for not including such estimates. The qualitative</p>	<p>The assessment of construction activity effects on water quality, consistent with many CEQA and NEPA analyses of construction activities, is for certain resources considered "qualitative" because the potential for effects is based on a number of factors, including construction timing, weather, and site activities. Best management practices, consistent with those required by the SWRCB, that are reflected in the proposed project environmental commitments are expected to minimize effects to water quality (e.g., environmental commitment BMPs, construction-related permit requirements), and while BMPs have been demonstrated to reduce concentrations of contaminants of concern in discharges, it is not possible to quantify those effects for the scale and timeframe of the construction activities. Thus, while the comment calls for quantitative estimates of soil, sediment, and contaminants that will be moved, having this information would not facilitate a quantitative assessment of water quality effects due to construction. Finally, while the impact</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>description of best management practices does not provide an adequate basis for a lead federal agency to write permit conditions that would be effective in minimizing the water quality impacts of constructing CM1.</p> <p>Additionally, on page 8-293, in lines 35 to 38, the Draft EIS states that "Alternative 1A would result in similar potential contaminant discharges to water bodies and associated water quality effects to those discussed above for the no action Alternative." It is not clear how the impacts on water quality from construction-related activities of building a 3.5-mile twin tunnel facility, with 5 screened on-bank intakes, would be the same as not building it.</p> <p>Recommendations: Provide quantitative information regarding project footprints and estimates of soil, sediment and contaminant discharges during construction, as well as the impacts of those discharges and measures that would mitigate those impacts.</p>	<p>discussion for construction of alternatives incorporating elements of CM1 states that certain impacts would be similar to the No Action Alternative, the discussion goes on to describe how there would be additional impacts relative to Existing Conditions and the No Action Alternative due to the additional land disturbances associated with constructing the project elements. Please see Master Response 2 for additional information regarding project-level analyses in the EIR/EIS to support decision-making by the Lead Agencies.</p>
2006	48	<p>Provide the level of detailed information necessary to support project-level analyses and permit and authorization decision making, or specify and commit to the additional detailed work and appropriate supplemental NEPA analysis that will need to be done prior to project-level decision making.</p>	<p>The lead agencies also recognize that additional information may be required to complete the permitting process. Appendix 1F Supplemental Information for USACE Permitting Requirements has been added to the RDEIR/EIS and FEIR/EIS which describes the steps required to secure permits under the CWA.</p>
2006	49	<p>Provide confidence intervals around predicted water quality effects of CM1 operational scenarios. Describe the methods used to identify tidal marsh habitat locations for estimating water supply effects of CM1 operational scenarios, and explain the reasons for choosing these locations. Disclose the tidal marsh habitat locations that were used to estimate water supply effects of CM1 operational scenarios. Evaluate water supply effects of CM1 scenarios using several configurations and success rates of CM4 and disclose methods and results.</p> <p>Provide a summary of tidal marsh habitat success rates reported in academic literature and restoration industry reporting. Include a description of elements that drive restoration success, including location characteristics and restoration actions.</p> <p>Describe the locations in Restoration Opportunity Areas that exhibit the location characteristics that optimize restoration success, would provide salinity gradient habitat benefits for pelagic native fishes and would protect municipal water supply intakes.</p>	<p>As stated previously, operational models are tools to provide a comparative analysis of a particular alternative compared to the No Action Alternative. The results of the CALSIM II and DSM2 models cannot be used in a predictive manner to determine absolute values. Therefore, it was determined that an uncertainty analysis was not required for this EIS.</p> <p>The locations of the tidal restoration actions evaluated in the BDCP Draft EIR/EIS Alternatives 1 through 9 are described in Final EIR/EIS Appendix 5A_D, Evaluation of Tidal Marsh Restoration Effects using RMA Bay-Delta Model.</p> <p>The ecological success of any given restoration site does not measurably affect the tidal prism that would result from breaching and therefore, the rate of success would not influence the salinity results.</p> <p>Please note the preferred alternative is now Alternative 4A (California WaterFix) and no longer includes the substantial tidal habitat restoration under an HCP, therefore water quality impacts from tidal habitat restoration are minimal. Please refer to Final EIR/EIS Chapter 8, Water Quality, for detailed analyses of the potential impacts resulting from project facilities operations and maintenance, or the project's Environmental Commitments, including habitat restoration.</p>
2006	50	<p>Energy Infrastructure</p> <p>The Draft EIS indicates that DWR will conduct a five-to-seven year Systems Impact Study (SIS) to evaluate the electrical transmission and power needed for conveyance facilities (p. 21-22). This study is projected to be completed in time to procure the necessary power to support construction and operation of the facilities. Based on the Draft EIS, it is not clear whether the SIS could affect the conclusions summarized in the EIS, of the energy needed for the system (Table 21-11 p. 21-34) or to what extent it may influence the procurement and placement of future transmission and associated infrastructure.</p> <p>Recommendations: Provide additional details on the purpose of the SIS and how it may affect the assessment of the BDCP 's energy needs as well as the procurement and placement of future transmission and associated infrastructure.</p>	<p>The brief reference to the SIS and general energy procurement procedures used by DWR are accurate. However, it is likely that the future energy needed for CVP and SWP exports will be similar to the recent operations; the additional energy needed for the Delta conveyance facilities are relatively small fraction of the energy used at the CVP and SWP Delta pumping facilities near Tracy. Therefore the energy procurement for any of the alternatives would likely be very similar to the recent years of CVP and SWP energy procurement.</p> <p>The methods used to estimate the amount of energy required to operate each alternative are provide in Chapter 21 Energy at Section 21.3.1 Methods for Analysis.</p> <p>The location of temporary and permanent electric power transmission lines are provide in Chapter 3 Alternatives and the Map Books.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>In the absence of the SIS, disclose the assumptions made regarding electrical transmission placement and energy needs for the proposed conveyance facilities and whether the SIS could affect the analysis of environmental impacts.</p> <p>Clarify, particularly with respect to impacts on terrestrial species, the level of uncertainty involved with future placement, and associated impacts, of the transmission line and related infrastructure pending the completion of the SIS.</p> <p>Discuss whether the SIS would provide an opportunity to focus procurement of a guaranteed source of 100% renewable energy (e.g., contractually binding agreement) for the BDCP.</p>	
2006	51	<p>No Action Alternative</p> <p>The No Action Alternative assumes that no BDCP actions would be undertaken, and that climate change and sea level rise would occur and water demands and diversions north and south of the Delta would increase, resulting in reduced freshwater flows into the Delta (p. 5-57). Under the No Action Alternative described in the Draft EIS, no action would be taken in response to the impacts of climate change and sea level rise on the Delta.</p> <p>The Environmental Protection Agency supports the Draft EIS's recognition that climate change and sea level rise would likely result in decreased freshwater flows into and through the Delta and increased salinity intrusion; however, the assumption that, in the face of diminished overall water supply due to climate change, diversions north of the Delta would be allowed to increase seems unrealistic. Similarly, maintaining existing reservoir operations and meeting existing water supply demands is unlikely with the predicted effects of sea level rise and climate change. Comparing the CM1 Alternatives to a "No Action" Alternative that assumes that no actions would be taken by any party to address climate change-induced reductions in overall water availability has the potential effect of exaggerating the benefits of the CM1 Alternatives to the project proponents.</p> <p>The Draft EIS appears to contradict itself by stating that some of the water supply delivery differences between CM1 alternatives and the No Action Alternative in the year 2060 are "solely attributable to sea level rise and climate change, and not to the operational scenarios themselves (emphasis added, p. 5-47, lines 20-23)." This overlooks the significant impact of the CM1 project operational scenarios, which propose exporting volumes of water approximately equal to, or greater than, those exported under existing conditions, regardless of overall water availability. In a future affected by climate change and sea level rise, with less fresh water to allocate among all water users, exports of such magnitude would further reduce water availability for other uses and users.</p> <p>Recommendations: Consider and incorporate into the No Action Alternative predictable actions by other parties to address the anticipated effects of increased north of Delta demands, climate change, and sea level rise on water availability. This should include consideration of any measures that would likely be taken to reduce demands both north and south of the Delta.</p> <p>Clarify that the comparisons of CM1 alternatives to the No Action Alternative isolate the effects that would be attributable to CM1, and that such effects would occur in the context of increased north of Delta demands, sea level rise, and climate change, not "in</p>	<p>The Draft EIR/EIS utilized a 50-year "impact horizon" in what is referred to as the "late long term". Therefore, No Action Alternative includes reasonable and foreseeable projected conditions in the late long term (generally for the Year 2060). However, it would be speculative to include future undefined facilities or operations in the No Action Alternative, including agencies' responses to climate change, sea level rise, or future regulatory changes. Future changes in facilities and operations in response to changes in climate and sea level rise also are not included in Alternatives 1 through 9 because they would not be implemented under the Project Objectives and Purpose and Need provisions of the EIR/EIS. Any future changes would only occur following separate engineering and environmental analyses.</p> <p>The CALSIM II model runs did not include assumptions for specific export volumes. The CALSIM II model assumptions first meet operational criteria, senior water rights, and instream flows established by the federal and state agencies, as described in Appendix 5A, Section B, of the EIR/EIS. In many years the amount of water delivered to SWP and CVP water contractors is substantially less than contract amounts, as shown in Appendix 5A, Section C.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		the absence of" the effects of those stressors.	
2006	52	<p>Impacts to Wetlands</p> <p>At this time, no Clean Water Act (CWA) Section 404 permit application has been submitted for discharges of dredged or fill material into waters of the United States, including wetlands, associated with projects described in the BDCP. Environmental Protection Agency and the U.S. Army Corps of Engineers encourage lead agencies to proactively integrate CWA Section 404 regulatory requirements into the NEPA process to streamline environmental review by using NEPA documents for multiple permitting processes. With this in mind, EPA and the Corps met with the lead and federal state agencies multiple times over the past several years in the interest of using the BDCP EIS/EIR to inform Corps' CWA 404 regulatory decisions. Although constructive and informative, those meetings did not result in an agreement to coordinate the NEPA and CWA 404 permit reviews.</p> <p>Information provided in the Draft EIS and through meetings with the lead agencies illustrate that there are substantial challenges to finding that discharges associated with Alternative CM1 are consistent with the CWA Section 404(b)(1) Guidelines . In addition, the Draft EIS acknowledges that additional analyses for NEPA may be required to support Corps CWA Section 404 permit decisions for CM1 and that additional NEPA work will be done for other conservation measures (p. 1- 1 3). The Corps also submitted comments on the Draft EIS verifying that the Draft EIS does not provide the site-specific information necessary to form the basis for a permit decision, and we agree with that comment. [footnote 27: See Corps comments on the Draft EIS July 16, 2014 and July 29, 2014]</p> <p>Recommendation: Demonstrate that the proposed project would meet the requirements for a CWA section 404 permit.</p>	<p>DWR submitted an application to the USACE for project authorizations under Section 404 of the Clean Water Act in 2015. The USACE deemed the application to be complete and issued a public notice, which solicited comments through November 9, 2015. The RDEIR/SDEIS and Final EIR/EIS includes Appendix E, Supplemental Information for the U.S. Army of Corps Engineers Regulatory program. The USACE expects to utilize the EIS to inform permit decisions under the authority of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbor Act. USACE expects a supplemental NEPA document will be needed to inform the Section 408 clearance.</p> <p>As stated in the permit application Section 404 Clean Water Act, DWR has designed the proposed project to avoid impacts to "waters of the United States" to the maximum extent practicable and has developed measures to minimize any unavoidable impacts. Numerous iterations of footprint locations for each of the conveyance components were evaluated to maximize the use of upland areas. An analysis of alternatives will be prepared and submitted to the USACE to demonstrate that the project as proposed is the least environmentally damaging practicable alternative, as required by the Section 404(b)(1) Guidelines.</p>
2006	53	<p>Wetland Extent and Jurisdiction (Section 12.3 .4)</p> <p>The accuracy of the Clean Water Act jurisdictional determination and estimates of impacts to jurisdictional waters need to be improved for project-level analysis. The Draft EIS is intended to provide project-level information for CM1. However, the BDCP applicants were not able to conduct field delineations of wetlands and waters of the U.S. Instead the extent of wetlands and other waters in the study area was determined primarily using aerial photography interpretation in a GIS with limited (26 sites) field delineations (p. 12- 146). However, the Draft EIS does not provide an estimate of GIS-based mapping accuracy as compared to the on-the-ground mapping. The Draft EIS also states that the extent of impacts to jurisdictional wetlands and other waters is likely an overestimate because actual construction footprints will be smaller than presented in the document and because some mapped wetlands and waters could be non-jurisdictional (p. 12-147). However, in some areas, when compared for other projects (e.g., Delta Wetlands project EIS) the extent of potential wetlands and waters mapped for BDCP is substantially lower. While the extent of ground disturbance may be overestimated in the document, it is likely that the extent of wetlands and waters have been substantially underestimated.</p> <p>Recommendations: In Section 12.3.2.4, clearly describe how the GIS-based mapping compared to the field delineations and provide an estimate of GIS mapping accuracy. Use</p>	<p>The commenter states that the analysis (Impact BIO-176) needs to be improved. The methods and analysis of effects on jurisdictional wetlands and waters (as described in Impact BIO-176) were coordinated with the USACE and have been updated consistent with the wetlands delineation and is presented in Chapter 12 of the Final EIR/EIS.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>available approved wetland delineations from other projects to supplement the GIS mapping.</p> <p>Identify a schedule for improving delineation methods completing wetland delineations on sites where DWR has access or can reasonably obtain access. Estimate direct fill impacts and secondary effects to waters using engineering drawings and cross sections.</p>	
2006	54	<p>Air Quality Impacts</p> <p>General Conformity</p> <p>The Draft EIS discloses that this project would generate emissions within multiple air basins that are federally designated as nonattainment for ozone, PM2.5 (particulate matter smaller than 2.5 microns), and/or PM10 (particulate matter smaller than 10 microns); as well as designated maintenance areas for carbon monoxide (CO; p.- 22- 13, Table 22-4). The Draft EIS states that general conformity to the State Implementation Plan (SIP), with regard to all of these pollutants except CO, would be demonstrated through the use of a combination of mitigation measures and the purchase of offsets. For CO, conformity would need to be demonstrated through the use of local air quality modeling analyses (i.e., dispersion modeling).</p> <p>The availability of sufficient offsets to demonstrate conformity for the BDCP may be limited. The Environmental Protection Agency is aware that other construction projects scheduled to take place in the BDCP project area during the BDCP's proposed construction time frame also include the purchase of offsets to demonstrate conformity. For example, two segments of the California High Speed Rail project scheduled to be constructed in the San Joaquin Valley Air District are currently pursuing a significant amount of offsets for several criteria pollutants.</p> <p>The Draft EIS is not clear as to whether the federal lead agencies have made a general conformity determination. To the extent there is information regarding conformity, the Draft EIS also appears to rely on qualitative, not quantitative information. EPA interprets the general conformity rule as including all direct and indirect emissions from the federal action; therefore, the emissions from all conservation measures required as part of this federal action should be quantified and evaluated in the general conformity determination.</p> <p>Recommendation: Demonstrate that all direct and indirect emissions of the federal action, including all required conservation measures, would conform to the applicable SIPs and not cause or contribute to violations of the National Ambient Air Quality Standards (NAA QS).</p> <p>Continue to work closely with the local air districts to secure legally binding offset agreements and complete the general conformity determinations.</p> <p>Include the Draft General Conformity Determination either as a detailed summary or as an appendix, and the previously referenced "Conformity Letters."</p>	<p>The general conformity determination is provided in Appendix 22E, General Conformity Determination, of the RDEIR/RDEIS and Final EIR/EIS. The analysis was conducted for the construction and operation of the water conveyance facilities and is therefore limited to direct and indirect emissions from CM1. DWR undertook a multi-year consultation process with the four Plan Area air districts to confirm sufficient emissions reduction credits were available to offset project- generated emissions to net zero. Copies of the air district coordination letters are provided in the general conformity determination (see Appendix 22E in the RDEIR/SEIS and Final EIR/EIS). This input, provided by the agencies designated to manage the offset programs, substantiate the feasibility of Mitigation Measures AQ-1, AQ-3, and AQ-4. As noted in the letters, DWR and the air districts are committed to working together to reduce air pollution generated by construction of the water conveyance facility, consistent with the requirements outlined in the mitigation and required by local air district rules and regulations.</p>
2006	55	<p>Alternatives</p> <p>The reason for including maximum pumping capacity (10,600 cubic feet per second) for the State Water Project's Banks Pumping Plant in all CM1 Alternatives that include north</p>	<p>Alternative 4A does not propose changes to the USACE permit limitations for CCF operations and diversions. The Banks Pumping Plant could operate more frequently because it would be pumping combined south Delta (CCF) and north Delta (NDD) water under some conditions. There is no proposal to change in Banks</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Delta intakes is not clear. The existing pumping restriction for Banks Pumping Plant for the gates of Clifton Court Forebay is intended to minimize erosive forces. Section 5.2.1.3 refers to the Corps of Engineers' Public Notice for the Bank Pumping Plant, which states that that additional permitting for the SWP's diversions would not be required so long as the SWP did not exceed a diversion of 13,250 acre feet (daily and 3-day running average). It is not clear that the Corps' goal of minimizing erosion would be met by full pumping capacity operation.</p> <p>Recommendations: Describe the Corps of Engineers ' pumping restriction for the Banks Pumping Plant. Describe the circumstances under which the Banks pumping plant would be able to pump at maximum capacity, and why erosion would no longer be a significant effect from pumping.</p>	<p>Pumping Plant maximum capacity.</p>
2006	56	<p>The description of CM2 (Yolo Bypass fisheries enhancement) in Section 3.6.2.1 (p. 3-122) does not contain information about the amount and location of planned restoration activities, disclosure of targeted flood frequency, or a description of how CM2 differs from what is already required of the Bureau of Reclamation by the 2009 National Marine Fisheries Service Biological Opinion, Section I.6.1 (page 34 in the 2009 Biological Opinion with 2011 amendments). That Biological Opinion requires Reclamation to "provide significantly increased acreage of seasonal floodplain rearing habitat, with biologically appropriate durations and magnitudes, from December through April, in the lower Sacramento River basin, on a return rate of approximately one to three years, depending on water year type." The Biological Opinion indicates that the amount of floodplain restoration should range between 17,000-20,000 acres (excluding tidally-influenced areas), with appropriate frequency and duration.</p> <p>It is the Environmental Protection Agency's understanding that CM2 is evaluated programmatically and subsequent NEPA document(s) will further define aspects of this alternative. Indeed, the Bureau has already collected scoping comments for the development of an EIS specific to CM2. It is not clear how programmatic information from this Conservation Measure was used to inform project-level impact determinations for Chapter 5 through Chapter 11 in the current Draft EIS.</p> <p>Recommendations: Provide additional available information about the planning of CM2, including floodplain acreages, frequency and duration of estimated inundation, and maps of potential locations of restoration sites.</p> <p>Summarize the potential overlap between CM2 and Section I.6.1 of the 2009 Biological Opinion so that the reader is informed about the existing requirements under Section 7 of ESA and how actions taken or proposed pursuant to the Biological Opinion may be modified by the BDCP.</p> <p>Indicate whether additional water would be needed to flood the Yolo Bypass and, if so, where the water would come from.</p> <p>Explain how programmatic information drawn from this Conservation Measure was used to inform project-level impact conclusions for water supply and water quality.</p>	<p>Please see BDCP description of CM2 for information about the amount and location of planned restoration activities, and inundation targets. Please see BDCP Table 3.2-1 for a description of which activities from the OCAP BiOps are included in BDCP. See Master Response 5 for more information regarding the BDCP and the Preferred Alternative. With this change, no restoration activities are proposed in Yolo Bypass, and no aspects of CM2 would be implemented.</p> <p>The originally proposed habitat restoration measures and related Conservation Measures (CMs) (i.e., CM2 through CM21) would not be included as part of the preferred alternative (Alternative 4A) , 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.</p>
2006	57	<p>Recent floodplain habitat loss over the last few decades is listed as one of the reasons for proposing CM2, however, floodplain habitat loss has been occurring for more than a few decades.</p>	<p>Proposed tidal habitat restoration in the Delta under CM 4 was evaluated at a programmatic level in the Draft EIR/EIS. Given the potential effect of restoration on the Delta hydrodynamics, a representative restoration configuration was assumed for the Draft EIR/EIS. Assumed Restoration Opportunity Area configurations were included in Attachment 2 for RMA Bay-Delta model and Attachment 4 for DSM2 model</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Recommendations: Provide a broader description of long-term floodplain habitat loss over a 100 year timeframe and describe how it has affected fisheries populations, with appropriate citations.</p> <p>It does not appear that a feasibility analysis was conducted to determine the availability of lands for restoration within the Restoration Opportunity Areas for CMs 2, 4-11. We understand that much of this information is confidential; however, there are multiple other draft HCP efforts moving forward that overlap with the project area, creating the potential for restoration planning conflicts on the same parcel of land.</p> <p>Recommendation: Conduct an analysis of areas that support each type of proposed habitat restoration in each of the Restoration Opportunity Areas and develop criteria for prioritizing acquisition based on potential restoration success and availability. Consider the other draft HCP efforts that overlap or are immediately adjacent to the project area to identify potential conflicts on restoration areas.</p>	<p>in the Appendix 5A Section D. Attachment 5 of the Draft EIR/EIS Appendix 5A Section D, provided the sensitivity of Delta hydrodynamics and salinity transport to various potential restoration configurations using the RMA Bay-Delta Model. As described in Section 3.6.2 of Chapter 3, Description of Alternatives, descriptions of the restoration actions in CM3 through CM5 in the Draft EIR/EIS include general locations; and potential physical modifications and construction efforts necessary to implement habitat conservation-related activities. These descriptions include enough detail to support program-level impact analyses related to habitat and land use conversions. While general locations are provided, specific locations for these conservation actions have not been identified at this time and would require separate engineering and environmental analyses.</p> <p>Please see Master Response 5 for more information regarding the BDCP and the new Preferred Alternative. No restoration activities are proposed in Yolo Bypass for the preferred alternative (4A), and no aspects of CM2 would be implemented.</p> <p>For more information regarding Existing Conditions, No Action Alternative, No Project Alternative, and Cumulative Impact Conditions please see Appendix 3D of the Final EIR/EIS. For more information regarding project versus program level please see Master Response 2.</p>
2006	58	<p>The Draft EIS does not include a comprehensive description of the CVP and SWP with and without new north Delta intake facilities or through-Delta operations. Such information is needed to assist the reader in understanding how the water delivery system operates under Existing Conditions and how it would change under CM1 alternatives.</p> <p>Recommendation: Include a description of existing CVP and SWP operations in the Chapter 3 discussion of the No Action alternative, including how operations would change or remain static under each proposed alternative.</p>	<p>Final EIR/EIS Chapter 5 Water Supply provides an overview of CVP and SWP operations and models operations through the use of CALSIM II, as reflected in the Existing Conditions and No Action Alternative. The results of the modeling effort are summarized in the Chapter 5 and the modeling results are provided in Appendices 5A BDP/California WaterFix EIR/EIS Modeling Technical Appendix, 5E Supplemental Modeling Requested by the State Water Resources Control Board, 5F Comparison of Final EIR/S Alternatives 2D, 4A, and 5A Modeling Results, and 5G Comparison of Final EIR Alternative 4A Modeling Results to the California Water Fix BA Proposed Action Modeling Results. The lead agencies believe that the EIR/EIS does include a comprehensive description for purposes of conducting the environmental impact analysis.</p>
2006	59	<p>The North Delta Bypass rules are difficult to understand and should be more clearly explained, particularly in the context of how flows occur currently (p. 3-181 -3-209). Listing the rules does not enable the reader to understand how the new facilities would operate within the CVP and SWP system and, subsequently, how the new rules could modify the Sacramento River where new intakes would be placed and operated.</p> <p>Section 3.6.4.2 provides only an annual average of how often the north Delta intakes would be used versus the south Delta intakes. For the reader to understand how the system would work, information about the potential timing, frequency, and duration of operation of each of the pumps throughout the year would be more useful.</p> <p>Recommendations: Provide information and references that describe current CVP and SWP operations. Describe modifications to reservoir operations to avoid dead pool conditions for all alternatives.</p> <p>Clearly state that BDCP 's North Delta Bypass rules are intended to protect flows from only one storm pulse or, potentially, two storm pulses if the first storm arrives before December 1st. Explain that subsequent storm pulses (that are important fish cues for migration) can be exported after BDCP 's new operational rules have been met.</p> <p>Provide information about the potential timing, frequency, and duration of operation of each of the pumps throughout the year, including when and the conditions under which each pump would be used alone or simultaneously with the other.</p> <p>Provide information about Sacramento River flows to put the North Delta Bypass rules in</p>	<p>Please see response to comment 58 within this comment letter, above. The lead agencies believe the extensive modeling performed for the BDCP and the CWF exceeds the requirements of CEQA and NEPA for accurately assessing environmental impacts. The North Delta bypass flows for Alternative 4A are provided in Final EIR/EIS Chapter 3 Description of Alternatives at Table 3-7. New and Existing Water Operations Flow Criteria and Relationship to Assumption in CALSIM II Modeling and at Table 3-24. North Delta Bypass Flow Criteria: Post-Pulse Water Operations.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>context. For example, describe how often flows are at the levels used as thresholds in the bypass rules to help the reader to generally understand how much flow would remain in the river versus be diverted into the new intakes. Also provide exceedance curves of Sacramento River flows and the Post Pulse Water Operations for each CM1 alternative, and consider including a chart that summarizes information in Table 3-16 (p. 3-183) describing Post Pulse Water Operations, and include Sacramento River flows for comparison.</p>	
2006	60	<p>The Export/Import ratio (also known as Export Limits in Table 3 of the Water Quality Control Plan) does not necessarily solely apply to the south Delta or explicitly exclude new points of diversion. The description of how the export/import ratio from the 1995 Bay-Delta WQCP is included in operational requirements and impacts from the CM1 Alternatives (p. 3-32) may not be consistent with the description of the E/I ratio as interpreted by National Marine Fisheries Service. [footnote 28: See NMFS Progress Assessment p. 10 http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/NMFS_Progress_Assessmct_Regarding_the_BDCP_Administrative_Draft_4-II-13.sflb.ashx]</p> <p>Recommendation: Describe how the E/I ratio was used in evaluations of each operational scenario for the alternatives. If the approach ultimately used in the analysis differs from the D-1641 approach, explain the reason(s) for, and implications of, using the different approach.</p> <p>State whether or not project proponents will request that the State Water Board modify the existing E/I water quality standard so it does not apply to the north Delta intakes and describe the process for having that modification approved.</p>	<p>The Export/Inflow ratio requirements used in most of the alternatives were defined as in the State Water Resources Control Board Decision 1641 (developed without the concept of the north Delta intakes) with the exports defined at the south Delta intakes, and the inflows defined at a location downstream of the proposed north Delta intakes. Alternative 4 H4 modified the Export/Inflow definition to include the north Delta and south Delta intakes, and moved the Inflow location upstream of the north Delta intakes.</p>
2006	61	<p>Information that provides context for the Fremont Weir and Yolo Bypass Operational Criteria should be provided in the section that generally describes these operational criteria (p. 3-187). In the absence of context, it is unclear how the rules would change. For example, with no information about how often Sacramento River flows at Freeport are expected to be greater than 25,000 cubic feet per second, it is unclear how often the 17.5 and 11.5-foot elevation gates would be open and how often the Yolo Bypass floodplain restoration work would provide benefits to aquatic life using these resources.</p> <p>Recommendations: Provide cumulative distribution curves that show expected flows at Freeport under each CM1 (Conservation Measure 1) alternative for each type of water year. Discuss the curves in the text and identify the median frequency at which Sacramento River flows at Freeport are expected to be greater than 25,000 cubic feet per second.</p> <p>Provide maps showing Yolo Bypass inundation of 3,000 to 6,000 cubic feet per second.</p>	<p>The changes in frequency of water flowing from the Sacramento Weir into the Yolo Bypass at Fremont Weir under Alternatives 1 through 9 as compared to the Existing Conditions and the No Action Alternative are shown in Figures C-18-1 through 18-6 and Tables C-18-1 through C-18-25 in Appendix 5A, Section C of the EIR/EIS.</p> <p>It should be noted that changes to Fremont Weir and habitat restoration actions in Yolo Bypass are only considered in a programmatic manner for the BDCP and several HCP alternatives in the EIR/EIS and subsequent engineering and environmental documentation would be completed prior to implementation.</p> <p>The preferred alternative, Alternative 4A, does not include an HCP or Yolo Bypass inundation flows.</p>
2006	62	<p>The Fremont Weir is described as a necessary component of CM1; however, the Draft EIS states that "CM2 is a programmatic element that will be further developed and analyzed in future technical and environmental reviews." The impacts associated with this element are not estimated and disclosed in the Draft EIS. For example, although Fremont Weir gate operational rules were developed for the purposes of modeling, the impacts of the proposed operation of the Fremont Weir do not appear to have been analyzed. Without such analysis, the impacts of CM1 cannot be fully evaluated.</p> <p>Recommendation: Describe the updates to Fremont Weir that would take place under all</p>	<p>Please see Master Response 2 regarding the level of information provided for CM2.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		of the Alternatives.	
2006	63	<p>The Rio Vista Minimum Instream Flow Criteria shown on p. 3-188 are substantially different from the Rio Vista flow criteria in the 2006 Bay-Delta Water Quality Control Plan, which are implemented through water right permit D-1641. It is not clear how the BDCP process would result in a change to the Bay-Delta WQCP water quality standards and the water right permit.</p> <p>Recommendations: Describe the Rio Vista flow criteria in the 2006 Bay-Delta WQCP and the D-1641 permit requirements. Describe the difference in flows proposed by the BDCP and explain how they would be attained.</p> <p>If it is anticipated that water quality standards would be modified subject to a request connected to the implementation of BDCP, describe the process by which the modification would be requested and processed by the State Water Board.</p>	<p>As discussed in Final EIR/EIS Chapter 3 Description of Alternatives, Alternative 4A would apply Scenario H differently from how Alternative 4 would implement this operational scenario. The proposed project also incorporates existing criteria from the 2008 and 2009 BiOps (including Fall X2), and adds additional criteria for spring outflow and new minimum flow criteria at Rio Vista from January through August. Alternative 4A starting operations will be determined through the continued coordination process as outlined in the Section 7 consultation process and 2081(b) permit prior to the start of construction. The State Water Board is in the process of developing and implementing updates to the Bay-Delta WQCP that protect beneficial uses in the Bay-Delta watershed.</p> <p>Operations of the preferred alternative would also be managed through a real-time decision making process. That process is describe in detail in Final EIR/EIS Chapter 3 at Section 3.6.4.3</p>
2006	64	<p>The discussion in Section 5.2.2.2 "The Revised Water Quality Control Plan (2006)" does not reflect substantial work the State Water Board has completed or undertaken relevant to the 2006 Bay Delta WQCP, including the 2009 Triennial Review and its conclusions, the 2010 Flow Criteria Report, and the Phase I and Phase II Updates to the 2006 Bay-Delta WQCP. These updates include potential modifications to San Joaquin River tributary and lower San Joaquin River flows, Delta outflow objectives, export/inflow objectives, Delta Cross Channel Gate closure objectives, Suisun Marsh objectives, potential new reverse flow objectives for Old and Middle Rivers and potential new floodplain habitat flow objectives. Under recent state legislation, the State Water Board will also be evaluating changes to outflow requirements for major Delta tributaries. Although the outcome of these State Water Board regulatory processes is unknown at this time, it is reasonable to expect that all will have significant impacts on BDCP planning and implementation.</p> <p>Recommendation: Summarize the current status of the State Water Board's update to flow objectives, including export limits and minimum Delta outflows. Updated objectives should be considered in the impacts analyses, and the document should describe how any proposed or pending updates to flow standards may affect the analyses and the implementation of the BDCP. Describe the mechanisms that would be in place in the BDCP, the Implementation Agreement or other BDCP agreements to assure implementation of future SWRCB water quality and water rights actions.</p>	<p>The information referred to in this comment is included in Appendix 3A in the Final EIR/ EIS.</p> <p>Please see Master Response 31 for a discussion of the Delta Reform Act's requirement of the SWRCB to consider appropriate Delta flow criteria. The SWRCB's flow criteria recommendations and how they were used to inform the planning process are discussed in detail in the Final EIR/EIS Appendix 3I and 3J.</p>
2006	65	<p>Water Supply</p> <p>We are concerned that the "Overview of California Water Demand" discussion in Section 5.1.1.3 provides an incomplete summary of water demand in California. For example, population growth is discussed as a reason for increasing urban water demand (p. 5-4); however, there is no reference to the statewide mandate to increase water efficiency 20% by the year 2020 for urban water uses, which is discussed in appendices to other chapters. Details are not provided regarding the rate of urban water demand growth or estimated urban water demand and use, and no basis other than population growth is provided for the conclusion that water demands will increase. Similarly, the importance of water to the agricultural economy is discussed (p. 5-4); however, there is no discussion about the importance of water to other economic sectors.</p> <p>Municipal and industrial (M & I) demand north of the Delta was estimated by assuming full build out of facilities associated with water rights and contracts north of the Delta,</p>	<p>The overall consumptive water use assumptions in CALSIM II are included by reference in the EIR/EIS. Specific discussions of the American River Demands are presented in Subsection 7 of Appendix 5A, Section B. These values are consistent with the Urban Water Management Plans and Agricultural Water Plans for this geographic area and the provisions of their senior water rights and CVP water contracts. 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 water demand by up to 20 percent.</p> <p>Please see Master Response 6 regarding water demand.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>primarily to meet projections of increasing urban water demand (p. 5-57). It is not clear whether the 81% estimated increase under the No Action Alternative, compared to Existing Conditions, takes into consideration the required water efficiency efforts for municipal and industrial water use (see table 5-8). This is important because "increased system demands by water rights holders, especially in El Dorado, Placer, and Sacramento counties" is identified as a reason for projected decreases in reservoir storage and CVP and SWP deliveries under the No Action Alternative (p. 5-61 through 5-64). An overestimation of M & I demand would result in exaggerated projected decreases in water availability for those other uses.</p> <p>Recommendations: Modify Table 5-1 to include sectors of consumptive water use, average water use in each category, and estimated rates of growth in each category.</p> <p>Summarize the information in Table 5-1 in the text of Section 5.1.1.3.</p> <p>Provide an overview of water demand in California that summarizes water use by sector (e.g., urban, agricultural, industrial), discloses the economic value generated by each sector, and estimate the rates of water demand growth in each sector.</p> <p>Clarify whether or not the 2010 urban water efficiency mandate of a 20% reduction in M & I water use by 2020 is included in estimates of future water demand. If it is not included in water demand estimates, explain why it is excluded in the context of the potential impact of overestimating demand on BDCP estimates of water supply effects.</p> <p>Evaluate water supply effects of CM1 scenarios using several configurations and success rates of CM4, and disclose methods and results.</p>	
2006	66	<p>Groundwater</p> <p>The Draft EIS describes beneficial impacts on groundwater resources for some alternatives as a result of CM1 (p. 7-54). It states that for all alternatives, increases in surface water supplies as a result of BDCP would result in diminished use of groundwater (p.7-84); however, no documentation is provided to support this assumption.</p> <p>The Draft EIS states that groundwater use in the San Joaquin River area is estimated to be between 730,000 and 800,000 acre-feet per year, which exceeds the basin's estimated safe yield of 61 8,000 acre-feet per year and that each groundwater basin has experienced some overdraft (p.7- 18). The Draft EIS also states that the estimated overdraft is between 1 and 2 million acre-feet annually, with many basins in Tulare Lake Basin in critical condition (p.5-4). The Draft EIS assumes that these overdrafts would stop after implementation of the BDCP. On the contrary, we believe it is reasonable to expect that provision of more water could result in more water being used, including as much groundwater as allowed, rather than in strict substitution of surface water for groundwater. Without management of groundwater resources, it is not clear that the pressure on groundwater resources would be diminished as a result of the BDCP.</p> <p>Recommendations: Explain the basis for the assumption that increases in surface water supplies would result in diminished use of groundwater. The likelihood and potential impacts of increased use of surface water supplies for aquifer storage and recovery should be discussed.</p> <p>Consider development of a mitigation measure to address management of groundwater</p>	<p>The analysis in the EIR/EIS assumes that water supplies and uses for non-CVP and non-SWP water users would be the same under the No Action Alternative and the action alternatives. The analysis also assumes that projected land uses and population growth would occur as projected in the current land use plans for 2030; and would be the same under the No Action Alternative and the action alternatives. Therefore, the surface water and groundwater supply analyses in the EIR/EIS focused on changes to users of SWP and CVP water supplies. It is possible that water use by non-SWP and non-CVP water users could change in response to other factors. Historically, agricultural water users of SWP and CVP water supplies have prioritized use of surface water as compared to groundwater because of the increased cost of and generally poorer quality of groundwater as compared to water rights and SWP and CVP water supplies. However, it would be speculative to attempt to correlate this to an actual impact analysis.</p> <p>The groundwater analyses assumes that groundwater overdraft would generally continue through the study period, especially under Alternatives 6 through 9; and could become more severe due to lack of groundwater recharge caused by climate change and increased withdrawals due to reduced surface water supplies.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		resources in the southern San Joaquin Valley.	
2006	67	<p>Water Quality</p> <p>Reporting methods for the chloride and EC analyses may partially obscure conclusions about the predicted range of salinity intrusion, chloride, and EC concentrations for existing conditions, the No Action Alternative, and CM1 alternatives. The chloride modeling analysis (Appendix 8G) provides a 16- year average of estimated chloride concentrations, a 5-year drought average chloride concentration, and a percent exceedence of the minimum health objective of 250 mg/L chloride. Combining 16 years of water quality data and reporting the average omits the predicted range of maximum mean daily chloride concentrations predicted for each of the compliance points under various alternatives compared to their baselines. Averages can mask the severity of chloride and EC concentrations by allowing wet years with lower salinity (chloride and EC) levels to balance dry years with higher salinity concentrations. The 5-year drought average provides some indication for time periods when increased salinity concentrations are expected; however, elevated EC and chloride concentrations at certain compliance points may also occur in above normal and below normal years following dry years.</p> <p>The reason for, and consequences of, constraining the water quality analysis by using a 16-year hydrology modeling period is not described in the Draft EIS nor its appendices. The 16-year hydrology period extends from 1975 to 1991 and includes a drought period and the highest water year recorded in recent decades (1982). If this hydrology period is different than other periods that could have been chosen or the entire 82-year period available for modeling, results of the water quality analysis may be inaccurate.</p> <p>Recommendation: Explain why the 16-year period was used and the 82-year period was not used, and describe the potential impacts on the precision of the water quality effects predicted by the modeling exercise reported in the Draft EIS Chapter 8 appendices and summarized in the text of the Draft EIS. Compare the 16-year hydrology period (1975-1991) to the entire hydrology period available, disclose that comparison to the public and decision-makers, and explain how the smaller time period may influence water quality predictions.</p>	<p>The EIR/EIS used the best available tools that are used by state and federal agencies. The full set of inputs needed for these tools are limited to 82-year (Water Years 1922 – 2003) at the time the analysis for the EIR/EIS was performed. The DSM2 analysis was limited to a 16-year analysis. Section D.12 of the Appendix 5A in the EIR/EIS discloses potential differences between the 16-year versus 82-year DSM2 simulations. Given the 16-year simulation period used for the DSM2 modeling is drier than the 82-year period, the water quality impact analyses would be more conservative, and represents conditions similar to those found over the full 82-year period. The CALSIM II assumptions include compliance with Delta water quality over the long-term operations, and do not reflect changes that could occur during emergency situations such as the recent drought when long-term water quality criteria were modified for the drought conditions.</p> <p>Regarding the presentation of modeling output for chloride and EC, while long-term and drought average concentrations and changes by month are presented in tables in Appendix 8G (Chloride) and Appendix 8H (EC), also presented is compliance with applicable water quality objectives for the Bay-Delta Water Quality Control Plan (WQCP) compliance locations. For chloride, this includes the maximum mean daily 250 mg/L objective (results are reported in Table CI-93 of Appendix 8G) and 150 mg/L objective (results in Table CI-94) that apply at Contra Costa Pumping Plant #1. For EC, this includes all Bay-Delta WQCP objectives, which vary according to water year type and location; results are presented in separate tables for each alternative throughout Appendix 8H. Additional response regarding averaging periods of modeling output is provided in Master Response 14 (Water Quality).</p>
2006	68	<p>The assertion that water demand will go down in the Tulare basin, in the face of large increases in population, is not thoroughly supported (p. 30-31). This is stated to be the expected result of a decrease in agriculture (now using 82% of the water p. 30-32), but it is not a given that the acreage in agriculture would decrease when additional water resources become available as a result of BDCP. Rather, increases in both population and agriculture are plausible.</p> <p>Recommendations: Include a discussion of growth that considers the potential for increases in both urbanization and agricultural development in response to increased reliable water supplies, and that addresses the entire San Joaquin Valley. Include an explanation of why additional water resources are needed (p. 5-4) if projected urbanization would use less water (p. 30-11).</p>	<p>As described in Chapter 30, Growth Inducements and Other Indirect Effects, of the Final EIR/EIS, although the population of the San Joaquin River and Tulare Lake Regions are projected to grow substantially, the average per capita water demand is anticipated to decline. For example, in the Tulare Lake Region, daily per capita water demand is anticipated to decline from 285 gallons/day to 188 gallons/day by 2020. In addition, the recently completed urban water management plans for many of the communities in this area indicate that non-SWP water supplies will be used to serve the future population growth, including expansion of conjunctive use programs to store water from the Sierra Nevada mountains and expansion of recycled water programs. Therefore, DWR recently projected a decline in regional water demands as agricultural water demands and per capita municipal water demands decline by 2030.</p>
2006	69	<p>Water Quality Impact Conclusion WQ-26 (effects on selenium concentrations resulting from restoration activities) lists impacts before mitigation, as "Less Than Significant." After mitigation, conclusions are "Less Than Significant" and "Not Adverse." Analysis of residence time for planned remediation efforts is not quantitative and, therefore, lacks</p>	<p>The CEQA and NEPA impact conclusion for Impact WQ-26 for Alternative 4A is "Less Than Significant" and "Not Adverse", respectively. Master Response 14 provides a detailed discussion of the selenium effects analysis conducted for the EIR/EIS.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>sufficient resolution to substantiate impact conclusions.</p> <p>Recommendation: Re-analyze Impact WQ-26 based on quantitative measures of residence time and selenium bioaccumulation that: (1) include specificity of locations and species, and (2) reflects current science that assesses the Delta as one interconnected system physically and biologically.</p> <p>Consider making the environmental commitments for selenium in restored areas a high priority by addressing these impacts within the main water quality and aquatic resources part of the EIS. Clearly identify the potential impacts of using water supplies containing selenium for wetlands with high residence times and selenium risks to fish and wildlife.</p>	
2006	70	<p>Selenium bioaccumulation modeling for sturgeon is shown in Appendix 8M2, but an impact conclusion is not listed within the category of impacts to white and green sturgeon (e.g., AQUA-136). Other identified species considered of concern in terms of selenium effects, for which no conclusions are provided, are diving ducks (scoter and scaup), clapper rail, salmonids (Chinook salmon, steelhead) and splittail.</p> <p>Recommendations: Provide an impact analysis for these species, and add impact conclusions for these species to the category of Fish and Aquatic Resources impacts.</p> <p>Illustrate and conceptualize mixing of selenium sources. Document representativeness of sites to selenium modeling to enable coordination of site locations to modeling predictions.</p> <p>Perform selenium bioaccumulation modeling to specifically address the potential for (1) less Sacramento River flow (i.e., less estuary dilution and increased residence times), and (2) more San Joaquin River flow (increased Se loads or concentrations) entering the Plan Area. Perform an analysis that is both species-specific and location-specific, and develop habitat-use and life-cycle diagrams to inform the selenium modeling. Identify the times and places of greatest ecosystem sensitivity to selenium as outcomes of the modeling and relate the outcome to the entire plan area. Add selenium bioaccumulation modeling of additional fish and bird species to identify the predators with the greatest selenium exposure within fish and bird communities. Development of a comprehensive set of enrichment factors to relate dissolved selenium concentrations to suspended particulate material selenium concentrations would address the uncertainty in this step of selenium modeling.</p>	<p>Selenium water and bioaccumulation modeling accounted for less Sacramento River flow and more San Joaquin River flow. Bioaccumulation modeling was conducted for bass throughout the Delta, as a representative predatory pelagic fish, mallard duck bird eggs, as a representative selenium sensitive bird, and for sturgeon in the West Delta, as a representative benthic feeding, long-lived fish. For the purposes of NEPA and CEQA, these assessments were conservative relative to other species and locations. Please refer to Appendix 8M for more detail related to the selenium methodology. Master Response 14 provides a detailed discussion of the selenium effects analysis conducted for the EIR/EIS</p>
2006	71	<p>The data sets that were used to model selenium in sturgeon and derive impacts are not spatially and temporally matched. Locations in the western Delta are ecologically and hydrologically disconnected from the Bay, where effects to sturgeon are known to be greatest. [footnote 29: (1) Linares, J., Linville, R. Eenennaam, JV, Doroshov, S. 2004 Selenium effects on health and reproduction of white sturgeon in the Sacramento-San Joaquin estuary. Final Report for Project No. ERP-02-P35. (2) Linville RG 2006 Effect of excess selenium on the health and reproduction of white sturgeon (Acipenser transmonranus): Implications for San Francisco Bay-Delta. Ph.D. dissertation, University of California, Davis, CA 232 pp. (3) Beckon, WN & Maurer, TC, 2008 Species at Risk from Selenium Exposure in the San Francisco Estuary. Final Report to the US EPA IAA No. DWI4022048-01-0. (4) Presser TS and Luoma SN 2010 Ecosystem-Scale Selenium Modeling in Support of Fish and Wildlife Criteria Development for the San Francisco Bay-Delta Estuary, California USGS Administrative Report.]</p>	<p>Master Response 14 provides a detailed discussion of the selenium effects analysis conducted for the EIR/EIS and provides information on how the analysis was updated in the RDEIR/EIS and Final EIR/EIS. As noted in the Final EIR/EIS Chapter 11 Fish and Aquatic Resources at Impact AQUA-134: Effects of Contaminants Associated with Restoration Measures on Green Sturgeon, the impacts occurring under the preferred alternative (Alternative 4A) would be considered less than significant as the acres of tidal restoration would be limited.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		Recommendation: Consider comprehensive sturgeon habitat and cumulative effects in selenium modeling and impact analysis.	
2006	72	<p>The multiple times that eutrophication is mentioned on page 8-70 (Section 8.2.3.1.0 Nitrate/Nitrite and Phosphorous) may suggest to some readers that the San Francisco Estuary is suffering from large-scale eutrophication. Currently, eutrophication is not one of the major stressors negatively affecting the open waters of the San Francisco Estuary.</p> <p>Recommendations: Clarify that monitoring shows that the open waters of the San Francisco Estuary do not show signs of large-scale eutrophication and that anoxic waters and sediment are not commonly reported in the Estuary. Identify the sites with demonstrated low dissolved oxygen problems and describe the extent to which nutrients, subsequent algal blooms, and microbial respiration contribute to low DO problems in the Estuary.</p> <p>Discuss the lack of diatom algal blooms as a stressor in the Estuary and the relationship between nutrients and the composition of the algal community and subsequent frequency of desired algal blooms. This can be a short summary in a few sentences and can refer to other locations in the document where nutrients and algal community composition is discussed in more detail. See http://www.sfestuary.org/pea-soup/ for more information.</p>	<p>The discussion cited addresses eutrophication generally, but does not specifically address whether or not the Delta is experiencing eutrophication. There is some debate concerning whether or not the Delta is experiencing effects of eutrophication and therefore a quantitative analysis of this stressor was not included in the analysis. Nutrient levels are high enough that the Delta is considered eutrophic, though most of the classical effects of eutrophication are not observed.</p> <p>Dissolved oxygen issues in the Delta are discussed in Chapter 8, Water Quality, Section 8.2.3.6.</p> <p>A discussion of the food web and diatom decreases has been included in Chapter 8 Water Quality, Section 8.3.1.8 - San Francisco Bay.</p>
2006	73	<p>Fish and Aquatic Resources</p> <p>The temperature analysis does not provide biologically meaningful temperature estimates for Chinook salmon and, potentially, other fishes. The majority of temperature estimates are calculated using models that predict monthly average temperatures which can obscure the occurrences of daily temperatures fluctuating above life stage impairment and lethal thresholds for Chinook salmon and other fishes. Daily temperatures are estimated for the mainstem of the upper Sacramento River in the segment downstream of Keswick dam because a model with a daily time unit of analysis is available for this exercise (Sacramento River Water Quality Model). Temperature models with a daily time unit are not yet available for the Feather, American, lower Sacramento, and Trinity Rivers, but we understand Bureau of Reclamation is developing daily temperature models as part of the OCAP Biological Opinion remand process. Completion of these models should be prioritized and used in any additional analyses to provide meaningful estimates of temperature impacts to fishes.</p> <p>Recommendations: Estimate potential temperature impacts when updated models become available. Identify temperature thresholds for specific life stages based on National Marine Fisheries Service recommendations and other available guidance; for example, Environmental Protection Agency temperature criteria. Identify mitigation measures that would minimize adverse temperature conditions.</p>	<p>Although the lead agencies are aware of the development of several daily temperature models, these models are still not the best available tools according to the hydrologic modeling community. Regardless, the issues related to going from a monthly time step in CALSIM to a daily time step in temperature models were deemed unacceptable for this analysis. Please see the Biological Assessment, Appendix 5.C, Upstream Water Temperature Methods and Results, Section 5.C.5, Appropriate Use of Model Results. The analyses do include several temperature thresholds for specific life stages, as well as specific analyses using these thresholds, recommended by NMFS.</p>
2006	74	<p>Environmental Protection Agency Region 10 developed Environmental Protection Agency Guidance Criteria for Water Temperature [footnote 30: http://www.epa.gov/region10/pdf/water/final_temperature_guidance_2003.pdf] to assist States and Tribes in adopting water quality standards for the protection of coldwater salmonids. The guidance criteria provide an averaging period for temperature targets and would be an appropriate benchmark against which to evaluate estimated impacts from CM1 alternatives, in addition to the evaluated criteria summarized in Table 11-1A-11.</p>	<p>As previously noted, the preferred alternative is now Alternative 4A and no longer includes an HCP. The analysis used for upstream water temperatures included water temperature criteria recommended by NMFS that are specific to individual species and races of Chinook salmon. Although not implemented in the EIR/EIS documents, the California WaterFix Biological Assessment used (and the Biological Opinion is expected to use) temperature-related upstream effects of the Proposed Action, which is very similar to Alternative 4A, using the EPA guidance criteria recommended by the commenter. Please see Section 5.4 of the Biological Assessment.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Recommendation: Compare impacts from CM1 and other CMs with the potential to impact water temperatures to EPA Guidance Criteria for Water Temperature to provide an additional metric for estimated impacts to Chinook salmon.</p>	
2006	75	<p>The Draft EIS assumes that state-of-the art fish screens would function in a way that results in minimal to zero entrainment, but provides no evidence that these screens would completely or almost completely prevent entrainment of larval, juvenile, or adult covered fishes. No details are provided regarding the design or operation of the proposed fish screens.</p> <p>Recommendation: Explain how the proposed fish screens would prevent entrainment of all life stages of covered fishes. Describe the entrainment thresholds that would trigger reduced pumping at the North Delta Diversion intakes, and mitigation strategies for minimizing entrainment if the fish screens do not function as anticipated.</p>	<p>The EIR/EIS does not assume minimal to zero entrainment, but instead describes that smaller life stages could be entrained, e.g., delta smelt of around 22 mm and smaller (see Impact AQUA-3); in the case of delta smelt, the low spatial overlap of the species with the intake locations would be the main driver leading to expected minimal levels of entrainment. Characteristics of the screens were provided in the Final EIR/EIS Biological Assessment and CESA Section 2081(b) Incidental Take Permit Application.</p>
2006	76	<p>The construction analysis relies on Best Management Practices for concluding that potential impacts to aquatic species would not be adverse. The construction is estimated to span ten years, coffer dams are expected to be constructed simultaneously, and potentially increasingly severe weather conditions during the ten-year construction period are likely to challenge the most effective Best Management Practices. Additionally, some of the equipment that would need to be constructed (including the dual 40 foot wide tunnel boring machines) would be some of the largest in the world and the Best Management Practices that have been designed for more conventional construction projects may not be applicable or effective as anticipated.</p> <p>Recommendation: Describe options for minimizing construction impacts in the event that BMPs do not perform as anticipated or completely fail, given the size and scale of the construction.</p>	<p>The BMPs and mitigation measures within the EIR/EIS are intended to mitigate to the greatest extent possible the construction impacts of the proposed project. The MMRP spells out details regarding the intent, mitigation parameters, and timing of these BMPs and mitigation measures, in many instances, these measures are also expected to be a condition of the permits issued by regulatory agencies such as USACE and SWRCB. Failure to mitigate or comply with the terms of various permits needed to construct the proposed project is reported by the Project Mitigation Monitor. In these cases, the lead agency, in conjunction with other permitting or monitoring entities, in its respective jurisdiction, may act to require correction of such failure. Corrective actions include, but are not limited to, (1) written notification and request for compliance; (2) withholding of permits; (3) administrative fines; (4) stop-work orders; (5) criminal prosecution and/or administrative fines; (6) forfeiture of security bonds or other guarantees; and (7) revocation of permits or other entitlements. Construction could not continue in violation of applicable state and federal laws and requirements.</p>
2006	77	<p>NEPA effects determinations used in Chapter 11 include: beneficial, not adverse, adverse, and no determination. These terms are not defined nor are thresholds for selecting among them identified. The reader is not provided with an indication or description of the magnitude of estimated positive or negative impacts or uncertainty associated with each conclusion.</p> <p>Recommendation: Define the NEPA conclusions and provide thresholds -- quantitative when possible--for each category so that it is clear why some estimated impacts result in a NEPA conclusion.</p>	<p>There are no quantitative thresholds applicable across all potential conditions evaluated. The methods used to make the determinations are further explained in the Final EIR/EIS (refer to individual resource chapters' "Determination of Effects" sections). There are no longer 'no determination' conclusions.</p>
2006	78	<p>Multiple indicators are used to evaluate impact and derive NEPA Effects determinations; however, the Draft EIS does not describe how each indicator was used to support the NEPA effects determination. For example, AQUA-42 Effects of Water Operations on Conditions for Chinook salmon (Winter-Run ESU) uses nine indicators to determine the overall effect of CM1 Alternatives on adult and juvenile migration for winter run Chinook salmon. We have summarized key information from this section in the following table: [NOT SHOWN] [See ATT1: AQUA-42 Effects of Water Operations on Conditions for Chinook salmon (Winter Run ESU)]</p> <p>It is not clear whether all nine indicators are considered equal when identifying the NEPA effect determination for migration overall. The monthly mean temperatures do not substantially vary among alternatives, so that indicator appears to be less useful than the others in differentiating between the alternatives. Some indicators show improved</p>	<p>The RDEIR/SDEIS (and Final EIR/EIS) included revisions to the NEPA and CEQA conclusions as appropriate to ensure consistency across alternatives analyses and to provide a NEPA conclusion for each impact. Additionally, the methods section in Chapter 11 Fish and Aquatic Resources was updated to better describe how conclusions were developed given the multiple lines of evidence often used for impact assessments.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>conditions relative to the No Action Alternative, while others show relatively worse conditions. For some indicators, the level of detail that is provided in the text differs from one alternative to another. The narrative descriptions of the multiple indicators in the NEPA Effects paragraphs often highlights different indicators when discussing the NEPA Effects determination, suggesting that some indicators are more important than others, depending on the alternative being evaluated. The reader sees only the summarized results of multiple indicators but cannot ascertain how the information was used to determine NEPA effects.</p> <p>Recommendation: Explain how each metric was used, and how the metrics were used in combination, to derive the NEPA Effects determinations, including whether the metrics were weighted in any way. Thresholds that were used to determine the appropriate NEPA Effects conclusion should be disclosed.</p>	
2006	79	ATT1: AQUA-42 Effects of Water Operations on Conditions for Chinook Salmon (Winter-Run ESU)	The 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 Draft EIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.
2006	80	<p>The description of Clean Water Act programs in the Water Quality Regulatory Setting Section 8.3.1.1 (p. 8-112-114) contains a number of errors. For example, it appears to indicate that the Environmental Protection Agency has delegated its CWA oversight responsibility to the State of California. A useful description of CWA programs and how they operate in the San Francisco Bay Estuary can be found in the US EPA Advance Notice of Proposed Rule-making for Water Quality Challenges in the San Francisco Bay/Sacramento San Joaquin Delta, available at http://www2.epa.gov/sites/production/files/documents/baydeltaanpr-fr_unabridged.pdf pages 11-18.</p> <p>Recommendation: Review the description of CWA programs in the San Francisco Bay Delta Estuary and California.</p>	This information is now reflected in Chapter 8, Section 8.2.1.1 of the Final EIR/EIS. No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
2006	81	<p>It appears from the Draft EIS that there could be significant impacts to vernal pools from implementation of CM1 and CM4. Impacts and mitigation for vernal pools are only presented as "vernal pool complex" and it is not clear from the document what percentage of this habitat is vernal pool wetlands (wetted surface area).</p> <p>The Draft EIS states that implementation of CM4 may result in the loss of 372 acres of vernal pool complex habitat and CM1 could result in up to an additional 37 acres of loss (depending on Alternative). With the information in the Draft EIS we cannot assess what proportion of these impacts are to wetlands. The document also states that AMM12 limits removal of "vernal pool crustacean habitat" to 10 wetted acres. However, it is not clear if all vernal pool wetlands are being considered "crustacean habitat." According to the document, these 10 wetted acres of crustacean habitat equates to approximately 67 acres of "vernal pool complex" habitat. The 67 acres of impact allowed by AMM12 is significantly less than the 372 acres of potential loss identified for CM4.</p> <p>Because the Draft EIS only presents theoretical footprints for tidal marsh restoration under CM4, it is unclear whether CM4 can be fully implemented while limiting vernal pool loss to 10 wetted acres as called for under AMM12. As the Draft EIS acknowledges, vernal pools are a highly sensitive community that has experienced significant loss in California. Yet, only 40 acres of restoration and 400 acres of protection are proposed in the near-term under the plan. Given the potential direct loss identified for CM1 and CM4, and</p>	The analysis for CMs 2-21 was completed at a programmatic level, as described in Section 4.1.2 of Chapter 4, Approach to the Environmental Analysis. The new preferred alternative, 4A, does not include a HCP or conservation measures. The alternative implementation strategy allows for other state and federal programs to address the long term conservation efforts for species recovery in programs separate from the proposed project. Therefore, substantially less land would be impacted by Alternative 4A, as described in Chapter 3, Alternatives. Additionally, Alternative 4A would result in no significant and unavoidable impacts to terrestrial biological resources.

