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2400	1	I strongly oppose the Delta tunnels proposal. Increased upstream diversions (and infrastructure such as the salinity barrier) are detrimental to ecosystems in both the Delta and the Bay. The tunnels could drive further extinctions, allow invasives to take hold (which is costly!) and contribute to dangerous problems like harmful algal blooms (HABs).	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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. See Master Response 3 (Purpose and Need).
2400	2	I've seen firsthand how difficult it is to manage water resources, particularly in the face on ongoing and relentless drought. The tunnels do nothing to conserve limited water resources in California. The tunnels would waste time, money and energy that we could be investing in technologies that actually help California manage water in the long run. Let's find solutions instead of creating more problems.	The Proposed Project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Water Demand Management). The California Water Action Plan recognizes that all Californians have 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 — 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. 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/. In accordance with the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/S), 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.
2401	1	The prospect of being able to send more water to Southern California at the expense of the San Francisco Delta is just plain wrong.	The Proposed Project is intended to provide a more reliable water supply, with diversions that are more protective for fish, in accordance with the Delta Reform Act co-equal goals of improving water supply reliability and Delta ecosystem health. It is projected that water deliveries from the federal and state water projects under a fully-implemented California WaterFix project would be about the same as the average annual amount diverted in the last 20 years. Please see Master Response 26 for additional information on effects on northern California. The plan does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. Although the 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. Please also refer to Master Response 31 (Delta Reform Act), Master Response 3 (Purpose and Need), and Master Response 35 (MWD Water Supply).
2402	1	Your science is faulty, and your motivation suspect. The tunnels benefit big agribusiness and Southern California developers and do nothing to "make" more water. Shades of the last attempt to dam the North Coast rivers and send water south. No, no, no!	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. 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

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			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.
2403	1	I am writing in opposition to the tunnel project EIR. I think removing more water from the Sacramento River Delta would be disastrous to the environment. The river leading to San Francisco Bay is responsible for an enormous amount of life. The environment including fish and bird and plant species is dependent upon the fresh water of the river. Salt intrusion is already reaching serious proportions. Please consider that all of this life contributes to our human lives and that the loss of it will seriously endanger all of us.	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 project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. It is projected that 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. Refer to Master Response 26 (Changes in Delta Exports). 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. Chapter 11 of the Final EIR/EIS addresses the potential for project alternatives to affect fish. Chapter 12 of the Final EIR/EIS addresses the potential for project alternatives to affect animals. Both chapters describe the impacts, both negative and positive, and discuss the mitigation measures and avoidance and minimization measures proposed to avoid, minimize, and compensate for any significant impacts.
2404	1	I oppose.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2405	1	The San Francisco Bay has been rendered fragile by the development of the San Francisco Bay Area, and by four years of drought. The habitat and species native to our region require more, not less, fresh clean water flowing into the estuary. Diverting water from this Delta to benefit another part of California is not a solution. I am firmly opposed to the construction of the Delta Tunnels.	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 project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. It is projected that 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. Refer to Master Response 26 (Changes in Delta Exports). 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. Chapter 11 of the Final EIR/EIS addresses the potential for project alternatives to affect fish. Chapter 12 of the Final EIR/EIS addresses the potential for project alternatives to affect animals. Both chapters describe the impacts, both negative and positive, and discuss the mitigation measures and avoidance and minimization measures proposed to avoid, minimize, and compensate for any significant impacts.
2406	1	I do not want to see the Delta Tunnels happen. Please count my vote against the Delta Tunnels.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2407	1	I am a user of the Delta in many ways -- my drinking water is sourced from it, and I fish and hunt in its waters and surrounding lands. We need to ensure its survival for the future of our state and my grandchildren, and the Delta Tunnels are not the answer.	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 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. 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) and Master Response 24 (Delta As A Place).
2408	1	$60,000,000,000.00: you are joking, right? If you are using the same estimators that did the "bullet" train, it will cost $120,000,000,000.00 by the time it is complete and it will be undersized for the intended use before it is complete.	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

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		Build the Auburn Dam. Better use of money.	to the specific substantive portions of the comment letter that were submitted by the commenter. The commenter does not raise a specific issue related to the adequacy of the EIR/EIS. Please see Master Response 4 regarding the range of alternatives selected. 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.
2409	1	As a farmer, I am opposed to the pumping of Delta water as presented in the subject documents. We already have an encroaching salinity problem in our water table and the pumping of more Delta water south will only make things worse.	Chapter 8, Water Quality, of the EIR/EIS discloses the potential water quality impacts resulting from constructing and operating the proposed project, and mitigation for these potential impacts. See also Master Response 14 (Water Quality). Refer also to Master Response 26 (Area of Origin).
2409	2	We need to look at more water storage and raising the elevations of existing dams.	Appendix 1C, Demand Management Measures, in the EIR/EIS, describes conservation, water use efficiency, and other sources of water supply including storm water drainage. While these elements are not proposed as part of the BDCP or the California WaterFix, the Lead Agencies recognize that they are important tools in managing California's water resources. Please also see Master Response 37 regarding water storage.
2410	1	It's one thing to replace/repair the Delta tunnel, but to build two new tunnels that will increase the water flowing from the Sacramento River to the Central Valley and farther south is unconscionable. First and foremost is to explore and impose projects that capture stormwater, conserve, and recycle water. How can "experts" think it is a solution to change the vast Delta estuary, impacting those who live in the area, as well as the fish and fowl that are a natural part of it, with tunnels to divert water before using and exhausting other options?	Please refer to Master Response 6 for additional details on demand management. Also, please see Master Response 3 for additional details on the project purpose and need and Master Response 4 for additional details on the selection of alternatives. Please refer to Master Response 24 for details on the Delta as a place and the impacts of the proposed project on the Delta.
2411	1	Enough water can be obtained through conservation and recycling.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
2411	2	Drawing water off the Delta will damage the aquatic and riparian environments.	The proposed project was developed to meet the rigorous standards of the Clean Water Act as well as federal and state Endangered Species Acts; as such it 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 comment does not offer any evidence on how the project would result in aquatic and riparian impacts.
2411	3	The citizens of California have already rejected a similar project, the Peripheral Canal. The very idea of the tunnels goes against Jerry Brown's own belief in accepting limitations and living [within] our means.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2412	1	I am opposed to the tunnels for the Bay Delta Conservation Plan/California WaterFix for the following reasons: -This plan would cause further harm to the Sacramento-San Joaquin Delta -- an already fragile ecosystem.	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. 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

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		-The WaterFix does not provide new water and will severely impact the Delta communities, the 2,500 farmers, and nearly 4 million people.	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 Response 24 for information on the Delta As A Place.
2412	2	The projected cost of $15 billion dollars could be used to address California's water needs by building better water storage and continuing conservation efforts throughout California.	Please refer to Master Response 5 for additional details on demand management and Master Response 37 regarding storage. Also, please see Master Response 3 for additional details on the project purpose and need.
2413	1	Develop a Bay/Delta levee maintenance program to ensure future Bay/Delta deliverable water. Make use of the high-density Delta levee maps produced by Dr. Cathleen Jones, scientist at JPL, Pasadena, California, and commit to upgrading the integrity and reliability of the 1100 miles of Delta levees.	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. Levees are an important public safety resource and the proposed project would not change levee policy or replace ongoing programs and grant projects aimed at facilitating and supporting levee improvements in or outside the Delta. It recognized that levee maintenance and safety in the Delta is an important issue for the residents of the Delta and for statewide interests.
2413	2	Immediately establish an aggressive, enforceable groundwater recharge program for the San Joaquin Valley and all of California. In San Francisco and San Mateo County we took steps to save Lake Merced and recharge the Westside Basin Aquifer in 2003. As a result we now have a restored Lake Merced and aquifer.	The Proposed Project and other action alternatives were developed to improve Delta habitat and SWP/CVP water supply reliability. The alternatives would increase flexibility for SWP and CVP operations while reducing adverse impacts to aquatic resources. 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 agricultural and municipal/industrial water conservation, recycling, desalination, increased surface water and groundwater storage, 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).
2413	3	Establish and provide funding programs/incentives for a statewide stormwater recapture system. Push for statewide recycling programs.	Please refer to Master Response 5 for additional details on demand management. Also, please see Master Response 3 for additional details on the project purpose and need.
2413	4	Reduce and restrict over-allocation of the Sacramento River water to match a rolling annual rainfall and snowpack average. Identify, review, audit and modify water rights to reflect actual and realistic annual rain and snowfall forecasts. Eliminate water delivery expectations and entitlement.	The State Water Resources Control Board is responsible for issuing water rights in California, and not DWR or Reclamation who are evaluating the project in this EIR/EIS. Water rights issued on rivers in 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. The Proposed Project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Water Demand Management). The California Water Action Plan also recognizes that all Californians have 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

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			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. 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/.
2413	5	Establish financial subsidies and incentives for farmers to install drip irrigation and soil moisture monitoring systems.	The commenter offers an opinion on the merits of a particular water supply augmentation approach (greater agricultural conservation) and does not raise a specific issue related to the adequacy of the EIR/EIS. 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. For more information regarding agricultural beneficial water use please see Master Response 34.
2413	6	Use solar power for water pumps.	The commenter does not raise a specific issue related to the adequacy of the EIR/EIS.
2413	7	Meter all water used in California to establish baselines and allocation formulas statewide.	Appendix 1C, Demand Management Measures, in the EIR/EIS, describes conservation, water use efficiency, and other sources of water supply including storm water drainage. While these elements are not proposed as part of the BDCP or the California WaterFix, the Lead Agencies recognize that they are important tools in managing California's water resources. For more information regarding demand management please see Master Response 6.
2414	1	Please check USGS [U.S. Geological Survey]/geological map, B2. Soil of San Joaquin County is Mediterranean subtropical, while southward, 28 counties are semi-arid. Why ruin the most fertile soil in the world in the Delta area of Northern California?	To achieve the purpose of the project, water must be conveyed from the north Delta to the south Delta. Consequently, project impacts on soils must occur in the Delta.
2414	2	Desalination can be cost-effective for business, like Navy ships. Desalination was invented at UCB [Berkeley] around 1970, and used in Israel, Australia and over 100 countries. U.S. Senator Feinstein noted that there are over 26 desalination testing points along the California coast. How can the Ocean Agency cooperate with issues of Northern California drought and California as number one for food crops for USA?	Please see Master Response 4 for discussion of the scope of the proposed project and alternatives (such as desalination) that were not carried forward for analysis in this document due to the fact that required actions beyond the scope of the proposed project. However, nothing in the proposed project would prevent other entities from pursuing innovative approaches to desalination or other water supply solutions. As described in Appendix 3A, Section 3A.7, Results of Initial Screening of Conveyance Alternatives, EIR/EIS (2013), desalination was included as part of Alternative B7. Issues related to desalination include land use impacts, costs, and substantial energy use requirements. Advances in technology have improved feasibility of desalination and as a statewide water use planning component; it will be evaluated by water agencies on a local/regional level. Desalination, the process of removing salt and other minerals from seawater to make it suitable for drinking or irrigation, is being implemented in several California communities. However, it has not proven viable to secure adequate water supplies to meet California's needs due to high costs and energy demands. Today, desalination creates an estimated 84,000 acre-feet of potable water a year in the state, mostly through treatment of brackish groundwater, which is less salty and cheaper to treat than sea water. In comparison, the proposed project would secure an estimated 4.7 to 5.2 million acre-feet of water to supply more than 25 million people and 3 million acres of farmland. Although the proposed project would not increase the overall volume of Delta water exported, it would

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			make the deliveries more predictable and reliable, while restoring an ecosystem in steep decline. Local water agencies will need to invest in additional strategies and technologies, including desalination, to meet future water demand. The proposed project is one part of a diverse portfolio of strategies needed to meet California's overall water management needs. It is not a substitute for increased commitments to other water supply solutions, including recycling, desalination, water conservation and storage. Please see Master Response 7 regarding desalination.
2414	3	On July 10th, 2015, at the CVFCB [Central Valley Flood Control Board] workshop in Clarksburg, California, a report showed 80% non-compliance in levee repairs. Levee funds were sent to Washington State (sacbee.com). Later, this was reconfirmed after another's comment for USACE/ Army Corp [of] Engineers (at San Joaquin County meeting of AWC, Advisory Water Council, 2014). A neighbor, Ahmed Mohammad, Basic Engineer, said that he repaired levees on all the Delta islands. He said the number one solution continues to be dredging the north Delta (Sacramento to Antioch Bay). It increases the flow [to reduce turbulence]. Certainly, it would have averted overgrowth [like algae] (Stockton record.net). El Nino will bring heavy rains this winter. Time is of the essence: Plan for continual dredging of the north Delta with USACE/U.S. Army Corps of Engineers, not to mention their 100 year maps. Ahmed said that soil purifies the soil by aeration and absorption. The silt is rearranged. [Avoid sand bags that add weight to levees.] Any mineral deposits testify to California's Gold Rush, which continued to attract people across the USA and the world refugees.	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.
2414	4	Will growers in fertile north San Joaquin County be represented and encouraged in farm family endeavors of generations for productive food crops? With drought, this year we had barely over half the tonnage of two years ago. Yet our grape was "fabulous with a stellar vineyard." Meanwhile, we had hail damage, with pictures of ice pellets. The drought affected Northern California, also! Truly, we need reforestation; honor the natural water recycle for ground water; prep with natural reservoirs; develop water technology in private jobs; and maintain dredging the Delta.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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. 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/.
2414	5	15 miles from plans for two tunnels, concrete, to pipe fresh water from Sacramento area to 35 miles, along the Sacramento-San Joaquin River Delta. (That is two pumps, generally, near Tracy housing developments, to divert over 300 miles away to desert and ocean areas.) Stop Twin Tunnels, which seem to favor Southern California and fracking over food crops, #1 in USA from fertile Delta.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
2414	6	Before the drought, my late father said that we have increased salt in the soil and that our well cannot go any deeper. This week a neighbor repeated where we are, regarding sea level (35-50 feet). One hundred years ago, watermelons grew without irrigation with water table at three feet.	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 Resources Control Board on the Sacramento, Trinity, Feather, American, San Joaquin, and Stanislaus rivers with consideration for senior water rights and Area of Origin laws and requirements. The project considered in the EIR/EIS would not affect water

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		Governor Pardee started Pardee Reservoir, diverting our Mokelumne water to Port of Oakland. He had learned about water redistribution in Germany. What kind of government is that?	operations on the Mokelumne River. The modeling completed for the EIR/EIS indicate that surface water elevations will rise and salinity intrusion will occur under the No Action Alternative and all action alternatives with sea level rise, as shown in Appendix 5A, Section C, and Appendices 8G and 8H in the EIR/EIS. This will occur with or without the BDCP implementation. 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. As described in Chapter 7, Groundwater, of the EIR/EIS, no significant groundwater quality impacts are anticipated in the Delta as compared to the No Action Alternative. Changes in minimum and maximum surface water elevations were projected at locations along the Sacramento River using the CALSIM II and DSM2 models, as summarized in Appendix 5A, Section C, Modeling Results, of the EIR/EIS. The results of the analysis indicate that water surface elevations would be higher under all alternatives as compared to the Existing Conditions along the Sacramento River due to climate change and sea level rise, and similar to conditions under the No Action Alternative.
2414	7	Is it true that 300 farm families in Delta are planned for "eminent domain"? (Taking fresh Delta Sierra river water will devalue our soil and property.)	This comment is on potential eminent domain process for acquiring private property not on the content or process of the EIR/EIS. Reference to impacts on 196 parcels or acquisition of 300 parcels in the EIR/EIS could not be found. This comment is on the property acquisition plan. Regarding effects of diverting Sacramento River water on Delta soil and property, the EIR/EIS discloses potential agricultural resources effects from water quality changes in Chapter 14, Agricultural Resources.
2414	8	What kind of government refers to "water board" agencies (voices dimmed), statewide "appointments" by governor, instead of elected county officials? If you read this . . . fact research, thank you. I'd appreciate a timely, pragmatic reply.	No issues related to the adequacy of the environmental impact analysis in the CEQA and NEPA documents were raised.
2414	9	Congressman Jerry McNerney (CA-D), knows it is a waste of money, on practical math terms! (Ask for his fact-finding.)	DWR acknowledges your opposition to the project.
2414	10	Who counts the family food crop and tourism losses? Is it true that cost-effective desalination (like [in the] Navy) can produce two to three times as much water?	Please refer to Master Response 7 regarding desalination. As described in Impact ECON-6 under Alternative 4A in Chapter 16, Socioeconomics, construction of conveyance facilities would convert land from existing agricultural uses to project-related construction uses, and agricultural land could also be affected by changes in water quality and other conditions that would affect crop productivity. These direct effects on agricultural land are described under Impacts AG-1 and AG-2 in Chapter 14, Agricultural Resources. Total value of irrigated crop production in the Delta would decline on average by $5.3 million per year during the construction period, with total irrigated crop acreage declining by about 4,700 acres. Other effects related to production costs, travel time, and loss of investments in production facilities and standing orchards and vineyards would also occur as a result of facilities construction. When required, DWR would provide compensation to property owners for economic losses due to implementation of the alternative. While the compensation to property owners would reduce the severity of economic effects related to the loss of agricultural land, it would not constitute mitigation for any related physical impact. Under Alternative 4A, additional regional employment and income could create net positive effects on the character of Delta communities. Construction of water conveyance facilities under Alternative 4A could affect community character in the Delta region. However, because these impacts are social in nature, rather than physical, they are not considered impacts under CEQA. To the extent that changes to community character would lead to reasonably foreseeable physical impacts involving population growth, such impacts are described under Impact ECON-2 and in Chapter 30, Growth Inducement and Other Indirect Effects.

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			Furthermore, notable decreases in population or employment, even if limited to specific areas, sectors, or the vacancy of individual buildings, could result in alteration of community character stemming from a lack of maintenance, upkeep, and general investment. However, implementation of mitigation measures and environmental commitments related to noise, visual effects, transportation, agriculture, and recreation, would reduce the extent of these effects such that a significant impact would not occur.
2415	1	Instead of spending $15 billion to build the Delta tunnels to send more Sacramento River water to grow almonds and hay for export, we should invest in projects that promote groundwater recharge, stormwater capture, water recycling, and an expansion of urban conservation projects that worked so well this year.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. Appendix 1C of the Final EIR/EIS, Demand Management Measures, describes conservation, water use efficiency, and other sources of water supply including desalination. Refer to Master Response 6 for more information on demand management. 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 project.
2416	1	Taking more water with the tunnels will kill off the entire salmon run in the Sacramento, American, Feather and Bear Rivers. In addition all other species in the Delta/Bay will be negatively affected. Please pull your heads out of your [expletive] and do something positive by voting no on these tunnels.	Chapter 11, Fish and Aquatic Species, of the FEIR/FEIS describes the projected effects of the new preferred alternative, Alternative 4A to fish species. The analysis finds that there would be no adverse effects to any covered fish species.
2416	2	If you took the money and invested in desalination plants it would solve everyone's problems.	For more information regarding desalination please see Master Response 7.
2417	1	I strongly oppose the Delta Tunnel project in its current form. The health of San Francisco Bay depends on fresh water from the Sacramento River Delta for its health, and the impact on wildlife, sea life, will be enormous and damaging. Even human lives may be impacted in unexpected ways.	Impacts on Delta outflows (fresh water flowing to the Bay) are not significant. Model simulation results for the proposed project alternative (4A) indicate that long-term average and wet year peak outflows would increase in winter months with a corresponding decrease in spring months because of the shift in system inflows caused by climate change and increased Delta exports as compared to Existing Conditions. In other year types, Alternative 4A would result in higher or similar outflow because of the spring outflow requirements. In summer and fall months, Alternative 4A would result in similar or higher outflow because of changes in export patterns and OMR flow requirements and export reductions in fall months, and also because of the Fall X2 requirements in wet and above normal years. The incremental changes in Delta outflow between Alternative 4A and Existing Conditions would be a function of both the facility and operations assumptions (including north Delta intakes capacity of 9,000 cfs, less negative OMR flow requirements, enhanced spring outflow and/or Fall X2 requirements) and the reduction in water supply availability due to increased north of Delta urban demands, sea level rise and climate change. Results for the range of changes in Delta Outflow under Alternative 4A are presented in more detail in Appendix 5A, BDCP EIR/S Modeling Technical Appendix, of the Draft EIR/EIS. For a more detailed response regarding impacts beneficial uses of water, please see Master Response 34.
2417	2	As for the water needs of Southern Californians, far more emphasis should be placed on water conservation and recycling before any consideration should be given to more diversion of our region's fresh water.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. Appendix 1C of the Final EIR/EIS, Demand Management Measures, describes conservation, water use efficiency, and other sources of water supply including desalination. Refer to Master Response 6 for more information on demand management. 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 project. Also, please see Master Response 3 for additional details on the project purpose and need.
2418	1	Honestly, this is one of the worst ideas Jerry Brown has ever had. And if you want to destroy a marsh and ultimately the San Francisco Bay as we now know it, proceed with this plan. But if you care about the quality of life in the Suisun and the Delta and around San Francisco Bay, let's try something else. This is of such impact that it should be voted on by the voters. Not back-roomed by a bunch	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.

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		of self-interested politicians, making deals with each other who have their own little pet project. Mark this one down as another Jerry Brown end-around that needs some "sunshine" and evaluation. Just like the Prop 30 save the schools plan Jerry had with a retroactive tax, truly among firsts.	
2418	2	As a duck hunter in the Suisun marsh for many years, I have watched the salt water degradation and changes taking place in the vegetation that occur when salt water meets fresh water. So let's not kid ourselves, salt water is coming and this tunnel plan will accelerate the already steady process we are now witnessing and further change the quality and make-up of the marsh.	The potential for water conveyance operations to affect salinity conditions in the Delta (including Suisun Marsh) under existing conditions and future no action conditions, and with implementation of each project alternative (including conservation measures), is assessed in detail in Chapter 8, Water Quality, of the EIR/EIS. Where significant impacts to uses would occur due to the alternative, mitigation to lessen those impacts is provided.
2418	3	There are alternatives. Why don't we spend money on water recapture, mandatory water controls and management of groundwater taking, additional recycling techniques, desalinization, and on and on, anything but tunnels. Focus on conserving and capturing fresh [water]. Don't count on the weather getting better. Take action now for our future and if rain and snow happen, look at this as a bonus, like a lottery hit. Put in more dams.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. Appendix 1C of the Final EIR/EIS, Demand Management Measures, describes conservation, water use efficiency, and other sources of water supply including desalination. Refer to Master Response 6 for more information on demand management. 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 project. Also, please see Master Response 37 regarding storage and Master Response 3 for additional details on the project purpose and need.
2418	4	Realize, profoundly and sadly, there will be some losses of creatures. Minimize this.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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. See Master Response 3 (Purpose and Need).
2418	5	Slow population growth and consumption in California. We are a state with the resources for about 25 million persons and we are a state with close to 40 million. There are too many people so create economic alternatives for people to leave. Perform cost analysis on what it costs to provide for a person in California. I think you will be shocked and agree we do not have the resources or taxing power to keep an ever-expanding population.	The comment raises an import policy issue concerning sustainable growth in California. However, the comment does not question the growth inducement analysis or conclusions of Chapter 30.
2418	6	Found a leadership academy for inner-city youth and others who can learn and begin to understand what is happening with the marsh, water, [and] conservation of resources, as many kids in the 12-16 age group have never been outside the zip code where they live. They need to understand resources such as water, population, etc. and management of these factors in our state. They do not now.	The commenter does not raise a specific issue related to the adequacy of the EIR/EIS. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.
2419	1	Although the project has been parsed into two parts, the overall impacts of the two projects to the Delta estuary, the region as a whole and the SJMSCP [San Joaquin County Multi-Species Habitat Conservation and Open Space Plan] should not be considered as separate but as one entire project. The project and restoration components will have significant, long-term impacts on the ability of the SJMSCP to function and meet the obligations of the existing permits issued by USFWS and CDFW to all signatories of the SJMSCP.	Although Alternatives 4A, 2D, and 5A include only those habitat restoration measures needed to provide mitigation for specific regulatory compliance purposes, habitat restoration is still recognized as a critical component of the state's long-term plans for the Delta. Such larger endeavors, however, will likely be implemented over time under actions separate and apart from these alternatives. The primary parallel habitat restoration program is called California EcoRestore (EcoRestore), which will be overseen by the California Resources Agency and implemented under the California Water Action Plan. Under EcoRestore, the state will pursue restoration of more than 30,000 acres of fish and wildlife habitat by 2020. These habitat restoration actions will be implemented faster and more reliably by separating them from the water conveyance facility implementation. Proposition 1 funds and other state and public dollars will be directed exclusively for public benefits

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			unassociated with any regulatory compliance responsibilities. Additional priority restoration projects will be identified through regional and locally-led planning processes facilitated by the Delta Conservancy. Plans will be completed for the Cache Slough, West Delta, Cosumnes, and South Delta. Planning for the Suisun Marsh region is already complete and a process for integrated planning in the Yolo Bypass is underway. The Delta Conservancy will lead the implementation of identified restoration projects, in collaboration with local governments and with a priority on using public lands in the Delta. Cumulative impacts of other reasonably foreseeable projects that could affect Delta resources in combination with the action alternatives is addressed in each Final EIR/EIS resource chapter, including Chapter 11, Fish and Aquatic Resources and Chapter 12, Terrestrial Biological Resources. Please refer to Section 12.3.6, Effects on Other Conservation Lands for a discussion of project effects on other conservation plans. CEQA allows lead agencies to define proposed projects in a reasonable manner based on the project objectives. Defining a regional project in the manner suggested is beyond the scope of the BDCP and California WaterFix. Please also refer to Master Response 9, related to cumulative impact analyses and Master Response 8 regarding analysis of the whole of the project.
2419	2	The lack of a fully comprehensive and completed Financial Analysis and/or a Cost-Benefits Analysis on California WaterFix project clouds whatever benefits the project provides considering no new water is actually being created.	Please refer to Master Response 5 for additional details on the costs of project implementation.
2419	3	In the near future, EcoRestore will need approximately 30,000 acres for restoration projects. Without a complete understanding of where, how and when the future projects will be done, the effects to the SJMSCP [San Joaquin County Multi-Species Habitat Conservation and Open Space Plan] can be devastating in meeting the obligations of the USFWS and CDFW permits.	A list of California EcoRestore projects is provided on the California Natural Resources Agency website. As described in response to comment 2419-1, California EcoRestore projects are separate from the California WaterFix; and therefore, they are not analyzed as part of the proposed project but are evaluated in cumulative impacts section of the relevant resource chapters.
2419	4	The restoration plans all seem to be in some way affiliated with public lands and projects/programs which have been in existence for some time under various public/private restoration endeavors and seem to be potentially harmful to other programs (e.g. SJMSCP [San Joaquin County Multi-Species Habitat Conservation and Open Space Plan]) due to unknown/unidentified areas of where restoration is to occur.	As indicated on the California EcoRestore website, approximately 25,000 acres of habitat restoration is associated with existing Biological Opinion requirements and 5,000 would be related to habitat enhancements. The projects that are currently being considered are listed on this website.
2419	5	The short window of time for response to the recirculation of the California WaterFix's RDEIR/SDEIS documents for such a massive public works project (e.g., costs at estimated $16 billion and impacts to the Delta estuary across multiple counties). Our agency, [any] agency, cannot conduct a thorough review and analysis and provide comments on the projects impacts to the SJMSCP [San Joaquin County Multi-Species Habitat Conservation and Open Space Plan].	The comment period for the RDEIR/SDEIS was extended by 60 days. In order to facilitate a more easy review of the changes in the RDEIS/SDEIS compared to the Draft EIR/EIS, a version of the document was made available that included hyperlinks and track changes, in addition to a Section 508-compliant version. Please see Master Response 39 for more information about the public review period.
2419	6	As pointed out by the Delta ISB [Independent Science Board] September 30, 2015 comment letter, "the effects of California WaterFix extend beyond water conveyance to habitat restoration and levee maintenance. These independent issues of statewide importance warrant an environmental impact assessment that is more complete, comprehensive and comprehensible than the current draft."	Please see responses to letters 1448 and 2546 for responses to the Delta Independent Science Board's letters.
2419	7	The California WaterFix will still require mitigation to be conducted within the SJMSCP [San Joaquin County Multi-Species Habitat Conservation and Open Space Plan] permit area of up to 6,100 acres of land. This number seems small in comparison to the prior mitigation in the	The commenter asks that the California WaterFix consider acquiring lands below sea level to meet protection and restoration goals. The comment is noted. Please see also response to comment 2419-1.

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		BDCP; however, the project and restoration of 6,100 acres can make up almost 10% of the needed agricultural lands above mean sea level for the SJMSCP in the overlap areas. Since the California WaterFix does not have any constraints with mean sea level acquisition requirements, all lands for mitigation (e.g., Swainson's hawk) should be considered for those lands below sea level.	
2419	8	For existing preserves and protected lands within San Joaquin County, the alignment of the preferred alternative may be below ground but will still have impacts to some existing preserve lands for protected species (e.g., sandhill cranes, Swainson's hawks, egrets, etc.) along New Hope Tract and Staten Island. The alignment of the tunnels will be encroaching on lands within San Joaquin County identified as "known" giant garter snake [GGS] habitat, causing an issue for the proliferation of the specie. Federal/state take permits allow take to occur; however, SJMSCP [San Joaquin County Multi-Species Habitat Conservation and Open Space Plan] does not allow take within identified areas (attached map [ATT4]). The specific tracts of land identified at the beginning of the SJMSCP permit term in 2001 were noted as "known occupied" but those tracts do not include the most recent research and sightings of the GGS specie to the west and south within SJ County. The excerpt of Section 5.2.4.8 of the SJMSCP describing the "known occupied" areas under the SJMSCP is provided below: "5.2.4.8 Giant Garter Snake Full avoidance of giant garter snake known occupied habitat is required in compliance with Section 5.5.9 (c) for the following SJMSCP Covered Activities with the potential to adversely affect the GGS and which have not been mapped: golf courses; religious assembly; communications services; funeral; internment services; public services -- police, fire and similar; projects impacting channel or tule island habitat; major impact projects including landfills, hazardous waste facilities, correctional institutions and similar major impact projects; recreational trails and campgrounds, recreational outdoors sports clubs; utility services, museums and similar facilities. Known occupied habitat for the giant garter snake is that area west of I-5 on Terminous Tract, Shin Kee Tract, White Slough Wildlife Area, and Rio Blanco Tract. New sites identified during the life of the SJMSCP as confirmed habitat sites for the giant garter snake shall be considered known occupied sites for the purposes of this section."	The commenter states that the project may have impacts on existing preserve lands. The project would have impacts on Staten Island but there are no known impacts on New Hope Tract. Please see Chapter 12 and associated appendices of the Final EIR/EIS and Master Response 17 for discussion of proposed project impacts on GGS and Staten Island.
2419	9	The California WaterFix document is ambiguous regarding the potential mitigation and restoration associated with the current preferred alternative impacts. As noted in prior documents and continued with this recent released draft document, the project alternative does not provide enough detail (e.g. ratios, timing, location, restoration plans, etc.) or evaluate the near/long term effects of those requirements on the Delta as a whole, the farming community, local economies and other habitat program restoration within the overlap [of] the project area.	The lead agencies believe that the 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts (using the best available science), direct and cumulative, that project description is complete and satisfies the requirements of NEPA, and that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies believe that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS. Please see Chapter 16 of the EIR/EIS and RDEIR/SDEIS Appendix A (Socioeconomics) identifies the unique features of the Delta and describes the potential effects on Delta communities. Please see chapter 15 for a discussion on impacts to recreation. 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

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			information on agricultural mitigation and Master Response 24 for information on the Delta As a Place.
2419	10	This RDEIR/SDEIS document continues to fail, as with the prior released draft documents, in being clear, concise and detailed with the project relating to the adaptive management, collaborative science-based decision-making, levees coupled with the project operations/maintenance, climate change over the longer term on the Delta because of the preferred alternative, and mitigation/restoration in the broader context of the Delta.	As stated in response to comment 2419-1, the lead agencies believe that the 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts (using the best available science), direct and cumulative, that project description is complete and satisfies the requirements of NEPA, and that the project objectives are also precise and complete and satisfy the requirements of CEQA. For more information regarding adaptive management please see Master Response 33. See Master Response 38 regarding the length and complexity of project documents.
2419	11	[ATT1: SJCOG previously submitted BDCP Letter #1594.]	This comment describes an attachment to the comment letter submitted in response to the BDCP. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. . All comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.
2419	12	[ATT2: SJCOG previously submitted BDCP Letter #1596.]	This comment describes an attachment to the comment letter submitted in response to the BDCP. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. All comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.
2419	13	[ATT3: SJCOG previously submitted BDCP Letter# 1595.]	This comment describes an attachment to the comment letter submitted in response to the BDCP. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. All comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.
2419	14	[ATT4: Map of no-take area for giant garter snake.]	This comment describes a map in an attachment to the comment letter. See response to comment 2419-8.
2420	1	The State of California's "Delta Fix" water tunnels project to divert Sacramento River flows under the San Francisco Bay Delta Estuary will cause the destruction of the West Coast's largest estuary, a nursery for fish and wildlife that feeds the Pacific Flyway (from Mexico to Alaska), commercial fishing operations in three states, a thriving tourist economy and vibrant farm community, drinking water for 5 million people in the San Francisco Bay Area, and essential natural water hub for recreation and community enjoyment. Taking this water for export before it reaches the estuary and Bay will lead to decades of public dissension and box the federal government into a corner replete with huge costs and obstacles to meeting its statutory and legal obligations. Independent state scientists recently testified that the project is legally deficient and not justifiable. The proposed Delta Water Tunnels will not solve current or future droughts because they create no new water supply. Moreover, they are so large they could easily drain the Delta Estuary of essential freshwater.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. The EIR/S 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 with or without the alternatives considered in the EIR/S. The SWP and CVP operations under the action alternatives would only deliver water under existing water rights issued by the State Water Resources Control Board to DWR and Reclamation for use by the SWP and CVP with consideration for senior water rights and Area of Origin laws and requirements. Water delivered to the SWP and CVP water contractors participating in proposed project would be within the existing contract amounts to serve agricultural lands that have been cultivated and existing and planned community populations. As described in Chapter 5, Water Supply, of the EIR/S, it is anticipated that climate change would result in more frequent and more severe rainfall events and less snowfall than under historic conditions. These rainfall events would result in periods of time when the capacity of the existing intakes would not be adequate. Therefore, the proposed project would provide the maximum capacity in the intakes and tunnels during those periods of time to convey water during extremely wet periods to areas south of the Delta for storage and use during drier times. The proposed project would decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months; and increase flows in the wet winter months when the river flows are high to improve conditions for aquatic resources. The water would be stored at locations south of the Delta during the high flow periods to allow reductions in deliveries in drier periods. The north Delta and south Delta intakes would only be used to divert water under existing water rights that were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements.

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			Operation of the project water delivery system could not drain the Delta rivers and channels dry, including the Sacramento River. The project facilities, including water intakes and pumping plants would be operated in accordance with permits issued by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and State Department of Fish and Wildlife. The project only 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. More information on the ranges of project 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/S. Current limitations and operational criteria for existing facilities can be found in DWR's State Water Resources Control Board Permit D1641 (see http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/decision_1641/index.shtml) and additional limitations described in the Federal Endangered Species Section 7 Biological Opinions and take permits (see http://www.usbr.gov/mp/cvo/ocap_page.html).
2420	2	Before saddling taxpayers with a multi-billion dollar mortgage, years of confusion and a legacy of conflict, more cost-effective water supply alternatives must be considered and implemented. This multibillion-dollar tunnels plan hinders real statewide water solutions for California. Policy analysis of the proposed project fails to consider more cost-effective water conservation alternatives that produce more water now in comparison to waiting the decades it will take to construct these experimental tunnels before determining if the investment was worth it.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. Appendix 1C of the Final EIR/EIS, Demand Management Measures, describes conservation, water use efficiency, and other sources of water supply including desalination. Refer to Master Response 6 for more information on demand management. 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 project. Also, please refer to Master Response 4 for additional details on the selection of alternatives, Master Response 5 for information on cost and funding and Master Response 3 for information on the project purpose and need.
2420	3	As currently proposed, the State of California's water tunnels project does not comply with Federal law and it will prevent the Department of Interior and other agencies from meeting their collective responsibilities to protect the San Francisco Bay Delta ecosystem. The water tunnels would serve both the federal Central Valley Project (CVP) and the California State Water Project (SWP). An engineering undertaking of this magnitude has never been attempted. More importantly, it would have devastating impacts on the Delta ecosystem, and inhibit your agency's ability to comply with the Clean Water Act, Endangered Species Act, Fish and Wildlife Coordination Act and to meet your trust obligations to Native Americans, especially those on the North Coast that depend on waters from the Trinity River Division. The resulting federal confusion will lead to decades of legal and political conflict, not a good legacy for the Department of Interior. All of this can be avoided if you show bold leadership and foresight by rejecting this project.	The proposed project was developed to meet the rigorous standards of the Clean Water Act as well as federal and state Endangered Species Acts; as such it 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. Comment does not provide the trust obligations to the Native Americans nor what would constitute or cause a federal confusion. The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. 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
2420	4	Diverting the highest quality freshwater inflow from the Bay-Delta system would lead to unprecedented change in the ecosystem character and sustainability. As for habitat and endangered species, they will be permanently, detrimentally affected. Impact studies on flow restrictions to San Francisco Bay have been largely excluded from public review and the resulting effect of years of flow restrictions omitted. Impacts to water dependent industries that count on a healthy bay and estuary have been ignored or brushed aside. Drinking and recreational contact water quality impacts, including flow related toxic harmful algae blooms will impact millions of people who depend on a healthy estuary to live, play, work, farm and fish.	The EIR/S 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 with or without the alternatives considered in the EIR/S. The SWP and CVP operations under the action alternatives would only deliver water under existing water rights issued by the State Water Resources Control Board to DWR and Reclamation for use by the SWP and CVP with consideration for senior water rights and Area of Origin laws and requirements. Water delivered to the SWP and CVP water contractors participating in proposed project would be within the existing contract amounts to serve agricultural lands that have been cultivated and existing and planned community populations. As described in Chapter 5, Water Supply, of the EIR/S, it is anticipated that climate change would result in more frequent and more severe rainfall events and less snowfall than under historic conditions. These rainfall events would result in periods of time when the capacity of the existing intakes would not be adequate. Therefore, the proposed project would provide the

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			maximum capacity in the intakes and tunnels during those periods of time to convey water during extremely wet periods to areas south of the Delta for storage and use during drier times. The proposed project would decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months; and increase flows in the wet winter months when the river flows are high to improve conditions for aquatic resources. The water would be stored at locations south of the Delta during the high flow periods to allow reductions in deliveries in drier periods. The north Delta and south Delta intakes would only be used to divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The project facilities, including water intakes and pumping plants would be operated in accordance with permits issued by the State Water Resources Control Board, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and State Department of Fish and Wildlife. The project only 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. More information on the ranges of project 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/S. Current limitations and operational criteria for existing facilities can be found in DWR's State Water Resources Control Board Permit D1641 (see http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/decision_1641/index.shtml) and additional limitations described in the Federal Endangered Species Section 7 Biological Opinions and take permits (see http://www.usbr.gov/mp/cvo/ocap_page.html). Impacts to drinking water and recreational beneficial uses, as well as potentially harmful Microcystis blooms, are addressed in Chapter 8, Water Quality. The assessment of the project alternatives in Chapter 8, Water Quality, shows that the preferred alternative 4A would have substantially less effect on Delta water quality such that significant impacts were only identified for electrical conductivity (EC) at Emmaton and Prisoners Point, and mercury associated with the limited tidal habitat restoration that would be implemented. The significant impacts to EC are to be mitigated through real-time operations that could not be completely represented in the modeling on which the EC assessment is based. Please refer to Master Response 14.
2420	5	Serious and potentially catastrophic issues have been raised by Fish and Wildlife Services' red flag memos. USGS [United States Geological Survey] has expressed concerns about pollution emanating from exporting more Delta water to irrigate toxic San Joaquin Valley west side soils, and an Interior-commissioned National Academy of Sciences (NRC Report) report concluded the water tunnels approach "contains critical scientific gaps." These experts, along with National Marine Fisheries and the U.S. Environmental Protection Agency, have rung alarm bells, informing that if approved, you won't be able to meet your legal duties. USBR [Bureau of Reclamation] has failed to look at alternative operations that will not have such devastating impacts on fish and wildlife.	Comments raised during the EIR/EIS process by other agencies are addressed in those original correspondences. The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2420	6	Just recently, USBR [Bureau of Reclamation] jumped the gun to file a water rights application for new points of diversion for the tunnels with the State Water Resources Control Board, assuming that the project complies with all applicable federal laws and regulations. On the contrary, compliance is highly doubtful. We have a classic case in which different agencies within the Department go in different directions. In addition to the water rights filing, USBR petitioned the Army Corps of Engineers for permission to perform dredge and fill construction activities for the water tunnels long before the project has received other necessary approvals. This heightens the public's fears that USBR and the State are trying to force the project through administrative channels without proper review. On the	Please refer to Master Response 45, regarding permitting processes and the appropriateness of this approach and Master Response 29, regarding the Endangered Species Act and timing for completing the ESA Section 7 process. Decisions about approval of a particular alternative are not included in the EIR/EIS. The EIR/EIS presents specific operating criteria for conveyance facilities in Chapter 3, Description of Alternatives that are used to estimate potential operation effects of the action alternatives. Please refer to Appendix 5A, for details on how operational scenarios were modeled for the environmental analyses.

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		other hand, their inaction with regard to Section 7 consultation with the fisheries agencies compounds the public's fears that realistic and prudent alternatives are being ignored and avoided. Their actions with the State Water Board and the Corps of Engineers are premature given their inaction on Section 7 consultation, and should be withdrawn. Embedded in this rush to act before safeguards are approved and analysis is completed, is the notion of building a project without operating plans. Building it now and learning to operate it later is not a recipe for success.	
2420	7	The Delta Water Tunnels Project is a massive experiment that has not been adequately thought through and presents unprecedented environmental and economic risks. The CVP and SWP already have a lengthy history of not meeting conservation objectives. For almost a decade, the projects' coordinated operations have made little or no progress in meeting required mitigation measures including the required purchase of 27,000 acres of endangered species habitat. Populations of listed fish species have declined to dangerous levels in this period. There should be no rush to make decisions that would hasten their extinction. The San Francisco Sacramento-San Joaquin River Delta and San Francisco Bay serve as a nursery and breeding grounds for iconic species on the brink of becoming extinct, such as salmon that, if lost, will set in motion an ecological chain reaction extinguishing orcas (Orcinus orca) along with support for over 750 species.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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. See Master Response 3 (Purpose and Need).
2421	1	Zone 7 [Water Agency] is the wholesale treated water supplier to businesses and approximately 240,000 residents in the cities of Livermore, Pleasanton, Dublin and a portion of San Ramon. Zone 7 also provides flood protection in eastern Alameda County and serves untreated water for irrigating 3,500 acres. Approximately 80 to 90% of Zone 7's water supply comes from the State Water Project (SWP), making Zone 7 one of the local water agencies that are most reliant on SWP water conveyed through the Delta. Furthermore, Zone 7 is the first recipient of Delta water delivered by the SWP's Banks Pumping Plant, making Zone 7 especially vulnerable to Delta disruptions due to earthquakes, salinity intrusions, wind-stirred sediment, toxic algal blooms and any other catastrophic events. The instability of the aging levees in the Delta (including their vulnerability to seismic events and climate change), regulatory uncertainty, saltwater intrusion and the declining health of the Delta ecosystem all challenge Zone 7's primary water supply, making the California WaterFix critical to Zone 7. The proposed project provides the best identified pathway for addressing the many complex issues undermining the Delta and its ability to continue to provide environmental, water supply conveyance and economic benefits, not just to Zone 7, but to the rest of California. Zone 7 supports the comments provided by the State Water Contractors. While some improvements are still necessary to complete the Final EIRIEIS, Zone 7 believes that the environmental documents prepared to date give the Department of Water Resources, the Bureau of Reclamation and other stakeholders the information needed to make an informed decision and to move California WaterFix forward as a key component of implementing the California Water Action Plan. To further delay California WaterFix extends risks to water supply reliability and the health of the Delta Ecosystem.	This comment is consistent with the fundamental purpose of the project to make physical and operational improvements to the SWP system in the Delta, water supplies of the SWP and CVP for users located south of the Delta, and Delta water quality consistent with statutory and contractual obligations of the SWP and CVP, as described in Section 2.3 of Chapter 2, Project Objectives and Purpose and Need, of the EIR/EIS. 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.

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2422	1	I request that a public hearing on the revised EIR, Delta tunnels project, and implementation agreement and mitigation measures be held in San Francisco, California, because no public meeting was held in San Francisco, only 1 ("one") copy of BDCP EIR materials was placed in the San Francisco Public Library System (as opposed to 10 in Marin County and several in each of San Joaquin and other counties). Such a public hearing in San Francisco could be held either in a hearing room in City Hall or some other building such as the Public Utilities Commission building in San Francisco.	More information on how DWR has developed the project in an open and transparent manner is provided in Master Response 41. More information about the public outreach conducted during the planning process, including information on the numerous public meetings held through the process is provided in Master Response 40.
2422	2	I request that the Independent Science Board, which has questioned the adequacy of the scientific basis for the impact and mitigation plan description in the EIR, be requested to review the revised EIR, comments of interested agencies and the public, and provide comments to be included in the record to determine the adequacy of the EIR and suitability of the proposed project and preferred alternative.	The RDEIR/SEIS was provided to those parties requesting a copy of the EIR/S and publicly noticed in accordance with CEQA and NEPA requirements. Comments were received and are part of the public record. Please refer to Master Response 41 (Transparency) and Master Response 42 (Public Comments) for additional information regarding the 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, as well as how these comments were received and addressed.
2422	3	Mitigation measures are inadequate when use of captive species is mentioned. The revised EIR, Appendix D, showing substantive changes, shows a section D.3.1.2 referring to Goal DTSM3, which apparently provides for use of captive Delta smelt in fisheries as a backstop for impacts on Delta smelt, a threatened species which could be significantly impacted. However, use of captive species to preserve an endangered or threatened species of fish is not without risks. To suggest that fish hatcheries or captive born fish can be relied upon to offset impacts in natural river conditions and populations ignores the history of problems and failures of captive fish and hatcheries. As noted recently, hatcheries can be subject to failure for a number of reasons, including infections, loss of water, or failure to maintain appropriate conditions for the species. See [Associated Press] story from September 2015: "GOLD RIVER (AP) - The California Department of Fish and Wildlife say it is working to keep hundreds of thousands of trout alive at the American River Hatchery after warm water temperatures killed about 155,000 trout. The department said Wednesday a chiller that cools water at the hatchery about 18 miles east of Sacramento unexpectedly failed Tuesday, and warm temperatures killed most of the Eagle Lake species of trout being raised there. Why the hatchery equipment failed is under investigation. It says trout require cold water to survive and hatchery staff is working to get a least one chiller working again to help the remaining 335,000 trout. The department says the unexpected die-off could mean it will not be able to stock streams and lakes at an ideal level in the Sacramento region next year." Thus, reliance on captive species and hatcheries to maintain populations of threatened species is risky and uncertain. Goal DTSM3 cannot be considered adequate mitigation if Delta smelt are impacted by the Delta tunnels project. This comment refers to both uncertain impacts and uncertain mitigation.	The comments are noted; however this goal and objective and the related conservation measure (CM18) are intended to lower the probability of delta smelt extinction, reflecting the poor status of the species in recent years, as opposed to mitigating effects of the alternatives; as discussed in Chapter 11, there are no significant impacts relying on this conversation measure for mitigation. 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. 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 BDCP Draft EIR/EIS. Alternative 4 (AKA BDCP) remains a potentially viable alternative and is being carried forward in this RDEIR/SDEIS because it represents the original 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 BDCP Draft EIR/EIS may be utilized by other programs for implementation of the long term conservation efforts. As such, the preferred alternative does not include CM18.

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2422	4	Mitigation measures, required under CEQA and NEPA, are uncertain, not finally funded, and cannot be used if uncertain to justify negative impacts of the Delta tunnels project. At various places in the revised EIR reference is made to various projects which are considered de facto mitigation. However, it is clear from a careful reading that many of these projects are far from certain of being implemented, lacking necessary commitments, agreements, planning, or funding. As one example, the Southport Project is described as one of several measures which will either create or enhance tidal march, or riparian habitat, or otherwise contribute environmental features which might have some positive impact on the Delta and fish species. However, these projects are not committed or funded. As noted in Section D1.1.1.4, the Southport project is not funded. "Partial funding for the project was secured through the DWR Early Implementation Project; however, funding for floodplain design and restoration has not been determined. A partner agency is needed to help fund the riparian floodplain restoration for the portion of the property that will not be used as mitigation for the flood control project. Depending on the funding source, this project may contribute up to 280 acres of floodplain restoration, which would be consistent with the goals of CM5 Seasonally Inundated Floodplain Restoration."	The Southport Project referenced in this comment is not a mitigation measure identified in the EIR/EIS and is not described as a "defacto mitigation measures" as have some of the environmental commitments and other actions presented in Appendix 3B of this Final EIR/EIS. Mitigation measures presented in this Final EIR/EIS are proposed under CEQA to reduce impacts to the extent possible. These mitigation measures are also included in the California WaterFix Mitigation Monitoring and Reporting Program which will help direct implementation of these measures. As allowed by CEQA and NEPA the decision to implement mitigation measures is included in the Finding of Facts and Record of Decision Documents, respectively. Please also refer to Master Response 22, which addresses EIR/EIS mitigation measures. Funding for separate projects, thought important for project implementation is not addressed in the EIR/EIS.
2422	5	Environmental impacts are highly uncertain, and mitigation measures are therefore not well understood. It cannot be concluded that mitigation will be adequate, knowing there will be negative environmental impacts. As an example of the uncertainty of environmental impacts and assumptions about necessary mitigation, there is a discussion of the objectives for stream flows necessary for salmon survival. See the following from pages 7-8/216 of Appendix D [of the EIR]: "Objective WRCS1.1 Rationale: Appendix 3.G, Proposed Interim Delta Salmonid Survival Objectives, presents a 2012 technical memorandum prepared by NMFS outlining the framework for determining appropriate metrics for through-Delta survival based on limited data of current through-Delta survival rates. The technical memorandum outlines how NMFS estimated current through-Delta survival rates and the rationale for specific interim metrics defined within Objectives WRCS1.1, SRCS1.1, FRCS1.1, and STHD1.1. NMFS used a simple deterministic, stage-based life-cycle model and cohort replacement rates of 1.2, 1.3, and 1.4 (1.3, 1.4, and 1.5 for winter-run Chinook salmon) to define survival objectives. . . . For each of the covered salmonids, the interim through-Delta survival objective represents 50% of the estimated increase in Delta survival required to achieve the modeled cohort replacement rates, based on improvements in through-Delta survival alone. That is, NMFS held pre-and post-Delta survival constant and calculated the improvement in Delta survival needed to achieve the target cohort replacement rates, assigning half of that improvement to the BDCP. The balance of the improvements required to achieve the modeled cohort replacement rates is expected to be derived from other recovery actions distributed throughout the entire range of covered salmonids, which could occur upstream, in the Delta, and/or in the ocean." Thus we can see that the objectives for Delta water flows and resulting salmon populations first, are based on a simple model, second, assign only half (50%) of required improvements	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 and Area of Origin laws and requirements. The amount of water that DWR and Reclamation can pump from the new north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the Proposed Project would still be consistent with the criteria set by the 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 Chapter 5, Water Supply of the EIR/EIS. Over the long-term, the proposed project would decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months; and increase exports in the wet winter months when the river flows are high. As described in Appendix 3A, Identification of Water Conveyance Alternatives Conservation Measure 1, of the EIR/EIS, one of the potential alternatives considered was based upon the State Water Resources Control Board 2010 Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem, which described providing up to 75 percent of unimpaired flow into the Delta to improve aquatic resources habitat conditions. 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 without reductions in non-SWP and non-CVP water rights diversions. The purpose and need of this EIR/EIS would not allow changes to non-SWP and non-CVP water rights. However, Alternatives 7 and 8 in the EIR/EIS reflect similar flow criteria in a manner that would only affect SWP and CVP water rights. Additional analysis of higher outflow scenarios is included in Appendix 5E. Additionally, the initial operating criteria for the NDD included in Appendix 4A allow for pulse flows to protect migration, with increased exports only if flows remain high and the migration has passed, so that the effects described in the comment are avoided and/or minimized. In the San Joaquin River, reduced reliance on the south Delta facilities results in improved flow conditions. Flow-survival relationships were used extensively in the analysis in Chapter 11, and for the preferred alternative, 4A, modeled survival is similar or

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		in salmon survival to the BDCP project mitigation, and third, rely on other, as yet unnamed measures, such as "ocean" improvements to provide appropriate salmon populations ("cohort replacement"). It is clear from other studies that fundamentally, water flows are correlated, positively or negatively, with fish populations, sometimes with a lag of a few years. The lag in effects is caused by the fact that water conditions in the first few years of fish species life are most important, including populations able to survive adequately to lay eggs, with required upstream migration. Then, the survival of eggs and young fish during downstream migration again provides major impacts on fish populations and "cohort replacement," i.e., the continuance of fish populations based on prior populations reproducing. See Effects of river regulation and diversion on marine fish and invertebrates, Drinkwater and Frank (1994): "Variations in river run-off are believed to induce upstream spawning migrations in many anadromous fish stocks (Fraser, 1972; Northcote, 1982). Most salmon migrations occur at times of increasing or peak run-off. Also, the downstream migration of many juvenile salmon stocks tends to be associated with high freshwater discharge (Northcote, 1982; Youngson et al., 1983)." http://swrcb2.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/exhibits/swrcb/swrcb_drinkwater1994.pdf By capturing and diverting conditions of high river runoff, the Delta tunnels will eliminate the potential for higher salmon migrations upstream to spawn as well as the downstream migration of juvenile salmon. This effect is clear and cannot be denied. Therefore, the only question is whether to allow it, or to reduce it, if it cannot be fully mitigated. Reduction or elimination of the two large proposed Delta tunnels under Preferred Alternative 4A is the only reasonable response to the potential impacts of large Delta diversions resulting from twin, large-scale tunnels. Moreover, while it is suggested that mitigation will consider maintenance of adequate Delta stream flows, as discussed above, the basis for determination of these "adequate" flows is highly uncertain and based on simplistic assumptions. Importantly, because of the lag in cohort replacement, i.e., the fact that returns of migratory fish may not take place for 2-3 years after the stream conditions under which the fish population was conceived or born, mistakes made in year 20XX may be devastating, with the impact not known until year 20XX+3. Therefore, mistakes in operation, stream flow, temperature conditions and so on can be long-term harmful without being understood at the time operational decisions are made. Given the potential for drastic harm to occur, no major decision which affects Delta flows should be made except on a conservative basis, designed to avoid the potential for a horrendous, unrecoverable error which would devastate Delta and Bay fisheries and the estuarine environment of Northern California. There has been extensive discussion of the uncertainty of developing necessary fresh water flows, with consideration of multiple approaches, reflecting the underlying uncertainty of	only slightly lower than the No Action Alternative. With real time adjustments based on hydrology or fish presence, any effects of the NDD operations can be further reduced. The objective noted in the comment was intended for a habitat conservation plan approach and that is no longer being pursued as the proposed project. The mitigation proposed for Alternative 4A is consistent with the type and level of impacts described in Chapter 11. And an Adaptive Management Program would be implemented to reduce uncertainties and adjust operations as necessary. See also Master Response 33.