DEIRS Ltr#	Cmt#	Comment	Response
		<p>the potential functional loss identified from implementation of CM2, the proposed vernal pool restoration may not be sufficient to meet mitigation needs under Clean Water Act Section 404. Mitigation needs cannot be fully assessed until project level information is available for all CMs.</p> <p>Recommendations: Clearly state what percentage of the vernal pools complex habitat may be vernal pool wetlands (by wetted surface area). Clarify whether AMM12 applies to all vernal pool wetlands or only vernal pool wetlands occupied by special status crustaceans.</p> <p>Clearly state how many acres of vernal pool wetlands may be lost from implementation of CM1 and CM4. Clarify whether it is feasible to fully implement CM4 while limiting vernal pool losses to 10 wetted acres and if there is a tradeoff, please disclose and discuss.</p> <p>Quantify the potential functional loss to vernal pool habitat from changes in inundation and acknowledge that compensatory mitigation may be required for loss of function even if there is no net loss in area. Acknowledge and address that compensatory mitigation requirements under CWA Section 404 maybe greater than the vernal pool complex restoration and protection proposed under the plan.</p>	
2006	82	<p>Appendix 3B details dredged material (DM) and reusable tunnel material (RTM) disposal and reuse commitments, among other environmental commitments. Neither Appendix 3B nor Chapter 3 details how much DM and RTM will be generated by each alternative; however, Chapter 12 identifies potentially significant impacts to wetlands and waters from disposal of this material. Impacts to jurisdictional wetlands and waters must be avoided and minimized to the maximum extent practicable consistent with the 404 Guidelines. Furthermore, the Draft EIS does not address the Delta Long Term Management Strategy (LTMS) [footnote 31: The San Francisco Bay Long Term Management Strategy (LTMS) is a cooperative effort of EPA, the US Army Corps of Engineers, the San Francisco Regional Water Quality Control Board, the San Francisco Bay Conservation and Development Commission, and stakeholders in the region to develop a new approach to dredging and dredged material disposal in the San Francisco Bay area. The LTMS serves as the "Regional Dredging Team" for the San Francisco area, implementing the National Dredging Policy in cooperation with the National Dredging Team [url]] goal to maximize beneficial reuse of DM by setting specific reuse targets for both DM and RTM. Appendix 3B states that material will be placed in multiple storage locations and reused in BDCP projects to the extent feasible, however, there are potentially many other construction and restoration projects in the Delta that could use the DM and RTM. If material will be placed in waters either temporarily or permanently, sediment testing will need to be coordinated with the Corps, EPA, and Regional Water Quality Control Boards.</p> <p>Recommendations: Include the volume of DM and RTM in Chapter 3 and Appendix 3B. In Appendix 3B clearly state that placement of DM and RTM must comply with the CWA 404(b)(1) Guidelines, in addition to meeting to BDCP goals.</p> <p>Discuss beneficial reuse goals for DM and RTM, including whether material will be made available for reuse in projects within and outside the BDCP.</p> <p>Discuss whether placement of DM and RTM on peat soils, either temporarily or</p>	<p>The dredging and RTM management plan description in Appendix 3B indicates that spoils and RTM could be used for other beneficial purposes. However, for purposes of CEQA and NEPA the location of these materials in the Plan Area were assumed to be permanent to provide a "maximum foreseeable impact" evaluation of the potential agricultural, wetland and other effects. It's expected that additional avoidance and minimization of these resources will occur during the USACE permitting process under Section 404 of the CWA. Much of the information requested in this comment is included in Chapter 3, Description of Alternatives. For example Alternatives 4 and 4A would result in approximately 30.7 million cubic yards of RTM. Mapbooks are also provided showing the locations of all of the project facilities.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>permanently, will further subsidence and undermine levee stability.</p> <p>Clearly identify accessibility of placement sites and commit to promoting beneficial reuse of DM and RTM both within and outside BDCP projects.</p> <p>For any material placed in waters, clarify that sediment testing must be coordinated with the U.S. Army Corps of Engineers, Environmental Protection Agency, and Regional Water Quality Control Board.</p>	
2006	83	<p>Energy</p> <p>The Draft EIS states that conveyance facility energy requirements are moderate and would not result in any substantial impacts (p. 21-25). The cumulative impacts analysis concludes that, while the cumulative energy demands of the BDCP, in combination with ongoing and reasonably foreseeable future projects, may affect regional resources, the increase attributable to any alternative is not cumulatively considerable, compared to statewide use (300,000 gigawatt-hours) (p. 21-61). A comparison only to statewide use does not provide sufficient context for decision makers and the public to understand the new energy demands associated with the BDCP alternatives and evaluate their potential effects on local and regional energy supplies.</p> <p>Recommendations: Include a table showing the current overall energy usage by the CVP and SWP to supply water to the end users, compared to the projected overall energy demand by the CVP and SWP to do the same under the No Action and each of the BDCP build alternatives. Separately, for additional context, compare these projections to recent and reasonably foreseeable development projects, including the High Speed Rail project. Include an evaluation of the effects of each alternative on peak and base period demands, as well as effects on local and regional energy supplies, as recommended by the State CEQA Energy Conservation Guidelines (Appendix F).</p>	<p>Please refer to comment 1785-175 regarding the cumulative analysis and comment 1803-37 regarding Appendix F of the CEQA Guidelines.</p> <p>Because the project alternatives would result in additional SWP energy demands in excess of 15 gigawatt hours per year, required consultation with DWR's SWP Power and Risk Office has occurred, and modifications to the Renewable Energy Procurement Plan (REPP) to accommodate the project alternatives have been identified to ensure that covered activities do not conflict with DWR's ability to achieve the GHG reductions outlined in their climate action plan (CAP). These modifications to the REPP detail the additional gigawatts of renewable electricity that DWR expects to purchase each year during the 40-year period (2011 to 2050) to meet their GHG emissions reduction goals are outlined in their CAP. Consequently, additional energy required by the action alternatives would be required to include renewable energy so as to meet goals outlined in their REPP and CAP. Language has been added to Impact ENG-2 to clarify.</p> <p>Text has been revised in Section 5, Revisions to Cumulative Impact Analyses, in the RDEIR/SDEIS (and is reflected in the Final EIR/EIS) to revise the energy impact analysis and prepare findings consistent with Section 21.3.3.17 of the Chapter 21 from the Draft EIR/EIS. Energy use for the proposed project is within the planned maximum capacity for the CVP and SWP.</p> <p>The lead agencies have established thresholds of significance from which energy impacts have been evaluated consistent with the requirements outlined in Section 15064.7 and Appendix F of the CEQA Guidelines. As indicated in Chapter 21, the project would incorporate measures, such as including off-peak pumping and use of gravity, to maximize efficient use of energy.</p>
2006	84	<p>EPA supports the use of gravity-fed tunnels to transport water to minimize net energy use for conveyance to the greatest extent possible. Alternative 4 is designed to take greater advantage of gravity than the other alternatives. According to the Draft EIS, the Department of Energy has estimated that construction of two 40-foot tunnels (Alternative 4) would require about 78% more electrical energy than would be needed for alternatives requiring two 33-foot tunnels (p. 21-31 and Table 21-9); however, since Alternative 4 would eliminate the need for an intermediate low-head pumping plant for flows of more than 9,000 cubic feet per second (p. 21-31), Alternative 4 would be able to 'recover' the extra energy used during construction in 25 years. It is not clear why the 33-foot tunnel alternatives do not include gravity-fed designs.</p> <p>Recommendations: Discuss the practicability of increasing the energy head (difference in water elevation) between the intermediate Forebay at the north of the Delta and the Clifton Court and Byron Forebays to allow for greater gravity-fed flow through the 33-foot tunnel alternatives. Discuss whether 9,000 cfs could be achieved without the need for intermediate low-head pumping through 33-foot tunnels.</p> <p>Consider alternate locations for the intakes, including upstream of the Sacramento Regional Wastewater Treatment Plant, and evaluate whether an increase in the energy head between the alternative north end intake locations and the south end of the</p>	<p>As indicated in Section 21.3.1.2, energy effects from operations are generally evaluated as a reduction in the amount of hydropower energy generated or as the increase in energy use because this additional energy must be supplied from other energy sources. This is because the overall operational analysis is based on the total actual amount of net energy consumed by the project relative to existing conditions and the no action alternative for pumping and conveyance, rather than reductions associated with specific elements that could be gravity fed.</p> <p>The construction of two 40-ft diameter tunnels would require more energy because the volume of material excavated for the tunnels would be greater. The comparison of the pumping energy (head losses) for the 33-ft and 40-ft tunnels are briefly compared in Table 21-8. However, a general comparison of various intakes and conveyance designs was not given in the Draft EIR/EIS; this was a small part of the alternatives selection process described in Chapter 3. The energy requirements for each of the alternatives in given in Table 21-9. The energy factors (MWh/TAF) for each alternative could be used to estimate the construction energy payback period. The Alternative 4A features provide greatly reduced energy requirements for the Delta conveyance.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>proposed conveyance system could decrease net energy use for each alternative.</p> <p>Include a table that demonstrates, for each alternative, the time that would be needed to 'recover' the energy used during construction. Incorporate into the table any additional alternatives that would minimize net energy use, and the time to 'recover' energy used during their construction. As part of the same table, include the overall energy for construction and operation of the BDCP for the total expected life of the project.</p>	
2006	85	<p>The Environmental Protection Agency strongly supports the goal, stated in the Draft EIS, to power the BDCP's average 270 megawatt (MW) construction load and 57 MW permanent load with 100% renewable energy (p. 21-33). This would avoid emissions of greenhouse gases and other pollutants associated with the generation of energy from fossil fuels. We find, however, that the Draft EIS defers much of the necessary analysis of renewable energy benefits, challenges, and opportunities to the future development of other documents, and lacks clear commitments regarding procurement of renewable energy. For example, regarding construction, Mitigation Measure AQ- 15 in Chapter 22 includes a suite of greenhouse gas emission reduction strategies that would be utilized to develop a future GHG Mitigation Program to reduce construction related GHG emissions to net zero (p. 22-75). At this time, it is unclear which strategies would comprise the program and whether a commitment would be made to enter into a purchase agreement for 100% renewables (Strategy 1) or temporarily increase renewable energy purchases to offset BDCP construction emissions (Strategy 12).</p>	<p>Mitigation Measure AQ-21 would develop a GHG Mitigation Program to reduce construction-related GHG emissions to net zero. The measure would require that project proponents develop the GHG Mitigation Program before commencement of any construction or other physical activities that would generate GHG emissions. The program would consist of feasible options that, taken together, are expected to reduce construction-related GHG emissions to net zero. As such, the program may not be comprised entirely of a 100% renewable energy agreement (Strategy 1). Rather, it is likely the project proponents will pursue a combination of options that best optimize project costs, community co-benefits, and GHG reductions. The project proponents would determine the nature and form of the components of the program after consulting with the air quality management districts in the study area, the California Air Resources Board, the U.S. Environmental Protection Agency, and the California Energy Commission. Additional analysis has been added to Appendix 22A, Air Quality Analysis Methods, to describe potential GHG reductions that may be achieved by each of the strategies. Please also see Master Response 19 for additional information.</p>
2006	86	<p>Regarding operations, Chapter 21 of the Draft EIS explains that the energy needed for pumping water would be provided from a mix of hydro, power purchase contracts, power exchanges and power markets (p. 21-22). The Draft EIS notes that 60% of the State Water Project's (SWP) 2010 load was met by hydro resources, while the remainder of the load was met by a mix of coal power and real-time purchases from the California Independent System Operator's (CAISO) energy market (p. 21-7). According to Chapter 21, the potential for new or expanded electrical power generation facilities is not discussed in the Draft EIS because it will be addressed through SWP power purchase programs (p. 21-33). Similarly, new energy sources to support the potential increased load from the Central Valley Project (CVP) are not discussed in the Draft EIS. It is unknown what type of power source (e.g., renewable, natural gas) would be substituted for the CVP-generated electricity that would be consumed by the project, itself, or to what extent some of additional energy required would be made up with higher efficiency (p. 22- 198).</p>	<p>Project activities could lead to reduced available CVP hydroelectricity to other California electricity users, and the substitution of the lost electricity with electricity from other sources could indirectly result in the replacement of the renewable CVP hydroelectricity with fossil fuel derived electricity. However, these purchases would be caused by dozens of independent electricity users, who had previously purchased CVP power, making decisions about different ways to substitute for the lost power, and these decisions are beyond the control of Reclamation or DWR. Monitoring to determine the actual indirect change in energy source as a result of project actions would not be feasible. Consequently, it would be speculative to predict where any additional electricity purchases would occur.</p> <p>Please see Master Response 19, Climate Change and GHG, for additional information on the procurement of renewable energy.</p>
2006	87	<p>The Draft EIS references DWR's Climate Action Plan, which established near-term (by 2020) and long-term (by 2050) goals of reducing emissions of greenhouse gases throughout DWR's operations -- including those of the SWP -- in part, by increasing the use of renewable energy sources. Similarly, the President's June 2013 Climate Action Plan established a goal for the federal government of consuming 20 percent of its electricity from renewable energy sources by 2020.</p> <p>Recommendations:</p> <p>Identify opportunities to power the BDCP conveyance system with renewable energy for the life of the project to demonstrate how the stated goal of powering the anticipated construction and operations energy loads with 100% renewable energy could be met. Consider committing to power construction and/or the conveyance system operations with 100% renewable energy, similar to the CA High Speed Rail (HSR) Authority's</p>	<p>As described in Chapter 22, Air Quality and Greenhouse Gases, Section 22.3.2.3, operational emissions associated with increased SWP pumping and project maintenance are evaluated for consistency with DWR's Climate Action Plan (CAP). Since the action alternatives would result in additional SWP energy demands in excess of 15 gigawatt hours per year, required consultation with DWR's SWP Power and Risk Office has occurred, and modifications to the Renewable Energy Procurement Plan (REPP) to accommodate the action alternatives have been identified to ensure that covered project activities do not conflict with DWR's ability to achieve the GHG reductions outlined in the CAP, as the REPP describes the amount of additional renewable energy that DWR expects to purchase each year to meet its GHG emissions reduction goals. The CAP commits DWR to monitoring its emissions each year and evaluating its emissions every five years to determine whether it is on a trajectory to achieve its GHG emissions reduction goals.</p> <p>Impact AQ-22 in Chapter 22, Air Quality and Greenhouse Gases, shows how the REEP could be modified to accommodate action alternatives and details the additional gigawatts of renewable electricity purchased during the 40-year period between 2011 to 2050. These additional purchases would accelerate between</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>commitment to use 100% renewable energy for operation of the HSR. At minimum, commit to ensure that construction and operation of the BDCP facilities are powered by renewable energy sources to the greatest extent feasible.</p> <p>Discuss whether DWR's Renewable Energy Procurement Plan (REPP) would provide a mechanism to secure 100% renewable sources for construction and operations of the BDCP prior to project approval. Consider adopting an approach similar to the California High Speed Rail Authority's partnership with the National Renewable Energy Laboratory to create and implement a strategic energy plan for the BDCP. Outline the steps that would need to occur, the barriers that would need to be overcome and the potential for partnerships with entities in the vicinity of the Delta that are aiming to achieve similar goals.</p> <p>Quantify how securing new, 100% renewable energy sources for construction and operations of the BDCP would assist DWR in achieving its Climate Action Plan (CAP) goals. Discuss the extent to which hydropower resources will be used to meet the 2020 and 2050 goals in the CAP, and whether larger hydropower generators would qualify.</p> <p>Discuss the extent to which the CVP is currently being used to meet California's renewable energy goals. To reduce potential indirect effects from substitute electricity for any new CVP energy usage, consider a commitment to ensure that new, renewable sources are secured to compensate for any use of CVP electricity for the BDCP.</p>	<p>2022-2025, corresponding with the time (2024) that the alternatives are projected to go online, and taper off in later years because of already planned GHG emissions reduction measures. Figures 22-4, 22-6, 22-8, 22-10, 22-12, 22-14, and 22-16 in Chapter 22, Air Quality and Greenhouse Gases, show how this modified Renewable Energy Procurement Plan would affect DWR's projected future emissions with the action alternatives. Please see Master Response 19 for additional information on the operational emissions analysis, consistent with DWR's CAP, and the procurement of renewable energy.</p> <p>With respect to construction-related energy consumption, Mitigation Measure AQ-21 outlines an extensive GHG Mitigation Program to reduce construction-related GHG emissions to net zero. The mitigation identifies 13 potential strategies, including entering into a power purchase agreement with utilities that provide electricity service within the Study area to purchase construction electricity from renewable sources. The project proponents will determine the nature and form of the components of the program after consulting with the air quality management districts in the study area, the California Air Resources Board, the U.S. Environmental Protection Agency, and the California Energy Commission.</p> <p>With respect to CVP impacts, operation of the CVP yields a net generation of clean, GHG emissions-free, hydroelectric energy. Currently, hydroelectric energy represents approximately 10% of total in-state generation (see http://energyalmanac.ca.gov/electricity/electricity_generation.html). Operation of CM1 would increase the amount of hydroelectric energy that would be sold to energy users throughout California (see Impact AQ-23). The GHG emissions estimated in Chapter 22, Air Quality and Greenhouse Gases, represent potential indirect emissions that may result if previous CVP electricity users acquire energy from a source that results in GHG emissions. These emissions would result from decisions made by dozens of independent electricity users, which are beyond the control of Reclamation or any of the other Lead Agencies. Further, monitoring to determine the actual indirect change in emissions as a result of action actions would not be feasible. Accordingly, a commitment to secure displaced CVP energy with renewable sources would not be feasible.</p>
2006	88	<p>Under the "NEPA Effects" section for each alternative in Chapter 21.3.3, the Draft EIS indicates that the use of Best Management Practices will ensure that only high-efficiency equipment is utilized during construction and that all feasible control measures to improve equipment efficiency and energy use are included. Similarly, it is noted that operation of the water conveyance facilities would be managed to maximize efficient energy use, including off-peak pumping and the use of gravity and, therefore, would not result in a wasteful or inefficient energy use. These conclusions are identical for every tunnel conveyance alternative.</p> <p>Recommendations: Explain how all of the energy efficiency mitigation measures and Best Management Practices referenced in Chapter 21 would be made an enforceable part of the project's implementation schedule. We recommend implementation of applicable mitigation measures prior to or, at a minimum, concurrently with, commencement of construction of the project.</p> <p>With regard to solicitations for future contracts for project construction and operations, consider including the following as energy efficiency requirements:</p> <p>The use of energy- and fuel-efficient fleets;</p> <p>For construction, the utilization of grid-based electricity and/or onsite renewable electricity generation, to the extent possible, rather than diesel and/or gasoline powered generators;</p>	<p>The lead agencies have developed a comprehensive set of environmental commitments that will dramatically reduce construction related energy use. Performance standards identified in the Exhaust Reduction Plan will be achieved through a variety of different means, including use of newer and more fuel efficient equipment, as well as alternatively fueled vehicles. The project will also comply with all best management practices outlined in DWR's Climate Action Plan, which include development of tire inflation, ride sharing, and debris recycling programs, as well as use of high efficiency lighting.</p> <p>The Exhaust Reduction Plan identifies a performance standard of model year 2013 engines for all offroad equipment with greater than 50 horsepower. This standard will be achieved through a variety of different means, including use of newer and more fuel efficient equipment. The Exhaust Reduction Plan also requires marine vessels and onroad haul trucks to utilize newer engines, which will consume less fuel and emit fewer emissions, relative to the fleetwide average. The project will also comply with all best management practices outlined in DWR's Climate Action Plan, which include development of tire inflation, ride sharing, and debris recycling programs, as well as use of high efficiency lighting. Please refer to Appendix 3B, Environmental Commitments, for additional information.</p> <p>As discussed in Chapter 22, Air Quality and Greenhouse Gases, the BDCP proposed project also includes aggressive mitigation that will offset construction-related emissions of nitrogen oxides, reactive organic gases, and particulate matter not reduced through onsite commitments, but still in excess of air district and federal de minimis thresholds, to below CEQA thresholds or net zero. Offsets will be purchased through local air district programs, which provide monetary incentives for engine retrofits and other low-emissions equipment. Accordingly, the projects funded through project contributions to local air district offset programs will help to reduce regional energy consumption and carbon emissions, especially considering that most funded projects have a lifespan longer than the 14-year project construction period. Similar to the</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Using lighting systems that are energy efficient, such as LED technology;</p> <p>Recycling construction debris to maximum extent feasible;</p> <p>Planting shade trees in or near construction projects where feasible;</p> <p>Giving preference to construction bids that use Best Available Control Technology, particularly those seeking to deploy zero emission technologies;</p> <p>Employing the use of alternative fueled vehicles;</p> <p>Using the minimum feasible amount of GHG-emitting construction materials that is feasible;</p> <p>Use of cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production; and,</p> <p>Use of lighter-colored pavement where feasible.</p>	<p>criteria pollutant offset mitigation, the project would also offset all construction-generated greenhouse gas (GHG) emission to net zero through implementation of Mitigation Measure AQ-21. Potential GHG reduction strategies that may be pursued to achieve this performance standard include a renewable energy purchase agreement for construction power, use of electric-powered construction equipment, use of low carbon concrete, and use of renewable diesel during construction.</p> <p>Please refer to Appendix 3B, Environmental Commitments, for additional information. Specific requirements for the environmental commitments and Mitigation Measure AQ-21 will be outlined in the Mitigation Monitoring Report Protocol (MMRP) and considered a condition of project approval.</p>
2006	89	<p>HCP Monitoring and Assessment</p> <p>The BDCP is a project of such significance, with a reliance on extensive monitoring and technical information, that its development and approval represents an opportunity to advance aquatic resource monitoring for the entire state of California. For several years, the Environmental Protection Agency and partner state and federal agencies have been advancing a comprehensive monitoring program that supports integration of federal and state aquatic resource permitting for Habitat Conservation Plans (HCPs) and Natural Community Conservation Plans (NCCPs). When implemented as a monitoring program, the framework that has been established will generate information to evaluate site specific and regional outcomes of habitat conservation and aquatic resource mitigation activity. This framework has been created in consideration of the Clean Water Act (CWA) Mitigation Rule (33 CFR Parts 325 and 332; 40 CFR Part 230), the "Five Point Policy" (Addendum to the HCP Handbook), Tenets of a State Wetland and Riparian Monitoring Plan (CA Water Quality Monitoring Council 2010) [footnote 32: Tenets of a State Wetland and Riparian Monitoring Program. 2010. California Water Quality Monitoring Council (CA Wetland Monitoring Workgroup). [url]], and Designing Monitoring Programs in an Adaptive Management Context for Regional Multiple Species Conservation Plans [footnote 33: Atkinson, A. J., P. C. Trenham, R. N. Fisher, S. A. Hathaway, B. S. Johnson, S. G. Torres and Y. C. Moore. 2004. Designing Monitoring Programs in an Adaptive Management Context for Regional Multiple Species Conservation Plans. U.S. Geological Survey Technical Report. USGS Western Ecological Research Center, Sacramento, CA. 69 pages.[url]].</p> <p>At the state level, the 2007 MOU signed by the Secretaries of the California Environmental Protection Agency (Cal/EPA) and the California Natural Resources Agency (Resources Agency) establishes the Water Quality Monitoring Council. The Council now requires the boards, departments and offices within Cal/EPA and the Resources Agency to integrate and coordinate their water quality and related ecosystem monitoring, assessment, and reporting. The Monitoring Council is further aligning state aquatic resource monitoring programs with their federal counterparts in order to develop an integrated monitoring program that addresses the needs of the HCP/NCCPs while providing CWA monitoring data and information that will satisfy the Corps of Engineers,</p>	<p>DWR, Reclamation, CDFW, USFWS, NMFS, and the public water agencies will establish a robust program of collaborative science, monitoring, and adaptive management for the proposed project as part of the ESA and CESA review processes, as well as through the CEQA/NEPA and SWRCB water rights processes. Since the preferred alternative is now the California WaterFix Project rather than the BDCP, monitoring activities will be tailored accordingly, as discussed in the Final EIR/EIS. Specific methodologies, databases, and actions for this program will be considered and developed within the context of the final mitigation program/operational needs/environmental regulatory requirements/and other factors for the project. The Lead Agencies acknowledge the recommendations of the EPA and the Delta Science Plan and will pursue those strategies that best fit the preferred alternative. Additionally, please see Master Response 33 which addresses adaptive management and monitoring.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>EPA, and the Water Boards.</p> <p>The primary goal of such a program is to develop a fully integrated monitoring framework (covering ESA, CESA, CWA, and the Porter-Cologne Act) that provides the best available information on the extent of impacts from permitted activities and progress toward achieving conservation targets using common databases to facilitate the sharing of this information across eco-regions and among local, regional, state and federal programs.</p> <p>The monitoring design for this comprehensive federal/State monitoring program is based on the EPA tiered monitoring approach (http://water.epa.gov/type/wetlands/outreach/upload/techfram_pr.pdf) which has also been adopted by the State, is increasingly used by programs across the country, and is consistent with the tiered approach described by Atkinson et al. (2004) [footnote 34: Ibid.]. The Delta Science Plan (dated 12/30/2013 and found at http://deltacouncil.ca.gov/science-program/delta-science-plan) describes a process by which this monitoring approach could be developed and implemented, including sections on adaptive management, data management, modeling, and communication. EPA strongly supports the recommendations in the Delta Science Plan.</p> <p>Recommendation: Discuss how the BDCP mitigation monitoring and reporting program will be consistent with the federal and State efforts discussed above.</p>	
2007	1	<p>The most prominent of these concerns among my friends and acquaintances involves the issue of water flow from the Northern Sacramento River to the lands south of the Delta. There is great consternation over what appears to be a "water grab" by farmers in the San Joaquin Delta and large water agencies that supply residential water to Los Angeles. Past practices by these agencies have led to the subsidence of soils in the San Joaquin, the draining of Owens Lake, and the reverse flow of the San Joaquin River (Cadillac Desert, Marc Resiner, 1963, DWR, U.S. Geological Survey data). It seems that once water resources in the Central Valley became overused, farmers seeking greater profits began to use Sacramento River Watershed water, through the CVP and SWP. Later, the Delta Cross Cut Channel diverted water away from the Sacramento outflow and into the Mendota Canal. Now, the plan is to take even more water to irrigate marginal soils in a desert region. The fear is that such water takes will cause the Delta to have severely reduced water flows, increased salinity and silt build up, and that the availability of water for current users above and within the Delta will decrease significantly.</p>	<p>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.</p> <p>Importantly, all water exported by the SWP and CVP is subject to 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.</p> <p>The proposed project's facilities, including water intakes and pumping plants, would be operated in accordance with permits issued by, U.S. Fish and Wildlife Service, National Marine Fisheries Service, State Department of Fish and Wildlife, and the State Water Resources Control Board, among other agencies. The proposed project would be permitted to operate with regulatory protections, including river water levels and flow, which would be determined based upon how much water is actually available in the system, the presence of threatened fish species, and water quality standards.</p> <p>Through the Legislature and through executive agencies, California has embraced water conservation on numerous fronts, as have many California water agencies. Many of these efforts are highlighted in Appendix 1C, Demand Management Measures, EIR/EIS, which describes conservation, water use efficiency, and other sources of water supply, including recycled water. While these elements are not proposed as part of the project, the Lead Agencies recognize that they are important tools in managing California's water resources. 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 conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage.</p> <p>For more information regarding alternatives development, water demand management, and purpose and need please see Master Response 4, Master Response 6, and Master Response 3.</p> <p>Refer to the following Master Responses for other issues raised by the commenter: Master Response 5</p>