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		knowledge about flow needs. A UC Davis study noted: "Estimating flows for improving habitat conditions, particularly to support fishes with different and often conflicting life history strategies, is much more complex and is hampered by numerous uncertainties." The same study reported that the biggest change from the period when "fish were doing better" to when "fish were doing worse" was increased Delta exports, exactly what [the] two-Delta-tunnel project is proposed to provide. "The largest change from the earlier historical period when fish were doing better to the later period when fish were doing poorer is the increase in exports that reduce net Delta outflow. Exports increase from 0.9 maf [million acre-feet] during the 1949-1968 period (1.4 maf annual average over the 13 years of actual export) to 5.1 maf over the 1986-2005 period, an increase exceeding 450 percent." See: Fleenor, Bennett, Myle and Lund, On Developing Prescriptions for Freshwater Flows to Sustain Desirable Fishes in the Sacramento-San Joaquin Delta https://watershed.ucdavis.edu/pdf/Moyle_Fish_Flows_for_the_Delta_15feb2010.pdf The lessons of these reports are clear: there is great uncertainty in estimating Delta flows, and lower flows are associated with poor fish conditions and survival. Similarly, a State Water Board Report found that Delta flows should be maintained at a level of about 75% of unimpaired flows for January through June. Http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/final_rpt080310.pdf Therefore, projects should be sized to minimize impacts that increase Delta exports, reduce Delta flows outward, and harm fish populations correspondingly, without effective knowledge about what conditions are necessary to maintain or improve those populations. Two tunnels should not be built, as a constraint on the level of exports and resulting harm to the Delta environment.	
2422	6	Decisions processes for Delta tunnel operation are poorly defined and not well-designed to maintain adequate flows to improve or maintain Delta and Bay environment or species populations. The mantra of how the Delta tunnels, exports, diversion amounts and timing and flows to Southern California and the Central Valley has been "adaptive management." This implies that decision making will be a learning process which conforms to rational and scientific decision-making, and improves management over time as new information becomes available. Unfortunately, the adaptive management process is subject to the actual processes provided for making decisions about water use and diversion, the people and agencies involved, and who has the ultimate power to make or veto decisions. As noted in the revisions to the EIR in Appendix D, "the fish and wildlife agencies (USFWS, NMFS, and CDFW) retain final authority over the operational criteria and constraints (i.e.,	Please refer to Master Response 33 regarding adaptive management. Please refer to Chapter 3, Description of Alternatives, Section 3.6.4 for a description of operations for each alternative. The amount of water that DWR and Reclamation can pump from the new north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the Proposed Project would still be consistent with the criteria set by the 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 Chapter 5, Water Supply of the EIR/EIS.

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		which pumping stations are operated and at what pumping rate) during testing." This implies that "after testing" the fish and wildlife agencies will give over control to another decision process. This is one of the fundamental problems with the EIR and a change that should be made. Eliminate "during testing" so that the fish and wildlife agencies "retain final authority over the operational criteria and constraints." At all times during the operation of any approved project, conditions may be found which require revision of any proposed operation, to protect critical species, water quality, and habitat. The fish and wildlife agencies must have on-going authority to control (or at least veto) any proposed operations which endanger the Delta environment, such as excessive back flows, slough like conditions, inadequate flows for salmon spawning or juvenile downstream migration, inadequate salmon populations to permit Delta diversion and other considerations which should be within the control of fish and wildlife agencies if any project is to be permitted. Especially if a twin tunnel project is permitted, the USFWS and other wildlife agencies must have a controlling role in Delta flows and exports. The need for definition of who is in control is obvious from the use of passive voice: Things will be done, but we don't know who will do them. From page 21/261 of Appendix D, "based on the results of the studies described above initial operating criteria will be established, including conditions under which pumping levels will be adjusted within the bypass flow criteria to minimize effects on migrating covered fish and to achieve water supply goals." So we have the BDCP, the AMT [Adaptive Management Team], a working group of the AMT yet to be established, the results of the working group being some research studies to address uncertainties, results of the research used by someone to establish criteria, and someone who will implement those criteria. This sounds like a playground game where children in a circle whisper to each other and what starts out at the beginning is incomprehensible at the end. The management processes have been extensively edited in the revised draft EIR, as shown on pages 25-26 of Appendix D. Page D.3-24 et seq. lay out a management process whereby a Real Time Operations (RTO) team is set up, with approval of BDCP. The RTO team consists of representatives of 1. USFWS 2. NMFS 3. CDFW 4. Reclamation 5. DWR and 6. State Water Project Contractors and 7. Central Valley Project Contractors. Nominally, members 6, SVP contractor, and 7, CVP contractor rep, are "non-voting." But this is unclear because the decision process says the RTO team will operate by consensus. Consensus is an informal agreement process, not a voting process. So what happens if the 6 and 7 non-voting members do not consent and happen to agree with DWR and Reclamation on the need for maintaining some level of water exports/diversion with which the fish and wildlife agencies do not agree? Then, on pages 25-26, the matter is escalated to the Regional Director of FWS agency, the Director of DWR, and the Regional Director of Reclamation. Note that two out of three of these decision makers are oriented toward water supply and contractor obligations, not fish and game and species preservation. Quite simply this decision process is ill-defined and does not provide adequate protection against imprudent diversions or exports. The operations process should be better defined; the FWS agencies should have the right to establish the constraints, which cannot be modified or violated by real time operations,	

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		within CM-1 referred to at page D.3-25 as set forth below: "The extent to which real time adjustments that may be made to each parameter related to these facilities shall be limited by the criteria and/or ranges set out in CM1 and CM2. That is, operational adjustments shall be consistent with the criteria, and within any ranges, established in the Conservation Measures." These criteria or ranges should be set narrowly and conservatively, and subject to revisions by the fish and wildlife agencies as necessary to protect the environment, water quality, and threatened and endangered fish species.	
2422	7	Overall, my review of the EIR and proposed project reaches conclusions similar to that of the Independent Science Board, as published, and reported in the Sacramento Bee in May 2015. We do not know whether the revised EIR, issued in July, resolves, or increases the concerns expressed in that independent review: May 15, 2015 Sacramento Bee "The state's proposal to restore habitat in the Delta and build two massive water diversion tunnels on the Sacramento River 'falls short' in its scientific rigor, according to a new report by a group of scientists. The tunnels are just one component of the Bay Delta Conservation Plan, a $25 billion project proposed by the California Department of Water Resources. The project, intended to reform water management in the Sacramento-San Joaquin Delta, has been in the works for eight years. It is now undergoing public review, with a decision on approval expected by the end of this year. As part of that process, legislation in 2009 required the draft environmental impact study for the project to be reviewed by the Delta Independent Science Board, a 10-member panel of technical experts appointed by the Delta Stewardship Council. The council is a state agency, separate from DWR, whose seven members are appointed by the governor and Legislature. It has limited powers of review over the Bay Delta Conservation Plan and other matters in the Delta. In a 133-page report released Monday, the Independent Science Board commends the BDCP planners for compiling and analyzing mountains of complex information on the Delta, the largest estuary on the West Coast of the Americas. But it also faults the analysis in a number of crucial areas, including interaction among wildlife species, effects of climate change, effects on San Francisco Bay, poor analysis of uncertainties, and poor organization that undermines public understanding. Jay Lund, the science panel's chair-elect and a professor of civil and environmental engineering at UC Davis, said another issue is the way the proposal analyzes the effectiveness of 100,000 acres of habitat restoration proposed in the Delta. 'One of the bigger concerns in my mind, and for the science panel, is that they're assuming the restoration is going to work, and work right away,' said Lund."	The lead agencies believe that 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts, direct and cumulative, that project description is complete and satisfies the requirements of NEPA, that the project objectives are also precise and complete and satisfy the requirements of CEQA. The lead agencies agree that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS. Please refer to comment letters 1448 and 2546 to see responses to the Delta Independent Science Board's comments.

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2423	1	The water redistribution system replacement proposals are vital to the economy of California but have been defeated handily not because they were technically flawed, but because the public did not understand the issue and were easily swayed by political emotional rhetoric.	No issues related to the adequacy of the environmental impact analysis in the EIR/EIS were raised.
2423	2	This is a very expensive project. I doubt the claim that the water districts can fully fund it. Prepare to solicit Congressional support or for taxpayer approval. You won't get either with the documents as they are presently written. This is your opportunity to educate the lay public so that they can understand that this project is in the best interests of all of California.	Please see Master Response 5 regarding costs of implementation and funding sources. For more information regarding purpose and need, please see Master Response 3.
2423	3	What is now needed in California is the water redistribution system that was first articulated by B.S. Alexander in 1873, i.e., a system that redistributes the abundant water produced in Northern California to the arid areas of Southern California (See Jackson, et al. 1990). The present CVP/SWP does not do this. At Friant Dam the CVP diverts water from the San Joaquin watershed, a Southern California watershed, and transfers it via the Friant - Kern Canal to the Kern watershed, another Southern California watershed. Then it takes San Joaquin Delta water, again Southern California water, and by using Jones Pumping Plant sends the San Joaquin Delta water back to Mendota Pool on the San Joaquin River via the Delta-Mendota Canal. Water stored in Shasta Dam and Folsom Dam that enters the Delta is used largely for water quality management and virtually all of this water flows into San Francisco Bay.	This comment is an opinion that an alternative SWP/CVP distribution system is needed for California. No comments on the EIR/EIS are provided.
2423	4	Why the new water diversion system on the Sacramento River is mandatory: The water from the Sacramento River Watershed should be used to secure the water supply because there is almost 3 ¾ more water available and it is of significantly higher water quality. The Sacramento Watershed (Sacramento River [and] Yolo Bypass) has contributed mean annually 21.19 MAF (million acre-feet) as Delta inflow between 1980 and 1991, while the San Joaquin Watershed (San Joaquin River [and] Eastside streams) contributed a mean annual 5.66 MAF over the same period (Delta Atlas 1993). With this amount of water from the Sacramento River available, the issue of nearing water supply capacity becomes moot and placement of the new water export diversion site becomes obvious.	The issues raised by the commenters address the merits of the project and do not raise any issues with the environmental analysis provided in the EIR/EIS documentation.
2423	5	Moving the export water diversion facility to the Sacramento River and banning further water exports in the San Joaquin Delta will eliminate reverse flows in the San Joaquin Delta. Without reverse flows from water export operations, migration cues to the ocean will reappear in the San Joaquin Delta so that San Joaquin tributary salmonid smolts are able to successfully emigrate through it. There also would be no water diversion facility to entrain them. Smolt production in the San Joaquin watershed would become meaningful. As a consequence of these two changes significantly larger numbers of returning fall-run Chinook salmon adults are expected. Despite low tributary instream flow releases that reduce attraction flows for returning adult salmonids, there would be at least a signal where the natal stream is located with no water exports from the San Joaquin Delta. Higher return rates to the natal stream and lower levels	The comments provided here appear to be focused on an alternative wherein all water is diverted from the Sacramento River. This, however, is not what is proposed under the preferred alternative (Alternative 4A, California WaterFix). Whereas some of the comments agree with analyses presented in the RDEIR/SEIS (e.g., the potential for less straying of San Joaquin River basin adult salmonids because of less south Delta exports), others do not. For example, even with no south Delta exports, water temperatures in the south Delta would be expected to remain too high for delta smelt to inhabit that area during the summer and fall.

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		of straying are expected. The San Joaquin Delta will revert to backwater habitat with no water export operations in the San Joaquin Delta. That is a habitat to which Delta smelt were adapted. With so much suitable habitat restored, and much of it in the historical center of their distribution (Moyle 2003) rapid and large increases in Delta smelt populations should occur. Longfin smelt populations are also expected to quickly rebound since the entrainment of fry by export operations would disappear. Residence time of San Joaquin Delta water would increase to pre-project levels without water export operations in the San Joaquin Delta, improving conditions conducive to robust and diverse plankton communities upon which threadfin shad and young-of-the-year striped bass feed. Importation of salts to the San Joaquin Valley would virtually cease due to the difference in water quality between the polluted San Joaquin Delta water and the much cleaner Sacramento River.	
2423	6	When the water export operations are relocated to the Sacramento River, the adverse effects associated with present water export operations will disappear from the San Joaquin Delta not reappear in the Sacramento Delta because the Sacramento River has a much higher gradient (0.026) from near the city of Sacramento to its confluence with the San Joaquin River just West of Sherman Island. This is 1.6 times the gradient of the San Joaquin River from Fresno to the confluence with the Sacramento River. Therefore the Sacramento River has a significant higher gradient and consequently has more energy with higher momentum and higher inertia. A typical water velocity in the Sacramento River is about 2.5 feet/second. It will be very difficult if not impossible to pump Sacramento River upstream. Therefore, by just by moving the export pumping facilities from the San Joaquin River to the Sacramento River, the adverse effects caused by flow reversal disappear in the San Joaquin Delta and will not reappear in the Sacramento Delta.	Reverse flows in the Sacramento River also are not shown in the model results because the CALSIM II model assumptions related to the North Delta Bypass Flows were specifically developed to reduce or eliminate diversions at the north Delta intakes during periods that would cause reverse flow patterns along the Sacramento River (see Appendix 5A, Section B). Therefore, tidal flows in the Sacramento River would be similar under the action alternatives and the No Action Alternative. However, it should be noted that under the proposed project, the south Delta intakes would continue to be used during portions of the year and reverse flows would continue during some periods in Old and Middle River, as shown in Appendix 5A, Section C. The existing operation of the SWP and CVP pumps in the south Delta can cause reversals in river flows, potentially altering salmon migratory patterns. The new system would reduce the ongoing physical impacts associated with sole reliance on the southern diversion facilities and allow for greater operational flexibility to better protect fish. Minimizing south Delta pumping would provide more natural east–west flow patterns (RDEIR/SDEIS Section 4.1). Overall reductions in OMR reverse flows under all flow scenarios for the proposed project would be beneficial with corresponding increase in net positive downstream flows, during the migration period of Chinook salmon through the interior Delta channels (Appendix B, Supplemental Modeling for Alternative 4A, Section B.7 (RDEIR/SDEIS Section 4.3.7). Operations would still be consistent with the criteria set by the FWS (2008) and NMFS (2009) BiOps and State Water Resources Control Board Water Right Decision 1641 (D-1641), subject to adjustments made pursuant to the adaptive management process as described in the 2008 and 2009 BiOps (RDEIR/SDEIS Executive Summary ES.2.2).
2423	7	If there are no reverse flows in the Sacramento River, then the emigrating anadromous smolts from the Sacramento watershed will still be able to find the ocean. This is critically important because the size of the salmonid stocks are higher and more varied than the San Joaquin salmonid stocks. The Sacramento watershed supports fall-run Chinook salmon, late-fall run Chinook salmon, winter-run Chinook salmon (Federally and State Endangered), spring-run Chinook salmon (Federally and State threatened), winter-run steelhead, summer-run steelhead, and green sturgeon (Federally threatened) that are presently absent from the San Joaquin watershed. Size of attraction flows in the Sacramento watershed is not as serious as those in the San Joaquin watershed. The proposed magnitude of the water diversion is large, but the Sacramento River channel around Hood is also huge. There should be an instream flow assessment made, but it has to be something more than PHABSIM, because the Sacramento River is wide and deep and I think there is a depth bias in the	The commenter is correct that there will be no reverse flows in the Sacramento River. In fact, the modeling was designed specifically to avoid causing reverse flows in the Sacramento River near the proposed intakes (Please see Comment 2423-6). Therefore, a formal instream flow assessment is unnecessary because, as noted by the commenter, the marginal habitat conditions will not change much in the Sacramento River.

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		PHABSIM approach. If there are no reverse flows in the Sacramento River, the marginal habitat conditions for Delta smelt in the Sacramento Delta will not change much with the new water export operations, so the net result in both deltas will be enhanced habitat condition in the San Joaquin Delta and no change in conditions in the Sacramento Delta.	
2423	8	Longfin smelt upstream distribution in the Sacramento Watershed is at Rio Vista, far downstream of the proposed water export diversion site at Hood. The proposed project should have no effect on longfin smelt in the Sacramento Delta. With Sacramento River water export diversions operating, the Sacramento River downstream of the export facility will slow slightly due to the reduction in flow. This slight increase in residence time is not expected to enhance conditions conducive to plankton proliferation, therefore feeding conditions for threadfin shad and young-of-the-year striped bass would be unchanged.	Longfin smelt do occur upstream of Rio Vista, and can be found in the Sacramento River near where the north Delta intakes would be located, albeit in very low abundance; see, for example, Appendix 5.B of the public draft BDCP EIR/EIS, section 5.B.6.2.3.1. With respect to the effects on threadfin shad and striped bass, the comments are noted.
2423	9	There is a proposal that water export facilities must be maintained in the San Joaquin Delta in case the Sacramento River is unable to supply water demand. With almost four times as much water as is delivered currently, when would this shortfall occur? This proposal must have come from those who want to take all the water. This is inappropriate and should be rejected outright. Besides, the system needs all of the San Joaquin Delta outflow to resist salt intrusion during incoming tides.	No issues related to the adequacy of the environmental impact analysis in the EIR/EIS were raised.
2423	10	There are many advantages of using the entire outflow of the San Joaquin Delta to control tidal salt intrusion. One, the low-energy San Joaquin Delta water resists tidal intrusion in a more consistent and predictable fashion than the high-energy Sacramento Delta water. This allows for better management of Delta tidal intrusion. In contrast, the higher-energy Sacramento Delta water reacts violently with the incoming tide, creating an uneven interface that would be more difficult to model. Two, the San Joaquin Delta water quality is very low. It is filled with pesticide and fertilizer residues, so water processing costs would be high. It would be better to use low-quality water to control tidal intrusion and provide a valuable service rather than using high-quality water that could be used for domestic purposes. It is going to take all of San Joaquin outflow and some water from the Sacramento to manage tidal salt incursion into the deltas.	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/EIS.
2423	11	Controlling tidal intrusion into the Delta has had much interest and should not be ignored. Its relevance with this project is two considerations. One, tidal salt intrusion into the Delta must be kept West of Rock Slough to preserve domestic water supply for Antioch and Pittsburg. Two, amounts of flow necessary by season to kept salt west of that diversion point must be determined prior to any consideration of expanding water demand, i.e., determining what water is surplus and available for water development. Pittsburg and Antioch had their domestic water diversion just off shore of each city. Each city lost their domestic water diversions in the 1920s due to upstream water development that decreased outflow that functioned to keep those domestic water diversion sites permanently fresh. Ultimately, the initial CVP moved their diversions further east to Rock Slough where water was still fresh. This area is not as fresh as when CVP constructed the facility. I believe keeping this area fresh has been compromised when water supply issues became more	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/EIS.

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		apparent. With the increased water supply situated on the Sacramento River there is no reason not to improve water quality at this location.	
2423	12	Upstream water development has resulted in the outflow to San Francisco Bay to be half of historical (California State Lands Commission 1991). Any further water development means outflow to San Francisco Bay would be reduced to more than half of historical. When you use more than half of anything, you must proceed with caution. I suggest that the amount of outflow sufficient to keep the Rock Slough diversion permanently fresh as the first bit of information needed to determine the amount of water available for further development. Outflow to the Bay is ecologically very important. Outflow magnitude determines where Pacific herring spawn. Many sea birds are dependent upon Pacific herring eggs for their welfare. Surf scoters, Western grebes, Clark's grebes, greater scaup and lesser scaup have a ten-year trend of declining abundance. They may be indicators that the minimum adequate outflow level to the bay has already been exceeded. I do not know anyone investigating what the minimum outflow to San Francisco Bay should be. It is a very important question and pertinent to this project. It relates to sustainable practices of water diversion and I request that you address this question.	As described in Appendix 3A, Identification of Water Conveyance Alternatives Conservation Measure 1, of the EIR/EIS, one of the potential alternatives considered was based upon the State Water Resources Control Board 2010 Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem, which described providing up to 75 percent of unimpaired flow into the Delta to improve aquatic resources habitat conditions and to meet recommended Delta outflow criteria. However, as indicated by the State Water Resources Control Board, 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 without reductions in non-SWP and non-CVP water rights diversions. The purpose and need of this EIR/EIS would not allow changes to non-SWP and non-CVP water rights.
2423	13	The present Delta fish protective facilities are worthless because there is no downstream to escape entrainment into the facility, so fish are repeatedly exposed to entrainment. The new facility must have a downstream so that fish can bypass the diversion facility. The louvers meant to screen the facility are inefficient so fish are sucked through the system and into the export channels. Use screens. They may be more expensive, but they work better than louvers. There is unacceptable mortality in fish rescued from both the state and federal water export diversion facilities. Too many fish are packed into the salvage tank trucks. At times there are more fish than water in these tank trucks. Fish are severely stressed and consequent mortality is high. A solution would be to provide more and larger tank trucks and develop standards for maximum fish density in tank trucks. Predator fish are trained to be present when salvaged fish are about to be released. Salvaged fish are not rescued. They become fish food. This is a tough one. Perhaps release the salvaged fish in a screened so they might recover. The screen may be designed to allow salvage fish to exit volitionally but prevent predators from entering the area.	The proposed North Delta Diversion fish screens would be located in a riverine section of the Sacramento River with predominantly downstream flows, which would provide the "downstream" that the commenter is referring to (presumably analogous to sweeping flows). The comments apparently describing the existing south Delta fish facilities are noted; it is acknowledged that these facilities have relatively low salvage efficiency.
2423	14	Largest fish screen is at Glen-Colusa Irrigation District and is sized for a 3,000 cfs [cubic feet per second] diversion or ¼ the size of the proposed diversion. Maybe the water diversion infrastructure should be built in 3,000 cfs-sized increments to keep within known fish screen performance. Along the bank screens have been extensively used in the California Central Valley. Along the bank perforated screens have holes that are sized to the species lifestage to be screened. The density of the holes is determined by the magnitude of the diversion and the desired approach velocity that will avoid impinging (sucking) the fish fast to the fish screen. The holes are distributed evenly in hopes that this will produce even approach velocity all	Each of the proposed intakes for the North Delta Diversion would be 3,000 cfs (please see, for example, Table 3.2-1 in Chapter 3 of the RDEIR/SEIS) and would be on-bank diversions meeting fish agency criteria. The process of design has been and will continue to be subject to extensive collaborative discussions with the fish agencies. A variety of preconstruction studies are proposed to aid in refinement of the fish screen design, based on the studies recommended by the Fish Facilities Technical Team in 2011.

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		along the screen. Unfortunately, as flow passes along the screen zones of higher than desired approach velocity and lower than desired approach velocity always occur. To remedy this, a secondary baffle is placed behind the screen and is adjusted to account for these uneven velocity spots. Unfortunately, all this does is change the location of these uneven velocities. Perhaps what is needed is for the water to enter the diversion facility when it is perpendicular to the screen so as to eliminate the upstream to downstream flow dynamic.	
2423	15	Use a water bridge to go over [Delta] waterways. Water can be elevated over the existing rivers in a canal supported by pillars or the like. Water bridges have been constructed in Germany and India. Because ocean freighters stop at Stockton and Sacramento as ports, the water bridge must be sufficiently high to allow unimpeded passage for these ships. The identifiable sources of cost would be the cross section of the canal (It must be sufficient to transport a volume of water between 9 thousand to12 thousand cubic feet per second), length (fifty miles!) and height of the structure (think height of the Bay Bridge) and then there are seismic protective considerations. This would be very expensive.	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 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 to that document thoroughly explain the process used to develop the alternatives, and explain why certain potential alternatives were considered but ultimately rejected by the Lead Agencies.
2423	16	A way to avoid [the] maze of waterways is to build a canal that runs initially eastwards to circumnavigate the Delta maze of waterways and separately siphon under each waterway. Under this concept North Fork Mokelumne River, Fourteen Mile Slough, Disappointment Slough, San Joaquin River and Middle River would have to be siphoned. This is basically the Peripheral Canal concept. In addition to costs of construction of canal and siphons, the cost of acquiring land will be much more than the west San Joaquin land acquired for the California Aqueduct when it was considered worthless desert. This alternative is politically dead.	Master Response 36 explains how the BDCP or the California WaterFix Project is different from the previously proposed Peripheral Canal. The Natural Resources Agency and DWR staff will continue seeking improvements and refinements to the current proposal in order to enhance species benefits and to avoid, reduce or mitigate for negative impacts to people, communities, sensitive species and habitats. 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 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 to that document thoroughly explain the process used to develop the alternatives, and explain why certain potential alternatives were considered but ultimately rejected by the Lead Agencies.
2423	17	Go underground [to get water to the California Aqueduct]. Tunneling beneath them can surmount the difficulty of multiple waterways as obstacles. The technology to do this is available. The BART tunnel under San Francisco Bay between San Francisco and Oakland comes immediately to mind. I am guessing that the proposed water tunnels are within this size scale.	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 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 to that document thoroughly explain the process used to develop the alternatives, and explain why certain potential alternatives were considered but ultimately rejected by the Lead Agencies.
2423	18	Why two tunnels? It reduces the risk of total failure of the diversion system, most probably from seismic events.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
2423	19	The water demand on the Colorado River reduced the inflow into the Colorado River Delta to no flow, eliminating vibrant fisheries, bird habitation and riparian communities. This must not happen to the Sacramento-San Joaquin Delta. The resource agencies have a responsibility to keep natural resources in good condition. I ask that good condition be defined as habitat sufficient to provide sufficient reproductive levels of all species living in	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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. See Master Response 3 (Purpose and Need) and Master Response 26 (Changes in

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		the Delta so they can persist indefinitely.	Delta Exports).
2423	20	[The] list of identified habitat restoration sites appears to be a wish list; the only apparent criterion to be on this list is that the habitat is degraded and is in need of restoration. It is curious that restoration of riparian habitat that was converted into levee is conspicuously absent. California has less than 10% of the historical distribution of riparian forest that is a virtual cornucopia of terrestrial and aquatic ecological benefits. Riparian forest provides climate change resilience, improves water quality, buffers water temperature change, improves bank stability, improves flood flow retention, and facilitates terrestrial and aquatic biodiversity and much, much more. The reasons for denuding banks and not revegetating them are frivolous.	The commenter states their opinion on the benefits of riparian habitat and states that the "list of identified habitat restoration sites appears to be a wish list; the only apparent criterion to be on this list is that the habitat is degraded and is in need of restoration". It is unclear exactly where in the EIR/EIS this comment is directed. No riparian restoration sites have been identified as part of the California WaterFix.
2423	21	The San Joaquin River Restoration Project activities should be incorporated into the EIS/EIR because the reason for that action was excessive water diversions from Friant Dam that caused extremely adverse effects to the San Joaquin River. How will these restoration activities affect San Joaquin Delta inflow?	The No Action Alternative and all action alternatives include qualitative assumptions for the San Joaquin River Restoration Program because at the time of publication of the Notice of Preparation and Notice of Determination Reclamation was evaluating alternatives within a separate NEPA process. Because the model runs are used in a comparative manner, and not a predictive manner to develop absolute values, and because operations on the San Joaquin River upstream of Vernalis are not modified in any of the action alternatives as compared to the No Action Alternative, the effects of these two sets of operations on the San Joaquin River would not affect evaluation of the changes in Delta conditions due to implementation of any of the action alternatives.
2424	1	[ATT1: BDCP Letter #1449]	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.
2425	1	As communicated in our April 15th comments, PG&E believes that CDWR's RDEIR/SDEIS would benefit from being supplemented with considerably more detail concerning the description and impacts of expected PG&E work as a result of implementation of the BDCP. The BDCP water conveyance component (CM-1) is expected to require new transmission-level electric service, upgrades to existing electric transmission facilities, and the relocation and protection in place of existing PG&E electric and gas facilities. Licensing and permitting of transmission facilities can take a considerable amount of time; however, the California Public Utilities Commission's (CPUC) General Order 131-D provides an exemption from CPUC permit requirements for certain projects that have undergone environmental review by another agency as part of a larger project, such as the BDCP. Even where this exemption is not available, the CPUC's permit process can be expedited where another agency has already certified a final CEQA document that includes environmental review of the facilities to be permitted by the CPUC. As such, PG&E is concerned that, absent further analysis in CDWR's RDEIR/SDEIS of the PG&E work necessary to serve and allow construction of the BDCP, the overall time needed to permit and construct the necessary PG&E facilities may be increased. These potential delays could result in a corresponding increase in the overall time and cost necessary to complete CDWR's project.	Under Alternatives 1A through 8, electrical power to operate the new north Delta pumping plant facilities would be delivered through 230 kV transmission lines that would interconnect with a local utility at a new or existing utility substation depending on the conveyance alignment. The alignment of this transmission line and its interconnection point would be based on the selection of a power provider for the project following selection of a conveyance alignment. This selection is ongoing and the alignment of the transmission lines will be finalized at a later date. At that time, all of the commenter's concerns for additional detail will be determined and addressed with the appropriate power provider. DWR will continue to work closely with utility providers. All comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.
2425	2	The document (Chapter 20 - Public Services Utilities) should address, with as much specificity as possible, what facilities PG&E will build or upgrade to serve the project's power needs, including, but not limited to, the following: -Facility information (materials, locations, land requirements)	See response to comment 2425-1.

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		-Planned route -Location and size of conductor pull sites -Appearance of structures -Construction (methods, equipment, access, impacted areas) -Temporary environmental impacts (disturbance footprints) -Permanent environmental impacts (disturbance footprints) As previously stated in PG&E's April 15th comment, complete project design information should be included and analyzed in the RDEIR/SDEIS. Absent such complete information, the RDEIR/SDEIS should be improved to reflect real-world constructability review and more robust assumptions related to PG&E facility construction and operation.	
2425	3	The document (Chapter 20 - Public Services Utilities) should address, with as much specificity as possible, what facilities PG&E will necessarily relocate or protect in place to meet the project's needs, including, but not limited to, the following: -Specific utility facilities to be relocated -Specific utility facilities to be protected in place -Facility information (materials, locations, land requirements) -Planned relocation or protect in place route/approach -Appearance of structures -Construction (methods, equipment, access, impacted areas) -Temporary environmental impacts (disturbance footprints) -Permanent environmental impacts (disturbance footprints) PG&E recommends CDWR staff continue to work closely with PG&E to further develop the appropriate preliminary project descriptions and augment the relevant chapters in DWR's RDEIR/SDEIS to help mitigate the risk of project delays.	See response to comment 2425-1.
2426	1	[ATT1: BDCP comment letter #1569]	This comment describes an attachment to the comment letter. All comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest.
2427	1	The BDCP and California Water Fix (Alternative 4A) continue to incorporate Conservation Measure 19 (CM19, BDCP Chapter 3.4.19), as it has not been removed through the published changes, list of significant changes, or other discussion. CM19 is repeatedly included in general discussions of CM2-22 without adequate distinction from the other types of conservation measures. CM19 in the RDEIR/SDEIS was not revised to address the major comments provided by the Sacramento Stormwater Quality Partnership on the BDCP documents, and it is unclear whether the project intends to implement CM19 as part of the proposed project, California EcoRestore, or indirectly through other existing or planned	As proposed in the 2013 public draft BDCP, Conservation Measure 19 (CM19; Urban Stormwater Treatment) was a voluntary measure proposed by DWR and Reclamation to try and improve water quality conditions in the Delta for the covered fish. CM19 is no longer included in the Proposed Action (Alternative 4A). If Alternative 4A is selected, CM19 would not be implemented. However, if a different alternative is selected that includes BDCP or CM19, DWR and Reclamation will take into consideration the suggested comments to revise the analysis of potential benefits of this conservation measure, and the consideration of other potential pollutants into the Delta

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		programs. Municipal separate storm sewer system (MS4) agencies already have significant investment in control strategies, monitoring, and adaptive management programs, including participation in the Delta Regional Monitoring Program.	which could be reduced through similar means to benefit the covered fish. See Master Response 5 regarding BDCP Conservation Measures and Master Response 14 regarding water quality.
2427	2	CM19 was described in seven pages of the BDCP with little detail, numerous inaccuracies on urban runoff contaminants and water quality regulations, and without any evidence that CM19 control measures could provide any measurable benefits to the covered species. CM19 (BDCP Section 3.4.19) intends to decrease urban runoff contaminant discharge to support BDCP Objective L2.4 to provide water quality to "help restore native fish habitat". However, there is no technical analysis demonstrating the potential benefits of CM19 aside from incomplete descriptions of pyrethroid research in upstream urban tributaries; this research has not demonstrated relevance to impacts on covered species in the Delta. As proposed in the BDCP, CM19 provides no new benefits to downstream covered species. The California Water Fix does not correct these errors and inaccurate characterizations of urban runoff control measures. We are concerned that without adequate revisions or complete removal of CM19, these errors will persist and propagate in future documents. The Sacramento Stormwater Quality Partnership requests that CM19 be specifically removed from the BDCP and California Water Fix documents unless it is significantly revised with coordination from Municipal separate storm sewer system (MS4) agencies and full funding is provided by the proposed project funding for the long-term implementation costs of CM19.	See response to comment 2427-1 regarding CM19.
2427	3	The California Water Fix inaccurately draws conclusions for groups of conservation measures by grouping them together without adequate distinction of effects. The California Water Fix continues to refer to CM19 when referring to multiple conservation measures (e.g., CM2-CM22) and never clearly states that CM19 will not be included. In fact, the California Water Fix essentially takes credit for all future conservation measures, including CM19, without revising these conservation measures to correct inaccuracies and significant flaws. For example, the Executive Summary includes a table with identified impacts, and on numerous occasions includes CM2-CM21 or CM2-CM22, without distinguishing differences or the relative contribution to the evaluated effect from the different conservation measures. There are many specific examples of this issue, such as Potential Impact WQ-14 (page ES-44) that shows "Effects on mercury concentrations resulting from implementation of CM2-CM22" with "significant and unavoidable" impacts. This implies that CM19 would have a significant impact on mercury concentrations, which is unsupported based on the known negligible relative contribution (0.4%) from urban runoff to Delta methylmercury loading. [Footnote 3: Central Valley Regional Water Quality Control Board. Sacramento-San Joaquin Delta Estuary TMDL for Methylmercury Staff Report. Page 80, Table 6.2 April 2010] The Sacramento Stormwater Quality Partnership requests that the conservation measures be more accurately evaluated, characterized, and grouped when discussed and presented in the context of benefits, impacts, and costs.	Please refer to response to comment 2427-1 regarding CM19.
2427	4	In our previous comments we identified several key areas of water quality impacts and insufficiently evaluated water quality degradation, which others including US Environmental Protection Agency [Footnote 4: Kathleen Martyn Goforth, Manager Environmental Review Section EPA Region 9 (ENF-4-2). Draft Environmental Impact Statement for the Bay Delta Conservation Plan, San Francisco Bay Delta, California (CEQ# 20130365). August 26, 2014] have echoed. Based on our review of the California Water Fix documents, these concerns	Regarding the portion of the comment stating there are numerous significant and unavoidable impacts, such impacts have only been identified for Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, 9. Alternatives 2D, 5A, and the preferred Alternative 4A would only have a significant and unavoidable impact to methylmercury associated with the small tidal habitat restoration area. Regarding exceedances of the Emmaton objective with the preferred Alternative 4A, as explained in Impact WQ-11 for this alternative, the modeled exceedances are largely associated modeled deadpool conditions.

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		have not yet been addressed through more robust evaluation and proposed mitigation. The California Water Fix documents identify areas of water degradation and numerous significant and unavoidable impacts. [Footnote 5: Table ES-9. Summary of BDCP/California WaterFix RDEIR/SDEIS Impacts and Mitigation Measures] Electrical conductivity (EC) exceedances at Sacramento River at Emmaton (New Alternatives: Alternatives 4A, 2D, and 5A Alternative 4A Water Quality, page 4.3.4-24, lines 15-18) are also notable: Modeling results indicated that the Emmaton EC objective would be exceeded more often under Alternative 4A than under Existing Conditions and the No Action Alternative (ELT), and that increases in EC could cause substantial water quality degradation in summer months of dry and critical water years The number of exceedances in this case is four times the current condition and nearly double the No Action Alternative (NAA, Appendix 8H, page 6, Table EC-4). Potential upstream impacts are completely ignored, and there is clear potential for water quality impacts on water resources upstream from this location. Though significant impacts to EC at Sacramento River at Emmaton are identified, the California Water Fix documents state that the proposed mitigation is expected to make this impact less than significant: Page 2-10, Line 42-44, Alternatives 2D, 4A, and 5A did not contain significant impacts for EC related to objective exceedance in the Sacramento River at Emmaton, did not contain substantial degradation in the western Delta due to increased chloride concentrations, had less water quality effects in the western Delta related to EC, and fewer exceedances of the fish and wildlife EC objective between Prisoners Point and Jersey Point, such that it was feasible to introduce mitigation that would prevent significant impacts related to EC increases. After introduction of these mitigation measures, Alternatives 2D, 4A, and 5A contained less than significant impacts for EC. Alternatives 2D, 4A, and 5A contained less than significant impacts for chloride as well. While we appreciate the efforts to identify mitigation measures, the measures proposed for the Sacramento River are insufficiently described as "Adaptively Manage Diversions at the North and South Delta Intakes to Reduce or Eliminate Water Quality Degradation in Western Delta." It is not sufficiently specified how existing management approaches will reduce all additional exceedances relative to existing conditions and the no action alternative (NAA) as required by the Federal Antidegradation Policy. Nor is it demonstrated through the water quality modeling that proposed operational changes would not reduce exceedances significantly. The California Water Fix documents also include the significant and unavoidable impact of microcystis, but provide no meaningful mitigation measures. All of the alternatives evaluated in the California Water Fix documents include significant export of water out of the Sacramento and American River watersheds. The cumulative impacts of the proposed North Delta diversion and the coordinated upstream water management system are not adequately characterized or mitigated. Full mitigation of the impacts is not evaluated, though this is required by Federal and State Antidegradation Policies. A thorough evaluation would provide a better and more informative indicator of the actual impacts and cost to fully mitigate. It is important that the final document provides full mitigation of the impacts to prevent costs from being passed on to local agencies that are not the proposed project beneficiaries. Moving forward with the California Water Fix without full mitigation would reinforce the current and historic reactive approach	Under extreme hydrologic and operational conditions where there is not enough water supply to meet all requirements, CALSIM II uses a series of operating rules to reach a solution that is a simplified version of the very complex decision processes that SWP and CVP operators would use in actual extreme conditions. Thus, it is unlikely that the Emmaton objective would actually be violated due to dead pool conditions. However, the modeling results indicate that water supply could be either under greater stress or under stress earlier in the year and EC levels at Emmaton and in the western Delta may increase as a result, leading to EC degradation and increased possibility of adverse effects to agricultural beneficial uses. EC degradation has been acknowledged in Impact WQ-11 as a significant impact, for which mitigation has been provided to reduce this impact to less than significant. Regarding the relevance of the federal and state antidegradation policies to the EIR/S water quality assessment, please see Master Response 14. Regarding impacts to Microcystis, it is noted that significant and unavoidable impacts were identified only for Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, 9. Alternatives 2D, 5A, and the preferred Alternative 4A would have less than significant impacts to Microcystis, thus, no mitigation has been provided related to Microcystis for these alternatives. Regarding evaluation of impacts to water quality using a mass export-loading type approach, please see response to Comment 2427-91. Please see Master Responses 22, 33, and 31regarding mitigation measures, adaptive management and the Delta Reform Act respectively.

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		to ecological management that is inconsistent with the Delta Plan Co-equal Goals. The water quality impacts are not adequately summarized for the purpose of evaluating the impact of the proposed North Delta diversion. The mass of any constituent (e.g., flow volume, salts, metals, etc.) exported under the proposed scenarios should be compared to the mass exported under the current and baseline conditions. If the exported mass decreases under the proposed diversions, the proposed project is increasing the mass remaining in the Delta. When both are normalized or averaged for the flow volume, the overall concentration increase could be quantified. This relatively simple approach would provide the context necessary to identify cumulative impacts. The Sacramento Stormwater Quality Partnership requests that full mitigation be evaluated, including specific plans for the relied-upon adaptive management, consistent with antidegradation requirements.	
2427	5	There are numerous cases where the proposed project refers to upstream effects and provides some operational changes, especially as it relates to fish passage. For example, Section 4 (page 4.1-13, lines 19 through 25) states: The RTO Team in making operational decisions that depart from the criteria used in the modeling will take into account upstream operational constraints, such as coldwater pool management, instream flow, and temperature requirements. This acknowledgement that upstream effects are likely, and will require Real Time Operations (RTO) management, also indicates a clear potential impact to upstream water quality. However, the Section 8 Water Quality analysis (page 8-93, lines 8 through 10) states that without the proposed project upstream electrical conductivity (EC) effects would not degrade: An effect on salinity (expressed as EC) would not be expected in the rivers and reservoirs upstream of the Delta. This acknowledges that there are EC increases due to the proposed project that would result in more tidal (i.e., salinity gradient) influences on upstream rivers. The water quality analysis of Alternative 4A does not make any specific findings or quantifications regarding EC changes upstream of the proposed North Delta diversion, and the Appendix 8H modeling results do not include sites upstream from Emmaton, despite the significant degradation expected at that location. This evaluation is an example of the insufficient and incomplete assessment regarding the significant effects on the upstream rivers from the proposed project, which will be amplified by climate change and sea level rise. Degradation due to salinity, temperature, and possible higher loads of metals liberated from reservoir releases operated at lower water surface elevations may increase downstream concentrations in the American and Sacramento Rivers. These effects are not considered in the California Water Fix or BDCP documents. The Sacramento Stormwater Quality Partnership requests a more detailed quantitative (modeled) assessment of water quality conditions upstream from the proposed North Delta diversion.	The text cited in the comment regarding real-time operations and upstream effects is related to temperature. Acknowledgement of temperature effects cannot be equated with effects on EC, because temperature is a physical parameter that is affected by reservoir and storage, river flow, and atmospheric conditions. For the reasons described in Impact WQ-11 in Chapter 8, Water Quality, EC is not expected to be affected by reservoir storage and river flow changes upstream of the Delta. The comment also states that degradation due to salinity, temperature, and metals is not considered. Temperature effects are addressed in detail in EIR/EIS in Chapter 11, Fish and Aquatic Resources. Please also see Master Response 14 regarding temperature effects to drinking water uses. Regarding EC, the assessment for EC in Chapter 8, Water Quality, Impact WQ-11 finds that an effect would not be expected, as noted in the comment. Regarding degradation at Emmaton identified in Impact WQ-11, mitigation is proposed to reduce that to a less than significant level. Potential changes in trace metals were fully assessed in Impact WQ-27, and considered changes in reservoir storage ranges relative to baseline conditions. Please refer to Master Response 30 for additional information beyond that presented in the EIR/EIS in Chapter 8, Water Quality, regarding the qualitative approach to the assessment of changes in water quality in the Upstream of Delta region.
2427	6	Table 8-60a (Section 8, page 8-83) presents the significantly increased residence times	The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action

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		during the fall in the North Delta under Alternative 4 H3 (57 days) in comparison to Existing Conditions (49 days) and the No Action Alternative (50 days). Increases in average residence time are predicted in the North Delta year-round with significant increases in the fall. Cache Slough, East Delta, West Delta, and South Delta had increases for every season except Cache Slough in the fall. Temperature and residence time increases are the most critical factors driving microcystis blooms in the Delta. [Footnote 6: Cyanobacteria white paper prepared for Central Valley Regional Water Quality Control Board science effort on Delta water quality problems and nutrient water quality objective evaluation.] Given the predicted increases in Delta water temperatures due to climate change and proposed project effects modeling, the increased residence times associated with the proposed project may lead to increased occurrence, spatial distribution, and magnitude of Microcystis blooms in the Delta. The residence time analysis did not evaluate the impacts further upstream. There is the potential for these blooms to migrate upstream due to tidal action under low flow conditions in the Sacramento and American Rivers. This is in the vicinity of numerous municipal water supply intakes and a highly utilized recreational and wildlife habitat area. These impacts are not evaluated in the California Water Fix documents or BDCP document revisions. The Sacramento Stormwater Quality Partnership requests that the residence times upstream of the proposed North Delta diversion be evaluated to determine if microcystis blooms will migrate upstream.	Alternative and Existing Conditions in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS. The DSM2 model results (which were used in the analysis of residence times) represent 15-minute intervals. Because the Alternatives 2D, 4A, and 5A contain a lower acreage of tidal restoration, relative to Alternatives 2, 4, and 5, which have modeled residence times, residence times under these alternatives are not expected to increase as substantially as under the other alternatives, and thus significant impacts with regard to Microcystis are not expected under these alternatives, relative to the No Action Alternative. Please refer to Master Response 14 related to water quality and residence time considerations.
2427	7	The Section 2 Substantive Revisions consider the "removal" of conservation measures and other water quality model "improvements", and conclude for electrical conductivity and chloride (Section 2, page 2-10, lines 40 and 41) that "although the impacts remain significant and unavoidable, the magnitude of the impacts is substantially less than was indicated in the BDCP documents." It is not clear if the "substantial improvement" is due to the removal of the conservation measures or the modeling revisions. The conservation measures are cited in the cumulative analysis as future activities for the many benefits they would provide, especially restoration areas and infrastructure investment; however, as stated in Section 2 it may be inferred that their inclusion would then cause "substantial degradation" in the context of the electrical conductivity and chloride cumulative analysis. The Section 5 "Revisions to Cumulative Impact Analyses" does not clearly evaluate the impacts of the Conservation Measures and refers to the BDCP documents without clarifying the limit of their applicability. For example, Section 5 (page 5-16, lines 18-21) states that: Concurrent implementation of CM1 with CM2-CM21 under Alternatives 1A-5 is not expected to result in more adverse/significant impacts than described for the separate conservation measures, because the mercury conditions in water and fish resulting from CM1 would be similar to Existing Conditions. If the case is CM2-CM21 will occur outside of the project, then the cumulative impact analysis should consider the impacts from the restoration areas (e.g., methylmercury generation). The California Water Fix analysis assumes only the beneficial outcomes of these future activities, which results in segmenting and masking the overall proposed project impacts. Moreover, the cumulative impacts of future restoration actions intended to mitigate the impact of the California Water Fix should consider the relevant water quality regulations, including consistency with Total Maximum Daily Loads (TMDLs). Our previous comments on the BDCP documents identified a number of technical issues and significant cumulative water quality impacts for a range of water quality constituents; these have not	The California EcoRestore project is a separate project from the California WaterFix, and will be overseen by the California Resources Agency and implemented under the California Water Action Plan. While restoration measures associated with the CMs under the BDCP alternatives would have contributed significant and unavoidable impacts, lessening their scope in the form of Environmental Commitments under the new subalternatives is not the only reason for less significant impacts. As described in Section 4 of the RDEIR/SDEIS, the subalternatives also are compared to a new timeline for the No Action Alternative – they use Early Long Term while the BDCP alternatives are compared to Late Long Term (because of different permit periods under the alternatives). Additionally, Alternative 4A relies on different operating criteria than Alternative 4. In many cases, certain habitat restoration activities of the project alternative would affect Delta hydrodynamics. The differences in constituent levels, and a comparison to Alternative 4, are described for each impact in the Water Quality analysis for Alternative 4A in Section 4 of the RDEIR/SDEIS. Please see Master Response 5 regarding more information about Conservation Measures from the BDCP. Please also see Master Response 2, which describes how the construction and operation of the alternatives were analyzed at a project level of detail while the CMs and EC were described at a programmatic level of detail. A thorough cumulative analysis is presented in Section 5 of the RDEIR/SDEIS. Also see Master Response 9 regarding the cumulative analysis.

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		been adequately addressed with the segmentation of the California Water Fix from the related restoration and mitigation measures. The Sacramento Stormwater Quality Partnership requests that California EcoRestore and all associated mitigation plans evaluate consistency with water quality regulation and allow a review period before the California Water Fix is finalized.	
2427	8	The California Water Fix economic analysis does not identify significant economic impacts on local agencies; nor does it include evaluation of the cost of eventual implementation of CM2-CM21 through California EcoRestore or other programs used to mitigate the impacts of the California Water Fix. The water quality and habitat degradation caused by the California Water Fix and its mitigation could require local agencies to perform their own mitigation to protect natural resources for aquatic life protection and other beneficial uses (e.g., MUN, REC, and AGR). Degradation caused by the North Delta diversion and related restoration activities should be fully mitigated by the project proponents. The Sacramento Stormwater Quality Partnership requests that the California Water Fix documents include significant and reliable water quality improvement funding assurances specific to the Delta and tributary watersheds.	Chapter 16, Socioeconomics, meets CEQA and NEPA requirements. Please see Master Response 5 regarding costs of implementation and funding for the proposed project. Decreases in revenue from property tax and assessments could potentially result in the loss of a substantial share of some agencies' tax bases and particularly for smaller districts affected by a project. However, California Water Code (Section 85089 subdivision 9b) specifies that the entities constructing and operating a new Delta conveyance facility will fully mitigate for the loss of property tax revenues or assessments levied by local governments or special districts. This Water Code requirement will ensure that tax revenues forgone as a result of transferring land from private to public ownership will be fully offset. Please refer to Chapter 8, Water Quality, for more details on the water quality analysis. Wherever, feasible mitigation has been incorporated to reduce impacts.
2427	9	The Sacramento Stormwater Quality Partnership previously provided extensive comments on consistency with the Federal Antidegradation Policy. There is no indication that these issues were addressed in the California Water Fix documents, which is required according to the requirements of the Clean Water Act and the Federal Antidegradation Policy. Therefore, the original comments are still applicable to the California Water Fix documents. The BDCP documents and California Water Fix documents do not address the consistency of the proposed project with those requirements, which are an important element of water quality standards. Specifically, the documents fail to address the identified significant degradation of 303(d) listed waters that would result from the proposed project, including the aforementioned increases in salinity (EC) and other constituent violations. Thus, the documents insufficiently address the requirements of the Federal Antidegradation Policy. The Sacramento Stormwater Quality Partnership requests that a full Antidegradation Analysis be performed for any/all cases where the proposed project may cause or worsen a water quality impairment or otherwise substantially reduce the available assimilative capacity.	Please refer to Master Response 14 regarding assessment of water quality degradation in the EIR/EIS, and the relevance of federal and state antidegradation policy considerations in the CEQA/NEPA process.
2427	10	The California Water Fix documents do not demonstrate a commitment to meet the Delta Reform Act and Delta Plan co-equal goals. The California Water Fix documents (Appendix G-4A, page G-1, lines 17-19) specify, "…Alternative 4A will not be incorporated into the Delta Plan and will follow a different process to demonstrate consistency with the Delta Plan." However, the Appendix G-4A analysis does not sufficiently demonstrate consistency with the Delta Plan co-equal goals. Measures are not adequately developed to mitigate the "far-field" impacts of the California Water Fix in the North Delta and in upstream locations. Appendix G-4A refers to the Executive Summary (Table ES-9) for a list of these measures; however, Table ES-9 does not provide mitigation for a number of significant water quality impacts. The California Water Fix documents then refer to the "Mitigation, Monitoring and Reporting Program (MMRP) that will be available with the Final EIR/EIS." (page G-4, lines 9-10). The California Water Fix documents are incomplete, and it is not possible to evaluate consistency with the Delta Plan without allowing sufficient time to review the MMRP. Appendix G-4 and the California Water Fix documents do not adequately evaluate key	Compliance with the Delta Reform Act and compatibility of the California WaterFix are presented in Appendices 3I and 3J, respectively in this Final EIR/EIS. These appendices have been updated since the time of the RDEIR/SDEIS. Please also refer to Master Response 31, which addresses compliance with the Delta Reform Act. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.