DEIRS Ltr#	Cmt#	Comment	Response
			(Conservation Measure 1 as a CM, of Restoration and Enhancement Activities), and Master Response 14 (Water Quality). With respect to exports to the south, refer to these Master Responses for clarification: Master Response 44 (Decision Tree), Master Response 43 (Water Transfers), Master Response 34 (Beneficial Use of Water), Master Response 28 (Operational Criteria), Master Response 35 (Southern California Water Supply), and Master Response 25 (Upstream Reservoir Effects).
2007	2	While farmers throughout the state from Redding to Bakersfield are seeking a secure source of water to maintain their livelihoods, the BDCP proposes a development which would allow farmers in the San Joaquin and water agencies further south to grow and prosper at the expense of those of us living in the five county Delta region. As stated July 22, 2014, at the Solano County Board of Supervisors' meeting by the Solano County Director of Resource Manager, Bill Emlen, " The plan facilitates a glaring imbalance and inequity whereby economic objectives of other regions are supported at the expense of the Delta region." At a previous Solano Board of Supervisors meeting (June 2, 2014) other problems for our county were brought to light: uncertainty about which lands will be affected and how management of these lands and habitat will take place, increased salinity of both flowing and ground water, as well as increased salinity of the land itself, loss of taxes from loss of farmland revenues, loss of housing, decrease in local food production, and environmental concerns. Solano County Supervisors have noted in their comment letter that "the plan has significant and far-reaching impacts that will erode the agricultural base that the county has spent decades trying to responsibly preserve."	Please refer to Master Response 26 regarding changes in Delta exports. Please refer to Section 4 4.3.4 of the RDEIR/SDEIS Water Quality, regarding salinity impacts in the project area. Only minor changes in salinity of agricultural water supply are expected during construction. Consequently, costs related to salinity changes would also be minor. 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. 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
2007	3	In addition the Plan has many indirect costs to the county, state, and private industry in order to benefit those in the southland. The "preferred alternative" plan would cause Highway 12, SR 160, and parts of I-5 to be rerouted. With implementation of the habitat plan several county bridges would need to be moved or extended and in one plan for Suisun Marsh, the railroad (Capitol Corridor line, and the one scheduled to bring heavy crude to the Benicia Valero Refinery) would need to be restructured or moved. There is no funding mechanism allowed for any of this in the BDCP.	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.
2007	4	The Bay Delta Conservation Plan will affect a much larger area than is covered by the plan itself. While the Plan documents indicate it is "a comprehensive conservation strategy aimed at protecting various species of wildlife while permitting the reliable operation of California's two most important delivery systems", its purview of study and influence is limited to an area bounded by Goodyear Slough near Benicia in the west to Staten Island in the east and southward to the Tracy pumps. In the plan area alone 3,500 to 20,000 acres of useable land will be altered (EIR-31-1), not including the land to be set aside for habitat mitigation. The Plan will in fact affect a much larger area than that. The way the BDCP and DWR choose to manage the water in the CVP and SWP will have great impact on millions: farmers, towns, cities, and wildlife all the way from Shasta Dam to Los Angeles and out through the Golden Gate. As noted in the EIR (ES.3) the effects of implementing the BDCP would extend beyond the boundaries of its proposed region, and these effects have not been fully evaluated or mitigated. The Plan needs to examine those effects before proceeding with construction of a water delivery system that will negatively impact millions of people as well as wildlife. At one of the roundtable hearings presented by the BDCP in Sacramento last year, I was very surprised to learn that wildlife presenters, ICF Consultants, and multiple	The BDCP alternatives, California WaterFix and its alternatives are fully evaluated in the EIR/EIS. The effects of operating new water conveyance facilities in the Delta is fully evaluated using CALSIM/DSM2 modeling. These models and others are used to estimate potential effects of operating the conveyance facilities on the SWP/CVP system and on river and stream hydrodynamics upstream of the Delta, in the Delta and south of the Delta. Please refer the Chapter 5, Water Supply, Chapter 6, Surface Water, Chapter 7, Groundwater, Chapter 8, Water Quality and Chapter 11, Fish and Aquatic Resources for a description of the specific study area for those topics and the approach to impact analyses. Other resources topics addressed in the EIR/EIS sometimes include effects focusing in the Plan Area (e.g. Agricultural and Land Use impacts) or address effects within and outside the Plan Area (e.g. Air Quality and Greenhouse Gas Emissions. Other effects that could result from use of exported Delta water is presented in Chapter 30, Growth Inducement and Other Indirect Effects. 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.

DEIRS Ltr#	Cmt#	Comment	Response
		water agencies' personnel had very little understanding of how the BDCP area is geographically and economically connected to the rest of California.	
2007	5	The San Francisco Bay Delta is the largest estuary on the West Coast of North America. It includes many subregions, each of which has different sensitive ecosystems that will be impacted by the BDCP (Suisun Marsh, Peter Moyle, 2014). The BDCP seeks to recreate historic habitat for about 90,000 acres, while preserving another 116,000 acres in the Suisun Marsh. Some of these acres will be grossly restructured under the Plan, while others will just be more tightly managed. Even though the EIR and BDCP reports are massive in length, the conclusions about how marsh ecosystems and natural habitats will be impacted are vague, and are only in theoretical stages according to the EIR. Proponents and consultants for the habitat restoration project are not yet clear on what the results of their efforts will be. As one ecological consultant at a February hearing in Sacramento announced, "There has never been a habitat restoration project this large in the world, so scientific data about it is limited."	The commenter does not offer any evidence on how the conclusions related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS are vague. 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.
2007	6	The BDCP lacks a clear statement of oversight and implementation of the project. The Implementation Agreement is nebulous at best. As written there, the BDCP conflicts with six different current water plans for the state of California including the Delta Plan, the California Water Action Plan, and the Suisun Marsh Preservation Plan, numerous county land use plans, and an international treaty for bird migration between multiple countries from Columbia through Canada. The Plan requires reworking of water rights issues that have been in place for decades.	<p>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.</p> <p>This comment also 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.</p> <p>The proposed project is one component, among many, of the California Water Action Plan. The California Water Plan evaluates different combinations of regional and statewide resources management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. Follow the California Water Plan here: http://www.waterplan.water.ca.gov/.</p> <p>Appendices 3I and 3J discuss how Alternative 4 and Alternative 4A would be compliant with the Delta Reform Act.</p>
2007	7	The BDCP is in violation of the Delta Protection Act which "accords first priority to satisfaction of vested rights and public interest needs for water in the Delta and relegates to lesser priority all exports of water from the Delta." The Water Code Section 11461 states that "projects must be operated so as not to cause any material deterioration of water quality which would impair its usefulness for the reasonable beneficial uses which are made by senior right holders." The BDCP is in clear violation of this. (Dante Nomellini, Sr., Central Delta Water Agency, June 3, 2014).	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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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

DEIRS Ltr#	Cmt#	Comment	Response
			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.
2007	8	The management of the BDCP is not efficient or transparent. The document itself is so lengthy and user-unfriendly that is difficult for consultants, managers, and the general public to access necessary information for understanding and implementation of the stated goals. The Plan is not inclusive. Those delineated in the Implementing Agreement as primary decision makers do not include stakeholders from the Delta or areas upstream who will be impacted. There is no public vote on any part of the plan. This lack of inclusion increases the political conflict between North and South, farmers, and fisherman, and environmentalists. The hearings that were held, and the comment period allow for some input, but it is limited considering how many will be impacted and how much it will cost us all financially.	Lay-friendly Highlight documents for both the BDCP and the EIR/EIS were published to provide summary information about the documents and to help readers get acquainted with the documents. The BDCP Highlights and the EIR/EIS Highlights were posted online at http://baydeltaconservationplan.com/AboutBDCP/InformationalMaterials.aspx . Short one-page factsheets on the BDCP and EIR/EIS were also provided online and by request. In addition, 17 narrated informational webinar episodes were posted to the website for both the BDCP and EIR/EIS. These webinars were developed to provide short, easy to understand summaries of key elements of the BDCP and EIR/EIS. Background documents, additional factsheets, and FAQs continue to be available on-line. For more information, please see Master Response 38 regarding the length and complexity of the document. This comment also 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.
2007	9	The BDCP is expensive and its funding is uncertain. Costs are not set and estimates vary from \$16 to \$35 billion with approximately \$3.2 billion for tunnel construction. These costs are based on an optimism basis according to the Implementation Agreement. The BDCP has offered two cost /benefit evaluations, that don't agree. Economics Professor Dr. Jeffrey Michael (Directory of the Business Forecasting Center, University of the Pacific) completed an independent cost/benefit comparison that shows a much lower benefit-cost ratio, which indicates that the Plan is not cost effective.	The construction of the water delivery facilities is estimated to cost \$14.9 billion, an amount that would be paid for by the state and federal water contractors who rely on Delta exports. The range of costs for water vary widely among contractors south of the Delta. Costs depend on the source of water, transport facilities, energy requirements, among other factors. For the agricultural customers of the CVP, prices range from \$100 per acre-foot to more than \$400 per acre-foot. The Metropolitan Water District of Southern California, which buys water from the SWP, estimates that the cost of the proposed project would translate into about \$5.00 extra per household, per month in its service area. The final cost of water from the new conveyance facilities would be determined by numerous factors. A number of these significant factors, such as the project yield and allocation of costs, have yet to be determined. Please see Master Response 5 for information regarding funding of the proposed project. The analysis in the BDCP Statewide Economic Impact Report (http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Draft_BDCP_Statewide_Economic_Impact_Report_8-5-13.sflb.ashx) did use 60 years as the time horizon in which to calculate the economic benefits of the operation of the water conveyance facility for water supply, water quality, and water supply reliability. For this analysis, the costs of operating the facility were also calculated out to 60 years. The costs of implementing BDCP conservation measures 2 to 21 would have ended after 50 years, corresponding to the end of the permit term. While costs to manage the BDCP Reserve System continue in perpetuity, these costs would be paid for by the endowment created during the first 50 years. So there would be no new costs after 50 years except the continued operation of the water conveyance facility. Therefore, it was reasonable to consider the costs and benefits of the water conveyance facility beyond 50 years because its useful life would extend beyond 50 years and with benefits accrued throughout its life. Indeed, because the facility would be likely to last much longer than 60 years, considering benefits out to 60 years was very conservative and greatly underestimated these economic benefits. The proposed water conveyance facility design was approximately 10% complete under the 2013 Public Draft. This level of design is typical of infrastructure projects at this stage of the environmental review

DEIRS Ltr#	Cmt#	Comment	Response
			<p>process. The detailed cost estimate for the facility was developed to take into account the preliminary level of design. Cost estimates include standard contingencies of 20-30% and in some cases are as high as 50% where cost uncertainties are highest. The cost estimate in Chapter 8 of the 2013 Public Draft, is at an appropriate level of detail and accuracy for a planning level estimate for the endangered species permits from the state and federal governments.</p> <p>A revised but more limited cost-benefit analysis is being prepared for the current proposed project (Alternative 4A) and to support project financing and implementation. In contrast to the former Statewide Economic Impact Report, the new analysis will be limited to the economic benefits to water supply, water quality, and water supply reliability. The economic benefits of the habitat restoration will not be included in the new cost-benefit analysis because the amount of habitat restoration required for mitigation is substantially less than the restoration that was originally proposed under BDCP. This updated cost-benefit analysis is not needed to support the final EIR/EIS or the Lead Agency decisions associated with CEQA or NEPA compliance but it is expected to be released prior to the final decisions on the project.</p>
2007	10	<p>According to the BDCP the annual debt service and operating costs of the tunnels will be about \$1.2 billion, while a Westlands Water District Presentation sets it at \$2 billion. Estimations for costs to agriculture in California presented by economist Dr. Michael, and based on the BDCP Economic Impact Report, indicate that the revenue gain based on increased production for south of the Delta would be around \$134 million, the loss to Delta would be around \$91 million. The net gain to California agriculture would be \$41 million before deducting the annual cost of tunnel operation. Financially, for agriculture this plan does not make sense.</p>	<p>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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.</p>
2007	11	<p>The cost of tunnel or conveyance construction and operation is to be split between water supply benefactors, water agencies, and the Federal and State government. Estimates given in February, 2014 by John Laird, Secretary of Natural Resources indicated that about 68% of costs would be paid by urban and agricultural water users. Last week, at a presentation by the Metropolitan Water District, the figure was quoted at 55%. There appears to be some Adaptive Management going on to convince the water contractors to sign onto the agreement. For some water contractors the cost/benefit will not be worth it.</p> <p>As noted by San Diego County Water Authority in their June 2, 2014, comment letter, "Chapter 8 of the current BDCP does not provide the detailed information necessary for potential participating agencies to evaluate individual agency cost-benefit of the proposed project."</p> <p>Where will the money come from? Obviously, water rates will rise for all users, including us here in Benicia. Currently, it was reported in the news that larger water agencies may be seeking to raise property taxes to pay for the BDC without a public vote. The State will need to pass a water bond, and the legislature can't seem to agree on one to submit. The Federal government has declined at this point to offer any financial assistance. A recent Army Corp of Engineers Levee Feasibility Study indicated that there is too little</p>	<p>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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. 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.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>benefit for the costs for the Federal Government to get involved at this time. This study also revealed that the benefit to cost ratio is appropriate for habitat restoration, and that the Federal Government may offer assistance there, but only at 50/50% with private funding.</p>	
2007	12	<p>While the BDCP has co-equal goals of supplying a consistent water source to California users and maintaining a sustainable wildlife habitat in the Delta, it seems unlikely for those goals to be achieved. First let's look at water availability. According to the EIR for the BDCP, (ES.2.2.2.2) water supply reliability cannot be maintained at permitted levels. In 2006, the State Water Board presented information to the Delta Vision Task Force indicating that quantities totaling several times the average annual unimpaired flow in the Delta watershed could be available based on the face value of water permits already issued. What's expected as "consistent water supply" by the farmers in the San Joaquin Valley has never been available and probably never will.</p> <p>Presenters at springtime hearings (Santa Clarita Delta Bus Tour, at Rush Ranch, April, 2014) indicated that the tunnels are not going to take more water than is taken now. The BDCP tunnel option would allow 65% of the outflow to be taken for state and federal water projects. The "Preferred Plan" allows an outtake of water at 9,000 cubic feet per second from July to January every year. According to the Delta Water Atlas, the average outflow during the summer varies between 5,000 and 10,000 cfs. This year, the US Geological Service monitoring stations within the Delta show the outflow last month to be closer to 150-300 cfs. Comparisons made by U. C. Davis researchers indicate that the Dayflow calculation system used by the DWR shows almost twice the water outflow as the USGS monitors. There is concern about the difference in monitoring and in the science used by the DWR to determine accurate water flows through the Delta. The science here is questionable. BDCP has not been accessing the Delta Science Project information either.</p>	<p>Water rights on rivers in the Trinity and Central Valley watersheds include a wide range of beneficial uses from hydropower to municipal, industrial, and agricultural water users. However, not all of the water diverted under the water rights is consumptively used. For example, water diverted for hydropower electric generation is fully returned to the water bodies; and a portion of the water diverted from municipal, industrial, and agricultural water uses is returned to the water bodies. In addition, the amount of water diverted is dependent upon water rights priorities and the need to meet environmental flow and quality requirements. Therefore, it is difficult to compare the total volume of water rights licenses to the total amount of water available in the system. For example, water rights issued to DWR and Reclamation are not fully available to provide water under the SWP and CVP water contracts in many years due to the demands of senior water rights holders and regulatory requirements.</p> <p>During preparation of the EIR/EIS, DWR and Reclamation met with the Delta Science Panel, and considered a wide range of observational data. Implementation of the proposed project would include substantial amounts of monitoring.</p>
2007	13	<p>BDCP computer modeling of water flows through the Delta are inaccurate. (Chapter 5) Although the Plan indicates the water not going through the tunnels would flow equally through three channels: Steamboat Slough, the Sacramento River, and Georgianna Slough. The real life lesson of the drought is showing that isn't happening. My own personal observation and those of others living in the Delta (Isleton Newspaper, July, 2014) indicate that Steamboat Slough is "turning into a mud flat" at low tide because of a sandbar that has developed blocking tidal inflow, the Sacramento River is 10-15 feet deep between Rio Vista and Walnut Grove, while the Georgianna Slough is 20-40 feet deep.</p> <p>There are other problems with the computer modeling as well. At a recent presentation by Solano Resource Conservation District, the director presented his own computer modeling about the critical placement of tidal marshes that provided very different information than that found in the BDCP. Placement of such habitat restoration projects is critical for attempting to mitigate the effect of flooding caused by climate change and sea rise (NERR, 2014), one of the secondary goals of the BDCP.</p> <p>The US Department of Fish and Wildlife noted in the EIR that modeling which had been done was insufficient and/or inaccurate. Limited and inaccurate modeling of water flows and salinity levels in Suisun Marsh were also noted by Peter Moyle, Associate director of the Center for Watershed Sciences at the University of California, Davis, in the book, Suisun Marsh.</p>	<p>The DSM2 modeling results presented in Appendix 5A, Section C, Modeling Results, of the EIR/EIS indicate that the flow in the Sacramento River is not uniformly allocated to Steamboat Slough, Georgianna Slough, and Sacramento River due to different channel configurations and tidal actions. The model results for minimum surface water elevations included in the appendix are not consistent with the observations cited in this comment because the model results are "average daily" results. The complete set of model results represent elevations every 15 minutes.</p> <p>The EIR/EIS includes a sensitivity analysis which considers effects on surface waters depending upon different locations of habitat restoration sites (see Appendix 5A, Section D, Attachment 5).</p>

DEIRS Ltr#	Cmt#	Comment	Response
2007	14	<p>Maintenance of a consistent water flow to those in the southland requires both an adequate amount of fresh water and the systems with which to move it. While the BDCP (Chapter 8) offers alternatives for moving water in and around the Delta and proposes certain modifications to the levee system to accommodate this water movement, it does not address the issue of failing water delivery infrastructures south of the Delta.</p> <p>According to Michelle Sneed, hydrologist with the U.S. Geological Survey who has studied land subsidence along the Delta-Mendota Canal since 2003, the subsidence of soil near the Delta Mendota Canal, the East Side Bypass, and the California Aqueduct is affecting the efficiency of the canals. "You get lost conveyance capacity." Another common impact is a loss of storage capacity within the aquifers there. Perhaps the BDCP or DWR should consider spending funds to improve the current canal system, and regulate ground water pumping to reduce subsidence before heavily investing in a massive Delta conveyance system.</p>	<p>The No Action Alternative and action alternatives assume the continuation of maintenance of existing SWP and CVP facilities, as described in Appendix 3D, Defining Existing Conditions, No Action Alternative, No Project Alternative, and Cumulative Impact Conditions, in the Final EIR/EIS.</p> <p>Groundwater overdraft and related subsidence conditions in the No Action Alternative and action alternatives are described in Chapter 7, Groundwater, of the Final EIR/EIS.</p>
2007	15	<p>One of the current problems for consistent water delivery is the U.S. Environmental Protection Agency requirement to stop pumping when delta smelt and long-fin smelt become trapped in the south Delta pumps. According to the CEQA in the EIR (Table 9-1) these same fish as well as Chinook salmon will be negatively affected and run the same risk of entrapment at the tunnel pumps. Adaptive management techniques suggest that when the fish are more likely to be killed, the water will not flow through the conveyance. At a hearing in Sacramento (February, 2014), The Director of DWR stated that "if (covered) species are jeopardized, permits will be withdrawn" as per the Bay Delta Reform Act of 2009. It would appear that even with the tunnels we will likely have a water delivery problem very similar to the one we have now.</p>	<p>The location of the proposed NDD facilities are outside the main range of delta and longfin smelt, and therefore, their operation are unlikely to entrain these species. The south Delta export facilities would continue to be used, but would be used approximately 50% less than they are today, with commensurate reductions in entrainment. As for Sacramento River Chinook, steelhead and sturgeon, who would migrate past the proposed NDD, the operational criteria proposed are meant to avoid or minimize effects by protecting pulses and making additional adjustments when fish are detected. The NDD would also include state-of-the-art fish screens to minimize entrainment and impingement. Additionally, the project includes a Collaborative Science and Adaptive Management program intended to research specific uncertainties, including those related to screen design and operational criteria, and make adjustments as necessary. Chapter 11 includes a detailed analysis of the entrainment and impingement effects of the NDD and continued use of the south Delta facilities.</p>
2007	16	<p>Water users upstream of the tunnel construction will likely suffer reduced water resources, including ground water, during the construction (ten years?) although the EIR only mentions that the BDCP fails to take into account the upstream disruption that can be caused by the construction of the tunnels. Feather River flows will suffer significant reduction during high water demand periods, negatively impacting the endangered fall Chinook salmon run. Water use by towns and farmers in the Delta during construction and operation will be negatively impacted as well.</p> <p>So, there will be less water for those in the Sacramento River watershed, less water for Delta farmers and residents, and an inconsistent source of water for those south of the Delta. Goal number one: not met.</p>	<p>Changes in Feather River conditions, which would not occur until after construction, are described in Chapter 6, Surface Water, and Chapter 11, Fish and Aquatic Resources.</p> <p>As described in Section 7.3.3.2 of Chapter 7, Groundwater, of the EIR/EIS, dewatering would occur at the construction sites for the intakes, forebays, pipelines (not the tunnels), and tunnel shafts. Near Scribner Road, dewatering would occur during construction only near the intakes. Following construction, the groundwater elevations would rise towards pre-construction elevations. Mitigation measures have been identified in the EIR/EIS; and specific measures would be defined during design and construction phases based upon more detailed analyses. However, impacts may remain significant and unavoidable and adverse.</p>
2007	17	<p>Not only will there not be a consistent source of water, the water provided is likely to be of lower quality. The operation of the tunnels will reduce the quality of water available in the Delta. About 20 million people depend on water flowing in the Sacramento-San Joaquin Delta inland from North Bay for their water supply (sfbay.wr.usgs.gov) They and certain aquatic species will be negatively impacted by increase in salinity caused by the reduced outflows of the tunnel project.</p> <p>As water flows through the Delta are decreased by the tunnel outtake, the EIR explains that increased silting and sedimentation are likely to develop in the channels and sloughs west of the tunnels, further impacting water quality within the Delta. For example, Baker Slough is currently the outtake site for the North Bay Aqueduct, a major source of</p>	<p>The EIR/EIS fully assess the potential water quality changes, identify adverse changes/significant impacts, and introduce mitigation for those impacts. The assessment does not conclude that water exported from the North Bay Aqueduct would not be suitable for irrigation and drinking. Rather, impacts such as those due to increased organic carbon and bromide at the North Bay Aqueduct, will be mitigated and drinking water treatment plants are expected to be able to maintain drinking water quality.</p> <p>Please also see Master Response 14 regarding the proposed project's impact on water quality.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Benicia's water. According to the BDCP, the tunnel project will cause such a reduction in Delta outflow that the water quality and salinity levels of the water there will not be appropriate for irrigation or drinking. Hence, the North Bay Aqueduct outtake site will need to be moved closer to the construction site of the tunnels.</p> <p>The water going through the tunnels is likely to degrade in quality as well. Natural filtration of sediment and increased oxygen provided by wetlands and channel habitat will not occur inside the 35 miles of tunnels. (Suisun Marsh, P. Moyle, et al, 2014).</p>	
2007	18	<p>According to the EIR and the U.S. Geological Survey, the construction of the tunnels and disruptions of underwater soils are likely to increase the amounts of mercury, bromide, chloride, copper, lead, and selenium, negatively impacting water quality downstream. The EIR also notes that agricultural drainage will be negatively affected and may cause a build up of various minerals and pesticides that could seep into the ground or ponding surface water. No mitigation for this is included in the BDCP.</p>	<p>No mitigation was included for construction-related effects to water quality, because effects would be less than significant due to implementation of the identified BMPs and environmental commitments described in the impact assessment of construction activities</p>
2007	19	<p>Reconstruction of the wetlands habitat as proposed in the EIR will also cause degradation of water quality within the Delta. Currently, salinity gates at Montezuma Slough help maintain fresh water within Suisun Marsh. The Plan calls for the removal or non-operation of those gates, allowing greater saltwater intrusion. Additionally, the habitat reconstruction suggests removing levees, reducing freshwater flow through channels, and allowing moving water to become more pond-like, to be affected primarily by the wind and tides. Not only will this area likely increase in salinity, it will likely become more polluted with water-born sediments dropped by slow or non-moving water. U.S. Geological Survey and US Department of Fish and Wildlife have expressed concern over fisheries management with this scenario.</p>	<p>Please refer to Sections 3.6.4.1 and 3.6.4 in Chapter 3, Alternatives, for a description of potential operations of the salinity control gates at Suisun Marsh. Under Operational Scenario H3+ for the preferred alternative, 4A, introduced in the RDEIR/SDEIS released in 2015, there would be no change in the use of the salinity gates. Gates would continue to be closed up to 20 days per year from October through May. Additionally, Alternative 4A does not include a HCP or conservation measures. The alternative implementation strategy allows for other state and federal programs to address the long term conservation efforts for species recovery in programs separate from the proposed project. Under Alternative 4A, substantially less habitat restoration would occur than under Alternative 4. Please refer to Chapter 3, Alternatives, for additional detail about the habitat restoration proposed under Alternative 4A.</p>
2007	20	<p>Changes in the Delta inflow and outflow affect Delta water quality particularly with regard to salinity. (EIR, ES.2.2.2.3 Hydrology). Freshwater is a major control on estuarine salinity within the North Bay and Delta and is a key state variable for fisheries management in San Francisco Bay according to the USGS (sfbay.wr.usgs.gov). Their surveys show that the salinity within the Delta has been slowly increasing, since the advent of the CVP and SWP. The BDCP calls for a reduction of Delta outflows that will allow salt water to intrude even further. Farmers are concerned (Ag Alert, June, 2014) that this increase in salinity will impact the irrigation water they use, the ground water they rely on, the production of their crops, and even the salt levels in the land itself. The EIR notes all of these problems but fails to offer any mitigation for it.</p>	<p>The EIR/EIS modeling results for the No Action Alternative indicate that, with or without the project, due to the reduction in rainfall and increased sea level rise, western Delta salinity could become greater than under the No Action Alternative and action alternatives. Water would be released from the SWP and CVP reservoirs to reduce the Delta salinity, however, in some years, adequate water supplies may not be available to reduce the surface water salinity, as described in Chapter 8, Water Quality. This would occur with or without the Proposed Project as indicated thorough the comparison of conditions under the No Action Alternative as compared to the Existing Conditions. Effects due to climate change are not caused by the project and are provided for informational purposes only and do not lead to mitigation.</p>
2007	21	<p>Much of the water flow in the Delta is affected by tidal action. Brackish water is created when fresh water flows mix with tidal water from the Bay and ocean. The location of this brackish water varies with the tides each day and with the fresh water outflows. During the summer the "tide line" of brackish, salty water known as X2 is usually near Chipps Island. In the winter it is further west near Collinsville. This year because of the drought and reduced water flows the X2 line is further upstream near Brannan Island. This encroaching salinity affects where fish like smelt and even herring go, and impacts the water quality of those relying on river water to irrigate or for drinking purposes.</p> <p>The EIR (ES-7, Biological goals and objectives) indicates that modification to existing flow regimes will result in changes in salinity patterns and water quality. With decreased</p>	<p>This comment addresses alternatives contained within the 2013 Draft BDCP and Draft EIR/EIS. Alternative 4 remains a viable alternative; however, a modified Proposed Project (Alternative 4A/California WaterFix) is the preferred alternative and does not include an HCP or NCCP component, or large-scale habitat restoration. Without implementation of large-scale habitat restoration, the effects on salinity under the action alternatives as compared to the No Action Alternative would be less than with large-scale restoration. For example under Alternative 4A, salinity generally would be similar or less than under No Action Alternative in the central Delta (e.g., near Jersey Point, Rock Slough, and along Sacramento River downstream of Steamboat Slough). However, salinity would increase under Alternative 4A as compared to the No Action Alternative in July through September along the Sacramento River near Collinsville and Emmaton; and generally decrease or be similar in remaining months, as presented in Appendix 5A, Section C, of the EIR/EIS. Please see Chapter 8 and associated appendices in the EIR/EIS and Master Response 14. Therefore, it is not anticipated that groundwater quality would substantially change under Alternative 4A as</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>outflows and increased tidal inflows over the course of several decades it is possible that higher salinity will reach as far as the tunnel outtakes. Currently, consistent brackish water is present at Brannan Island just 17 miles from the proposed outtake site near Hood. (USGS monitoring report, July ,2014). The X2 tide line has moved eastward 12 miles just this year alone. This could almost certainly impact the salinity level of the water being moved through the tunnels.</p> <p>Computer modeling conducted by the BDCP consultants did not reflect this possibility. Once again the modeling is inaccurate and/or incomplete. The data cannot be relied upon as a predictive agent.</p> <p>Salinity is also a problem in the San Joaquin Valley, partially as a result of the reverse flow of the San Joaquin River due to export pumping. Recent farm news from Bakersfield reported a decline in melon production because of increased salinity in the irrigation water.</p>	<p>compared to the No Action Alternative due to operations of the conveyance facilities.</p> <p>The EIR/EIS modeling results for the No Action Alternative indicate that, with or without the project, rising sea levels will bring saline tidal water further into the Delta than occurs at present. These changes would occur with or without implementation of the Proposed Project and no mitigation is required.</p>
2007	22	<p>Salinity levels influence the movement of fish and birds through the Delta. Last month a local fishing column reported that there was a large school of herring (a pelagic fish) east of Pittsburg. Currently, delta smelt are reported at Brannan Island and Franks Tract, in the flow of fresher water being pumped through the south Delta pumps. The BDCP models had predicted that with lower fresh water flows, the smelt would stay in the lower Delta, which has not happened. Both flow levels and water quality have negatively impacted this endangered species. The California Department of Fish and Game indicates that the population of smelt is at its lowest in 37 years, likely because of lack of fresh water flow.</p>	<p>Pacific herring were indeed found quite far upstream in this drought year with relatively low outflow (e.g., salvage of the species occurred in late February to mid-April; see http://www.dfg.ca.gov/delta/apps/salvage/SalvageExportChart.aspx?Species=3&SampleDate=6%2f30%2f2014&Facility=1). However, it is unclear to which surveys the commenter is referring to with respect to “Currently, Delta smelt are reported to be seen at Brannan Island and Franks Tract, in the flow of fresher water being pumped through the south Delta pumps” because the only scientific surveys for which data are available during June 2014 (the month prior to the commenter’s letter) are the 20-mm survey (http://www.dfg.ca.gov/delta/data/20mm/CPUE_Map.asp), for which some delta smelt were found somewhat seaward (i.e., near Decker Island and Jersey Point) of the locations that the commenter noted; salvage of delta smelt at the SWP and CVP south Delta facilities was limited to late April to mid-May, with no salvage occurring at the time of the commenter’s letter in late July 2014 (see http://www.dfg.ca.gov/delta/apps/salvage/SalvageExportChart.aspx?Species=3&SampleDate=6%2f30%2f2014&Facility=1).</p> <p>It is unclear which portion of the BDCP that the commenter is referring to with the statement the “The BDCP models had predicted that with lower fresh water flows, the smelt would stay in the lower Delta, which has not happened.” In fact, the effects analysis employed an analysis of entrainment of larval/juvenile delta smelt at the south Delta export facilities for which entrainment is a function of X2 (indicating the position of the low salinity zone, and therefore susceptibility to entrainment) and Old and Middle River flows (an indication of the size of the hydrodynamic zone of influence of the south Delta export facilities and therefore of susceptibility to entrainment). Higher X2 under the BDCP, but lower Old and Middle River flow, gave entrainment that was similar in magnitude between the BDCP and the existing biological conditions scenarios (see Appendix 5.B, sections 5.B.5.5.1 and 5.B.6.1.5, of the BDCP public draft). 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.</p> <p>It is unclear to which Department of Fish and Wildlife document the commenter is referring to with the statement “The California Department of Fish and Game indicates that the population of smelt is at its lowest in 37 years, likely because of lack of fresh water flow.”</p>

DEIRS Ltr#	Cmt#	Comment	Response
2007	23	<p>The Bay Delta Conservation Plan is an ill-conceived conservation plan. It is incomplete and misleading. The Plan Area does not include the San Francisco Bay at all, and parts of the Delta are excluded as well. The effects on the Bay and Carquinez Straits from the construction and operation of the tunnels for water export have not been addressed in the Draft Plan or the EIR.</p> <p>The major focus of the plan is a water conveyance system to shunt water away from the Delta impacting hundreds of species of wildlife that the government is required to protect. The Plan goal of habitat restoration lacks specifics of location, uses of materials, time required, costs, and financing sources. While the tunnel project will be funded in part by water users, the habitat portion has no such provision.</p> <p>Biological Goals and Objectives stated in the EIR (ES-7) state that there is a significant conflict between conservation goals and the use of natural resources and lands for economic developments.</p> <p>There are repeated statements within the Draft Plan that are contradictory with the premise of conservation. For example, The Effects Analysis chapter (Chapter 5) of the Draft plan admits that the new upstream diversion would reduce water flows that in conjunction with climate change, will negatively impact future salmon population, a critically endangered species.</p>	<p>Please refer to Master Response 5, which addresses comments on the BDCP content and approach. It should be noted that the preferred CEQA and NEPA alternative, presented in the EIR/EIS is now the California WaterFix (Alternative 4A) which does not include implementing an HCP/NCP and is focused on construction and operation of the conveyance facilities. Downstream operational effects associated with water quality and fish and aquatic resources were added to the analysis in the RDEIR/SDEIS and is included in this Final EIR/EIS.</p> <p>The proposed project is costly, but proponents have assessed the benefits as described in the funding sources. Notably, the water contractors benefitting from the proposed project and their constituents will bear all costs associated with constructing new conveyance facilities and mitigating for the impacts of those facilities. Expenditures of public money from other sources would be limited to restoration activities beyond those needed to mitigate the impacts of facility construction Please see Master response 5 for more information on project costs and funding.</p>
2007	24	<p>The Implementing Agreement (Chapter 8) requires the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to issue permits to the DWR and the SWP/CVP water contractors to be allowed to "take" wildlife that is fully protected by the U.S. Environmental Protection Agency or Endangered Species Act for the next 50 years. Suspending portions of the EPA for 50 years is not a conservation plan!</p> <p>The EIR recognizes these contradictions in the section on Biological Resources (ES-7): The complexity of the BDCP raises many concerns over environmental consequences for the aquatic and terrestrial ecosystem. These include changes of land uses and habitats, disparity between restored habitat and historical conditions, which could result in adverse effect on sensitive resources, including covered species.</p> <p>The current proposed location for the tunnel construction is Staten Island, which is a Nature Conservancy Bird Preserve for the breeding and nesting of endangered sandhill cranes. The Implementation Agreement would allow for an unspecified "take", fully jeopardizing the species.</p>	<p>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.</p>
2007	25	<p>The location of the lands for mitigation or conversion to wildlife habitat is unclear. Some of the agricultural land to be used falls under the Williamson Act of 1965, which is a conservation measure to protect agricultural and related open space lands. Often these lands are used as habitat for various covered wildlife. The BDCP will alter the use of these lands, reducing the conservation benefits for land conservation, birds, and other animals.</p>	<p>Please refer to Impact AG-1 in Chapter 14, Agriculture, for a description of potential impacts to Williamson Act lands. Alternative 4A would result in the temporary or short-term conversion of approximately 1,132 acres of land subject to Williamson Act contracts to other uses. Permanent features associated with this alternative could convert 2,035 acres of land subject to Williamson Act contracts to other uses. Mapbook Figure M14-7 shows all of the construction features (including temporary work areas) associated with this proposed water conveyance facility alignment along with Important Farmland. Mitigation Measure AG-1: "Develop an Agricultural Lands Stewardship Plan (ALSP) to Maintain Agricultural Productivity and Mitigate for Loss of Important Farmland and Land Subject to Williamson Act Contracts or in Farmland Security Zones" would be implemented to reduce impacts. Please refer to Chapter 12, Terrestrial Biological Resources, for a description of impacts to natural community and habitat.</p>
2007	26	<p>The BDCP calls for massive changes in the wildlife habitat of the Delta. The ideas presented for restoration back to pre-1850's condition as a "natural state" are erroneous.</p>	<p>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; however, a modified proposed project</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Although human intervention did change the Delta in the 1852, previous human effects on Suisun Marsh can be traced back almost 200 years earlier (Historical Ecology, Suisun Marsh, Amber Manfree, 2014). There is not scientific definition of a "natural state" within the BDCP.</p> <p>The result of proposed habitat development plans to break levees and let water overtop 27 islands in the Delta is very unclear. An attempt to create new wetlands and marshlands, in with a changing dynamic of reduced water flows, increased sedimentation, increased salinity, unclear sedimentation rates, climate change, and a myriad of other variables requires significant monitoring and adaptive management practices. The science needed here is limited and often inaccurate. The amount of land affected and the number of species impacted are huge.</p> <p>A different kind of habitat development needs to be used. Reconciliation, rather than restoration, will give a better solution to maintaining ecosystems within a growing economy (Center for Watershed Sciences, U.C. Davis, Bay Conservation and Development Commission). The BDCP needs to rewrite and restructure its habitat conservation plan.</p>	<p>(Alternative 4A/California WaterFix) is the preferred alternative. 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.</p>
2007	27	<p>Suisun Marsh has been described as possibly the largest estuarine marsh in the United States. Some call it the Everglades of the West. It serves as a "refuge for a high diversity of native plants and animals" (Suisun Marsh, Moyle, et al, 2014). In all there are about 250 species of fish, birds, and animals that depend on the marsh for food, cover, and breeding sites. They include many endangered and "covered" birds and fish that will be negatively impacted by the BDCP plan (EIR table ES-9) and include delta smelt, long fin smelt, Chinook salmon, California rail, salt marsh mice, Western pond turtles, and the Suisun shrew.</p> <p>Most of Suisun Marsh is brackish, affected by the daily tides and strong regional winds. The primary plants are tules, cattail, and bulrush, which provide food, cover, and nesting sites for all kinds of birds. Many small channels and several larger sloughs provide moving water and connectivity to the larger Delta for fish.</p> <p>The BDCP Draft Plan indicates that the habitat portion would involve breaking the levees and allowing the water in the larger sloughs to overtop, creating more open water, inundating the smaller channels. This will negatively impact shallow water plants as well as terrestrials living in the area. The types of grasses that grow would be affected and are not likely to support the feeding habits of animals and birds in the area. The land connectivity needed by the salt marsh mouse and the California Rail would be compromised. (Suisun Marsh, Peter Moyle, et al, 2014).</p> <p>Currently Suisun Marsh contains seasonal fresh water ponds that are maintained by various duck clubs in the area for migratory waterfowl. The BDCP plan would eliminate those fresh water ponds, turning them into tidal marsh or wetland, not suitable for ducks, geese, swans, and other migratory birds. On average, 350,000 birds are estimated to winter in the fresh water of Suisun Marsh. Many species of ducks are year round residents and rely on brackish water (not salt water) for cover, food, and nesting.</p> <p>Some plants will be inundated and not recover, like the rare Suisun Thistle which grows primarily in the upland marsh. The amount of zooplankton and phytoplankton, food sources for small fish, will be negatively affected by changes in temperature and turbidity created by the BDCP plan.</p>	<p>Commenter is correct that restoration actions proposed under BDCP would alter habitat types in Suisun Marsh. That is the intent of restoration; to replace lower-value habitat such as agricultural land and managed wetland with higher-value habitat such as tidal marsh. Commenter is incorrect in stating that these changes would have net harmful effects upon covered species in the plan. See BDCP Chapter 5 for a detailed evaluation of those effects, demonstrating the plan's net conservation value for the covered species.</p> <p>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.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		While the EIR notes that the Plan may have some negative impacts on wildlife in the area, it does not offer any mitigation solutions. Goal number two: not met.	
2007	28	<p>In addition to the negative effects on wildlife, the BDCP is hazardous to humans as well. As noted in the Misc. Section of the EIR, there is likely to be increased chemical pollution of the water, danger from disrupted natural gas wells, disrupted ground water resources and well use, contamination of soil and water due to the storage of tunnel muck with unknown hazardous waste, and air pollution so severe in Byron that large portions of the population of that area may have to be displaced.</p> <p>With in increase of shallow water caused by reduced fresh water flows, the habitat plan proposal, building of a forebay, and ponding around construction, there is likely to be a large increase in mosquitos according to the EIR. While this may seem like just a minor inconvenience of buzzing insects and bug bites, it is a serious concern. When the last big water project was built (Shasta Dam) in 1938, proper precautions were not taken and a large malaria outbreak occurred, affecting 57% of the population within a 40 mile region downstream. Limited mitigation for the BDCP has been proposed and is not adequate.</p>	<p>Please note that the preferred alternative is now Alternative 4A, which does not include a HCP, or enhancement of Yolo Bypass (CM2). Accordingly, there would be a lower potential for an increase in suitable mosquito habitat within the study area as a result of implementing the project under this alternative because there would be less restoration/enhancement of aquatic habitat.</p> <p>Certain features of the water conveyance facilities (e.g., cofferdams at the intake sites, sedimentation basins, solids lagoons, and the intermediate forebay inundation area) have the potential to provide mosquito breeding habitat. However, design features as well as best management practice to aid in the control of mosquitos would be implemented with all action alternatives.</p> <p>The depth, design, and operation of the sedimentation basins and solids lagoons would prevent the development of suitable mosquito habitat primarily due to their depth, and because the water contained in these structures would be constantly circulated and the flow rates would be high enough to prevent water from stagnating. Additionally, project proponents will consult with the appropriate mosquito vector control district(s) prior to construction of the intakes and before the sedimentation basins, solids lagoons and the intermediate forebay inundation area become operational to inform mosquito management and control practices in order to limit public health risks from mosquito-borne diseases. Further, once the sedimentation basins, solids lagoons and intermediate forebay inundation area become operational, project proponents will again consult with the mosquito vector control districts to determine if mosquitoes are present in these conveyance components. If mosquitos are present, mosquito control techniques will be implemented.</p> <p>Potentially suitable mosquito habitat may be created as a result of implementing CM2–CM7, CM10 and CM11 under Alternatives 1-9, and Environmental Commitments 3, 4, and 6-11 under Alternatives 4A, 2D, and 5A, but given the location of the areas to be restored/enhanced under these conservation measures and environmental commitments, this potential habitat would generally not be located near densely populated areas. However, it is acknowledged that certain mosquito species can travel several miles from their breeding grounds. As such, those proposed project restoration areas which are closest to densely populated areas (e.g., Yolo Bypass [CM2, Yolo Bypass Fisheries Enhancement]) may result in an increase in mosquitoes and exposure to vector-borne diseases. However, as discussed in Ch. 25, Impact PH-5, the habitat restoration and enhancement under all action alternatives would be performed in accordance with Natural Communities Enhancement and Management (CM11 and Environmental Commitment aa), which would require preparation and implementation of management plans for the protected natural communities and covered species habitats. The preparation and implementation of the management plans would be performed in consultation with the appropriate MVCDs. This consultation would occur when specific restoration and enhancement projects and locations are identified within the ROAs and prior to implementation of CM2. It is standard practice to use IPM to control mosquitoes, and, as part of the consultation with the MVCDs, project proponents would prepare and implement mosquito management plans (MMPs) (Appendix 3B, Environmental Commitments). In addition, best management practices (BMPs) from the guidelines outlined in Section 25.2.5.7, and detailed in Appendix 3B, would be incorporated into the proposed project and executed to maintain proper water circulation and flooding during appropriate times of the year (e.g., fall) to prevent stagnant water and habitat for mosquitoes. Implementation of these BMPs will reduce the likelihood that project operations will require an increase in abatement activities by local mosquito vector and control districts.</p> <p>The California Department of Public Health’s Best Management Guidelines (California Department of Public Health 2008) are incorporated for habitat management plans in the mosquito vector control districts within the study area, and those guidelines, among others (e.g., the Central Valley Joint Venture’s Technical guide) will be used for mosquito management.</p>

DEIRS Ltr#	Cmt#	Comment	Response
2007	29	<p>The Bay Delta Conservation Plan is does not meet its co-equal goals of providing consistent water for the state or maintaining a sustainable wildlife habitat in the Delta. It is a veiled attempt to provide more water for economic growth in areas south of the Delta. It has many negative impacts that affect millions of people and thousands of animals. It does not have enough accurate science for reasonable predictions of effects, it does not have an adequate economic analysis, and it has no secure funding.</p> <p>The BDCP has been in the planning stages for at least six years with millions spent on research, with no good answers. The project is too big with too many unknowns to succeed in such a diverse state as California. It is a bad idea agriculturally, environmentally, legally, financially, economically, and politically.</p> <p>Both the habitat and water conveyance portions of the BDCP need to be rewritten.</p> <p>I hope you will consider the points I have attempted to make here. I am not a scientist or a lawyer. I have not got a staff of researchers. I am just one concerned citizen.</p>	<p>The Lead Agencies respectfully disagree with the general assertion that the documentation is fundamentally flawed and that the project does not meet its co-equal goals as stated by the commenter. The commenter is referred to the following Master Responses for information on compliance with existing legislation: 31 (Compliance with Delta Reform Act), 11 (Applicability of City and County General Plans), 13 (Public Trust Doctrine), and 5 (Compliance with Endangered Species Act). The preparation and processing of the documentation are in compliance with state and federal environmental laws and regulations. For example, the environmental documentation 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. 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. Refer to Chapter 32 (Public Involvement, Consultation, and Coordination) in the 2013 Draft EIR/EIS and Master Response 40 (Public Outreach Adequacy) and 41 (Transparency). The preferred alternative is now Alternative 4A (i.e., the California WaterFix Project) and no longer includes an HCP. The project has been analyzed through a joint RDEIR/SDEIS in compliance with the requirements of CEQA and NEPA. Before the selection and approval of an alternative considered, the Lead Agencies must comply with the necessary state and federal environmental review requirements. This document, along with the Draft EIR/EIS, and expected Final EIR/EIS are intended to provide sufficient CEQA and NEPA support for approval of the project or any of the action alternatives for either compliance strategy. The following Master Responses respond to the commenter's other concerns: 3 (Purpose and Need), 49 (Conservation Measure 1 as a CM), 5 (Overview of Restoration and Enhancement Activities), 4 (Alternatives Development), 27 (Environmental Justice), 30 (Operational Criteria), 32 (Water Rights Issues), 26 (Changes in Delta Exports), 34 (Beneficial Use of Water), 35 (Water Supply South of the Delta), 14 (Water Quality), 17 (Impacts on Smelt, Terrestrial Impacts, Impacts on Greater Sandhill Crane, Impacts on Salt Marsh Harvest Mouse, Impacts on Swainson's Hawk), 18 (Agricultural Impact Mitigation), 5 (Costs of Implementation and BDCP Funding). Socioeconomic effects of the various alternatives are described and assessed in Chapter 16 of the Draft EIR/EIS. A Draft BDCP Statewide Economic Impact Report has been published and indicates that the project would result in a substantial economic net benefit to the State. The environmental documentation and project approval will be acted on by the decision makers from each lead agency at the conclusion of the CEQA and NEPA processes.</p>
2008	1	<p>Dear Federal and California Agencies, Officers, and Staff Members Carrying out the BDCP:</p> <p>Friends of the River (FOR), the California Water Impact Network (C-WIN), the California Sportfishing Protection Alliance (CSPA), and the Environmental Water Caucus (EWC) (a coalition of over 30 nonprofit environmental and community organizations and California Indian Tribes) are relieved to learn that the Bay Delta Conservation Plan website announced on August 27, 2014 that the California Department of Water Resources "and the other state and federal agencies leading the Bay Delta Conservation Plan will publish a Recirculated Draft BDCP, Draft BIR/EIS), and Draft Implementing Agreement (IA) in early 2015." The announcement also states that: "The scope of the partially recirculated draft documents will be announced in approximately six to eight weeks. The recirculated documents will include those portions of each document that warrant another public review prior to publication of final documents." We look forward to learning of the scope of the recirculated documents by mid- to late October of this year.</p>	<p>The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. For information on recirculation and scoping please see Master Response 46.</p>
2008	2	<p>Our organizations have communicated several times with BDCP officials about analysis of alternatives in the BDCP process. 1 The alternatives section (Chapter 3) of the Draft EIR/EIS and the Endangered Species Act (ESA) required Alternatives to Take section (Chapter 9) of the BDCP Draft Plan failed to include even one alternative that would</p>	<p>Please note that the BDCP is no longer the proposed project. The proposed project is now Alternative 4A and no longer includes an HCP. Alternative 4A has been developed in response to public and agency input following publication of the 2013 Draft EIR/EIS. See Master Response 5 regarding the BDCP.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		increase water flows through the San Francisco Bay-Delta by reducing exports, let alone the NEPA, CEQA, and ESA required range of reasonable alternatives. These serious violations of law require corrective action during the upcoming new Draft BDCP process.	<p>Evaluation of the Proposed Project was presented in a joint RDEIR/SDEIS prepared in compliance with the requirements of CEQA and NEPA. Before the selection and approval of an alternative considered, the Lead Agencies must comply with the necessary state and federal environmental review requirements. This EIR/EIS is intended to provide sufficient CEQA and NEPA support for approval of the proposed project or any of the action alternatives for either compliance strategy. 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 Chapter 3 of the FEIR/EIS for additional information on Proposed Project operations.</p> <p>Appendix 3A describes the range of alternatives considered under the Project Objectives and Purpose and Need, and the reasons that several alternatives were not analyzed in detail in the EIR/EIS, including a proposal to specifically reduced Delta exports. For more information regarding alternatives to the proposed project please see Master Response 4.</p> <p>It should be noted that the No Action Alternative and Alternatives 2A, 2B, 2C; 2D, 4A, 4H2, 4H3, 4H4; 5; 5A, 6A, 6B, 6C; 7; 8; and 9 would result in greater average annual Delta outflow than under Existing Conditions. Similarly, Alternatives 6A, 6B, 6C; 7; 8; and 9 would result in greater average annual Delta outflow than under the No Action Alternative. The range of alternatives also includes alternatives which would result in less Delta exports on an average annual basis as compared to Existing Conditions and the No Action Alternative (see Appendix 5A, Section C, CALSIM II and DSM2 Model Results, of the EIR/EIS).</p> <p>Please see Master Responses 28 and 5 for more information regarding operational scenarios and compliance with ESA respectively. Regarding development of alternatives for the EIR/EIS, a description of the process the Lead Agencies followed to develop and screen alternatives is provided in Master Response 4. For more information regarding water demand management please see Master Response 6.</p>
2008	3	Your agencies have ignored EWC and FOR's calls for consideration of alternatives reducing exports and increasing freshwater flows. Despite your agencies' intransigence, the United States Environmental Protection Agency (EPA), and State Water Resources Control Board (SWRCB), have also called for consideration of alternatives that would increase freshwater flows through the Delta. Such an alternative is at the heart of the EWC's Responsible Exports Plan. The United States Army Corps of Engineers reminds your agencies that new conveyance was not a part of the preferred alternative for CalFed. The Corps asks if the Draft EIR/EIS describes "why the reasons for rejecting new conveyance in CalFed are no longer valid?" The answer is simple. Your agencies have not revealed or discussed the Corps' point. Your agencies need to do that now in disclosing and considering the Responsible Exports Plan alternative.	<p>See response to comment 2008-2 regarding alternatives development.</p> <p>As described in Section 3A.9.4.2 of Appendix 3A, Identification of Water Conveyance Alternatives Conservation Measure 1, a potential alternative based upon the State Water Resources Control Board 2010 Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem was considered during development of the range of alternatives to be evaluated in detail in the EIR/EIS. This potential alternative was not evaluated in detail because the flow recommendations in the 2010 report could not be achieved without adverse impacts to cold water management for fisheries in the Sacramento, Feather, and American rivers, and without reductions in non-SWP and non-CVP water rights diversions. The purpose and need of this EIR/EIS would not allow changes to these water rights users.</p> <p>In addition, the 2010 report stated that "Any process with regulatory or adjudicative effects must take place through the State Water Board's water quality control planning, water rights processes, or public trust proceedings in conformance with applicable law. In the State Water Board's development of Delta flow objectives with regulatory effect, it must ensure the reasonable protection of beneficial uses, which may entail balancing of competing beneficial uses of water, including municipal and industrial uses, agricultural uses, and other environmental uses." Results from this report were considered in the development of Alternative 8 which is evaluated in the Draft EIR/EIS.</p> <p>Following completion of the updated Bay-Delta Water Quality Control Plan, SWP and CVP operations would need to be reviewed to determine if the operations continued to comply with the new regulations.</p>
2008	4	The BDCP omission of alternatives reducing exports to increase flows has been deliberate. A claimed purpose of the BDCP Plan is "Reducing the adverse effects on certain listed	See response to comment 2008-2 regarding alternatives development.

DEIRS Ltr#	Cmt#	Comment	Response
		<p>[fish] species due to diverting water." (BDCP Draft EIR/EIS Executive Summary, p. ES-10). "There is an urgent need to improve the conditions for threatened and endangered fish species within the Delta." (Id.) . Alternatives reducing the exporting/diversion of water are an obvious direct response to the claimed BDCP purpose of "reducing the adverse effects on certain listed [fish] species due to</p> <p>diverting water." Despite these mild rhetorical gestures implying the need for such alternatives, the omission of a range of reasonable alternatives reducing exports to increase flows violates NEPA, CEQA, and the ESA.</p>	<p>For more information regarding impacts to aquatic resources please see Chapter 11 of the Final EIR/EIS.</p>
2008	5	<p>The California Department of Water Resources and other BDCP federal and State agencies 2 marched along for at least three years in the face of "red flags flying" deliberately refusing to develop and evaluate a range of reasonable alternatives, or indeed, any real alternatives at all, that would increase flows by reducing exports. Three years ago the National Academy of Sciences declared in reviewing the then-current version of the draft BDCP that: "[c]hoosing the alternative project before evaluating alternative ways to reach a preferred outcome would be post hoc rationalization-in other words, putting the cart before the horse. Scientific reasons for not considering alternative actions are not presented in the plan." (National Academy of Sciences, Report in Brief at p. 2, May 5, 2011).</p>	<p>See response to comment 2008-2 regarding alternatives development.</p> <p>The alternatives included in the Final 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. For more information regarding alternatives development and screening please see Master Response 4.</p>
2008	6	<p>More than two years ago, on April 16, 2012, the Co-Facilitators of the EWC transmitted a letter to then-Deputy Secretary of the California Natural Resources Agency Gerald Meral. The letter stated EWC's concerns with BDCP's current approach and direction of the [BDCP] project. (Letter, p. 1). Most of the letter dealt with the consideration of alternatives. The penultimate paragraph of the letter specifically states:</p> <p>The absence of a full range of alternatives, including an alternative which would reduce exports from the Delta. It is understandable that the exporters, who are driving the project, are not interested in this kind of alternative; however, in order to be a truly permissible project, an examination of a full range of alternatives, including ones that would reduce exports, needs to be included and needs to incorporate a public trust balancing of alternatives. (Letter, p. 2).</p> <p>On November 18, 2013, FOR submitted a comment letter in the BDCP process urging those carrying out the BDCP to review the "Responsible Exports Plan" proposed by the EWC:</p> <p>as an alternative to the preferred tunnel project. This Plan calls for reducing exports from the Delta, implementing stringent conservation measures but no new upstream conveyance. This Plan additionally prioritizes the need for a water availability analysis and protection of public trust resources rather than a mere continuation of the status quo that has led the Delta into these dire circumstances. Only that alternative is consistent with the EPA statements indicating that more outflow is needed to protect aquatic resources and fish populations. The EWC Responsible Exports Plan is feasible and accomplishes project objectives and therefore should be</p> <p>fully analyzed in a Draft EIS/BIR. (FOR November 18, 2013 comment letter at p. 3, Attachment 4 to FOR January 14, 2014 comment letter).</p>	<p>See response to comment 2008-2 regarding alternatives development.</p> <p>The alternatives included in the Final 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. For more information regarding alternatives development and screening please see Master Response 4.</p>
2008	7	<p>The BDCP Draft BIR/EIS Alternatives (Chapter 3) and Draft Plan Alternatives to Take (Chapter 9) fail to include any distinctive alternatives. The BIR/EIS itself describes</p>	<p>See response to comment 2008-2 regarding alternatives development.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>differences among the alternatives as "slight." That is an undeniable fact established by reading those two chapters. The Water Tunnels would divert enormous quantities of water from the Sacramento River near Clarksburg, California. These waters presently flow through designated critical habitats for declining fish species in the Sacramento River and sloughs to and through the Bay-Delta. Should</p> <p>the Tunnels be completed, these waters would instead be exported through the north Delta intakes shortly after entering the Delta. All of the so-called project alternatives set forth in the Draft Plan and Draft EIR/EIS are largely the same project in different outfits. Each creates a capacity to divert more water from the Delta. And they do so contrary to Endangered Species Act Section 10 (prohibiting reduction of the likelihood of survival and recovery of listed species), ESA Section 7(prohibiting federal agency actions that "result in the destruction or adverse modification of [critical] habitat of [listed] species" 16 U.S.C. § 1536 (a)(2)), and California Water Code Section 85021 (requiring that importers reduce reliance on the Delta for water supply).</p>	<p>The range of alternatives includes operations criteria 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. The No Action Alternative and Alternatives 4A, 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. 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. As exports are reduced, Delta outflows increase. The range of alternatives included in the EIR/EIS would result in a wide range of changes in Delta outflows 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. Similarly, Alternatives 6A, 6B, 6C; 7; 8; and 9 would result in greater average annual Delta outflow than under the No Action Alternative. For more information regarding purpose and need please see Chapter 2 of the Final EIR/EIS and Master Response 3.</p> <p>The action alternatives could only divert the amount of water under the existing SWP and CVP water rights and in accordance with the existing and future related regulatory requirements based upon river water levels and flow, water available in the system, the presence of threatened and endangered fish species, and water quality standards. More information on the ranges of proposed water diversions, based on water year types and specific flow criteria, can be found in Chapter 3, Section 3.6.4.2, North Delta and South Delta Water Conveyance Operational Criteria, EIR/EIS.</p> <p>The Delta Reform Act (Water Code Section 85021) establishes that it is the policy of the State of California to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency Under the Act, it is the obligation of individual regional governing bodies, not the proposed project, to determine the best ways to meet this goal. DWR, the primary proponent of the proposed project, is not a statewide governing body that can impose a statewide water strategy on different parts of the state. DWR lacks any statutory authority to make and implement localized decisions about water technology investments, to develop and impose investments for new water supply projects that serve particular geographic regions, or to mandate coordinated efforts among local and regional water suppliers. See Appendix 1C, Demand Management Measures, of the Final EIR/EIS.</p>
2008	8	<p>We expressly request "a range of reasonable alternatives" reducing exports both more and less than the reductions called for by the Responsible Exports Plan. The BDCP agencies must take this opportunity as part of the scoping of the recirculated EIR/EIS and other related documents to evaluate actions called for by the Responsible Exports Plan (attached hereto and also posted at http://www.ewccalifornia.org/reports/responsibleexportsplanmay2013 .pdf). These actions include:</p> <p>reducing exports to no more than 3,000,000 acre-feet in all years in keeping with State Water Resources Control Board (SWRCB) Delta flow criteria (for inflow as well as outflow); water efficiency and demand reduction programs including urban and agricultural water conservation, recycling, storm water recapture and reuse; reinforced levees above PL 84-99 standards; installation of improved fish screens at existing Delta pumps; elimination of irrigation water applied on drainage-impaired farmlands south of the Bay-Delta; return the Kern Water Bank to State control; restore Article 18 urban preference; restore the original intent of Article 21 surplus water in SWP contracts; conduct feasibility study for Tulare Basin water storage; provide fish passage above and below Central Valley rim dams for species of concern; and retain cold water for fish in reservoirs.</p>	<p>See response to comment 2008-7 regarding operations and 2008-2 regarding alternatives.</p> <p>It should be noted that the Proposed 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. 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).</p> <p>See Master Response 37 regarding storage, Master Response 34 regarding beneficial use of water, Master Response 6 regarding demand management.</p>

DEIRS Ltr#	Cmt#	Comment	Response
2008	9	Responsible Exports Plan Alternatives could vary by how much time is allotted them to phase in export reductions over time. For instance, they could range from 10 to 40 years, which would comparatively span the same range of timelines provided, on one hand, for Tunnels construction, and on the other, the range of time provided for full implementation of habitat restoration projects under BDCP. Such comparisons would be useful for meaningful decisionmaking.	See response to comment 2008-2 regarding alternatives development. The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2008	10	We are aware that BDCP proponents are driving the project. They do not want the public including environmental organizations to have a BDCP alternative that they could support. This concealment to this date of any alternatives that would reduce exports is calculated to increase the likelihood of the BDCP proponents getting what they want. That strategy is illegal under CEQA, NEPA, and the state and federal ESAs and the state's Natural Communities Conservation Planning Act. Such a strategy promotes decision-making based on bad faith.	See response to comment 2008-2 regarding alternatives development. The alternatives included in the Final 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. For more information regarding alternatives development and screening please see Master Response 4.
2008	11	By this letter, the EWC, FOR, C-WIN, and CSPA repeat prior demands for consideration of the Responsible Exports Plan alternative and reasonable variants on that alternative. This demand follows up our similar requests which started back on April 16, 2012 but have to date been ignored in the BDCP process.	See response to comment 2008-2 regarding alternatives development. The alternatives included in the Final 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. For more information regarding alternatives development and screening please see Master Response 4.
2008	12	We also urge you to not load up the Responsible Exports Plan alternative with "poison pills" designed to make the alternative or variants on the alternative appear infeasible or undesirable. Our plan should be evaluated in good faith as a reduced exports/increased Delta inflow and Delta outflow alternative without prejudging its results. Our suspicions of future BDCP process intentional violations of NEPA, CEQA, and the ESA are heightened by the flat refusal of the BDCP agencies to develop or even consider a reasonable range of alternatives despite the clear warnings in this regard given by the National Academy of Sciences three years ago, and repeated by the EWC over the past three years.	See response to comment 2008-2 regarding alternatives development. The alternatives included in the FEIR/EIS represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. For more information regarding alternatives development and screening please see Master Response 4.
2008	13	Under NEPA Regulations, "This [alternatives] section is the heart of the environmental impact statement." The alternatives section should "sharply" define the issues and provide a clear basis for choice among options by the decision-maker and the public. 40 C.F.R. § 1502.14. Moreover, if "a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion. The agency shall make every effort to disclose and discuss at appropriate points in the draft statement all major points of view on the environmental impacts of the alternatives including the proposed action." § 1502.9(a). The Responsible Exports Plan must be among those alternatives in the recirculated Draft EIR/EIS for BDCP that helps to sharpen and clarify issues and enrich the basis for decision-making by the fishery agencies, the public, and all other public agencies that rely on the BDCP administrative record for their decision-making. ³	The alternatives included in the Public Draft EIR/EIS, RDEIR/SDEIS, and Final 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 Lead Agencies carefully considered all potential alternatives that were proposed during the scoping process and while the EIR/EIS was being prepared. Although many of the proposed alternatives included meritorious water policy principles, the proposals rejected by the Lead Agencies did not qualify as appropriate alternatives for various reasons. For example, proposals were rejected because they were inconsistent with the project's objectives and its purpose and need or included components that are beyond the scope of the project. The text of the Draft EIR/EIS in Chapter 3 (section 3.2) and Appendix 3A thoroughly explain the process used to develop the alternatives, and explain why certain potential alternatives were considered but ultimately rejected by the Lead Agencies. See Master Response 4 regarding requirements of CEQA and NEPA, where an EIR/EIS must include a reasonable range of alternatives that would meet the purpose and need and all or most of the project's objectives (CEQA Guidelines, § 15126.6, subd. (a); 42 U.S.C. § 4332(2)(C)(iii); 40 C.F.R. §§ 1502.14, 1502.13.).
2008	14	The BDCP agencies have failed to produce an alternatives section that "sharply" defines the issues and provides a clear basis for choice among options as required by the NEPA Regulations, ⁴⁰ C.F.R. § 1502.14. Again, those issues must include producing more Delta inflow and outflow through the estuary as habitat for listed fish species, and documenting the impacts on Delta ecosystems as called for in Water Code Section 85021. The choice	See response to comment 2008-7 regarding alternatives and flows. The alternatives included in the Final 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. For more information regarding alternatives development and screening please see Master Response 4.

DEIRS Ltr#	Cmt#	Comment	Response
		presented must include increasing flows by reducing exports, not just reducing flows by increasing the capacity for exports as is called for by all of the so-called "alternatives" presented in the BDCP Draft Plan and EIR/EIS.	
2008	15	The failure to include a range of reasonable alternatives also violates CEQA. An EIR must "describe a range of reasonable alternatives to the project ... which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." 14 Code Cal. Regs (CEQA Guidelines) § 15126.6(a). "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." § 15126.6(b). Recirculation of a new Draft EIR/EIS will be required by CEQA Guidelines section 15088.5(a)(3) because the Responsible Exports Plan alternative and other alternatives that would reduce rather than increase exports have not been previously analyzed but must be analyzed as part of a range of reasonable alternatives.	See response to comment 2008-13 regarding reasonable alternatives. The alternatives included in the Final 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. For more information regarding alternatives development and screening please see Master Response 4.
2008	16	With respect to the ESA, we have repeated several times in 2013 and 2014 that the failure of the federal agencies to prepare the ESA required Biological Assessments and Opinions concerning the US Bureau of Reclamation's activities with the Bay Delta Conservation Plan violates both the ESA Regulations (50 C.F.R. § 402.14(a) "at the earliest possible time" requirement and the NEPA Regulations (40 C.F.R. § 1502.25(a) "concurrently with and integrated with" requirement. (FOR January 14, 2014 comment letter and its four attachments). The missing Biological Assessments and Biological Opinions are essential to any meaningful public review and comment on a project claimed to be responsive to declining fish populations.	A biological opinion is not required prior to the release of the Draft BDCP/CWF EIR/EIS. For the Proposed Action, the USFWS and NMFS will conduct an internal ESA section 7 consultation prior to issuance of an Section 10(a)(1)(B) permit for the Proposed Action. These federal agencies will coordinate the ESA consultation process and other environmental review processes, such as the National Environmental Policy Act (NEPA), consistent with federal regulations. In addition, the USFWS and NMFS will consult with the Reclamation to complete biological opinions or a joint biological opinion prior to federal action to carry out the proposed project. The Biological Assessment has been completed and formal consultation with NMFS and USFWS is underway. The ROD will not be signed until biological opinions are issued by USFWS and NMFS.
2008	17	As conceded by BDCP Chapter 9, Alternatives to Take, the analysis of take alternatives must explain "why the take alternatives [that would cause no incidental take or result in take levels below those anticipated for the proposed actions] were not adopted." (BDCP Plan, Chapter 9, pp. 9-1, 9-2). Here, the lead agencies failed to even develop let alone adopt alternatives reducing exports and increasing flows to eliminate or reduce take. The agencies ignored the Responsible Exports Plan alternative that was provided to them a full year before they issued the Draft Plan and Draft EIR/EIS for public review and comment.	Please see Master Response 4. The alternatives included in the 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 in response to the project objectives and purpose and need, as described in Chapter 2 of the EIR/EIS. 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. 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. It is projected that water deliveries from the federal and state water projects under the Proposed Project would be similar to the average annual amount of water that would be diverted under the No Action Alternative (i.e. 2025 conditions without the Proposed Project).
2008	18	No matter how badly the BDCP proponents want to maintain or increase Delta exports, the Draft NEPA, CEQA, and ESA processes mandate inclusion of alternatives increasing flows and reducing exports as part of a range of reasonable alternatives.	See response to comment 2008-7 regarding alternative development and flows. The alternatives included in the Final 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. For more information regarding alternatives development and screening please see Master Response 4.
2008	19	In short, the fundamental flaws in the alternatives sections in the BDCP Draft EIR/EIS and Chapter 9 of the BDCP plan have led to a Draft EIR/EIS and Alternatives to Take analysis "so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." 40 C.F.R. § 1502.9(a).	See response to comment 2008-17 represent a legally adequate reasonable range of alternatives. The alternatives included in the Final 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. For more information

DEIRS Ltr#	Cmt#	Comment	Response
			regarding alternatives development and screening please see Master Response 4.
2008	20	<p>There is yet more. On August 26, 2014, the United States Environmental Protection Agency (EPA) issued its 40-page review of the Draft BDCP EIS. EPA declared that "we believe the NEPA process is well-suited to bring all of these considerations together, including the consideration of the environmental impacts of reasonable alternatives to the BDCP as it is currently proposed." (Letter, p 1). However, EPA found in BDCP's case that:</p> <p>operating any of the proposed conveyance facilities ... would contribute to increased and persistent violations of water quality standards in the Delta, set under the Clean Water Act, measured by electrical conductivity (EC) and chloride concentrations. We recommend that the Supplemental Draft EIS include one or more alternatives that would, instead, facilitate attainment of all water quality standards in the Delta. Specifically, we recommend that an alternative be developed that would, at minimum, not contribute to an increase in the magnitude or frequency of exceedances of water quality objectives, and that would address the need for water availability and greater freshwater flow through the Delta. Such an alternative should result in a decrease in the state and federal water projects' contributions to the exceedance of any water quality objectives in the Delta. (Id., p.2, emphasis added).</p>	<p>See response to comment 2008-2 regarding alternatives.</p> <p>Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP. The water quality impacts expected to occur under Alternative 4A, as well as Alternatives 2D and 5A, have been evaluated and the impacts disclosed in the RDEIR/SDEIS and FEIR/EIS.</p> <p>The EC water quality impacts are discussed in FEIR/EIS Chapter 8 Water Quality at Impact WQ-11: Effects on Electrical Conductivity Concentration Resulting From Facilities Operations and Maintenance. The EC objective that applies between Prisoners Point and Jersey Point applies in April and May of all water year types except Critical water years. When the model is predicting exceedances of the Prisoners Point objective, the maximum EC is about 600 uS/cm, which equates to roughly 120 mg/L chloride. This is well below municipal and industrial chloride objectives.</p> <p>Please see Master Response Master Response 14 regarding Water Quality, and Master Response 28 regarding Operational Criteria.</p>
2008	21	EPA's letter also indicated that the Tunnels project and each of its BDCP alternatives would result in increased residence time of interior Delta waters, resulting in increased toxic contamination from methyl mercury, mercury, selenium, boron, and other constituents.	See response to comment letter 2006 regarding EPA comments. See Master Response 14 and Chapter 8 regarding residence time and water quality.
2008	22	<p>EPA further stated that "Data and other information provided in the Draft EIS indicate that all CM1 [Tunnels project] alternatives may contribute to declining populations of Delta smelt, Longfin smelt, green sturgeon, and winter-run, spring-run, fall-run and late-fall run Chinook salmon." (p. 10). "We recommend that the Supplemental Draft EIS consider measures to insure freshwater flow that can meet the needs of those [declining fish] populations and ecosystem as a whole, and is supported by the best available science. We recommend that this analysis recognize the demonstrated significant correlations between freshwater flow and fish species abundance."</p> <p>(Id.). These correlations were recently reviewed in the Delta Science Program/State Water Resources Control Board workshops on "Delta Outflows and Related Stressors" (held February 10-11, 2014) and "Interior Delta Flows and Related Stressors" (held April 16-17, 2014).⁴ "Other reasonable alternatives could be developed by incorporating a suite of measures, including Integrated Water Management, water conservation, levee maintenance, and decreased reliance on the Delta." (Id. p. 3). In addition, EPA concluded that "The Draft EIS does not address how changes</p> <p>in the Delta can affect resources in downstream waters, such as San Francisco Bay, and require changes in upstream operations, which may result in indirect environmental impacts that must also be evaluated. We recommend that the Supplemental Draft EIS include an analysis of upstream and downstream impacts." (Id.).</p>	<p>See response to comment 2008-2 regarding alternatives.</p> <p>The RDEIR/SDEIS and FEIR/EIS include a NEPA and CEQA determination for each impact, which was based on the appropriate comparison to either the NEPA or CEQA baseline. For a description on the methodology for reaching impact conclusions, please see Section 11.3.2.2 in Chapter 11 of the FEIR/EIS. Following the methodology in Section 11.3.2.2 and the guidelines presented in Section 11.3.3, Determination of Effects, all impacts to covered fish species under the preferred alternative, 4A, were determined to be less-than-significant and not adverse. The Chapter 11 impact analyses demonstrated there would be no detectable population effects on the fish species referenced in this comment.</p> <p>Since the time of the Draft EIR/EIS, analyses of alternatives effects on areas downstream of the Plan Area in the San Francisco and San Pablo bays were included in the EIR/EIS for Chapter 8, Water Quality, and Chapter 11, Fish and Aquatic Resources. These analyses indicate that potential effects on water quality and fish species in the San Francisco and San Pablo bays would be less-than-significant. Please refer also to Master Response 14, which addresses the analysis of San Francisco Bay water quality effects.</p>
2008	23	On July 29, 2014, the State Water Resources Control Board (SWRCB) issued its 38 page review of the Draft BDCP EIS/EIR. The SWRCB declared that the "environmental documentation prepared for the project must disclose the significant effects of the	<p>See response to comment 2008-2 regarding alternatives.</p> <p>The alternatives included in the Final 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. For more information</p>

DEIRS Ltr#	Cmt#	Comment	Response
		proposed project and identify a reasonable range of interim and long-term alternatives that would reduce or avoid the potential significant environmental effects." (Letter, comment 9 pp. 11-12). Further, "The justification for this limited range of Delta outflow scenarios is not clear given that there is significant information supporting the need for more Delta outflow for the protection of aquatic resources and the substantial uncertainty that other conservation measures will be effective in reducing the need for Delta outflow. For this reason a broader range of Delta outflows should be considered for the preferred project." (Id. comment 10 p. 12).	regarding alternatives development and screening please see Master Response 4.
2008	24	On July 16, 2014, the United States Army Corps of Engineers (Corps) issued comments on the BDCP Drafts. The Corps' District Commander stated in crystal-clear language that: "I have determined the EIS/EIR is not sufficient at this time in meeting the Corps' needs under the National Environmental Policy Act (NEPA) ... in particular with regard to the incomplete description of the proposed actions, alternatives analysis ... and impacts to waters of the United States and navigable waters, as well as the avoidance and minimization of, and compensatory mitigation for, impacts to waters of the United States." (Letter p. 1). Additional Corps comments include the absence in the EIR/EIS of "an acceptable alternatives analysis" (comment 4), "the document needs a clear explanation of a reasonable range of alternatives and a comparison of such, including a concise description of the environmental consequences of each" (comment 19), and "new conveyance was not a part of the preferred alternative for CalFed. Does this EIS/EIR describe why the reasons for rejecting new conveyance in CalFed are no longer valid?" (Comment 22).	See response to comment 2008-2 regarding alternatives. DWR submitted an application for a 404 permit in 2015. The USACE deemed the application to be complete and issued a public notice, which solicited comments through November 9, 2015. The RDEIR/SEIS and FEIR/EIS includes Appendix E, Supplemental Information for the U.S. Army of Corps Engineers Regulatory program. The USACE expects to utilize the EIS to inform permit decisions under the authority of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbor Act. USACE expects a supplemental NEPA document will be needed to inform the Section 408 clearance. As stated in the Section 404 Clean Water Act permit application, DWR has designed the proposed project to avoid impacts to Waters of the United States to the maximum extent practicable and has developed measures to minimize any unavoidable impacts. Numerous iterations of footprint locations for each of the conveyance components were evaluated to maximize the use of upland areas. An analysis of alternatives will be prepared and submitted to the Corps to demonstrate that the project as proposed is the least environmentally damaging practicable alternative, as required by Section 404(b)(1) of the Clean Water Act.
2008	25	EWC's Responsible Exports Plan-completely ignored so far by DWR and the other BDCP applicant agencies- fits the EPA's and SWRCB's calls for alternatives that would increase freshwater flow through the Delta and the Corps' call for an acceptable alternatives analysis. It is now time for the state and federal fishery agencies to terminate their abject submission to the dominance of the BDCP process by DWR and the other Section 10 applicants. It is also time to include among the range of reasonable alternatives required by law reduced Delta exports to increase freshwater flows through the Delta that are known to correlate with benefits to listed fish species. BDCP's scoping announcement in six to eight weeks must address the alternatives comprehensively and faithfully reproduce the Responsible Exports Plan alternative as part of the reasonable range of alternatives that are included in the recirculated documents.	Please see Master Response 4. The alternatives included in the 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 in response to the project objectives and purpose and need, as described in Chapter 2 of the EIR/EIS. 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. 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. It is projected that water deliveries from the federal and state water projects under the Proposed Project would be similar to the average annual amount of water that would be diverted under the No Action Alternative (i.e. 2025 conditions without the Proposed Project).
2008	26	Please call Conner Everts, Co-Facilitator, Environmental Water Caucus at (310) 394-6162 ext. 111 or Robert Wright, Senior Counsel, Friends of the River at (916) 442-3155 ext. 207 with any questions you may have.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2008	27	RESPONSIBLE EXPORTS PLAN Developed by the Environmental Water Caucus May 2013	The comment describes an attachment to the comment letter. Please see response to comments 2008-3, 2008-6, 2008-8, 2008-9, 2008-11-2008-13, 2008-15, 2008-17, and 2008-25 regarding comments referencing this attachment.
2009	1	In quoting information from the BDCP species account for GGS I found an error/geographic inconsistency.	This comment is on the BDCP Plan, which is no longer the preferred project. It remains a viable option and if chosen as the proposed project the Plan document will be updated. Thank you for pointing out this error.