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		science questions previously identified in our review and in the Independent Science Board review. [Footnote 7: Delta Independent Science Board. Environmental Documents for California WaterFix. September 14, 2015. http://deltacouncil.ca.gov/docs/delta-isb-s-review-rdeirsdeis-bdcpcalifornia-waterfix] Appendix G-4 and the California Water Fix documents do not provide a clear commitment to collaborative science and adaptive management that is required under the Delta Plan. The California Water Fix documents do not specifically include any demand management measures as required by the Delta Plan. Demand management and regional water supply self-reliance are key elements of the Delta Plan, but these are inadequately presented in the California Water Fix documents without commitments to key implementation targets. As described in the California Water Fix documents, the project purports to meet the co-equal goals of the Delta Reform Act and Delta Plan by providing flexibility in managing water diversions between the North and South locations. However, in practicality the proposed project incurs risk. This includes risk of the continued decline of habitat with the hydrodynamic changes, and additional species that may go extinct or no longer be present in the Delta and tributary systems. The California Water Fix documents should provide assurance that all reasonable circumstances and conditions were reviewed and considered for risk and the opportunity for mitigation. Full commitment to meet the co- equal goals should include a plan to fund the necessary monitoring and mitigation to protect the Delta's beneficial uses. The Sacramento Stormwater Quality Partnership requests that complete documentation of Delta Plan consistency (i.e., the MMRP, the response to comments on the BDCP documents, and revisions to the California Water Fix documents) be circulated for public review with adequate time for review and revision prior to circulation of the final California Water Fix documents.	
2427	11	The proposed project permit period is shortened from fifty years to fifteen years in the California Water Fix documents; and, the scope of impacts evaluated is constrained to the fifteen years. Construction and ongoing operation of the proposed North Delta diversion has significant long-term impacts that are not adequately evaluated. When the next permitting cycle begins, the proposed California Water Fix will be the new baseline, and shortening the permit periods could effectively set up a cycle of incremental impacts that do not consider the overall long-term impact of the proposed project. Incremental changes may be small compared to the baseline, but the baseline is already an impaired condition. The Sacramento Stormwater Quality Partnership requests that the California Water Fix documents include an analysis of long-term effects from the proposed project, including cumulative effects with associated projects such as CA EcoRestore.	For information regarding cumulative impacts please see Master Response 9. For information regarding the project permit term please see Master Response 45. Cumulative impacts associated with California EcoRestore are considered in the cumulative analysis (see Section 5.1.2, pp 37).
2427	12	The proposed California Water Fix relies on future, non-specific adaptive management to mitigate its impacts without providing clear and specific goals, outcomes, and timelines. While the Sacramento Stormwater Quality Partnership is encouraged by the participation of the Independent Science Board and other "third-party" entities, there are no clear commitments to fund sufficient science and modeling. Although efforts to adaptively manage environmental systems to minimize impacts on covered species and beneficial uses are important, the historical adaptive management program has failed and must be fundamentally changed to achieve collaborative partnerships to meet the co-equal goals. The proposed project construction, mitigation, and operations could provide opportunities	The lead agencies believe that the 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts (using the best available science and modeling). The California Water Fix would utilize an adaptive management program (AMP) 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. The AMP will be made available with the Final EIR/EIS prior to project decision-making. Additional details for the AMP are included in Chapter 3, Description of Alternatives. The AMP is intended to provide a process for addressing uncertainty associated with the effectiveness of management actions taken to prevent jeopardy and adverse modification of critical habitat to federally listed species and to prevent jeopardy and minimize and fully mitigate effects on state listed species from: ongoing operations of the SWP/CVP, habitat restoration actions

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		for adaptive management, both for the benefit of the project as well as for Delta ecosystem recovery. However, such a specific roadmap has not been presented. The BDCP documents and California Water Fix documents defer specific planning actions and governance to a later time to adaptively address issues as they arise (Executive Summary, page ES-17, lines 7 through 9): An adaptive management and monitoring program will be implemented to develop additional scientific information during the course of project construction and operations to inform and improve conveyance facility operational limits and criteria. This reactive approach will not be effective, because ecological systems and species may collapse completely before correction actions are taken. The California Water Fix documents should include specific commitments and schedules for monitoring, assessment, engagement of local agencies, and implementation of actions before thresholds of beneficial use impairments are realized. The California Water Fix documents and BDCP documents defer details on how adaptive management will be made to work. The California Water Fix documents appear to weaken commitments to any Delta Adaptive Management Team that is broad based and implements the co-equal goals. The sections on collaborative science (ES.4.2 and 4.1.2.4) of the California Water Fix documents cite recent progress toward truly collaborative efforts in monitoring and synthesis in support of adaptive management in the Delta; however, more specific commitments and funding to implement adaptive management and collaborative science are necessary. The current level of assurance falls short of the serious attention to adaptive management that would be consistent with the Delta Reform Act. We have noted this shortcoming before and it is echoed by others, including the Independent Science Board. The lack of impact assessment to upstream areas in the California Water Fix documents and BDCP documents suggests that these potential impacts will not be considered as part of the adaptive management and science programs that are referenced. These potential beneficial use impacts to the upstream water bodies include water quality related (MUN), biological (COLD, WARM), recreational (REC), and agricultural (AGR).	required for CWF and/or the 2008/09 BiOps and CESA authorizations, and from future construction and operation of the proposed CWF, including the proposed North Delta Diversion (NDD) screen design. Please see Master Response 33 for a discussion of the adaptive management and monitoring program. For more information regarding the proposed project's compliance with the Delta Reform Act please see Master Response 31. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.
2427	13	The Sacramento Stormwater Quality Partnership and other Delta stakeholders have participated in the successfully operating Delta Regional Monitoring Program. Technical and information gathering stakeholder groups like this should have defined roles in a collaborative Delta science framework. Because of potential significant water quality impacts of the proposed North Delta diversion, the Delta Plan requires a commitment for long-term monitoring and a transparent adaptive management program. By deferring to future plans and actions, the California Water Fix documents and BDCP documents insufficiently describe the Adaptive Management Program and Monitoring Program. The Sacramento Stormwater Quality Partnership requests that at a minimum, more information be provided on key components of these collaborative adaptive management programs, including an outline of their structure and the types of evaluations and studies that will be completed, as well as an implementation schedule and any required benchmarks that are linked to operations and species recovery.	See response to comment 2427-12 regarding adaptive management.
2427	14	The proposed North Delta diversion construction, mitigation, and operation plans provide many opportunities for adaptive management, both for the benefit of the project as well as for the Delta ecosystem. The BDCP documents and California Water Fix documents defer specific planning actions and governance to a later time to adaptively address issues as they	See response to comment 2427-12 regarding adaptive management.

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		arise: A management and monitoring program will be implemented to develop additional scientific information during the course of project construction and operations to inform and improve conveyance facility operational limits and criteria. (p. ES-17) This reactive approach will not be effective, because ecological systems and species may be significantly impacted or unrecoverable before correction actions can be taken. The Sacramento Stormwater Quality Partnership requests that the California Water Fix documents include specific commitments to monitoring, assessment, engagement of local agencies, and implementation of actions before thresholds of beneficial use impairments are realized.	
2427	15	The project documents are tens of thousands of pages, and the collaborative science and adaptive management discussion is less than four pages in length. A review of key components of these four pages is provided below as examples of the insufficient descriptions provided. The discussion within the California Water Fix documents initially limits the collaborative group to historic partners as described in the following text: 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. (Page 4.1-18, line 18-20) We agree that a robust collaborative program is necessary. The collaborative science program does not include a diverse group of members, and it resembles the current approach to management. While greater participation of the Independent Science Panel (ISP) is an improvement (discussed elsewhere in the California Water Fix documents), alternative structures should be considered to improve the focus of the science to develop solutions to water quality impacts created by water diversions. A "robust program" would consider multiple points of view in a comprehensive, transparent, and public process. The Sacramento Stormwater Quality Partnership requests that the stakeholder group be broadened to consider the interests of other stakeholders and beneficial uses impacted by the BDCP/California Water Fix project in the Delta and the upstream and downstream waters.	See response to comment 2427-12 regarding adaptive management.
2427	16	In the following text the California Water Fix documents suggest that the AMMP is a tool to inform operations, but not an action that has any environmental impact by itself: For the purposes of analysis, it is assumed that the Collaborative Science and Adaptive Management Program (AMMP) developed for Alternative 4A would not, by itself, create nor contribute 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. (page 4.1-18, lines 20-25) As previously commented, the project proposes to mitigate EC water quality impacts with adaptive management. The intent by the project proponents is then to use the AMMP as a process and planning document for mitigation of the Delta diversions. While this is not a specific action, it is a planning document for a series of interrelated actions that should be considered individually as well as a cumulative whole for impacts. The AMMP should be	It is assumed the Collaborative Science and Adaptive Management Program (AMMP) developed for Alternative 4A would not, by itself, create nor contribute 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. Chapter 31, Other CEQA/NEPA Required Sections, analyzes the environmental effects of mitigation measures (which comprise the MMRP). Mitigation measures to address water quality impacts are included in Chapter 8, Water Quality, and are listed by impact in a summary table in the Executive Summary. Please see Master Response 14 regarding Water Quality. For significant impacts, see the significance table in the Executive Summary. Please see Master response 33 for information regarding Adaptive Management and Monitoring. And please

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		considered as part of the cumulative impact assessment and to demonstrate the overall benefit of the Delta diversion mitigation measures. The Sacramento Stormwater Quality Partnership requests that the AMMP provide the detail and a demonstration of how such a program could reasonably assure compliance with water quality regulations (i.e., water quality standards). The Sacramento Stormwater Quality Partnership requests that the California Water Fix documents include a discussion of the specific tasks and tools that will be developed through adaptive management. These tools should be available to a wide range of stakeholders to improve broad-based collaborative science and coordination. The collaborative science approach should be inclusive at the "base" where the science is performed as well as at the "top" where the ISP provides review and direction.	see Master Response 9 regarding Cumulative Impact.
2427	17	The California Water Fix documents' description of the forthcoming Adaptive Management and Monitoring Program (AMMP) provides little detail on how and when the AMMP will be applied, without consideration for a wider range of reasonable mitigation measures: Specifically, collaborative science and adaptive management will, as appropriate, develop and use new information and insight gained during the course of project construction and operation to inform and improve: - the design of fish facilities including the intake fish screens; - the operation of the water conveyance facilities under the Section 7 biological opinion and 2081b permit; and, - habitat restoration and other mitigation measures conducted under the biological opinions and 2081b permits. (Page 4.1-18, lines 28-35) The type of actions listed above are too limited to address the range of possible water quality impacts that are already identified, and they do not address the potential benefit of other measures required by the Delta Plan such as demand management. The Sacramento Stormwater Quality Partnership requests that the AMMP consider a broader range of mitigation and operational activities, including demand management.	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 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 Bay Delta Conservation Plan/California WaterFix permit, 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. Numerous water quality monitoring stations are located and are currently operating throughout the Delta, and will continue to be operational in the future. These stations are operated by the United States Geological Survey, the United States Bureau of Reclamation, the California Department of Water Resources, the Interagency Ecological Program, and numerous local agencies. Staff can constantly monitor Delta water quality conditions from these stations and adjust operations of the SWP and CVP in real time as necessary to meet water quality objectives set by the State Water Resource Control Board protection of agricultural water supply, municipal and industrial drinking water supply, and fish and wildlife beneficial uses. Monitoring locations already present in Old River near Discovery Bay are sufficient to support and inform these activities with regards to salinity (including both chloride and electrical conductivity) and organic carbon. Monitoring of mercury and selenium will be further defined in site specific monitoring and management plans associated with the restoration areas. Refer to Master Response 6 and Appendix 1C for further information on demand management measures, including increasing agricultural water use efficiency and conservation.
2427	18	In the following text, the California Water Fix documents summarize the overall goals of the Adaptive Management and Monitoring Program (AMMP): In summary, the broad purposes of the program will be to: 1) undertake collaborative science, 2) guide the development and implementation of scientific investigations and monitoring for both permit compliance and adaptive management, and 3) apply new information and insights to management decisions and actions. (Page 4.1-18, lines 36-40) The purposes presented are beneficial, but they are only aspirational without commitments to more thoroughly evaluate the effectiveness of management actions as part of this	Water Quality effects of all of the action alternatives, including California WaterFix are addressed in Chapter 8, Water Quality of this Final EIR/EIS. This analysis shows that water quality in the Sacramento and San Joaquin Rivers would not be significantly affected by proposed new water operations. For more information regarding adaptive management please see Master Response 33.

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		planning process. The Sacramento Stormwater Quality Partnership requests that California Water Fix documents provide a reasonable assurance that the high quality water in the Sacramento and American Rivers can be maintained. The Sacramento Stormwater Quality Partnership requests that the AMMP be circulated for review prior to release of the final BDCP documents and California Water Fix documents.	
2427	19	In the following text, the California Water Fix documents describe the sources of funding, without committing sufficient resources to collaborative science and monitoring related to the proposed North Delta diversion: Collaborative science and monitoring conducted to support the proposed project will be implemented, when feasible, using existing resources from state, federal, and other programs, and the mitigation program of the water conveyance facility. The mitigation program of the water conveyance facility has money dedicated to the monitoring necessary to support effective implementation of mitigation actions. (Page 4.1-20, lines 1-4) The project proponents and the State of California should provide funding guarantees to address collaborative science relative to the overall health of the Delta, including operation of all diversion and conveyance facilities. Because there is "uncertainty" in many of the effects of the project on other stakeholders, the project proponents should also develop a specific list of tools and activities that will be performed (e.g., Delta water quality model) so that the uncertainty of the proposed adaptive management does not persist. The Sacramento Stormwater Quality Partnership Requests that these tools be developed so that all stakeholders have access to the data and model elements, as well as peer review opportunities.	The Lead Agencies believe that the 2013 Draft EIR/EIS and 2015 RDEIR/SDEIS are complete in their evaluation of impacts (using the best available science and modeling), direct and cumulative, that project description is complete and satisfies the requirements of NEPA, and that the project objectives are also precise and complete and satisfy the requirements of CEQA. The Lead Agencies believe that the 2013 Public Draft EIR/EIS and 2015 RDEIR/SDEIS provided the public and decision-makers with sufficient information on which to make informed comments which have been considered and incorporated into the Final EIR/EIS. Considerable 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. For more information regarding adaptive management please see Master Response 33.
2427	20	Collaborative science is not easy, but the choices made for the welfare of all of California and its natural resources should not be based on convenience and too narrow of an approach. The Sacramento Stormwater Quality Partnership requests that the adaptive management and monitoring program structure and discussion be updated to encourage and incorporate consensus science through coordination and participation in regional scientific and monitoring programs. Long-term funding guarantees for the Delta Regional Monitoring Program and Delta water quality modeling tools should be specified.	See response to comment 2427-19 regarding adaptive management.
2427	21	The BDCP documents and California Water Fix documents (Alternative 4A) do not adequately coordinate with local agencies in and around the Delta to develop solutions that will meet the Delta Plan co-equal goals and mitigate the impacts from the California Water Fix. The California Water Fix documents provide no assurances that local agency input on adaptive management will be considered through a meaningful process. The Sacramento Stormwater Quality Partnership (SSQP or Partnership) and the ratepayers it represents, as well as other north-of-Delta agencies, have a significant financial and natural resource stake in the outcome of the BDCP/California Water Fix. Therefore, local Northern California agencies need to be afforded a more significant role in BDCP/California Water Fix implementation and assessments.	Commenter is requesting greater communication between local agencies and DWR/Reclamation. See Master Response 40 regarding public outreach and Master Response 33 regarding adaptive management.

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		While the Partnership appreciates the modification to the BDCP documents (Appendix D, Substantial BDCP Revisions, page D.3-141, Table 3.6-2) to include the SSQP as a "Potential Partner for the Monitoring and Adaptive Management Program", the role is limited to "Community involvement" and "landowner access", which is not responsive to the local agency concerns nor commensurate with the potential impact of the proposed project on local agencies. The major input opportunity described in these revisions to the BDCP documents appears to be participation in developing the "Decision Trees". However, that participation ends when the North Delta diversion is operational (page D.3-138, lines 7-9), "Unlike the other focus areas, the Decision Trees focus area has a deadline, terminating when the new north Delta diversions become operational." The Substantial BDCP Revisions (page D.3-85, lines 30-31) also state that "The Adaptive Management Fund will also support changes to conservation measures CM2-21 as determined by the BDCP adaptive management program." If CM19 is implemented or changed, local municipal separate storm sewer system (MS4) agencies should be allowed participation in the process to change and implement conservation measures. The Partnership requests the creation of a state-funded local agency liaison commission with representation on the adaptive management team to allow adequate adaptive management participation from local agencies upstream of the proposed North Delta diversion.	
2427	22	The BDCP documents and California Water Fix documents attempt to balance complex scientific analysis while satisfying the environmental planning processes. However, the complexity of the presentation results in reduced public transparency and inhibits informed decision-making. The sheer volume of documents for public review is inconsistent with State and Federal environmental review guidelines, reducing the public decision-makers' ability to understand the actions and implications of government decisions with environmental consequences. There are well-acknowledged facts that are diluted by the volume and complexity of the documents. Many of these facts were noted in previous comments on the BDCP documents; however, to date there has not been any comprehensive response to key comments made by the Sacramento Stormwater Quality Partnership and repeated by others during the review period. There are a number of cases where the "gaps" between the BDCP documents and California Water Fix documents cannot be evaluated with only "assurances" that future versions and efforts will cover this scope. For example, key issues such as where and how habitat restoration will be effective to achieve BDCP/California Water Fix goals, where and how additional flows will be provided for fish habitat improvement, how water supply demand management in the export areas will address the Delta Plan goals, and how and where land, water quality, and biological impacts will be mitigated, are given only casual consideration compared to the presentation of complex operational scenarios. Deferring these major issues and comments to the final documents is a significant omission in the review process and undermines transparency in how the final documents will be composed. The BDCP documents and California Water Fix documents have numerous technical errors and omissions in evaluation of the impacts of the Alternatives related to water quality and related issues. Specific comments and references are provided in Attachment A. One particular reference that should be corrected is the description of the Sacramento Stormwater Quality Partnership, which is edited below for clarification:	Please refer to Master Response 41 regarding transparency of the public review process. The EIR/EIS follows a well-established format consisting of an executive summary, introduction, description of project objectives/purpose and need, description of alternatives and analysis of 18 alternatives divided by resource chapter. Although some of the analyses, particularly those related to operation of the conveyance facility may be considered complex, the EIR/EIS presents the background or setting information to provide the context and baseline for the analysis, explains the analysis methodology and approach to NEPA and CEQA conclusions and then presents all the known impacts for each resource topic. Regarding the habitat restoration, enhancement, protection and other actions (Environmental Commitments) that are built into the California WaterFix (Alternative 4A), these actions are commitments that serve as "defacto" mitigation measures and there effects are described at a level of detail consistent with the level of detail provided for impacts of mitigation measures. Once precise locations to these Environmental Commitments are determined, additional environmental review may be required to implement these actions. In addition, related to potential spring outflow flow sources, the EIR/EIS indicates that these flows will be obtained from willing sellers or by operation of the SWP/CVP. Water supply demand management is not a component of the action alternatives analyzed in the EIR/EIS. The revisions to the Stormwater Quality Partnership text is noted and incorporated into this Final EIR/EIS by reference as indicated in this comments.

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		The Sacramento Stormwater Quality Partnership is a multi-jurisdictional program made of Sacramento County and the incorporated cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova to [insert]improve urban runoff quality and protect[insert] [delete]ensure[delete] water quality [delete]and quantity for cities[delete]. (Page D.3- 144, lines 13-17)	
2427	23	Section: ES.1.1 Page: ES-2 Line: 34-46 Type: Omission Key Document Text: Many commenters argued that, because the proposed project would lead to significant, unavoidable water quality effects, DWR could not obtain various approvals needed for the project to succeed (e.g., approval by the State Water Resources Control Board of new points of diversion for north Delta intakes). Yet others suggested that DWR should pursue a permit term shorter than 50 years due to the levels of uncertainty regarding both the future effects of climate change and the long-term effectiveness of habitat restoration in recovering fish populations. Still other comments suggested that the proposed conveyance facilities should be separated from the habitat restoration components of the BDCP, with the latter to be pursued separately. Comment: The summary omits the significant comments from the Sacramento Stormwater Quality Partnership and others, such as USEPA, that an alternative should be proposed that does mitigate all water quality degradation. Please provide response to comments prior to issuance of the final project documentation and allow for a reasonable comment period.	The alternatives included in the Draft EIR/EIS 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 during time of preparation of the EIR/EIS. In fact, as a direct result of the extensive public comments and agency input, the water facility and conveyance options proposed as part of the project changed significantly during the planning process in ways that reduce impacts in the Delta communities. Additional unique Alternatives that were proposed during review of Administrative Drafts of the BDCP and EIR/EIS were also considered and described, See Appendix 3A of the EIR/EIS and Section 4 of the RDEIR/SDEIS. Refer to Master Response 41 for information on project transparency and Master Response 42 for information on public comments.
2427	24	Section: ES.1.1 Page: ES-3 Line: 31-33 Type: Alternatives, WQ Key Document Text: Although Alternatives 4A, 2D, and 5A include only those habitat restoration measures needed to provide mitigation for specific regulatory compliance purposes, habitat restoration is still recognized as a critical component of the state's long-term plans for the Delta. Comment: The document insufficiently describes the ability of the project to precisely determine which measures are "needed" for specific compliance purposes. The significant impact of the	The commenter offers an opinion on adequacy of habitat restoration mitigation measures. The habitat acreages needed to reduce effects of Alternative 4A are described as Environmental Commitments and presented in Chapter 3, Description of Alternatives and Section 4 of the RDEIR/SDEIS. These acreages have been determined to adequately compensate for habitat losses related to construction and operation of the water conveyance facilities in consultation with USFWS and DFW.

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		diversions is not mitigated, nor are the cumulative impacts.	
2427	25	Section: ES.1.2 Page: ES-4 Line: 19-22 Type: WQ Key Document Text: This RDEIR/SDEIS has been prepared to provide the public and interested agencies an opportunity to review and comment on revisions and additional information added to the Draft EIR/EIS that was circulated for public review on Dec 13, 2013. Key revisions are listed below. - Updated environmental analysis that addresses certain issues raised in the more than 12,000 comments received on the Draft EIR/EIS. One example of such updated analysis is an updated discussion of Water Quality effects, which have been reduced compared with how they were described in the Draft EIR/EIS. Comment: Characterizing the changes as "reductions" in water quality impacts is misleading because 1) some changes were computational and do not actually indicate that real impacts have been reduced, 2) many minor changes do not necessarily mean that the project as a whole will have a minor impact, rather than a major one, on water quality at many locations, and 3) the removal of the restoration areas accounts for many of these changes, especially those where there is uncertainty in the water quality projections. While removing the restoration areas may reduce water quality impacts for some constituents, their removal also takes away all the benefits they provide for habitat and water quality. It is recommended that this statement more clearly states that water quality effects from CM-1 are not changed, but the removal of some of the other conservation measures and modeling refinements provide benefits for some constituents.	The water quality impact conclusions are based on modeling results available at the time the RDEIR/SDEIS was prepared, which included the assumption of 25,000 acres of tidal habitat restoration and implementation of Yolo Bypass enhancements, neither of which are components of Alternatives 4A, 2D, and 5A. The modeling also assumed Threemile Slough as a compliance location, even though the alternatives descriptions had the compliance location at Emmaton. Further, the Montezuma Slough Salinity Control Gate was not operated (i.e., open for the entire simulation) whereas the alternatives' description has the gate operated, consistent with the No Action Alternative. Hence, sensitivity analyses were relied upon to interpret how the operation of the Salinity Control Gate, removal of restoration areas, and Emmaton as the compliance location would change water quality relative to that shown in the modeling results. Additional modeling was conducted under the Final EIR/EIS for Alternatives 4A, 2D, and 5A that removes the tidal habitat restoration and Yolo Bypass enhancements, includes Emmaton as the compliance location, and includes operation of the Montezuma Slough Salinity Control Gate. Final EIR/EIS appendices supporting Chapter 8, Water Quality, have been revised to show the updated modeling results, including 8D (Source Water Fingerprinting Results), 8E (Bromide), 8F (Boron), 8G (Chloride), 8H (Electrical Conductivity), 8I (Mercury), 8J (Nitrate), 8K (Organic Carbon), 8L (Pesticides), and 8M (Selenium). Based on the results of the updated modeling, the water quality impact conclusions presented in the RDEIR/SDEIS were confirmed, as presented in the Final EIR/EIS in Chapter 8, Water Quality. Alternatives 4A, 2D, and 5A would result in less-than-significant impacts to water quality for all parameters assessed except for mercury and EC. Mitigation for addressing periods of EC degradation at Emmaton was refined based on the updated modeling results, and the revised analysis supports the determination that the impacts of Alternatives 4, 4A, 2D, and 5A on EC will be less than significant with mitigation. Please refer to Final EIR/EIS Chapter 8, Water Quality, for constituent-specific impact conclusions regarding the effects of the proposed alternatives on water quality, including the non-HCP alternatives 4A, 2D, and 5A. Please refer to section 8.3.5 for a cumulative effects analysis with regard to water quality. Please also see Master Response 14, for more information regarding water quality.
2427	26	Section: ES.1.2.2.3 Page: ES-7 Line: 2-6 Type: Alternatives, WQ Key Document Text: The anticipated effects of climate change will result in elevated sea levels, altered hydrological cycles, changed salinity and water temperatures in and around the Delta, and accelerated shifts in species composition and distribution. These changes add to the difficulty of resolving the conflicts in the Delta. Anticipating, preparing for, and adapting to these changes are key underlying drivers for the proposed project.	The California Water Action Plan recognizes that all Californians have 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 — 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. 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/. Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1, EIR/EIS, describes the range of conveyance alternatives considered in the development of the EIR/EIS. Appendix 1B, Water

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		Comment: The proposed approach and modifications to Alternative 4 suggest that management of the conveyances can resolve or substantially mitigate the effect of diversions. However, this assessment inadequately evaluates the benefits of demand management, which is required by the Delta Plan.	Storage, EIR/EIS, describes the potential for additional water storage and Appendix 1C, Demand Management Measures, EIR/EIS, describes conservation, water use efficiency, and other sources of water supply including desalination. While these elements are not proposed as part of the proposed project, the Lead Agencies recognize that they are important tools in managing California's water resources. Please see Master Response 4 regarding the selection of alternatives analyzed, Master Response 7 regarding desalination, Master Response 6 regarding demand management and Master Response 37 regarding water storage. For more information regarding the proposed project's compliance with the Delta Reform Act please see Master Response 31.
2427	27	Section: ES.1.3 Page: ES-9 Line: 25-27 Type: Alternatives, WQ Key Document Text: Range of Alternatives. The range and adequacy of alternatives is an issue of concern to the public as well as to governmental agencies. In response, the RDEIR/SDEIS proposes three new sub-alternatives. Comment: There are a number of suggested alternatives as mentioned in similar comments that have not been adequately addressed. The summary omits the significant comments from the Sacramento Stormwater Quality Partnership and others, such as USEPA, that an alternative should be proposed that does mitigate all water quality degradation. The limited number of alternatives evaluated provides a biased evaluation of potential project impacts. Please provide response to comments prior to issuance of the final project documentation and allow for a reasonable comment period.	A detailed description of the Alternatives screening process is provided in Appendix 3A of the Final EIR/EIS. For more information regarding alternatives to the proposed project please see Master Response 4. Consistent with the requirements of the California Environmental Quality Act (CEQA Guidelines §15088) and the National Environmental Policy Act (Council on Environmental Quality § 1503.4) and policies held by all Lead Agencies governing the implementation of CEQA and NEPA, all comments received on the DEIR/EIS and RDEIR/SDEIS are included with the Final EIR/EIS. Please see Master Responses 42 regarding treatment of public comments.
2427	28	Section: ES.1.3 Page: ES-9 Line: 30-32 Type: Alternatives, WQ Key Document Text: Separating the water conveyance plan from the HCP/NCCP [Habitat Conservation Plan/Natural Community Conservation Plan] and accelerating environmental restoration through EcoRestore may alleviate some of these concerns. Comment: The revised alternatives do not provide assurances of effective restoration or protection for covered species. There are no suggested alternatives that would mitigate water quality degradation, as requested by the USEPA and from the Sacramento Stormwater Quality	The comment expresses a general opinion regarding assurances of effective restoration or protection of covered species. For additional information regarding the development of project alternatives, please see Master Response 4. RDEIR/SDESIS 4.3.4 (4A) describes whether concentrations of various water quality constituents are expected to increase or decrease with the project, relative to existing conditions and the No Action Alternative. To the extent that concentrations of various water quality constituents are expected to increase, 4.3.4 describes whether these increases are expected to result in impacts to beneficial uses of water in the Delta. For constituents for which adverse impacts were expected, mitigation and other commitments, such as additional evaluation and modeling and consultation with water surveyors to identify additional measures to avoid and minimize or offset these impacts, were introduced to address those impacts. Additionally, adding intakes in the North Delta will allow for operational flexibility that can improve natural flow in the Delta and avoid impacts to migratory fish based on real time data and operations.

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		Partnership's review.	
2427	29	Section: ES.1.3 Page: ES-10 Line: 8-12 Type: Scope, Omission Key Document Text: Water quality is an issue of concern because of uncertainties regarding activities associated with conveyance facilities and restored habitat that could lead to discharge of sediment, possible changes in salinity patterns, and water quality changes that could result from modifications to existing flow regimes. This RDEIR/SDEIS in Section 4 addresses all of these water supply, surface water and water quality issues. Comment: This is another example of a summary conclusion where antidegradation, water quality impacts and reasonable mitigation, among other significant comments from the Sacramento Stormwater Quality Partnership's review and USEPA, are not adequately discussed or identified as issues that will be addressed. The statement that water quality impacts are adequately addressed is not supported by revisions to Section 4.	Under both CEQA and NEPA, lead agencies are afforded substantial discretion to determine what level of analysis is appropriate for a particular project or action. The Lead Agencies acknowledge that, with scientific uncertainty associated with this major project and its immense geographic and temporal scale, different experts may disagree with the data, methodologies, analyses, and/or determinations presented in the EIS/EIR documentation. However, the Lead Agencies strived to use the best available science throughout the effects analyses. The use of specific scientific data, modeling efforts, and findings was often vetted with various public and private experts to ensure it was the best available. A variety of data were obtained for the proposed project process: quantitative data from peer-reviewed published literature on topics specific to the Plan Area; peer-reviewed published literature outside the Plan Area but on topics relevant to the proposed project; unpublished quantitative data from within the Plan Area and from outside of the Plan Area; qualitative data or personal communication with topical experts; and expert opinion if no other sources were available. Though some experts may disagree with the Lead Agencies' analyses and conclusions, such differing views do not undermine the validity of the technical analyses in the environmental documentation so long as reasonable statements are provided by the Lead Agencies (Planning & Conservation League v. Castaic Lake Water Agency [2009] 180 CA4th 210, 243, 103 CR3d 124) Constituents of concern have been identified through an ongoing regulatory monitoring, and environmental planning processes. The water quality analysis in the RDIER/RDEIS and Final EIR/EIS covering the new subalternatives, including the new preferred project (Alt 4A), and Appendix A provide a thorough analysis of important water quality constituents of concern at multiple locations throughout the Delta, including CVP/SWP export service area, to present the potential water quality effects that could result from implementing the project alternative. As discussed in the RDEIR/SDEIS and confirmed in the Final EIR/EIS, the preferred project would result in only one water quality impact that cannot be mitigated to less than significant levels: effects on methylmercury, which is due to habitat restoration components of the project. Furthermore, Delta Reform Act allows for a reasonable range of Delta conveyance alternatives and the EIR/EIS included through-delta, dual conveyance, and isolated conveyance alternatives. Please see Master Response 4 for alternatives development and Master Response 14, Water Quality, for further discussion of water quality issues.
2427	30	Section: ES.1.6 Page: ES-14 Line: 12-16 Type: Clarity Key Document Text: New public comments made during the public review period for the RDEIR/SDEIS should be specific only to the newly circulated information contained in the RDEIR/SDEIS and should not address issues not directly included in the RDEIR/SDEIS. The Lead Agencies intend to only respond to comments that address analysis included within this RDEIR/SDEIS and not those related solely to the original Draft EIR/EIS. Comment: The complexity of the project and reliance on BDCP and associated DEIR/DEIS documents	Consistent with the requirements of the California Environmental Quality Act (CEQA Guidelines §15088) and the National Environmental Policy Act (Council on Environmental Quality § 1503.4) and policies held by all Lead Agencies governing the implementation of CEQA and NEPA, all comments received on the DEIR/EIS and RDEIR/SDEIS are included with the Final EIR/EIS. Please see Master Response 42 regarding treatment of public comments. For more information regarding the document's length and complexity please see Master Response 38.

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		makes it impossible to limit comments solely to "information contained in the RDEIR/SDEIS". Moreover, because the response to comments is not available, it is not clear whether previously commented issues have been adequately addressed. As presented, the documents inadequately represent the current proposed project.	
2427	31	Section: ES.3.2 Page: ES-25 Line: 33-35 Type: WQ, Omission Key Document Text: Section 2.2, Water Quality Revisions, of this RDEIR/SDEIS describes additional analyses undertaken to more accurately characterize the potential for exceedances of water quality standards and summarizes associated... Comment: The documents do not adequately address consistency with water quality regulation, including the Federal and State Antidegradation Policy.	Please refer to Master Response 14regarding assessment of water quality degradation in the EIR/EIS, and the relevance of federal and state antidegradation policy considerations in the CEQA/NEPA process.
2427	32	Section: ES.3.2.2 Page: ES-28 Line: 36-40 Type: WQ Key Document Text: Because of the combined effects of increased temperatures due to climate change (not related to the project alternatives) and increased residence times in the Delta (due primarily to the effects of the conveyance facility and tidal restoration), effects of project alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, and 9 on Microcystis were considered adverse (under NEPA) and significant and unavoidable (under CEQA). Comment: As noted in the comments on the revised Chapter 8, we have concerns about the potential of the revised reservoir operations to impact the hydrodynamic conditions in the rivers upstream of the Delta, which may contribute to algal growth due to increased temperatures. We request that this be reviewed and reconsidered.	Water temperature impacts in upstream tributaries that might be affected by SWP/CVP operations have been evaluated in Chapter 11. Please refer to Master Response 14. In addition, in-Delta water temperatures have been shown to be unaffected by upstream reservoir operations. Please see: Wagner, R. W., M. Stacey, L. R. Brown, M. Dettinger. Statistical Models of Temperature in the Sacramento–San Joaquin Delta under Climate-Change Scenarios and Ecological Implications. Estuaries and Coasts. 34: 544-556.
2427	33	Section: ES.4.2 Page: ES-37 Line: 29-39	Please see Master Response 33 concerning the Adaptive Management Program. The program will address screen design, habitat restoration, and operations of the CVP and SWP in the Delta, and its development has been coordinated among a large stakeholder group.

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		Type: AM, WQ Key Document Text: 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. Specifically, collaborative science and adaptive management will, as appropriate, develop and use new information and insight gained during the course of project construction and operation to inform and improve: - the design of fish facilities including the intake fish screens; - the operation of the water conveyance facilities under the Section 7 biological opinion and 2081(b) permit; and - habitat restoration and other mitigation measures conducted under the biological opinions and 2081(b) permits. Comment: The Adaptive Management and Monitoring Plan (AMMP) scope does not adequately address water quality impacts for all beneficial uses or ecological protection for the Delta and upstream watershed. The AMMP scope should be determined by a wide stakeholder group that includes local agencies to more transparently set goals consistent with the Delta Plan and other regulations.	
2427	34	Section: ES.5 Page: ES-43 Line: Table ES-9 Type: WQ, Omission Key Document Text: Table ES-9. Summary of BDCP/California WaterFix RDEIR/SDEIS Impacts and Mitigation Measures Water Quality Potential Impact: WQ-7: Effects on chloride concentrations resulting from facilities operations and maintenance (CM1) Comment: Chloride and salinity would tend to increase in the vicinity of the North Delta intakes, and there are other localized effects that may be significant. The analysis does not adequately evaluate these effects.	The assessment of chloride and EC in Chapter 8, Water Quality, addresses changes to these parameters within the entire affected environment, which includes the Sacramento River in the vicinity of the North Delta intakes. In the Upstream of Delta region, impacts to chloride and EC were determined to be less than significant for all project alternatives, including preferred Alternative 4A. Please see Master Response 30 for additional response regarding the assessment approach in this region.
2427	35	Section: ES.5 Page: ES-44	Please refer to response to comment 2427-1 regarding CM19.

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		Line: Table ES-9, multiple entries Type: CM19 Key Document Text: Table ES-9. Summary of BDCP/California WaterFix RDEIR/SDEIS Impacts and Mitigation Measures Water Quality Potential Impact: WQ-14: Effects on mercury concentrations resulting from implementation of CM2-CM22 Alternatives: 2D, 4, 4A, 5A Impact Conclusions Before Mitigation (CEQA): Significant (S) Proposed Mitigation (CEQA and NEPA): No available mitigation to address this impact Impact After Mitigation: Significant and Unavoidable (CEQA) as well as Adverse (NEPA) Comment: It is a broad and inaccurate generalization to assume that the effects from CM19 will have significant and unavoidable impacts on mercury concentrations. There is no evidence suggesting that stormwater controls generate methylmercury or increase total mercury concentrations. This table is confusing when referencing CM2-CM22 and option 4A is included. This implies that CM19 may be added to Option 4A later, which is not justified.	
2427	36	Section: ES.5 Page: ES-44 Line: Table ES-9 Type: CM19, Clarity Key Document Text: Table ES-9. Summary of BDCP/California WaterFix RDEIR/SDEIS Impacts and Mitigation Measures Water Quality Potential Impact: WQ-12: Effects on electrical conductivity concentrations resulting from implementation of CM2-CM22 Comment: There are numerous cases in the table where CM2-CM22 are grouped together for a combined effect. While this is convenient for presentation, it inaccurately implies that these conservation measures act in the same way.	This comment raises issue with the grouping and effects analysis of CMs 2-22 is noted. See Master Response 5 regarding BDCP Conservation Measures.
2427	37	Section: ES.5 Page: ES-44	See response to comment 2427-1 regarding CM19.

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		Line: Table ES-9 Type: CM19 Key Document Text: Table ES-9. Summary of BDCP/California WaterFix RDEIR/SDEIS Impacts and Mitigation Measures Water Quality Potential Impact: WQ-14: Effects on mercury concentrations resulting from implementation of CM2-CM22 Alternatives: 2D, 4, 4A, 5A Impact Conclusions Before Mitigation (CEQA): Significant (S) Proposed Mitigation (CEQA and NEPA): No available mitigation to address this impact Impact After Mitigation: Significant and Unavoidable (CEQA) as well as Adverse (NEPA) Comment: CM19 would not cause significant and unavoidable impacts based on methylmercury. The analysis inaccurately presents CM19 as generating methylmercury, when many studies have demonstrated the benefit of stormwater controls in reducing methylmercury.	
2427	38	Section: ES.5 Page: ES-45 Line: Table ES-9 Type: WQ, Alternatives Key Document Text: WQ-32: Effects on Microcystis Bloom Formation Resulting from Facilities Operations and Maintenance (CM1). Before Mitigation: 1A-2C, 3, 4, 5, 6A-9 - Significant (S) 2D, 4A, 5A - Less Than Significant (LTS). Proposed mitigation: WQ-32a: Design Restoration Sites to Reduce Potential for Increased Microcystis Blooms WQ-32b: Investigate and Implement Operational Measures to Manage Water Residence Time Comment:	Impacts WQ-32 and 33 describe why Alternative 4A is less than significant. Impact WQ-32 states that operations and maintenance of Alternative 4A is not expected to increase water residence times or ambient water temperatures throughout the Delta, including at the Banks and Jones pumping plants, and thus result in adverse effects on Microcystis in the Delta, relative to No Action Alternative (ELT and LLT) or Existing Conditions. Impact WQ-33 contributes the differences between Alternative 4 and 4A to the smaller scale of restoration proposed (CMs and ECs). Section 4.1.2.2 describes the operations associated with Alternative 4A. Please refer to Master Response 14. Please see Master Response 4 for alternative development.

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		Both ALT 4 and ALT 4A would lead to increased residence time, and the ALT 4A finding of LTS before mitigation is not justified. Moreover, the proposed mitigation measures for both cases rely on operational plans that are not provided for evaluation and may not be effective. A more detailed operational plan should be provided that also includes a discussion of operation changes if algal blooms or macrophyte growth threaten any beneficial uses due to the residence time increase. Please provide this more detailed operation plan specific to this mitigation for review prior to issuance of the final CA Water Fix documents.	
2427	39	Section: ES.5 Page: ES-45 Line: Table ES-9 Type: CM19, WQ Key Document Text: Table ES-9. Summary of BDCP/California WaterFix RDEIR/SDEIS Impacts and Mitigation Measures Water Quality Potential Impact: WQ-33: Effects on Microcystis Bloom Formation Resulting from Other Conservation Measures (CM2-CM21). Comment: CM19 was not demonstrated to cause significant and unavoidable impacts based on microcystis. Moreover, the increased residence time expected due to CM1 and Alternative 4A would be expected to increase the occurrence of microcystis.	See response to comment 2427-1 regarding CM19. Impact WQ-33 of Chapter 8 of the FEIR/EIS states that implementation of ECs would not have an adverse effects on Microcystis bloom formations. See Master Response 14 regarding Microcystis.
2427	40	Section: ES.5 Page: ES-54 Line: Table ES-9 Type: WQ, Alternatives Key Document Text: AQUA-78: Effects of water operations on migration conditions for Chinook salmon (fall-/late fall-run ESU [evolutionarily significant unit]); Proposed Mitigation: AQUA-78D: Slightly adjust the timing and magnitude of Shasta, Folsom, and/or Oroville Reservoir releases, within all existing regulations and requirements, to ameliorate changes in instream, slows that would cause an adverse effect to fall-run Chinook salmon. Significant (S) effect before mitigation, less than significant (LTS) effect after mitigation for ALT 4 and ALT 4A Comment: There is no demonstration that the suggested mitigation (AQUA-78) related to "slight"	As noted in the new Appendix 11E in the Final EIR/S, Sensitivity Analysis to Confirm RDEIR/SDEIS Determinations for Fish and Aquatic Species Using Updated Model Outputs for Alternative 2D, 4A, and 5A, there would be no need for Mitigation Measure AQUA-78d if 2010 and 2015/BA modeling had been used in this analysis because the Impact AQUA 78 determination would be not adverse and less than significant. These two modeling versions have been updated to better reflect the system operations under Alternative 4A from the RDEIR/SDEIS modeling, which included some assumptions that were no longer valid.

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		adjustments in reservoirs release will be sufficient. There exist so many release and flow requirements that it does not seem reasonable that there would be enough flexibility to manage salmon migration in all critical years. Moreover, if "slight" modifications can have such a sufficient effect to mitigate impacts, it is reasonable to assume that "slight" modifications can also have negative effects on migration. Given the amount of uncertainty included in the analysis of this mitigation measure, there is no assurance that "high resolution" management is possible or certain to be effective. Please develop sufficient evaluation and technical justification for the LTS finding after mitigation for any of these species where "slight" adjustments are primary mitigation.	
2427	41	Section: ES.5 Page: ES-103 Line: Table ES-9 Type: WQ, Alternatives Key Document Text: PH-2: Exceedances of water quality criteria for constituents of concern such that there is an adverse effect on public health as a result of operation of the water conveyance facilities. Proposed Mitigation: WQ-5: Avoid, minimize, or offset, as feasible, adverse water quality conditions. Impact After Mitigation: LTS (for ALT4A) and SU (for ALT4). Comment: There is no provided analysis that demonstrates that the proposed mitigation measure can reduce the number of electrical conductivity (EC) exceedances below the Existing Conditions or NAA for Alternative 4A. Additional mitigation should be provided and assessed or the finding should be changed to significant.	Relative to the 2013 DEIR/EIS, the 2015 RDEIR/SDEIS presented updated water quality analyses for Alternative 4 based on new modeling sensitivity analyses that reflected a change in EC compliance point from Threemile Slough to Emmaton, the current EC compliance point in the Bay-Delta Water Quality Control Plan. In addition, relative to the 2013 DEIR/EIS, the 2015 RDEIR/SDEIS presented results of sensitivity analyses conducted to better understand the driver of the modeling results and identify whether certain modeling results were indeed the result of the alternative or modeling artifact. Changing modeling assumptions did not result in determining that certain alternatives would not cause significant impacts to water quality in the RDEIR/SDEIS. The RDEIR/SDEIS introduced three new alternatives—Alternatives 4A, 2D, and 5A—of which Alternative 4A was identified as the new preferred alternative. These three alternatives had reduced impacts to water quality relative to those identified for Alternative 4, in both the 2013 DEIR/EIS and updated assessment in the 2015 RDEIR/SDEIS. Thus, the water quality impacts identified in the 2013 DEIR/EIS did not go away due to a change in modeling assumptions. Rather, additional analyses allowed for refinement of the water quality impacts, and new alternatives showed lesser impacts relative to those presented in the 2013 DEIR/EIS because certain components of the original Alternative 4 (e.g., tidal habitat restoration) were not part of the new alternatives. Please see Master Response 22, Mitigation, and Master Response 14, Water Quality. Also see Master Response 10, Significant and Unavoidable Impacts.
2427	42	Section: ES.5 Page: ES-103 Line: Table ES-9 Type: WQ, Alternatives Key Document Text: PH-8: Increase in Microcystis Bloom Formation as a Result of Operation of the Water Conveyance Facilities. Proposed Mitigation: WQ-32a: Design Restoration Sites to Reduce Potential for Increased Microcystis Blooms. WQ-32b: Investigate and Implement Operational Measures to Manage Water Residence	Note that the BDCP, under which alternatives were identified to have a significant impact to Microcystis, is no longer the preferred alternative. The preferred alternative is now Alternative 4A and no longer includes an HCP or the components that contributed to the significant impacts identified for the BDCP alternatives (e.g., tidal habitat restoration areas). Alternative 4A would have a less than significant impact to Microcystis. See Master Response 14 regarding water quality.

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		Time. Comment: No assurances are provided that operational measures will be effective. Reasonable mitigation, including remediative actions when a bloom threatens recreational, aquatic life, or water supply beneficial uses, should be developed and evaluated. An evaluation of the potential conditions upstream of the North Delta intake should be provided.	
2427	43	Section: 1.4 Page: 1-34 Line: 3-5 Type: Clarity Key Document Text: The Lead Agencies have identified a number of additional issues raised in public and technical review of the Draft EIR/EIS that do not warrant inclusion in the RDEIR/SDEIS but would be explained or addressed in the Final EIR/EIS revisions. Comment: We continue to support our comments made on the DEIR/DEIS and the BDCP, as applicable. As a result of not receiving response to comments, it is difficult to prepare these comments, and the revision process becomes overly complicated.	As explained in the Executive Summary of the RDEIR/SDEIS, all of the comments received during the Draft EIR/EIS 2013–2014 public review period were considered in the development of the RDEIR/SDEIS. The RDEIR/SDEIS does not include responses to comments on the Draft EIR/EIS, though some revisions have been made in response to comments received on the Draft EIR/EIS. Consistent with the requirements of the California Environmental Quality Act (CEQA Guidelines §15088) and the National Environmental Policy Act (Council on Environmental Quality § 1503.4) and policies held by all Lead Agencies governing the implementation of CEQA and NEPA, all comments received on the DEIR/EIS and RDEIR/SDEIS are included with the Final EIR/EIS. Please see Master Responses 42 regarding treatment of public comments.
2427	44	Section: 2.2.4 Page: 2-13 Line: 39-43 Type: WQ, Omission Key Document Text: It is not expected that the level of tidal restoration proposed under Alternatives 2D, 4A, and 5A would cause fish tissue concentrations to increase, at a measurable level, outside of the immediate localized area of the tidal restoration sites. However, habitat restoration has 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. Comment: Please provide the justification that methylmercury bioaccumulation would not expand the scope of impacts outside of localized areas.	Please refer to Master Response 14 regarding methylmercury. It is not expected that the level of tidal restoration proposed under Alternatives 4A, 2D, and 5A would cause fish tissue concentrations to increase, at a measurable level, outside of the immediate localized area of the tidal restoration sites. However, habitat restoration has 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. Fish tissue concentrations in the Delta already frequently exceed the Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins objective of 0.24 mg/kg for trophic level 4 fish in the Delta. The proposed tidal restoration may cause or contribute to increased fish tissue concentrations at a local level, though the magnitude of the increase is not quantifiable. The Basin Plan also includes methylmercury allocations for wetlands for various areas of the Delta. Because the proposed tidal restoration acreage is very small, it is possible that, relative to the allocations, the increased loading would be very small. However, it is still unknown how and if the allocations can be attained. The Basin Plan also requires that for many areas of the Delta (i.e., those needing reductions in methylmercury), proponents of wetland restoration projects shall (a) participate in Control Studies, or implement site-specific study plans, that evaluate practices to minimize methylmercury discharges, and (b) implement methylmercury controls as feasible. Design of restoration sites would be guided by Environmental Commitment 12, which requires development of site-specific mercury management plans as restoration actions are implemented to minimize methylmercury production. The effectiveness of minimization and mitigation actions implemented according to the mercury management plans is not known at this time, although the potential to reduce methylmercury concentrations exists based on current research.

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2427	45	Section: 2.2.4 Page: 2-14 Line: 1-7 and 17-20 Type: WQ, Omission Key Document Text: Fish tissue concentrations in the Delta already frequently exceed the Water Quality Control Plan (Basin 1 Plan) for the Sacramento River and San Joaquin River Basins objective of 0.24 mg/kg for trophic level 4 fish in the Delta. The proposed tidal restoration may cause or contribute to increased fish tissue concentrations at a local level, though the magnitude of the increase is not quantifiable. The Basin Plan also includes methylmercury allocations for wetlands for various areas of the Delta. Because the proposed tidal restoration acreage is very small, it is possible that, relative to the allocations, the increased loading would be very small. However, it is still unknown how and if the allocations can be attained...Although this would constitute a potential environmental impact, these increases would not be expected to cause injury to downstream water rights holders or other downstream water users, because effects would be localized to the restoration sites. Nor would such localized impacts adversely affect any other downstream beneficial users. Comment: This is another example of a summary conclusion where antidegradation and water quality impacts, among other significant comments from Sacramento Stormwater Quality Partnership's review and USEPA, are not adequately discussed or identified as issues that will be addressed. Additionally, the proposed project(s) should also be considered in the Delta Methylmercury TMDL [Total Maximum Daily Load]. The California Water Fix documents fail to provide an assessment of how the proposed project(s) would be consistent with the Delta Methylmercury TMDL if there is any potential to increase fish tissue concentrations in the Delta or to not meet the required Delta area reductions.	See response to comment 2427-44 regarding methylmercury.
2427	46	Section: 2.2.5 Page: 2-14 Line: 27-31 Type: WQ Key Document Text: Due to the combined effects of increased temperatures due to climate change (not related to the project) and increased residence times in the Delta (due primarily to the project related effects of CM1 and CM4), effects of project alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5, 6A, 6B, 6C, 7, 8, and 9 on Microcystis were considered adverse (under NEPA) and significant and unavoidable (under CEQA). Comment:	Please see Master Response 14 for potential for Microcystis blooms to occur in the rivers in the upstream of Delta region. Impact WQ-32, which addresses water quality impacts due to Microcystis, addresses the upstream of Delta region, as well as the Delta and SWP/CVP export service areas. As described in Impact WQ-32, Microcystis bloom development is limited upstream of the Delta due to high water velocity and low residence times. Further, Microcystis blooms upstream of the Delta have only been documented in eutrophic lakes such as Clear Lake. Large reservoirs upstream of the Delta are typically characterized by low nutrient concentrations, where other phytoplankton outcompete cyanobacteria, including Microcystis. Thus, bloom development is limited in watersheds of the eastern tributaries (Cosumnes, Mokelumne, and Calaveras Rivers), and the San Joaquin River upstream of the Delta. The Sacramento River and American River are also characterized by high water velocity and low residence times, providing inadequate conditions for the development of Microcystis blooms. High water velocity and low residence times are not expected to change under the No Action Alternative (ELT and LLT) or the project alternatives. Thus, any modified reservoir operations under the project alternatives are not expected to promote Microcystis production upstream of the Delta, relative to Existing Conditions and the No Action Alternative (ELT and LLT).