DEIRS Ltr#	Cmt#	Comment	Response
		<p>see: page 2A.28-5, last sentence of last paragraph of:</p> <p>California Department of Water Resources (DWR). 2013. Bay Delta Conservation Plan. Public Draft. Appendix 2A.28. November. Sacramento, CA. Prepared by ICF International (ICF 00343.12). Sacramento, CA.</p> <p>These include the Yolo Bypass and vicinity west of the Stockton Deep Water Ship Channel and the eastern Delta</p> <p>fringe from approximately the Stone Lakes area south to Stockton and generally east of the Mokelumne River</p> <p>(Figure 2A.28-2).</p> <p>I believe the highlighted word should be Sacramento.</p>	
2010	1	I am one of many Spanish-speakers who all live close to, or rather, in the Delta. That is why I am requesting the EIR circular in Spanish, because I would like for you to also take into consideration my opinion, as well as that of all of us who only speak Spanish.	Please refer to Master Response 27 for information related to public outreach efforts to non-English speaking communities.
2011	1	<p>Like my husband and so many people in this town, we depend on agriculture, and for that we need a large supply of water for the plants. If part of this water is taken away, there will no longer be enough water for the production of all that is sown around this area.</p> <p>If the water becomes scarce, indeed it will result in less sowing, "No work" [sic], and this is what we depend on to support our children.</p>	Changes in surface water flows, elevations, and water quality in the Delta that could affect Delta water diversion intakes, as discussed in the Final EIR/EIS in Appendix 5A, Section C; Chapter 14; and Chapter 8. The effects on agricultural activities are addressed under Agricultural Impact AG-2 (see Chapter 14, Agricultural Resources, in the EIR/EIS), including impacts that could result in disruption of irrigation or drainage infrastructure, and could jeopardize agricultural production. Implementation of Mitigation Measure AG-1 will reduce the severity of these impacts by implementing activities such as siting project footprints to encourage continued agricultural production; relocating or replacing agricultural infrastructure in support of continued agricultural activities; engaging counties, owners/operators, and other stakeholders in developing optional agricultural stewardship approaches; and/or preserving agricultural land through off-site easements or other agricultural land conservation interests. During the design phase, detailed surveys of drainage facilities and utilities that could be affected by construction and operation of facilities under Alternatives 1 through 9, as described under Impact AG-2 and Mitigation Measure AG-1. The results of the surveys will be used to minimize disruption of drainage and irrigation systems; and if necessary, develop mitigation measures to reduce the impacts. Please see Master Response 18 regarding agricultural mitigation.
2011	2	We have lived in this area for the peace it gives us in watching our children grow, a peaceful area, but if you bring all of those excavations and that noisy operation to our area, you are going to destroy our town. I understand your needs, but find solutions that do not affect others.	Socioeconomic effects of the various alternatives are described and assessed in Chapter 16 of the Draft EIR/EIS and Appendix A (Chapter 16) of the RDEIR/SDEIS. A Draft BDCP Statewide Economic Impact Report has also been published, which indicates that the proposed project would result in a substantial economic net benefit to California. 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 Draft EIR/EIS. All impacts would be minimized and mitigated to the degree feasible, as noted under each alternative in the RDEIR/SDEIS individual resource chapters and in Appendix 3B (Environmental Commitments) of the Draft EIR/EIS.
2012	1	I strongly oppose the construction of the tunnels due to the damage that they would cause. As a resident of Clarksburg, I would suffer a significant impact because I live on the edge of the river and my supply of water comes from a well, and I could be left without water.	Changes in surface water flows, elevations, and water quality in the Delta that could affect Delta water diversion intakes, as discussed in the BDCP EIR/EIS in Appendix 5A, Section C; Chapter 14; and Chapter 8. The effects on agricultural activities are addressed under Agricultural Impact AG-2 (see Chapter 14, Agricultural Resources, in the EIR/EIS), including impacts that could result in disruption of irrigation or drainage infrastructure, and could jeopardize agricultural production. Implementation of Mitigation Measure AG-1

DEIRS Ltr#	Cmt#	Comment	Response
			will reduce the severity of these impacts by implementing activities such as siting project footprints to encourage continued agricultural production; relocating or replacing agricultural infrastructure in support of continued agricultural activities; engaging counties, owners/operators, and other stakeholders in developing optional agricultural stewardship approaches; and/or preserving agricultural land through off-site easements or other agricultural land conservation interests. During the design phase, detailed surveys of drainage facilities and utilities that could be affected by construction and operation of facilities under Alternatives 1 through 9, as described under Impact AG-2 and Mitigation Measure AG-1. The results of the surveys will be used to minimize disruption of drainage and irrigation systems; and if necessary, develop mitigation measures to reduce the impacts. Please see Master Response 18 regarding agricultural mitigation.
2012	2	I should also mention that, in addition to this environmental imbalance, we would suffer from extreme noise, which would affect our lives, especially those of the children by not allowing them to rest at night or study during the day, not to mention to the traffic chaos that would result. This would eliminate the peace and tranquility of our city.	As stated in Chapter 23, construction noise impacts are considered to be "Significant and unavoidable". This is based on an analysis that considers worst-case conditions. For example, six pieces of construction equipment operating simultaneously and continuously in one location. These conditions would not necessarily occur on a routine basis. Although alternative haul routes for truck traffic may be an effective measure in some cases, significant impacts are still likely after mitigation. From Appendix 3B, Section 3B.5.5: DWR and contractors hired to construct any conveyance components of the project will implement a site-specific noise abatement plan to avoid or reduce potential construction-, maintenance-, and operation-related noise impacts. This section also includes environmental commitments to reduce noise levels where exceedances are anticipated to occur.
2012	3	I ask and insist that you please stop this tunnel project. In the interest of benefitting a few hundred, thousand, or million people, perhaps double that amount of people or more will end up affected by this project, causing irreversible damage.	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; however, a modified proposed project (Alternative 4A/California WaterFix) is the preferred alternative. For additional detail on the primary issues being raised with regard to the BDCP or Alternative 4, as well as a discussion of the current status of the draft BDCP Effects Analysis, please see Master Response 5.
2013	1	In general, we find that the Draft BDCP EIR/EIS is deficient and needs revisions regarding water quality impacts to the North Bay Aqueduct and other areas identified in this letter. Solano County Water Agency object to approval of the BDCP with the current deficient EIR/EIS. However, if the EIR/EIS is revised to become legally adequate, then many of SCWA's environmental concerns would be mitigated or lessened.	The water quality assessment in Final EIR/EIS Chapter 8, Water Quality, fully assessed impacts at the North Bay Aqueduct in Impacts WQ-1 through WQ-33. For constituents that could be modeled (i.e., boron, bromide, chloride, EC, mercury, nitrate, organic carbon, and selenium), supporting tables with the North Bay Aqueduct as an assessment location, showing concentrations and changes relative to existing conditions and the no-action alternative, are provided. Please see Master Response 14 for more information regarding water quality.
2013	2	A general comment pertains to how the North Bay Aqueduct Alternate Intake Project (AI) is referenced in the Draft BDCP. The AI project is independent of BDCP, but must be referenced in the BDCP documents because, if implemented, it will become part of the State Water Project and is in the same geographical area of BDCP. The AI project has its own EIR and separate permitting process. Where there is overlap with BDCP is in the operations of the AI project. Since the intake locations of the AI project and BDCP are in the same part of the Delta, the AI project will be operated in coordination with BDCP tunnels. In other words, whatever the limitations on pumping for the BDCP tunnels are, the AI project will be included in that limitation. Additionally, the BDCP documents should not take any credit for any environmental benefits of the AI project since the AI project is not a conservation measure in BDCP and we have not yet determined if we are going fund the AI project, so its implementation is uncertain. Any environmental benefit from the AI project is illusory, thus cannot be counted as mitigation.	Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A/California WaterFix 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. Operation and maintenance of the proposed North Bay Aqueduct Alternate Intake Project would not be included as a part of Alternatives 4A, 2D, and 5A; therefore, impacts from operating this proposed facility are not considered in the analysis of these alternatives. Please see Chapter 3 of the Final EIR/EIS for an explanation of the various alternatives and what they incorporate. Please also see Chapter 8 of the Final EIR/EIS, Water Quality, for more information related to the North Bay Aqueduct and BDCP.
2013	3	A general comment pertains to how the Solano HCP relates to BDCP. The Solano County Water Agency see no major conflicts between the two Plans (assuming Alternative 4). However close coordination during implementation of both Plans will be necessary to	For information regarding the effect of BDCP on other HCPs, including the Solano HCP, please see section 12.3.6 of the Final EIR/EIS. Please also see Master Response 5 for issues raised regarding the BDCP,

DEIRS Ltr#	Cmt#	Comment	Response
		ensure there are no future conflicts and to maximize environmental benefits of both Plans. We also suggest that BDCP use the most up to date environmental data that is included in the Solano HCP for the Delta area, especially our detailed vernal pool data.	including the current status of the BDCP Effects Analysis.
2013	4	In Chapter 8, increases in Bromide and Organic Carbon at the North Bay Aqueduct are identified as an unavoidable significant adverse impact. The EIR/EIS does not identify adequate mitigation measures. Appendix 3B, provides a "pledge" that BDCP will mitigate these types of significant and unavoidable impacts through subsequent agreements, with several conditions. Since such agreements are not in place at the time of the comment period, Solano County Water Agency (SCWA) cannot consider these prospective agreements a valid mitigation measure. SCWA is interested in exploring possible agreements to address the significant adverse water quality impacts.	DWR and Reclamation are committed to working with water agencies. Commitments are detailed in the Environmental Commitments section of the Final EIR/EIS, and mitigation is detailed in Chapter 8, Water Quality. Please note that preferred alternative is now Alternative 4A, which 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. A detailed discussion of the mitigation that will be used to offset water quality impacts is included on the EIR/EIS Mitigation Monitoring and Reporting Plan. This plan provides detail on each measure including information on the action, parties responsible for implementing the mitigation measure, responsible parties, location, timing, monitoring, and reporting requirements. Please see Master Response 14 for more information regarding water quality.
2014	1	The EIS/EIR is not sufficient at this time in meeting the U.S. Army Corps of Engineers' needs under the National Environmental Policy Act (NEPA) and 404(b)(1) Guidelines, in particular with regard to the incomplete description of the proposed actions, alternatives analysis, impacts to navigation, impacts to federal flood control and navigation projects, and impacts to waters of the United States and navigable waters, as well as the avoidance and minimization of, and compensatory mitigation for, impacts to waters of the United States. Without incorporation of the changes recommended in our comments on the administrative and public drafts, the Corps will not be able to adopt the EIS/EIR for any of our permit decisions on the proposed actions to implement the BDCP. The Corps has no opinion as to the suitability of the EIS/EIR for decisions by other agencies.	The lead agencies have coordinated with the U.S. Army Corps of Engineers regarding the contents of the EIR/EIS related to their permit needs. The RDEIR/SDEIS and this Final EIR/EIS includes Appendix 1F, Supplemental Information for USACE Permitting Requirements and also includes additional impact analysis related to navigation in Chapter 19, Transportation. Chapter 12, Terrestrial Biological Resources has also revised Mitigation Measures Bio-176 to be more consistent with the Corps' CWA Section 404 permitting process. Appendix 1F outlines the specific steps that will be taken to achieve compliance with 33 CFR 408. One of the first steps in this process has already occurred as DWR submitted a letter request (dated December 9, 2015) to the Central Valley Flood Protection Board requesting the start of the Section 408 process, who approved transmitting it to the USACE on December 15, 2015. However, some of the detailed levee design information needed to assess the potential effect on federal project levees may need to occur as part of separate "Section 408" analyses under the Corps' direction.
2014	2	The U.S. Army Corps of Engineers is concerned about the inadequate treatment of two proposed navigation projects: the Sacramento River Deep Water Ship Channel Deepening and the San Francisco Bay to Stockton Deepening. The EIS/EIR concludes there is no need to consider either project under NEPA regarding items such as existing conditions or cumulative impacts. I strongly disagree with that conclusion. These ship channels are significant hydrologic and economic features of the Delta, and intersect with the BDCP in numerous ways.	The EIR/EIS has been revised since the 2013 and now includes discussion of the continued operation (including dredging) of the Sacramento River Deep Water Ship Channel and Stockton Deep Water Ship Channel. Although the EIR/EIS identifies the ongoing programs related to the Sacramento River Deep Water Ship Channel Deepening and the San Francisco Bay to Stockton Deepening, because these projects have not been completed, it would be speculative to include them in the No Action Alternative and the action alternatives. Therefore the No Action Alternative and action alternatives have not been revised to incorporate these actions.
2014	3	The U.S. Army Corps of Engineers request all of our comments on the administrative and public drafts be incorporated into the Final EIS/EIR. I also request a formal letter response from the National Marine Fisheries Service to our comments.	At the time of the release of the FEIR/S, NMFS is not a lead agency to the proposed project. However, the lead agencies have been coordinating regularly with USACE to address their concerns and issues. Formal responses to this letter, as well as to the clarification letter (see comment letter 1767 BDCP) and comment letter on the RDEIR/SDEIS (see comment letter 2576 RDEIR) have been included in this Final EIR/EIS.
2014	4	The U.S. Army Corps of Engineers has regulatory jurisdiction over portions of the BDCP under Section 404 of the Clean Water Act, 33 U.S. Code 1344 (section 404), and Sections 10 and 14 of the Rivers and Harbors Act of 1899, 33 U.S. Code 403 and 33 U.S. Code 408 (sections 10 and 14). All usage of the term "section 10" below refers to Section 10 of the	The lead agencies recognize the USACE regulatory jurisdiction related to the authorities under Section 404 of the CWA and Sections 10 and 14 of the RHA and make note of the use of "section 10" when reviewing the USACE comments (as opposed to Section 10 incidental take permits as was planned for the BDCP compliance with Section 10 of the ESA).

DEIRS Ltr#	Cmt#	Comment	Response
		Rivers and Harbors Act of 1899, and not to Section 10 of the Endangered Species Act.	
2014	5	The U.S. Army Corps of Engineers notes that very few of the 429 comments we made on the administrative draft EIS/EIR have been adequately addressed in the public draft EIS/EIR or anywhere else. We consider all those prior comments to remain applicable, and we have tried not to repeat them in our below comments on the public draft EIS/EIR.	Information was added to the RDEIR/SDEIS to address the USACE's comments. In addition, Appendix 1F Supplemental Information for USACE Permitting Requirements has been added to the Final EIR/EIS to address a wide range of USACE comments on the DEIR/EIS. This appendix includes information on CWA Section 404, Rivers and Harbors Action Sections 10 and 14, as well as National Historic Preservation Act Section 106, and Executive Order 11988. It also includes a supplemental discussion on of impacts on waters, effects on navigations, and a conceptual compensatory mitigation description. The informational requirements under the Section 408 process necessarily include a detailed level of engineering design, as well as a detailed level of analysis related to effects on USACE's civil works projects and indirect hydraulic effects. The information contained in the current CEQA/NEPA documents will likely not fully meet this level of detail and additional informational submittals and analysis may be necessary. As a result of these submittals, prior to final Section 408 permission, and possibly additional authorization under Section 10 of the RHA, additional NEPA compliance by USACE may be required.
2014	6	The U.S. Army Corps of Engineers only reviewed in detail the Chapters that we have comments. Our review was further constrained by limitations of staff time and by the size and organization of the EIS/EIR.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
2014	7	The EIS/EIR does not contain the information and analysis needed for our permit decisions, including, but not limited to, a complete project description, analysis of impacts to navigation, analysis of impacts to Federal projects, delineation of wetlands, an acceptable alternatives analysis, and a mitigation plan.	Chapter 3, Description of Alternatives in the EIR/EIS provides a comprehensive description of the project alternatives as required by CEQA and NEPA. Please refer to Master Response 2, which addresses requirements for a project-level analysis and the level of detail required by CEQA and NEPA. It is acknowledged that some of the information or level of detail required by the U.S. Army Corps of Engineers for its Section 404 permitting process and Section 408 permit will be developed during those permit processes. That information generally is related to the specific engineering design details that are not currently available for the environmental review process. The RDEIR/SDEIS included supplemental information regarding the USACE' permitting processes and this EIR/EIS does include an analysis of navigation effects in Chapter 19, Transportation and includes supplemental information consistent with the Corps permitting requirements in Appendix 1F. Additional detail on specific mitigation sites, as well as additional discussion of alternatives consistent with the requirements of the 404(b) (1) Guidelines will be provided for the CWA Section 404 review process. For additional information regarding permitting, please see Master Response 45.
2014	8	For purposes of National Environmental Policy Act (NEPA) compliance for our permit decisions, Conservation Measure 1 (CM1), the proposed new water intakes, operations, and conveyance facilities, is not fully described in the EIS/EIR, and its description and analysis is not to the level of detail necessary for our processes. The incomplete information and analysis would prevent us from making any decision based on the EIS/EIR as it is currently written, including making a recommendation on which alternative may contain the Least Environmentally Damaging Practicable Alternative (LEDPA). As a result, we would likely require an additional EIS process as part of our permitting review for CM1.	Please see responses to comments above. Additional information related to the USACE's permitting process was added to the RDEIR/SDEIS and the Final EIR/EIS. It is acknowledged for at least some of the USACE' permitting processes, additional NEPA compliance will likely be required. A separate discussion of alternatives, consistent with the USACE's Section 404(B) (1) Guidelines will be submitted through the USACE's permitting process and not as a part of the EIR/EIS. For additional information regarding permitting, please see Master Response 45. Master Response 2 provides a discussion of the sufficiency of the level of analysis for the purposes of CEQA and NEPA analysis. Appendix 1F Supplemental Information for the USACE Permitting Requirements was added to the RDEIR/SDEIS and provides information regarding the USACE permitting requirements for the proposed project. The lead agencies acknowledge that additional information may be required to complete the permitting process.
2014	9	The U.S. Army Corps of Engineers had hoped that the BDCP process would develop an EIS/EIR document which could serve as a "master analysis" that would be helpful to all others doing work in the Delta, so that each project does not need to repeat similar	DWR and USBR as the respective lead agencies intended the focus of the EIR/EIS to be specifically for decision-making associated with the BDCP/California Water Fix. Some of the underlying data sets and analyses may prove foundational for other projects while others are highly project specific. DWR and USBR

DEIRS Ltr#	Cmt#	Comment	Response
		modeling and analysis. Unfortunately, the data and analysis in the EIS/EIR is already several years out of date, and various data sets are incomplete or have been truncated. This reduces the likelihood that we could incorporate or borrow analysis from the EIS/EIR in support of other future Corps permit and project decisions.	encourage the use of information from the Draft EIR/EIS and BDCP, as well as that contained in the RDEIR/SDEIS and Final EIR/EIS, for other purposes and would be pleased to offer assistance in determining applicability toward this goal. With regards to purpose and need, please see Master Response 3.
2014	10	The Corps [Army Corps of Engineers] does have major concerns regarding all the components of the BDCP which may alter or be adjacent to Federal projects. However, because Conservation Measures 2 through 22 are only described in very general programmatic terms, we were only able to give detailed comments on CM1. We ask to continue to be included in the planning and development of the remaining Conservation Measures so that we can work together to develop designs which may be able to obtain permits.	Note that the proposed project (Alternative 4A) no longer includes the BDCP, and therefore restoration beyond mitigation, to meet the Section 10 of the ESA and NCCPA requirements, is no longer a component of the project. DWR continues to coordinate with the USACE through the 404 permitting process for CM1 as it relates to Alternative 4A to ensure that sufficient detail has been provided to the USACE regarding the project and associated mitigation to meet the USACE's permit requirements. For additional information regarding permitting, please see Master Response 45.
2014	11	The Corps has no opinion on the usability of the EIS/EIR by other agencies for their decisions. All of our comments are in regards to our permitting processes, including compliance with NEPA for our permitting decisions.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2014	12	Typically our regulatory program considers impacts which last for 5, 10, or more years as permanent impacts, not as temporary impacts as is described throughout the document.	Temporary and permanent impacts are treated different with each resource area. Please see individual resource areas for a discussion of how impacts are classified as temporary or permanent.
2014	13	Throughout document, use "section 14" in place of "section 408" for all reference to Section 14 of the Rivers and Harbors Act of 1899, 33 U.S. Code 408.	Final EIR/EIS Chapter 1, Introduction includes a section on Section 14 of the Rivers and Harbors Act. The reference to Section 14 is thereafter referred to as the U.S. Army Corps of Engineers Section 408 permission or process. No revisions related to this reference have been made because the CVFPB and DWR's common reference to this has been as "408 process".
2014	14	We are concerned about the inadequate treatment of two proposed navigation projects: The Sacramento River Deep Water Ship Channel deepening and the San Francisco Bay to Stockton deepening project. The EIS/EIR concludes that there is no need to consider either project under NEPA regarding items such as existing conditions or cumulative impacts. We strongly disagree with that conclusion. These ship channels are significant hydrologic and economic features of the Delta, and intersect with the BDCP in numerous ways, including overlapping project mitigation and BDCP restoration areas, overlapping dredged material disposal and BDCP restoration areas, cumulative changes to salinity in the Delta, and the potential for beneficial reuse of dredged material. The proposed navigation projects must be included in the cumulative impacts analysis of the EIS/EIR, and the ongoing need for maintenance dredging and to maintain and operate dredged material disposal sites must also be included in the existing conditions of the EIS/EIR.	As described in the response to Comment 2, the EIR/EIS includes continued operation (including dredging) of the Sacramento River Deep Water Ship Channel and Stockton Deep Water Ship Channel. The EIR/EIS recognizes the ongoing programs related to the Sacramento River Deep Water Ship Channel Deepening and the San Francisco Bay to Stockton Deepening. However, those projects have not been completed, and it would be speculative to include them in the No Action Alternative and the action alternatives or in the cumulative impact analysis. In addition, the new proposed project, Alternative 4A, no longer includes restoration beyond what is required to mitigate and offset impacts from construction and operations of the project.
2014	15	Chapter 1, Page 1-14, Line 8-18 Comment: Design information for CM1 is available but not at the project level for those potential impacts to federal projects, surface water hydrological regimes, navigation, mitigation projects impacting Federal projects, and other related impact topics required for a project level NEPA required for section 14 decisions. The impacts analysis needed for the section 14 must be included if this is project-level NEPA document for CM1.	Please see responses to comments above and in Master Response 2 regarding the sufficiency of the level of analysis for CM1. Please see Master Response 2, Project Level v. Program Level regarding program and project elements of the Draft EIR/EIS.
2014	16	Chapter 1, Page 1-14, Line 1-39 Comment: The EIR/EIS presents the levels of analysis, project level and program level, for CM1 (project level), and the CM2-CM22 (all analyzed at the program level). Mitigations for CM1 are included in several of the other CMs; therefore, they are directly related to	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. For more information regarding project and program level analysis please see Master Response 2. Necessary to an HCP/NCCP being implemented over a 50 year permit life, various elements of the BDCP are presented programmatically with the

DEIRS Ltr#	Cmt#	Comment	Response
		feasibility of implementation of CM1 (connected actions), and impacts should be assessed at the project level (CM2-CM10). Any portion of CMs 2-22 which are mitigation for impacts of CM1 also need to be described and analyzed at the project level of detail.	<p>presentation of CM 2 – 22. However, the elements of the CMs that would be necessary to off-set impacts of construction of CM 1 would be implemented consistent with the timing of the impacts. In addition it would be expected that, prior to obtaining many of the permits needed to implement CM 1 (e.g., permits from the USACE), DWR would necessarily have to produce the specific detail for the project description and the mitigation prior to implementation. Further consideration will be given to these comments and appropriate revisions to the Draft BDCP made if an HCP/NCCP alternative was ultimately approved at the conclusion of the CEQA/NEPA process.</p> <p>Construction of the proposed California WaterFix 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 EIR/EIS and RDEIR/SDEIS.</p> <p>As part of the planning and environmental assessment process, the project proponents will incorporate environmental commitments and best management practices (BMPs) into the action alternatives to avoid or minimize potential adverse effects (a NEPA term) and potential significant impacts (a CEQA term). The project proponents will implement these environmental commitments as part of the project construction activities. In other words, these commitments will be satisfied even if not separately imposed by the permitting agencies. If permitting agencies impose additional measures or modifications, those will also be adhered to as part of the permit(s). The Lead Agencies will coordinate planning, engineering, design and construction, operation, and maintenance phases of the alternative with the appropriate agencies. For more information regarding Environmental Commitments please see Appendix 3B of the RDEIR/SDEIS.</p>
2014	17	Chapter 1, Page 1-14 to 1-15, Line 42-43; 1-7 Comment: In the HCP, some of the water contractors are called "authorized entities" What is the difference in both role and responsibilities for "BDCP proponents" versus "authorized entities"?	The "authorized entities" would have been the holders of the state and federal permits. The "BDCP proponents" would have been the authorized entities and others.
2014	18	Chapter 1, Page 1-20, Line 31 to 39 Comment: Delete "For example, U.S. Army Corps of Engineers (USACE) is expected to use the BDCP EIR/EIS as part of its permit issuance responsibilities regarding compliance with Section 404 of the Clean Water Act, which would result in a separate Record of Decision in consideration of related permit actions; Section 404 compliance requires that USACE select the Least Environmentally Damaging Practicable Alternative for implementation under 40 C.F.R Part 230 (the "Guidelines"), and to assure compliance with the USACE/Environmental Protection Agency (EPA) joint "Mitigation Rule" (33 C.F.R. Parts 325 and 332, and 40 C.F.R. Part 230) USACE may rely on this EIS/EIR in whole or part in satisfying its NEPA obligations with respect to individual permit actions. In fulfilling its obligation with respect to those permits, USACE may determine that additional NEPA analysis is required."	The subject language was included as part DEIR/EIS Chapter 1 Section 1.6.2 Use of EIR/EIS by Other Entities". The Final EIR/EIS Chapter 1 text has been modified under Section 1.6 "Intended Uses of this EIR/EIS and Agency Roles and Responsibilities" regarding the USACE's use of the information contained in the FEIR/EIS with recognition that additional environmental compliance documentation may be required.
2014	19	Chapter 1, Page 1-21, Table 1-2 Comment: Under U.S. Army Corps of Engineers permit, decision, approval, or other action: Executive Order 11988 was left out of this list and does need to be considered and addressed with all section 10/404 and 14 actions.	The table in Chapter 1 of the Final EIR/EIS was revised to include reference to EO 11988.
2014	20	Chapter 1, Page 1-30	Chapter 1 does not include subsections on outreach and consultation with specific stakeholders, such as "government to government communication" and tribal outreach. Information on tribal consultation and

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: Should include a subsection on tribal review (government to government) and other stakeholder outreach/coordination/consultation	coordination with native American groups is included in Chapter 18. For additional information regarding tribal issues, please see Master Response 21.
2014	21	Chapter 1, Page 1-30, Line 9 Comment: Insert "would" require a separate ROD (Record of Decision)	The word "could" continues to be used in the text because of several factors including that the proposed project is now Alternative 4A, additional coordination with the USACE has produced a separate appendix outlining specific information needs of the project for USACE permitting purposes. Therefore, it is not certain that the actions under discussion would require separate Records of Decisions.
2014	22	Chapter 3 Comment: The document needs a clear explanation of a reasonable range of alternatives and a comparison of such, including a concise description of the environmental consequences of each.	Please see Master Response 4 for more information regarding alternatives to the proposed project. The alternatives included in the EIR/EIS (both the Draft EIR/EIS and the 3 additional alternatives presented in the RDEIR/SDEIS) represent a legally adequate reasonable range of alternatives and the scope of the analysis of alternatives fully complies with both CEQA and NEPA. The process for developing and identifying the alternatives that were evaluated in detail in the EIR/EIS is provided in Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1, Draft EIR/EIS. Appendix 3A also explains why various proposals were screened out from the detailed analysis in the EIR/EIS. Each resource chapter in the Final EIR/EIS includes a summary comparison of impacts which more easily allows readers compare impacts across all alternatives. This text and comparison figures have also been included in the Final EIR/EIS Executive Summary.
2014	23	Chapter 3 Comment: When CM1 moves into U.S. Army Corps of Engineers permitting review, we would need a full project level review and analysis of all the impacts of CM1, including all proposed mitigation. The EIS/EIR does not contain a project level review nor does it analyze the impacts of the mitigation proposed for CM1, including setback levees mentioned at 6-59 and waters of the U.S. mitigation mentioned at 12-147. Permanent and temporary loss of terrestrial habitat and natural communities (specifically wetlands) resulting from CM1 construction and operations, including associated mitigation, are not clearly described or analyzed at the level necessary to select a preferred alternative. Much of the mitigation for impacts to terrestrial habits resulting from CM1 construction operations is based on theoretical footprints and aerial imagery. There is too much uncertainty to conclude that adverse effects to natural communities would be mitigated entirely.	Please see responses to comment 2014-1, 2014-5, 2014-7, and 2014-8. The Lead Agencies believe the analysis contained in the Final EIR/EIS provides information at the level necessary to make a decision regarding the proposed project under NEPA and CEQA. The Lead Agencies also recognize that other permitting agencies, including the USACE, may require additional information regarding the proposed project before issuing permits.
2014	24	Chapter 3 Comment: This chapter was very difficult to follow. Additional figures are needed to better communicate all of the potential measures, especially as they pertain to CM1. Also, include other figures to locate other CMs. These would be extremely helpful in identifying the wide array of potential 14 approvals which may be required for the full implementation of the BDCP.	Final EIR/EIS Chapter 3 has been updated to include the description of the preferred alternative (Alternative 4A) in addition to Alternatives 2D and 5A. Where appropriate, additional figures have been added to better present the relevant information. The lead agencies believe the level of detail regarding the BDCP (Alternative 4) and other alternatives found in the Draft EIR/EIS is sufficient for purposes of CEQA and NEPA.
2014	25	Chapter 3 Comment: New conveyance was not a part of the Preferred Alternative for CalFed. Does this EIS/EIR describe why the reasons for rejecting new conveyance in CalFed are no longer valid? The CalFed EIS/EIR and Record of Decision are presently being cited in support of major projects consistent with the CalFed preferred alternative, including raising Shasta Dam (Shasta Lake Water Resources Investigation), constructing Sites Reservoir (NODOS) and constructing a dam at Temperance Flats in Millerton Reservoir	The alternatives included in the 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 Lead Agencies carefully considered all potential alternatives that were proposed during the scoping process and during time of preparation of the Draft EIR/EIS. In response to public input, several new alternatives have been studied in the Recirculated DEIR/EIS and a new Preferred Alternative (4A) identified. The lead agencies believe that the preferred alternative is consistent with the overall framework of CalFed but also updates the approach based on additional considerations to meet the stated project objectives for California

DEIRS Ltr#	Cmt#	Comment	Response
		(Upper San Joaquin River Basin Storage Investigation).	WaterFix. Please also see Master Response 4 which provides additional information on alternatives development.
2014	26	Chapter 3 Comment: Unable to determine which conservation measure included improvements to the existing fish salvage facilities.	Conservation Measure/Environmental Commitment/AMM 15, Localized Reduction of Predatory Fishes (Predator Control), under Alternative 4, would modify existing salvage procedures through consideration of predator reductions in Clifton Court Forebay. However, no physical changes to fish salvage facilities are proposed under Alternative 4A.
2014	27	Chapter 3, Page 3-34, Line 11-15 Comment: Some questions on the new operational rules for the north delta intake diversions. 1. How do these operations relate to the operations of the existing State Water Project diversion at Clifton Court Forebay? Neither description states how the two diversions would operate together; i.e., when the south is operating at high level, does the north have to operate at low level or vice versa or can both be on at full capacity as long as stated parameters are met? 2. There doesn't seem to be a discussion in document of how the diversion of water at the new intakes plus the old intakes would affect water levels, direction of flow, velocity, scour and accretion, both at the area of diversions north and south as well as throughout the delta. On 6-59 the document discusses water level change from the physical constriction of the river by the new structures, but nowhere was the operational effects to water levels. This isn't asking about OMR reverse flow criteria or position of X2.	The operational rules for the north and south Delta intakes are summarized in Chapter 3, Description of Alternatives, and presented in more detail in Appendix 5A, Section B, of the EIR/EIS, and the description of the Proposed Action in the Biological Assessment. As the project description details, the North Delta Diversion Facilities will operate in dual conveyance with the existing South Delta Diversion Facilities. The operational rules proposed for Alternative 4A and associated modeling spell out the how the two facilities would operate together. Surface water elevations associated with Alternative 4A in place and operating in dual conveyance with the existing SWP facilities are presented in Appendix 5A, Section C, of the EIR/EIS in Tables C-25-1 through C-25-25, C-29 -1 through C-29-25, C-30-1 through C-30-25, and C-31-1 through C-31-25. As discussed in the FEIR/EIS, Appendix 3F Paragraph 3F.8, DWR performed preliminary hydraulic modeling to evaluate potential impacts of proposed intake structures for CM1 along the Sacramento River on river hydraulics. The modeling results indicated on-bank intakes, as proposed under the BDCP/CWF, would have minimal impacts on river hydraulics. As part of future engineering, additional hydraulic modeling will be performed to accommodate design refinements and to comply with U.S.C. Title 33 – Navigation and Navigable Waters Section 408 and other permitting requirements. Please see FEIR/EIS Appendix 6A for a discussion on potential hydraulic analyses required during the Section 408 permitting process.
2014	28	Chapter 3, Page 3-92, Line 23-24 Comment: Example of lack of specificity which affects our (U.S. Army Corps of Engineers) ability to compare alternatives as well as different intake locations: "Foundation type, dimensions, and construction methods would be revised further when additional site-specific subsurface geotechnical data becomes available."	This information on the design of the water conveyance facilities was based on the best available information as the time the Draft EIR/EIS was complete. The design information contained in the Final EIS/EIR has been updated to reflect revisions to the previous design. Master Response 45 provides information on how comments made by the USACE on previous designs was considered in the updated design of CM-1. The lead agencies also recognize, as stated in Final EIR/EIS Appendix 1F Supplemental Information for USACE Permitting Requirements, that the USACE may require additional information regarding the project through their permitting process
2014	29	Chapter 3, Page 3-92, Line 34-37 Comment: Example of lack of specificity which affects our (U.S. Army Corps of Engineers) ability to compare alternatives as well as different intake locations: "The length of the bank protection required on either side of the intake would vary by intake location but would range from approximately 100 to 2,200 feet for the pipeline/tunnel, modified pipeline/tunnel, and east alignments, and from 500 to 1,800 feet for the west alignment."	Please see responses to comments 2014-1 through 2014-8 and 2014-28.
2014	30	Chapter 3, Section 3.1; 3-92, Line 37-38 Comment: The intakes and associated bank protection would permanently change existing substrates and local hydraulic conditions in the immediate vicinity of the intakes. How would the hydraulic conditions change? Has this been modeled?	Please see response to comment 2014-1 through 2014-8 and 2014-28.