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		As noted in the comments on the revised Chapter 8, the potential of the revised reservoir operations to impact the hydrodynamic conditions in the rivers upstream of the Delta, which may contribute to algal growth due to increased temperatures, needs to be addressed.	
2427	47	Section: 2.2.5 Page: 2-14 Line: 33-36 Type: WQ, Alternatives, Error Key Document Text: Because the new alternatives (2D, 4A, and 5A) contain a lower acreage of tidal restoration, residence times are not expected to increase as substantially as under the other alternatives, and thus significant impacts with regards to Microcystis are not expected under these alternatives, relative to the No Action Alternative. Comment: Alternative 4A does increase residence times and would likely result in microcystis occurrences in a number of locations. Please reevaluate and address this concern.	The assessment of the effects of Alternatives 4A, 2D, and 5A on Microcystis have been updated in the Final EIR/S. Specifically, the assessment of Alternative 4A now relies, in part, on residence time modeling information available from the California WaterFix Biological Assessment. The modeled increases in residence times within certain Delta regions are noted; however, the impact conclusion for Alternative 4A (and 2D and 5A) remains less than significant as real time operations would address potential for increased Microcystis bloom formation, as described further in the revised assessment in Chapter 8, Impact WQ-32 for each alternative. Please refer to Master Response 14.
2427	48	Section: 2.4 Page: 2-21 Line: 14-17 Type: Alternatives, CM19 Key Document Text: The RDEIR/SDEIS includes a number of revisions to the project description and an enhanced level of detail for Alternative 4. These include more explanation regarding the analysis of water conveyance facilities, updates to CM2-CM21, clarification on the role of the Bureau of Reclamation, and the use of CM3-CM11 to offset impacts related to CM1. Comment: There is an inadequate discussion of how individual conservation measures and the groups of conservation measures address specific mitigation needs. Please clarify the relative role of individual conservation measures in addressing impacts.	Environmental Commitments are actions primarily intended to satisfy CEQA, CESA Section 2081, and ESA Section 7. Discussion of how Environmental Commitments would mitigate or offset impacts are included in Chapters 5 - 30 of the 2013 Draft EIR/EIS and Section 4 of the RDEIR/SDEIS. A summary of the Environmental Commitments for Alternative 4A is provided in Section 4 of the RDEIR/SDIES, Table 4.1-3. Environmental Commitments under Alternative 4A. Additional details regarding Environmental Commitments are provided in Appendix 3B for the RDEIR/SDEIS. See Master Response 5 regarding BDCP Conservation Measures.
2427	49	Section: 3.1 Page: 3-1 Line: n/a	See response to comment 2427-48 regarding BDCP Conservation Measures.

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		Type: Alternatives Key Document Text: Section 3: Conveyance Facility Modifications to Alternative 4 Comment: Section 3 does not adequately characterize the removal of conservation measures. The section should be modified to accurately reflect that changes to Alternative 4 are more than just physical changes to the diversion structure.	
2427	50	Section: 3.3.5 Page: 3-7 Line: 4-7 Type: WQ Key Document Text: Chapter 8, Water Quality, of the Draft EIR/EIS was revised to describe the potential for water quality effects associated with construction of water conveyance facilities--such as those related to discharges from work sites or changes to stormwater drainage and runoff patterns--to occur in different locations as a result of the revised facility footprints. Comment: The water quality evaluation does not adequately address water quality impacts upstream of the proposed North Delta intakes or identify reasonable mitigation measures to address upstream impacts.	Please refer to Master Response 30 for additional information beyond that presented in the EIR/EIS in Chapter 8, Water Quality, regarding the qualitative approach to the assessment of changes in water quality in the Upstream of Delta region. No mitigation is identified for water quality impacts in this region, because all impacts were determined to be less than significant.
2427	51	Section: 4 Page: entire section Line: n/a Type: Alternatives Key Document Text: Omission Comment: To evaluate water quality degradation, it is necessary to consider an alternative where there are no exported diversions, at the point in time when the previous antidegradation analysis was performed, or at the point when antidegradation considerations became a requirement.	A variety of alternatives were evaluated in the 2013 Draft EIR/EIS and RDEIR/SDEIS. Please see Master Response 4 for additional information regarding the development of the alternatives, and Master Response 1 for information on the No Action Alternative and Master Response 14 regarding water quality.

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2427	52	Section: 4.1.1 Page: 4.1-3 Line: 17-19 Type: Omission, Clarity Key Document Text: NEPA and its implementing regulations specifically require federal officials to consider the recommendations of other government entities and the public who present reasonable solutions or alternative approaches that may improve a proposed action. Comment: Sacramento Stormwater Quality Partnership, as well as many others, previously submitted suggested alternative approaches including more distributed portfolio approaches, but have not been advised of whether the "reasonable solutions" were addressed or incorporated.	As explained in the Executive Summary of the RDEIR/SDEIS, all of the comments received during the Draft EIR/EIS 2013–2014 public review period were considered in the development of the RDEIR/SDEIS. The RDEIR/SDEIS does not include responses to comments on the Draft EIR/EIS, though some revisions have been made in response to comments received on the Draft EIR/EIS. Consistent with the requirements of the California Environmental Quality Act (CEQA Guidelines §15088) and the National Environmental Policy Act (Council on Environmental Quality § 1503.4) and policies held by all Lead Agencies governing the implementation of CEQA and NEPA, all comments received on the DEIR/EIS and RDEIR/SDEIS are included with the Final EIR/EIS. Please see Master Response 42 regarding treatment of public comments. Refer to Master Response 4 regarding alternatives development.
2427	53	Section: 4.1.2.1 Page: 4.1-4 Line: 14-15 and Table 4.1-1 Type: WQ, Clarity Key Document Text: Table 4.4-1 provides a brief summary comparison of the elements between Alternatives 4A and 4. Comment: The justification for the relevant regulatory descriptions is not clear within the section and should be provided. In particular, the removal of the Section 10 element does not seem appropriate. While the summary is appreciated, it is not comprehensive in evaluating water quality impacts and relevant requirements of the Clean Water Act and federal and state Antidegradation Policy elements. The baseline for any Antidegradation analysis should also be included.	The elements included in this table were selected because there would be differences between these elements for Alternative 4 and 4A, in particular regarding Endangered Species Act compliance, project components, and operations. This table is not for evaluating water quality impacts. Those are addressed via specific methods and criteria, which are provided in Chapter 8, Water Quality. Regarding the relevance of the antidegradation policy to the EIR/EIS for the BDCP/California WaterFix, please see Master Response 14.
2427	54	Section: 4.1.2.2 Page: 4.1-13 Line: 17-25 Type: AM Key Document Text: RTO [Real Time Operations] Team decisions are expected to be needed during at least some	Real Time Operational decisions as referenced by the comment would be made within the established parameters described in Table 4.1-2. Changes to these parameters would be made through the Adaptive Management and Monitoring Program. Details of this adaptive management decision-making process will be developed with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife through the development of the Biological Opinion, and state incidental take permit. Further development and refinements to this adaptive management decision-making process are expected during the early years of project implementation. Such details are not required to be included in the regulatory permits, nor the EIR/EIS. See Master Response 33 regarding adaptive management.

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		part of the year at the Head of Old River gate and the north and south Delta diversion facilities. The RTO Team in making operational decisions that depart from the criteria used in the modeling will take into account upstream operational constraints, such as coldwater pool management, instream flow, and temperature requirements. The extent to which real time adjustments that may be made to each parameter related to these facilities shall be limited by the criteria and/or ranges is set out in Table 4.1-2. Any modifications to the parameters subject to real time operational adjustments or to the criteria and/or ranges set out in Table 4.1-2 shall occur only through the adaptive management, as discussed below. Comment: The Adaptive Management and Monitoring Program should be developed more fully so that the process to make the suggested changes can be adequately reviewed.	
2427	55	Section: 4.1.2.3 Page: 4.1-15 Line: 1-4 Type: Alternatives, WQ, Omission Key Document Text: The RDEIR/SDEIS describes and analyzes Environmental Commitments 3, 4, 6-12, 15, and 16 at a level of detail consistent with that applied to these activities under other alternatives in the Draft EIR/EIS. (See CEQA Guidelines, [Section] 15126.4[a][1][D] [EIRs must discuss significant effects of mitigation measures, "but in less detail than the significant effects of the project as proposed"]; Comment: Please provide additional details for all alternatives on upstream water quality. This has been omitted from the analysis.	Under NEPA, impacts of alternatives must be evaluated at an equal level of detail as the proposed project. This is unlike CEQA, which does not require such a rigorous evaluation of alternatives. Because the Draft EIR/EIS and RDEIR/SDEIS are joint CEQA and NEPA documents, the impacts of the alternatives have been evaluated at an equal level of detail as the preferred action. RDEIR/SDESIS 4.3.4 (4A) describes whether concentrations of various water quality constituents are expected to increase or decrease with the project, relative to existing conditions and the No Action Alternative. To the extent that concentrations of various water quality constituents are expected to increase, 4.3.4 describes whether these increases are expected to result in impacts to beneficial uses of water in the Delta. For constituents for which adverse impacts were expected, mitigation and other commitments, such as additional evaluation and modeling and consultation with water purveyors to identify additional measures to avoid and minimize or offset these impacts, were introduced to address those impacts. Additionally, adding intakes in the North Delta will allow for operational flexibility that can improve natural flow in the Delta and avoid impacts to migratory fish based on real time data and operations For more information regarding alternatives to the proposed project please see Master Response 4.
2427	56	Section: 4.1.2.4 Page: 4.1-18 Line: 36-40 Type: AM Key Document Text: In summary, the broad purposes of the program will be to: 1) undertake collaborative science, 2) guide the development and implementation of scientific investigations and monitoring for both permit compliance and adaptive management, and 3) apply new information and insights to management decisions and actions. Comment: The specific purposes are too general and lack a clear means to evaluate the effectiveness.	Please refer to Master Response 33, which addresses the current collaborative science and adaptive management and monitoring approach for the California WaterFix.

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		The collaborative science program does not include a diverse group of members, and it resembles the current approach to management. While greater participation from the Independent Science Panel (ISP) is an improvement, alternative structures should be considered to improve the focus of the science to develop solutions to water quality impacts created by the diversion of water. The RDEIR/SDEIS should include a discussion of the specific tasks and tools that will be developed. These tools should be available to a wide range of stakeholders to improve broad-based collaborative science and coordination. The collaborative science approach should be inclusive at the "base" where the science is performed as well as at the "top" where the ISP provides review and direction.	
2427	57	Section: 4.1.2.4 Page: 4.1-20 Line: 28-32 Type: AM Key Document Text: Collaborative science and monitoring conducted to support the proposed project will be implemented, when feasible, using existing resources from state, federal, and other programs, and the mitigation program of the water conveyance facility. The mitigation program of the water conveyance facility has money dedicated to the monitoring necessary to support effective implementation of mitigation actions. Comment: The project proponents should provide funding guarantees to address collaborative science relative to the overall health of the Delta. Because there is "uncertainty" in many of the effects from the project on other stakeholders, the project proponents should also develop a specific list of tools and activities that will be performed (e.g., Delta water quality model) so that the uncertainty of the proposed adaptive management does not persist. These tools should be developed so that all stakeholders have access and peer review to the data and model elements.	Considerable 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. For more information regarding adaptive management please see Master Response 33.
2427	58	Section: 4.1.2.4 Page: 4.1-21 Line: 11-14 Type: AM Key Document Text: Adaptive management uses a process to clearly articulate objectives, identify management alternatives, predict management consequences, recognize key uncertainties in advance, and monitor and evaluate outcomes. Comment:	Please refer to Master Response 33 for an updated approach to collaborative science adaptive management and monitoring. The California Water Fix would utilize an adaptive management program (AMP) 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. The AMP will be made available with the Final EIR/EIS prior to project decision-making. Additional details for the AMP are included in Chapter 3, Description of Alternatives. The AMP is intended to provide a process for addressing uncertainty associated with the effectiveness of management actions taken to prevent jeopardy and adverse modification of critical habitat to federally listed species and to prevent jeopardy and minimize and fully mitigate effects on state listed species from: ongoing operations of the SWP/CVP, habitat restoration actions required for CWF and/or the 2008/09 BiOps and CESA authorizations, and from future construction and operation of the proposed CWF, including the proposed North Delta Diversion (NDD) screen design.

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		While the general objectives and discussion of scientifically based adaptive management is appropriate, there are no provisions for accountability for additional Delta water quality and ecosystem degradation. Any proposed project in the BDCP, California Water Fix, or EcoRestore should state the specific goals that are consistent with the relevant biological opinions and water quality law.	
2427	59	Section: 4.2.7 Page: 4.2-18,19 Line: 39-41, 1-3 Type: WQ Key Document Text: The analysis of effects of the No Action Alternative (ELT) on boron, bromide, chloride, DOC [dissolved organic carbon], EC [electrical conductivity], and nitrate in the Delta and SWP/CVP Export Service Areas is based on modeling conducted for the No Action Alternative in the ELT, which assumed no implementation of Yolo Bypass improvements or tidal habitat restoration. However, as described in Section 4.1.6, Assumptions for Purpose of Analysis, of the RDEIR/SDEIS, enhancements to the Yolo Bypass and 8,000 acres of tidal habitat restoration areas would be developed under the No Action Alternative (ELT). Comment: The use of existing model runs to approximate impacts to revised alternatives does not seem to be sufficient for comparison of alternatives, determination of impact analysis, and identification of required mitigation. These numeric approximations lack computational rigor sufficient for quantitative assessments. The analysis inadequately makes quantitative assessments and should be expanded to consider computational modeling of the target constituents.	Additional model runs were completed during preparation of the Final EIR/EIS, and the results are presented in Chapters 5 and 8 and the associated appendices to these chapters in the Final EIR/EIS.
2427	60	Section: 4.2.7 Page: 4.2-44 Line: 14-22 Type: WQ Key Document Text: The effects of the No Action Alternative (ELT) on Microcystis levels, and thus microcystin concentrations, in surface waters upstream of the Delta relative to Existing Conditions would be similar to those described for the No Action Alternative in Chapter 8, Water Quality, Section 8.3.3.1 of the Draft EIR/EIS. This is because factors that would affect Microcystis levels in these areas would be the same in the ELT and the LLT. In the rivers and streams of the Sacramento River watershed, watersheds of the eastern tributaries (Cosumnes, Mokelumne, and Calaveras Rivers), and the San Joaquin River upstream of the Delta, under Existing Conditions, bloom development is limited by high water velocity and low residence times. These conditions are not expected to change under the No Action	None of the action alternatives changed the flow or diversions along the Cosumnes, Mokelumne, and Calaveras rivers; or the San Joaquin River upstream of Vernalis as compared to the No Action Alternative. Because the model runs are used in a comparative manner, and not a predictive manner to develop absolute values, and because operations on these rivers are not modified in any of the action alternatives as compared to the No Action Alternative, continued operations on these rivers would not affect evaluation of the changes in Delta conditions due to implementation of any of the action alternatives. There would be differences in residence time and water temperatures in the lower reaches of streams in these watersheds between Existing Conditions and the No Action Alternative due to climate change and sea level rise; however, these changes would occur with or without the Project and are not mitigated due to the Project. See Master Response 14 regarding Microcystis.

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		Alternative (ELT). Comment: The Draft EIR/EIS does not discuss Microcystis in detail. The areas upstream of the Delta have not been adequately assessed for potential impacts due to changing hydrodynamic and temperature impacts. Sacramento Stormwater Quality Partnership requests that this be reevaluated.	
2427	61	Section: 4.2.24 Page: 4.2-67 Line: 39-42 Type: WQ Key Document Text: Any modified reservoir operations under the No Action Alternative (ELT) are not expected to promote Microcystis production upstream of the Delta since large reservoirs upstream of the Delta are typically low in nutrient concentrations and phytoplankton outcompete cyanobacteria, including Microcystis. Comment: The potential impacts to areas upstream of the Delta have been inadequately assessed with regard to potential for Microcystis growth.	There is no evidence that Microcystis grows upstream of the Delta. Therefore, we concluded that there would be no effect in upstream waterways. The impact mechanism for potential effects is in the Delta only. See Master Response 14 regarding Microcystis.
2427	62	Section: 4.2.24 Page: 4.2-70 Line: 9-13 Type: WQ Key Document Text: Because it is possible that under the No Action Alternative (ELT) increases in the frequency, magnitude, and geographic extent of Microcystis blooms in the Delta would occur due to increased water temperatures associated with climate change, as well as increased water residence times related to restoration activities, long-term water quality degradation may occur in the Delta and water exported from the Delta to the SWP/CVP Export Service Areas. Comment: The potential for increases in Microcystis blooms in the areas upstream of the Delta should be investigated further.	See response to comment 2427-61 regarding Microcystis. Please refer to Master Response 14.
2427	63	Section: 4.3.4	Comments made on the 2013 DEIR/DEIS are addressed in the Final EIR/FEIS as required by CEQA and NEPA. Effects on water quality upstream of the Delta are analyzed for each water quality constituent under

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		Page: 4.3.4-1 Line: 1 Type: WQ Key Document Text: Water Quality Comment: The water quality evaluation for Alternative 4A ELT for many constituents is stated as similar to Alternative 4 LLT for areas upstream of the Delta. We would like to reference our applicable previous comments on Alternative 4 LLT in the DEIR/DEIS, specifically those in Chapter 8 (8.4.3). We continue to request water quality evaluations for areas upstream of the Delta.	Chapter 8 in the Final EIR/EIS.
2427	64	Section: 4.3.4 Page: 4.3.4-24 Line: 15-18 Type: WQ Key Document Text: Modeling results indicated that the Emmaton EC [electrical conductivity] objective would be exceeded more often under Alternative 4A than under Existing Conditions and the No Action Alternative (ELT), and that increases in EC could cause substantial water quality degradation in summer months of dry and critical water years. Comment: This is indicative of the significant impact that is not mitigated, and is the site closest to the upstream areas that are of concern to the City. The document does not adequately address upstream impacts and should be revised.	Please refer to Master Responses 14 regarding electrical conductivity. Additional discussion of these EC and chloride analyses is included in Section 2.2.1 of the RDEIR/SDEIS, and Chapter 8, Water Quality and Appendix 8H, Electrical Conductivity, of this Final EIR/EIS.
2427	65	Section: 4.3.4 Page: 4.3.4-66 Line: 21-31 Type: WQ Key Document Text: Adverse effects from Microcystis upstream of the Delta have only been documented in lakes such as Clear Lake, where eutrophic levels of nutrients give cyanobacteria a competitive advantage over other phytoplankton during the bloom season. Large reservoirs upstream of the Delta are typically characterized by low nutrient concentrations, where other	See response to comment 2427-61 regarding Microcystis. Please refer to Master Response 14.

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		phytoplankton outcompete cyanobacteria, including Microcystis. In the rivers and streams of the Sacramento River watershed, watersheds of the eastern tributaries (Cosumnes, Mokelumne, and Calaveras Rivers), and the San Joaquin River upstream of the Delta under Existing Conditions, bloom development is limited by high water velocity and low residence times. These conditions are not expected to change under Alternative 4A or the No Action Alternative (ELT and LLT). Consequently, any modified reservoir operations under Alternative 4A are not expected to promote Microcystis production upstream of the Delta, relative to Existing Conditions and the No Action Alternative (ELT and LLT). Comment: The potential impacts to areas upstream of the Delta have been inadequately assessed with regard to potential for Microcystis growth, and should be evaluated in more detail.	
2427	66	Section: 4.3.7, ES.5 Page: 4.3.7-372, ES-59 Line: Entire page; Table ES-9 Type: Alternatives Key Document Text: AQUA-201: Effects of water operations on entrainment of noncovered aquatic species of primary management concern; No proposed mitigation Comment: There are significant and unavoidable findings for striped bass and American shad. There are adverse effects on striped bass. According to Table ES-9, it appears that no mitigation may be planned. However, improved screening operations in the South Delta diversion could provide benefit and mitigation of new losses in the North Delta and should be evaluated.	Chapter 11 of the EIR/EIS analyzes and address impacts to covered and non-covered fish species including Striped Bass and American Shad. Please see Chapter 11, Appendix 11A and Appendix 11B for more information. DWR and Reclamation are required to improve fish collection efficiency at the existing south Delta salvage facilities, as part of facility improvements required by the National Marine Fisheries Service 2009 biological opinion on the SWP/CVP. For example, in 2014 Reclamation replaced the secondary louver system with a traveling screen system. These screens provide protection by guiding fish into the holding tanks while catching debris on pegs and transporting debris to a collection system at the work surface. The technology required at the proposed north Delta intakes and the existing south Delta export facilities differ fundamentally. The north Delta intakes would be located on the side of the river channel and so would be designed to comply with CDFW, NMFS, and USFWS fish screening criteria (BDCP Appendix 5B Section 3.B.3.3). The south Delta export facilities are located on dead-end channels and require active collection and salvage of fishes. Screening the intakes at Clifton Court Forebay was analyzed during the water conveyance alternative development process and is described in the 2013 Public Draft BDCP EIR/EIS, Appendix 3A. This alternative was eliminated from further evaluation because initial results of recent studies, including information included in the recent NMFS biological opinions, supported a phased approach that would emphasize improvements to operations of fish handling facilities and reduced predator potential within Clifton Court Forebay prior to further analysis of installation of fish screens. Nevertheless, DWR and Reclamation will continue investigating strategies to increase fish salvage efficiency, reduce pre-screen losses, and improve screening efficiencies, consistent with the 2009 biological opinion of the SWP/CVP. The comment references the Executive Summary, which provides the impact statement, mitigation, and conclusions. Please see pages 4.4.7-212 through 4.4.7-214 for the complete discussion of Impact AQUA-201. The positive-barrier fish screens for the proposed north Delta intakes would be designed to established protection standards for salmonids and delta smelt, and would comply with CDFW, NMFS, and USFWS fish screening criteria. Appendix 3F of the PD EIR/S provides details on the development of intakes and fish screening technology, as well as the Conceptual Engineering Reports (CERs). It is proposed that monitoring and research would be conducted to inform the fish screen design, construction, and operation in order to maximize their effectiveness. Dual operations provides for flexibility that will better protect the fish based

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			on real time data.
2427	67	Section: 4.3.11, ES.5 Page: 4.3.11-1, ES-83 Line: Entire page; Table ES-9 Type: Alternatives Key Document Text: REC-2: Result in long-term reduction of recreation opportunities and experiences as a result of constructing the proposed water conveyance facilities; Proposed Mitigation: REC-2: Provide alternative bank fishing access sites BIO-75: Conduct preconstruction nesting bird surveys and avoid disturbance of nesting birds AES-1a: Locate new transmission lines and access routes to minimize the removal of trees and shrubs and pruning needed to accommodate new transmission lines and underground transmission lines where feasible Impact Conclusions Before Mitigation: Significant (S) Impact After Mitigation: Significant and Unavoidable (SU) and Less Than Significant (LTS) Comment: The long term adverse effects and significant and unavoidable reduction of recreation opportunities could be mitigated with more extensive alternate bank fishing locations or modification to intake design that should be considered. Additional mitigation measures should be proposed for full mitigation.	The Lead Agencies believe that impact Rec -2 has been adequately analyzed and the appropriate mitigation has been proposed. Because it is not certain the mitigation would reduce the level of these impacts to less than significant in all the instances occurring within the entire study area, these impacts are considered significant and unavoidable. Please refer to the text description of the impact and the proposed mitigation in Chapter 15. Please refer to Master Response 22 for more information regarding mitigation. The comment suggests revisions to the alternatives and additional mitigation measures. Please see Master Response 4 for a discussion of the development of the project alternatives.
2427	68	Section: 4.3.21 Page: 4.3.21-9 Line: 34-41 Type: WQ Key Document Text: NEPA Effects: Any modified reservoir operations under Alternative 4A are not expected to promote Microcystis production upstream of the Delta relative to the No Action Alternative (ELT and LLT) since large reservoirs upstream of the Delta are typically low in nutrient concentrations and phytoplankton outcompete cyanobacteria, including Microcystis. Further, in the rivers and streams of the Sacramento River watershed, watersheds of the eastern tributaries (Cosumnes, Mokelumne, and Calaveras Rivers), and the San Joaquin River upstream of the Delta, bloom development would be limited by high water velocity and low hydraulic residence times. These conditions would not be expected to change	See response to comment 2427-61 regarding Microcystis. Please refer to Master Response 14.

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		under Alternative 4A relative to the No Action Alternative (ELT and LLT) Comment: The potential impacts to areas upstream of the Delta have been inadequately assessed with regard to potential for Microcystis growth, and should be evaluated in more detail.	
2427	69	Section: 5.1 Page: 5-1 Line: 7-9 Type: Scope, Alternatives, WQ Key Document Text: "Cumulatively considerable" means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (CEQA Guidelines, [Section] 15065[a][3]). Comment: The analysis does not adequately incorporate the cumulative effect of historic diversions and exports out of the Delta. Moreover, the scope of CM1 is not adequately incorporated into the cumulative impact analysis so as to identify where "tipping points" of impacts may occur, such as the continued decline of covered species. If these types of outcomes are not addressed through the most significant impact, the effects are effectively segmented and not adequately identified.	Cumulative water supply impacts are addressed in Chapter 5, Water Supply of this Final EIR/EIS. This analysis indicates that for Alternative 4A, exports would decrease compared to existing conditions and increase compared to the No Action Alternative. The cumulative effects from changes in modeled hydrodynamics are presented in Chapter 8, Water Quality and Chapter 11, Fish and Aquatic Resource. These chapters include discussions of the potential cumulative impacts on those resources. It is unclear what is meant by "tipping points" for the decline of covered species. However, the potential cumulative effects are addressed to the extent possible with the modeling and other tools available for these analyses. Please also refer to Master Response 9 regarding cumulative impacts.
2427	70	Section: 5.1.2.2 Page: 5-3 Line: 21-24 Type: Scope Key Document Text: California EcoRestore will be led by the Delta Conservancy as the lead state agency, and will accelerate and implement a suite of Delta restoration actions prescribed in the 2014 California Water Action Plan by 2020. Under EcoRestore, the state will pursue restoration of more than 30,000 acres of fish and wildlife habitat. Comment: The document does not sufficiently specify the components of EcoRestore. Please provide more detail on how EcoRestore would be adaptively managed in relation to the California Water Fix and how the impacts from these cumulative actions will be considered.	Although Alternatives 4A, 2D, and 5A include only those habitat restoration measures needed to provide mitigation for specific regulatory compliance purposes, habitat restoration is still recognized as a critical component of the state's long-term plans for the Delta. Such larger endeavors, however, will likely be implemented over time under actions separate and apart from these alternatives. The primary parallel habitat restoration program is called California EcoRestore (EcoRestore), which will be overseen by the California Resources Agency and implemented under the California Water Action Plan. Under EcoRestore, the state will pursue restoration of more than 30,000 acres of fish and wildlife habitat by 2020. These habitat restoration actions will be implemented faster and more reliably by separating them from the water conveyance facility implementation. Proposition 1 funds and other state and public dollars will be directed exclusively for public benefits unassociated with any regulatory compliance responsibilities. Additional priority restoration projects will be identified through regional and locally-led planning processes facilitated by the Delta Conservancy. Plans will be completed for the Cache Slough, West Delta, Cosumnes, and South Delta. Planning for the Suisun Marsh region is already complete and a process for integrated planning in the Yolo Bypass is underway. The Delta Conservancy will likely lead the implementation of identified restoration projects, in collaboration with local governments and with a priority on using public lands in the Delta.

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2427	71	Section: 5.2.1 Page: 5-6 Line: 1-4 Type: Omission Key Document Text: Alternatives 4A, 2D, and 5A do not have the same kind of concurrent project effects as described for the other alternatives because the interim restoration implementation actions are not part of these new alternatives but instead would be implemented separately under the California Water Action Plan/California EcoRestore program. Comment: There is no certainty or commitment to complete the "separately" implemented projects. Sacramento Stormwater Quality Partnership suggests the following revision: "...the interim restoration implementation actions are not part of these new alternatives but instead MAY be implemented separately..."	This comment suggests that the word “would” in the referenced phrase should be changed to “may” in reference to implementing the California EcoRestore. No changes have been made as the EcoRestore program would be implemented and is currently underway. The EIR/EIS assesses impacts to the environment due to California WaterFix; tidal habitat restoration California EcoRestore is unassociated with any habitat restoration that may be required as part of the construction and operation of new Delta water conveyance facilities under WaterFix.
2427	72	Section: 5.2.1.2 Page: 5-10 Line: 7-9 Type: WQ Key Document Text: Implementation of Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 2D, 3, 4 (H1, H3), 4A, 5, 5A, and 9 would result in more negative flows in Old and Middle Rivers in April and/or May as compared to Existing Conditions and the No Action Alternative. Comment: The evaluation should also consider both the reverse flow conditions and the tidal amplification in the Sacramento River near to the North Delta intakes. The results should be made available for review.	As described in Chapter 3 and Appendix A, Section B, of the EIR/EIS, Alternative 4, including the proposed project (Alternative 4A), was developed to provide more positive Old and Middle River flows than the No Action Alternative except in April through June. In April through June, the Old and Middle River flow criteria were developed based upon the San Joaquin River inflow. These criteria result in positive Old and Middle River flows in April through June; however, less positive under Alternative 4A than under the No Action Alternative in April and May except in wet years (see Appendix 5A, Section C). The CALSIM II model assumptions related to the North Delta Bypass Flows were specifically developed to reduce or eliminate diversions at the north Delta intakes during periods that would cause reverse flow patterns along the Sacramento River and adjacent tributaries, including Sutter and Steamboat sloughs (see Appendix 5A, Section B, of the EIR/EIS). Therefore, tidal flows in the Sacramento River would be similar under the action alternatives and the No Action Alternative and adjacent tributaries, including Sutter and Steamboat sloughs.
2427	73	Section: 5.2.1.4 Page: 5-14 Line: 14-17 Type: Clarity Key Document Text: In areas upstream of the Delta, the conservation measures or components of these	Alternatives 2D, 4A (Proposed Project), and 5A would not include implementation of CM 19, Urban Stormwater Treatment. For all other alternatives, impact analysis of CM 19 was considered at a programmatic level only in the EIR/EIS; and more detailed analyses would occur when actions identified in CM 19 were identified and evaluated in detail.

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		measures that would be implemented in addition to the water conveyance facilities would be: 1) the Yolo Bypass Fishery Enhancement (CM2), 2) Conservation Hatcheries (CM18), and 3) Urban Stormwater Treatment (CM19). Comment: The project scope is inadequate as to how activities are included for the purposes of the cumulative analysis. Are CM19 measures only limited to those funded through Water Bond, Proposition 84, or future funding programs? There are a large number of other water quality based programs in the upstream areas that are not considered. Also, the cumulative analysis does not evaluate how the project will affect growth patterns statewide. The cumulative analysis also does not adequately evaluate the relative contributions of water quality constituents from the major sources, including the contributions due to the CA Water Fix Project and its operation and mitigation. At a minimum, a conceptual model with seasonal load estimates is necessary for assessment of this project.	
2427	74	Section: 5.2.1.4 Page: 5-15 Line: 29-31 Type: Alternatives, WQ Key Document Text: The assessment of bromide, chloride, and EC [electrical conductivity] conditions in the Delta concluded that CM1 plus the hydrodynamic effects associated with CM2 and CM4 under Alternatives 1A-9 would result in an adverse effect/significant and unavoidable impact, to varying degrees. Comment: The document does not provide sufficient alternatives for mitigating water quality degradation that is expected from the project and related follow-up projects.	For the constituents identified in the comment, Alternative 4A would have a less than significant impact to bromide and chloride. Significant impacts to EC were identified due to degradation at Emmaton . Mitigation is provided to reduce this impact to less than significant. See Master response 14 regarding EC.
2427	75	Section: 5.2.1.4 Page: 5-16 Line: 18-21 Type Omission, WQ Key Document Text: Concurrent implementation of CM1 with CM2-CM21 under Alternatives 1A-5 is not expected to result in more adverse/significant impacts than described for the separate conservation measures, because the mercury conditions in water and fish resulting from CM1 would be similar to Existing Conditions. Comment:	For a detailed background of the importance and ecological function of sediment in the Bay-Delta watershed please refer to Chapter 11, Fish and Aquatic Resources, Section 11.1.4, Ecological Processes and Functions. Operation of the north Delta intakes (water conveyance facilities) is estimated to result in around 11% of sediment being removed from the Sacramento River, the main source of sediment for the Delta and downstream subregions. Any negative effects on sediment load would be minimized by reintroduction of sediment. Please refer to Master Response 14 regarding mercury.

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		The cumulative impacts evaluation of mercury effects is inadequate as it does not provide an assessment of overall compliance with the Delta methylmercury Total Maximum Daily Load. Sediment release and water management are known to be the greatest contributors to the Delta methlymercury flux. The assessment should evaluate whether the proposed CM1 operations would result in an increase in sediment flux upstream and in the Delta, and provide mitigation if it does.	
2427	76	Section: 5.2.1.4 Page: 5-16 Line: 39-43 Type: Alternatives, WQ Key Document Text: The assessment of Microcystis conditions in the Delta concluded that CM1 plus the hydrodynamic effects associated with CM2 and CM4 under Alternatives 1A-9 would result in an adverse effect/significant impact. Effects of CM2-CM21, beyond the increase in residence time and localized water temperature described in the separate impacts assessments, would not present new, previously unidentified impacts. Comment: The document does not provide sufficient alternatives for mitigating water quality degradation that is expected from the project and related follow-up projects.	RDEIR/SDESIS 4.3.4 (4A) describes whether concentrations of various water quality constituents are expected to increase or decrease with the project, relative to existing conditions and the No Action Alternative. To the extent that concentrations of various water quality constituents are expected to increase, 4.3.4 describes whether these increases are expected to result in impacts to beneficial uses of water in the Delta. For constituents for which adverse impacts were expected, mitigation and other commitments, such as additional evaluation and modeling and consultation with water purveyors to identify additional measures to avoid and minimize or offset these impacts, were introduced to address those impacts. Additionally, adding intakes in the North Delta will allow for operational flexibility that can improve natural flow in the Delta and avoid impacts to migratory fish based on real time data and operations. Please refer to Master Response 14.
2427	77	Section: 5.2.1.11 Page: 5-23 Line: 2-5 Type: WQ Key Document Text: Construction of the water conveyance facilities under all action alternatives except Alternatives 4A, 2D, and 5A would have a wide range of significant adverse impacts on recreation occurring within the Plan Area. Comment: Any reduction in summer releases from Folsom Dam would lead to recreational impacts. The frequency of reduced flow periods would reduce boating and swimming uses. Alternative 4A has the potential to reduce flows, which is not adequately discussed.	Final EIR/EIS Chapter 5 Water Supply, Appendix 5A BDCP EIR/EIS Modeling Technical Appendix includes information on with and without project hydrological conditions, including flows in the American River estimated downstream of Nimbus Dam. For the preferred alternative (Alternative 4A), information on the American River is included in Table C-58-3 and Table C-58-6. The largest predicted changes in monthly river is shown in Table C-58-3 which compares existing hydrologic conditions compared to with project conditions, in this case Alternative 4A. However, as explained in Final EIR/EIS Chapter 5 Water Supply, these changes are primarily attributable to climate change and do not represent changes solely attributable to hydrologic conditions occurring under Alternative 4A. The values contained in Table C-58-6 are the result of comparing No Action conditions with conditions under Alternative 4A. This is a more accurate prediction of changes in flows that would occur under Alternative 4A. This data does indicate that the largest changes in flows, measured as a percent change from No Action conditions to Alternative 4A conditions. The largest change would occur in August of critically dry years. Although the change inflows would exceed a reduction of 10-percent, the flows would remain about the minimum established by the SWRCB in D-893 and exceed the 800 cfs minimum flows for that period recommended by the Sacramento Water Forum.
2427	78	Section: 5.2.2.7 Page: 5-119	Please refer to response to comment 2427-1 regarding CM19.

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		Line: 13-19 Type: CM19 Key Document Text: The implementation of CM19 Urban Stormwater Treatment, under the BDCP, would provide an additional source of funding for grants to entities such as the Sacramento Stormwater Quality Partnership, and area cities and counties, whose stormwater contributes to Delta waterways under NPDES [National Pollutant Discharge Elimination System] MS4 [municipal separate storm sewer systems] stormwater permits. These grants would help to implement actions from, and in addition to, their respective stormwater management plans. Reducing the amount of pollution in stormwater runoff entering Delta waterways will benefit delta smelt, white sturgeon, steelhead, and Chinook salmon (Essex Partnership DRERIP 2009). Comment: The assessment of CM19 is insufficient in that the relative loading of pollutant stressors was not evaluated, not even in a conceptual model. The effect of low-level pesticides on covered species or how concentrations improve between urban runoff discharges and covered species habitat is not well understood. A better understanding of all sources, the fate and transport in the system, and specific beneficial use impacts would allow more effective control measures rather than wide-scale implementation of projects that could be ineffective. Grant programs only fund a small percentage of projects such that it will take decades to have a substantial effect on urban runoff loads. Pesticide registration by EPA Office of Pesticide Programs and the California Department of Pesticide Regulation allow use of pesticides that local agencies have no authority to restrict.	
2427	79	Section: 5.2.2.7 Page: 5-120 Line: 15-17 Type: CM19 Key Document Text: The implementation of CM19 Urban Stormwater Treatment, under the BDCP, would provide an additional source of funding for these and other entities in the Plan Area to implement these programs. Comment: The document does not adequately describe funding assurances. The BDCP only states that funding may be available through existing and future grant programs. However, these grant programs (Propositions 84 and 1) are not specific to “Plan Area” entities and now require preparation of SB985 stormwater resource plans.	As proposed in the 2013 public draft BDCP, Conservation Measure 19 (CM19; Urban Stormwater Treatment) was a voluntary measure proposed by DWR and Reclamation to try and improve water quality conditions in the Delta for the covered fish. This measure was not required to mitigate for impacts to the covered species, so funding is also not required for the full 50-year permit term. The 2013 public draft of BDCP in Chapter 8 assumes that $50 million of funding for CM19 would begin in Year 3 of Plan implementation and continue until Year 15. The expectation was that if the program was successful during the first 12 years of funding, DWR and Reclamation would either voluntarily fund the program for a longer period, or find external funding sources to continue to the program. If implemented, an assessment would be conducted to fund the most cost-effective and biologically effective measures with willing recipients. Note that CM19 is no longer included in the Proposed Action (Alternative 4A). If Alternative 4A is selected, CM19 would not be implemented. However, if a different alternative is selected that includes BDCP or CM19, DWR and Reclamation will take into consideration the suggested comments to revise the analysis of potential benefits of this conservation measure, and the consideration of other potential pollutants into the Delta which could be reduced through similar means to benefit the covered fish.
2427	80	Section: 5.2.4.11	See response to comment 2427-80 regarding CM19 funding.

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		Page: 5-162 Line: 34-36 Type: CM19 Key Document Text: Impact ECON-16: Changes in Local Government Fiscal Conditions as a Result of Implementing CM2-CM21 under Alternatives 1A-2C, 3-5, and 6A-9, or Environmental Commitments under Alternatives 4A, 2D, and 5A Comment: The analysis inadequately assesses the cumulative impact of CM19 on local agencies, as the suggested grant funding is inadequate to make any measurable change in Delta water quality and benefit to covered species. The financial burden to demonstrate measureable changes in the Delta could then be passed on to local government.	
2427	81	Section: A.6.3.1 Page: 6-1 Line: 16-18 Type: WQ Key Document Text: Therefore, surface water resources on many of the tributaries of the Sacramento River and San Joaquin River that are not affected by SWP and CVP operations would not be affected by implementation of the alternatives. Comment: It is not presented how reverse flow conditions in the South Delta and North Delta would be impacted by the proposed project. These conditions, especially during extreme events (drought, flood, fire, etc.), may in turn affect operation of other water supply infrastructure on tributaries. Please present the technical justification for the conclusion that upstream tributaries are not affected by the alternatives.	The text referred to in this comment is not related to Delta channels. Rather, it is referring to tributaries upstream of the Delta, including tributaries to the Sacramento River upstream of the American River confluence, Mokelumne and Calaveras rivers that flow into the Delta, and tributaries to the San Joaquin River upstream of Vernalis.
2427	82	Section: A.8.0 Page: 8-3 Line: 14 Type: WQ Key Document Text: San Francisco Bay	The text presented in the comment ("San Francisco Bay") indicates text that was added to the 2013 Draft EIR/EIS in the RDEIR/SDEIS. The text is a bullet list item indicating that water quality impacts relative to the bullet list item are evaluated within each alternative discussion section. RDEIR/SDESIS 4.3.4 (4A) describes whether concentrations of various water quality constituents are expected to increase or decrease with the project, relative to existing conditions and the No Action Alternative. To the extent that concentrations of various water quality constituents are expected to increase, 4.3.4 describes whether these increases are expected to result in impacts to beneficial uses of water in the Delta. For constituents for which adverse impacts were expected, mitigation and other commitments, such as additional evaluation and modeling and consultation with water purveyors to identify additional measures to avoid and minimize or offset these impacts, were introduced to address those impacts.

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		Comment: The areas upstream and near to the North Delta intakes should also be included in the assessment of water quality.	Additionally, adding intakes in the North Delta will allow for operational flexibility that can improve natural flow in the Delta and avoid impacts to migratory fish based on real time data and operations.
2427	83	Section: A.8.1.3.7 Page: 8-15 Line: 26-32 Type: WQ Key Document Text: Water quality in the southern Delta downstream of Vernalis is influenced primarily by San Joaquin River inflow; tidal action; agricultural return flows; and channel capacity. The Delta water supply operations have relatively little influence on salinity levels at these locations, and the elevated salinity in south Delta channels is affected substantially by local salt contributions discharged into the San Joaquin River downstream of Vernalis as evidenced by the comparatively lower EC [electrical conductivity] levels at Vernalis and the Banks and Tracy export locations. Comment: This statement is misleading and should be revised. The South Delta intakes are known to draw significant North Delta lower salinity water, which would improve water quality compared to San Joaquin River at Vernalis during some periods. The text implies that exceedances on Old River are not caused or influenced by the South Delta intakes, but rather local discharges.	Rather than stating that water operations have no effect on salinity at Vernalis, the text cited in this comment notes that water supply operations have comparatively little effect on EC exceedances compared to the other factors listed: river inflow, tidal action, agricultural return flows. No change was made to the text.
2427	84	Section: A.8.1.3.8 Page: 8-19 Line: 32-35 Type: WQ Key Document Text: WTPs [water treatment plants] are not specifically designed to treat and remove CECs [Contaminants of Emerging Concern], and the WTP industry is just beginning to examine their ability to treat for EDCs [Endocrine Disrupting Chemicals], with an encouraging some degree of success (e.g., Snyder 2008; Benotti et al. 2009; Contra Costa Water District 2009); however, our understanding of treatability for CECs is incomplete. Comment: This text is confusing, because the intention of the author is unclear. Water or wastewater treatment plants needs to be clarified, and the references need to be reviewed to ensure that they support the intended treatment facility.	The paragraph referred to in this comment provides background information related to endocrine disrupters and the determination that the sources and ability to remove these constituents from the water column, even with mechanical and chemical treatment, is not fully understood. As described in Appendix 8C of the EIR/EIS, these constituents were not analyzed in the impact analysis.

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2427	85	Section: A.8.1.3.10 Page: 8-22 Line: 13-20 Type: WQ Key Document Text: The Central Valley Water Board has embarked on a Nutrient Study Plan, which will be closely coordinated with the San Francisco Bay study effort, to determine whether separate nutrient criteria for the Delta are necessary. The Nutrient Study Plan is considered a necessary prerequisite for any decisions about creating NNEs [Nutrient Numeric Endpoints] for the Delta and determining how they would be implemented. The Nutrient Study Plan consists of four topical study areas (i.e., macrophyte, cyanobacteria, nutrient concentrations-forms-ratios, and modeling tools) to assess the fundamental question of whether there is evidence that nutrients contribute to Delta problems associated with macrophytes and algae. Comment: The NNE Stakeholder and Technical Advisory Group (STAG) has also developed a charter that should be referenced as a key process document to develop the desired outcomes. Also, there is a fifth subcommittee that is evaluating drinking water impacts related to Delta nutrients. Please add reference to this subcommittee in the discussion.	The text in this section regarding Central Valley Water Board work in the area of nutrient criteria development is simply an overview for setting purposes. It is recognized there are additional details of this process that are ongoing, however, such details are not necessary to support the assessment of nutrients to derive impact conclusions. Therefore, no change was made in response to this comment.
2427	86	Section: A.8.1.3.11 Page: 8-25 Line: 13-22 Type: WQ, Clarity Key Document Text: The Central Valley Water Board recently (July 2013) amended the Drinking Water Policy in the Basin Plan to include new directives to ensure that risks to drinking water quality associated with organic carbon from Delta source water does not increase over current levels. The Basin Plan narrative chemical objective (i.e., "Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses.") was amended to include a new footnote stating, "This includes drinking water chemical constituents of concern, such as organic carbon." The revised policy requires the Central Valley Water Board to consider the necessity for inclusion of monitoring of organic carbon, salinity, and nutrients when renewing waste discharge requirements based on the discharge loading, proximity to drinking water intakes, and trends in ambient conditions for these constituents. Comment: The Drinking Water Policy covers the Delta and the upstream tributaries, and this text needs to be revised to include all source waters included in the Policy.	The text in the Final EIR/EIS has been changed as follows: "The Central Valley Water Board recently (July 2013) amended the Drinking Water Policy in the Basin Plan to include new directives to ensure that risks to drinking water quality associated with organic carbon from Delta source waters and upstream tributaries do not increase over current levels."

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2427	87	Section: A.8.1.3.16 Page: 8-38 Line: 32-36 Type: WQ Key Document Text: The concentrations of these metals can be substantially elevated above background levels during watershed runoff events that transport high-suspended sediment loads. However, in general, a large majority of the metals are stable within the mineral matrices of the suspended particles and not available to interact chemically with other compounds or otherwise cause adverse water quality effects. Comment: There are other causes and sources of metals (both dissolved and total) which are not discussed or presented here (reservoirs, agriculture, mines, etc.). This presentation should be expanded to include all sources. Supporting studies related to speciation of metals or stability in the source waters have not been included. This statement should be supported with water quality data specific to the Central Valley sources. We request that the supporting studies be provided and adequately referenced.	The purpose of the text cited in the comment is to provide an overview of the factors that would affect aluminum, iron, and manganese in the environmental setting/affected environment, as it relates to how the alternatives would affect those factors. The primary mechanism by which alternatives would change aluminum, iron, and manganese in the environmental setting/affected environment is through changes in river flows and source water fractions in the Delta. The alternatives are not expected to otherwise chemically alter the reservoir releases, thus, the addition of studies regarding metals speciation would not contribute further to making impact determinations regarding the effects of the alternatives on aluminum, iron and manganese, or other trace metals.
2427	88	Section: A.8.1.3.16 Page: 8-40 Line: 17-20 Type: WQ Key Document Text: Based on water quality criteria and objectives, and typical levels in surface waters, it is generally the case that aluminum, arsenic, iron, and manganese are of primary concern for drinking water, while aluminum, cadmium, chromium, copper, lead, nickel, silver, and zinc are of concern because of potential toxicity to aquatic organisms. Comment: Although aluminum, iron, and manganese were added to the trace metals discussion, the data tables for metals were not expanded. We request the inclusion of aluminum, iron, and manganese in the data tables.	Data regarding aluminum, iron, and manganese in the primary source waters to the Delta (Sacramento River, San Joaquin River and San Francisco Bay) that was relied up for the trace metals assessment is included in Appendix 8N, Trace Metals, Tables 9–11 and cross-referenced in the trace metals impact analysis in Impact WQ-27, in Chapter 8, Water Quality. Therefore, no changes to the document are necessary.
2427	89	Section: A.8.3.1.1 Page: 8-46 to 8-53 Line: 28-30 and other occurrences	The sentence specifically identifies the use of models for assessing compliance with EC and chloride objectives. No changes to the text are necessary.

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		Type: WQ, Clarity Key Document Text: "models were used to assess compliance with water quality objectives for EC [electrical conductivity] and chloride in the Delta, ..." Comment: The section consistently refers to "compliance with water quality objectives", which implies that all water quality objectives were considered. For clarity, references in this section should be to "salinity related water quality objectives".	
2427	90	Section: A.8.3.1.1 Page: 8-53 Line: 12-17 Type: WQ, Clarity Key Document Text: At times, negotiations with the State Water Resources Control Board occur in order to effectively maximize and balance protection of beneficial uses and water rights. These activities are expected to continue to occur in the future. Thus, it is likely that some objective exceedances simulated in the modeling would not occur under the real-time monitoring and operational paradigm that will be in place to prevent such exceedances. Comment: The last sentence is misleading by implying that the "real-time monitoring and operational paradigm" will necessarily reduce exceedances compared to modeling. Modeling may bias (favor high or low) the number of water quality exceedances compared to observed conditions. Real-time management has historically been used to maximize water export while attempting to minimize water quality impacts in key locations. Without a more detailed evaluation of historical performance of the models against observed conditions that demonstrates the "high-bias" of the models, the last sentence should be omitted.	The models used to support the water quality assessment are planning tools to assess a specific project operations and facilities on a historical hydrology. Extensive discussion is provided in Section 8.3.1.1 of Chapter 8, Water Quality, regarding the abilities and limitations of what aspects of facilities operations can be represented by these models. One limitation is that CALSIM is a monthly model that is operating according to algorithms to achieve, among many rules, certain water quality objectives that apply for only portions of a month or a certain number of days a year. Real-time monitoring and operations can take actions to address potential exceedances that have been represented in the modeling due to modeling limitations. No change to the text was made.
2427	91	Section: A.8.3.1.3 Page: 8-56 Line: 3-7 Type: WQ, AM Key Document Text: Finally, it must be noted that no formal validation studies have been performed to validate the mass-balance method that was used for boron, mercury, methylmercury, nitrate, or selenium. The validation studies performed to date on conservative constituents (e.g., EC [electrical conductivity], chloride, bromide) have validated the approach for using DSM2 to	Beneficial use effects are concerned with exposure concentration and most water quality criteria/objectives are expressed as concentration or a threshold level of effect. Thus, It was necessary and appropriate to conduct the analysis in Chapter 8, Water Quality, using constituent concentrations or other threshold level (e.g., umhos/cm for EC) and the mass-balance method provides a means for conducting a comparative assessment of effects of each alternative.

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		evaluate changes in mixing of Delta source waters on water quality constituents. Comment: The shortcomings of the mass balance approach used (fate and transport effects, time-scales for assumptions, time-scales for water quality objective comparisons, etc.) might be better understood if an analysis of the net increase in loads of constituents was evaluated. This could be done by looking at historical water quality conditions in the North and South Delta and applying the proposed alternative export compared to the baselines. In other words, what was the historical load and volume exported and what is the expected load and volume exported under the alternatives? Monthly time scales would provide a good indicator of the overall water quality impacts.	
2427	92	Section: A.8.3.1.7 Page: 8-71 Line: 30-33 Type: WQ, AM Key Document Text: Furthermore, there are several factors related to the modeling approach that may result in modeling artifacts that show objective exceedance, when in reality no such exceedance would occur in reality. Sensitivity analyses and further other analyses were performed to evaluate whether exceedances were indeed modeling artifacts or were potential project related impacts that may actually occur. Comment: The text suggests that the model will identify false positive exceedances. The model should be used to evaluate the trends and problematic areas. It was not demonstrated that the model introduces "false-negative" exceedance errors. Please provide a clearer quantification or range of the magnitude of the impacts modeled (e.g., volume diverted differences, changes in total loads passing key locations, etc.).	The sensitivity analyses conducted were to further evaluate whether specific assumptions made in the initial modeling contributed to exceedances that otherwise would not occur given how conveyance facilities are actually operated. The magnitude of the impacts of the alternatives is expressed by the difference between the project alternative modeled conditions versus the No Action Alternative modeled conditions, as presented within the impact discussions and supporting appendices.
2427	93	Section: A.8.3.1.7 Page: 8-73 Line: 19-21 Type: WQ Key Document Text: Further, since the Delta is thought to be light limited and nutrients are in excess relative to algal growth requirements, these types of changes would not be expected to measurably change the quantity or composition of algae in the Delta. Comment:	A discussion of the relevance of temperature and residence time to harmful algal blooms is provided in the "Microcystis" subsection of Section 8.3.1.7, Constituent-Specific Considerations Used in the Assessment, within Chapter 8, Water Quality. Please refer to Master Response 14.

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		Recommended edits: Further, since the Delta is thought to be light limited and nutrients are in excess relative to algal growth requirements, these types of changes would not be expected to measurably change the quantity or composition of algae in the Delta. Increased retention time in the Delta and increased temperature are more strongly tied to algal and macrophyte growth enhancement.	
2427	94	Section: A.8.3.1.7 Page: 8-82 Line: 21-24 Type: WQ Key Document Text: Minimal changes in water clarity would result in minimal changes in light availability for Microcystis under the project Alternatives. As such, the project alternatives' influence on Microcystis production in the Delta, as influenced by the project alternatives' effects on Delta water clarity, is considered to be negligible. Comment: The project Alternatives will increase residence times in some areas, which would tend to increase clarity and enhance microcystis production. Because water clarity is a limiting factor, even small changes should be evaluated for the potential to increase microcystis occurrence.	As described in Impact WQ-29, facilities operations under the project alternatives would have a less than significant impact on TSS and turbidity within the affected environment. Channel velocities, which affect water clarity, are expected to be minimally affected by the alternatives. Hence, the focus of the Microcystis assessment is on changes in residence times. Please refer to Master Response 14.
2427	95	Section: A.8.3.3.17 Page: 8-453 Line: 17-19 Type: WQ Key Document Text: In addition, the frequency, magnitude, and geographic extent of Microcystis blooms in Delta waters may increase in the future as Delta water temperatures increase due to climate change. Comment: The impact of microcystis blooms on the Lower American River (upstream of the Delta) needs to be evaluated as impacting the NAA and the other project alternatives (1-9) and may need to be added here.	There would be differences in residence time and water temperatures in the lower reaches of streams in these watersheds between Existing Conditions and the No Action Alternative due to climate change and sea level rise; however, these changes would occur with or without the project and are not mitigated due to the project. Please refer to Master Response 14 related to water quality and residence time considerations.
2427	96	Section: A.8.3.3.17 Page: 8-456	The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS. The DSM2

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		Line: 39-40 Type: WQ Key Document Text: Water diverted from the Sacramento River in the North Delta is expected to be unaffected by Microcystis and microcystins. Comment: Insufficient data was presented to support this claim. Insufficient analysis was done to review climate change and Alternative implementation impacts on waters upstream of the Delta.	model results (which were used in the analysis of residence times) represent 15-minute intervals. Because the Alternatives 2D, 4A, and 5A contain a lower acreage of tidal restoration, relative to Alternatives 2, 4, and 5, which have modeled residence times, residence times under these alternatives are not expected to increase as substantially as under the other alternatives, and thus significant impacts with regard to Microcystis are not expected under these alternatives, relative to the No Action Alternative. Please refer to Master Response 14 related to water quality and residence time considerations. There would be differences in residence time and water temperatures in the lower reaches of streams in these watersheds between Existing Conditions and the No Action Alternative due to climate change and sea level rise; however, these changes would occur with or without the project and are not mitigated due to the Project.
2427	97	Section: A.11.3.5.4 Page: 11-189 Line: 8-14 Type: Alternatives, WQ Key Document Text: This impact discussion is new and is divided by Alternatives 1-5 (Alternatives 1A, 1B, 1C, 2A, 2B, 2C, 3, 4, 5); Alternatives 4A, 2D, and 5A; and Alternatives 6-9 (Alternatives 6, 7, 8, and 9). Residence time changes are shown for Alternatives 1-9 in Table 8-60a of Section 8.3.1.7. The effects of contaminants on aquatic resources associated with implementation of water operations will depend on how operations change the composition or concentration of contaminants, how contaminant bioavailability is affected, and how those changes might impact aquatic resources. Comment: The impact evaluation should be expanded to include cumulative effects of the proposed project and its mitigation activities that can contribute contaminants.	Relevant cumulative impacts are presented in Chapter 8, Water Quality and Chapter 11, Fish and Aquatic resources of this Final EIR/EIS which address potential changes in water quality constituents and effects of contaminants on fish.
2427	98	Section: A.11.3.5.4 Page: 11-189 Line: 27-40 Type: WQ, Alternatives Key Document Text: The operational impacts of new flows under CM1 Water Facilities and Operation on mercury and methylmercury concentrations were evaluated both qualitatively in the context of a conceptual model for mercury in the delta, and quantitatively using a numerical model; details on these analyses are described in Appendix 8I, Mercury. These two lines of analyses must be considered together, since a very high level of uncertainty is associated with both	For Alternatives 2D, 4A, and 5A, the change in exceedance quotient with proposed water operations ranges from a decrease (improvement) of 0.3 to an increase (decline) of 0.2. Compared to an exceedance quotient of 1, which represents the threshold at which fish are expected to be affected, these values are considered within the range of uncertainty associated with the models that are the basis of this analysis, and no substantive change is indicated. Results are similar when compared to 6 Existing Conditions (see Appendix 8I, Mercury). Overall, model results do not indicate an adverse impact to largemouth bass (and therefore other fish species in the Delta) due to water operations under Alternatives 2D, 4A, and 5A.

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		approaches, as further described below. Based on the conceptual model, since the Sacramento River is a larger contributor of mercury loading to the Delta system relative to the San Joaquin River, a reduction of the flow from the Sacramento River entering the Delta (due to some of the flow being exported) and an increase in the flow from the San Joaquin River entering the Delta (as opposed to being exported) would be expected to result in an overall decrease in mercury loading to the Delta under CM1 water operations. However, since the concentrations of mercury in San Joaquin River are sometimes higher than the Sacramento River, there could be increases in mercury concentrations at certain locations, depending on the specific operations at any given time. Comment: The increase in methylmercury concentration resulting from the proposed project may lead to higher fish tissue concentration and further impairment due to methylmercury. While there is uncertainty with modeling, if the impact is reasonably expected, it should be reasonably mitigated.	
2427	99	Section: A.11.3.5.4 Page: 11-193 Line: 10-18 Type: WQ, Alternatives Key Document Text: NEPA Effects: Based on the above discussion, the effects of mercury and methylmercury in comparison to the No Action Alternative are not considered to be adverse to all fish species evaluated for Alternatives 2D, 4A, and 5A because the modeled changes are within the range of uncertainty and no substantive change is indicated. CEQA Conclusion: Alternatives 2D, 4A, and 5A would not increase levels of mercury by frequency, magnitude, and geographic extent such that the affected environment would be expected to have measurably higher body burdens of mercury in aquatic organisms, thereby substantially increasing the health risks to wildlife (including fish). This impact is considered to be less than significant for Alternatives 2D, 4A, and 5A. No mitigation is required. Comment: This is a sample excerpt to support the concern that cumulative contaminant impacts for mercury and selenium are insufficiently evaluated in the revised environmental document. Also, Alternative 4A does have the potential to cause significant impacts, and reasonable mitigation for methylmercury should be included. There are numerous other parts of the California Water Fix documents where this is applicable.	As described under impact WQ-14 in Chapter 8, Water Quality, habitat restoration proposed under Alternative 4A has 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 would be guided by Environmental Commitment 12, which requires development of site-specific mercury management plans as restoration actions are implemented. The effectiveness of minimization and mitigation actions implemented according to the mercury management plans is not known at this time, although the potential to reduce methylmercury concentrations exists based on current research. Although Environmental Commitment 12 would be implemented with the goal to reduce this potential effect, there remain uncertainties related to site-specific restoration conditions and the potential for increases in methylmercury concentrations in the Delta in the vicinity of the restored areas. Therefore, the effect of Environmental Commitments 3, 4, 6–12, 15, and 16 on mercury and methylmercury is considered to be adverse.
2427	100	Section: A.25.3.3.1 Page: 25-27	There is no published record of Microcystis in the lower American River. Under Existing Conditions, bloom development is limited by high water velocity, low residence times and low nutrients. While flows may vary under the project alternatives, the low flows are not expected to be outside of the range that occurs under Existing Conditions or would occur under the No Action Alternative. Please see Master Response 14

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		Line: 21-24 Type: WQ Key Document Text: Any modified reservoir operations under the No Action Alternative are not expected to promote Microcystis production upstream of the Delta since large reservoirs upstream of the Delta are typically low in nutrient concentrations and phytoplankton outcompete cyanobacteria, including Microcystis. Comment: Sacramento Stormwater Quality Partnership is are concerned about the potential for varying river flows due to revised reservoir release operations and increased temperatures expanding the geographic extent of Microcystis.	regarding potential for Microcystis blooms in the Upstream of the Delta region.
2427	101	Section: A.28.5.8.7 Page: 28-16 Line: 15-18 Type: WQ Key Document Text: Consequently, it is possible that increases in the frequency, magnitude, and geographic extent of Microcystis blooms in the Delta would occur due to the operations and maintenance of the water conveyance facilities and the hydrodynamic impacts of restoration under CM2 and CM4. Comment: Sacramento Stormwater Quality Partnership is concerned with potential for Microcystis presence in areas upstream of the Delta and believes that this mitigation effort should be expanded to include tracking of the rivers below the major upstream reservoirs during late summer/fall. We are concerned that revised reservoir operations may lead to significant seasonal changes in river hydrodynamics that could support Microcystis growth.	Please see response to Comment 2427-100 regarding Microcystis. Please refer to Master Response 14.
2427	102	Section: A.31.4 Page: 31-4 Line: n/a Type: WQ, omission Key Document Text: WQ-18: Effects on pesticides concentrations resulting from implementation of CM2-CM21	Chapter 8, Water Quality, underwent several changes in the RDEIR/SDEIS. This impact is now WQ-22: Effects on pesticide concentrations resulting from implementation of CM2–CM21, which is less than significant for Alternative 4A, the preferred alternative. Please see Master Response 2 regarding project level and program level analyses. All CMs (or environmental commitments under Alternative 4A), were analyzed together with a program level of analysis. For more information regarding Conservation Measures please see Master Response 5.

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		Comment: It is unclear why this impact was removed from the Significant and Unavoidable list. There are no revisions to the text, which supports significance - even after mitigation. Moreover the grouping of CM2-CM21 in this case confuses the causes of impacts. For example, CM19 would not increase pesticide concentrations; however, conservation measures such as restoration efforts or flow modifications could reasonably increase Delta pesticide concentrations.	
2427	103	Section: A.8H-1 Page: 8H-3 Line: n/a Type: WQ Key Document Text: Even though the sensitivity analyses were performed at LLT, the factors identified to explain modeled salinity exceedances at LLT are expected to be valid similarly at Early Long-term (ELT) conditions. Comment: It is unclear why it is valid to apply the results of the sensitivity analysis to the ELT. Please expand on the rationale.	The Final EIR/EIS includes results of model runs that simulate the conditions at ELT time period, as included in Appendix 5A, Section C.
2427	104	Section: D.3.4.1.5 Page: D.3-29 Line: Table 3.4.1-5, Row 3 Type: WQ Key Document Text: To what extent does CM1 change the abundance and distribution of Microcystis? Assess abundance and distribution of Microcystis using field studies such as those of Lehman et al. (2005, 2010). Summer months following implementation of CM1 (i.e., after north Delta intakes are completed and diversions at the south Delta export facilities decrease). Multiple year study to capture hydrological and operational variability. Comment: Similar to previous comments, the potential impacts to areas upstream of the Delta have been inadequately assessed with regard to potential for Microcystis growth. This assessment should be expanded to include areas upstream of the Delta to determine if the	Please see Master Response 30 regarding the adequacy of the upstream assessment approach and Master Response 14 regarding the adequacy of the Microcystis assessment, and new information supporting the Microcystis assessment for Alternatives 4A, 2D, and 5A.

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		presence of Microcystis is changing.	
2427	105	Section: D.3.6.4.3 Page: D.3-138 Line: 1-9 Type: AM Key Document Text: Decision Trees: This focus area includes all monitoring and research needed to resolve which branch of the Decision Trees is chosen for initial operations (see Section 3.4.1.4.4, Decision Trees for a description of the Decision Trees). Potential partners for monitoring and research in this focus area include the IEP [Interagency Ecological Program], Delta Science Program, Ecosystem Restoration Program, Central Valley Water Board, Sacramento Stormwater Quality Partnership, State Water Contractors, USGS, San Francisco Estuary Institute, Central Valley Joint Venture, CDFW Bay-Delta Office, Ecological Species Recovery Program, and UC Davis Research Programs. Unlike the other focus areas, the Decision Trees focus area has a deadline, terminating when the new north Delta diversions become operational. Comment: It is not clear why the decision tree focus group should terminate efforts after the proposed North Delta diversion is operational. Are the decision trees then static? Please provide more information on this focus group and the justification for not including this group on the adaptive management team.	Please see Master Response 3 for more information on the Decision Tree. For more information on the preferred alternative's adaptive management plan, see Master Response 33. Also, see Chapter 3 for information on the Collaborative Science and Adaptive Management Program (CSAMP). Actions taken through the CSAMP will be based on sound science and targeted research actions to improve our understanding of effects from CVP and SWP operations and other management actions on listed species and resolve key knowledge gaps on the Delta ecosystem. If new science suggests changes to operations are needed, including modifications to fall and spring operating criteria, adjustments can be made after approval from the decision-making agencies and groups.
2427	106	Section: D.3.6.4.4 Page: D.3-141 Line: Table 3.6-2. Type: AM Key Document Text: Sacramento Stormwater Quality Partnership [SSQP] Comment: The SSQP role is limited to only "community involvement" and "landowner" access and should be expanded to allow more direct feedback on water quality issues and other impacts to local agencies.	Expanding the brief description of the SSQP would not change the significance of any impacts, no edit was made.
2427	107	Section: D.3.6.4.4.12 Page: D.3-144	Expanding the brief description of the SSQP would not change the significance of any impacts, no edit was made.

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		Line: 13-17 Type: Error Key Document Text: Sacramento Stormwater Quality Partnership. The Sacramento Stormwater Quality Partnership is a multi-jurisdictional program made of Sacramento County and the incorporated cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova to ensure water quality and quantity for cities. The Partnership may be a stakeholder and monitoring or research partner in CM19 implementation. Comment: The Sacramento Stormwater Quality Partnership is not a drinking water partnership and does not "ensure ... quantity".	
2427	108	Section: D.6.3.5.2 Page: D-243 Line: 17-19 Type: Scope, WQ Key Document Text: The fifth five-year review (i.e., the 25-year review) will include a comprehensive assessment of whether the timing and magnitude of observed environmental and ecosystem changes attributable to climate change have been consistent with Plan expectations. Comment: Since the term of the Early Long Term (ELT) is 15 years (2025), it is warranted to conduct the climate change assessment at a time consistent with the assumptions. We recommend conducting this review in 2025 to validate ELT assumptions and revise Late Long Term assumptions to support the ESA Section 7 and CESA incidental take authorization.	Appendix D, Substantive BDCP Revisions includes this text primarily to support Alternative 4 which would be implemented in the Late Long Term. Alternative 4A, which is assumed to operate under a shorter timeframe, would not require the same comprehensive climate change review as alternatives that include and an HCP/NCCP.
2427	109	Section: G Introduction Page: G-1 Line: 15-19 Type: Scope, Omission Key Document Text: The revised proposed project, identified in the Partially Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS), no longer includes a HCP/NCCP [Habitat Conservation Plan/Natural Community Conservation Plan] (see Section 1, Introduction, of the RDEIR/SDEIS for more	Comment is addressing the consistency with the Delta Plan. See Master Response 31 for more information about the Delta Reform Act. An updated Appendix 3J, Alternative 4A (Proposed Project) Compliance with the 2009 Delta Reform Act, includes a discussion on the proposed project and 85320.

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		information); therefore, Alternative 4A will not be incorporated into the Delta Plan and will follow a different process to demonstrate consistency with the Delta Plan. Comment: Although the CA Water Fix claims to not technically need to meet the requirements of Delta Reform Act Water Code section 85320, there are elements of the content and intent of this regulation that should be addressed in the California Water Fix.	
2427	110	Section: G.4.1 Page: G-3 Line: 14-15 Type: Alternatives Key Document Text: Reduce Reliance on the Delta through Improved Regional Water Self-Reliance (23 CCR Section 5003) Comment: The RDEIR/SDEIS lacks an alternative with a portfolio approach that examines the role of regional water self-reliance.	The California Water Action Plan recognizes that all Californians have 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 - 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. 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/. Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1, EIR/EIS, describes the range of conveyance alternatives considered in the development of the EIR/EIS. Appendix 1B, Water Storage, EIR/EIS, describes the potential for additional water storage and Appendix 1C, Demand Management Measures, EIR/EIS, describes conservation, water use efficiency, and other sources of water supply including desalination. While these elements are not proposed as part of the proposed project, the Lead Agencies recognize that they are important tools in managing California's water resources. For more information regarding alternatives to the proposed project please see Master Response 4.
2427	111	Section: G.4.1 Page: G-4 Line: 9-10 Type: Clarity, Omission Key Document Text: DWR is preparing a Mitigation, Monitoring and Reporting Program (MMRP) that will be available with the Final EIR/EIS. Comment: It is a concern that more information is not available in the RDEIR/SDEIS for comment during the public review period. The following comment is based on the limited language provided in the RDEIR/SDEIS. The key components of the monitoring program should be included in the final environmental document. There should be a more detailed explanation of how the monitoring program will be a component of a long-term adaptive management program and how the monitoring information will be used to inform decisions on mitigation efforts.	Section 21081.6 of the California Public Resources Code only requires that an MMRP is adopted by lead agencies when making findings—not that it be included in a draft (or even a final EIR). The court in Christward Ministry v. County of San Diego (13 Cal. App. 4th 31, 49) states, "The law clearly contemplates otherwise, for the mitigation monitoring program is required to be adopted "when making the findings required" (§ 21081.6), and those findings are made after considering the final EIR. (See § 21081; Guidelines, § 15091.) Nothing in CEQA or the Guidelines requires the mitigation monitoring plan to be in the EIR. (See § 21100; Guidelines §§ 15120-15132.)

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		Consideration should be given to coordination and funding of other stakeholder monitoring programs such as the Delta Regional Monitoring Program rather than isolated programs solely within state agencies.	
2427	113	Section: G.4.1 Page: G-4 Line: 9-10 Type: Clarity, Omission Key Document Text: DWR is preparing a Mitigation, Monitoring and Reporting Program (MMRP) that will be available with the Final EIR/EIS. Comment: This is a significant item that is not adequately covered in the RDEIR/SDEIS. The RDEIR/SDEIS is then insufficient in that it is not substantially complete and is missing key elements to allow for a complete Public Review. Furthermore, Sacramento Stormwater Quality Partnership requests that the MMRP engage local agency stakeholders and the Delta Regional Monitoring Program.	The MMRP is a required element of the CEQA process. CEQA requires the adoption of the MMRP when the CEQA document is certified. CEQA requires the following information as dictated in Section 18.04.050 Report contents. "A. The proposed MMRP shall include the following elements: 1. A statement that the requirements of the adopted program run with the real property that is the subject of the project and that successive owners, heirs, and assigns of this real property are bound to comply with all of the requirements of the adopted program; 2. A statement that prior to any lease, sale, transfer, or conveyance of any portion of the real property that is the subject of the project, the applicant shall provide a copy of the adopted program to the prospective lessee, buyer, transferee, or one to whom the conveyance is made; 3. A statement which specifies the responsibilities of the applicant and the environmental coordinator or his or her designee, as well as whether professional expertise is required for completion or evaluation of any part of the program; 4. The anticipated costs that will have to be paid by the applicant and the timing of the payment. Actual dollar amounts are not required, but the plan shall include cost estimates, identification of the type of specialized personnel or professional firms to be retained by the city at the applicant's sole cost and expense; 5. The time requirements, schedule, phases or tasks that will, upon completion, result in issuance of a program completion certificate from the environmental coordinator; 6. A statement of the civil remedies and criminal penalties permitted by this title for noncompliance with an adopted mitigation monitoring and reporting program. B. Where a project is approved with mitigation measures that have been modified during the hearing process from those originally recommended in the environmental document, the proposed mitigation monitoring, and reporting program shall be modified to maintain consistency with the project as approved. The proposed program may also be modified at the discretion of the approving body. Any such modifications must be insignificant in nature and not cause a substantial change in the effectiveness of any mitigation measure or condition of approval. (Ord. 97-03 § 2 (part): prior code § 8-1.6015(E))" The rationale for waiting until the FEIR process is due to the number of alternatives under consideration, differences in the mitigation required for the various alternatives, and the potential for additional measures to be implemented as a function of the public review process. The EIR/S provides full disclosure of the mitigation measures that are currently proposed as part of the project review for consideration by the decision makers and public.
2427	113	Section: G.4.2 Page: G-4	Responses to all comments are included in this Final EIR/EIS as required by CEQA and NEPA. The obligations of California public agencies under Article 1, section 3(b)(1), of the California Constitution and under the Public Records Act, do not include any obligation to post comments on draft environmental documents on agency websites as such comments come in from the public and interested agencies. Rather, those statutes deal with the obligation for public agencies to hold certain kinds of meetings of public bodies

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		Line: 19-21 Type: Clarity Key Document Text: All of the documents, studies, administrative drafts, and meeting materials - more than 3,000 documents - have been posted online since 2010 in an unprecedented commitment to public access and government transparency. Comment: While we agree significant effort and detailed thought has gone into the tens of thousands of pages of documents that are publicly available, the science process has not been transparent in that comments and responses to comments on the BDCP documents and RDEIR/SDEIS were not circulated. Further, the City and others have requested specific science items that have not yet been provided or responded to. The quantity of documents is high, but the attention to key science questions has been inadequate.	and public officials in public, and to make non-privileged documents of various kinds available to members of the public in response to formal requests. To date, neither the California Legislature nor Congress has required Lead Agencies for CEQA and NEPA documents to post comments on draft environmental documents on their websites during the public review periods for those draft documents. This is consistent with the requirements of the California Environmental Quality Act (CEQA Guidelines §15088) and the National Environmental Policy Act (Council on Environmental Quality § 1503.4) and policies held by all Lead Agencies governing the implementation of CEQA and NEPA. Please see Master Responses 40 for additional detail on the public outreach that has been done for stakeholders and Master Response 42 regarding treatment of public comments. No specific response is possible regarding the general comment that attention to key science questions is inadequate; however, DWR and Reclamation have committed to a collaborative science and adaptive management program to address areas of uncertainty and to help adjust project operations over time based on new research and monitoring.
2427	114	Section: G.4.3 Page: G-5 Line: 8-11 Type: Clarity, Omission Key Document Text: The proposed project (Alternative 4A) will include an adaptive management plan that describes the approach to be taken, which, to the extent feasible, will be consistent with the adaptive management framework in Appendix 1B of the Delta Plan Comment: The nine-step process as described in Appendix 1B of the Delta Plan should be discussed in the RDEIR/SDEIS in sufficient detail to provide readers with an understanding of the key components and focus areas of the planned adaptive management program. Insufficient detail is provided to assure allocation of sufficient resources, coordination with other programs, and adequacy to address project impacts.	The RDEIR/SDEIS adequately describes the collaborative science and adaptive management plan in the Executive Summary. Revisions to this program are provided in this Final EIR/EIS at a level of detail appropriate under CEQA and NEPA. For more information regarding adaptive management please refer to Chapter 3, Description of the Alternatives and Master Response 33.
2427	115	Section: G.4.3 Page: G-5 Line: 27-30 Type: AM, Omission Key Document Text: In summary, the broad purposes of the program will be to: (1) undertake collaborative science, (2) guide the development and implementation of scientific investigations and	DWR and Reclamation are providing a description of the proposed Adaptive Management and Monitoring program to provide a more complete picture of the proposed action. Monitoring is a requirement of the state 2081(b) incidental take permit. Adaptive management is a recommended component of any long-term mitigation program. DWR and Reclamation have included local agencies in the decision-making process through the extensive public outreach and involvement program of BDCP and California Water Fix. This has included numerous outreach meetings with local public agencies directly. DWR and Reclamation intend to continue this outreach to local agencies during the rest of the CEQA/NEPA process as well as during project implementation. As described on p. 4.1-20 of the RDEIR/SDEIS, collaborative science and adaptive management will be funded through a combination of mitigation funds from participating state and federal water contractors, and available supplemental state and federal funding.

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		monitoring for both permit compliance and adaptive management, and (3) apply new information and insights to management decisions and actions. Comment: The CA Water Fix does not commit funding and support to collaborative science that includes all stakeholders including local agencies. Sufficient description and information on the Adaptive Management Plan is not provided, therefore, the RDEIR/SDEIS is insufficient.	
2427	116	Section: G.4.4 Page: G-6 Line: 10-14 Type: Alternatives Key Document Text: While the DMMs (Demand Management Measures) are not proposed as part of any alternative, Appendix 1C of the Draft EIR/EIS is intended to provide information on the important contribution made by DMM towards reducing demands in areas served by water exported from the Delta. By reducing long-term water demand in the areas served by the SWP and CVP contracting agencies, demand management efforts complement the environmental objectives of the proposed project. Comment: One or more project alternatives should be provided to include demand management and resulting environmental benefits with regards to the project.	The BDCP/ California WaterFix EIR/EIS evaluates 18 action alternatives. The action alternatives were selected through a rigorous three-step screening process and documented in Appendix 3A, Identification of Water Conveyance Alternatives- Conservation Measure 1, of the 2013 Draft EIR/EIS. The lead agencies believe that the EIR/EIS meets CEQA and NEPA requirements to evaluate a range of alternatives. For more information regarding alternatives to the proposed project please see Master Response 4. For more information regarding demand management please see Master Response 6.
2428	1	The Delta is in a state of disrepair. Fish populations are steadily decreasing. The CVPIA [Central Valley Project Improvement Act] law enacted as not been complied with. Water Resource Board continues to violate the provisions by failing to increase fish populations, violate water temperature standards, violate salinity standards but continue to increase the exports to water contractors. No BDCP should proceed without flow requirements and penalities if violations occur.	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. 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 is actually available in the system, the presence of threatened fish species, and water quality standards. Flow criteria will 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. Monitoring for compliance with D-1641 requirements or any future requirements for SWP/CVP water supply operations would be conducted year-round in the future under the proposed project.
2428	2	No new conveyance system should be proposed without the outflow requirements to keep the Delta healthy be determined by scientific method. The current plan has no maximum limit established.	As described in Chapter 3, Description of Alternatives, and Appendix 5A, Section B, of the EIR/EIS the proposed project and other action alternatives were developed to provide a range of Delta outflow criteria for the spring, summer, and fall months. The effects of these changes on Delta outflow on aquatic resources are presented in Chapter 11, Aquatic Resources, of the EIR/EIS.
2428	3	This last year over 800,000 af of water was exported, even though it was considered a dry year. Before the year 2000 exports exceed 600,000 af only once. Increased water exports have to stop, there is only so much water.	The CVP facilities are used to convey both water rights for CVP water contractors and water rights users that hold water rights that are senior to the CVP. The CVP facilities are required to deliver water to senior water rights holders along the San Joaquin River (up to 840,000 acre-feet in most years, and up to 630,000 acre-feet in extremely dry years). In addition, the federal Central Valley Project Improvement Act requires

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			the CVP facilities to deliver water to several federal and state wildlife refuges located to the south of the Delta (304,600 acre-feet in most years, and 228,450 acre-feet in extremely dry years). These deliveries must occur even when there is no water delivered to CVP water service contractors, as described in Appendix 5A, Section B, of the EIR/EIS.
2428	4	Current water rights need to be revised. Current water rights exceed 4 times the annual rainfall in California! This is stupid!	The State Water Resources Control Board is responsible for issuing water rights in California, and not DWR or Reclamation who are evaluating the project in this EIR/EIS. Water rights issued on rivers in the 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.
2428	5	This system will cost billions of dollars yet funding is not secured. The conservation measures have not been funded and will be paid by taxpayers. Why should we pay to fix the damage caused by others who benefit? Conservation measures should be funded and completed first before any conveyance goes forward.	Funding for the construction and operation of the proposed water conveyance facility and its mitigation will be secured through financing by the participating state and federal water contractors described in the public draft BDCP EIR/EIS, chapter 8. This funding will come from water rate increases to the users of the water supplied by these participating water contractors. Taxpayers would not pay any costs of the proposed project. Mitigation will be implemented prior to or concurrent with the impacts of the water conveyance construction.
2428	6	This system will provide a reliable source of water to mainly a few very powerful water districts.Some of these districts lie within the salt and selenium laced Tulare basin. The farm land within this basin, roughly 190,000 acres has naturally occurring salts and selenium with no natural out drainage. It is predicted that in 40 years this land will be unproductive yet billions of dollars and the possible destruction of the Delta is being invested to keep these poisoned lands going. Wouldn't it be wiser to take this land out of production to save money, water and the Delta?	For information about effects of the project to selenium, please refer to Master Response 14.
2428	7	The BDCP is a dual conveyance project. The destruction of fish at the south delta pumps will continue yet no new fish screens are proposed. No project should go forward without the current screens being replaced by modern screens. Over 40 million fish were killed at the pumps last year. This needs to stop!	The use of dual conveyance would reduce reliance on the south Delta facilities.
2428	8	This project does not create any new water or replenish groundwater supplies. Corporate farmers continue to plant permanent crops despite it being against the original CVP agreeements. Over 415,000 acrs of permanent crops have been planted with a 68,000 acre increase between 2008 and 2012. Additional almond and pistachio orchards have been planted recently to take advantage of high export prices, despite current dry conditions. These practices of planting for profit then bullying to get the water needed needs to stop!	The comment does not raise any environmental issue rated or the 2015 DEIR/EIS or the 2013 DEIR/EIS.
2429	1	BDCP Comment -- Alternate 4 -- fish protection It is my understanding that Alternative 4 would be a dual conveyance system that would draw an additional 9000 cfs from the Sacramento River and also allow exports from the current South Delta pumps. The Delta is currently in a state of possible destruction and has been in a downhill spiral	The operational criteria included in the preferred alternative, 4A, is based on several years of coordination with fish agencies and incorporation of the best available science to avoid and minimize the effects of changes in Delta operations. The existing south Delta and proposed NDD would operate in coordination and the maximum diversion capacity at each facility is subject to various constraints included in the preferred alternative, 4A, as well as existing regulations such as D-1641.

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		since the implementation of the CVP. Increased exports have caused the steady decline of fish species and, based on studies by the CALFED project, are the number one stressor on listed species.	
2429	2	Currently the South Delta pump operations are killing millions of fish each year. Last year there were over 11 million fish "salvaged" at the pumps. It is estimated that 4 times that amount are not salvaged and [are] killed by the pumps. This is largely due to the existing fish diversions are outdated and 50-year-old technology. Current diversions only run at 45% efficiency and are not fish screens. No implementation of any new conveyance project should proceed without the removal and reconstruction of the existing louvers and replaced with state of the art fish screens. The current plan does not include any conservation measure to address fish screens. I spoke with the fisheries people at the public meeting in Walnut Grove and their comment was that a more efficient screen was not possible. I do not believe this is the case. Channels could be redirected to create continuous flow to avoid entrapment against the screen. It is obvious this measure is not included due to cost and not possibility. No new conveyance system should proceed without the current problems within the Delta and fish populations increased.	15 alternatives and 3 new subalternatives were analyzed in the EIR/S and the RDEIR/RSEIS respectively. Four major alignments have been included in the EIR/S: Through-Delta, East of the Sacramento River, West of the Sacramento River, and a Tunnel under the Delta. Many additional proposals by public and private individuals and organizations have also been evaluated and described in Chapter 3 of the BDCP EIR/S and Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1. 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. DWR and Reclamation are required to improve fish collection efficiency at the existing south Delta salvage facilities, as part of facility improvements required by the National Marine Fisheries Service 2009 biological opinion on the SWP/CVP. For example, in 2014 Reclamation replaced the secondary louver system with a traveling screen system. These screens provide protection by guiding fish into the holding tanks while catching debris on pegs and transporting debris to a collection system at the work surface. The technology required at the proposed north Delta intakes and the existing south Delta export facilities differ fundamentally. The north Delta intakes would be located on the side of the river channel and so would be designed to comply with CDFW, NMFS, and USFWS fish screening criteria (BDCP Appendix 5B Section 3.B.3.3). The south Delta export facilities are located on dead-end channels and requires active collection and salvage of fishes. Screening the intakes at Clifton Court Forebay was analyzed during the water conveyance alternative development process and is described in the 2013 Public Draft BDCP EIR/EIS, Appendix 3A. This alternative was eliminated from further evaluation because initial results of recent studies, including information included in the recent NMFS biological opinions, supported a phased approach that would emphasize improvements to operations of fish handling facilities and reduced predator potential within Clifton Court Forebay prior to further analysis of installation of fish screens. Nevertheless, DWR and Reclamation will continue investigating strategies to increase fish salvage efficiency, reduce pre-screen losses, and improve screening efficiencies, consistent with the 2009 biological opinion of the SWP/CVP.
2430	1	Delta Fix Comment -- Alternative 4 -- Selenium The current draft EIR contains no mitigation of the toxic selenium created when irrigating land within the Tulare Basin. Discussions with officials at the public meeting indicated that the current tunnel project has no impact on the creation of Selenium. The tunnels will create a way to export more water from the Delta, possibly opening up more land to irrigate, thus creating more toxic run off that the Federal government will have to deal with. No EIR should be accepted without listing the effects of increased irrigation of land that within 40 years will not be sustainable.	Please refer to Master Response 14 regarding selenium.
2431	1	It was announced that the state plans to condemn 300 parcels containing Delta family farms so the tunnel project can move forward. [It] makes no sense to condemn land that has been in production for over 100 years with senior water rights to favor land that has been in production since the 1960s with junior rights. This land exists only because of the creation of the Central Valley conveyance system. Wouldn't it make more sense to condemn and fallow the Westlands farms due to their destruction of the Delta and the creation of toxic	This comment is on the merits of the project and suggests an alternative to the proposed project that would not meet the project objectives or purpose and need statement as presented in EIR/EIS Chapter 2. A description of the process the Lead Agencies followed to develop and screen alternatives is provided in Master Response 4.

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		selenium waste? Then there would be enough water and no need for the 15-billion-dollar tunnels.	
2432	1	Delta Fix Comment -- Old River Barriers The "conservation measures," which are now not conservation measures, state that a permanent barrier will be installed at the mouth of Old River. The EIR does not address the economic loss to Delta businesses and marinas due to the restricted navigation. Pleasure boats and fishing boats would not be able to access major businesses and restaurants when this barrier is closed. The only route from Bethel Island to the main San Juaquin River would be through the narrow Fisherman's Cut or way south through Middle River.	Impact TRANS-18, Potential Effects on Navigation From Construction and Operations of Head of Old River Barrier, notes that operable barriers would be constructed to allow recreational boat passage.
2432	2	[Old River Barriers] will restrict migratory paths of regulated game fish such as striped bass and American shad. Putting band-aids on the problem will not fix the decline of Delta smelt. The smelt need water and natural flows, not artificial barriers. The smelt and other listed species, as well as all legally introduced species need state-of-the-art fish screens at the south Delta pumps, not barriers that would affect the economic lives of many.	The Old River barrier would be provided with a fish passage facility, and the San Joaquin River migration pathway would remain available. Analysis of the effects of the alternatives on delta smelt in terms of flow-related effects are provided in the sections entitled Operations of Water Conveyance Facilities. DWR is required to improve salvage efficiency (including reducing prescreen losses across Clifton Court Forebay) as part of compliance with the NMFS (2009) CWP/CVP biological opinion; changes in fish screen design are not proposed as part of any of the alternatives assessed in the RDEIR/SDEIS.
2433	1	Center for Food Safety submits these comments on the Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS) for the project previously known as the Bay Delta Conservation Plan, and now known as California Water Fix. CFS is opposed to Alternative 4A and urges the Department of Water Resources (DWR) and the Bureau of Reclamation (Bureau) to select the no-project alternative and abandon the flawed tunnels project.	The Proposed Project is intended to provide a more reliable water supply, with diversions that are more protective for fish, in accordance with the Delta Reform Act co-equal goals of improving water supply reliability and Delta ecosystem health. The premise of the California WaterFix is that it will provide environmental benefits while stabilizing water supplies for a large population of California residents, consistent with statutory policy as found in the Delta Reform Act of 2009 (see, e.g., California Public Resources Code, §§ 85001(c), 85002, 85004(a), 85020.) Refer to Master Response 31 (Compliance with the Delta Reform Act). See Master Response 31 and Appendices 3I and 3J of the Final EIR/EIS for discussion of the proposed project's consistency with the Delta Reform Act. 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. Please see Master Response 3 for more information on Purpose and Need. Please also refer to Master Response 4, which addresses the development and selection of the preferred project alternative.
2433	2	In general, Alternative 4A represents a near-total capitulation to the wishes of southern San Joaquin Valley agribusiness interests. Both DWR and the Bureau have long acted as agents of these special interests, in a manner far out of proportion to their contributions to the statewide and regional economy. This is especially true considering the recent shift in the southern San Joaquin Valley from row crops and rangeland to tree crops and other "permanent" crops. The shift to tree crops in the southern San Joaquin Valley has greatly padded corporate profits, but has also hardened demand for Delta exports, dramatically reducing what flexibility existed in the State Water Project and Central Valley Project. The Delta ecosystem and the communities dependent on the Delta as a functioning, sustainable shared resource have suffered as a result.	The proposed project was developed to meet the rigorous standards of the federal and state Endangered Species Acts. By establishing a point of water diversion in the north Delta and new operating criteria, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. The State Water Resources Control Board, not DWR, is responsible for decisions relating to water rights and beneficial use of water. See Master Response 43 for more information on Beneficial Use of Water.
2433	3	Rather than spending billions of dollars to transport water hundreds of miles for the benefit of a few select politically-connected profiteers, we should focus on supporting sustainable agriculture, sustainable economies, true water supply enhancements, and a rational,	The comment addresses the merits of the project and does not raise any issues with the environmental analysis provided in the RDEIR/SDEIS.

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		equitable water infrastructure system. Alternative 4A is not the answer.	
2433	4	Alternative 4A does not meet the coequal goals of the Delta Reform Act, particularly the goal of "protecting, restoring, and enhancing the Delta ecosystem." The RDEIR/SDEIS incorrectly states that Alternative 4A will "improve conditions for endangered and threatened aquatic species in the Delta while at the same time improving water supply reliability…" (RDEIR/SDEIS at p. 4.1-1.) But by separating the tunnels portion of the project from the ecosystem restoration portion of the project, Alternative 4A makes compliance with the Delta Reform Act impossible. While Alternative 4A includes several "environmental commitments," these are primarily focused on limited terrestrial habitat restoration projects. Not only are these restoration projects far too limited given the scope of the project, they fail to adequately address the largest consequence of the project: the removal of freshwater from the Delta ecosystem. The essence of the Delta as an ecosystem is its confluence of freshwater and saltwater. Removing large quantities of freshwater from that ecosystem will not only prevent the protection, restoration, and enhancement of the Delta but will have devastating consequences to the ecosystem and to the Delta economy. These consequences are almost completely ignored by Alternative 4A.	As described in response to comment 2433-2, by establishing a point of water diversion in the north Delta and new operating criteria, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. 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. Please refer to Master Response 26 for more information on regarding changes in water exports, Master Response 28 for more information on operational criteria, and Master Response 31 for more information about the Delta Reform Act.
2433	5	A recent study by California Water Information Network demonstrated that consumptive water rights for water from the Sacramento and San Joaquin River basins total five times the amount of water that is actually available in those systems. The Delta Vision Taskforce showed that there are 245 million acre feet of water rights in the Delta, which has average natural flows of only 29 million acre feet per year. And just within the State Water Project, water contractors hold contracts for at least twice as much water as the SWP can reliably provide each year. The cause of the disconnect between available water and allocated water – "paper water" – is based on both the incomplete build-out of water storage facilities in northern California and on the historical capture of state and federal water agencies by water contractors, primarily agribusiness interests in the southern San Joaquin Valley. The RDEIR/SDEIS completely fails to address this fundamental problem. The RDEIR/SDEIS describes one project objective as being to "[r]estore and protect the ability of the SWP and CVP to deliver up to full contract amounts…." (RDEIR/SDEIS at p. 1-8; see also p. 1-9 [NEPA-related purpose statement].) But delivering full contact amounts is an illusory goal due to the incomplete build-out of the SWP system and the over-allocation of the Sacramento and San Joaquin basins. To the extent the project provides a solution, it is merely to rob Peter to pay Paul: delivering full SWP and CVP contract amounts will require someone else getting less – far less – water in any given year. Identifying those water users who will suffer is easy: any non-SWP and non-CVP user south of the proposed water intake pipes will have to do with less, while the SWP and CVP contractors, holders of illusory paper water contracts for water that does not actually exist, will get a windfall. More likely, though, the water users south of the proposed intakes will continue to use their contracted and allocated amounts, kicking the suffering down the line to those users with the least political and economic power: the fish, birds, plants, and animals that make up the Delta	The State Water Resources Control Board is responsible for issuing water rights in California, and not DWR or Reclamation who are evaluating the project in this EIR/EIS. Water rights issued on rivers in the 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. In accordance with the Project Objectives and Purpose and Need (see Chapter 2 of the Final 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 and Area of Origin laws and requirements. The amount of water that DWR and Reclamation can pump from the new north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Over the long-term, the proposed project would decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months; and increase exports in the wet winter months when the river flows are high. The water would be stored at locations south of the Delta during the high flow periods to allow reductions in deliveries in drier periods. See Master Responses 26, 28, and 32 for more information on area of origin, operational criteria, and water rights, respectively.

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		ecosystem.	
2433	6	Alternative 4A fails to address the severe economic and ecological harm that will likely be caused by the tunnels project. Dewatering the Delta at the scale envisioned by the tunnels project and described in Alternative 4A will result in significant salt water intrusion in the Delta ecosystem. Yet Alternative 4A euphemistically describes this change as a positive: "Alternative 4A would allow the Delta to be managed in a number of different ways, including maintaining salinity as it is currently managed or allowing salinity to fluctuate more freely in the Delta as it did prior to the development of upstream reservoirs." (RDEIR/SDEIS at p. 4.3.25-9.) The suggestion is that the only thing blocking more natural fluctuations in salinity is the presence of the southern intake pumps and the need to transport water stored in northern reservoirs through the Delta, to those pumps. But the Delta was a significantly altered ecosystem even before the development of upstream reservoirs. A number of factors, including the drying up of much of the Delta with the building of levies, upstream consumption of water, and upstream water diversion by Bay Area communities, have had significant effects on natural salinity fluctuation in the Delta. And in turn, agricultural and residential/commercial development in the Delta and downstream have placed all sorts of constraints on the system to maintain a certain amount of freshwater at the expense of natural salinity fluctuation.	Salinity in the Delta is a function of the amount and timing of freshwater input from the major tributaries, tidal action from San Francisco Bay, and exports from the Delta. During the late winter and spring months of seasonally elevated flows, and in wet years, seawater intrusion is limited and the Delta has mostly low salinity. During low-flow summer and fall months, and during dry years, lower freshwater flows result in greater amounts of seawater intrusion. Staff from DWR and USBR constantly monitor Delta water quality conditions and adjust operations of the SWP and CVP in real time as necessary to meet water quality objectives set by the State Water Resource Control Board protection of agricultural water supply, municipal and industrial drinking water supply, and fish and wildlife beneficial uses. See section 4.3.4 in the RDEIR/SDEIS for a discussion on the proposed projects effects on water quality, salinity and electrical conductivity. Effects of the alternatives on salinity levels are described in Chapter 8, Water Quality, and Appendix 8H, Electrical Conductivity of the Final EIR/EIS and Appendix A of the RDEIR/SDEIS. Modeling results indicate that the implementation of the water conveyance facilities may positively or adversely affect in-Delta water quality, depending on a number of factors including location, time of year, and hydrologic conditions. See tables in Appendices 8E through 8N of the Final EIR/EIS for specific results related to various water quality constituents (including EC, bromide, and chloride). In addition to potential effects associated with the project and alternatives, modeling results for the No Action Alternative indicate that, with or without the proposed project, rising sea levels will bring saline tidal water further into the Delta than occurs at present. For a discussion on water quality, please see Master Response 14. Also see Master Response 32, Water Rights, and Master Response 23, Other Stressors. For information on mitigation measures, please see Master Response 22.
2433	7	Alternative 4A proposes an incredibly expensive solution that attempts to address only one of these factors – the need to transport water from northern reservoirs to the southern SWP-CVP pumps – at the likely expense of the other users dependent on freshwater flows in the Delta. Any enhanced salinity fluctuation enabled by increased northern diversions caused by the tunnels project will be seen by downstream users as a negative, and they will likely work to prevent it, a fact the RDEIR/SDEIS misses. The result will be increased stress on an overstressed ecosystem, not increased management flexibility, as Alternative 4A promises.	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 and Area of Origin laws and requirements. The amount of water that DWR and Reclamation can pump from the proposed north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the Proposed Project would still be consistent with the criteria set by the 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 Chapter 5, Water Supply of the Final EIR/EIS. 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. Changes in surface water quality, including salinity, under each action alternative and the proposed project as compared to the No Action Alternative and Existing Conditions are discussed in Chapter 8, Water Quality, in the Final EIR/EIS. As described in Chapter 5, Water Supply, of the Final EIR/EIS, it is anticipated that climate change would result in more frequent and more severe rainfall events and less snowfall than under historic conditions. These rainfall events would result in periods of time when rainfall would decline in drier years more than under Existing Conditions. 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 of the Final EIR/EIS. Effects due to climate change are provided for informational purposes only and do not lead to mitigation. See Master Responses 26, 28, and 32 for more information on area of origin, operational criteria,

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			and water rights, respectively.
2433	8	The RDEIR/SDEIS also fails to adequately discuss the role of the tunnels in facilitating and encouraging north-south water transfers. The vast majority of these transfers are from agricultural users in the Sacramento Valley to agricultural users in the San Joaquin Valley, meaning that their purpose is to shift agricultural production from the north, where there is more water, to the south, where there is less. This is environmentally inefficient, and pencils out as economically efficient only because many of the costs of the transfers are borne by taxpayers or spread among all water users, not borne solely by the recipients of the transferred water. The tunnels will increase the number and frequency of north-south water transfers by removing the natural impediment of the Delta. Moreover, transfers will increase exactly when the Delta and other ecosystems are in most need of water – when water is scarce and the value on the market makes such transfers economical to southern water users. This will exasperate the stress that is already present on sensitive species when water is scarce and could drive some species closer to extinction.	The transfer of water from north to south is paid by the purchasers of the water, which may be ratepayers within water agencies, farmers, or others. Water transfers are not paid from public tax revenue unless a public agency is acquiring the water for a public use other than for delivery to its customers and therefore is not passing the costs through to its customers. The comment that water transfers may increase through the removal of certain Delta-related impediments is addressed in Water Transfers Master Response 43, section A. An increase in project water deliveries is expected to reduce the demand for cross-Delta transfers, while the availability of the project facilities would increase the available transfer capacity by removing certain constraints on cross-Delta transfers. As described in response to comment 2433-2, by establishing a point of water diversion in the north Delta and new operating criteria, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility.
2433	9	Increased north-south water transfers will have devastating impacts that are not adequately analyzed in the RDEIR/SDEIS. First, many, if not most, of the new water transfers will involve groundwater substitution. Increased groundwater pumping to facilitate water sales will result in depleted aquifers and groundwater subsidence. It will also result in dewatering of streams and rivers. The surface waterways of the Sacramento Valley are tightly connected to groundwater; surface water recharges groundwater aquifers while groundwater provides water for streams and rivers. Today, less than 30% of the consumptive water use in the Sacramento Valley is from groundwater. That percentage will certainly rise with the construction of the tunnels and the increased water transfers that will result, and with it land subsidence will increase and dewatering of rivers and streams will increase.	As described in Chapter 3, Description of Alternatives of the Final EIR/EIS, the proposed action and other 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 Final 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 conveyance facilities. As indicated in Appendix 5D of the Final EIR/EIS, the analyses are conservative because it is not known if adequate water would be available from other water users for transfer. As shown in Table 5D-8, the maximum cross-Delta transfers under Alternatives 1 through 9 would be greatest under Alternative 8 because there would be the most available capacity. Any future water transfers will require separate approvals. The analysis of any potential upstream impacts due to water transfers are not a part of this EIR/EIS and must be covered pursuant to separate laws and regulations once the specific transfer has been proposed. As described in the EIR/EIS, during construction, 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. 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; monitoring changes in groundwater levels during construction; monitoring seepage effects; relocating or replacing agricultural infrastructure in support of continued agricultural activities; identifying, evaluating, developing, and implementing feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional agricultural stewardship approaches; and/or preserving

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			agricultural land through off-site easements or other agricultural land conservation interests.
2433	10	Separating groundwater and surface water through overpumping of groundwater to satisfy north-south water transfers facilitated by the tunnels will have devastating impacts on aquatic species and on terrestrial and avian species dependent on the surface aquatic ecosystems of the Sacramento Valley and the Delta (like the giant garter snake and migrating birds). These particular significant impacts are not explored in the RDEIR/SDEIS.	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. As discussed in the Response to Comment2433- 9 and in Chapter 3, Description of Alternatives of the Final EIR/EIS, the proposed action and other action alternatives considered in the EIR/EIS do not include specific water transfers. Any future water transfers will require separate approvals. The analysis of any potential upstream impacts related to water transfers are not part of this EIR/EIS and must be covered pursuant to separate laws and regulations once the specific transfer has been proposed.
2433	11	Land subsidence will have other devastating impacts, as is already evidenced in the San Joaquin Valley, where overpumping of groundwater has caused severe land subsidence. Impacts can include increased flooding; reduced freeboard and carrying capacity of canals, aqueducts, rivers, and flood control channels; damage to engineered structures like buildings, roads, bridges, pipelines, canals, aqueducts, levees, and wells; and loss of aquifer capacity.	This comment summarizes some of the impacts of land subsidence. The proposed project evaluated in the EIR/EIS is not expected to cause land subsidence because operation of the conveyance facilities would not affect groundwater levels. As indicated in Chapter 7, Groundwater of the Final EIR/EIS, alternatives that would reduce exports to south of Delta service areas could indirectly affect groundwater levels if surface water is replaced with increased groundwater pumping. Overdraft of groundwater basins is known to create land subsidence. See Master Response 23 for more information on subsidence in the Delta.
2434	1	I am concerned and alarmed by your proposal for the Bay Delta Conservation Plan to redirect water from northern California to central and southern California. This project will cost billions of taxpayer dollars at a time when our state cannot afford it. Additionally, the proposed tunnels have already been rejected by voters in 1982, and similar tunnel projects in places like Santa Barbara County have not been cost effective and have provided little benefit to taxpayers.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. Refer to Master Response 3 (Purpose and Need), Master Response 36 (Peripheral Canal), and Master Response 5 (Cost and Funding).
2434	2	Redirecting water from the Delta will ruin the rich history of the region by destroying an ecosystem, which has supported a diversity of life. This proposed project would have catastrophic consequences on the region, specifically for farmers who support the communities in which they live. Siphoning off water from our region will only end up as a net loss for everyone involved.	In accordance with the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/S), 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. Over the long-term, the proposed project would decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months; and increase flows in the wet winter months when the river flows are high. The water would be stored at locations south of the Delta during the high flow periods to allow reductions in deliveries in drier periods.
2434	3	I would encourage the Governor to look at reinforcing the existing aqueduct, and implementing rainwater collection alternatives; including the creation of storage capacity in the form of new dams and groundwater sustainability projects.	While water storage is a critically important tool for managing California's water resources, it is not a topic that must be addressed in the EIR/EIS for the proposed project. This is because the proposed project does not, and need not, propose storage as a project component. Although the physical facilities contemplated by the proposed project, once up and running, would be part of an overall statewide water system of which new storage could someday also be a part, the proposed project is a stand-alone project for purposes of CEQA and NEPA, just as future storage projects would be. Appendix 1B, Water Storage, of the 2013 Public Draft EIR/EIS, describes the potential for additional water storage. Please see Master Response 4 regarding the development of alternatives. Please see Master Response 6 for information on Demand Management.
2435	1	Please don't do this Governor Brown! Save animals and protect wild spaces!	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

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			to the specific substantive portions of the comment letter that were submitted by the commenter. No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
2436	1	We need to sustain our environment and not allow exploitation for profit.	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 comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2437	1	California Water Fix fails to maintain co-equal goals for sustaining a water source for California and maintaining or improving the habitat and water quality in the Delta.	For more information regarding the proposed project's compliance with the Delta Reform Act please see Master Response 31.
2437	2	Water quality in the Delta is degraded and is getting worse. Ca. Water Fix fails to address this issue in any meaningful way; it blatantly violates the Delta Protection Act and the EPA Clean Water Act. The salinity in Suisun Marsh at Rush Ranch is twice what it was last year at this time and is indicative of what flows will be like with the tunnels in place. The x-2 salinity line is moving further east with the drought. We need freshwater flows to keep the salt out. Taking water out above the Delta and shipping it through tunnels around the Delta to pumps further south is not going to help mitigate water quality issues at all. This affects drinking water for those in the Delta and beyond as well as habitat for wild mammals, fish, birds, and Delta farmers.	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/EIS.
2437	3	Habitat quality is drastically reduced in this new plan. Less than a quarter of what was originally proposed will be “rehabilitated.” This plan is focused on moving water south with minimum expense to restoration.	The approach for California WaterFix (Alternative 4A) is to meet the requirements of Section 7 of the ESA to avoid jeopardizing the continued existence of listed species and avoid adverse effects on critical habitat. Operation of the north delta diversions is intended to maintain and improve Delta ecosystem health under certain circumstances by implementing diversion and other operational criteria. Restoration actions under this alternative are focused on reducing the construction and operational effects of the water conveyance facilities. The State is also implementing the California EcoRestore program, a related but separate program to further improve the Delta ecosystem. EcoRestore would restore up to 30,000 acres of habitat in the Delta.
2437	4	Reduced water flows in the Delta will further decimate wild native fish populations, fail to provide habitat for migrating birds, reduce the amount of sediment “dropped” in the Delta and Bay which is needed for wetlands which will be essential in coping with climate change as salt water level increases. The only thing likely to increase are the algae blooms in the Delta.	As stated in the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/S), 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 and Area of Origin laws and requirements. The proposed project does not seek any new water rights or any changes 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, ESA 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. No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.