DEIRS Ltr#	Cmt#	Comment	Response
2014	31	<p>Chapter 3, Section 3.1; 3-92, Line 37-42</p> <p>Comment: Here the EIS/EIR states the Sacramento River would remain navigable during construction of the intakes, but it does not state the maximum width of boats that would be able to navigate up the Sacramento River. Please describe current navigation concerns and current boating/shipping activities in the river segments proposed for intake construction. The Horn Blower is about 60' wide and the San Francisco Belle is a 2200 passenger boat, 97' wide. Here it states that river channel width at several intake sites varies from a minimum width of 400 feet, and the protrusion of cofferdams into the river is estimated at 60 feet. The river does not appear to be that wide at proposed intake sites for Alternative 4. Where exactly is the river a minimum of 400' wide from Courtland to Clarksburg? A diagram would help.</p>	<p>Since the time of the Draft EIR/EIS additional navigation impact analyses have been added to Chapter 19, Transportation and Appendix 1F, Supplemental Information for U.S. Army Corps of Engineers has been added to this Final EIR/EIS. Please also see responses to comments 2014-1, 2014-2, 2014-7, 2014-14, and 2014-27.</p>
2014	32	<p>Chapter 3, Page 3-92, Line 39-41</p> <p>Comment: Extension from the bank into the Sacramento River is not the only factor in determining impacts to navigation. The depth of the River is also important; if the facility is located in the deepest side of the River its impacts to navigation would be disproportionate to its extension from the shore. In addition, intakes could also affect navigation by altering the water depth, velocity, direction of flow, and patterns of erosion and accretion, both by the physical structure of the intakes as well as the diversion of water by the intake. This is also another example of lack of specificity which affects USACE ability to compare alternatives as well as different intake locations.</p>	<p>Please also see response to comments 2014-1, 2014-2, 2014-7, 2014-14, 2014-27, and 2014-31.</p>
2014	33	<p>Chapter 3, Page 3-95, Line 4-35</p> <p>Comment: Example of lack of specificity which affects our ability to compare alternatives: This section described that for a 30 mile pipeline, a maximum of 80 acres of additional surface disturbance might be needed for grout injection, but that this will not be known until site specific subsurface conditions are known.</p>	<p>Final EIR/EIS Chapter 3 Section 3.6.1.2 has been expanded to provide a better description of the vent shaft locations and the tunnel boring machine safe haven areas. The preliminary locations of these planned areas are shown on mapbook figures and presented as either "vent shaft" locations or "safe haven work areas". The precise locations of the unplanned pressurized safe haven intervention areas have not yet been determined because the locations would depend on site-specific mining conditions and therefore, these sites are not shown on mapbook figures as the locations of the sites would be determined by a number factors including subsurface geology and surface resources. For planning purposes, the lead agencies have estimated that a safe haven location could be situated at intervals of approximately 2000 feet along the tunnel alignment.</p>
2014	34	<p>Chapter 3, Section 3.1; 3-181, Line 20-22</p> <p>Comment: All operations of new intake and conveyance facilities included as either covered activities, or federal actions associated with the BDCP (or an alternative), and the effects of those activities/actions are not thoroughly addressed in the BDCP/EIS at the level of detail required for Corps permitting.</p>	<p>Please see responses to comment 1-8, and 28. The lead agencies are coordinating directly with USACE through the CWA Section 404 and Rivers and Harbors Action Sections 10 and 14 permitting process.</p>
2014	35	<p>Chapter 3, Section 3.2; 3-12, Line 28-35</p> <p>Comment: Through formulation of CM1 alternatives, agencies should have considered and analyzed impacts to waters of the US and wetlands that would occur from implementation of CM1, particularly with type and location of conveyance, and number and location of intakes. This would provide assist in determining the LEDPA (Least Environmentally Damaging Practicable Alternative) required by the Corps under Section 404(b)(1).</p>	<p>Please see Master Response 2 regarding the sufficiency of the level of analysis for CM1 for purposes of CEQA/NEPA compliance. In addition, the lead agencies will continue to coordinate with the USACE through the 404 permitting process to provide the information necessary to make the LEDPA determination consistent with the requirements of the Section 404(b)(1) Guidelines.</p>
2014	36	<p>Chapter 3A, Page 3A-15, Line 39-45</p>	<p>This section of the DEIR/EIS is providing information on the Department of Interior NEPA regulations, consistent with the requirements for the U.S. Bureau of Reclamation and U.S. Fish and Wildlife Service (both</p>

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: We comply with NEPA (Pub. L. 91-190, 42 U.S.C. 4321-4347), 40 CFR 1500-1508, 33 CFR Part 230, 33 CFR Part 325 Appendix B. U.S. Department of the Interior (DOI) NEPA regulations do not apply to U.S. Corps of Engineers NEPA analysis associated with permit decisions.	in the Department of Interior). The lead agencies recognize that the USACE NEPA regulations are different.
2014	37	Chapter 3A, Page 3A-59, Line 16-22 Comment: The "Early Look" preliminary effects analysis did not consider periodic and contiguous drought years with decreased precipitation and snow pack, and related changes in water exports during drought periods.	The purpose of this discussion in the DEIR/EIS Appendix 3A was to provide an overview of hydrologic conditions the BDCP Steering Committee took into consideration in developing the project description for the early effects analysis. A detailed discussion of the factors considered in the hydrologic modeling effort for BDCP and CWF is provided in Final EIR/EIS Chapter 5 Water Supply and accompanying appendices.
2014	38	Chapter 3A, Page 3A-7, Line 35-36 Comment: Further information, clarification (and associates citations) is needed regarding seismic risk.	The purpose of the DEIR/EIS Appendix 3A is to provide information regarding the alternatives development process. Final EIR/EIS Appendix 3E Potential Seismic and Climate Change Risks to SWP/CVP Water Supplies and Chapter 9 Geology and Seismicity provide more detailed information on seismic risk.
2014	39	Chapter 3B, Page 3B, Line 3B-4 Comment: Conduct surveys in project area to identify cultural resources that may be affected.	Final EIR/EIS Chapter 18 Cultural Resources includes Mitigation Measure CUL-2: Conduct Inventory, Evaluation, and Treatment of Archeological Resources which requires cultural resource surveys prior to conducting ground disturbing activities. The Mitigation Monitoring and Reporting Plan included in the Final EIR/EIS provides additional detail on this measure.
2014	40	Chapter 3B, Page 3B-22, Line 6-7 Comment: Loss of emergent vegetation and associated post-project restoration may require section 404 permits	Chapter 12 of the EIR/EIS does address impacts on wetlands and waters regulated under the Clean Water Act. The lead agencies agree that a 404 permit may be required before disturbing these resources, where the activity would involve the discharge of dredged or fill material into waters of the United States.
2014	41	Chapter 3B, Page 3B-36 Comment: Construction of dredge material disposal sites may require section 404 permits	The potential for effects of all of the conveyance facility improvements on wetlands and other waters of the United States is fully addressed in Chapter 12, Terrestrial Biological Resources under Impact BIO 176 on page 12-2556. The Final EIR/EIS also has updated information related to this impact. Clean Water Act Section 404 permitting is underway with the U.S. Army Corps of Engineers for all activities that involve the discharge of dredged or fill material into waters of the United States.
2014	42	Chapter 3C Comment: We need detailed hydraulics and designs to verify that assumptions are correct or within ranges.	See responses to comments 1-8. The lead agencies recognize that prior to completion of the Section 14 approval process, DWR will be required to provide the USACE with hydraulic and design data required as part of the 408 process.
2014	43	Chapter 3C, Page 3C-3, Table 3C-1 Comment: Example of lack of specificity which affects U.S. Army Corps of Engineers ability to compare alternatives as well as different intake locations: "Each intake would range from 40 to 60 ft wide and 700 to 2,300 ft long."	Please see responses to comments 2014-1 through 2014-8 and 2014-28.
2014	44	Chapter 3C, Page 3C-4, Table 3C-1 Comment: Example of lack of specificity which affects U.S. Army Corps of Engineers ability to compare alternatives as well as different intake locations: "The length of the temporary cofferdam at each intake site would vary depending on the alignment and intake but would range from 740 ft to 2,500 ft for the pipeline/tunnel alignment and modified pipeline/tunnel alignment, and 890 ft to 2,440 ft for the west alignment."	Please see responses to comments 2014-1 through 2014-8 and 2014-28.
2014	45	Chapter 3C, Page 3C-4-5, Table 3C-1	Please see responses to comments 2014-1 through 2014-8 and 2014-28.

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: Example of lack of specificity which affects U.S. Army Corps of Engineers ability to compare alternatives as well as different intake locations: "The in-water area temporarily isolated inside the temporary cofferdam would vary by intake location, but would range from 0.2 to 5 acres."	
2014	46	Chapter 3C, Page 3C-5, Table 3C-1 Comment: Example of lack of specificity which affects U.S. Army Corps of Engineers ability to compare alternatives as well as different intake locations: "permanent cofferdams would range in length from 1,220 to 3,360 linear ft."	Please see responses to comments 2014-1 through 2014-8 and 2014-28.
2014	47	Chapter 3C, Page 3C-6, Table 3C-1 Comment: Example of lack of specificity which affects U.S. Army Corps of Engineers ability to compare alternatives as well as different intake locations: "Affects area enclosed by cofferdam, approximately 0.2-1.9 acres."	Please see responses to comments 2014-1 through 2014-8 and 2014-28.
2014	48	Chapter 3C, Page 3C-6, Table 3C-1 Comment: Table states "15,876 cy of spoil (including slurry bulking) removed." Respectfully express skepticism at the level of exactness here when the document gives all other dimensions in very broad ranges.	Draft EIR/EIS Table 3C-1 reflected the best available estimate on the amount of spoil that would be removed and reports the amount calculated by the engineering team. Final EIR/EIS Table 3C-1 has been updated to reflect the amount of spoil that would be removed at each intake site and is based on the most recent intake design information provided by the engineering team.
2014	49	Chapter 3C, Page 3C-7, Table 3C-1 Comment: Example of lack of specificity which affects U.S. Army Corps of Engineers ability to compare alternatives as well as different intake locations: "Screen dimensions would vary depending on location, ranging from 10 to 22 ft high and from 915 to 1,935 ft long."	Please see responses to comments 2014-1 through 2014-8 and 2014-28.
2014	50	Chapter 3D Comment: Unclear why the "River Islands" project is not included. This long planned development may alter the viability of restoration opportunity areas in the south Delta.	The River Islands project is identified in Final EIR/EIS Attachment 3D-A Description of Programs, Projects, and Policies considered for Existing Conditions, No Action Alternative, No Project Alternative, and Cumulative Impact Analysis for the BDCP EIR/EIS and was incorporated as part of the assessment of the no project/no action conditions and cumulative impact assessment.
2014	51	Chapter 3D Comment: Which CALFED [California Bay-Delta Authority] projects are included, and which are not and why?	Please refer to Appendix 3D, Attachment 3D-A. Descriptions of Programs, Projects, and Policies considered for Existing Conditions, No Action Alternative, No Project Alternative, and Cumulative Impact Analysis for the BDCP EIR/EIS for an overview of the projects associated with the CALFED program or which were developed to meet objectives of the CALFED record of decision. All of the projects and programs in Attachment 3D and considered in this EIR/EIS analyses were included under either existing conditions, no action/no project or cumulative conditions. For No Action and cumulative impacts please also refer to analyses contained provided for each EIR/EIS resource topic.
2014	52	Chapter 3D Comment: Unclear why the U.S. Bureau of Reclamation's "Title XVI Recycled Water Program" project is not included. This long-standing program reduces water demands.	The Title XVI Water Reclamation and Reuse Program funds numerous projects on a nationwide basis. Some projects receiving these funds that were determined to potentially have a cumulative impact, when considered with the proposed project, were included in Appendix 3D separately (and the underlying finding mechanisms for these projects was not specifically identified). However, the program as a whole was not included by name.
2014	53	Chapter 3D, Page 3D-23, Line 6-13 Comment: Unclear about some assumptions in the No Action Alternative regarding the	As described in Attachment 3D-A in Appendix 3D of the FEIR/EIS, the Central Valley Flood Protection Plan has been included in the No Action Alternative and Cumulative Impact Analyses. For information on how the project will comply with applicable flood protection standards and regulations, including those from the

DEIRS Ltr#	Cmt#	Comment	Response
		Central Valley Flood Control Plan. Please clarify.	Central Valley Flood Protection Board, please see Chapter 6 (Surface Water) and Appendix 6A (BDCP/California WaterFix Coordination with Flood Management Requirements).
2014	54	Chapter 3D, Page 3D-30 Comment: What assumptions were made for the "Fish Screen and Passage Program" in the cumulative analysis? Which barriers are anticipated to be removed and when and how? Which intakes are anticipated to be screened and when and how? Would these fish screen projects result in changes to the timing and amounts of water diverted at those facilities?	No specific assumptions were made regarding this program, but it would generally be expected to be beneficial to covered fishes.
2014	55	Chapter 3D, Page 3D-47 Comment: Unclear why "South Delta Temporary Barriers Projects" is not included in the cumulative analysis.	The South Delta Temporary Barriers Project is identified in Final EIR/EIS Attachment 3D-A Description of Programs, Projects, and Policies considered for Existing Conditions, No Action Alternative, No Project Alternative, and Cumulative Impact Analysis for the BDCP EIR/EIS and was incorporated as part of the cumulative impact assessment.
2014	56	Chapter 3D, Page 3D-52 Comment: Unclear why "North Bay Aqueduct Alternate Intake Project" is not included in the cumulative analysis. This project proposes another intake structure/water diversion in the Sacramento River near the CM1 intake locations, and the cumulative impacts of both projects should be analyzed. Also, this project contains alternatives which include sharing BDCP facilities.	Operations and maintenance of the North Bay Aqueduct Alternate Intake Project (also known as the North Bay Aqueduct Alternate Intake Project) are covered activities under the BDCP. As such, these activities are considered/included in Alternative 4 in the Draft EIR/EIS, and separately in the cumulative analysis. Operation and maintenance of the proposed North Bay Aqueduct Alternate Intake Project would not be included as a part of Alternatives 4A, 2D, and 5A; therefore, impacts from operating this proposed facility are not considered in the analysis of these alternatives. Please see FEIR/EIS Appendix 3D for updates defining existing conditions, no action alternative, no project alternative and cumulative impact analysis for the proposed project.
2014	57	Chapter 3D, Page 3D-52 Comment: Unclear why "Dutch Slough Tidal Marsh Restoration Project" is not included in the cumulative analysis. This is a very long-standing effort anticipated by many to be ready for implementation prior to authorization of the BDCP.	The Dutch Slough Tidal Marsh Restoration Project has been added to the cumulative project list in Chapter 6, Surface Water among other resource topics.
2014	58	Chapter 3D, Page 3D-75 Comment: Unclear why "Sacramento River Water Reliability Study" is not included in the cumulative analysis. This project proposes another intake structure/water diversion in the Sacramento River near the Conservation Measure 1 intake locations, and the cumulative impacts of both projects should be analyzed.	The Sacramento River Water Reliability Study has been added to the cumulative project list in Chapter 5, Water Supply.
2014	59	Chapter 3D, Page 3D-83 Comment: Unclear why "Delta Wetlands Project" is not included in the cumulative analysis. This is a very long-standing effort which is much further along than the "NODOS" project, which is included in the cumulative analysis.	The Delta Wetlands Project has been added to the cumulative project list in Chapter 5, Water Supply. Although it should be noted with the purchase of the Delta Wetlands Islands by MWD, it is not likely that the project would move forward as it was previously proposed.
2014	60	Chapter 3D, Page 3D-87 Comment: Unclear why "Lower San Joaquin Feasibility Study" is not included in the cumulative analysis.	The Lower San Joaquin Feasibility Study has been added to the cumulative project list in Chapter 5, Water Supply.
2014	61	Chapter 3D, Page 3D-88	The Delta Islands and Levees Feasibility Study has been added to the cumulative analysis list and is

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: Unclear why "Delta Islands and Levees Feasibility Study" is not included in the cumulative analysis.	considered in a number of the resource chapter cumulative analyses.
2014	62	Chapter 3D, Page 3D-88-89 Comment: The EIS/EIR appears to exclude from their analysis the current efforts underway to make navigational improvements to the Stockton Deep Water Ship Channel and the Sacramento Deep Water Ship Channel as well as the ongoing need to maintain and operate dredged material disposal sites for routine USACE and Port maintenance dredging programs. USACE is concerned that by excluding these navigational improvement projects: 1) the navigational improvement projects may not be able to obtain regulatory approval as they would be "inconsistent" with the BDCP; 2) the BDCP's planned reoperations of the CVP and SWP may need to be remodeled/modified if one or more navigational improvement projects is constructed as the EIS/EIR is not considering the cumulative impacts to salinity intrusion and sensitive species impacts; 3) the habitat planned in the vicinity of the Sacramento Deep Water Ship Channel may not perform as expected because the BDCP did not take into account navigational improvements to that channel, 4) the habitat planned in the BDCP may be in conflict with both ongoing O&M upland dredged material placement sites, and 5) the BDCP would not be able to benefit from beneficial use of dredged material.	Since the time of the Draft EIR/EIS, Alternative 4A, which does not include an HCP/NCCP, has been identified as the preferred alternative. Both the Sacramento Deep Water Ship Channel and Stockton Deep Water Ship Channel have been considered in the appropriate cumulative impact analyses and both projects are presented in Final EIR/EIR Appendix 3D Attachment A. Nothing in BDCP or the California WaterFix would be inconsistent with these projects. Potential future salinity issues related to future ship channel improvements would need to be included in environmental analyses and cumulative impact analyses for those projects. It is also unlikely that Alternative 4A would have substantial effect on dredged material placement because this alternative includes a reduced level of restoration mitigation compared to Alternative 4. Whether restoration efforts would be able to benefit from available dredged material would need to be determined when restoration mitigation is implemented. Please also see response to comments 2014-1, 2014-2, 2014-7, 2014-14, 2014-27, and 2014-31.
2014	63	Chapter 3D, Page 3D-90 Comment: Unclear why "Shasta Lake Water Resources Investigation" is not included in the cumulative analysis. This is a part of the same effort as the "NODOS" project, which is included in the cumulative analysis.	The Shasta Lake Water Resources Investigation has been added to the cumulative project list in Chapter 5, Water Supply.
2014	64	Chapter 3D, Page 3D-90 Comment: Unclear why "Delta-Mendota Canal Recirculation Feasibility Study" is not included in the cumulative analysis.	The Delta-Mendota Canal Recirculation Feasibility Study was not included in the cumulative impact analysis because it does not meet the criteria for determining a "reasonably foreseeable project" for purposes of CEQA or NEPA – in addition, neither a Draft or Final EIS is available from which to assess potential cumulative water supply impacts.
2014	65	Chapter 3D, Page 3D-92 Comment: Unclear why "Upper San Joaquin River Basin Storage Investigation" is not included in the cumulative analysis. This is a part of the same effort as the "NODOS" project, which is included in the cumulative analysis.	The San Joaquin River Basin Storage Investigation has been added to the cumulative project list in Chapter 5, Water Supply.
2014	66	Chapter 3D, Page 3D-97 Comment: What assumptions were made for the "Anadromous Fish Screen Program" in the cumulative analysis? Which intakes are anticipated to be screened and when and how? Would these fish screen projects result in changes to the timing and amounts of water diverted at those facilities?	As discussed in response to comment 2014-54, no specific assumptions were made regarding this program, but it would generally be expected to be beneficial to covered fishes.
2014	67	Chapter 3D, Page 3D-98 Comment: Unclear why "San Luis Reservoir Low Point Improvement" is not included in the cumulative analysis.	The San Luis Reservoir Expansion project has been added to the cumulative project list in Final EIR/EIS Chapter 5, Water Supply. The description of this project also includes the water quality effects investigated in the San Luis Reservoir Low-Point Investigation.
2014	68	Chapter 3D, Page 3D-109	This Final EIR/EIIS has been revised to include the Yolo County Habitat/Natural Community Conservation

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: Unclear why "Yolo County Habitat/Natural Community Conservation Plan" is not included in the cumulative analysis.	Plan in the cumulative impact analysis.
2014	69	Chapter 3F Comment: Uncertain if the screening and selection of intake locations is consistent with 404(b)(1).	Final EIR/EIS Appendix 3F provides an overview of the steps the lead agencies followed in determining the locations of the CM-1 intakes. This information, however, was not presented as part of the required alternatives analysis required for 404(b)(1) compliance. Final EIR/EIS Appendix 1F Section 1F.2.1.1 provides an overview of the steps DWR will follow when applying for the CWA 404 permit. Please also see responses to comments 2014-7, 2014-8, and 2014-35.
2014	70	Chapter 3F Comment: Unclear if intake locations examined are the same as those under consideration for the proposed North Bay Aqueduct project, and if the opportunity to reduce impacts by having both projects share intakes was considered.	The location of the proposed intakes for Alternative 4A are not the same as the proposed North Bay Aqueduct Sacramento River intake. As indicated Final EIR/EIS Appendix 3A Identification of Water Conveyance Alternatives, Conservation Measure 1, a connection with the North Bay Aqueduct was considered as part of Initial Screening Conveyance Alternative B6. The potential alternative did not meet the screening criteria and was not carried forward for consideration in the EIR/EIS.
2014	71	Chapter 3F, Figure 3F-1 Comment: Where is the cross section drawings referred to on this figure?	Figure 3F-1 shows the location of river cross-sections that (in addition to other GIS datasets) were used to identify potential intake sites for all conveyance alignment options. All seventeen of the sites shown on the figure were evaluated using aerial maps, land use maps, recently collected bathymetry data, river cross-sections, and water surface elevations at the 99% exceedance level. Sites were analyzed and compared based on location, impacts to existing structures, potential for deposit of sediments at the face of the intake fish screens, and potential encroachment into the river cross section. Cross section figure of the intake itself or other diagrams of the intake structures are located in Volume 2 of the MPTO CER.
2014	72	Chapter 4, Page 4-2, Line 25-29 Comment: The EIR/EIS does not analyze the effects of CM1 on all required resource impact topics at a project- level; In order to implement CM1, additional NEPA analysis would be required.	Please see Master Response 2 regarding the sufficiency of the level of analysis for CM1. Although no longer identified in the preferred alternative (Alternative 4A) as "CM1", the elements of the BDCP associated with CM1, as it was described in the Draft EIR/EIS, are proposed as part of Alternative 4A. These elements are analyzed on a project-level basis for purposes of compliance with CEQA and NEPA. As discussed in previous responses to USACE comments above, DWR recognizes that an additional level of detail is required for the USACE's Section 408 approval of the North Delta Diversion facilities and this information may trigger the need for additional NEPA compliance.
2014	73	We still have many unanswered questions on how CM1 would alter water levels. Do these numbers include the raise in water surface elevations from the physical constriction of the Sacramento River as described in 6-59? Do these numbers include the effects of the full operations of the CVP and SWP including the Delta Cross Channel Gates and the export pumps at Banks and Jones Pumping Plants? What are the numbers for the other alternatives? Are these numbers the same through all seasons and water year types? Would the expected increases in water levels in some parts of the Delta have any impacts, e.g., threatening levees, enabling scour and erosion to occur higher on, impacting outfall pipes, docks or other structures, reduce the navigability of the channels by reducing the clearance under bridges? Would the expected decreases in water levels in other parts of the Delta have any impacts, e.g., requiring more dredging in marinas and by docks; requiring water intakes to be lowered, reducing the navigability of the channels by reducing the depths of the channels? What about changes in water velocity and direction of flow? Would shallower waters mean slower flow with higher levels of sedimentation and accumulation of aquatic vegetation such as water hyacinth? Would deeper waters mean higher velocities with greater erosion and scour and higher maintenance requirements for riprap/revetment on levees	Changes to surface water elevations related to proposed project operations of the proposed project and all other action alternatives are presented in Appendix 5A, Section C, of the Final EIR/EIS in Tables C-25-1 through C-25-25, C-29 -1 through C-29-25, C-30-1 through C-30-25, and C-31-1 through C-31-25. These model results include the operational effects of the SWP and CVP north Delta and south Delta diversions, Delta Cross Channel Gates, and Banks and Jones pumping plants by month for all water year types. Changes in flow patterns in the Delta are also presented in Appendix 5A, Section C, including changes in monthly Sacramento River flows downstream of the north Delta diversions. This analysis is consistent with the requirements of CEQA and NEPA NPEA. Reductions in surface water elevation does not necessarily result in changes in velocities, either higher or lower, as compared to the No Action Alternative. As described under Impact SW-7 in Chapter 6, Surface Water, in the Final EIR/EIS, the USACE, CVFPB, and DWR would require that any construction that would disturb existing levees to be designed in a manner that would not adversely affect existing flood protection. As described in Section 3.6.1 of Chapter 3, Description of Alternatives, facilities to be constructed along the levees would be designed to provide flood neutrality and to provide continued flood management at the same level of flood protection as the existing levees; or if applicable, to a higher standard for flood management engineering and permitting requirements if the standards are greater than the existing levee design during construction and operations. Additionally, DWR would consult with local reclamation districts to ensure that construction activities would not conflict with

DEIRS Ltr#	Cmt#	Comment	Response
		and structures?	<p>reclamation district flood protection measures.</p> <p>Construction within the waterways would be required to not increase erosion or sedimentation in accordance with Stormwater Pollution Prevention Permit and requirements of the USACE, Central Valley Regional Water Quality Control Board, and Central Valley Flood Protection Board, as described in Chapter 6, Surface Water.</p> <p>A more detailed presentation of project effects on navigability and water elevations, consistent with the USACE requirements for Section 408 approval, will be prepared at time of final detailed design.</p> <p>The impacts of operation of all the alternatives on aquatic vegetation was addressed in EIR/EIS Chapter 11 Fish and Aquatic Resources. This assessment estimated the impacts of invasive aquatic vegetation on aquatic species of primary management concern and is discussed at impacts AQUA-11, AQUA-29, AQUA-47, AQUA-65, AQUA-83, AQUA-101, AQUA-119, AQUA-137, AQUA-155, AQUA-173, AQUA-191, and AQUA-209.</p>
2014	74	<p>Chapter 6</p> <p>Comment: Refer to page 176-177 of the "Effects of the CVP upon the southern Delta water supply, Sacramento San Joaquin River Delta, California" (we will send you a copy if you do not have it available) for a summary of a discussion of impact of export pumps on water levels. This type of discussion, although dated, is a good example of the type of analysis/discussion which is missing from the BDCP EIS/EIR and which is needed for USACE permit decisions. Also needed would be discussion of how water levels would change with the implementation of CM1 with and without continued operations of the existing SWP/CVP diversions.</p>	<p>The CALSIM II and DSM2 modeling used for the EIR/EIS delivered the same amount of flows in the No Action Alternative and the action alternatives. Water quality changes between the No Action Alternative and the action alternatives, as discussed in Chapter 8.</p> <p>Surface water elevations are presented in Appendix 5A, Section C, of the EIR/EIS in Tables C-25-1 through C-25-25, C-29 -1 through C-29-25, C-30-1 through C-30-25, and C-31-1 through C-31-25. Changes in flow patterns in the Delta are also presented in Appendix 5A, Section C.</p> <p>Please also see responses to comment 2014-1-2014-8, and 2014-28.</p>
2014	75	<p>Chapter 6, Page 6-23, Line 24</p> <p>Comment: If this section is intended to list all surface water-related laws that may apply to BDCP CM implementation, then the Rivers and Harbors Act Section 10 and 14 should be listed.</p>	<p>The EIR/EIS analyzes all alternatives, including Alternative 4A. The Rivers and Harbors Act and the associated revisions are presented in Section 6.2.1.3 of Chapter 6 of the Final EIR/EIS.</p>
2014	76	<p>Chapter 6, Page 6-30, Line 1-3</p> <p>Comment: You quoted 230.10(d) here; however, 230.10 (a) through (c) contain relevant information that should be cited here, for example, CFR 230.10(a) "Except as provided under section 404(b) (2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences."</p>	<p>The text referred to in this comment has been modified in the Final EIR/EIS.</p>
2014	77	<p>Chapter 6, Page 6-45, Line 31-43</p> <p>Comment: Please give page numbers, not just chapters. We are unable to find the effects associated with erosion, accretion and sedimentation anywhere in the EIS/EIR.</p>	<p>Bank erosion and sedimentation potential are addressed in FEIR/EIS Chapter 10, Soils at Impact SOILS-5: Accelerated Bank Erosion from Increased Channel Flow Rates as a Result of Operations Water quality concerns and regulatory implications associated with soil erosion and sedimentation are summarized in Chapter 10, but are more thoroughly discussed in Chapter 8 Water Quality at Impacts. Erosion and sedimentation effects are discussed in Chapter 8 Water Quality at Impact WQ-31: Water Quality Effects Resulting from Construction-Related Activities for the Water Conveyance Facilities and Environmental Commitments.</p> <p>During the design phase more detailed analysis will be completed to determine the potential for erosion and methods to minimize and mitigate the erosion potential, as described in Appendix 3B, Environmental</p>

DEIRS Ltr#	Cmt#	Comment	Response
			Commitments.
2014	78	Chapter 6, Page 6-45, Line 31-43 Comment: Refer to page 151-153 of the "Effects of the CVP upon the southern Delta water supply, Sacramento San Joaquin River Delta, California" (we will send you a copy if you do not have it available) for a discussion of changes in bottom elevations in the South Delta. This type of discussion, although dated, is a good example of the type of analysis/discussion which is missing from the EIS/EIR and which is needed for our permit decisions. Also needed would be discussion of how patterns of aggradation and degradation would change with the implementation of CM1 with and without continued operations of the existing SWP/CVP diversions.	Please see responses to comment 2014-74. Surface water elevations are presented in Appendix 5A, Section C, of the BDCP EIR/EIS in Tables C-25-1 through C-25-25, C-29 -1 through C-29-25, C-30-1 through C-30-25, and C-31-1 through C-31-25. Changes in flow patterns in the Delta are also presented in Appendix 5A, Section C. As described in Chapter 10 and Appendix 3B, detailed bathymetric studies will be conducted during the design phase. This information will be used to determine sediment transport and accumulation.
2014	79	Chapter 8, Page 8-114, Line 12-29 Comment: This discussion of section 404 of the Clean Water Act both garbled and largely wrong. Recommend deleting all descriptions of U.S. Army Corps of Engineers regulations in the entire EIS/EIR document except for Chapter 32.	Per the commenter's recommendation, the Section 404 section in Chapter 8, Section 8.3.1.1 has been deleted. Chapter 1, Section 1.6.2.2, of the Final EIR/EIS includes a description of the expected USACE permits/authorizations necessary for implementation of the proposed project and alternatives. Appendix 1F Supplemental Information for USACE Permitting Requirements has been included in the Final EIR/EIS. Appendix 1F includes a discussion of the permits that may be issued by the USACE.
2014	80	Chapter 11 Comment: The impacts are not well described. The proposal of adaptive management needs clarification.	The REIR/SEIS and FEIR/EIS include revised discussions and analyses for the Chapter 11 evaluation. The adaptive management program has been refined to correspond with the new preferred Alternative 4A. Additional information regarding the adaptive management proposal is provided in the Chapters 3 and 29 of the EIR/EIS and the MMRP. Further revisions to the adaptive management program are expected through the Section 7 ESA and Section 2081 CESA processes and an updated version of this program will be submitted to the USACE during the Section 404 permit review process.
2014	81	Chapter 11, Page 10, Line 26-30 Comment: Habitat quality as a mitigating factor especially with regard to migration	As stated in the referenced portion of the document: "While in-water construction activities would temporarily or permanently alter migration, spawning, and rearing habitat conditions in the vicinity of the construction activities, the extent of the overall available habitat affected, and the relatively poor quality of the affected habitat, is expected to limit the effects of construction and maintenance activities on most covered fish species. Thus the effects would not be limiting to population productivity." Therefore, it is true that the in-water work impacts associated with the proposed project and alternatives related to aquatic species habitat would be minimal based on the existing conditions of the habitat.
2014	82	Chapter 11, Page 11, Line 4-5 Comment: Are these impacts fully described elsewhere in the document? If so this should be referenced.	This data is provided in Table 11-5. A reference to this table has been added to line section 11.0.2 Summary of Effects.
2014	83	Chapter 11, Page 11, 12, Line 19-24, 1-7 Comment: This is an extremely general statement. Maintenance activities and the associated impacts and mitigation need to be fully described and analyzed. If this is description and analysis is contained elsewhere in the document it should be referenced.	These sections in the beginning of Chapter 11 provide an overview of impacts that are detailed in the following sections of the chapter for each alternative. To the extent that maintenance activities are known, they are described in Chapter 3 and evaluated in Chapter 11. Overall, it is correct to assume that the same types of impact mechanisms would occur as described for construction.
2014	84	Chapter 11, Page 14, Line 19-25 Comment: This is confusing. Is the reduced entrainment due to improved screening?	As stated in the text, the reduced entrainment is a result of the shift in export patterns to the North Delta Diversion under some conditions.
2014	85	Chapter 11, Page 15-16, Line 25-39, 1-2	The referenced section is a summary of the impacts that are later described in detail in the Fish and Aquatic Resources Chapter. For more details on the impacts to endangered salmon, please see FEIR/EIS Chapter 11

DEIRS Ltr#	Cmt#	Comment	Response
		Comment: Clarification needed on the impacts to endangered salmon and the mitigation for those impacts.	Fish and Aquatic Resources, Section 11.3.4.2.
2014	86	Chapter 11, Page 16, Line 3-4 Comment: The Benefits need clarification.	The benefits are described for each alternative in the impact discussion section in FEIR/EIS Chapter 11 Fish and Aquatic Resources
2014	87	Chapter 11, Page 16, Line 5-35 Comment: This alternative seems to negatively affect all anadromous species. Where are the benefits?	This summary also includes a discussion of the beneficial and adverse effects of Alternative 1A on aquatic resources
2014	88	Chapter 11, Page 17, Table 11-1A-SUM2 Comment: Adverse effects to migration would reduce spawning potential; if the alternative adversely affects migration it would follow that the alternative would adversely affect spawning.	The impact statement pertaining to spawning and egg incubation is specific to habitat, not spawning potential. This analysis is consistent with the effect analysis presented in the Biological Assessment and 2081(b) Incidental Take Permit application, which was coordinated closely with the fisheries agencies. Therefore, no change was made to the referenced text.
2014	89	Chapter 11, Page 17, Line 10-11 Comment: This statement is in conflict with the information provided.	The text has been changed to remove the statement in question.
2014	90	Chapter 11A, Page 11A-60, 11A-61, Line 23-26, 16-45 Comment: Are these CALFED projects currently being funded?	<p>The referenced text is as follows:</p> <p>“Results of monitoring at the CVP and SWP fish salvage facilities and extensive experimentation over the past several decades have led to the identification of a number of management actions designed to reduce or avoid the potentially adverse effects of SWP/CVP export operations on salmon. Many of these actions have been implemented through State Water Board water quality permits (D-1485, D-1641), biological opinions issued on project export operations by NMFS, U.S. Fish and Wildlife Service (USFWS), and CDFW, as part of CALFED programs (e.g., Environmental Water Account), and as part of Central Valley Project Improvement Act actions. These requirements support multiple conservation efforts to enhance habitat and reduce entrainment of Chinook salmon by the SWP/CVP 25 export facilities.” (Page 11A-60, lines 18-26).</p> <p>“Two programs included under CALFED, the Ecosystem Restoration Program and the Environmental 16 Water Account, were created to improve conditions for fish, including winter-run Chinook salmon, in the Central Valley. As part of developing the program, a series of conceptual models (DRERIP) have been constructed to provide a framework for identifying and assessing the benefits and/or consequences of potential restoration actions. The DRERIP models are being used to evaluate proposed conservation measures, as well as restoration actions as part of the program. Restoration actions implemented by the program include the installation of fish screens, modification of barriers to improve fish passage, habitat acquisition, and instream habitat restoration. The majority of these actions address key factors and stressors affecting listed salmonids. Additional ongoing actions include efforts to enhance fishery monitoring and improvements to hatchery management to support salmonid production through hatchery releases.</p> <p>A major CALFED Ecosystem Restoration Program action currently under way is the Battle Creek Salmon and Steelhead Restoration Project. Although winter-run Chinook salmon do not currently inhabit Battle Creek, they occurred there historically. CALFED is funding the establishment of a second independent population of winter-run Chinook salmon in the upper Battle Creek watershed using the artificial propagation program as a source of fish. The project will restore kilometers 31 (48 miles) of habitat in Battle Creek to support steelhead and Chinook salmon spawning and juvenile rearing at a cost of over \$90 million. The project includes removal of five small hydropower diversion dams, construction of new fish screens and ladders on another three dams, and construction of several hydropower facility modifications to ensure the continued</p>

DEIRS Ltr#	Cmt#	Comment	Response
			<p>hydropower operations. This restoration effort is thought to be the largest coldwater restoration project to date in North America. Other than the potential benefits of the Battle Creek restoration effort, there has been very limited habitat expansion, but no substantial changes in habitat condition or availability since the ESU was listed (National Marine Fisheries Service 2011).</p> <p>As part of CALFED and Central Valley Project Improvement Act programs, many of the largest water diversions located on the Sacramento River and Delta (e.g., Glenn Colusa Irrigation District, Bureau of Reclamation [Reclamation] District 1001 Princeton diversion, RD 108 Wilkins Slough Pumping Plant, Sutter Mutual Water Company Tisdale Pumping Plant, Contra Costa Water District's Old River and Alternative Intake Project intake, and others) have been equipped with positive barrier fish screens, although the majority of smaller water diversions located on the Sacramento River and Delta remain unscreened. Reclamation District 108 has also designed and constructed a new fish screen and pumping plant (Poundstone Pumping Plant) located on the Sacramento River that consolidates and eliminates three existing unscreened water diversions. These fish-screening projects are specifically intended to reduce and avoid entrainment losses of juvenile winter-run Chinook salmon and other fish inhabiting the river." (Page 11A-61-62, lines 16-45; 1-5).</p> <p>The projects in question were funded and implemented. When presented with the entire context of the quotes, the funding element is not relevant to the impact analysis presented in Chapter 11. Therefore, no issues related to the adequacy of the environmental impact analysis in the EIR/EIS were raised.</p>
2014	91	<p>Chapter 11A, Page 77, Table 2A.4-1</p> <p>Comment: Table does not match table on page 37 from National Marine Fisheries Service Biological Opinion for the Corps operation and maintenance of Daguerre Point Dam on the Yuba River (dated 12 May 2014). The NMFS BO shows the species are present for longer time periods than is in the BDCP EIS/EIR.</p>	<p>The timing of species presence has been an ongoing topic of discussion amongst the agencies. DWR met with the fish and wildlife agencies several times during 2012 and 2013 and developed the tables in Section 2A collaboratively with them. The goal, building on what was presented in the NMFS BiOp, was to record the months of general presence with an understanding that individual fish may occasionally be seen at times outside these periods.</p>
2014	92	<p>Chapter 11A, Page 130, Table 2A.6-1</p> <p>Comment: Table does not match table on page 80 from NMFS Biological Opinion for the Corps operation and maintenance of Daguerre Point Dam on the Yuba River (dated 12 May 2014). The NMFS BO shows the species are present for longer time periods than is in the BDCP EIS/EIR.</p>	<p>Please see response to comment 2014-91.</p>
2014	93	<p>Chapter 12</p> <p>Comment: There seem to be a lot of assumptions in the effects analysis and biological outcomes, particularly the discussion that all conservation measures would be entirely successful. There is a lack of quantitative analysis to determine that the project would achieve biological objectives.</p>	<p>The commenter states an opinion that the effects analysis is based on assumptions that the conservation measures would be successful. The commenter further states that there is a lack of quantitative analysis to determine that the project would achieve biological objectives. The purpose of Chapter 12 of the Draft EIR/EIS is to evaluate the effects of construction of the water conveyance facility (CM1) at the project level and the effects of the remaining conservation measures at the programmatic level and to determine whether or not the stated conservation commitments in the BDCP are sufficient enough to offset the effects to natural communities and terrestrial species. No assumptions about the conservation measures are made in Chapter 12 outside of what the BDCP itself commits to do. Appendix 12D does quantitatively analyze whether there is suitable and sufficient lands to meet the BDCP's conservation objectives.</p>
2014	94	<p>Chapter 12</p> <p>Comment: Increased diversion of Sacramento River flows in the north Delta, and reduced diversions from south Delta channels (associated with Operational Scenario H) could result in the reduction in acreage of wetland habitats. Operational Scenario H is not articulated in the document to the degree that an accurate effects analysis can be made. The water export and flows released into the delta to protect fish and delta ecosystem</p>	<p>Please see Master Response 28 regarding the adequacy of the operational criteria. The full description of Alternative 4A operational criteria is included in Final EIR/EIS Chapter 3 Description of Alternatives. The commenter may not have reviewed the entirety of the analysis, appendices and modeling that was presented in the Draft EIR/EIS. This information was supplemented in the RDEIR/SDEIS for the three additional alternatives, and was updated in the Final EIR/EIS.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		associated with Scenario H is dependent upon future data collection and adaptive management in the projects near term. With so much uncertainty with export amounts and effects of climate change and drought, flow levels in the upstream rivers may likely change to the degree that water levels in adjacent managed wetlands would be altered. Similarly, increased diversions of Sacramento River flows in the north Delta may likely result in a permanent reduction in the managed wetland community downstream of these diversions.	
2014	95	Chapter 12 Comment: CM1 is treated at a project level of analysis whereas CM2-22 are described and analyzed at a programmatic level. Additional information is needed to effectively evaluate the CMs and their ability to mitigate adverse impacts on terrestrial habitats from proposed activities and operations associated with CM1.	The commenter states that CM1 is treated at the project level and that CM2-22 are addressed at a programmatic level. Please see Master Response 2, Project Level v. Program Level regarding program and project elements of the Draft EIR/EIS. The statement is correct and is stated in Section 12.3 of the Draft EIR/EIS. The commenter further states that additional information is needed to effectively evaluate the CMs and their ability to mitigate adverse impacts on terrestrial habitats from CM1. The commenter does not specify what additional information they believe is needed in Chapter 12. The programmatic level of analysis for CM2-22 is sufficient for the analysis of an HCP/NCCP because the exact locations of conservation actions were unknown at that time, and remain unknown. Appendix 12D does quantitatively analyze whether there is suitable and sufficient lands to meet the BDCP's conservation objectives. Future restoration projects will be subject to project level environmental review, which may include further NEPA and CEQA review and will include project level permitting (e.g., Section 404, Streambed Alteration Agreement) at the time they are proposed.
2014	96	Chapter 12, Page 12-10, Table 12-ES-3 Comment: Temporary and permanent effects to wetlands and other waters should be identified separately, that is each impact identified in a separate column.	The commenter states that the analysis of effects on jurisdictional wetlands and waters (Impact BIO-176) needs to address temporary and permanent effects separately. The methods and analysis of Impact BIO-176 was updated to reflect this approach for the RDEIR/SDEIS and the Final EIR/EIS.
2014	97	Chapter 12, Page 12-115, Line 32-39 Comment: Delete discussion on Corps permitting for CM1.	The commenter asks that the discussion regarding Corps permitting of CM1 be deleted. This section was updated for the Final EIR/EIS and will take into consideration this and any future comments on Section 404 permitting. The current approach, coordinated closely with the USACE, is to request permits from the USACE for "CM1" consistent with construction activities in relation to future USACE permitting requiring additional detail and analysis. In addition Appendix 1F Supplemental Information for USACE Permitting Requirements was included in the RDEIR/SEIS and Final EIR/EIS. This Appendix provides a detailed discussion of the USACE permitting process.
2014	98	Chapter 12, Page 12-116, Line 1-14 Comment: Delete discussion on Corps permitting for CM1.	Please see response to comment 2014-97
2014	99	Chapter 12, Page 12-118, Line 6-8 Comment: Depending on proposed project activity, Letter of Permission, Standard or General Permit from the Corps is required prior to any work begun within navigable waters and other waters of the U.S.	The commenter states that permits are required prior to any work being initiated within navigable waters. In Section 12.2.1.1, Sections 404 and 401 of the Clean Water Act, the need for permits related to fill of waters of the U.S., which includes other waters of the U.S. is addressed. On page 12-118 of the Draft EIR/EIS, in Section 12.2.1.6 Rivers and Harbor Act, it does state that "A Letter of Permission or permit from USACE is required.." No technical changes to the document have been prepared in response to the comment. Please see response to comment 2014-97
2014	100	Chapter 12, Page 12-147, 12.3.2.4 Comment: The methods used in the EIS/EIR to assess wetlands and other waters of the United States has identified less wetland acreage than have been Corps ground truthed and verified at several CM1 locations in the Delta. The under reporting of wetlands and other waters potentially affected by CM1 alternatives means that USACE cannot rely	The Draft EIR/EIS and analysis specifically related to wetlands and jurisdictional waters was prepared without the ability to access many of the locations along the proposed project right-of-way. Please also see response to comment 2014-96.

DEIRS Ltr#	Cmt#	Comment	Response
		upon the information to make even preliminary determinations of which CM1 alternative may contain the LEDPA.	
2014	101	Chapter 12, Page 12-164, Line 21-37 Comment: It appears that the EIS/EIR proposes to mitigate the impacts to waters of the US from implementation of Conservation Measure 1 by the habitat creation included as part of Conservation Measure 4. A final mitigation plan is required prior to our permitting decisions. This means that if CM4 is proposed as mitigation for CM1, than CM4 will have to be developed to a sufficient level of detail to be evaluated as acceptable mitigation for CM1. CM4 is not sufficiently described in the EIS/EIR to be evaluated as appropriate mitigation for CM1. In addition, the proposed time of 10 years or so between the impacts to waters and the mitigation would result in a mitigation ratio considerably greater than 1:1 due to temporal losses in the functions and services of those waters. Lastly, the plan for mitigation described is not compliant with USACE 2008 Compensatory Mitigation Rule.	The commenter indicates that the EIR/EIS proposes to mitigate the impact waters of the U.S. from implementation of CM1 by the habitat creation in CM4. The commenter specifically refers to the near-term analysis of tidal perennial aquatic habitat under Alternative 1A (page 12-164, lines 21-37). The Draft EIR/EIS was not proposing this but referring to what the BDCP planned on doing and discussing whether the acreage commitment is sufficient. The effects to wetlands and waters of the U.S. and a discussion of mitigation are specifically addressed in Impact BIO-176, which has been updated for the Recirculated Draft EIR/Supplemental Draft EIS and in the Final EIR/EIS. Mitigation will be applied on a project level basis and does not rely on separate conservation measure elements. The revised analysis does address the USACE 2008 Compensatory Mitigation Rule.
2014	102	Chapter 12, Page 12-165, Line 13-20 Comment: The creation of approximately 3,400 acres of high-value tidal perennial aquatic natural community as part of CM4 is possible, but without the project level analysis for CM4, the feasibility and actual implementation of this measure is uncertain; therefore, adverse effect associated with construction activities may be unavoidable.	The commenter states that a project level analysis of CM4 is necessary to determine whether it would be effective. The Draft EIR/EIS as stated in Section 12.3 evaluated CMs2-22 at a programmatic level, which is the appropriate level of analysis for an HCP/NCCP where the exact locations of all conservation efforts are yet to be determined will take place over a 50-year time period. Future restoration projects will be subject to project level environmental review, which may include further NEPA and CEQA review and will include project level permitting (e.g., Section 404, Streambed Alteration Agreement) at the time they are proposed. The effects to wetlands and waters of the U.S. and a discussion of mitigation are specifically addressed in Impact BIO-176, which has been updated for the Recirculated Draft EIR/Supplemental Draft EIS and will be further refined as needed for the Final EIR/EIS. Please also see response to comment 2014-101. The commenter is referred to Master Response 5 for more discussion the feasibility of mitigation.
2014	103	Chapter 12, Page 12-167, Line 37-40 Comment: Why wouldn't increased diversions of Sacramento River flows in the north Delta result in a permanent reduction in tidal perennial aquatic community downstream of these diversions?	The impacts on aquatic species as a result of changes in tidal perennial aquatic communities are addressed in Chapter 11 Fish and Aquatic Resources at impacts AQUA-1, AQUA-19, AQUA-37, AQUA-55, AQUA-73, AQUA-91, AQUA-109, AQUA-127, AQUA-145, AQUA-163, and AQUA-181. The potential impacts of the proposed project and alternatives were compared to both existing conditions and the No Action Alternative, based on the operational modeling, within various water year types.
2014	104	Chapter 12, Page 12-179, Line 1-10 Comment: We do not believe that the EIS/EIR should assert that mitigation for impacts of CM1 will be accomplished by the undefined and uncertain conservation measures 2-22. All mitigation for CM1 should be part of CM1.	The commenter believes that the EIR/EIS should not assert that mitigation for CM1 impacts be accomplished through CMs2-22 but should be part of CM1. The BDCP was developed with CM1 as part of an HCP/NCCP and thus developing specific compensatory mitigation for a specific project included as part of an HCP/NCCP is not appropriate. Other CMs have their own impacts that the EIR/EIS does evaluate along with BDCP's proposed conservation and AMMs to offset any such effects. As described in the Draft EIR/EIS and BDCP the timing of implementation of portions of the CMs that were developed to address the mitigation needs for implementation of CM would be on a "project level" basis and would not be "undefined and uncertain" and timing of implementation of those elements of the CMs that are for mitigation of impacts of CM1 would be consistent with the impacts. The Draft EIR/EIS evaluated whether the conservation measures committed to in the BDCP provide sufficient acreages to offset any losses, provide a framework to develop more detailed restoration plans, and provide performance standards to demonstrate success, which is a sufficient level of detail for NEPA and CEQA review. Alternative 4A provides mitigation specific to the impacts that may occur related to the construction of the north Delta Diversions and associated facilities. The commenter is referred to Master Response 5 for more discussion the feasibility of mitigation.
2014	105	Chapter 12, Page 12-187, Line 22-38 Comment: During the near-term timeframe (the first 10 years of BDCP implementation),	The commenter states that CM3 and CM7 are not clearly articulated or analyzed to insure impacts would be offset by Alternative 1A. The analysis does refer to relevant goals and objectives that further guide these conservation measures (see lines 23-42 on page 12-134 of the Draft EIR/EIS). These conservation measures

DEIRS Ltr#	Cmt#	Comment	Response
		Alternative 1A would affect the valley/foothill riparian natural community through CM1 construction losses (58 acres 23 permanent and 28 acres temporary). The natural community would be lost primarily along the eastern bank of the Sacramento River at intake sites, along pipeline routes connecting these intakes to the forebay (for CM1). The construction losses of this natural community would likely result in an adverse effect; the mitigation plan for losses, CM7 and CM3, are not clearly articulated or analyzed to insure impacts would be offset by avoidance and minimization measures and protection/restoration actions associated with CM7 and CM3. Restoration of 800 acres and protection (including enhancement) of 750 acres of 35 valley/foothill riparian natural community during the first 10 years of Alternative 1A implementation would not likely minimize this near and long-term loss of valley oak. Mitigation for the loss of this species would require decades, therefore; CM1 would likely have a permanent long term adverse effect to the valley riparian community.	and AMMs were analyzed by the chapter authors; however, the details for CM3 and CM7 and relevant AMMs were not fully restated in the EIR/EIS but rather the reader is referred to the BDCP if more detailed information is desired. The analysis does acknowledge the time lag between the impact and when the restored riparian is fully mature, which is the case for all projects that impact riparian habitat and mitigate through restoration (see lines 1-2 on page 12-188 of the Draft EIR/EIS). In addition, the author considered the amount of near-term protection (800 acres), which includes significant enhancement, and the amount of near-term restoration (750 acres) relative to the amount of habitat lost in the near-term (561 acres from CM1, CM2, and CM4) when making the effects determinations. Alternative 4A provides mitigation specific to the impacts that may occur related to the construction of the north Delta Diversions and associated facilities. No changes to the EIR/EIS were made in response to this comment.
2014	106	Chapter 12, Page 12-188, Line 20-26 Comment: Alternative 1A would affect the valley/foothill riparian natural community through CM1 construction losses (58 acres). The construction losses of this special-status natural community represent an adverse effect. Feasibility of implementing CM7 and CM3 must be further investigated before it is certain that these measures would offset adverse effects and minimize this loss.	The commenter states that the feasibility of implementing CM3 and CM7 must be further investigated before it is certain that the measures would offset adverse effects. Appendix 12D of the Draft EIR/EIS does evaluate the feasibility of implementing the conservation measures through a quantitative assessment of available lands that are suitable to meet the proposed conservation commitments under the BDCP. Furthermore, the level of detail contained in the BDCP for CM3 and CM7 is sufficient under both NEPA and CEQA. No changes to the EIR/EIS were made in response to this comment. The commenter is referred to Master Response 5 for more discussion the feasibility of mitigation.
2014	107	Chapter 12, Page 12-2015 and 12-2016, Line 39-44 and 1-5 Comment: Restoration, enhancement and protection of valley foothill/riparian habitat over the NT and LLT would not likely mitigate for adverse effects to valley oak which take decades to fully mature and cannot be replaced in-kind within a 10 to 50 year period. CM1 would have a permanent adverse impact on riparian habitats.	Please see response to comment 2014-105.
2014	108	Chapter 12, Page 12-2078, Line 28-42 Comment: CM1 conveyance facilities and operations would result in the permanent and temporary combined loss of approximately 33 acres of vernal pool crustacean habitat. In addition, conveyance facility construction could result in the indirect conversion of 10 acres of modeled vernal pool crustacean habitat in the vicinity of Clifton Court Forebay. Alternative 4 would impact 14 acres of critical habitat for vernal pool fairy shrimp. Mitigation measures (AMM12) may not be adequate to ensure there would be no adverse effects or habitat loss. In essence, AMM12 states that project design would minimize indirect effects on modeled habitat, avoid effects on core recovery areas, minimize ground-disturbing activities or alterations to hydrology to ensure there is no suitable habitat within these areas. Conveyance facilities may impact over 33 acres of vernal pool habitat due to mitigation timeframe and success rate for creation of vernal pool. Restoration and enhancement would not likely suffice for mitigation for loss.	The commenter states that AMM12 may not be adequate to ensure there would be no adverse effects or habitat loss for vernal pool crustaceans. The commenter mischaracterizes the content of AMM12. First, AMM12 does not state nor is it intended to “ensure there would be no adverse effects or habitat loss” but rather provides direction for and a commitment to avoid adverse modification of critical habitat, guides the planning phases of restoration site selection to avoid vernal pool crustacean habitat to the maximum extent practicable, requires protocol-level surveys for activities in vernal pool recovery areas, and commits to cap of 10 wetted acres of direct loss and 20 wetted acres of indirectly affected vernal pools. The commenter offers their opinion that conveyance facilities may impact over 33 acres of vernal pool habitat due to “mitigation timeframe and success rate for creation of vernal pools”. The mitigation timeframe and success rate would not result in the conveyance facility impacting more vernal pool habitat. The BDCP has committed to restoring/creating vernal pools such that there is no net loss of vernal pool acreage and has a contingency to increase the mitigation ratio to 1.5:1 if restoration takes place concurrent with impacts, as opposed to prior to impacts. The BDCP also includes the long-term protection and enhancement of 600 acres of vernal pool complex. The commenter is referred to Master Response 5 for more discussion the feasibility of mitigation.
2014	109	Chapter 12, Page 12-2083, Line 1-25 Comment: These mitigation ratios may not coincide with the Corps policies and requirements for compensatory mitigation. Preservation and restoration (versus creation) may not compensate for temporary or permanent loss of vernal pools. Considering	The commenter states that the ratios mentioned on page 12-2083 of the Draft EIR/EIS may not coincide with Corp policies and requirements for compensatory mitigation. These ratios presented are from the BDCP and were evaluated in the Draft EIR/EIS based on the Plan’s commitment to restoration, long term management, and adaptive management. The analysis presented in Chapter 12 does not refer to a temporal loss of vernal pool complex habitat for 5 to 10 years. The BDCP has committed to doing restoration prior to impacts at 1:1

DEIRS Ltr#	Cmt#	Comment	Response
		temporal loss (5-10 years) of wetland function associated with temporary adverse impacts may require a higher mitigation ratio than anticipated.	<p>and if done concurrent with impacts at 1.5:1. The BDCP conservation strategy also includes the near-term goal of protecting and enhancing 400 acres, which by the late-long term would rise to 600 acres.</p> <p>The commenter alludes to restoration being different from creation in the BDCP. The term restoration is used in the HCP/NCCP because many of these activities are re-creating habitat where it likely formerly occurred (e.g., habitats that were altered due to levee development and agricultural practices). In terms of vernal pools, there are numerous areas in the Delta, as well as the Central Valley, that were converted from vernal pool complex to areas used for dry farmed crops or pasture that still possess soil profiles suitable to recreating vernal pools. The term restoration in the BDCP does not imply taking existing vernal pools and enhancing them. Enhancement will take place on areas targeted for preservation that have become degraded due to past management activities (e.g., over grazing, ground squirrel management).</p> <p>The commenter's statement that the Corp may require higher mitigation ratios is acknowledged. DWR is coordinating closely with USACE staff to develop specific mitigation for compliance with Section 404 permit requirements. No changes were made to the EIR/EIS in response to the comment. The commenter is referred to Master Response 5 for more discussion the feasibility of mitigation.</p>
2014	110	<p>Chapter 12D, Page 12D-1, Line 16-38</p> <p>Comment: The analysis presented in the appendix supplementing the impact assessment of Chapter 12 states it assesses whether the portion of conservation measures implemented in the 10-year near-term period would offset impacts of conveyance facilities, thereby, rendering feasible at a planning level.</p> <p>However, the assessment considers if suitable conditions are present within specified conservation zones to implement the appropriate conservation measures within the near-term. This level of analysis is not at the project-level, as it does not consider socio-economic aspects of feasibility (e.g., funding, availability of properties, willing sellers of real property), and does not consider engineering feasibility of implementing the CMs. Conveyance facilities operations effects were not considered in this section either. The feasibility of offsetting the impacts of CM1 construction and operation of the water conveyance facilities (CM1) is analyzed in the EIR/EIS at a project level supposedly, while implementation of the remaining conservation measures is analyzed at a program level. It doesn't seem plausible to avoid significant adverse effects by relying upon on mitigation measures that are not fully fleshed out/not yet known to be feasible.</p>	<p>The commenter makes several statements about the adequacy of Appendix 12D. The intent and purpose of Appendix 12D is to determine whether implementing the BDCP conservation measures in the 10-year near-term time period is feasible at the planning level (i.e., are there suitable and sufficient lands). There is no requirement under NEPA or CEQA that mitigation have construction level detail in order to be determined adequate, especially for a document that is largely programmatic. The level of detail that is provided in the BDCP and referred to by reference in the Draft EIR/EIS includes enough detail to make effects determinations.</p> <p>Sufficient numbers of willing sellers will be needed to meet BDCP land acquisition needs. The availability of willing sellers is a function of many variables, including land prices, market forces for crops suitable for the land in question, landowner preferences, landowner changes (e.g., from parents to children or from one seller to another buyer), and the availability of funds to acquire land, among others. Land has been acquired for regional HCPs and NCCPs in California since the first HCP was approved in 1983 on San Bruno Mountain near San Francisco. After over 30 years of implementation, there are no examples of regional HCPs or NCCPs being unable to acquire land due to a lack of willing sellers. In the most recent example, the East Contra Costa County HCP/NCCP (approved in 2007 and began implementation in 2008), has greatly exceeded its land acquisition target to date. In that plan, which overlaps with the BDCP Plan Area, willing sellers have always been available when funding is available to purchase the lands. Consistent with the experience of every other plan in California, BDCP expects that enough willing sellers will be available to meet the land acquisition requirements of the plan. The commenter is referred to Master Response 5 for more discussion the feasibility of mitigation and willing sellers.</p>
2014	111	<p>Chapter 12D, Page 12D-23, Line 39-43</p> <p>Comment: This section addresses mitigation for vernal pool or alkali seasonal wetland at a ratio of 1:1 (if replacement occurs before the impact occurs), or at 1.5:1 if replacement occurs concurrently with the impact. There is no discussion regarding compensation for adverse effect on wetlands ecosystem function, and of the success/failure rate for compensatory mitigation.</p>	<p>The commenter states that Appendix 12D does not discuss compensation for wetlands ecosystem function and the success/failure rate for compensatory mitigation. The intent of Appendix 12D is to determine whether implementing the BDCP conservation measures in the 10-year near-term time period is feasible at the planning level (i.e., are there suitable and sufficient lands) and is not intended to be an analysis of the effectiveness of BDCP conservation measures in mitigating effects. Impacts BIO-18, BIO-21 and BIO-32 in Chapter 12 evaluate the effectiveness of the BDCP conservation measures in mitigating effects to alkali seasonal wetland, vernal pools, and vernal pool crustaceans, respectively, which includes evaluating the biological goals and objectives of the plan as well as the commitment of the BDCP in assuring that ecosystem functions and values are replaced through long term adaptive management and monitoring.</p>
2014	112	<p>Chapter 12D, Page 12D-28, Table 12D-9</p> <p>Comment: Mitigation ratios used for compensatory mitigation for impacts to</p>	<p>The commenter states that compensatory mitigation for impacts to wetlands/waters of the U.S. must be approved by the USACE and that a 1:1 ratio is not a standard ratio for the section 404 program. The ratios</p>

DEIRS Ltr#	Cmt#	Comment	Response
		wetlands/waters of the US impacts must be approved by Corps. A ratio of 1:1 for vernal pools is not a standard ratio in the section 404 program.	referred to in Appendix 12D are minimum commitments in the BDCP for the conservation of species and are not specifically addressing the requirements under the Section 404 program. The Draft EIR/EIS does acknowledge that a 404 permit will be required and the updated Impact BIO-176 in the Recirculated Draft EIR/Supplemental Draft EIS does address the mitigation requirements under Section 404 of the Clean Water Act.
2014	113	Chapter 18 Comment: The document is overwritten and obscures the process rather than explaining it to the public.	Please see Master Response 38 for a discussion of the length and complexity of the document.
2014	114	Chapter 18 Comment: The federal process is downplayed and is virtually absent from the document.	This comment was addressed in the RDEIR/SDEIS through Sections 18.2.1.3 and 18.2.1.4, which provide information on Section 106 compliance specific to the BDCP, and the Native American Graves Protection and Repatriation Act, respectively. The federal processes are also highlighted in Chapter 1 of the Final EIR/EIS.
2014	115	Chapter 18 Comment: The Impacts/Mitigation Measures are split too finely. They could easily be stated in 4 instead of 8: Archaeological sites, Built environment, Traditional Cultural Properties, and Unanticipated Finds/Effects.	The Impacts/Mitigation Measures were organized so that mitigation measures were specific enough to address impacts. No change is made to the document.
2014	116	Chapter 18 Comment: The BDCP is constrained by state law from waiting until after the formal evaluation of cultural resources prior to determination of eligibility within this document. It is my understanding that determinations of eligibility cannot be rescinded on a state level once made. If the determination of eligibility/significance cannot be reversed, unnecessary funds may be expended to mitigate for resources that do not meet the National Register of Historic Places or California Register of Historic Resources criteria. There should be some discussion concerning this limitation within the document that explains why sites that have not been evaluated are being considered eligible.	Master Response 20 provides a discussion of the cultural resources assessment conducted for the EIR/EIS.
2014	117	Chapter 18 Comment: The References Cited section is incomplete and should be updated. Not all previously recorded sites were captured in the record search. There appears to be confusion in the document concerning the ability to access a property and the presence of sites and/or the determination of a site's eligibility. Recommend clarifying process.	The references section of the Draft EIR/EIS and RDEIR/SDEIS have been updated and the version in the Final EIR/EIS is considered complete. The commenter's opinion related to the DEIR/S is acknowledged. The records searches were based on the California Historical Resources Information System (CHRIS) data for the Study Area. CHRIS records searches are the industry standard for identification of previously recorded cultural resources. DEIR/S Section 18.11 explains the methodology for identification, including methods other than field survey, of cultural resources and also the amount of the proposed footprint where field surveys were completed. Also, DEIR/S Section 18.3.5 is organized in such a way so that effects and impacts on identified and as yet unidentified cultural resources are analyzed. Please also see Master Response 20.
2014	118	Chapter 19 Comment: The Delta King appears to be the largest vessel which recently navigated past the locations of the proposed intakes for CM1. Could such a vessel continue to navigate past the proposed CM1 intakes on the Sacramento River, both during and after construction, including operating of the new intakes with and without continued operations of the existing SWP/CVP diversions?	Please refer to Chapter 19, Transportation for impacts of the project alternatives on marine traffic and navigation. Navigation during construction and operation of intakes on the Sacramento River will not be substantially affected because intakes would be constructed on the river bank adjacent to levees and the width of the Sacramento River is sufficient to accommodate boating traffic during construction of intakes. Please also see response to comments 2014-1, 2014-2, 2014-7, 2014-14, 2014-27, and 2014-31.

DEIRS Ltr#	Cmt#	Comment	Response
2014	119	<p>Chapter 19</p> <p>Comment: Navigational discussions are incomplete. No mention of in-delta navigation or what impacts CM1 would have on navigation, with or without continued operations of the existing SWP/CVP diversions. Refer to the USACE publications "Waterborne Commerce of the United States" at http://www.navigationdatacenter.us/wcsc/wcsc.htm. In 2011, 25,000 tons of sand and gravel (6-9 ft vessel draft) were shipped on Middle River, CA; 24,000 tons of sand and gravel (6-9 ft vessel draft) were shipped on Mokelumne River, CA; 12,000 tons of sand and gravel (10-12 ft draft) were shipped on Old River, CA. In 2010, 59,000 tons of sand and gravel (10-12 ft draft) were shipped on Old River, CA. In 2009, 18,000 tons of sand and gravel (6-9 ft draft) were shipped on Old River, CA. In 2007, 140,000 tons of sand and gravel (10-12 ft vessel draft) were shipped on Middle River, CA. Need discussion of how water depths, velocity, direction of flow, and patterns of aggradation and degradation would change with the implementation of CM1 with and without continued operations of the existing SWP/CVP diversions and its impacts to shipping on Middle River, Mokelumne River and Old River.</p>	<p>Since the time of the Draft EIR/EIS additional navigation impact analyses have been added to Chapter 19, Transportation and Appendix 1F, Supplemental Information for U.S. Army Corps of Engineers has been added to this Final EIR/EIS. Please also see response to comments 2014-1, 2014-2, 2014-7, 2014-14, 2014-27, and 2014-31.</p>
2014	120	<p>Chapter 19, Page 19-184, Line 23-40</p> <p>Comment: Extension from the bank into the Sacramento River is not the only factor in determining impacts to navigation. The depth of the River is also important; if the facility is located in the deepest side of the River its impacts to navigation would be disproportionate to its extension from the shore. In addition, intakes could also affect navigation by altering the water depth, velocity, direction of flow, and patterns of erosion and accretion, both by the physical structure of the intakes as well as the diversion of water by the intake. Also another example of lack of specificity which affects USACE ability to compare alternatives as well as different intake locations.</p>	<p>Please see response to comments 2014-1, 2014-2, 2014-7, 2014-14, 2014-27, 2014-31, and 2014-119.</p>
2014	121	<p>Chapter 30</p> <p>Comment: For Section 14 review, Chapter 30 should contain a write-up/discussion of Executive Order 11988.</p>	<p>Appendix 1F Supplemental Information for USACE Permitting Requirements has been added to the RDEIR/EIS and Final EIR/EIS. The appendix includes a discussion of EO 11988 and steps required to comply with the order.</p>
2014	122	<p>Chapter 32</p> <p>Comment: Executive Order 11988 was left out of this list and does need to be considered and addressed.</p>	<p>Please see response to comment 2014-121</p>
2015	1	<p>I strongly believe that if these tunnels are built they will have a detrimental effect on our rivers and wildlife in Northern California.</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>The comment does not raise any environmental issue related to the 2013 Draft EIR/EIS or the 2015 RDEIR/SDEIS. Developed to meet the rigorous standards of the federal and state ESAs, 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.</p>
2015	2	<p>With the severe drought conditions that we are having at the present time, I see no positive effect from the tunnels that would send water that we very much need to the</p>	<p>With respect to the drought, the proposed intakes would only be permitted to operate with regulatory protections, including river water levels and flow, which would be determined based upon how much water</p>

DEIRS Ltr#	Cmt#	Comment	Response
		southern portion of the state.	is actually available in the system, the presence of threatened fish species, and water quality standards. Flow criteria would be applied month by month and according to water year type. More information on the ranges of water project diversions, based on water year types and specific flow criteria, can be found in BDCP, Chapter 3 (Conservation Strategy). Also, refer to Master Response 35 (Southern California Water Supply). The plan does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. Water deliveries from the federal and state water projects under a fully implemented project would be about the same as the average annual amount diverted in the last 20 years.
2016	1	Only two options for California's water problems exist, more reservoirs and desalinization plants. Altering the amount of fresh water going through the Delta will not only destroy the salmon but it will also severely impact the Dungeness Crab. Dungeness Crab Larva need a clean estuary to survive and without the fresh water flowing, the San Francisco Bay's water quality will plummet. Please do not destroy California's Natural Estuary.	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>The proposed 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. 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 conservation as well as other water supplies such as recycling (as described in Section 1.C.3 of Appendix 1C, Demand Management Measures). For more information regarding aquatic impacts and its associated mitigation please see Chapter 11.</p> <p>For more information regarding purpose and need of the proposed project please see Master Response 3.</p>
2017	1	Please do not proceed with the Delta twin tunnels plan. The implementation of this ill-thought scheme will bring more future water woes to our state. Conservation is the key.	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>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. The proposed 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, and the recovery and conservation of threatened and endangered species that depend on the Delta.</p> <p>Although components such as desalination plants and demand management measures have merit from a statewide water policy standpoint, and are being implemented or considered independently through the state, they are beyond the scope of the proposed project. 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 conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage. Refer to Master Response 6 and Appendix 1C for further information on demand management measures, including increasing agricultural water use efficiency and conservation.</p>
2018	1	This project is nonsense! As a retired tax payer I do not want to support agribusinesses and oil and gas businesses so they can waste our precious water and make the rest of the citizens pay the bill! How many times do we have to let our California government know that we do not want to build unnecessary tunnels to send our much needed water to Southern California! Perhaps they need to stop watering their golf courses and filling their	This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.

DEIRS Ltr#	Cmt#	Comment	Response
		swimming pools instead!	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. For more information regarding purpose and need of the proposed project please see Master Response 3.
2018	2	Overall, the tunnels are unnecessary and fiscally irresponsible. The existing aqueduct could be reinforced and other local water projects like rainwater collection could be implemented instead, providing a much greater benefit at a lower cost.	Reinforcing the existing aqueduct would not meet the purpose and need of the proposed project to improve the ecosystem of the Delta and improve water supply reliability. Please see Appendix 1C in the FEIR/EIS for information on water use efficiency programs being implemented to reduce water demand throughout the state.
2020	1	I would like to add that southern CA should never have been developed into the agriculture center it is today - it's not sustainable, it never was and is impossibly so in drought years. Agriculture needs to be flexible.	This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter. The BDCP/California WaterFix project is being proposed to address the conflict between the ecological needs of a range of at-risk Delta species and natural communities, while providing for more reliable water supplies for people, communities, agriculture, and industry.
2020	2	Climate change is real so farmers need to change their crops, their locations or both.	The BDCP/California WaterFix project is being proposed to address the conflict between the ecological needs of a range of at-risk Delta species and natural communities, while providing for more reliable water supplies for people, communities, agriculture, and industry.
2020	3	Non-orchard crops can be relocated to more sustainable areas - or even states. Government needs to ban all recreational water usage and look at ways of reclaiming gray water. No pools, no fountains, eliminate waste. Not enough is being done regarding conservation and instead energy is being wasted on how to exploit the areas not hit by drought. And what happens when you bleed the river dry? Non-orchard crop farms and livestock farms need to move to more sustainable regions.	The project is being proposed to address the conflict between the ecological needs of a range of at-risk Delta species and natural communities, while providing for more reliable water supplies for people, communities, agriculture, and industry. The proposed project does not propose any changes to existing agricultural practices or water-use practices. The Lead Agencies do not have the authority to designate what water deliveries are used for. Please refer to Master Response 34 regarding the potential uses of water delivered via proposed conveyance facilities.
2021	1	It won't be long before everyone recognizes that proposals like this are outmoded at best. Southern California should institute fines for wasting water, and agribusiness should look into underground cisterns to capture rain, and should look into permaculture and increased labor inputs for increased yields and reduced water needs. Too many places are water-threatened now and in the near future--we can just be grabbing from "elsewhere." And wildlife is one of, has to be in the future, one of our constituents, because species diversity/species extinction affects us all.	This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter. Enforcement of the Governor's recent water conservation ordinances and the orders by the State Water Resources Control Board are the responsibility of local water districts and are not part of the project. 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. Refer to Chapter 32 (Public Involvement, Consultation, and Coordination) in the Draft EIR/EIS and Master Response 40 (Public Outreach Adequacy). The preferred alternative is now Alternative 4A (i.e., the California WaterFix Project) and no longer includes an HCP. Appendix 3A describes the range of conveyance alternatives considered. Appendix 1B describes the potential for additional water storage and Appendix 1C describes conservation, water use efficiency, and other sources of water supply including desalination. While these elements are not part of the project, they are important tools in managing California's water resources. The project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. The BDCP, as well as the California WaterFix Project, is one component, among many, of the California Water Action Plan. That Plan recognizes that all Californians have