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2437	5	The California. Water Fix will not supply enough dependable water for agriculture in the Central Valley. (Even Kern County Water Agency has made note of that!)	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights that were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. Senior water rights holders are not affected by implementation of action alternatives. The amount of water that DWR and Reclamation would be able to pump from the proposed north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the proposed project would still be consistent with the criteria set by the 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 adaptive management process, as described in Chapter 5, Water Supply of the EIR/S.
2437	6	This is an economic boondoggle starting at $2 billion and projected to end up around $62 billion when interested is added in. All that for degraded habitat, ecological disaster, and no more fresh water for anyone.	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. Please see Master Response 5 for more information on costs and funding.
2437	7	The degraded water quality and reduced flows in the Delta will irreparably harm the Northern California economy because recreation of all types that make the Delta a popular destination will diminish as the water quality and flow worsens. There will be a ripple effect.	Water quality impacts applicable to recreation are described in Chapter 15, Recreation, under each impact. Environmental commitments to prevent water quality effects would be implemented. These include environmental training; implementation of stormwater pollution prevention plans, erosion and sediment control plans, hazardous materials management plans, and spill prevention, containment, and countermeasure plans; disposal of spoils, RTM, and dredged material; and a barge operations plan. Water quality is not expected to significantly impact recreation or recreational socioeconomics in the study area, as described under Impact ECON-5 in Chapter 16, Socioeconomics.
2437	8	Degraded water quality will also damage the salmon, crab, and other fisheries off the coast because the Bay and Delta serve as nurseries for young species caught in the ocean.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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.
2438	1	I am writing to express my strong opposition to the BDCP/WaterFix proposed by Governor Brown. This is a bad plan that will lead to mismanagement of our precious, scarce water resources. It will drain the Sacramento River, our creeks, streams, and our aquifers. Our farmers and residences will suffer from depleted aquifers as will our north state economies, environment, and communities. A similar plan - called the Peripheral Canal - was rejected by voters many years ago and we continue to oppose this plan. Our water resource is precious and we will fight to protect it from politically-motivated, bad plans such as this one.	A number of important improvements have been made to set the current proposal apart from the Peripheral Canal. For instance, tunnels are proposed to reduce surface impacts associated with canals. The capacity of the Proposed Project is more than 10,000 cfs smaller than the Peripheral Canal. The project as proposed allows for dual conveyance allowing through-Delta operations to continue in order to maintain in-Delta water quality. The Proposed Project would require operation of the proposed new in-Delta portions of the CVP and SWP pursuant to environmentally stringent rules under the Federal Endangered Species Act and California Endangered Species Act. Please see Master Response 4 regarding the selection of alternatives analyzed, Master Response 7 regarding desalination, Master Response 6 regarding demand management and Master Response 37 regarding water storage.
2439	2	These tunnels will not generate more water. The water currently pumped from the Delta is already unacceptably large and has resulted in jellyfish in Stockton, year round seal	No issues related to the adequacy of the environmental impact analysis in the EIR/EIS were raised.

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		populations are already deep into the Delta, and saltwater intrusion is way too far inland.	
2439	3	Yes, we send fresh water out to sea. It is supposed to go there, and a lot more of it is supposed to be with it, it is the way mother nature intended. Salmon rely on the smell of their home turf water to guide them back to their spawning grounds.	The proposed project would decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months and in drier years; and increase exports in the wet winter months in wetter years when the river flows are high. The water would be stored at locations south of the Delta during the high flow periods to allow reductions in deliveries to SWP and CVP water users in drier periods. As shown in Appendix 5A, Section C, Delta outflow would be similar under the proposed project as compared to the No Action Alternative. Summer Delta outflows under the proposed project and No Action Alternative would be less than under Existing Conditions due to climate change and sea level rise.
2439	4	The peripheral canal was voted down decades ago. The agri-greed has worked around environmental rules for too long. The California Delta is one of two on the planet, and it is not right to destroy what is left of it. If this project t is so very necessary, let's add some legislation to it. Let us make clean, fresh water a right for all human beings in this state, and make it illegal to buy and sell water for profit. Seriously. No more water profits. I bet the tunnel plan will suddenly become unnecessary.	As stated in the Project Objectives and Purpose and Need (see Chapter 2 of the EIR/S), 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 and Area of Origin laws and requirements. The proposed project does not seek any new water rights or any changes in total water rights issued to DWR and Reclamation. As described in Chapter 3, Description of Alternatives, the 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 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.
2439	5	Make farmers grow crops suitable for the area they are grown in. No more rice crops in the desert areas. Only water sipping plants, and if the land is not suitable for the crops allowed, it should be retired and turned into a solar energy field.	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 proposed conveyance facilities.
2439	6	Governor Moonbeam has balanced the budget, which is why he was elected. It is time to stop trying to make some kind of name for himself and do the job we pay him for.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2440	1	I would like to go on record in opposition to the California Water Fix, Delta Tunnels Project. This project has not been properly presented to the public in such as manner as to see true benefits for Northern and Southern California. There are no guarantees as to the true positive affect this project will have on local communities, farms, wildlife and fish. Also, no assurances that the project will come in under budget and meet all deadlines. The cost, known and unknown, is not balanced by the projected end result. The State of California has a fragile budget, and environment. We cannot risk damaging either.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. Refer to Master Response 3 (Purpose and Need).
2441	1	Though you may feel that you have cloaked this revised document with enough verbiage about the environment and the condition of the Delta's farms businesses and fisheries to fool people into thinking you care about these vital interests, it is clear that your goal is to be able to provide "full contract amounts" per "existing agreements" to inherited "rights" of the lucky few, many of whom are the generous benefactors of elected officials. You clarified that these full contract amounts would be delivered only if there is any water available. If we are to actually provide a California Waterfix, that is where we need to start the fixing. I know that water rights are considered sacrosanct, and I sympathize with those who have	The State Water Resources Control Board is responsible for issuing water rights in California, and not DWR or Reclamation who are evaluating the project in this EIR/EIS. Water rights issued on rivers in the 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

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		inherited water and live off of it, by reselling it with enormous markups, but those contracts were made in a different era, and many would not stand up in today's environment. We need a new plan for water rights, period.	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. The Proposed Project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in agricultural and municipal/industrial water conservation, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage (as described in Section 1.C.3 of Appendix 1C, Water Demand Management). The California Water Action Plan also recognizes that all Californians have 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 — 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. 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/.
2441	2	When I read that the RDEIR/SDEIS would present some "alternatives," I was encouraged. Finally, they are considering the alternatives to those incredibly expensive tunnels that will sit empty for at least 1/3 of the time (at today's drought rate). No. You were just considering different places for the tunnels, ways to implement the tunnels, and so on. This revised plan is little different in it's efficiency in addressing environmental, public health and economic impacts. ES 1.2.2.2 exemplifies your perception of the environmental crisis: "minimizes or avoids adverse effects....to listed species." How about restores or revives existing species? The sneaky way you have held your "informative meetings" shows how little you want the public to really understand what this will mean to users (ratepayers) in California.	The comment is a general opinion regarding the project and alternatives, and does not present any CEQA or NEPA issues. 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 project is just one element of the state's long-range strategy to meet anticipated future water needs of Californians in the face of expanding population and the expected effects of climate change. The project is not a comprehensive, statewide water plan, but is instead aimed at addressing many complex and long-standing issues related to the operations of the SWP and CVP in the Delta, including reliability of exported supplies. It is important to note that the project is not intended to serve as a state-wide solution to all of California's water problems, and it is not an attempt to address directly the need for continued investment by the State and other public agencies in conservation, storage, recycling, desalination, treatment of contaminated aquifers, or other measures to expand supply and storage. The comment is a general opinion regarding the project and alternatives, and does not present any CEQA or NEPA issues.
2441	3	As far as economic impacts go, the farmers, businesses in recreation and tourism, and especially fishermen would like you to look at what they contribute to California's economy! The signs on 5 and 99 lament the loss of jobs in the Central Valley. Antonio Cortes of the United Farm Workers stated that 90% of the workers his union represents in California are undocumented workers. So how many jobs held by US citizens will be lost if some of the farmland (especially impaired land with rising saline) is retired and used for wind farms, solar farms and other profitable uses (which will need workers)?	Please refer to Master Response 3 regarding the purpose and need. Please refer to Impact ECON-13, 4, 5 and 6 under Alternative 4A, the preferred alternative, in Chapter 16, Socioeconomics. As discussed under Impact ECON-1, construction of the water conveyance facilities would be anticipated to result in a net temporary increase of income and employment in the Delta region. Construction-related employment from the project is estimated to peak at 2,427 FTE jobs in year 3. Total employment (direct, indirect, and induced) would peak in year 12, at 8,673 FTE jobs. Direct agricultural employment would be reduced by an estimated 16 FTE jobs, while total employment (direct, indirect, and induced) associated with agricultural employment would fall by 57 FTE jobs. Throughout the five-county Delta region, population and employment would expand as a result of the construction of water conveyance facilities, as discussed under Impacts ECON-1 and ECON-2. Under Alternative 4A, additional regional

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			employment and income could create net positive effects on the character of Delta communities. As described under Impact AG-2 in Chapter 14, Agriculture, water quality modeling results indicate that it is unlikely that there would be increased frequency of exceedance of agricultural electrical conductivity (salinity) 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 Measures AG-1, GW-1, GW-5, and WQ-11 (including Mitigation Measure WQ-11ea) will reduce the severity of these adverse effects.
2441	4	You are well-acquainted with the real alternatives to these tunnels. If you really think these tunnels will cost $15 billion after all is said and done, I have a gorgeous bridge I would like to sell you. The estimated $60 billion could be spent on increasing usable water through recycling, raising the aquifers and increasing each county's water independence; that's when we will find a real Waterfix for California.	For more information regarding cost of the proposed project please see Master Response 5.
2441	5	Do not spend another taxpayer dollar studying this ridiculous plan. No more revised reports, alternative ways to waste taxpayers money. Give us some new state-of-the-art scientific ideas and a real California Waterfix.	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. Please see Master Response 5 for more information on costs and funding.
2442	1	This project verges on insanity, promising to divert water from the Delta that may never flow downstream for lack of runoff/rainfall in the hotter, drier climate of the future. If it were to be built, the taxpayers of California will all be forced to share the costs for the benefit of a very few, which is absurd.	The proposed project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. It is projected that water deliveries from the federal and state water projects under a fully implemented project would be roughly about the same as the average annual amount diverted in the last 20 years. Refer to Master Response 26 (Changes in Delta Exports). 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 3 (Purpose and Need) and Master Response 5 (Funding).
2442	2	I have a suggested alternative that makes perfect sense. Take half the amount of money, cover the canal system with solar panels or thin film solar, which will reduce evaporation, leaving more water to be put to agricultural use, use the electricity to cover all of Department of Water Resources power needs as well as producing enough electricity to power massive desalination plants along the coasts near major metropolitan areas, again, leaving more water for agricultural purposes. This would also be a great job training program, would reduce the cost of solar for all of us, due to economies of scale and will work better in the hotter, drier climate of the future.	Please refer to Master Response 4 for additional details on the selection of alternatives. Also, please see Master Response 3 for additional details on the project purpose and need.
2443	1	I would like to go on record as opposing the plan to build two large tunnels underneath the Delta to carry water to to uses in the Central Valley and Southern California. My opposition is based on two points: 1.) There is not enough water to both support the health of the Delta and to supply water to users further south with the magnitude of the proposed tunnels.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. The amount of water that DWR and Reclamation would be able to pump from the proposed north Delta facilities is set by Federal regulating agencies, ESA 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 adaptive management process, as described in Chapter 5, Water Supply of the EIR/S. In addition to permitting constraints on daily operations of the SWP and CVP, DWR and Reclamation must maintain proper performance and bypass flows across fish screens

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		2.) Before risking the health of ecosystems and agriculture in the areas where water originates, all reasonable conservation methods should first be instituted. California has not done this thus far - much, much more can be done. Reducing river and Delta flows to irrigate golf courses in the desert climate of Southern California makes no sense.	when endangered and threatened fish species are present within the north Delta facilities area. The intake fish screens drive the overall size of the intake structure on the riverbank, and have been numbered and sized to permit water to flow through the screens within a predetermined flow regime set by California Department of Fish and Wildlife and NMFS fish screen criteria. The proposed project proposes to stabilize water supplies, and exports could only increase under certain circumstances in which hydrological conditions result in availability of sufficient water and ecological objectives are fully satisfied. It is projected that water deliveries from the federal and state water projects under the proposed project would be about the same as the average annual amount of water that would be diverted under the No Action Alternative. It is projected that Delta exports from the federal and state water projects would remain similar or increase in wetter years and decrease in drier years under the proposed project as compared to exports under No Action Alternative based on the capability to divert water at the north Delta intakes during winter and spring months. Although long-term total exports under the proposed project would be similar to the amount water exported in recent history, it would make the deliveries more predictable and reliable, while reducing other stressors on the ecological functions of the Delta. The amount of water that DWR and Reclamation would be able to pump from the proposed north Delta facilities is set by Federal regulating agencies, ESA compliance and project design, and not by the water contractors. Operations for the proposed project would still be consistent with the criteria set by the 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 adaptive management process, as described in Chapter 5, Water Supply of the EIR/S. In addition to permitting constraints on daily operations of the SWP and CVP, DWR and Reclamation must maintain proper performance and bypass flows across fish screens when endangered and threatened fish species are present within the north Delta facilities area. The intake fish screens drive the overall size of the intake structure on the riverbank, and have been numbered and sized to permit water to flow through the screens within a predetermined flow regime set by California Department of Fish and Wildlife and NMFS fish screen criteria.
2444	1	You can't take any more water from our Delta without destroying the habitat. Please do not support the twin tunnels project.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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. See Master Response 3 (Purpose and Need).
2445	1	This project is misguided. Should it come to fruition, it will kill the ecology of not only the Delta, but the San Francisco Bay and Northern California fisheries. It will not be reversible. California's water needs will not be fixed by this measure. Instead of spending billions of dollars building tunnels, implement the needed water conservation measures throughout Southern California and start building the desalination facilities that this state needs for its future. Don't reek havoc on our environment. We are already losing the fish, crabs, and many other species of animals by previous disregard of the environment. Please rethink your actions. You must agree. Our children's State is in your hands.	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. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project, Master Response 4 regarding the selection of alternatives analyzed, Master Response 7 regarding desalination, Master Response 6 regarding demand management, and Master Response 37 regarding water storage.
2446	1	We don't need delta tunnels shipping more water south. It is time we got smarter instead of continuing old technology and worked at conserving water, desalinization and recycling the water each region of California already has. Taking more water from the Delta risks salt water intrusion further up into the Delta than we have now. The tunnels likely will	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

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		lead to a ruined Delta for future generations.	operational flexibility. For more information regarding desalination please see Master Response 7. Please see Master Response 6 for information on Demand Management.
2447	1	As a child I recall the San Francisco Bay fill plan that would have destroyed the Bay environment, wildlife refuges, and recreational accesses, leaving only a shipping lane strip of water. Had that plan been implemented we can today see what long reaching environmental effects it would have had not only locally but all the way into the Sacramento and San Joaquin valleys and Sierras. The Plan to build tunnels is and would/will be viewed as environmentally damaging as well Anyone who puts their signature of approval on such a devastating plan should be held accountable in the public eye and court of environmental destruction. Stop it now!	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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.
2448	1	Please do not approve the Delta tunnels. I believe they will do huge damage to the already fragile delta. Saltwater incursion is already increasing, the False River Dam is trying to keep it out. Please don't spend lots more money shipping water south. We need it here. Protect the Delta estuary.	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. Chapter 8, Water Quality, of the EIR/EIS discloses the potential water quality impacts resulting from constructing and operating the proposed project. See also Master Response 14 (Water Quality).
2449	1	It is way past time for Californians to stop living as if they lived in the land of plentiful water. We cannot compensate for nature's revenge on our profligate living (in other words, the four-year drought) by raiding the Delta of more fresh water. In doing so we are ignoring other species' right to habitat and degrading water quality for those who depend on Delta fresh water for their drinking water. I consider the construction of the tunnels to be environmental abuse. As the impacts of climate change become real, we must find real solutions to our struggles for enough water. Draining the Delta of water and life is not a real solution. It only substitutes one problem for another.	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.
2450	1	I oppose the Delta Tunnels because I do not believe they solve our water issues. I do believe they would have a negative impact on the economy of the Delta and Bay Area.	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. Please refer to Master Response 3 regarding the need for the project and its goals. As described in Chapter 16, Socioeconomics, under Alternative 4, Impact ECON-1, construction employment is estimated to peak at 2,427 FTE jobs in year 3. Total employment (direct, indirect, and induced) would peak in year 12, at 8,673 FTE jobs. Direct agricultural employment would be reduced by an estimated 16 FTE jobs, while total employment (direct, indirect, and induced) associated with agricultural employment would fall by 57 FTE jobs. Because construction of water conveyance facilities would result in an increase in construction-related employment and labor income, this would be considered a beneficial effect. Draft BDCP Statewide Economic Impact Report has also been published, which indicates that the BDCP would result in a substantial economic net benefit to the State of California. Please note that the proposed project does not serve to fix California's entire water problem. 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:

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			http://www.waterplan.water.ca.gov/.
2450	1	I oppose the Delta Tunnels because I do not believe they solve our water issues. We can and must find better alternatives to address our water crisis.	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. 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. Nor is the proposed project intended to solve all environmental challenges facing the Delta. Please see Master Response 5 for further information regarding how many of the suggested components have merit from a state-wide water policy standpoint, and some are being implemented or considered independently throughout the state, but are beyond the scope of the proposed project. Please also refer to Master Response 4 (Alternatives) and Master Response 45 (Purpose and Need).
2450	2	I do believe [the tunnels] would become a detriment to tourism, water recreation, fisheries and farmland. We can and must find better alternatives to address our water crisis.	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. The project is intended to be beneficial and not detrimental.
2451	1	We cannot hope to maintain a healthy estuary by taking more fresh water out of an already struggling habitat, which the Delta Tunnels will do. With the effects of climate change increasing each year, we must protect the many benefits this estuary provides for humans and the environment.	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 specific timing, volume, and location of flow in the Delta and its tributaries are important factors in assessing effects on these species. The operational criteria included in Alternative 4A, the preferred alternative, are intended to minimize and avoid adverse effects on listed fish species. Alternative 4A also includes a collaborative science and adaptive management program to improve understanding of operational requirements of the fish, and a process for integrating that information into operation of the CVP and SWP. 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.
2451	2	There is a huge negative environmental impact on many species -- fish, animals, and birds -- many of them protected or endangered species. This proposal violates the Endangered Species Act by actions resulting in the "destruction or adverse modification of critical habitat of species."	The commenter states that the project violates the Endangered Species Act because it will result in the "destruction or adverse modification of critical habitat of species". Critical habitat for several species does occur within the Plan Area. Some project activities will take place within areas of designated critical habitat and in some cases cause impacts there; however, whether or not adverse modification of that critical habitat will occur will be determined by the U.S. Fish and Wildlife Service (USFWS) and NOAA Fisheries during Section 7 Consultation and not in the EIR/EIS. The USFWS has defined destruction or adverse modification as follows: "Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the conservation value of critical habitat for listed species. Such alterations may include, but are not limited to, effects that preclude or significantly delay the development of the physical or biological

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			features that support the life-history needs of the species for recovery." 79 FR 27060 (May 12, 2014) Although destruction or adverse modification of critical habitat of species would be a significant impact under CEQA, it would not violate the Endangered Species Act. Critical habitat designation is a tool that gives the USFWS and NOAA Fisheries authority to regulate the adverse modification of critical habitat for listed species, when the action requires federal funding or approval. Both Chapter 11 and 12 of the Final EIR/EIS address impacts on critical habitat and discuss measures that would be implemented to avoid and minimize impacts and to compensate for significant impacts.
2451	3	The tunnels will cause increased contamination of municipal water and wells in the 5 Delta counties, San Joaquin being one of them!	The potential for proposed project alternatives to affect water quality constituents of concern for municipal water supply uses in the project area is assessed in detail in Chapter 8, Water Quality, of the EIR/S. Where significant impacts to uses would occur due to the alternative, mitigation to lessen those impacts is provided.
2451	4	Intrusion of salt water into the Delta will negatively impact the agricultural economy due to inability to plant and irrigate crops because of increased salinity. There are generations of farmers whose livelihoods would be ended, with farming crops that feed the state and much of the nation no longer grown! The agricultural economy powerfully impacts that of the California state economy! Millions, even billions, of dollars would be lost.	Mitigation Measure WQ-11: Avoid or Minimize Reduced Water Quality Conditions would be expected to reduce increases in EC resulting from implementing Alternative 4A (the preferred alternative). The goal of specific actions is to reduce/avoid additional exceedances of Delta EC objectives and reduce long-term average concentration increases to levels that would not adversely affect beneficial uses within the Delta. See Master Response 22 for more information regarding agricultural impact mitigation.
2451	5	The tunnels will obstruct and even destroy the waterways now used for boating, marinas and recreational activities that are a major part of the Delta economy, not to mention the quality of life for generations of local residents.	Fishing and recreation would still be accessible during and after construction of the proposed project throughout the Delta. As described in Table 15-15 for Alternatives 4 and 4A, three marinas would be directly impacted by noise and visual disturbances from the preferred alternative: Lazy M Marina, Bullfrog Landing Marina, and Wimpy's Marina. Mitigation measures and environmental commitments would reduce the impacts on wildlife, visual setting, transportation, and noise conditions that could otherwise detract from the recreation experience. However, due to the dispersed effects on the recreation experience across the Delta, it is not certain that mitigation would reduce the level of these impacts to less than significant in all instances, and would therefore remain significant and unavoidable.
2451	6	There are far less expensive and destructive alternatives to the tunnels: 1. More aggressive programs statewide to enhance efficient water usage. 2. Water recycling and groundwater recharging projects statewide. 3. Retiring thousands of acres of pollution generating farmlands in southern San Joaquin Valley. 4. Improving Delta levees to address potential earthquake and flooding hazards.	It is important to note, as an initial matter, 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. Nor is the proposed project intended to solve all environmental challenges facing the Delta. Please see Master Response 6 (Demand Management) for further information regarding how many of the suggested components have merit from a state-wide water policy standpoint, and some are being implemented or considered independently throughout the state, but are beyond the scope of the proposed project. The scope and purpose of the proposed project is much more limited. As explained in Chapter 2 Project Objectives and Purpose and Need of the Final EIR/EIS, the fundamental purpose of the proposed project is to make physical and operational improvements to the State Water Project (SWP) system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and Central Valley Project (CVP) south-of-Delta, and water quality within a stable regulatory framework with statutory and contractual obligations. Please see Master Response 3 (Purpose and Need). 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 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 to that document thoroughly explain the process used to develop the alternatives, and explain why certain potential alternatives were considered but ultimately rejected by the

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			Lead Agencies.
2451	7	California WaterFix tunnels will not produce more water, more reliable supplies of water, or improved environmental conditions in the Delta. I adamantly oppose the Delta Tunnels/California WaterFix project. Please do not cause further harm to our state and Delta region. Explore other additional possibilities, including desalinization plants, water storage projects, and others.	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. 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.
2452	1	What I am completely opposed to is the magnitude of the project. I have studied in considerable depth the water-grabbing tactics of the Los Angeles Water Department with regard to the Owens Valley and later tributaries feeding into Mono Lake and the City of San Francisco ultimately succeeding after the earthquake in damming the Hetch Hetchy Valley. In all of these instances, powerful political forces overrode scientific arguments and robbed areas of their environmental and basic property rights. We now are in another one of those political overrides of sound environmental issues with the wealthy players being again Los Angeles and other cities to the south and the Westland Water District (another one of those well-intentioned but totally botched projects which lacked the funding to have it developed correctly).	The proposed project does not seek any new water rights nor include any regulatory actions that would affect water rights holders other than DWR, Reclamation, and SWP and CVP contractors. Importantly, all water exported by the SWP and CVP is 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. 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. 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. 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.
2452	2	The size of the Twin Tunnel project far exceeds the water supply that will pass through it. Further, any rationale that the size is to allow massive flooding surpluses to go south but no additional water taken from the Delta is absurd and any person at all familiar with California water wars can see that the reason for the massive size of these tunnels is to be able to take massive quantities of water to the south with the whims of whatever politicians can be paid off to support changing the language of any initial promises. The only way to ensure that this does not happen is to reduce the size of the tunnels to no	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 alternatives development please see Master Response 4. The Department of Water Resources released in 2013 the Conceptual Engineering Report that describes design details of the

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		more than 50% of their current size and even smaller to prevent such a water grab and the destruction of both the Delta environment and probably the livelihood of many of the farmers in the northern San Joaquin Valley. If one examines the same kind of slippery grabs sending water to Southern California that has already taken place in the canals from the Delta, we can see slippage that in many cases was saved only by the decreasing population of the Delta smelt. Many indications suggest that the current drought may extinguish the entire population and then what marker can be used to argue that too much water is being sent south? Maybe this is part of the idea that Delta smelt will not be a factor when water is taken from rivers to the north of the Delta?	modified pipeline/tunnel option (MPTO). For more information regarding tunnel research and design please see http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/Conceptual_Engineering_Report-Modified_Pipeline_Tunnel_Option.sflb.ashx.The plan does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. Although the 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. It is projected that water deliveries from the federal and state water projects under a fully-implemented California Waterfix project would be about the same as the average annual amount diverted in the last 20 years. Please refer to Master Response 26 (Changes in Delta Exports) and Master Response 35 (MWD Water Supply) as to how the proposed project is not a "water grab".
2452	3	There are many very good arguments being proposed based on science for why the current massive twin tunnels should not be constructed. Many very intelligent people have labored for years to try and present rational arguments. However, the point is that the tunnels are primarily political and, as we are currently seeing with Republican Presidential candidates, rational and scientific arguments have absolutely no credibility there. Rational appeals are very important but the bottom line is that completion of the twin tunnels project as it is currently proposed will only be one more chapter in the story of the California Water Wars. The project in its massive form is only to facilitate a political water grab for wealthy Central and Southern California water interests who are unwilling to examine alternative (but admittedly expensive) ways to solve their own water problems.	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. 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.
2453	1	I am opposed to the Delta Tunnels because of the harm that will be done to the San Francisco Bay-Delta business, tourism, fishing, and farming communities. Additionally, the cost of this boondoggle far outweighs any benefit that would be received.	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. 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. Refer to Master Response 3 (Purpose and Need), Master Response 24 (Delta As A Place), and Master Response 5 (Cost).
2454	1	Please add my name to the opposition of the Delta Tunnels. Mainly because I want to preserve clean, fresh water for drinking, recreation, fishing, industry, and agriculture. Both habitat and endangered species would be affected adversely if the Delta tunnels are built. Without increased, not decreased, freshwater flows, the San Francisco Bay-Delta ecosystem will continue to degrade. Our Bay will die along with the newly created wetlands.	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. Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project. Please also refer to Master Response 10 (Impacts).
2455	1	I believe [the tunnel project] will be environmentally devastating to the Delta region, an unacceptable consequence. I believe that people can find ways to conserve that make the tunnel project unnecessary.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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.
2456	1	I oppose the tunnels because I believe it would be bad for Sacramento salmon.	For information about effects of the preferred alternative, Alternative 4A, on salmonids, please see Chapter 11, Fish and Aquatic Resources, which indicates that effects would not be adverse. Therefore, there would

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			be no adverse effects to the coastal fishing industry due to the alternative.
2456	2	[The tunnels] will lower the water quality at the Contra Costa Water District intakes which supplies water to my home in Concord, California.	The potential for proposed project alternatives to affect water quality constituents of concern for municipal water supply uses in the project area is assessed in detail in Chapter 8, Water Quality, of the EIR/S. Where significant impacts to uses would occur due to the alternative, mitigation to lessen those impacts is provided.
2457	1	I feel that California needs to install a permanent "anti-saltwater intrusion flexible flow management barrier" in the Carquinez Strait instead of building the tunnels. I strongly believe such a barrier would nullify the threat of saltwater intrusion due to levee failure of any type. It would also be used to throttle and manage the outflow of precious fresh water to the Bay and sea. It would feature closeable gates. Such barriers are seen now in Holland and more are planned throughout Europe. With this barrier, the current flow through the Delta would continue as-is. Only in emergencies would the gates be temporarily closed.	Salinity in the Delta is a function of the amount and timing of freshwater input from the major tributaries, tidal action from San Francisco Bay, and exports from the Delta. During the late winter and spring months of seasonally elevated flows, and in wet years, seawater intrusion is limited and the Delta has mostly low salinity. During low-flow summer and fall months, and during dry years, lower freshwater flows result in greater amounts of seawater intrusion. Staff from DWR and USBR constantly monitor Delta water quality conditions and adjust operations of the SWP and CVP in real time as necessary to meet water quality objectives set by the State Water Resource Control Board protection of agricultural water supply, municipal and industrial drinking water supply, and fish and wildlife beneficial uses. See section 4.3.4 for a discussion on the proposed projects effects on water quality, salinity and electrical conductivity. Effects of the alternatives on salinity levels are described in Chapter 8, Water Quality, and Appendix 8H, Electrical Conductivity, EIR/EIS and Appendix A of the RDEIR/SDEIS. Modeling results indicate that the implementation of the water conveyance facilities may positively or adversely affect in-Delta water quality, depending on a number of factors including location, time of year, and hydrologic conditions. See tables in Appendices 8E through 8N for specific results related to various water quality constituents (including bromide and chloride). In addition to potential effects associated with the project and alternatives, modeling results for the No Action Alternative indicate that, with or without the proposed project, rising sea levels will bring saline tidal water further into the Delta than occurs at present. For more information regarding alternatives to the proposed project please see Master Response 4.
2458	1	Tunnels are not the answer to California water issues. Essentially the tunnels would take water for the benefit of one region (the Southern San Joaquin Valley) at the expense of another (the Delta). The money would be better invested in low-impact surface water storage, such as another Central Valley reservoir with environmental mitigation measures. At some point we all have to [live] with the water we have, not the water we can get.	It is important to note, as an initial matter, 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. Nor is the proposed project intended to solve all environmental challenges facing the Delta. Please see Master Response 6 (Demand Management) for further information regarding how many of the suggested components have merit from a state-wide water policy standpoint, and some are being implemented or considered independently throughout the state, but are beyond the scope of the proposed project. Rather, the scope and purpose of the proposed project is much more limited. As explained in Chapter 2 Project Objectives and Purpose and Need of the Final EIR/EIS, the fundamental purpose of the proposed project is to make physical and operational improvements to the State Water Project (SWP) system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and Central Valley Project (CVP) south-of-Delta, and water quality within a stable regulatory framework with statutory and contractual obligations. Additional water storage was eliminated from consideration in the Draft EIR/EIS and RDEIR/SDEIS through the alternatives development and screening process (discussed in Appendix 3A, Identification of Water Conveyance Alternatives). As such, the proposed project does not propose storage as a project component. Although the proposed project would be part of an overall statewide water system of which new storage could someday also be a part, Alternative 4A is a stand-alone project which demonstrates

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			independent utility just as future storage projects would demonstrate. Please refer to Master Response 4 (Alternatives) and Master Response 37 (Storage) for additional information.
2459	1	I have seen a map of the currently proposed tunnels, and they are the Peripheral Canal all over again. It was a bad idea in the 1970s and it is a bad idea now.	For more information regarding the differences between the proposed project and the peripheral canals please see Master Response 36.
2459	2	I propose a better idea to add water storage to California is to build dams on any canyon in Southern California that floods. Even if there are homes built there before the flooding.	The commenter does not raise a specific issue related to the adequacy of the EIR/EIS and just offers an opinion about one water supply augmentation approach (more surface storage in Southern California). Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.
2459	3	Or we could begin to replenish the aquifers by building wetlands above them in the subsidence zones that pumping has created so rain could be captured and returned to the ground. We might even be able to pump some floodwater back underground when there is flooding if we plan for such a thing.	Although Alternatives 4A (preferred alternative), 2D, and 5A include only those habitat restoration measures needed to provide mitigation for specific regulatory compliance purposes, habitat restoration is still recognized as a critical component of the state's long-term plans for the Delta. Such larger endeavors, however, will likely be implemented over time under actions separate and apart from these alternatives. The primary parallel habitat restoration program is called California EcoRestore (EcoRestore), which will be overseen by the California Resources Agency and implemented under the California Water Action Plan. Under EcoRestore, the state will pursue restoration of more than 30,000 acres of fish and wildlife habitat by 2020. These habitat restoration actions will be implemented faster and more reliably by separating them from the water conveyance facility implementation. Additional water storage was eliminated from consideration in the Draft EIR/EIS and RDEIR/SDEIS through the alternatives development and screening process (discussed in Appendix 3A, Identification of Water Conveyance Alternatives). As such, the proposed project does not propose storage as a project component. Although the proposed project would be part of an overall statewide water system of which new storage could someday also be a part, Alternative 4A is a stand-alone project which demonstrates independent utility just as future storage projects would demonstrate. 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 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 to that document thoroughly explain the process used to develop the alternatives, and explain why certain potential alternatives were considered but ultimately rejected by the Lead Agencies. Please refer to Master Response 4 (Alternatives) and Master Response 37 (Storage) for additional information.
2460	1	Please. Stop the tunneling project. It's an environmental disaster (another). When you kill that Bay you'll have doomed hundreds and hundreds of square miles to an unsustainable wasteland. Please. No Delta tunnels.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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.
2461	1	Please do not construct tunnels and divert water. The environmental impacts will be enormous and the studies have been inadequate. We must learn to get by on the water that we have. Not only that, but the crops grown with the water are exported. We shouldn't ruin California's ecology to supply food to other countries. The large increase of salt water will surely kill many of the creatures who live there. This proposed Bay-Delta Tunnel is a colossal	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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

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		mistake and an environmental nightmare.	salinity, the proposed project is designed to improve native fish migratory patterns and allow for greater operational flexibility. See Master Response 43 (Beneficial Use of Water). The State Water Resources Control Board, not DWR, is responsible for decisions relating to water rights and beneficial use of water. Effects of the alternatives on salinity levels are described in Chapter 8, Water Quality. Modeling results indicate that the implementation of the water conveyance facilities may positively or adversely affect in-Delta water quality, depending on a number of factors including location, time of year, and hydrologic conditions. Modeling results for the No Action Alternative indicate that, with or without the proposed project, rising sea levels will bring saline tidal water further into the Delta than occurs at present.
2462	1	I vote a big no to the proposed twin tunnels. Nobody has the right to steal the beauty that is our Delta. It is a unique and rare ecosystem that will be destroyed if these massive tunnels are allowed. Again, no to the tunnels.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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.
2463	1	Please hear one more voice concerned that the proposed tunnels to fix California's water problems adds no additional water supply, only re-distributing whatever is available. The process upsets the natural flows and, thereby, changes the ecosystem for not only wildlife but for people who live and work around and on the Delta.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights that were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. DWR and Reclamation operate with water rights issued by the State Water Resources Control Board that are junior in priority to many senior water rights holders in the Delta watershed. Under the action alternatives, senior water rights holders would continue to receive the same amount of water as under the No Action Alternative. Conveyance facilities under 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 based upon river water levels and flow, water available in the system, the presence of threatened and endangered fish species, and water quality standards. 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.
2463	2	Surely, the huge amount of money proposed for this project could be used to provide more water via new storage, additional conservation efforts, desalination, and even new technologies now unknown.	For both environmental and economic reasons, there is an urgent need to improve and modernize the existing SWP/CVP conveyance system, which was designed and built decades ago. The ecological problems with the current system could be greatly reduced by the construction and use of new north Delta intake structures with state-of-the-art fish screens. With this future vision in mind, DWR and several state and federal water contractors, in coordination with the Bureau of Reclamation, proposed a strategy for restoring ecological functions in the Delta while improving water supply reliability in California. Since 2006, the BDCP/California WaterFix has been developed based on sound science, data gathered from various agencies and experts over many years, input from agencies, stakeholders and independent scientists.
2463	3	Please do not alter the wonder of the Delta for questionable water reconveyance.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.

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2464	1	I oppose the Delta Tunnels. They won't produce more water and will have negative impacts on the Delta and Bay Area economy, tourism, water recreation, fisheries, and farmland. There are better alternatives for water conservation.	Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project, Master Response 4 regarding the selection of alternatives analyzed, Master Response 6 regarding demand management, and Master Response 37 regarding water storage.
2465	1	I am opposed to the construction of the proposed construction of the Delta tunnels. There are better ways to solve California's water problems without further degrading the Bay-Delta ecosystem .	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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.
2466	1	Please don't build tunnels that will destroy natural habitats and divert Northern California water to the south. During the current drought, I cannot imagine having less water than we currently have access to. Please don't be swayed by money but instead please consider the good of all Californians.	The preferred alternative is undergoing rigorous review by USFWS, NMFS, and CDFW through state and federal endangered species acts. Under their missions, a project cannot be permitted if it causes jeopardy of a listed species or adversely modifies their habitat. The preferred alternative, Alternative 4A, proposes to stabilize water supplies, and exports could only increase under certain circumstances in which hydrological conditions result in availability of sufficient water and ecological objectives are fully satisfied. It is projected that water deliveries from the federal and state water projects under the preferred alternative would be about the same as the average annual amount of water that would be diverted under the No Action Alternative (i.e. 2025 conditions without the preferred alternative). It is projected that Delta exports from the federal and state water projects would either remain similar or increase in wetter years and decrease in drier years under Alternative 4A as compared to exports under No Action Alternative (ELT) depending on the capability to divert water at the north Delta intakes during winter and spring months. The estimated changes in deliveries for 4A are provided in the Section 4.3.1 and Appendix A Chapter 5 Water Supply. Although exports under the preferred alternative would be similar to the amount water exported in recent history, it would make the deliveries more predictable and reliable, while reducing other stressors on the ecological functions of the Delta.
2467	1	I am opposed to the building of the Twin Tunnels. The appeal of an engineering solution to a resource problem shared by all of the citizens of the state is great. But more effective and lasting solutions will come with discussion and compromise and sacrifice from all shareholders. Building the twin tunnels will divide people into those who believe we are doing something and it is enough and those who believe we are misusing resources which could better be used elsewhere in alternatives.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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.
2467	2	Please maximize other alternatives like stringent water conservation, groundwater recharge and making a state water plan which addresses all of the needs for the state so that we can become sustainable at all levels.	It is important to note, as an initial matter, 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. Nor is the proposed project intended to solve all environmental challenges facing the Delta. Please see Master Response 6 (Demand Management) for further information regarding how many of the suggested components have merit from a state-wide water policy standpoint, and some are being implemented or considered independently throughout the state, but are beyond the scope of the proposed project. Rather, the scope and purpose of the proposed project is much more limited. As explained in Chapter 2 Project Objectives and Purpose and Need of the Final EIR/EIS, the fundamental purpose of the proposed project is to make physical and operational improvements to the State Water Project (SWP) system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and Central Valley Project (CVP) south-of-Delta, and water quality within a stable regulatory framework with statutory and

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			contractual obligations. Additional water storage was eliminated from consideration in the Draft EIR/EIS and RDEIR/SDEIS through the alternatives development and screening process (discussed in Appendix 3A, Identification of Water Conveyance Alternatives). As such, the proposed project does not propose storage as a project component. Although the proposed project would be part of an overall statewide water system of which new storage could someday also be a part, Alternative 4A is a stand-alone project which demonstrates independent utility just as future storage projects would demonstrate. Please refer to Master Response 4 (Alternatives) and Master Response 37 (Storage) for additional information. The California Water Plan's strategies are to be considered tools in a toolkit for water managers to choose from with the understanding that regional and local water managers have the best perspective on which strategy or strategies are most cost-effective and productive for meeting the needs and priorities of their region. Accordingly, the EIR/EIS does not include alternatives (including several that were proposed during the scoping process) that are equivalent to a statewide water plan or required actions beyond the scope of the proposed project. Many of the alternatives proposed for inclusion in the EIS/EIR but ultimately rejected because they address issues or apply to regions outside the Bay Delta, are nevertheless pertinent to stewardship of California's water resources and thus are appropriate for consideration in other regulatory or legislative contexts. For more information on the California Water Plan see Draft EIR/EIS, Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1.
2468	1	I believe this "water fix" for California is far too significant a decision for a few self-serving individuals to decide. This "fix" should have been presented to the public, with all its ramifications, and voted upon by all the California registered voters. Our Governor advises us that we are facing an on-going water shortage, his recent statement was, "This four-year drought is our future." However, it now appears that Southern California is receiving more storms than Northern California. I have lived in California all my life and have never faced a water shortage this severe until now. We own a small ranch with three green pastures for our livestock, around our home are many large trees, lawn and shrubbery. We are on a well, and have been using our water sparingly. Our pastures are brown, our lawn is brown and the trees and shrubbery are being hand watered twice a week. So far this fall we have had one rainfall on our property that wet our driveway and washed the dust off the outer leaves of our trees and plants. Southern California, on the other hand, has received devastating floods and mud slides--there seems to be something wrong with this picture. Why are we being asked to send our water south? The rain we receive here needs to stay here. We need it to water our vast farm lands, to furnish fresh drinking water to our northern cities, water for households and businesses. Our reservoirs are almost dry, some river beds are no longer running with water. We have provided for these times by building dams on our major rivers--so far only a few towns have run out of water and have been trucking in a supply for their residents. Most of our wells are still operating although we know that this could change at any time. If the water "fix" is completed our delta will no longer have the fresh water from the Sacramento River to keep the salt water from	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights that were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. DWR and Reclamation operate with water rights issued by the State Water Resources Control Board that are junior in priority to many senior water rights holders in the Delta watershed. Under the action alternatives, senior water rights holders would continue to receive the same amount of water as under the No Action Alternative. Conveyance facilities under 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 based upon river water levels and flow, water available in the system, the presence of threatened and endangered fish species, and water quality standards. The range of alternatives in the 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. 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.

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		encroaching into our underground aquifer thus contaminating our wells. We might eek by with the help of the water rationing, the small amount of water remaining in our reservoirs and much prayer. This should be enough to prove the "water fix" is no "fix" at all. Why hasn't Southern California built its own dams catching the rainfall they receive? Why have not they looked into desalinization? Why can not their farmers dig wells to water their crops like us? The "fix" being proposed will eventually turn California into a inhabitable desert. Do not install the water intakes on our Sacramento River and do not build the tunnels under our Delta.	
2469	1	This is a fundamentally bad idea and you need to take a step back and really, honestly assess the impact of two giant straws that will suck the living daylights out of the Sacramento Delta. Don't allow this project to proceed without due process of a fully vetted environmental impact report that addresses the true impact of this project.	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. 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.
2470	1	Citizens do not want these tunnels. Only a few who are farming in a desert. Please do not hurt the Delta for a few who don't know where to farm.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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. See Master Response 34 (Beneficial Use of Water).
2471	1	Our entire town of Walnut Grove opposes this waste of [money]. You are not creating any new water, just sending water to Westlands. They planted tree crops instead of crops that could adapt. . . . I remember the cotton crops. I saw sea lions from the saltwater intrusion last week in downtown Walnut Grove. If you build these disgusting tunnels you will be destroying the jewel of California, our Delta . . . loved around the world. The largest estuary in the Northern hemisphere. Please find an alternative to the monstrous tunnels. Do you really want this destruction to be the legacy you leave your grandchildren?	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 proposed project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. It is projected that 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. Refer to Master Response 26 (Changes in Delta Exports). 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 3 (Purpose and Need). Please also see Master Response 14 regarding salinity and Master Response 35 regarding Southern California's water supply.
2472	1	Worse, the quality of water and indigenous marine species in San Francisco Bay and its shoreline estuaries would be badly harmed by increased salinity due to reduced fresh water flow from the Sacramento River.	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.

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			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/EIS.
2472	2	Funding key desalination plants installations along California's Pacific Coast.	The commenter offers an opinion on the merits of one particular water supply augmentation approach (desalination) and does not raise a specific issue related to the adequacy of the EIR/EIS. Please see Master Response 4 for discussion of the scope of the proposed project and alternatives (such as desalination) that were not carried forward for analysis in this document due to the fact that required actions beyond the scope of the proposed project. However, nothing in the proposed project would prevent other entities from pursuing innovative approaches to desalination or other water supply solutions. As described in Appendix 3A, Section 3A.7, Results of Initial Screening of Conveyance Alternatives, EIR/EIS (2013), desalination was included as part of Alternative B7. Issues related to desalination include land use impacts, costs, and substantial energy use requirements. Advances in technology have improved feasibility of desalination and as a statewide water use planning component; it will be evaluated by water agencies on a local/regional level. Desalination, the process of removing salt and other minerals from seawater to make it suitable for drinking or irrigation, is being implemented in several California communities. However, it has not proven viable to secure adequate water supplies to meet California's needs due to high costs and energy demands. Today, desalination creates an estimated 84,000 acre-feet of potable water a year in the state, mostly through treatment of brackish groundwater, which is less salty and cheaper to treat than sea water. In comparison, the proposed project would secure an estimated 4.7 to 5.2 million acre-feet of water to supply more than 25 million people and 3 million acres of farmland. 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. Local water agencies will need to invest in additional strategies and technologies, including desalination, to meet future water demand. The proposed project is one part of a diverse portfolio of strategies needed to meet California's overall water management needs. It is not a substitute for increased commitments to other water supply solutions, including recycling, desalination, water conservation and storage. Please also see Master Response 7 regarding desalination.
2472	3	As a native-born Sacramentan, now 60, I know the Sacramento-San Joaquin rivers Delta well. The Delta Tunnels legislation proposal from concept to budgeting and construction would be terrible and ultimately bad for all 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. 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. Please see Master Response 5 for more information on costs and funding.

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2473	1	I oppose the Delta Tunnels. They won't produce more water and will have negative impacts on the Delta and Bay Area economy, tourism, water recreation, fisheries and farmland. There are better alternatives for water conservation.	RDEIR/SDEIS Appendix A (Socioeconomics) identifies the unique features of the Delta and describes the potential effects on Delta communities. Please see chapter 15 for a discussion on impacts to recreation. Impacts to agriculture are identified and discussed in Chapter 14; project proponents 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 3 for additional information regarding the purpose and need behind the proposed project, Master Response 4 regarding the selection of alternatives analyzed, Master Response 6 regarding demand management, and Master Response 37 regarding water storage.
2474	1	I want you to know that although I support many of the issues that you do, I abhor the thought of the building of the Twin Tunnels. Until the entire State of California is on board with a water conservation plan (that means the big users who make no real sacrifice), there will never be enough water for the Central Valley and Southern California. An engineering solution to this resource problem (that is shared by all of the citizens of the state) sacrifices both the fish and people of Northern California.)	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. 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, Master Response 4 regarding the selection of alternatives analyzed, Master Response 7 regarding desalination, Master Response 6 regarding demand management and Master Response 37 regarding water storage.
2474	2	The truly lasting solutions to our water needs will come with shared sacrifice from all shareholders.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2474	3	Building the twin tunnels will divide people into those who will benefit from the redirecting of flow to the south without addressing the finiteness of rainfall and snowmelt and those who will feel the consequences of loss of river flow- California's Northwest. Be governor of the whole state!	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2474	4	Please maximize other alternatives: strict water conservation for all, rainwater harvesting to recharge ground water and a state water plan which addresses all of the needs for the state before promoting this water tunnel.	It is important to note, as an initial matter, 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. Nor is the proposed project intended to solve all environmental challenges facing the Delta. Please see Master Response 6 (Demand Management) for further information regarding how many of the suggested components have merit from a state-wide water policy standpoint, and some are being implemented or considered independently throughout the state, but are beyond the scope of the proposed project. Rather, the scope and purpose of the proposed project is much more limited. As explained in Chapter 2 Project Objectives and Purpose and Need of the Final EIR/EIS, the fundamental purpose of the proposed project is to make physical and operational improvements to the State Water Project (SWP) system in the Delta necessary to restore and protect ecosystem health, water supplies of the SWP and Central Valley Project (CVP) south-of-Delta, and water quality within a stable regulatory framework with statutory and contractual obligations.

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			Additional water storage was eliminated from consideration in the Draft EIR/EIS and RDEIR/SDEIS through the alternatives development and screening process (discussed in Appendix 3A, Identification of Water Conveyance Alternatives). As such, the proposed project does not propose storage as a project component. Although the proposed project would be part of an overall statewide water system of which new storage could someday also be a part, Alternative 4A is a stand-alone project which demonstrates independent utility just as future storage projects would demonstrate. Please refer to Master Response 4 (Alternatives) and Master Response 37 (Storage) for additional information. The California Water Plan's strategies are to be considered tools in a toolkit for water managers to choose from with the understanding that regional and local water managers have the best perspective on which strategy or strategies are most cost-effective and productive for meeting the needs and priorities of their region. Accordingly, the EIR/EIS does not include alternatives (including several that were proposed during the scoping process) that are equivalent to a statewide water plan or required actions beyond the scope of the proposed project. Many of the alternatives proposed for inclusion in the EIS/EIR but ultimately rejected because they address issues or apply to regions outside the Bay Delta, are nevertheless pertinent to stewardship of California's water resources and thus are appropriate for consideration in other regulatory or legislative contexts. For more information on the California Water Plan see Draft EIR/EIS, Appendix 3A, Identification of Water Conveyance Alternatives, Conservation Measure 1.
2475	1	I am deeply disappointed and opposed to the tunnel project. Our government has shown complete lack of respect for the California Delta inhabitants, farmers, landowners and businesses. As a real estate agent and property owner in the California Delta I have directly seen the negative effect on the people & the Delta that this proposed project has created. I pay a lot in property taxes and not once have we been given a discount for the negative effect this proposed project has already had on our land. The underhanded way the government has gone about starting the project before the people have any say in it is asinine.	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. Refer to Chapter 16 of the EIR/EIS for socioeconomic impacts of the proposed project and proposed mitigation for these impacts. See also Master Response 24, The Delta As a Place.
2475	2	With the current drought situation there is no extra water to send south out of our rivers. Our wells have changed, and not for the better! Our farmers need fresh water to farm, not salt water. Farmers in the lower Delta have already seen the change in the water from fresh to salt due to the drought. I am not a scientist, but I am able to read through the proposed project and see all the flaws.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. The EIR/S 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. All of the alternatives evaluated in the EIR/EIS would only divert water under existing water rights that were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. DWR and Reclamation operate with water rights issued by the State Water Resources Control Board that are junior in priority to many senior water rights holders in the Delta watershed. Under the action alternatives, senior water rights holders would continue to receive the same amount of water as under the No Action Alternative. Conveyance facilities under 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 based upon river water levels and flow, water available in the system, the presence of threatened and endangered fish species, and water quality standards.
2475	3	I do not feel it is necessary to ruin the land, lives, and businesses of the Delta just to fix a problem that is happening in another part of the state. Stop, stop, stop this project and find another way to save water for our parched state!	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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.

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2476	1	I am opposed to this project. California is in the middle of a severe water crisis and this is not a solution. I think if will harm our Delta waterways, the people and farmers.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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.
2476	2	This is an outrageous waste of taxpayer's money. Maybe a wiser use of taxpayer dollars would be to look into Desalination Facilities such as the one in San Diego. Converting ocean water into irrigation and drinking water. Global warming alarmists would be happy as they contend oceans levels are rising. This would be a way to bring ocean levels downward.	For more information regarding cost of the proposed project please see Master Response 5. For more information regarding desalination please see Master Response 7.
2477	1	We vehemently object to the Governor's personal plan to deprive Central Valley farmers and residents the water and agriculture that is indigenous to the Central Valley. To permanently disturb this fragile system would render it forever useless for food, recreation and sustenance!	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. The Lead Agencies discuss community character in Chapter 16 of the EIR/EIS and RDEIR/SDEIS Appendix A (Socioeconomics) identifies the unique features of the Delta and describes the potential effects on Delta communities. Please see chapter 15 for a discussion on impacts to recreation. Impacts to agriculture are identified and discussed in Chapter 14; project proponents 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.
2477	2	Governor Brown is playing to the tune of the environmental activists who reject storage of water in Northern California and the Sierras where it is most easily collected and managed. The tunnels will benefit large farming corporations and the wealthy and the numerically overwhelming population of Southern California. The water for Southern California should be upon them to solve, not the citizens whose elective powers are the minority. Federal projects of Mississippi River water can be diverted to the West for storage and use by farmers and citizens when natural resources fall short of needs.	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. It is not the result of "favoring" large corporations (e.g., large agribusinesses). In fact, this issue is beyond the scope of the project as the Lead Agencies do not have local land use/zoning authority. The project does not increase the amount of water to which DWR holds water rights or for use as allowed under its contracts. See Master Response 3 (Purpose and Need), Master Response 34 (Beneficial Use of Water), Master Response 26 (Change in Delta Exports), and Master Response 35 (Southern California Water Supply). For information regarding why water storage was not included in the proposed project, refer to Master Response 37 (Water Storage) and Appendix 1B, Water Storage, EIR/EIS.
2477	3	California must provide real leadership on this issue that has been ignored for decades when the population was smaller, and now we have doubled and still the proverbial can is being kicked down the road. Governor Brown has been a poor leader for now, his fourth term. I support the division of California at the southernmost point of the Central Valley. Then, the real Southern California must provide for themselves in all aspects of leadership and economics. We the people are ignored at all levels of this nation where the liberals control elective offices. They are patently corrupt and greedy with others rights under the law and of natural	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.

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		law. Time for you to grow up!	
2478	1	The tunnels are nothing but a water grab by Southern California and the Governor. The tunnels will not provide one more drop of water.	The preferred alternative, Alternative 4A, proposes to stabilize water supplies, and exports could only increase under certain circumstances in which hydrological conditions result in availability of sufficient water and ecological objectives are fully satisfied. It is projected that water deliveries from the federal and state water projects under the preferred alternative would be about the same as the average annual amount of water that would be diverted under the No Action Alternative (i.e. 2025 conditions without the preferred alternative). It is projected that Delta exports from the federal and state water projects would either remain similar or increase in wetter years and decrease in drier years under Alternative 4A as compared to exports under No Action Alternative (ELT) depending on the capability to divert water at the north Delta intakes during winter and spring months. The estimated changes in deliveries for 4A are provided in the Section 4.3.1 and Appendix A Chapter 5 Water Supply. Although exports under the preferred alternative would be similar to the amount water exported in recent history, it would make the deliveries more predictable and reliable, while reducing other stressors on the ecological functions of the Delta.
2478	2	The money the tunnels will cost should be spent building new water storage reservoirs. Also Southern California should be spending their own money building desalination plants.	The commenter offers an opinion on the merits of one particular water supply augmentation approach (more surface storage and desalination facilities in Southern California) and does not raise a specific issue related to the adequacy of the EIR/EIS. While water storage is a critically important tool for managing California's water resources, it is not a topic that must be addressed in the EIR/EIS for the proposed project. This is because the proposed project does not, and need not, propose storage as a project component. Although the physical facilities contemplated by the proposed project once up and running would be part of an overall statewide water system of which new storage could someday also be a part, the proposed project is a stand-alone project for purposes of CEQA and NEPA, just as future storage projects would be. Appendix 1B, Water Storage, of the 2013 Public Draft EIR/EIS, describes the potential for additional water storage. Please see Master Response 37 regarding water storage. Please see Master Response 4 regarding the range of alternatives selected. 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. Please also see Master Response 7 regarding desalination.
2478	3	The tunnels are nothing but a planned destruction of the environment. They should be stopped!	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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.
2479	1	As a resident of Chico, California, I oppose the Governor's proposed California WaterFix. It is crazy to think about dewatering the north state when you have Wall Street investors and farmers planting orchards for their own wealth when my lawn is dying. It is time to monitor groundwater and make these guys pay for it, not just the electricity to pump it.	Please refer to Chapter 7 for information about groundwater effects due to the preferred alternative, Alternative 4A. Effects during construction and operation, as well as mitigation, are described in this chapter.

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2480	1	Please put me down as a no on this project. Stop the Governor now, please.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2481	1	PSSEP [Partnership for Sound Science in Environmental Policy]'s members simply desire to ensure that the final BDCP is technically accurate and adequately ensures that known or reasonably foreseeable impacts that are likely to accrue as a result of BDCP will be formally recognized and fully mitigated under CEQA, NEPA and the Sacramento-San Joaquin Delta Reform Act of 2009.	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. 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. The proposed project is 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 document, along with the BDCP Draft EIR/EIS, and expected 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). For more information please see 1.1.5 of Section 1 Introduction of the RDERI/SDEIS. Please refer to Master Response 31, Appendix 3I of the 2013 Public Draft BDCP EIR/EIS and Appendix 3J of the Final EIR/EIS for discussion of compliance with the Delta Reform Act.
2481	2	PSSEP [Partnership for Sound Science in Environmental Policy] maintains that the FDEIR/SDEIS continues to understate the potential additional selenium loading impacts to the Delta that will result from construction and operation of the BDCP/California WaterFix, and further understates the potential impacts these additional selenium loads will have to San Francisco Bay.	Please refer to Master Response 14 for a discussion of the water quality assessment of the project alternatives effects on selenium.
2481	3	We [Partnership for Sound Science in Environmental Policy] appreciate the revisions to the July 2015 RDEIR/SDEIS which now affirmatively include San Francisco Bay in the effects analysis. Nevertheless, the ultimate conclusions made in the July 2015 BDCP/California WaterFix environmental documents are erroneous and legally unsupportable.	The commenter states that the conclusions in the 2015 RDEIR/SDEIS are 'erroneous and leally unsupportable' but does not offer any evidence to justify this statement. 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.
2481	4	The BDCP/California WaterFix and the RDEIR/SDEIS fail to provide a clear definition of what constitutes a "significant effect" relative to increases in selenium concentrations in the	Please refer to Master Response 14 for a discussion of the water quality assessment of the project

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		water column or fish tissue. It is not clear whether the total predicted selenium loads referred to in the 2015 RDEIR/SDEIS is to all predicted selenium loads, or just predicted selenium loads coming only from the Delta. If the latter, then the average increase of 325 kg/yr for Alternative 4H-1, is a larger percentage of Delta load than the 6% reported. [Footnote 2: See, BDCP/California WaterFix RDEIR/SDEIS Appendix A - Revisions to Draft EIR/EIS, App. 8O, San Francisco Bay Analysis, Table O-3 [sic].] This should be clarified and supported with reference to specific data. A review of the RDEIR/SDEIS does not provide readers an explanation what the authors mean by "significant effect" related to predicted increases in selenium concentrations in water or tissue. In some cases, increases of greater than 24% are noted to be significant (in the context of Alternative 6), although the definition appears to be vague. [Footnote 3: See, BDCP/California WaterFix RDEIR/SDEIS, Appendix A, Revisions to Draft EIR/EIS, Chapter 8 - Water Quality, Section 8.3.3.11 at pp. 8-367-369.] A specific definition of what constitutes a significant change, in terms of change in average concentrations as well as maximum or monthly concentrations, will help in evaluating the numeric results presented. Thus, it is important to understand if the concentrations for a specific month or year in the simulation hydrology exceed a certain threshold (say 20%), if that will be considered a significant increase. Likewise, this comment about the lack of a specific definition of what constitutes a significant change in terms of selenium tissue concentrations also applies to selenium loading. In the view of the preparers, the Lead Agencies, or the WaterFix project sponsors, what constitutes a "significant increase" in loading and why?	alternatives effects on selenium.
2481	5	The anticipated increased loads of selenium to the Delta and San Francisco Bay due to the revised BDCP/California WaterFix are significant and must be mitigated for under CEQA and NEPA. The original draft BDCP EIR/EIS released in November of 2013 concluded that development of the BDCP preferred Alternative 4 conveyance facilities "would result in essentially no change in selenium concentrations throughout the Delta" [Footnote 4: Bay Delta Conservation Plan, Public Draft, EIR/EIS, Sec. 8.4.3.9 at page 8-474 (November 2013).] based on the preparers' estimate that selenium loading caused by the operation and maintenance of the new water conveyance facilities would "only" be between 2-5%. Following this conclusion, TetraTech was asked to perform an analysis of the EIR/EIS assessment of selenium loading and impacts related to the BDCP project, wherein TetraTech found, "Selenium concentrations used in the Sacramento River for the BDCP EIR/EIS study are biased high." [Footnote 5: See, Review of Selenium Bioaccumulation Assessment in the Bay Delta Conservation Program Draft EIR/EIS, TetraTech, May 30, 2014, at p. 5-1 (hereafter, "TetraTech Selenium Review"). (Attachment 3 to June 25, 2014 PSSEP Comment Letter on BDCP and Draft EIR/EIS [ATT1:ATT3].)] TetraTech further determined that the EIR/EIS preparers excluded recent selenium water concentration data, and used older data based on high "non-detect" values, which artificially inflated calculated values of water column selenium by more than a factor of two. [Footnote 6: TetraTech Selenium Review at page 5-1.] Notably, when valid boundary values for the Sacramento and San Joaquin Rivers were input into the same modeling framework	Please refer to Master Response 14 for a discussion of the water quality assessment of the project alternatives effects on selenium.

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		used by the BDCP preparers, TetraTech found the following: "The model analysis shows that the BDCP-preferred Alternative 4 will result in higher percent changes in water column concentrations than that calculated in the EIR/EIS. Using the bioaccumulation model in the EIR/EIS, we find a similar projected increase in fish tissue concentrations between Alternative 4 and existing conditions (i.e., no BDCP project). Importantly, the new calculations suggest that there is an effect of the BDCP changes to the water column and white sturgeon selenium concentrations at the Mallard Island station for CEQA Alternative 4, representing conditions in Suisun Bay (8-20% increase, depending on the hydrology)." [Footnote 7: TetraTech Selenium Review, page 1-2.] Thus, in the November 2013 draft BDCP EIR/EIS, anticipated increased selenium loading from the Central Valley Watershed caused by the BDCP Alternative 4 were underestimated by an average of approximately 15% for any given hydrology year. As a result of PSSEP [Partnership for Sound Science in Environmental Policy]'s and other parties' comments on this point, the preparers of the revised BDCP/California WaterFix RDEIR/EIS made substantial changes to the estimates of anticipated increased selenium loading to the Delta and San Francisco Bay. [Footnote 8: It is important to note that "Alternative 4" described and analyzed in the November 2013 draft BDCP and DEIR/EIS is functionally identical to "Alternative 4A" described and analyzed in the July 2015 BDCP/California WaterFix RDEIR/EIS, according to the Department of Water Resources and Bureau of Reclamation. (See, California WaterFix (Alternative 4A/Recirculated Environmental Analysis, Frequently Asked Questions, #5 at p. 2.) (http://baydeltaconservationplan.com/Libraries/Dynamic_Document_Library/California_WaterFix_RDEIR-SDEIS_FAQ_Aug-15.sflb.ashx)]	
2481	6	One of the changes to the BDCP/California WaterFix RDEIR/EIS is a revised estimate of increased selenium loading to North San Francisco Bay under the preferred Alternative 4. Specifically, and according to the preparers of the revised BDCP/California WaterFix RDEIR/SDEIS: "Changes in source water fraction and net Delta outflow under Alternative 4, relative to Existing Conditions, are projected to cause the total selenium load to the North Bay to increase by 6-11%. . . ." [Footnote 9: BDCP/California WaterFix RDEIR/SDEIS, Appendix A, Revisions to Draft EIR/EIS, Chapter 8 - Water Quality, p. 8-310, lines 15-16.] However -- and astonishingly -- your preparers go on to conclude that "the estimated changes in selenium loads in Delta exports to San Francisco Bay due to Alternative 4 are not expected to result in adverse effects to beneficial uses or substantially degrade the water quality with regard to selenium, or make the existing CWA [Clean Water Act] Section 303(d) impairment [for selenium] measurably worse." [Footnote 10: BDCP/California WaterFix RDEIR/SDEIS, Appendix A, Revisions to Draft EIR/EIS, Chapter 8 - Water Quality, p. 8-310, lines 27-30.]	Please refer to Master Response 14 for a discussion of the water quality assessment of the project alternatives effects on selenium.
2481	7	The San Francisco Regional Water Quality Control Board has estimated the current annual selenium load attributable to the Central Valley Watershed is 4,070 kg/year. [Footnote 11: Draft Proposed Basin Plan Amendment for North San Francisco Bay Selenium TMDL, [Section] 7.2.4.3 and Table 7.2.4-2; Draft Staff Report for Proposed Basin Plan Amendment, Section 7, Table 24.] According to the BDCP/California WaterFix RDEIR/SDEIS, those loads are expected to increase by as much as 447 kg/year [Footnote 12: BDCP/California WaterFix RDEIR/SDEIS, Appendix A, Revisions to Draft EIR/EIS, Chapter 8 - Water Quality, p. 8-310,	As described in the 2013 Public Draft BDCP EIR/EIS Chapter 8, Section 8.2.3.15, selenium criteria were promulgated by the State Water Resources Control Board and San Francisco Bay Regional Water Quality Control Board for all of San Francisco Bay and the portions of the Delta waters in North San Francisco Bay, including portions of the Delta, and Suisun Bay, Carquinez Strait, San Pablo Bay, and the Central San Francisco Bay. The U.S. Environmental Protection Agency Action Plan for Water Quality Challenges in the San Francisco Bay/Sacramento-San Joaquin Estuary requires development of a new site-specific numeric selenium criteria to protect aquatic and terrestrial species dependent on the aquatic habitats of the Bay

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		lines 15-16.], which is more than 10% of current annual selenium loading attributable to the Central Valley Watershed. This anticipated increased loading of selenium to the Delta and San Francisco Bay is not trivial, as the BDCP/California WaterFix RDEIR/SDEIS suggests. In fact, this additional loading attributable to future operations of the California WaterFix could potentially be significant to the environment, and may well have significant economic impacts on businesses, industry, and municipal agencies forced to incur further costs to reduce selenium discharges to San Francisco Bay. These potential impacts must be mitigated for under CEQA and NEPA, but there is nothing in the BDCP/California WaterFix RDEIR/SDEIS to indicate that any such mitigation is provided. [Footnote 18: To be adequate under CEQA, an EIR must respond to specific suggestions for mitigating significant environmental impacts unless the suggested mitigation is facially infeasible. See, San Francisco Ecology Center v. City and County of San Francisco, (1975) 48 Cal.App.3d 584, 596.]	Delta Estuary. The new criteria being developed by the State Water Resources Control Board and San Francisco Bay Regional Water Quality Control Board could be more stringent than the existing selenium water quality criteria and require actions that would decrease allowable concentrations of selenium in surface waters of the Bay Delta Estuary and may set allowable levels of selenium in the tissue of fish and wildlife. Applicable selenium objectives for water in the affected environment are summarized in Table 8-54, and selected benchmarks for assessment of selenium in whole-body fish, bird eggs, and fish fillets are presented in Table 8-55 in Appendix A Chapter 8 Water Quality of the RDEIR/SDEIS. For more information regarding updated selenium analysis please see Section 8.3.1.7 Constituent-Specific Considerations Use in the Assessment in Appendix A Chapter 8 of the RDEIR/SDEIS. Please also refer to Master Response 14 for a discussion of the water quality assessment of the project alternatives effects on selenium.
2481	8	The proposed mitigation measures for the BDCP/California WaterFix to address potential increased selenium loads attributable to the Project are practically insufficient and legally deficient under CEQA and the Delta Reform Act of 2009. According to the BDCP/California WaterFix RDEIR/SDEIS, all of the proposed mitigation measures to be taken to address potential environmental and water quality impacts associated with selenium are contained in a "management memorandum" known as "AMM27 Selenium Management" (hereafter, AMM27). [Footnote 14: See, Appendix D, Substantive BDCP Revisions, Section D.3.3.9, pages D.3-116-D.3-118.] Following prior public comments on the November 2013 draft BDCP documents, AMM27 was completely revised to address two distinct "mechanisms" related to BDCP actions that could result in increased selenium impacts to fish and wildlife in the Delta and San Francisco Bay. [Footnote 15: AMM27 at [Section] 3.C.2.27.1, Appendix D, Substantive BDCP Revisions, Section D.3.3.9 at page D.3-117, lines 6-14.] These two "mechanisms" include increased selenium due to: (1) Water Operations; and (2) Restoration actions taken in support of the BDCP/California WaterFix. "Water Operations" refers to the actual operation and maintenance of the BDCP/California WaterFix facilities, as integrated with the State and Federal Water Projects. [Footnote 16: See, BDCP/California WaterFix RDEIR/SDEIS, Section 3, "Conveyance Facility Modifications to Alternative 4."] According to AMM27, the only mitigation measure proposed to be taken by the project sponsors relative to anticipated selenium impacts associated with future Water Operations is as follows: "The Implementation Office will maintain a selenium monitoring program in conjunction with ongoing state and federal led monitoring programs. Before implementation of Water Operations, the Implementation Office will prepare a comprehensive Selenium Monitoring Program. This program will include reporting on a yearly basis, at a minimum to state and federal regulators, as well as dissemination for public use on the BDCP Implementation Office website. The monitoring program will also cover identified data needs to monitoring restoration actions." [Footnote 17: AMM27 at [Section] 3.C.2.27.2, Appendix D, Substantive BDCP Revisions, Section D.3.3.9 at page D.3-117, lines 26-31.] Thus, the sole mitigation measure proposed by the project sponsors to address potential future increased loading of selenium as a result of Water Operations is to monitor various points in the Delta to determine if selenium loads are increasing. There are no minimization or mitigation measures proposed by the project sponsors to address what happens if the	Please refer to Master Response 14 for a discussion of the water quality assessment of the project alternatives effects on selenium. Please also refer to Master Response 22 for a discussion on the adequacy of mitigation measures.

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		monitoring reveals (as is expected) that selenium loads to the Delta and San Francisco Bay have increased, or have affected assimilative capacities of the Delta and San Francisco Bay to accept these additional loads, or even if they have actual, deleterious impacts to fish and wildlife in the Delta or San Francisco Bay. The failure to include any affirmative steps to address what happens when monitoring confirms that the BDCP/California WaterFix has caused increased selenium loading to the Delta and San Francisco Bay makes the putative "mitigation measures" illusory, and thus legally inadequate under CEQA. [Footnote 18: To be adequate under CEQA, an EIR must respond to specific suggestions for mitigating significant environmental impacts unless the suggested mitigation is facially infeasible. See, San Francisco Ecology Center v. City and County of San Francisco, (1975) 48 Cal.App.3d 584, 596.] PSSEP [Partnership for Sound Science in Environmental Policy] recommends that the RDEIR/SDEIS be revised to include specific and adequate measures to mitigate the potential impacts associated with increased selenium loading caused by the Water Operations of the BDCP/California WaterFix.	
2481	9	The Delta Reform Act of 2009 specifically provides that proponents of new Delta water conveyance facilities must pay to mitigate all impacts associated with the construction, operation, and maintenance of such facilities. [Footnote 19: California Water Code [Section] 85089(a).] There is nothing in the RDEIR/SDEIS for the BDCP/California WaterFix which accounts for mitigation related to increased selenium loads that will occur as a result of the construction and operation of the new preferred Alternative 4A water conveyance facilities. As such, the revised BDCP/California WaterFix and related RDEIR/SDEIS do not satisfy the Delta Reform Act of 2009, and cannot legally be included in the Delta Plan.	Please refer to Master Response 14 for a discussion of the water quality assessment of the project alternatives effects on selenium.
2481	10	PSSEP [Partnership for Sound Science in Environmental Policy] maintains the revised BDCP/California WaterFix and the RDEIR/SDEIS continue to be flawed with respect to potential long-term impacts related to selenium loading to San Francisco and San Pablo Bays. Our members respectfully request that these flaws be corrected, and that the BDCP/California WaterFix proponents provide adequate financial assurances that future, affirmative "adaptive management" actions will be taken to address the impacts of expected selenium loading of San Francisco and San Pablo Bays.	Please refer to Master Response 14 for a discussion of the water quality assessment of the project alternatives effects on selenium. Concurrently with the FEIR, the Monitoring Mitigation and Reporting Program (MMRP) will be published and it will provide additional details responsive to this comment.
2481	11	[ATT1: BDCP Letter #1433, with attachments, from Partnership for Sound Science in Environmental Policy.]	This comment describes an attachment to the comment letter. The attachment does no raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. Please refer to the table of commenters to locate the letter of interest.
2481	12	[ATT1: ATT1: Article titled "Modeling, Transport, and Biological Uptake of Selenium in North San Francisco Bay."]	This comment describes an attachment to the comment letter. The attachment does no raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. Please refer to the table of commenters to locate the letter of interest.
2481	13	[ATT1: ATT2: Figure 1-4 from BDCP EIR/EIS.]	This comment describes an attachment to the comment letter. The attachment does no raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. Please refer to the table of commenters to locate the letter of interest.
2481	14	[ATT1: ATT3: "Review of Selenium Bioaccumulation Assessment in the Bay Delta Conservation Program Draft EIR/EIS -- Revised Final Report."]	This comment describes an attachment to the comment letter. The attachment does no raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. Please refer to the table of

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			commenters to locate the letter of interest.
2482	1	The RDEIR/SDEIS does not provide adequate information on how the State Water Project (SWP) and Central Valley Project (CVP) will be operated if the proposed Alternative 4A facilities are constructed, nor does it analyze the potentially significant environmental effects of those operations. This is a significant omission as it affects the very underpinning of the environmental analysis contained in the RDEIR/SDEIS. If the WaterFix is approved and constructed, up to 9,000 cubic feet per second (cfs) of water could be diverted in the north Delta at three new points of diversion. This water will be sent underneath the Delta in two new 30-mile long, 40-foot diameter tunnels to the existing SWP and CVP south Delta facilities and pumps. This will enable the SWP and CVP to divert entirely in the north Delta, entirely in the south Delta -- as is done now -- or in various combinations.	Please see Appendix 5A in the Final EIR/EIS for information on SWP and CVP modeling assumptions included in the hydrological analyses and Chapter 4 for a description on the approach to the environmental analyses. The Final EIR/EIS analyzes potential changes in upstream SWP and CVP reservoirs and associated changes in downstream reaches, north Delta and south Delta operations and associated changes in surface water (see Chapter 6) and water quality (Chapter 8), and Delta exports and changes in CVP and SWP deliveries both north and south of the Delta (see Chapter 5). Under the proposed project, operations at both the new north Delta intakes and existing south Delta export facilities will operate to criteria described in Chapter 3 (unless new science through the CSAMP indicates changes in operations are warranted), in addition to complying with existing environmental standards and regulations (e.g. operating criteria under the 2008 USFWS and 2009 NMFS Biological Opinions and SWRCB D1641).
2482	2	Given the large-scale nature of the Alternative 4A components, operation of the new north Delta intakes in conjunction with the existing SWP/CVP south Delta points of diversion will certainly affect Delta flows, hydrodynamics, and water quality and fishery resources. Additional modeling information is needed to fully assess and quantify the impacts of Alternative 4A on Mokelumne River fisheries, existing EBMUD [East Bay Municipal Utility District] infrastructure (Mokelumne Aqueducts), and Freeport Operations (reverse flows). This is a fundamental gap in analysis in the RDEIR/SDEIS and must be addressed.	The commenter asserts that the proposed project will adversely impact EBMUD's existing Mokelumne Aqueducts and potentially adversely impact future planned aqueduct projects, thereby affecting the delivery of Mokelumne River water to EBMUD's service area; (2) will cause an increase in reverse flows at EBMUD's Freeport diversion site, thereby adversely affecting water quality and yield at Freeport; (3) could lead to increased opening of the Delta Cross Channel, thereby adversely impacting the Mokelumne River anadromous fishery; and (4) could redirect flow mitigation responsibilities to parties other than the project proponents. To the contrary, the analyses in the Draft EIR/EIS, the RDEIR/SDEIS, and the Final EIR/EIS regarding every environmental resource area, including hydrology, water quality, biological resources, and public health, as well as substantial evidence in light of the whole record, demonstrate that the proposed project will not operate to the injury of any legal user of the water involved and will not in effect initiate a new water right. Appendix B of the RDEIR/SDEIS shows supplemental modeling results for the new alternatives. Where appropriate, additional modeling has been provided in the Final EIR/EIS. Please refer to Master Responses 14 and 30 for additional information regarding updated modeling. For additional information regarding protections for other legal users of water as well as fish and wildlife, please see Master Response 44.
2482	3	Impacts on Mokelumne River Fisheries from Delta Cross Channel operations: The RDEIR/SDEIS must consider how Alternative 4A will change the operations of the Delta Cross Channel (DCC), and assess how those changes will cause potentially significant environmental effects to the Mokelumne fisheries resources. While the RDEIR/SDEIS recognizes the hazards and low survival of migratory fish passing through the central Delta, the document makes no attempt to assess the potentially significant environmental impacts of the revised DCC operations likely as a result of Alternative 4A. The operation of the DCC has long been identified as having a potential adverse impact on salmonid migration. For example, in 1989 the Mokelumne River Technical Advisory Committee identified the DCC as a significant factor contributing to straying of Mokelumne River salmonids. In addition, the Lower Mokelumne River Partnership, which includes representatives from California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS), worked with United States Bureau of Reclamation (USBR) to develop a low-risk study plan looking at the effects of DCC closures on migrating salmon. USBR issued a Finding of No Significant Impacts on the study plan in 2012. Due to limitations related to Delta water quality standards, the planned study closures did not occur. However, D-1641 Rio Vista flow standards have resulted in DCC closures since 20l0. In each year the DCC has been closed, the stray rates of Mokelumne River salmonids to the Sacramento River system, primarily to the American	Additional analysis has been added to the FEIR/EIS to assess the potential for effects on Mokelumne River upstream-migrating adult salmonids, as represented by the olfactory cues in the Delta. This is in addition to existing analyses such as the Delta Passage Model which examined through-Delta survival of Mokelumne River juvenile fall-run Chinook salmon. Table 3-7 New and Existing Water Operations Flow Criteria and Relationship to Assumptions in CALSIM II Modeling in Chapter 3 of the FEIR/EIS states that Delta Cross Channel Gate operational criteria will not be changed. Operations will be as required by the 2009 NMFS BiOp RPA IV.1 and D-1641. The Delta Passage Model utilizies Calsim flow outputs for the Delta, which are partially influenced by Delta Cross Channel operations. For more information regarding modeling, please see Appendix 5A of the FEIR/EIS. For more information regarding salmonid exposure to the Delta Cross Channel please see Section 5.4.1.2.7 of the CA WaterFix Biological Assessment. As noted for Alternative 4, adult salmonids migrating through the delta use flow and olfactory cues for navigation to their natal streams (Marston et al. 2012), as discussed under Impact AQUA-42 for Alternative 1A. Attraction flows and olfactory cues in the west Delta would be altered because of shifts in exports from the south Delta to the north Delta. Flows in the Sacramento River downstream of the north Delta intake

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		River, have been reduced significantly. In addition, as part of the SWRCB Bay Delta Plan update Notice of Preparation in 2012, USFWS, USBR, and CDFW submitted comments supporting continued evaluation of DCC closures to improve salmon returns to both the Sacramento and Mokelumne river systems. In sum, it is well settled that operation of the DCC can impact Mokelumne River fisheries. Therefore, any new operating regime resulting from Alternative 4A needs to include a full evaluation of the DCC impacts on migrating Mokelumne origin adult salmon, and a commitment to implement measures to mitigate those impacts (i.e., reduce straying) to a level of insignificance in the RDEIR/SDEIS. Finally, the Mokelumne River is a distinct river system and the Mokelumne fish face conditions that are significantly different than those in the San Joaquin and Sacramento Rivers. Yet the RDEIRISDEIS lumps the Mokelumne River together with the San Joaquin River, and contains no analysis addressing the project's impacts on the Mokelumne River fishery. It is therefore essential that the RDEIR/SDEIS assess impacts specifically on the Mokelumne fishery, as the Mokelumne River contributes a very high percentage of non-Sacramento-origin salmonid return in the Central Valley and to the commercial and recreational ocean fishery. In summary, the RDEIR/SDEIS must consider how Alternative 4A will change the operations of the DCC, and assess how those changes will cause potentially significant environmental effects to the Mokelumne fisheries resources. (Attachment 2 of the attached July 28, 2014 letter [ATT1] provides additional technical comments and recommendations regarding Mokelumne fishery impacts.)	diversions would be reduced, with concomitant proportional increases in San Joaquin River flow, with differences between water-year types because of differences in the relative proportion of water being exported from the north Delta and south Delta facilities (Appendix 11C, CALSIM II Model Results Utilized in the Fish Analysis). As described for Alternative 4, these changes may slightly decrease the Sacramento River olfactory cues used by migrating adults, although the changes are within the dilution factor and the behavioral response is uncertain. For more information regarding effects of water operations on migration conditions for Chinook Salmon, including Through Delta survival as estimated by the Delta Passage Model please see Impact AQUA-42 in Chapter 11 of the FEI/EIS.
2482	4	Impacts on EBMUD's Mokelumne Aqueducts: The Mokelumne Aqueducts are a vital link in EBMUD [East Bay Municipal Utility District]'s water supply system, providing virtually all (90% on a long-term basis) of EBMUD's water supply to its East Bay service area and its nearly 1.4 million inhabitants. The Aqueducts traverse the Delta for a distance of approximately 90 miles from Pardee Reservoir in the east to Walnut Creek in the west. In their east-west crossing of the Delta, the Mokelumne Aqueducts pass over Lower Roberts Island, Upper Jones Tract, Woodward Island, and Palm-Orwood Tract. The proposed Alternative 4A twin tunnels would pass directly underneath the existing Mokelumne Aqueducts. For a map of the Mokelumne Aqueduct location relative to the Alternative 4A tunnels, see Attachment 3, Figure 1 of our July 28, 2014 comment letter [ATT1]. As explained in detail in Attachment 3 of our July 28, 2014 comment letter, the proposed BDCP/ Alternative 4A tunnels threaten to expose the existing Mokelumne Aqueducts and their deep foundations to substantial adverse effects resulting from soil settlement/subsidence, undermining, lateral earth movement, construction vibrations and vibration induced settlement. Attachment 3 also provides detailed mitigation measures that will be necessary to protect the existing aqueduct facilities from the project's impacts.	The conceptual tunnel inverts range from 122 to 135 feet below mean sea level (msl) for the North tunnels and from 147 to 163 feet below msl for the Main tunnels. The conceptual tunnel invert elevations are based on assumed ground conditions with liquefiable soil at the upper strata near the surface. Additional geotechnical investigation will be required during the next engineering phase to finalize the tunnel profile. Localized settlement can occur during construction and tunneling and other construction activities such as dewatering and hauling materials. Settlement above tunnels is usually in response to ground loss at the tunnel face, voids created around the tunnel during mining, and/or stress redistribution around the excavated tunnel. The magnitude of risk for ground settlement depends on the excavated diameter of the tunnel, the amount of ground cover above the tunnel, excavation methods, workmanship, details of tunnel construction, and the geotechnical properties of the ground. Settlement risk is mitigated through selection of equipment and means and methods of construction. Based on the preliminary data regarding Delta ground conditions, it is assumed that an earth pressure balancing TBM will likely be used for tunneling. These machines rely on the excavated soil, under confinement of a cutterhead chamber, to balance earth and hydrostatic pressures. The pressure is maintained by a screw conveyer in which a soil plug provides the seal and excavated soil is removed through the screw onto the conveyor. Should geotechnical reports indicate high settlement risk in certain areas, pre-excavation ground stabilization treatment will be performed ahead of the TBM. Utilization of an Earth Pressure Balanced TBM and implementation of a well planned and executed ground stabilization program will mitigate potential for ground settlement due to tunnel construction. Ground stabilization methods and settlement monitoring programs will be evaluated during design, with requirements for ground stabilization and settlement monitoring specified during construction. Construction contracts will include prescriptive specification

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			requirements for settlement monitoring at sensitive features, such as levees, pipelines, and other critical infrastructure—to ensure that tunneling, dewatering, and traffic-induced settlement remains within specified limits. These requirements shall be consistent with common industry standards such as those found in the Regulatory Setting section of Chapter 9, Geology and Seismicity.
2482	5	Under CEQA, potential impacts on public services and utility services are an impact area requiring analysis. The RDEIR/SDEIS does not adequately assess the project's impacts on the Mokelumne Aqueducts. Chapter 13.1.5 of the BDCP Conceptual Engineering Report erroneously concludes that "no conflicts are anticipated" with regard to the Mokelumne Aqueduct crossing and Chapter 13.2.5 indicates that the crossings "will be evaluated at the preliminary design level in conjunction with EBMUD [East Bay Municipal Utility District]." These analyses cannot be deferred to a future date. A thorough assessment of the potential impacts on the Mokelumne Aqueducts must be completed as part of the RDEIR/SDEIS to determine what mitigation measures will be necessary to protect the existing aqueduct facilities, and in turn avoid potential damage and suspension of water service to 1.4 million people in EBMUD's service area.	Until preliminary designs are developed further analysis is unable to occur. The evaluation will occur in conjunction with EBMUD as early in the process as possible to avoid disruption to the existing aqueduct facilities. Mitigation Measures UT-6a, UT-6b, and UT-6c are available to reduce the severity of this effect. If coordination with all appropriate utility providers and local agencies to integrate with other construction projects and minimize disturbance to communities were successful under Mitigation Measure UT-6b, the effect would not be adverse. Please see Chapter 20 for additional detail on these Mitigation Measures.
2482	6	The RDEIR/SDEIS fails to address a likely conflict between a future EBMUD [East Bay Municipal Utility District] cross-Delta tunnel and the proposed BDCP/Alternative 4A tunnels. EBMUD owns the land and subsurface rights along the alignment of the Mokelumne Aqueducts and has begun planning for a cross-Delta tunnel that could replace its existing aboveground aqueducts. In a telephone conversation on March 12, 2012, and in a follow up email on March 23, 2012, EBMUD staff discussed with DWR the potential conflicts between a BDCP tunnel and EBMUD's planned cross-Delta tunnel. EBMUD's design for its cross-Delta tunnel places the EBMUD tunnels within an elevation range of -100 feet mean sea level (ft msl) to-143ft msl. Tunnel design will be developed further in the future, and subsequent design phases may identify a tunnel profile outside of these elevations. Despite prior notification given by EBMUD to DWR, the RDEIR/SDEIS documents fail to note the potential conflict, analyze the resulting environmental impacts, or propose mitigation. The BDCP/ Alternative 4A RDEIR/SDEIS must address this reasonably foreseeable conflict, and EBMUD expects the project to avoid tunneling within the -100 to -143 ft msl elevation range at the site of the tunnel intersection and also to provide an appropriate additional buffer between the two facilities.	At the time of preparation of the Draft EIR/EIS and RDEIR/SDEIS, the future EBMUD project did not meet the criteria to be included in the analysis and the cumulative impact analysis. At that time, EBMUD did not have a decision made about its potential future project nor did it have associated environmental documentation complete. As indicated above further engineering for the proposed project will consider updated site conditions and adjust to avoid and minimize impacts, including EBMUD's proposed project. Additionally coordination with EBMUD will continue through this development.
2482	7	Impacts on diversions at Freeport Regional Water Project: EBMUD [East Bay Municipal Utility District] diverts critical water supplies at the Freeport Regional Water Project (FRWP), constructed and operated by the Freeport Regional Water Authority (FRWA). The FRWP is a drinking water diversion facility on the Sacramento River near Freeport. These diversions provide water supply for the Sacramento County Water Agency most years and to EBMUD during dry years. The Sacramento Regional County Sanitation District (SRCSD) operates a wastewater treatment plant downstream of the FRWA facilities. When the Sacramento River is flowing downstream the water quality at the FRWA facilities is adequate, however, when reverse flows occur, meaning when the Sacramento River is flowing upstream at the FRWA facilities, water quality can be adversely affected and diversions at FRWA must be shut down. As explained below, Alternative 4A has the potential to increase the magnitude, frequency, and duration of reverse flows at Freeport, causing significant water quality impacts that require the Freeport water supply intake to be shut down more often and for longer	The Sacramento Regional County Sanitation District (Regional San) also expressed concern that the project could change flows in the Sacramento River flows such that the ability of their wastewater treatment plant to discharge to the river could be impaired. Regional San's wastewater treatment plant is required to maintain a minimum of 14:1 ratio between the river flow below Freeport and the plant's treated effluent discharge rate. When river flow rates drop such that the 14:1 ratio cannot be maintained, Regional San must divert the treated effluent to on-site emergency storage basins until river flow rates return to levels that allow discharge. Modeling shows that Alternative 4A may increase reverse flows in the lower Sacramento River at Freeport, relative to the NAA, based on certain low flow conditions and flood tides. These reverse-flow events at Freeport have the potential to cause Regional San to limit discharges and hold treated effluent in its storage basins until downstream river flow resumes and thus river discharge can resume. The Final EIR/EIS addresses this potential effect in Appendix 3B, Section 3B.3.6 (Develop North Delta Intake Operations Protocols to Reduce Reverse Flow Effects at Regional San Outfall). In consideration of tides and river flows, DWR, in consultation with Regional San, will develop a rule curve and/or operating protocols for the north

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		intervals of time, thereby directly inhibiting FRWA's ability to divert water. However, the RDEIR/SDEIS fails to address these adverse impacts on operations of the existing FRWA facilities. This is not a new issue. EBMUD raised this issue in an August 26, 2009 letter to Dr. Parviz Nader, Supervising Engineer with DWR, and in EBMUD's BDCP comment dated July 28, 2014 [ATT1]. More specifically, Alternative 4A will likely cause a significant increase in reverse flows on the Sacramento River. Such flow changes would adversely impact FRWA operations as determined by analyzing modeling results performed by DWR, provided to EBMUD, and confirmed through independent modeling performed with DWR's Delta Simulation Model version 2 (DSM2). Although the previous BDCP modeling results showed that future wetland restoration in certain areas under the long-term BDCP would have mitigated these impacts, those restoration areas have been removed from Alternative 4A and no such mitigation is included. Thus, this potentially significant environmental effect must be fully analyzed and mitigated in the RDEIR/SDEIS. Specific mitigations should be provided in the EIR/EIS to assure that Alternative 4A operations will not increase the magnitude, frequency, or duration of flow reversals in the Sacramento River at the FRWP. Operations must be managed at all times to avoid increasing the magnitude, frequency, or duration of flow reversals in the Sacramento River above Sutter Slough to avoid impacting the FRWP and EBMUD's water supply. Attachment 4 to our comment letter dated July 28, 2014 provides additional details regarding this issue.	delta diversions that will account for peak flow periods within the tidal fluctuations of the Sacramento River to ensure that Regional San operations will remain consistent with existing storage capabilities and thus not adversely impact Regional San's SRWTP operations.
2482	8	[ATT1: BDCP Letter #1633 -- East Bay Municipal Utility District's "Comments on the Bay Delta Conservation Plan and Environmental Impact report/Environmental Impact Statement," previously submitted July 28, 2014.]	Responses to Letter 1633 are provided individually and can be cross-referenced with the Response to Comments index table.
2484	1	I think it is particularly significant that auxiliary impacts were ignored, such as the dam modifications, in the impact statement. This amounts to false advertising. The southern part of the state is overbuilt, and it should not have been allowed to occur. The north part of the state should not in any way be degraded or abused to support the over-building in the south. Now you try to paper over it. You would create havoc and wholesale environmental destruction if you were to succeed.	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. Please see Master Response 35 regarding water use in Southern California. 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.
2485	1	Overall, it seems to me that the primary purpose of this project is to transer a large quantity of money from the taxpayers to the construction contractors and water companies. I think this is a bad idea.	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 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.

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			For more information regarding purpose and need please see Master Response 3.
2486	1	The intrusion of saltwater will only increae in the Delta with the advent of ocean rise expected in the future due to global warming impacts. Has this been considered in the plan?	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 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. 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. More information on ways in which the California WaterFix proposes to improve resiliency and adaptability of the Delta to climate change can be found in Chapter 29, Climate Change, EIR/EIS and Appendix 3E, Potential Seismic and Climate Change Risks to SWP/CVP Water Supplies, EIR/EIS.
2487	1	We need to stop trying to destroy the Delta and we need to invest in rain catchment systems!	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 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. Appendix 1C, Demand Management Measures, in the EIR/EIS, describes conservation, water use efficiency, and other sources of water supply including storm water drainage. While these elements are not proposed as part of the BDCP or the California WaterFix, the Lead Agencies recognize that they are important tools in managing California's water resources. Please also see Master Response 37 regarding water storage.
2488	1	Water must be preserved by banning fracking in California and also by charging mega-agricultural users the fair market price of this resource.	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

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			to the specific substantive portions of the comment letter that were submitted by the commenter. The commenter does not raise a specific issue related to the adequacy of the EIR/EIS Please see Master Response 3 for additional information regarding the purpose and need behind the proposed project.
2489	1	California voters said no to Delta tunnels/peripheral canal years ago. It is unacceptable.	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 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.
2490	1	New intakes in the northern Delta on the Sacramento River would provide the ability to capture increased flow in wet and normal years and address reverse-flow conditions in the southern Delta that are a result of relying solely on the operation of the existing south Delta pumping.	This comment is consistent with the fundamental purpose of the proposed project to decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months; and increase exports in the wet winter months when the river flows are high. The water would be stored at locations south of the Delta during the high flow periods to allow reductions in deliveries to SWP and CVP water users in drier periods, as described in Chapter 3, Description of the Alternatives, of the EIR/EIS.
2490	2	The proposed twin tunnel conveyance system would not only enhance water supply reliability and provide much needed stability to State Water Project deliveries it would also protect the people and economy of California from long-term catastrophic threats such as seismic events and adapt the state's backbone water supply system to deal with the anticipated effects of climate change and sea level rise.	This comment is consistent with the fundamental purpose of the project to make physical and operational improvements to the SWP system in the Delta, water supplies of the SWP and CVP for users located south of the Delta, and Delta water quality consistent with statutory and contractual obligations of the SWP and CVP, as described in Section 2.3 of Chapter 2, Project Objectives and Purpose and Need, of the EIR/EIS. 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/EIS.
2490	3	Expected water quality improvements in SWP supplies from the new water facilities described in Alternative 4A will result in reduced salinity, total organic carbon and bromide providing water quality benefits to consumers and promoting water recycling and reuse in Orange County and Southern California and improving the salinity balance in groundwater basins accessing this water. The latter issues are key to the successful implementation of the Governor's Water Action Plan.	No issues related to the adequacy of the environmental impact analysis in the EIR/EIS were raised.
2490	4	Proposed project modifications identified in the RDEIR/SEIS to consolidate intake pumping into a single facility in the southern Delta on SWP property near Clifton Court Forebay further reduces the physical footprint of the Project and is responsive to concerns expressed by Delta communities and compatible with existing land use activities.	This comment is consistent with the fundamental purpose of the project to make physical and operational improvements to the SWP system in the Delta, water supplies of the SWP and CVP for users located south of the Delta, and Delta water quality consistent with statutory and contractual obligations of the SWP and CVP, as described in Section 2.3 of Chapter 2, Project Objectives and Purpose and Need, of the EIR/EIS.
2490	5	MWDOC [Municipal Water District of Orange County] continues to support sound science and adaptive management as key strategies in enhancing the reliability of State Water Project operations and also supports efforts to improve real-time monitoring to protect both threatened natural fisheries and water supply reliability.	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. 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. See Master Response 33 (Adaptive Management and Monitoring).
2490	6	Implementation of Alternative 4A requires a significant investment by water supply agencies and their ratepayers. That investment continues to require greater certainty in regulatory	No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised. The proposed project was developed to meet the rigorous standards of the federal and state Endangered

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		assurances and participative management inclusive of the water supply contractors. The RDEIR/SEIS proposes a significant change in the approach to permitting and achievement of the legislatively mandated co-equal goals of eco system restoration and water supply reliability. MWDOC [Municipal Water District of Orange County] still believes its ratepayers' investment requires that the Final Plan address the issues of regulatory assurances and greater certainty of SWP deliveries.	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.
2490	7	The MWDOC [Municipal Water District of Orange County] Board of Directors has specifically raised a concern with the project schedule for the California WaterFix, which currently appears headed towards an operational date of 2031, thereby leaving 16 years and $15 billion of uncertainty for a water system underpinning a $2 trillion state economy. While the Board realizes a project of this magnitude cannot be implemented immediately, every effort should be made to initiate early actions and to approach contracting in a manner that provides incentives for early completion; procurement of long lead time specialty items, including the tunnel boring machines, should be pursued. If DWR has limitations on its contracting flexibility, these should be resolved via administrative or legislative methods or the contracting should be delegated to others, with the overall goal of advancing the completion date. Furthermore, once the funding commitment has been made for the construction phase, regulatory flexibility should be implemented to improve reliability of supplies until such time as the construction has been completed and the operations of the WaterFix begins.	The commenter does not raise an issue on the adequacy of the EIR/EIS or related analyses.
2490	8	The primary reliability benefit of a north Delta diversion is the ability to capture increased flow in wet and normal years when compared to the existing south Delta pumps only. Capturing this increased flow in those years is critical to the foundation of Southern California's dry year strategy, reliable local supplies and storage. The current four-year drought and the previous 2008-2010 drought clearly demonstrated the importance of investments made by Metropolitan [Water District of Southern California] in storage. It also highlighted the value of groundwater basins in Orange County and elsewhere in the Metropolitan service area as a storage asset that could reduce the demand for imported supplies in dry years. Being able to maintain high levels of storage in Metropolitan's system and in conjunctive use groundwater basins of its member agencies is dependent on maximizing SWP supplies during those wet and normal years when the system is much less stressed. The Final EIR/EIS should provide additional information on yield, operating criteria and the benefits of real-time operations in contributing to increasing the amount of water supply yield. This is critical information needed in planning to optimize all storage assets in southern California and enhance reliability during the inevitable prolonged dry periods that will occur. The Final EIR/EIS should also include a discussion in the No Action Alternative of the likelihood and future effects on SWP operations of further fish protection restrictions, i.e., high outflow operating criteria, and its effect on water supply yield and water quality in the absence of implementation of the Preferred Alternative.	This comment is consistent with the fundamental purpose of the project to make physical and operational improvements to the SWP system in the Delta, water supplies of the SWP and CVP for users located south of the Delta, and Delta water quality consistent with statutory and contractual obligations of the SWP and CVP, as described in Section 2.3 of Chapter 2, Project Objectives and Purpose and Need, of the EIR/EIS. The EIR/EIS addresses the changes in long-term conditions under the action alternatives (including the Proposed Project) as compared to the Existing Conditions and No Action Alternative. The changes in total exports and deliveries to all SWP and CVP water users are presented in Appendix 5A, Section C, of the EIR/EIS. The EIR/EIS discusses potential changes between the long-term analyses and real-time operation in Chapter 5; however, because the specific details of the real-time operation conditions are not specifically known at this time, the discussion is qualitative. The No Action Alternative is based upon include the continuation of existing policy and management actions and reasonable and foreseeable projected conditions related to policies, programs, and conditions, as described in Appendix 3D, Defining Existing Conditions, No Action Alternative, No Project Alternative, and Cumulative Impact Conditions, of the EIR/EIS. It would be speculative to include future undefined facilities or operations in the No Action Alternative, including federal, state, and local agencies' responses to climate change, sea level rise, future regulatory changes, or future responses under federal and state endangered species acts. Potential changes that could occur in the future are discussed under the Cumulative Impact Analysis.
2490	9	An important factor in the BDCP and its achievement of the co-equal goals was that it sought to provide more stable and reliable SWP supplies through obtaining a 50-year permit for water supply operations under Section 10 of the ESA and the Natural Communities Conservation Planning Act (NCCPA) under CESA [California Endangered Species Act]. The change in permitting approach through ESA Section 7 and CESA Section 2081 (b) is a more standard permitting path but one that contains less certainty and assurances on future	Please note that the BDCP is no longer the preferred alternative. The preferred alternative is now Alternative 4A/California WaterFix. Alternative 4A has been developed in response to public and agency input. Please see Master Response 5 regarding the BDCP and Master Response 4 , development of alternatives.

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		requirements. A final plan should include formalized agreements between the permitting agencies and the permit holders that provides a participatory role for the involvement of the permit holders and water contractors in operational decisions. This formal agreement can take the form of an MOU [memorandum of understanding] identified in RDEIR/SEIS and include the Adaptive Management approach of the BDCP and the reliance on collaborative science to adjust to actual conditions and make operational decisions jointly with the permit holders. The final plan should include an MOU or other form of agreement that seeks to incorporate the "No Surprises" rule and regulatory assurances that are similar to those contained in Safe Harbor Agreements for listed species and Candidate Conservation Agreements with Assurances for currently unlisted species. These arrangements are regularly used with landowners as a means to better manage lands for habitat conservation and species protection. MWDOC [Municipal Water District of Orange County] strongly believes that the final plan should include these formal mechanisms that provide assurances, guarantees and participative management that reflect the intent of the BDCP and can be obtained under ESA Section 7 and CESA Section 2081 (b).	
2490	10	Under the BDCP, water conveyance facilities and habitat enhancement and restoration were linked in the same permitting process. Under the modifications of the permitting process contained in the RDEIR/SEIS, they have been delinked and the total amount of habitat acreage has been significantly reduced. While overall habitat acreage has been reduced, the amount of habitat and mitigation related to construction of the water conveyance facilities under the modified Preferred Alternative 4A has substantially increased from the amount identified under the BDCP. Under the BDCP, mitigation for direct impacts of the water conveyance facilities was significantly less than the 16,000 acres identified in Alternative 4A. Under the BDCP, water conveyance facilities (CM1) had cost responsibility for a share of habitat mitigation occurring under several of the other conservation measures (CMs 2-22). It was understood that the basis of the quantification of acreage for habitat enhancement assigned to the water suppliers was linked to the physical impacts resulting from the construction of the water conveyance facilities under CM1. Preferred Alternative 4A has a smaller construction footprint than was contemplated in the BDCP DEIR/EIS yet the amount of mitigation acreage has substantially increased. The final EIR/EIS should provide a clear explanation of how the 16,000 acres was arrived at, specifically detailing in easily understood table(s) the direct and indirect impacts associated with water conveyance facilities and how the total mitigation acreage was derived. If the mitigation acreage is in excess of the physical impacts of the Project, then the Final Plan should indicate the rationale as to why it is the financial responsibility of the water supply contractors.	The commenter suggests that the amount of habitat and mitigation related to construction of the water conveyance facilities under the modified Preferred Alternative 4A has substantially increased from the amount identified under the BDCP. The analysis for the loss of habitat and/or direct mortality of a species considers the collective loss of habitat from water conveyance construction and the Conservation Measures/Environmental Commitments. Alternatives 4 and 4A utilize the same water conveyance construction footprint but differ in that they have different levels of restoration with Alternative 4 having greater impacts to biological resources from restoration actions when compared to Alternative 4A (note some restoration actions to benefit one species or natural community result in effects on other species or land cover types). The proposed restoration under Alternative 4A is less than that proposed under Alternative 4. Alternative 4 would result in the protection of 69,275 acres and restoration 83,839 acres (see Table 12-ES-2 in the EIR/EIS) and Alternative 4A would result in the protection of up to 13,340 acres and restoration of up to 2,496 acres. The analysis in Chapter 12 of the EIR/EIS does not separately discuss the compensation acreages for water conveyance impacts and restoration impacts. Language to explain how the proposed protection and restoration acreages were generated has been added to Chapter 3 of the EIR/EIS in Section 3.3.2.2 Non-HCP Alternative Environmental Commitments. In summary, this new language states that the acreages for the Environmental Commitments under the non-HCP alternatives were developed by taking into consideration the analysis conducted in Appendix 12D, Feasibility Assessment of Conservation Measures Offsetting Water Conveyance Facilities Construction Impacts on Terrestrial Biological Resources for the BDCP alternatives, which used typical mitigation ratios to determine the sufficiency of the BDCP conservation strategy as CEQA and NEPA mitigation (i.e., whether the BDCP conservation strategy includes sufficient land acquisition and restoration to adequately mitigate the impacts of CM1 for purposes of CEQA and NEPA). The first step involved applying these mitigation ratios to the water conveyance facility impacts on natural communities to obtain the restoration and protection acreages necessary to offset these impacts. Once these initial natural community restoration and protection acreages were obtained, they were then compared to the mitigation requirements for species addressed in the EIR/EIS that use these natural communities as habitat. Several of the species analyzed in the EIR/EIS utilize the same general natural communities but may only use specific subsets of these natural communities or are geographically restricted to certain portions of the study area where these natural communities occur. Therefore, the total acreages of proposed natural community restoration and protection increased to account for species needs. Where restoration is anticipated to result in additional impacts on natural communities and species habitats, the restoration and protection acreages were increased further.