DEIRS Ltr#	Cmt#	Comment	Response
			<p>a stake in the future of our state’s water resources, and that a series of actions are needed to comprehensively address the water issues before us. The five-year agenda spells out a suite of actions in California to improve the reliability and resiliency of water resources and to restore habitat and species.</p>
2022	1	<p>Any sensible person can see that the outrageous twin tunnels plan would be extremely damaging and disrupting to both wildlife and farmers. It's one more boondoggle to serve the interests of Stuart Resnick and big agribusiness at the expense of California citizens, especially Delta farmers, fishermen, and wildlife.</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>Providing regulatory oversight to agribusinesses is outside the scope of the project. Since 2006, the project has 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. All of the documents, studies, administrative drafts, and meeting materials have been posted online since 2010 in an unprecedented commitment to public access and government transparency (see Master Response 41 [Transparency]). See Chapter 32, Public Involvement, Consultation, and Coordination, EIR/EIS, for details on public participation. Master Response 5 details the proposed governance structure and implementation for the project. Socioeconomic effects of the alternatives are assessed in Chapter 16 of the Draft EIR/EIS. A Draft BDCP Statewide Economic Impact Report has been published and indicates that the project would result in a substantial economic net benefit to the State. The preferred alternative is now Alternative 4A (California WaterFix Project) and no longer includes an HCP. The project was initiated by former Governor Arnold Schwarzenegger, who was twice elected by a majority of California voters. The process has continued under the administration of his successor, Edmund G. Brown, Jr. Hence, the project has been initiated and carried forward by two Governors acting on a mandate from the voters of the State as a whole.</p>
2022	2	<p>California taxpayers would end up paying for this outrageous plan to ship more water directly to Valley water contractors. It is shameless theft of a resource that belongs to all of us.</p>	<p>Please see Master Response 5 for a discussion of the proposed project funding approach.</p> <p>Please note that the preferred alternative is now Alternative 4A, which reduces the cost of the proposed project and shifts financial responsibility to state and federal water contractors receiving exported water.</p>
2023	1	<p>Northern California needs water too. If the sea level rises 5 feet, water will be running up the Sacramento [River] rather than down it.</p>	<p>This comment letter is in part a form letter that has been submitted by many commenters. To locate the response to the form letter portion of the comment, please refer to the index of commenters in Chapter 4 of Volume II of the Final EIR/EIS, and cross reference the Form Master letter number shown there with the index of Form Masters also provided in Chapter 4 of Volume II of the Final EIR/EIS. The text below responds to the specific substantive portions of the comment letter that were submitted by the commenter.</p> <p>The modeling completed for the EIR/EIS indicates that surface water elevations will rise and salinity intrusion will occur with sea level rise, as shown in Appendix 5A, Section C, and Appendices 8G and 8H in the Final EIR/EIS. This will occur with or without the proposed project implementation.</p>
2024	1	<p>Friends of the River (FOR), the California Water Impact Network (C-WIN), the California Sportfishing Protection Alliance (CSPA), and the Environmental Water Caucus (EWC) (a coalition of over 30 nonprofit environmental and community organizations and California Indian Tribes) here provide detailed scoping comments for consideration by the California Department of Water Resources "and the other state and federal agencies leading the Bay Delta Conservation Plan (BDCP) [that] will publish a Recirculated Draft BDCP, Draft EIR/EIS , and Draft Implementing Agreement (IA) in early 2015."</p> <p>Our organizations have communicated several times to BDCP officials our concerns about deficient analysis of alternatives in the BDCP process. 1 The single most glaring deficiency</p>	<p>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.</p> <p>The new proposed project, Alternative 4A, significantly reduces the amount of planned habitat restoration, compared to the originally preferred BDCP HCP alternative, Alternative 4. Instead, the proposed project includes habitat restoration necessary 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).</p> <p>Please see Master Response 4 regarding Alternative Development. The action alternatives could only divert the amount of water under the existing SWP and CVP water rights and in accordance with the existing and</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>in the BDCP process and documents to date remains the failure of the BDCP agencies to develop and consider a range of reasonable alternatives that would increase freshwater flows by reducing exports. We addressed this in our letter of September 4, 2014. We are concerned that BDCP agencies continue to conceal this central problem for the Tunnels project from the public by their continuing refusal to post comments and correspondence on the BDCP website. Nor have we had</p> <p>the courtesy of a reply to our letter of September 10, 2014 requesting "scoping" notices and participation and asking "How do Interested Parties Contact You?"</p> <p>We here summarize (in sections I through 7 below) our previous salient points about specific deficiencies. These deficiencies must be properly scoped and corrected in BDCP's revised, recirculated documents when they are reissued next year. In the wake of letters critical of BDCP from the US Environmental Protection Agency and the US Army Corps of Engineers, you have a number of difficult compliance and funding problems in revising BDCP documents for the next public review period. Many of these agencies' comments and observations about BDCP, its EIR/EIS, and its draft Implementing Agreement raise points echo our comment letters this summer. This letter is intended to clarify specific areas where changes must be made to bring BDCP documents, and the project on which they are based, into compliance with law and environmental sustainability. We reiterate: the most basic change needed is to increase freshwater flows through the Delta.</p>	<p>future related regulatory requirements based upon river water levels and flow, water available in the system, the presence of threatened and endangered fish species, and water quality standards. More information on the ranges of proposed water diversions, based on water year types and specific flow criteria, can be found in Chapter 3, Section 3.6.4.2, North Delta and South Delta Water Conveyance Operational Criteria, EIR/EIS. 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.</p> <p>All formal comments received on the DEIR/EIS and RDEIR/SDEIS have been catalogued, evaluated, and responses incorporated into the Final EIR/EIS. All of the comments on the RDEIR/SDEIS were also made available on the project website. Comments received during the public review and other forms of public engagement resulted in changes to the preferred project (Alternative 4A is now the preferred alternative). The Final EIR/EIS has incorporated all public review comments and responses.</p> <p>Please see Master Response 46, Recirculation/Scoping, and 42 regarding Public Comments</p>
2024	2	<p>Environmental Justice, Free Speech, and Full Disclosure Issues</p> <p>The BDCP agencies must refrain from using their web site as a propaganda tool to simply promote the Plan and instead post all comments, whether supportive or critical, on the BDCP web site. BDCP manipulates its web site to limit and exclude viewpoints critical of BDCP, rather than simply moderate them. BDCP agencies are all public agencies and have obligations under the U.S. Constitution's First Amendment, the California Constitution, and the California Government Code, as well as the California Environmental Quality and the National Environmental Policy Act to employ the web site to further full public disclosure of viewpoints about BDCP, which would benefit environmental justice communities, and promote full disclosure about the Bay Delta Conservation Plan.</p> <p>Enforcing the Public Trust Doctrine is an environmental justice issue. The Delta is a common pool resource, as recognized by the Department of Water Resources. Delta public trust</p> <p>resources-the listed and covered fish species and the non-covered fish species of the Delta alike-are all nurtured at some point in their lives (if not their whole lives) in the Delta common pool. Members of environmental justice communities in the Delta live, play, work, and subsist in and through the resources of the Delta common pool. State government has a fiduciary responsibility and obligation to protect the public trust. The Public Trust Doctrine is an affirmation of the duty of the state to protect the people's common heritage in streams, lakes, marshlands, and tidelands.</p> <p>Restore the Delta for all. Accordingly, it is incumbent on the BDCP agencies to produce a revised plan that seeks to restore the Delta for all interested parties, including the beneficial users from environmental justice communities. BDCP agencies need to overcome previous barriers to participation faced by members of environmental justice communities, including access to decision-making processes, provision of language translations, and interpretation of BDCP meetings. Environmental justice issues also span</p>	<p>The Federal and State Lead Agencies have done their best to make the EIR/EIS for the proposed project as fair, objective, and complete as possible. The Lead Agencies are following the appropriate legal process and are complying with CEQA and NEPA in preparing the EIR/EIS for the proposed project. These agencies readily acknowledge, however, that the document addresses a number of topics for which some scientific uncertainty exists. Such uncertainty can give rise to differing opinions as to what conclusions may be reached.</p> <p>As described in Appendix 3A, Section 3A.9.3, of the 2013 Public Draft EIR/EIS the State Water Resources Control Board prepared a Delta Flow Criteria Report in accordance with the requirements of the Sacramento-San Joaquin Delta Reform Act of 2009. Information from that report included "determinations of flow criteria for the Delta ecosystem to protect public trust resources. The report makes clear, however, that the flow criteria do not consider the balancing of public trust resource protection with public interest needs for water. The flow criteria also did not consider other public trust resource needs such as the need to manage cold-water resources in reservoirs tributary to the Delta. Nonetheless, the flow determinations contained in the Delta Flow Criteria Report, together with recent scientific conclusions of other State and federal agencies, including the Department of Fish and Wildlife, National Marine Fisheries Service, and the Interagency Ecological Program provide a useful guide to establish one side of a reasonable range of alternatives" (State Water Resources Board letter dated April 19, 2011). The information in the flow criteria report was used to inform the development of the proposed project.</p> <p>Due to the sheer size of the BDCP and the EIR/EIS for the BDCP, translation of the entirety of these documents was impractical and therefore inappropriate.</p> <p>Even so, BDCP and EIR/EIS Fact Sheets were translated into Spanish, Hmong, Cambodian, Tagalog, Chinese (Mandarin), and Vietnamese. Translated fact sheets were posted to the website and hard copies were provided upon request. Additionally, a multilingual toll-free phone line has been established for questions about the BDCP, which includes information in Spanish, Tagalog, Vietnamese and Chinese (Mandarin) in addition to English (based on Census data) as well as Hmong and Cambodian (based on requests).</p> <p>The California Water Action Plan recognizes that all Californians have a stake in the future of our state's</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>the scope of drinking water quality and supply, land use risk and hazards, water transfers that cross the Delta, impacts to affordable housing and transportation equity, air quality, public health, and jobs and economic impacts. [footnote: See the EWC's detailed comment letter of June 11, 2014, pp. 23-27, 116-117, 135-138, 164-166, 191-192, and 227-254. Accessible online at http://ewccalifornia.org/reports/bdcpcomment_s6-11-2014-3.pdf.]</p>	<p>water resources, and that a series of actions are needed to comprehensively address the water issues before us. The five-year agenda spells out a suite of actions in California to improve the reliability and resiliency of water resources and to restore habitat and species — all amid the uncertainty of drought and climate change. For more information regarding future developments of the California Action Water Plan please follow http://resources.ca.gov/docs/Final_Water_Action_Plan_Press_Release_1-27-14.pdf. Future committees for the Proposed Project implementation may provide future opportunities for innovative input as well.</p> <p>The California Water Plan evaluates different combinations of regional and statewide resources management strategies to reduce water demand, increase water supply, reduce flood risk, improve water quality, and enhance environmental and resource stewardship. Follow the California Water Plan here: http://www.waterplan.water.ca.gov/.</p> <p>Please see Master Response 40 Public Outreach Adequacy, Master Response 41 Transparency, and Master Response 42 Public Comments.</p>
2024	3	<p>Endangered Species Act/Natural Communities Conservation Planning Act Issues</p> <p>Early Disclosure of Incidental Take of Covered Species. BDCP must disclose to the public during the public review period incidental take levels in the recirculated BDCP and EIR/EIS to be inserted in the incidental take permits for covered species. It is too late for adequate participation by the public to release take levels as part of proposed issuance of the permits themselves. Such a process defeats the public's important role in reviewing BDCP, its associated documents, and the proposed levels of incidental take.</p> <p>Complying with All Laws Will Firm Up Needed Assurances. BDCP must upgrade what are currently inadequate biological and ecological assurances concerning covered fish species. The Delta Independent Science Panel's review confirmed our analysis that there are flawed habitat restoration hypotheses employed in the habitat restoration conservation measures of the Plan. The US EPA has noted, bolstering our arguments in previous comments, that the Tunnels project will create outflow and hydrodynamic issues that will reduce salmon survival rates and increase Delta smelt entrainment risks at the North Delta intakes. There are also stranding issues in Yolo Bypass and potentially other restoration opportunity areas. Climate change analysis is noted by US EPA and ourselves as inadequately handled in BDCP documents. Real-time operations and adaptive management processes are relied upon by BDCP as crutches to cover over serious uncertainties associated with scientific and organizational gaps in Tunnels and Conservation Measure 2 (i.e., Yolo Bypass fish</p> <p>facilities) contributing to stranding and habitat restoration deficiencies. Other stressor measures, such as potential selenium, mercury, and methyl mercury issues, in the overall Conservation Strategy have similar gaps and uncertainties.</p> <p>No Water Quality Violations by the Tunnels Project. Operation of the Tunnels project would cause increased residence times throughout the Delta, as we documented in our June comments, and which US EPA confirms in their appraisal of the project. Water quality violations of objectives established by the State Water Resources Control Board and EPA are to be expected for salinity, electrical conductivity, mercury, methyl mercury, selenium, pesticides, and other constituents.</p> <p>Fix Models and Improve Forecasting Accuracy. Modeling of upstream storage and carryover for supplies and temperature control must be clarified and addressed, as found</p>	<p>Alternative 4A, the California WaterFix proposed action, will be subject to incidental take authorization under ESA Section 7 and CESA Section 2081(b), and will therefore be subject to review by federal and state fisheries agencies. The Alternatives to Take analysis presented in the 2013 Draft BDCP and required by Section 10 of the ESA is not applicable to the new Proposed Project, Alternative 4A. 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.</p> <p>In addition, please see Master Response 29 regarding the Endangered Species Act and 45 regarding Permitting. Please see Master Response 3 for further information regarding the level of detail provided in the EIR/EIS Analysis</p> <p>Please see Master Response 5 regarding BDCP Conservation Measures. 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. As exports are reduced, Delta outflows increase. The range of alternatives included in the EIR/EIS would result in a wide range of changes in Delta outflows 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. Similarly, Alternatives 6A, 6B, 6C; 7; 8; and 9 would result in greater average annual Delta outflow than under the No Action Alternative. 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 in the 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.</p> <p>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 Project, 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 Project will continue to be pursued as part of existing projects and programs. Examples of these include habitat restoration addressed in the 2008 and 2009 USFWS and NMFS biological opinions (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.</p> <p>The setting is not deficient in its characterization of current water quality conditions, presenting a</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>by US EPA, the Corps, and the independent modeling review by MBK Engineers.</p> <p>Additional Changed Circumstances Needed. The list of "changed circumstances" in the Bay Delta Conservation Plan should be expanded to include increased discharge of selenium, arsenic, boron, molybdenum, and other toxic contaminants known to occur naturally in the drainage impaired lands of the western San Joaquin Valley that are tributary to the San Joaquin River. This is necessary so that the costs of drainage remediation are borne by the BDCP Applicants and are not externalized onto the public at large.</p> <p>Adaptive Management Should Not Be a Crutch. Reduce the reliance of the Bay Delta Conservation Plan on adaptive management as a substitute for regulatory authority of the State Water Resources Control Board and other appropriate regulatory agencies.</p>	<p>comprehensive description of existing conditions complete with citations to current literature and data summaries. Additional data would be just that and would not contribute to an appreciably altered characterization of existing conditions. The data that were compiled were of sufficient quantity and quality to characterize conditions for all constituents of concern to all beneficial uses that would be affected by the project alternatives throughout the study area and support the qualitative and quantitative assessments. Collection of additional field data is not part of the scope of the setting nor was it necessary given the extent of data that was available.</p> <p>Please see Master Response 14 regarding Water Quality and 30 regarding Modeling.</p> <p>Please see Master Response 33 regarding Adaptive Management.</p>
2024	4	<p>Funding Assurances and Financing Plan Issues</p> <p>Needed Financial Assurances. Recirculated BDCP documents, including especially the Plan's financial/cost sections, and the draft Implementing Agreement, must include:</p> <p>Funding sources, amounts, and uses for the Supplemental Adaptive Management Fund (intended for use purchasing water for environmental flows into the Delta)</p> <p>Detailed financing plan, including state and federal water contractor participation commitments, and local financial sources and uses statements that indicate extent of reliance by participating agencies on water rate increases, State Water Project property tax increases, and other potential sources of revenue such as special parcel taxes subject to vote of the electorate.</p> <p>Detailed financing plan for creation and expansion of the BDCP Natural Reserve called for in Conservation Measure 3, including specific plans for acquisition of existing restoration sites, as well as prospective new ones. This is necessary to ensure clear understanding by the public about what BDCP Applicants acquire as existing habitat restoration projects initiated by others versus what BDCP Applicants actually create with restoration funding resources.</p> <p>Stabilize the unreasonable baseline assumptions concerning future Delta water exports by conducting a more diversified alternatives analysis in BDCP Chapter 8, parallel to the revised alternatives analysis that will be required for the Draft EIR/EIS.</p> <p>Directly and in good faith address and analyze BDCP Tunnels project's poor cost competitiveness with other cheaper water source alternatives.</p> <p>[Improve the inadequate analysis of water demand by both urban and agricultural customers by conducting several previously omitted analyses:</p> <p>Evaluate each BDCP Applicant's realistic ability to reduce reliance specifically on imported water supplies from the Delta (as required by the Delta Reform Act).</p> <p>Apply demand elasticities to the customer service areas of both agricultural and urban BDCP Applicants to determine economically what alternative levels of investment would be needed to meet their demand for water. This should be done using a transparent, reasonable methodology which in so doing helps decision makers and the public evaluate</p>	<p>The proposed project is costly, but proponents have assessed the benefits as described in the funding sources. Notably, the water contractors benefitting from the proposed project and their constituents will bear all costs associated with constructing new conveyance facilities and mitigating for the impacts of those facilities.</p> <p>The proposed project, Alternative 4A which is the new preferred alternative, is estimated to cost significantly less relative to the former preferred alternative, Alternative 4. The difference in cost is largely due to the reduced level of restoration specifically funded by the project, as well as other Conservation Measures that are not included under Alternative 4A. As such, the total estimated cost for Alternative 4A is \$14.9 billion in undiscounted 2014 dollars. The estimated cost to implement the former preferred alternative is \$24.7 billion in undiscounted 2012 dollars. The construction of the water delivery facilities is estimated to cost \$14.9 billion, an amount that would be paid for by the state and federal water contractors who rely on Delta exports. The range of costs for water vary widely among contractors south of the Delta. Costs depend on the source of water, transport facilities, energy requirements, among other factors. For the agricultural customers of the CVP, prices range from \$100 per acre-foot to more than \$400 per acre-foot. The Metropolitan Water District of Southern California, which buys water from the SWP, estimates that the cost of the proposed project would translate into about \$5.00 extra per household, per month in its service area. The final cost of water from the new conveyance facilities would be determined by numerous factors. A number of these significant factors, such as the project yield and allocation of costs, have yet to be determined. Please see Master Response 5 for information regarding funding of the proposed project, and Master Response 1 regarding Environmental Baselines.</p> <p>As discussed for each impact under each alternative (Chapter 16 Socioeconomics, Impact ECON-4 EIR/EIS), the lead agencies would make arrangements to compensate local governments for the loss of property tax or assessment revenue for land used for constructing, locating, operating, or mitigating for new Delta water conveyance facilities. Notably, California Water Code section 85089 provides that "[c]onstruction of a new Delta conveyance facility shall not be initiated" until the benefitting federal and state water contractors, or a joint powers authority representing them, have made arrangements or entered into contracts requiring them to pay for both (a) the "costs of the environmental review, planning, design, construction, and mitigation" required for such a facility and (b) "[f]ull mitigation of property tax or assessments levied by local governments or special districts for land use in the construction, location, mitigation, or operation of new Delta conveyance facilities."</p> <p>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</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>need for the Tunnels project of Conservation Measure 1.]</p> <p>Include "step-up" provisions in contractual requirements for all water contractors participating in Delta Tunnels financing arrangements, and then determine which BDCP Applicants and other potential water contractors are still willing to participate and where water would come from (i.e., only the State Water Project or would there also be wheeling arrangements with the Central Valley Project?).</p>	<p>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.</p> <p>Similarly, for land acquired for habitat restoration measures under the environmental commitments (see Impact ECON-16), the lead agencies would compensate local governments and special districts for forgone revenue.</p> <p>Please see Master Response 31 regarding Compliance with the Delta Reform Act, and Master Response 3 regarding Purpose and Need.</p>
2024	5	<p>Governance and Assurances</p> <p>Ensure that ecological assurances are supported, rather than undermined, by BDCP's governance structure.</p> <p>Make BDCP biological goals and objectives critical to incidental take permit compliance.</p> <p>Make BDCP biological goals and objectives accountable to provisions of the Delta Reform Act of 2009 that require that BDCP demonstrate recovery of listed fish species.</p> <p>Sever control of all habitat restoration funds from the BDCP Implementation Office, and make its control directly proportional to habitat restoration funds invested by BDCP Applicants.</p> <p>Recognize the impossibility of adhering to both the "No Surprises " Rule and to a fully-functioning and integrated Adaptive Management Program.</p> <p>BDCP stacks the deck of governance and decision-making responsibility in favor of Tunnel operations, which violates the Delta Reform Act's co-equal goals.</p> <p>Address and clarify the Bureau of Reclamation's Role. Describe how BDCP will overcome the legal asymmetry imposed by the Bureau of Reclamation's exclusion from ESA Section 10 eligibility to participate in a habitat conservation plan. How would the BDCP agencies (including the Bureau) still meet Section 10 ecological and funding assurance requirements?</p> <p>Address the lack of funding assurances, currently visible in the Plan, in the Draft Implementing Agreement as well.</p> <p>Obtain a legal opinion from the State Attorney General about whether California would contract away its financial responsibility to enforce the Public Trust Doctrine by signing incidental take permits and the Implementing Agreement for BDCP.</p> <p>Ensure inclusion of environmental justice community members. Reconsider composition of the BDCP stakeholder council to ensure broad inclusion of environmental justice community members and ensure funding that facilitates participation through use of stipends and language accessibility.</p> <p>Brown Act Compliance by BDCP Entities. Ensure that the Authorized Entity Group and the Permit Oversight Group each comply with California's open public meeting law, the</p>	<p>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). Alternative 4A would not serve as a habitat conservation plan/natural community conservation plan (HCP/NCCP) under ESA Section 10 and the NCCPA. Instead, Alternative 4A, as the California WaterFix proposed action, will be subject to incidental take authorization under ESA Section 7 and CESA Section 2081(b), and will therefore be subject to review by federal and state fisheries agencies. Please also see Master Response 5 for more information regarding governance under BDCP and CA WaterFix, as well as project funding.</p> <p>For more information regarding the purpose and need of the project please see Master Response 3, and for information regarding project compliance with the Delta Reform Act please see Appendix 3I of the Final EIR/EIS and Master Response 8.</p> <p>Please refer to Chapter 28 of the Final EIR/EIS regarding an analysis of project impacts on Environmental Justice populations, and any mitigation offered as a result.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		Brown Act. Please explain whether and under what circumstances federal members of both Groups might have difficulty doing so, and describe how such problems could be overcome to facilitate Brown Act compliance.	
2024	6	<p>Water Quality Issues</p> <p>Increase Freshwater Flows Into and Through the Delta. Again, the most fundamental need in the Delta is to increase freshwater flows through the Delta and not adopt the Tunnels or other new upstream conveyance alternative. If that is not done, demonstrate how the revised, recirculated Tunnels project and associated documents and restoration plans comply with federal Clean Water Act and state Porter-Cologne Water Quality Control Act anti- degradation requirements.</p> <p>Demonstrate how the revised, recirculated Tunnels project and associated documents and restoration plans would reduce residence time in such a way as to improve water quality in the Delta and facilitate meeting the co-equal goals established for the project instate law.</p> <p>Demonstrate how the revised, recirculated Tunnels project and associated documents and restoration plans comply with water quality objectives and criteria for all regulated constituents, including but not limited to, salinity, electrical conductivity, mercury, methyl mercury, pesticides, and selenium.</p> <p>Antidegradation analysis required by state and federal clean water laws for the Tunnels project and other components of the BDCP Conservation Strategy.</p>	<p>Please refer to Master Response 14 regarding project impacts on water quality (including salinity, electrical conductivity, mercury, methyl mercury, pesticides, and selenium), and the relevance of State and Federal antidegradation policies. For individual impact analyses regarding water quality, please see Chapter 8, Final EIR/EIS.</p> <p>As described in Appendix 3A, Identification of Water Conveyance Alternatives, EIR/EIS, comments and suggestions received from the State Water Board were influential in defining the range and content of alternatives considered in the EIR/EIS, including the State Water Board’s Delta Flow Criteria Report, prepared pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009. Scoping comments from the State Water Board included requests for an alternative providing for reduced diversions and an alternative incorporating changes to Delta outflows (and potentially inflows) that would reflect a more natural hydrograph. The Lead Agencies determined that an additional alternative would be required to be responsive to the State Water Board’s comments. Informed by these comments, as well as several letters from the State Water Board to the Natural Resources Agency, DWR met with State Water Board staff to identify a general approach to model an increased spring Delta outflow alternative. This alternative was designed to increase spring Delta outflow by approximately 1.5 million acre-feet, on average, above the NEPA baseline assumptions. This became Alternative 8 as analyzed in the EIR/EIS.</p> <p>The anticipated hydrologic changes due to climate change (increased temperatures and more years of critical dryness, increased water temperatures, changes in precipitation and runoff patterns, sea level rise, and tidal variations) will constrain and challenge future water management practices across the state, with or without the proposed project. The state is addressing climate change through strategies and a decision-making framework as outlined in the California Climate Adaptation Strategy and Adaptation Planning Guide. However, no single project and indeed none of the project alternatives would be able to completely counteract all of the impacts of climate change.</p> <p>California Waterfix would help to address the resilience and adaptability of the Delta to climate change through water delivery facilities combined with a range of operational scenarios, measures focused on the protection, restoration, and enhancement of the Delta ecosystem and measures to reduce other stressors (Environmental Commitments 3, 4, 6, 7, 8, 9, 10, 11, 12, 15, 16). In addition to the added water management flexibility created by new water diversions and operational scenarios, California Waterfix would improve habitat, increase food supplies and reduce the effects of other stressors on the Delta ecosystem. By improving and expanding available habitat, the proposed project would increase resilience and adaptability to climate change by making alternative habitat available during periods of high stress, such as very high or low freshwater inflow or very high salinity intrusion.</p>
2024	7	<p>NEPA/CEQA Compliance</p> <p>Provide complete environmental survey and geotechnical data relating to habitat restoration, Tunnels, and other water facilities of BDCP.</p> <p>Prepare all needed biological assessments and biological opinions to accompany revised, recirculated BDCP documents and NEPNCEQA documents.</p> <p>Incorporate all elements of the Tunnels project’s purpose and need, including the role of water transfers meeting supplemental demands of contractors and increasing capacity utilization of the Tunnels project.</p>	<p>The alternatives included in the FEIR/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. 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. For more information regarding alternatives development and screening please see Master Response 4.</p> <p>Complete environmental survey and geotechnical data for all element of the proposed project is not required for the purpose of CEQA/NEPA. For more information regarding project and program level</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Explicitly define water supply reliability comprehensively, and indicate how BDCP addresses reliability, while still achieving co-equal goals.</p> <p>As mandated by EPA and many other commenters, provide a reasonable range of alternatives including several that examine reduced exports to achieve higher Delta outflow in relation to habitat restoration outcomes.</p> <p>Include use of Delta flow criteria developed by the State Water Resources Control Board pursuant to Water Code Section 85086, with variations in habitat restoration actions.</p> <p>Include invasive nonnative clam (<i>Potamocorbula amurensis</i> in particular) management as a conservation measure to provide variations in habitat restoration components of the BDCP Conservation Strategy, coordinated with increased outflow alternatives.</p> <p>Include selenium management conservation measure in tandem with habitat restoration components that increase Delta inflows and outflow (especially for the San Joaquin River).</p> <p>Include among the new reasonable range of alternatives examination of the Environmental Water Caucus's Responsible Exports Plan.</p> <p>Evaluate fish population survival rates from increased flow alternatives with reduced exports.</p> <p>Beef up setting discussions in the areas of environmental justice, over-appropriation of water rights, water transfers (both as a point of controversy and as an objectively frequent occurrence), present and past groundwater conditions in the Sacramento Valley, direct comparison of Tunnels project's operational modeling criteria with existing Delta water quality objectives now in force, and disclosure of chronic violations of Delta water quality objectives by the Bureau and DWR.</p> <p>Provide adequate impact analyses of:</p> <p>Environmental justice issues.</p> <p>Water transfers, especially in supplemental demand years (where State Water Project allocations are 50 percent or less of Table A contract amounts, and CVP allocations are 40 percent or less of contractual amounts).</p> <p>Groundwater impacts in the Sacramento Valley of groundwater substitution water transfers.</p> <p>Conservation Measure 1 construction and operational effects on Delta subirrigation practices.</p> <p>Methyl mercury impacts from sediment disturbance and other bioavailability pathways through covered and non-covered species to public health and environmental justice issues.</p> <p>Habitat restoration and water quality effects (through increased residence time) on piscivorous predator behavior, invasive bivalves, and food webs generally.</p>	<p>analysis please see Master Response 2.</p> <p>For more information regarding purpose and need of the proposed project please see Master Response 3.</p> <p>A biological opinion is not required prior to the release of the EIR/EIS. For the Proposed Action, the USFWS and NMFS will conduct an internal ESA section 7 consultation prior to issuance of a 2081(b) permit for the Proposed Action by the CDFW. USFWS and NMFS will coordinate the ESA consultation process and other environmental review processes, such as the NEPA process, consistent with federal regulations. In addition, the USFWS and NMFS will consult with Reclamation to complete biological opinions or a joint biological opinion prior to federal action to carry out the proposed project.</p> <p>Alternative 8, as analyzed in the EIR/EIS, was designed to increase spring Delta outflow by approximately 1.5 million acre-feet, on average, above the NEPA baseline assumptions. Please refer to response to comment 6 within this comment letter for more information (and Master Response 4).</p> <p>The new preferred alternative no longer includes an HCP or conservation measures. A discussion of the invasive nonnative clams (including <i>Potamocorbula</i>) in the Delta is provided in Chapter 11 in the final EIR/EIS.</p> <p>A detailed analysis of each of the proposed alternatives' impacts on fish populations, including Alternative 8 (designed to increase spring Delta outflow), is provided in Chapter 11.</p> <p>Please refer to Chapter 5 regarding project impacts on water supply, Chapter 7 regarding impacts on groundwater, Chapter 28 regarding impacts on Environmental Justice populations (including impacts on subsistence beneficial uses), and Chapter 8 regarding impacts on water quality.</p> <p>Importantly, all water exported by the SWP and CVP is the subject of the existing water rights. 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.</p> <p>The issue of crops and water use is beyond the scope of the proposed project. For more information please refer to the updated draft 2013 California Water Plan's strategy for agricultural water use efficiency, which describes the use and application of scientific processes to control agricultural water delivery and use. Also, refer to Master Response 6 and Appendix 1C for further information on demand management measures, including increasing agricultural water use efficiency and conservation. With regards to beneficial use of water, please see Master Response 34.</p> <p>Impacts to agriculture are identified and discussed in Chapter 14; the lead agencies have proposed measures that would support and protect agricultural production in the Delta by securing agricultural easements and/or by seeking opportunities to protect and enhance agriculture with a focus on maintaining economic activity on agricultural lands. Please see Master Response 18 for more information on agricultural mitigation and Master Response 24 for information on the Delta As a Place. An analysis of economic impacts of the proposed project, including impacts related to agriculture, recreation, water rates, and taxes are also evaluated and described in the Statewide Economic Impact Report (http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Draft_BDCP_Statewide_Economic_Impact_Report_8-5-13.sflb.ashx).</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Potential water quality violations, as described above.</p> <p>Effects of Tunnels and habitat restoration actions in BDCP on subsistence beneficial users described in the State Water Board's Bay-Delta Water Quality Control Plan of 2006 and 1995.</p> <p>Effects of the Conservation Strategy on area land use, agriculture, and Delta economy, and impacts as a result on environmental justice communities.</p>	
2024	8	<p>Delta Reform Act and Water Code Compliance</p> <p>Develop and consider alternatives that would actively establish recovery of Delta ecosystems and listed fish populations to levels already established in the California Fish and Game Code and the Central Valley Project Improvement Act of 1992.</p> <p>Demonstrate how the revised Bay Delta Conservation Plan would comply with the co-equal goals of the Delta Reform Act.</p> <p>In coordination with the analysis described above about the BDCP Applicants demonstrating how they would reduce reliance on imported supplies specifically from the Delta, ensure that analysis demonstrates compliance with Water Code Section 85021.</p> <p>Incorporate analyses that reflect the best available science obtained through the information proceeding conducted by the State Water Resources Control Board in 2010, and their approval of the Delta Flow Criteria Report that August.</p> <p>Again, the most fundamental need is to increase freshwater flows through the Delta and not adopt the Tunnels or other new upstream conveyance alternative. If this action to increase flows is not taken, then demonstrate how the revised, recirculated Tunnels project and associated documents and restoration plans comply with the Public Trust Doctrine and the state's constitutional requirement for reasonable use and method of use and diversion of water applicable to the Delta.</p> <p>Demonstrate how the revised, recirculated Tunnels project and associated documents and restoration plans comply with area of origins water rights of the Delta and other upstream areas of California.</p> <p>Demonstrate how the revised, recirculated Tunnels project and associated documents and restoration plans comply with the non-injury rule in California water rights law, and the need to change the State Water Project's point of diversion, and its purpose and place of use of Tunnels water.</p>	<p>Regarding the expected benefits of the project on the Delta ecosystem and fish populations and the range of alternatives selected, please refer to Master Responses 3 and 4, respectively. Also see response to comment 6 within this comment letter.</p> <p>For more information regarding compliance with the Delta Reform Act please see Master Response 31.</p> <p>Please note that 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 under the No Action Alternative. The BDCP 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, 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).</p> <p>The project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. Please refer to Master Response 26 for more information on how the project relates to area of origin rights in the Delta and areas upstream of the Delta.</p>
2024	9	<p>NEPA Compliance for BDCP and Integrated Consultation on the Coordinated Long-term Operation of the CVP and SWP with the BDCP</p> <p>Our organizations commented earlier this year regarding BDCP and the EIR/EIS about piecemealing problems with the first round of these documents. This problem has worsened. We attach a 25-page document entitled "Performance Work Statement, National Environmental Policy Act (NEPA) Compliance for the Integrated Consultation on the Coordinated Long-term Operation of the Central Valley Project (CVP) and State Water Project (SWP) with the Bay Delta Conservation Plan (BDCP)"(July 16, 2014).</p>	<p>The proposed project is prepared in compliance with the requirements of CEQA and NEPA. Before the selection and approval of an alternative considered, the Lead Agencies must comply with the necessary state and federal environmental review requirements. The Final EIR/EIS is intended to provide sufficient CEQA and NEPA support for approval of the proposed project or any of the action alternatives for either compliance strategy. 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 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 20 trustee agencies under CEQA (State CEQA Guidelines Sections 15381 and 15386) and cooperating agencies under NEPA (e.g., USACE and EPA).</p> <p>For more information regarding how the lead agencies analyzed the project as a whole, including</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>The background section of the attached Performance Work Statement explains that:</p> <p>Review of the potential impacts of the alternatives under NEPA must be completed on the entirety of the CVP and SWP coordinated operation in conjunction with implementation of the BDCP (which includes new water conveyance facilities and large-scale habitat restoration in the Delta) in order to determine the overall effects of the proposed action. New conveyance and habitat restoration resulting from implementation of the BDCP needs to be considered within the context of operation of the CVP and SWP system as a whole.</p> <p>(Performance Work Statement at p.1; emphasis added).</p> <p>The Performance Worked Statement includes in explaining the purpose and scope of the work that:</p> <p>The required environmental compliance documentation includes an Environmental Impact Statement analyzing the impacts of the coordinated long-term operation of the CVP and SWP, including new water conveyance facilities and large-scale habitat restoration as proposed by the BDCP in the Delta. The required analyses and resultant documentation must be completed in accordance with NEPA.</p> <p>(Performance Work Statement at p. 2).</p> <p>It appears that a federal BDCP agency, the Bureau of Reclamation, is the lead agency for carrying out the NEPA work as the Statement specifies that "all deliverables (other than invoices) shall be delivered to the Contracting Officer's Representative (COR) at Reclamation 's Bay-Delta Office on the specified due dates listed below." (Id.).</p> <p>The Statement explains under "Task 2: Alternatives Development" that a sufficient range of alternatives should be developed . (p. 8). The narrative for the Project Description states: "The proposed action will be the proposed coordinated operation of the CVP and SWP with new conveyance facilities and associated conservation measures proposed in the BDCP." (p. 9, emphasis added).</p> <p>The NEPA compliance for the Integrated Consultation on operation of the CVP and SWP is being carried out separately from the ongoing BDCP NEPA and CEQA process. If separation continues, both the BDCP process and the compliance for Integrated Consultation process will violate the NEPA and CEQA prohibitions against "piecemealing," also called "segmenting," environmental review. Moreover, the NEPA and CEQA requirements that cumulative impacts be disclosed and analyzed will also be violated by this separation of environmental review.</p> <p>FOR has already commented on the secret BDCP planning going on between the agencies and the exporters and their consultants in our July 24, 2014 BDCP comment letter. Our comment letter (pp. 5-6) referred to a document called the "BDCP Federal Open Issues Tracker" (apparently dated March 28, 2014). Those issues with respect to BDCP new conveyance operation included "2) whether the High Outflow Scenario (HOS) draws from Oroville only or whether other COA [Coordinated Operations Agreement] 'adjustments' will occur; 3) whether water transfer programs are part of meeting the HOS requirements, and if so, how to address their NEPA/CEQA-related effects;"</p> <p>The BDCP Federal Open Issues Tracker also states with respect to "CVP Upstream</p>	<p>piecemealing/segmentation, please see Master Response 8.</p> <p>Existing Conditions for the EIR/EIS include continuation of operations of the State Water Project (SWP) and Central Valley Project (CVP) by DWR and the Bureau of Reclamation (Reclamation), respectively. Assumptions for the Existing Conditions related to operations of the SWP and CVP are described in the Biological Assessment on the Continued Long-term Operations of the Central Valley Project and the State Water Project (August 2008) prepared by Reclamation (2008) as modified by the June 2009 NMFS BiOp and the December 2008 USFWS BiOp. Detailed assumptions for the SWP and CVP operations are represented in hydrological and water quality analytical models, as described in Appendix 5A, BDCP/California WaterFix FEIR/FEIS Modeling Technical Appendix. Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1, provides additional information on assumptions made for Existing Conditions.</p> <p>Each resource area chapter in the FEIR/EIS includes project impacts and cumulative impacts with their associated mitigation measures, including project effects from implementing CM 2-21 of Alternative 4.</p> <p>As stated above the new proposed project, Alternative 4A, significantly reduces the amount of planned habitat restoration, compared to the originally preferred BDCP HCP alternative, Alternative 4. Instead, the proposed project includes habitat restoration necessary 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).</p> <p>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 Chapter 3 of the FEIR/EIS for additional information on Proposed Project operations.</p> <p>Also please refer to Master Response 28, Operational Criteria.</p> <p>Please see Master Response 28 and 29 for more information regarding operational scenarios and compliance with ESA respectively.</p> <p>For more information regarding water transfer analysis methodology and results please see Appendix 5D of the FEIR/EIS.</p> <p>At this time it is anticipated that CVP upstream operations will not change to accommodate construction and operation of new water conveyance facilities as may be proposed by the project. However, if Reclamation determines that changes in upstream operations are warranted to maintain operational efficiencies or for other reasons, Reclamation may undertake additional environmental analysis.</p> <p>For the Proposed Action, the USFWS and NMFS will conduct an internal ESA section 7 consultation prior to issuance of an Section 10(a)(1)(B) permit for the Proposed Action. These federal agencies will coordinate the ESA consultation process and other environmental review processes, such as the National Environmental Policy Act (NEPA), consistent with federal regulations. In addition, the USFWS and NMFS will consult with the United States Bureau of Reclamation (Reclamation) to complete biological opinions or a joint biological opinion prior to federal action to carry out the proposed project.</p>

DEIRS Ltr#	Cmt#	Comment	Response
		<p>Operations":</p> <p>a. STATUS; Recent refinements to real-time operations state that meeting BDCP exports will require an (unspecified) accounting between the CVP and the State project. This accounting needs to be clarified and agreed upon.</p> <p>b. This change raises several fundamental issues of project operations and Project impacts and it may trigger additional NEPA/CEQA analyses. This change may also affect the scope and timing of the ESA section 7 consultations associated with the BDCP.</p> <p>It is difficult if not impossible to imagine a closer relationship for NEPA and CEQA purposes than that between the proposed new BDCP water conveyance facilities and the operations of the upstream CVP and SWP reservoirs as well as other facilities of the CVP and SWP system. Planned long-term operations of the CVP and SWP system determine whether the new conveyance proposed by the BDCP makes any sense as an alternative. In turn, whether or not the new conveyance proposed by the BDCP is approved will make a major difference in the actual long-term operations of the CVP and SWP system.</p> <p>If it continues, this deliberate separation of the BDCP NEPA and CEQA process from the NEPA compliance process for the Integrated Consultation on the Coordinated Long-term Operation of the CVP and SWP with the BDCP will be a bad faith segmentation of environmental review for the purpose of avoiding environmental full disclosure of environmental and cumulative impacts required by NEPA and CEQA.</p> <p>CEQA requires that "an agency must use its best efforts to find out and disclose all that it reasonably can" about a project being considered and its environmental impacts. <i>Vineyard Area Citizens v. City of Rancho Cordova</i>, 40 Cal.4th 412, 428 (2007). Under CEQA a "project" is defined as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. . ." I 4 Code Cal. Regs (CEQA Guidelines) § 15378(a). The courts have explained that:</p> <p>Theoretical independence is not a good reason for segmenting environmental analysis of the two matters. Doing so runs the risk that some environmental impacts produced by the way the two matters combined or interact might not be analyzed in the separate environmental reviews. Furthermore, if the two matters are analyzed in sequence (which was a situation here) and the combined or interactive environmental effects are not fully recognized until review of the second matter, the opportunity to implement effective mitigation measures as part of the first matter may be lost.</p> <p><i>Tuolumne County Citizens for Responsible Growth v. City of Sonora</i>, 155 Cal.App.4th 1214, 1230 (2007).</p> <p>Also, the California Supreme Court has held that future water sources "and the impacts of exploiting those sources are not the type of information that can be deferred for future analysis." <i>Vineyard Area Citizens</i>, 40 Cal.4th 412, 431. "An EIR that neglects to explain the likely sources of water and analyze their impacts, but leaves long-term water supply considerations to later stages of the project, does not serve the purpose of sounding an environmental alarm bell before the project has taken on overwhelming bureaucratic and financial momentum." <i>Vineyard Area Citizens</i>, 40 Cal.4th 412, 441 (internal citations and quotation marks deleted).</p>	

DEIRS Ltr#	Cmt#	Comment	Response
		<p>The rules under NEPA are similar in these respects to those under CEQA. The NEPA Regulations are codified at title 40 of the Code of Federal Regulations (C.F.R.). The NEPA Regulations specify that "Agencies shall make sure the proposal which is the subject of an environmental impact statement is properly defined. . . Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement."</p> <p>(40 C.F.R. § 1502.4(a). See also, § 1508.25(a)(l) ("Connected actions, which means that they are closely related and therefore should be considered in the same impact statement.")).</p> <p>The NEPA Regulations also require that agencies "Integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively."§ 1500.2(c). See also § 1501.2 ("Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.").</p> <p>Preparing separate environmental impact statements for BDCP and long-term operation of the CVP and SWP, including new water conveyance facilities proposed by the BDCP in the Delta would be a blatant bad faith effort to approve the proposed Water Tunnels first, before evaluating the overall consequences for long-term operations of the CVP and SWP. Segmentation of environmental review if carried out will violate both NEPA and CEQA.</p> <p>To proceed in the manner required by NEPA and CEQA, the BDCP agencies must drop the plan to prepare separate EIS's and instead prepare one EIR/EIS addressing both the BDCP and the long-term operation of the CVP and SWP including new water conveyance facilities proposed by the BDCP in the Delta.</p>	
2024	10	<p>Likely Settlement Agreement between Westlands and the United States</p> <p>We also attach a document entitled "Principles of Agreement for a Proposed Settlement Between the United States and Westlands Water District regarding Drainage" (Draft December 6, 2013). We are also aware of Federal Defendants' Status Report of October 1, 2014 filed October 1, 2014 (Document 980) in Firebaugh Canal Water District v. United States, in action no. CV-F-88- 634-LJO/DLB in the Eastern District of California. In that document, the Department of Justice attorney for the United States stated among other things that "Federal Defendants now report that negotiators for the United States and Westlands have reached consensus, subject to approval, on potential terms for settlement regarding the management of drainage within Westlands' service area." (p. 3:14-16).</p> <p>Pursuant to the negotiations the water supply to Westlands would be permanent and also arbitrarily and capriciously receive a much higher water delivery priority. The terms of the proposed agreement need to be disclosed and evaluated in the BDCP process. They must be also subject to environmental and alternatives analysis under NEPA and the Endangered Species Act (ESA) in the upcoming new BDCP draft documents. Scientists and federal agencies, including the U.S. Geological Survey and the U.S. Fish and Wildlife Service, have previously concluded that the best solution to the drainage problem would be to retire 300,000 to about 400,000 acres in the western San Joaquin Valley from</p>	<p>Please see comment response number 7 in this letter. The action alternatives could only divert the amount of water under the existing SWP and CVP water rights and in accordance with the existing and future related regulatory requirements based upon river water levels and flow, water available in the system, the presence of threatened and endangered fish species, and water quality standards. More information on the ranges of proposed water diversions, based on water year types and specific flow criteria, can be found in Chapter 3, Section 3.6.4.2, North Delta and South Delta Water Conveyance Operational Criteria, EIR/EIS. Water rights by other water users are not affected to meet the water quality objectives. The FEIR/EIS analyzed the effects of the climate change and sea level rise in the Delta and in the reservoirs in the Delta watershed through the comparison of conditions under the action alternatives to conditions under the Existing Conditions. The operational criteria are the same for the upstream reservoirs under the Existing Conditions, No Action Alternative, Proposed Project, and all action alternatives.</p> <p>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.</p> <p>Please refer to Master Response 32 regarding water rights issues.</p> <p>For more information regarding water supply impacts and its associated mitigation measures please see</p>

DEIRS Ltr#	Cmt#	Comment	Response
		irrigation. Instead, negotiations with Westlands appear headed toward producing the worst possible outcome of continuing to irrigate lands producing enormous amounts of salt and selenium while allowing Westlands growers to establish in effect a permanent water supply for sale, as opposed to reducing exports as lands are and should be retired from irrigation. They have sought such a dream deal for over a decade. It is time to have it fully evaluated in ESA, NEPA and CEQA documents for which proposed settlement terms must be considered a cumulative project, at a minimum.	Chapter 5 and Appendix 5A of the FEIR/EIS. For more information regarding the development of alternatives please see Master Response 4. For more information regarding existing conditions, no action alternative, no project alternative, and cumulative impact conditions please see Appendix 3D of the FEIR/EIS.
2024	11	The continuing drive to supply irrigation water to drainage-impaired lands, and authorizing cross-Delta water transfers has yet to be fairly and dispassionately analyzed in BDCP documents to date. Meanwhile, to repeat: BDCP environmental documents must make a good faith effort to analyze alternatives that reduce exports and increase inflow to and outflow through the Delta. Lands retired from irrigation need to be up front and center, disclosed, and analyzed in the revised draft EIR/EIS including the setting/affected environment sections of the EIR/EIS, and in the changed circumstances and relevant conservation measure discussions in the revised draft BDCP documents now scheduled to be issued in 2015. Adhering to our recommendations in good faith, BDCP agencies would go a long way toward among other things, acting in a rational way to retire drainage-impaired lands from irrigation and reducing exports and adoption of an alternative increasing freshwater flows through the Delta, and not adopting a plan for new conveyance in the Delta.	Please see comment response number 2 and 7 in this letter. Please also see Appendix 5E of the FEIR/EIS Supplemental Modeling Requested by State Water Resources Control Board Related to Increased Delta Outflows.
2024	12	Attachment 2: Performance Work Statement	The comment describes an attachment to the comment letter. Please see response to comment 2024-9 regarding the comment related to this attachment.
2024	13	Principles of Agreement for a Proposed Settlement Between the United States and Westlands Water District regarding Drainage	The comment describes an attachment to the comment letter. Please see response to comment 2024-13.