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			Through an iterative process, final acreages for natural community protection and restoration were arrived at when it was determined by project biologists that proposed restoration and protection was sufficient to offset the loss or conversion of natural communities and species habitats from water conveyance construction and proposed restoration activities.
2490	11	[ATT1: Previously submitted Municipal Water District of Orange County comments, BDCP Letter #1551.]	This comment describes an attachment to the comment letter. The attachment does no raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.
2491	1	The purpose of the Delta Tunnels Project is not Federally authorized [and] does not comply with Federal [and] State law. Therefore, it remains unsuitable for Federal decision making. Planning and Conservation League, Sierra Club, California Sportfishing Protection Alliance, Winnemem Wintu Tribe, Save the American River, the Southern California Watershed Alliance and the Environmental Water Caucus (EWC) (a coalition of over 30 nonprofit environmental and community organizations and California Indian Tribes) find the RDEIR/SDEIS fails to comply with federal law and fails to include tribal interests and fishing rights. Federal law does not authorize the Central Valley Project to be operated for the narrow stated purpose of the project: "Restore and protect the ability of the SWP and CVP to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of state and federal law and the terms and conditions of water delivery contracts held by SWP contractors and certain members of San Luis Delta Mendota Water Authority, and other existing applicable agreements." [Footnote 1: ACE 404 Permit Application & (73 Fed. Reg. 20326 (April 15, 2008)) first amended Notice of Intent https://s3.amazonaws.com/californiawater/pdfs/5n2mg_Complete_Final_CA_Water_Fix_USACE_404_Permit_Application.pdf] The proposed project will take water from the Sacramento River before it reaches the Sacramento-San Joaquin River Estuary, for export and operations of the State Water Project (SWP) and federal Central Valley Project (CVP). Under federal law the coordinated operations of these projects are governed by the Coordinated Operations Act of 1986 (P.L. 99-546) and the Reclamation Act of 1937, as modified by the Central Valley Project Improvement Act (CVPIA) P.L 102-575 along with other laws and agreements. The proposed Delta Water Tunnels, requiring the construction of two 35-mile-long, 40-foot-wide tunnels, are designed to export more water south of the Delta estuary that current operations and will significantly harm Delta estuary water quality and beneficial uses, while boosting water quality and quantity to south of the Delta users. The purpose of the project ignores federal statutes governing these south of the Delta exports, such as the federally required provisions covered under the Coordinated Operating Agreement, the San Luis Project Act (P.L. 86-488), and the CVPIA and other federal statutes. [Footnote 2: P.L. 86-488 authorizes CVP San Luis Unit water exports for only 500,000 acres to be irrigated in three counties: ". . . five hundred thousand acres of land in Merced, Fresno, and Kings Counties, California, hereinafter referred to as the Federal San Luis unit service area." Other statutes include: National Environmental Policy Act of 1969, Fish and Wildlife Coordination Act of 1958, Endangered Species Act of 1973, Clean Water Act of 1972 and the National Historic Preservation Act of 1960.] These provisions of federal law and associated regulations limit CVP exports from the Sacramento San Joaquin Delta Estuary and associated watersheds and	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 divert water under existing water rights which were issued to DWR and Reclamation by the State Water Board with consideration for senior water rights and Area of Origin laws and requirements. The proposed project does not seek any new water rights nor reduction in total water rights issued to DWR and Reclamation. 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 (including Decision 1641), as described in Chapter 5, Water Supply of the EIR/EIS. All action alternatives provide water under existing agreements with tribes, including Trinity River Record of Decision flows on the Trinity River. The proposed project would decrease total exports of SWP and CVP water as compared to Existing Conditions and No Action Alternative in the summer and early fall months; and increase exports in the wet winter months when the river flows are high to improve conditions for aquatic resources in the Delta. The water would be stored at locations south of the Delta during the high flow periods to allow reductions in deliveries to SWP and CVP water users in drier periods. The Final EIR/EIS includes model results specifically for Alternative 4 as compared to Existing Conditions and No Action Alternative. These results indicate that total Delta exports under Alternative 4A are approximately 6 percent higher in wet years and 3 percent lower in critical dry years as compared to the No Action Alternative. The results also indicate that total Delta exports under Alternative 4A are similar in wet years and 18 percent lower in critical dry years as compared to the Existing Conditions which includes changes due to climate change, sea level rise, and population growth. For additional information regarding baseline, please see Master Response 1. For additional information regarding water quality, please see Master Response 14. For additional information regarding greenhouse gas emissions and climate change, please see Master Response 19. For additional information regarding water transfers, please see Master Response 43. Please refer to Master Response 20 and 21 regarding tribal interests.

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		require project yield to be reserved for fish and wildlife, tribal fishing rights and other environmental mitigation purposes. The Tunnel Project purpose of "restore and protect the ability of the [State Water Project and Central Valley Project] to deliver up to full contract amounts" to specified contractors is in conflict with these federal statutes, thus making the proposed NEPA compliance questionable and use for major federal actions unsuitable. [Footnote 3: Deference to action agencies is not unlimited. See, for example, Simmons v. U.S. Army Corps of Engineers, 120 F.3d 664, 666 (7th Cir. 1997) (Rejecting "single source" definition of project purpose for water supply, noting that "[i]f the agency constricts the definition of the project's purpose and thereby excludes what truly are reasonable alternatives, the EIS cannot fulfill its role."). See also Border Power Plant Working Group v. DOE, 260 F. Supp. 3d 997 (S.D. Cal., 2003)(Rejecting and broadening agency's definition of project purpose.); Similarly, Davis v. Mineta, 302 F.3d 1104 (loth Cir. 2002).]	
2491	2	As noted by EPA [Footnote 4: EPA, Straus & Manzanilla, June 2010 letter to Glaser, Lohefener and McInnis Re: "Purpose Statement for Bay Delta Conservation Plan (BDCP)], the stated purpose of the Tunnel Project has confusing meaning. A significant increase in exports out of the Delta is inconsistent with state legislation and it hinders the scope of alternatives necessary for federal decision making. Full deliveries on contract amounts have never occurred. EPA states "Combined, the SWP and CVP full contract amounts for Delta exports are around 7,432,883 AF. As noted . . . historical exports by the CVP and SWP almost never exceed 6 MAF[million acre-feet], so it appears that the "full contract amount" of exports is at least 1 million acre feet more than has ever been exported historically." EPA states further [Footnote 5: Ibid], "A significant increase in exports out of the Delta is inconsistent with recent state legislation. California Water Code Section 85021 . . . states, in relevant part: "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 us efficiency. Federal Council on Environmental Quality regulations at 40 C.F.R. Section 1506.2(d) require that "[EISs] shall discuss any inconsistency of a proposed action with any approved State or local plan and laws (whether or not federally sanctioned.)" Further, under the Clean Water Act Section 404, the permit applicant must demonstrate that the chosen alternative is the "least environmentally damaging practicable alternative" (LEDPA) for meeting the overall project purpose pursuant to the CWA Section 404 (b) (I) Guidelines. In accordance with Army Corps of Engineers Standard Operating Procedures Regulatory Program, p 7, "The overall project purpose must be specific enough to define the applicant's needs, but not so restrictive as to preclude all discussion of alternatives." EPA, citing the California Supreme Court, states clearly that significantly increasing exports out of a stressed Delta is the wrong policy. The California Supreme Court, when it evaluated appeals of the CALFED Bay-Delta Program, noted that the Program was an experiment: "The CALFED Program is premised on the theory, as yet unproven, that it is possible to restore the Bay-Delta's ecological health while maintaining and perhaps increasing Bay-Delta water exports through the CVP and SWP. If practical experience demonstrates that the theory is unsound, Bay-Delta water exports may need to be capped or reduced." In the Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings, 43Cal.4th. 1143 (2008). Note that the Court was looking at a program that was developed during the 1990s and adopted in 2000. The intervening ten years have not proved the	See Response 1 above. Under the range of alternatives considered in the EIR/EIS full contract amounts are not delivered in the majority of times to the SWP and CVP water contractors, as presented in Appendix 5A, Section C, CALSIM II and DSM2 Model Results, of the EIR/EIS. Long-term water deliveries to SWP and CVP water contractors located south of the Delta are lower under Alternatives 6, 7, and 8 as compared to the Existing Conditions and the No Action Alternative. The preferred alternative includes initial operating criteria developed over several years in coordination with the fish agencies, based on the best available information, consistent with the purpose and need. The Adaptive Management Program can be used over time to adjust these criteria as necessary based on information obtained through research. For additional information regarding baseline, please see Master Response 1. For additional information regarding public trust, please see Master Response 13. For additional information regarding water quality, please see Master Response 14. For additional information regarding greenhouse gas emissions and climate change, please see Master Response 19. For additional information regarding water transfers, please see Master Response 43. Please refer to Master Response 33 regarding Adaptive Management and Master Response 28 regarding operational criteria.

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		theory accurate, and, in fact, seem to point the other way." [Footnote 6: Ibid page 5.] Congress limits CVP water exports, requires reservoir releases, and authorizes diversions sufficient to provide water to meet obligations to control salinity, protect water quality, and restore refuges. These requirements, along with the 800,000 acre-feet of CVP water yield reserved to restore fish and aquatic habitat needs, are not clearly provided in the legal baseline for the project. Further, the proposed project purpose conflicts with federal CVP operational constraints laid out in federal statute and agreements. A review of the BDCP/CWF RDEIR/SDEIS (Delta Water Tunnels) documents finds a failure to disclose how the project purpose will comply with the federal statute and regulations that require mitigation for the environmental effects of the CVP along with the proposed additional exports from Delta Tunnels project, which seek to remove nearly ten million acre-feet of water from the watersheds of origin. The impacts of CVP exports from these watersheds have been significant. Current federal statute and regulation require water yield for these specific purposes. Water exports from north of the Sacramento River Delta to south of the Delta reduce the flow of water in the Sacramento River and its tributaries, with damaging effects on a large riparian ecosystem. [Footnote 7: CVPIA Section 3406(b) requires the Secretary to meet all obligations under the Endangered Species Act, 16 U.S.C. [Section] 1531-1544, and all decisions of the California State Water Resources Control Board. In addition, [Section] 3406(b)(1) requires by October, 1995, implementation of a plan to restore anadromous fish populations on all Central Valley rivers except the San Joaquin River at twice the average levels between 1967 and 1991. In addition [Section] 3406(b) establishes specific guidelines for implementing and reviewing this plan. Section 3406(c) relates to restoration of the San Joaquin River. Section 3406(d) relates to rehabilitation of wetland wildlife habitats. An anadromous fish is one that hatches in a river, migrates to the 'ocean for maturity, then returns upriver to spawn. The primary anadromous fish in California are salmon, steelhead, striped bass, sturgeon, and American shad. See C.V.P. Improvement Act [Section] 3403(a).] These statutory requirements for mitigation of these impacts include but are not limited to these provisions: 1. Water quality and flow standards (D-1641) imposed on CVP and SWP water rights 2. Sacramento River Temperature Control Operations 3. Fish and Wildlife and area of Origin Trinity River Minimum Release Requirement Increases 4. Sacramento River Winter-Run Chinook Salmon ESA Listing 5. CVPIA 3406(b)(2) and Refuge Water Supplies [Footnote 8: Refuges within or near the Delta include: Stone Lakes National Wildlife Refuge, Antioch Dunes National Wildlife Refuge, Sacramento National Wildlife Refuge, Delevan National Wildlife Refuge, Colusa National Wildlife Refuge, Sacramento River National Wildlife Refuge, San Joaquin River National Wildlife Refuge. Refuges in or near San Francisco Bay and nearby coastal ocean include: San Pablo Bay National Wildlife Refuge, Marin Island National Wildlife Refuge, Don Edwards San Francisco Bay National Wildlife Refuge, Farallon National Wildlife Refuge. Pursuant to CVPIA, refuge water is provided to National Wildlife Refuges South of the Delta.] 6. Delta Smelt ESA Listing 7. San Joaquin flow standards	

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		8. Sacramento River Spring-Run Chinook Salmon ESA Listing, 9. Steelhead Trout ESA Listing 10. Doubling of anadromous fish.	
2491	3	Central Valley Project. Section 2 of the 1937 Act was amended by the 1992 amendment as follows: "[T]he entire Central Valley Project . . . is hereby reauthorized and declared to be for the purposes of improving navigation, regulating the flow of the San Joaquin River and the Sacramento River, controlling floods, providing for storage and for the delivery of the stored waters thereof, ... for the reclamation of arid and semi-arid lands and the lands of Indian reservations, [insert] and mitigation, protection, and restoration of fish and wildlife[insert], and other beneficial uses.... And provided further, That the said dam and reservoirs shall be used, first for river regulation, improvement of navigation, and flood control; second, for irrigation and [insert] domestic uses and fish and wildlife mitigation, protection, and restoration purposes [insert]; and, third, for [insert] power and fish and wildlife enhancement. The mitigation for fish and wildlife losses incurred as a result of construction, operation, or maintenance of the Central Valley Project shall be based on the replacement of ecologically equivalent habitat and shall take place in accordance with the provisions of this title and concurrent with any future actions which adversely affect fish and wildlife populations or their habitat but shall have no priority over them [insert]." Under the Act, new short-term, temporary, or long-term contracts are prohibited until the following events have occurred: 1. Fish and wildlife activities specified in section 3406(b)-(d) are carried out, including, among other activities, doubling the anadromous fish population in Central Valley rivers and streams, commencement of rehabilitation of the San Joaquin River, and commencement of waterfowl habitat restoration. 2. Completion by the California Water Resources Control Board of its review of Delta water quality standards required by United States v. State Water Resources Control Board (182 Cal.App.3d 82 (1986 See below), and the EPA approves the Board's decision. 3. 120 days elapse after the Secretary of the Interior reports to relevant Congressional committees on how the CVP will meet its Bay Delta obligations to preserve water quality. These required events have not been completed. Furthermore, contracts to pay for the proposed project are needed prior to construction and have not been forthcoming. [Footnote 9: Water Code [Section] 85089. Construction of a new Delta conveyance facility shall not be initiated until the persons or entities that contract to receive water from the State Water Project and the federal Central Valley Project or a joint powers authority representing those entities have made arrangements or entered into contracts to pay for both of the following: (a) The costs of the environmental review, planning, design, construction, and mitigation, including mitigation required pursuant to Division 13 (commencing with Section 21000 of the Public Resources Code), required for the construction, operation, and maintenance of any new Delta water conveyance facility. (b) Full mitigation of property tax or assessments levied by local governments or special districts for land used in the construction, location, mitigation, or operation of new Delta	Please see response to comment 2491-2. As described in Appendix 3A, Identification of Water Conveyance Alternatives Conservation Measure 1, of the EIR/EIS, one of the potential alternatives considered was based upon the State Water Resources Control Board 2010 Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem, which described providing up to 75 percent of unimpaired flow into the Delta to improve aquatic resources habitat conditions. 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 without reductions in non-SWP and non-CVP water rights diversions. The purpose and need of this EIR/EIS would not allow changes to non-SWP and non-CVP water rights. However, Alternatives 7 and 8 in the EIR/EIS reflect similar flow criteria in a manner that would only affect SWP and CVP water rights. As described in Chapter 6, Surface Water, of the EIR/EIS, the State Water Resources Control Board is conducting a current program to update the Bay-Delta Water Quality Control Plan. Since this program is still under development and the potential outcomes are not known at this time, this program is not included in the analysis. Following completion of the updated Bay-Delta Water Quality Control Plan, SWP and CVP operations would need to comply with the new regulations. Similarly, Reclamation has requested re-initiation of consideration of their long-term coordinated operation of the CVP and SWP by USFWS and NMFS under the Endangered Species Act. Following completion of this analysis, SWP and CVP operations would need to comply with new requirements of modified biological opinions, if any. Funding agreements will be complete prior to initiation of the project. Please refer to Master Response 4 regarding alternatives and Master Response 5 regarding funding.

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		conveyance facilities.] Before a project alternative can be determined as feasible, cost-sharing and the feasibility of payment is needed. Extensive negotiations with State Contractors remain unresolved [Footnote 10: Extensive comments have been provided by PCL et. Al. to identify existing costs to SWP contractors and resultant needs to raise revenues and issue debt. See comments regarding the State Water Project Contract extension and http://www.c-win.org/webfm_send/421]. How the proposed project and each alternative will impact these federal requirements is not disclosed in the REIR/SEIS. Needed comparisons for each alternative to the No Action alternative are vague summaries that are inadequately specified. Also, many of the scenarios of the Preferred Alternative "range" decrease Delta outflow despite the fact that several key scientific evaluations by federal and State agencies indicate that more outflow is necessary to protect aquatic resources and fish populations [Footnote 11: [7] State Water Resources Control Board's, 2010 Flows Report, p.2. "Interior remains concerned that the San Joaquin Basin salmonid populations continue to decline and believes that flow increases are needed to improve salmonid survival and habitat." USFWS May 23, 2011 Phase I Scoping Comments, available at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/cmmnts052311/amy_aufdemberge.pdf "Inadequate flow to support fish and their habitats is directly and indirectly linked to many stressors in the San Joaquin river basin and is a primary threat to steelhead and salmon." NMFS February 4, 2011 Phase I Scoping Comments, available at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/bay_delta_plan/water_quality_control_planning/cmmnts020811/010411dpowell.pdf ". . . Current Delta water flows for environmental resources are not adequate to maintain, recover, or restore the functions and processes that support native Delta fish." Executive Summary in 2010 CDFG Flow Criteria. "a strong majority of scientists prioritizes habitat and flow management actions that would restore more natural processes within and upstream of the Delta" (p. 2) http://www.ppic.org/content/pubs/report/R_413EHR.pdf]. In addition, recent technical reports and emerging research raise questions about whether the proposed mitigation of tidal marsh is feasible [Footnote 12: NMFS Progress Assessment and Remaining Issues Regarding the Administrative Draft BDCP Document (04/4/2013), page 15.], possible [Footnote 13: U.S. Fish and Wildlife Service Staff BDCP. The broad concern is that the tidal prism would be diminished over time by the large increases in tidal habitat.], or effective [Footnote 14: Lucas, L. V., and J. K. Thompson. 2012. Changing restoration rules: Exotic bivalves interact with residence time and depth to control phytoplankton productivity. Ecosphere 3(12):117. http://www.esajournals.org/doi/pdf/10.1890/ES12-00251.1. The issue raised is whether the increased production of plankton by the restored wetlands would be offset by the increased consumption by exotic bivalves as they spread into the restored wetlands.]. These are scientific questions about the assumptions used to support restoration proposals and projections of anticipated benefits to fish populations, while the costs to the environment and obligations by contractors to meet required environmental project yields remain vague and unclear. Without this information an informed decision cannot be made.	
2491	4	Army Corps of Engineers and the Bureau of Reclamation require that new or existing Federal investments to construct new infrastructure, modify or replace existing infrastructure, or	The comment does not raise an issue with the environmental review documents - 2015 RDEIR/RDEIS or the 2013 DEIR/DEIS. However, please see Master Response 5 regarding costs of implementation and for more

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		implement major changes to the operations of Federal assets comply with the Principles and Requirements for Federal Investments in Water Resources dated March 2013 and 1983. These requirements, along with Reclamation Manual Directives and Standards CMP09-02, require a clear distribution of all financial costs of a project among its authorized purposes. This is necessary to determine whether the project beneficiaries are capable of repaying the reimbursable costs assigned to them. The allocation provides the basis for establishing the repayment obligations specified in water-related contracts. Further P.L. 99-546 requires full CVP repayment and pay-off by Central Valley Contractors by 2030. The proposed project has been estimated in 2012 dollars to nominally cost more than $16 billion dollars, but ultimately cost some $67 billion with financing and operation and maintenance costs according to figures provided to the Westlands Water District Board [Footnote 15: http://www.mercurynews.com/ci_24795356/delta-tunnels-plans-true-price-tag-much-67]. Interior's Inspector General's audit indicates that, under current water rates, Contractors will likely fail to meet the repayment deadline for just existing CVP costs [Footnote 16: https://www.doioig.gov/sites/doioig.gov/files/WR-EV-BOR-0003-2012Public.pdf]. How these additional costs will be repaid with construction spanning over a decade is not disclosed, and, thus, ratepayers, taxpayers and decision makers are left in the dark. The REIR/SEIS provides no such information on how these financial costs will be allocated. Nor is information provided as to how the project meets the "Least-Cost CVP Yield Increase Plan" pursuant to Title 34 P.L. 102-575 Section 3408(j). In accordance with federal regulatory requirements [Footnote 17: http://www.usbr.gov/recman/cmp/cmp09-02.pdf], the following information is required for projects, studies, and/ or any projects with federal funding assistance, such as the proposed Delta Water Tunnels, in order to legally implement Executive Order 12322 Water Resources Projects and Principles, Requirements and Guidelines for Water and Land Related Resources Implementation Studies: (1) how well the planning objectives are met; (2) the economic justification; (3) the validity of the scientific, technical, and design assumptions; (4) the ability to construct a project, implement a non-structural plan, or both, according to Reclamation standards and practices, within the estimated cost and schedule; (5) the reliability of the estimated costs and benefits; (6) the reliability of the proposed construction schedule; and (7) the capability and willingness of the project partner(s) to financially support the project	information regarding funding sources. The financial agreement between DWR and Reclamation was initiated to support completion of the EIR/EIS for the BDCP. Reclamation does not have construction authority for the new conveyance facilities and does not anticipate using the same agreements to fund design or engineering for California WaterFix.
2491	5	On July 16, 2014, the U.S. Army Corps of Engineers found that: "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); no demonstration of which alternative may contain the Least Environmentally Damaging Practicable Alternative	The EIR/EIS is for the decision-making of Reclamation and DWR to adopt a project. USACE's decision-making under the Clean Water Act and Rivers and Harbors Act to permit the project, once selected and adopted, may be supported by supplemental documentation under NEPA specifically for USACE, as disclosed in the EIR/EIS. Separate and apart from the EIR/EIS, an analysis of alternatives will be conducted pursuant to Section 404 of the Clean Water Act. The USACE has determined that such an analysis can be separate from the NEPA alternatives discussed in the EIS. The USACE has stated that the 404 application submitted adequately

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		(LEDPA) for section 404, Clean Water Act purposes (Comment 5); "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). The current REIR/SEIS does not remedy these fatal flaws.	addresses the avoidance of waters of the United States as well as minimization of impacts to waters of the United States. A Compensatory Mitigation plan will be developed to demonstrate that the unavoidable impacts are fully mitigated such that there is no loss of function or value of waters of the United States.
2491	6	The undersigned attempted through a FOIA request to obtain specific information provided to the Army Corps by the project applicants, but the request for this information between two public agencies was denied [Footnote 18: September 30, 2015, see correspondence A. L. Faustino District Counsel to Patricia Schifferle regarding Freedom of Information Act Request FA-15-0201 (Documents and Comments Related to BDCP_DHCCP, DCE or Cal Fix for the Water Tunnels Diversion Project]. Thus, the following information necessary to comply with federal statute remains hidden from the public and the piecemeal approach to providing such fundamental project information leaves the public and decision makers in the dark regarding the full impacts from the proposed project and the alternatives. The identified deficiencies include but are not limited to: 1. A detailed hydraulic study per Corps' standards for Section 408 NEPA 2. A detailed level of engineering design, as well as a detailed level of analysis related to effects to the Corp's civil works projects and indirect hydraulic effects.	The EIR/EIS is for the decision-making of Reclamation and DWR to adopt a project. USACE's decision-making under the Clean Water Act and Rivers and Harbors Act to permit the project, once selected and adopted, may be supported by supplemental documentation under NEPA specifically for USACE, as disclosed in the EIR/EIS (Appendix 1F). The lead agencies acknowledge that additional information may be needed to address USACE's need for detailed levee designs for the purpose of its Section 408 compliance process. Even though the lead agencies may need to prepare additional environmental documentation, the lead agencies have analyzed the whole of the project as is required under CEQA. Also see Master Response 8.
2491	7	Applying for permits prior to an approved project for a pre-determined project outcome clearly indicates bias on the part of the lead agency to a pre-determined outcome. A 408 authorization and NEPA compliance is needed and in turn must be approved under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act, but this is not possible until the 408 authorization is obtained. The Central Valley Project is operated as a whole. The public and decision makers need the complete environmental impact picture prior to any decision regarding the LEDPA alternative.	It is acknowledged that the project will require Clean Water Act and Rivers and Harbors Act permits via the USACE, and that USACE policy dictates that Section 408 permission is required for Section 404 permit issuance. DWR and Reclamation have engaged USACE in pre-application coordination for Section 408 permission, and have agreed that future supplemental technical information and NEPA documentation may be required for USACE's decision-making relative to the Clean Water Act and Rivers and Harbors Act. However, the EIR/EIS analysis identifies and brackets the anticipated impacts under USACE's regulatory authority.
2491	8	On August 26, 2014, the U.S. Environmental Protection Agency (EPA) issued its 40-page review of the Draft BDCP EIS finding in BDCP's case that: "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). 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]	To review responses to comments submitted by the U.S. Environmental Protection Agency during the 2013 and/or 2015 comment periods, please refer to the index of commenters to find the appropriate letter number(s).

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		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." (Id.). "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 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.). In FOIA documents provided by the National Marine and Fishery Service, it is apparent that similar warnings to the project applicants regarding impacts to critical habitat, endangered species and required temperatures have been ignored in the REIR/SEIS, leaving mitigation measures and compliance with existing ESA Reasonable and Prudent Alternative up to some future date [Footnote 19: See DOC-NOAA-2015-001768 to Patricia Schifferle found at: https://foiaonline.regulations.gov/foia/action/public/view/request?objectId=090004d2808890c5].	
2491	9	Our organizations [Planning and Conservation League, et al.] have already communicated several times over the years with BDCP officials about the failure to develop a range of reasonable alternatives in the BDCP process [Footnote 20: This letter follows previous comments from the undersigned groups including Friends of the River comment letter of May 21, 2014, joint May 28, 2014 and joint September 4, 2014 comment letters focused on the failure of the BDCP Draft plan and Draft EIR/EIS to identify and evaluate a range of reasonable alternatives that are the declared "heart" of both the NEPA and CEQA required EISs and EIRs. A detailed evaluation of the Draft EIR/EIS's inadequate alternatives analysis was provided by the EWC in its comment letter of June 11, 2014, accessible online at http://ewccalifornia.org/reports/bdcpcomments6-11-2014-3.pdf.]. Instead of complying with the Delta Reform Act, the ESA, the Clean Water Act, and applying the public trust doctrine, all of the so-called Delta Water Tunnels alternatives involve taking freshwater -- water essential to the health and beneficial uses of the Sacramento-San Joaquin Estuary and San Francisco Bay -- before the water reaches the estuary. Taking this essential water and adding additional fish-grinding pumps on the Sacramento River (in addition to the southern Delta pumps which will still operate) , while exacerbating fish kills, damaging flows, and degrading temperatures, water quality, and water supply to over 5 million people residing in surrounding municipalities and water dependent industries, is not authorized under the Central Valley Project.	Please refer to Master Response 31 for a response related to the Delta Reform Act and the Delta Plan. Endangered Species Act and the associated biological opinions (see Chapters 5 and 11), and other federal and state statutes and regulations. See Master Response 4 regarding the range of alternatives, Master Response 31 regarding compliance with the Delta Reform Act, and Master Response 14 regarding water quality. The proposed project, Alternative 4A, will not affect water temperatures. The NDD will include a state-of-the-art screen with associated operational criteria, including sweeping and approach velocities protective of smelt and salmonids, and are located outside the main range of Delta Smelt and longfin smelt. The reduced use of the south Delta exports would substantially reduce entrainment of all fish. The effects on flows are detailed in Final EIR/EIS ,Chapter 5. The effects on fish are detailed in Final EIR/EIS, Chapter 11.
2491	10	The narrow purpose of the Tunnels Project to promote the delivery of imaginary 'paper water' to south of the Delta contractors first, above all other users, also will have significant financial impacts that have not been disclosed. 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. [Section] 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." [Section] 1502.9(a). The Responsible Exports Plan and variants on it must be among those alternatives	The 2013 DEIR/DEIS included 15 conveyance alternatives. The 2015 RDEIR/SDEIS addressed another three alternatives. This does not include a vast number of alternatives evaluated, see the Final EIR/EIS, Appendix 3A.. Please see Master Response 4 regarding the alternatives development. The water transfers considered in the document refer only to "real water," that is water that is new to the system as a result of the transfer mechanism. Please also refer to Master Response 43 regarding water transfers. Please see Master Response 46 regarding why recirculation is not required.

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		in a new Draft EIR/EIS for BDCP that helps to disclose, sharpen and clarify the issues [Footnote 21: The EIS alternatives section is to "Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated." [Section] 1502.14(a).].	
2491	11	Reclamation and DWR 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. [Section] 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 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, Draft EIR/EIS, and RDEIR/SDEIS [Footnote 22: In California v. Block, 690 F.2 753, 765-769 (9th Cir. 1982), the project at issue involved allocating to wilderness, non-wilderness or future planning, remaining roadless areas in national forests throughout the United States. The court held that the EIS failed to pass muster under NEPA because of failure to consider the alternative of increasing timber production on federally owned lands currently open to development; and also because of failure to allocate to wilderness a share of the subject acreage "at an intermediate percentage between 34% and 100%." 690 F.2d at 766. Like the situation here where the BDCP agencies claim a trade-off involved between water exports and Delta restoration (RDEIR/SDEIS ES 4-6), the Forest Service program involved "a trade-off between wilderness use and development. This trade-off however, cannot be intelligently made without examining whether it can be softened or eliminated by increasing resource extraction and use from already developed areas." 690 F.2d at 767. Here, likewise, trade-offs cannot be intelligently analyzed without examining whether the impacts of alternatives reducing exports can be softened or eliminated by increasing water conservation, recycling, and eventually retiring drainage-impaired agricultural lands in the areas of the exporters from production. Accord, Oregon Natural Desert Assn. v. Bureau of Land Management, 625 F.3d 1092, 1122-1124 (9th Cir. 2010) (EIS uncritical alternatives analysis privileging of one form of use over another violated NEPA). Here, the BDCP alternatives analysis has unlawfully privileged water exports over protection of Delta water quality, water quantity, public trust values, and ESA values.].	The BDCP/ California WaterFix EIR/EIS evaluates 18 action alternatives. The action alternatives were selected through a three-step screening process and documented in Appendix 3A, Identification of Water Conveyance Alternatives- Conservation Measure 1, of the 2013 Draft EIR/EIS. The lead agencies believe that the EIR/EIS meets CEQA and NEPA requirements to evaluate a range of alternatives. For more information regarding alternatives to the proposed project please see Master Response 4. The alternatives included in the 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 during time of preparation of the EIR/EIS. 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 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 to that document thoroughly explain the process used to develop the alternatives, and explain why certain potential alternatives were considered but ultimately rejected by the Lead Agencies. The Final EIR/EIS, along with many other documents developed through the project planning (e.g., engineering, economic, and other technical studies) and other environmental compliance processes (e.g., Endangered Species Act, Clean Water Act, and water rights compliance), will serve as the basis for the Federal and State Lead Agencies' review and consideration of the proposed project. For additional information regarding the scoping process and selection of alternatives for evaluation in the EIR/EIS, please see Master Response 4. For additional information regarding water quality, please see Master Response 14. For additional information regarding the public trust, please see Master Response 13.
2491	12	The fundamental flaws in the alternatives sections in the BDCP Draft EIR/EIS, Chapter 9 of the BDCP plan, and the RDEIR/SDEIS, have led to NEPA and CEQA documents "so fundamentally and basically inadequate and of a summary nature that meaningful public review and comment were precluded." 40 C.F.R. [Section] 1502.9(a).	This comment is a general opinion about the adequacy of alternatives in the BDCP and EIR/EIS. No specific comment about how alternatives are inadequate is provided. However, the lead agencies have complied with CEQA and NEPA and have adequately discussed and analyzed a reasonable range of alternatives. For additional information regarding alternatives development, please refer to Master Response 4.
2491	13	Least cost alternatives presented in EWC [Environmental Water Caucus]'s Plan have been completely ignored so far by Reclamation and DWR. These alternatives fit into Congressional directives under the Central Valley Project Improvement Act to follow the "Least-Cost CVP Yield Increase Plan." Additionally these alternatives save ratepayer and taxpayer money while fitting the EPA's and the SWRCB's calls for alternatives that would increase freshwater flow through the Delta, as well as the Army Corps' call for an acceptable alternatives analysis. It is time to include increasing freshwater flows through the Delta by reducing exports among the range of reasonable alternatives required by law, and presented to the public for comment. Consideration of this alternative approach is imperative. Extinction of species is forever.	Section 3408(j) of the CVPIA requires the submittal of a least-cost plan to increase the yield of the CVP by the amount dedicated to fish and wildlife purposes under the CVPIA. Neither the CVPIA nor subsequent legislation authorizes implementation of the least-cost plan or requires consistency with the least-cost plan. The EIR/EIS is an independent effort separate from the CVPIA. The EIR/EIS evaluates the potential impacts of 18 action alternatives- far more than most CEQA/NEPA documents. Furthermore, these alternatives were selected from a lengthy screening process that looked at far more alternatives for potential inclusion in the EIR/EIS. Appendix 3A of the Draft EIR/EIS provides explanation of how the alternatives were selected. For more information regarding alternatives to the proposed project please see Master Response 4.

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			With regard to USACE's call for an acceptable alternatives analysis, DWR is working with USACE in developing an alternatives analysis specific to their Clean Water Act decision-making and determination of the Least Environmentally Damaging Practicable Alternative (LEDPA).
2492	1	Antioch has pre-1914 appropriative water rights. The City of Antioch, located along the San Joaquin River in the western portion of the Sacramento and San Joaquin River Delta ("Delta"), is one of the oldest towns in California. Since the 1860s, Antioch has obtained all or part of its freshwater supply directly from its intake on the San Joaquin River (and from the tributary flow of the Sacramento River) pursuant to a pre-1914 appropriative water right with a priority of at least 1868.[footnote#1: Antioch has vested adjudicated pre- 1914 water rights to water from the San Joaquin River as well as to the tributary flow of the Sacramento River via Georgiana and Three Mile Sloughs. This was determined as a matter of law by the California Supreme Court. Note also that information presented demonstrates that waters at Antioch prior to about 1918 were historically fresh, not saline.] Troublingly, the WaterFix determines that the City's use of its own water rights is sporadic. [footnote#2: The RDEIR states that "the use of seasonal intakes at these locations is largely driven by acceptable water quality, and thus has historically been oppmtunistic. Opportunity to use these intakes would remain, and the predicted increases in bromide concentrations at Antioch and Mallard Slough would not be expected to adversely affect MUN beneficial uses, or any other beneficial use, at these locations." [See, for example, 4.3.4-9 of Chapter 4] This conclusion is in fact absolutely false and the Department of Water Resources knows this is false. The City's water rights are used to the fullest extent possible each year that water quality permits. While the number of days the City has been able to use its water rights have declined over the past 100 years, these water rights remain critical and necessary to the City's ability to provide drinking water to its population of over 100,000. The City has a present contract with DWR that compensates the City for the purchase of substitute water due to the water quality impacts of the State Water Project. However, that contract reimburses for only 1/3 of cost to purchase water and expires in 2027. If the City's ability to take water is further reduced due to adverse impacts from the WaterFix project, there could be significant financial impacts to City.	The impact assessment for bromide presented in Final EIR/EIS Chapter 8, Water Quality, Impact WQ-5 does not address water rights or contracts. The impact assessment is focused on effects to beneficial uses, primarily municipal and industrial uses. The assessment acknowledges the City's diversion and that water is diverted when suitable. A factor in determining impacts to bromide at the City's intake was the change in frequency of specified thresholds. In addition, changes in concentrations during periods when water quality would be most likely to be suitable for diversion (early spring, Table 26 in Appendix 8E, Bromide) was evaluated, which is a more appropriate comparison for assessing impacts at the intake than comparing long-term average concentrations at the intake, which are shown to be lower than the No Action Alternative (Table 22 of Appendix 8E) and on the order of 3,000 ug/L, well above the specified thresholds. The changes in bromide at the intake location were determined to not be of sufficient magnitude to preclude continued use of the intake such that the beneficial use would be adversely impacted. Please see also Master Response 26 for a discussion of effect on existing upstream water rights and Master Response 32 for a general description of SWRCB regulation of the water rights held by DWR for the operations of the SWP and by Reclamation for the operations of the CVP.
2492	2	The WaterFix project has not been defined, modeled, or evaluated adequately. The WaterFix project has not modeled the actual proposed project, and there are significant differences between what has been modeled and the actual project as proposed (e.g., tidal marsh area); proposed project operations have not yet been adequately defined; and the sensitivity analyses relies only on CALSIM and does not carry through to DSM2. The proposed baseline is also incorrect. As a result, it is not possible to determine the full nature and extent of potential project impacts. Prior environmental analysis indicated that the construction of large areas of tidal marsh would end up decreasing salinity in the Western Delta, but tidal marsh restoration is not part of the present proposed project, and so, actual salinity will likely be higher than modeled salinity.	Modeling was updated for the Final EIR/S; the update included elimination of tidal habitat restoration areas to isolate the effects of the water conveyance facilities on Delta water quality. Please refer to Final EIR/EIS Appendix 5A and Master Response 30 for additional information regarding modeling conducted for the RDEIR/SDEIS and Final EIR/S for WaterFix alternatives. Please review Master Response #1 for Environmental Baselines.
2492	3	The WATERFIX project will decrease the City of Antioch's ability to use water at the City's intake. It is without question that the WaterFix project will further impact the City's ability to provide a reliable water supply to its citizens. As shown in Appendix A [coded seperately] DWR's model runs describing the proposed project show significant increases in salinity at the City's drinking water intake, and DWR's modeling shows conclusively that most salinity impacts are due to the project and not to sea level rise or other	The modeling data provided in the Final EIR/EIS Chapter 8, Water Quality and supporting Chapter 8 appendices allow for determining effects of the project alternatives separately from climate change through comparison of the project alternative results to the No Action Alternative results. The City's specific concerns regarding increases in salinity-related parameters are addressed further in responses to comments 2492-15through 2492-18.

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		factors.	
2492	4	The WaterFix project will cause significant impacts to recreation and the City of Antioch's economy. As presently proposed, the WaterFix project will result in increased salinity in the western Delta, including at Antioch. Antioch's unique historic and cultural legacy within the Delta has been as a freshwater location for well over 100 years. Antioch is known as the gateway to the western Delta providing freshwater boating, recreation, and fishing. The WATERFIX has a detrimental effect on this sector of Antioch's economy. The Project fails to adequately address the long-term impacts of the WaterFix Project on recreation and fishing at Antioch. Further, the Project fails to address any impacts that will be caused by higher salinity to public trust resources at Antioch, such as impacts to aesthetics, aquatic plant and wildlife, and navigation. See Appendix B [coded seperately] for further details.	The preferred alternative, Alternative 4A, would not cause significant impacts for electrical conductivity (EC) related to objective exceedance in the Sacramento River at Emmaton, would not cause substantial degradation in the western Delta due to increased chloride concentrations, and would have less water quality effects in the western Delta related to EC and fewer exceedances of the fish and wildlife EC objective between Prisoners Point and Jersey Point. After introduction of mitigation measures, Alternative 4A, would result in less than significant impacts for EC and chloride. Please also refer to Final EIR/EIS Chapter 8, Water Quality, regarding salinity or electrical conductivity impacts near Antioch, and Master Response 14 regarding water quality and salinity. Therefore, Alternative, 4A, would be anticipated to result in less than significant effects on fish and water quality related to salinity, which would result in less than significant effects on fishing from a recreation perspective. Please see Appendix 5F regarding submerged aquatic vegetation and fish populations. Please see Master Response 17 regarding effects on fish and wildlife. Please see also Chapter 16 of the Final EIR/EIS and RDEIR/SDEIS Appendix A (Socioeconomics) for discussion of potential effects on Delta communities. Please see also Chapter 15 and Appendix 15B for discussion of impacts to recreation and Master Response 24 for information on the Delta as a Place. Antioch is approximately 8 miles away from the nearest project alignment (western alignment Alternatives 1C, 2C, and 6C) and project feature associated with Alternative 9-the proposed operable barrier across Three Mile Slough at Brannan Island State Recreation Area. Therefore, there would be no project features that would directly affect visual resources associated with Antioch and, as such, Antioch is out of the affected area for visual resources. Similarly, Antioch is out of the affected area for indirect aesthetic impacts because there would be no indirect impacts associated with proposed project due to effects upon visual resources. Increases in salinity would not result in visual changes to the appearance of water at Antioch (i.e., the water associated with the San Joaquin River would look the same). Also, increases in salinity might affect recreation associated with the area; however, it would not alter the appearance of recreational resources and recreational areas and amenities would look the same. Boating and fishing would still occur in the same fashion, but recreational fishing would likely shift from freshwater fish to fish that prefer higher salinities. However, as discussed above, it is anticipated that there would be less than significant effects on fish and water quality related to salinity. Overall, there would be no direct or indirect impacts to aesthetic resources at Antioch that could result from changes to water quality associated with the proposed project.
2492	5	In addition, the WaterFix project broadly concludes that there will be no harm to downstream water rights users based upon faulty and incomplete modeling and promises to conform to state mandated water quality standards. However, as described in the attached documents, [coded separately] the relied upon modeling is flawed. The modeling performed is for a different alternative (Alternative 4 from the original WaterFix project, rather than Alternative 4a which is the preferred alternative for the WaterFix Project). The Applicants have not updated to model the current project, and there are significant differences (e.g., amount of tidal restoration, salinity compliance points, etc.) between the model runs and the preferred alternative. The RDEIR fails to provide adequate detail as to how the project will operate. Project operations are proposed to be determined during an "adaptive management" process, but this process is not adequately described as to how it will work , or within what bounds. The WaterFix project underestimates the impacts of the preferred alternative because it continues to use the incorrect baseline condition, which the City and others have previously pointed out. Therefore, relying on the present modeling to	Please refer to Final EIR/EIS Appendix 5A and Master Response 30 for additional information regarding modeling conducted for the RDEIR/SDEIS and Final EIR/S for the alternatives. Discussion of the environmental baseline used in the analysis is included in Master Response 1. Please see also 28 for information on operational criteria and Master Response 33 for adaptive management and monitoring.

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		demonstrate a "no harm/no injury" project impact is insufficient to meet the standards required to approve the RDEIR/SDEIS and the WaterFix Project.	
2492	6	No mitigation is detailed to address impacts at Antioch. As noted above, the WaterFix projects fails to adequately address the project's impacts on water quality and water flow in the Delta. This leads to the incorrect conclusion that the project will not have significant impacts to the City and its water supply, and so, no mitigation is proposed. However, as described in detail in the attached technical appendices, [coded separately] the project will in fact have a broad and adverse impact on the City's water supply. If the project is approved, there is a critical need to mitigate that project's impacts to the City's water supply to over 100,000 citizens.	Please see Master Response 14 regarding the approach to assessing water quality impacts at the Antioch and Contra Costa Water District intakes, including the use of averaging periods to interpret modeling results. No water quality-related mitigation is provided for Antioch water quality, because water quality impacts were determined to be less than significant at that location for the constituents assessed in detail.
2492	7	The WaterFix project will result in unacceptable impacts to the City. In summary, our review of the WaterFix project, associated environmental documents, and the model results describing the proposed project indicate that the impacts of the RDEIR cannot be determined from the modeling analysis or documentation provided to date. Contrary to the conclus ions in the RDEIR, our analysis indicates Project will result in unacceptable impacts to the City and its over 100,000 residents. No mitigation is envisioned to address these impacts. As a result, the changes induced by the WaterFix project are expected to result in serious detrimental impacts to the City's water supply, financial condition, and quality and way of life.	This comment is a general opinion and conclusions about the impacts on local jurisdictions. The commenter does not offer any evidence on how the project would result in significant impacts related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.. Please see also response to comment 2492-4.
2492	8	Antioch's water rights. The City of Antioch is located along the San Joaquin River in the western portion of the Sacramento and San Joaquin River Delta (Delta). Since the 1960s, Antioch has obtained all or part of its freshwater supply directly from its intake on the San Joaquin River, [footnote# 1: Much of the water in the western Delta (including the City's water supply) comes from the Sacramento River. Historically, significant amounts of Sacramento River water flowed into the San Joaquin River east of Antioch at Three Mile and Georgiana Sloughs. Sacramento River water also reaches Antioch where the river merges with the San Joaquin River just west of the City, and via tidal action.] pursuant to a pre-1914 appropriative water right with a priority of 1867.[footnote#2: Antioch has vested pre-1914 water rights to water from the San Joaquin River, as well as to the tributary flow of the Sacramento River via Georgiana and Three Mile Sloughs. This was determined as a matter of law by the California Supreme Court in the case of Town of Antioch v. Williams Irrigation District et al. (1922) 188 Cal. 451,455.] Contrary to incorrect statements contained in the RDEIR/SDEIS, Antioch continues to obtain much of its water supply from its own diversion facility. Footnote#3: The City of Antioch uses water from its intake as its main source of supply when salinity at the intake is below specified thresholds. The 2013 EIR/EIS stated that Antioch's intake is "seasonal" and used "infrequently" (EIR/EIS Chapter 8 at p. 8-185, lines 13-14), which is not true. Rather than address the impact of reduced water quality on the City's ability to use water at its intake, the 2015 RDEIR/SDEIS states, for example (see p. 4.3.4- 10), that "the use of seasonal intakes at Antioch and Mallard Island is largely driven by acceptable water quality, and thus has historically been opportunistic, and opportunity to use these intakes would remain. Thus, these increased bromide concentrations would not be expected to adversely affect MUN beneficial uses, or any other beneficial use, at these locations." Thus, it appears that the RDEIR/SDEIS both misrepresents the facts with respect to Antioch's use of its intake, and further downplays the effect of any worsening of water quality on the City's ability to use its intake.] Antioch has a substitute water agreement with the Department of Water Resources (DWR) that partially compensates the City for water purchases from the Contra Costa Water District. That	Please see response to comment 2492-1.

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		agreement currently has a 15-year term, which will end at approximately the same time the BDCP is anticipated to begin operations. [footnote#4: On October 29, 2013, the term of the agreement between the State of California and the City of Antioch was extended through September 30, 2028.]	
2492	9	The Proposed Project was not modeled. The RDEIR/SDEIS identifies Alternative 4A, also known as the "WaterFix," as the preferred alternative. However, Alternative 4A was not explicitly modeled. Instead, the environmental impacts of Alternative 4A were assessed using modeling of Alternative 4 (first presented in the 2013 Draft RDEIR/SDEIS) and a limited sensitivity analysis. Although the RDEIR/SDEIS states that "Lead agencies have determined that they may reasonably rely on modeling conducted for Alternative 4 to accurately predict the environmental effects of Alternative 4A," [footnote#5: See New Alternatives: Alternatives 4A, 2D and 5A (Chapter 4 of the Bay Delta Conservation Plan/California Waterfix RDEIR/SDEIS) at page 4.1-43, lines 17–19 ("Physical Modeling").] the differences between Alternative 4 and Proposed Project Alternative 4A are significant, as shown in Table 1 [ATT:1]. Three of the differences between the models—the amount of tidal restoration, the salinity objective compliance location, and the operation of the Suisun Marsh salinity control gates—have direct and immediate impacts on the salinity levels predicted to occur at Antioch's intake. In addition, salinity within the Delta often behaves in a non-linear fashion, such that without being modeled, it is not possible to reliably infer the effects of multiple changes in model assumptions on model output. In summary, the differences between Alternative 4A and Alternative 4 are significant enough that the environmental impacts of Alternative 4A cannot be determined based on the existing modeling, as detailed below.	The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS. Please refer to Final EIR/EIS Appendix 5A and Master Response 30 for additional information regarding modeling conducted for the RDEIR/SDEIS and Final EIR/S for the alternatives.
2492	10	[ATT1: Table 1. Comparison of modeled conditions and conditions of proposed project Alternative 4A]	This comment describes a table in an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDIER/SDEIS or the 2013 DEIR/EIS that are not already addressed I comment referencing the attachment or the Final EIR/EIS.
2492	11	The appropriate timeframes for the Proposed Project were not evaluated. The RDEIR/SDEIS indicated that two baselines were used in the current analysis: the "Existing Conditions" baseline defined in the 2013 Draft EIR/EIS was used for the CEQA impact analysis, and the "No Action Alternative Early Long-Term" (NAA-ELT) scenario was used for the NEPA impact analysis. The impacts of the proposed project were evaluated quantitatively only in the Early Long-Term (ELT) timeframe. Long-term impacts of the proposed project were evaluated only qualitatively, even though the 2013 EIR did evaluate Alternative 4 (the 2013-proposed project) for a Late Long-Term (LLT) timeframe quantitatively, and even though the project documents note that the project "would continue indefinitely." [footnote#6: The RDEIR/SDEIS states, on p. 4.1-42, "The same 'Existing Conditions' baseline defined in the Draft EIR/EIS applies to Alternatives 4A, 2D, and 5A, for the purposes of the CEQA impact analysis… Because Alternatives 4A, 2D, and 5A, contemplate a shorter permit period for project implementation than the other alternatives, the new "No Action Alternative Early Long-Term" (No Action Alternative ELT) is used as the NEPA point of comparison for these alternatives. The No Action Alternative ELT is described and analyzed in Section 4.2. However, because the project would continue indefinitely, the analysis qualitatively examines impacts at the Late Long-Term timeframe for Alternative 4A, 2D, and 5A, but does not make a CEQA or NEPA conclusion based off the No Action Alternative LLT	Please refer to Final EIR/EIS Appendix 5A and Master Response 30 for additional information regarding modeling conducted for the RDEIR/SDEIS and Final EIR/S for the alternatives. Please see Master Response 1 for a discussion of the environmental baselines. Please see also Master Response 14 for discussion of water quality and response to comment 2492-1.

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		baseline" (emphasis added).] As detailed below, the City of Antioch's consultants previously evaluated water quality impacts for the LLT using DSM2 model runs provided by DWR, and those model results at LLT (see Attachment B [ATT4]) showed significant water quality impacts at LLT, which would have significant impacts on the City's ability to utilize its intake. Because the project "would continue indefinitely," a quantitative analysis of the long-term impacts of the project is needed.	
2492	12	The baseline condition used to evaluate the BDCP Proposed Project is flawed and inappropriate. The RDEIR/SDEIS indicated that two baselines were used in the current analysis: the "Existing Conditions" baseline defined in the 2013 Draft EIR/EIS was used for the CEQA impact analysis, and the "No Action Alternative Early Long-Term" (NAA-ELT) scenario was used for the NEPA impact analysis. The 2013 Draft EIR/EIS used a model run previously called "EBC1" to simulate the existing condition, and the 2015 RDEIR/SDEIS continues to use the same "Existing Conditions" model run (i.e., "EBC1"). As noted by the City of Antioch and its technical consultants in prior documentation (see Attachment A [ATT8]), the EBC1 existing conditions scenario used to evaluate project impacts is flawed and does not accurately represent existing conditions with respect to salinity at Antioch. By contrast, a second existing conditions model run, called "EBC2," was also conducted and was available for use at the time the 2013 Draft EIR/EIS was prepared, and more accurately represents existing conditions.[footnote#7: The March 2013 Revised Administrative Draft used both EBC1 and EBC2, while both the 2013 Draft EIR/EIS and the 2015 RDEIR/SDEIS use only the EBC 1 scenario, which has been renamed as the "existing conditions" scenario.] The primary difference between EBC1 and EBC2 is whether Delta outflows are managed to achieve the Fall X2 provision (hereafter referred to as "Fall X2") of the 2008 U.S. Fish and Wildlife Service Biological Opinion (the "2008 BiOp"): the EBC1 scenario does not operate to Fall X2, whereas the EBC2 scenario does operate to Fall X2. As described in the City's prior comments, the City's consultants obtained from DWR the modeling results from the Delta Simulation II (DSM2) model, which was used to simulate hydrodynamics and water quality throughout the Delta for a range of model scenarios. Model results for EBC2 agree well with salinity measurements made near Antioch. By contrast, the EBC1 scenario (the 2015 and 2013 "Existing Conditions" scenario) showed poor agreement, particularly in the fall of 1974, 1975, 1978, 1980, 1984, and 1986, or 6 out of the 17 years modeled, when modeled salinity values were significantly greater than measured salinity values. [footnote#8: Note that the time period evaluated in the RDEIR/SDEIS appears to have changed. Whereas the 2013 EIR/EIS evaluated the full modeled period, the current 2015 RDEIR/SDEIS appears to have evaluated a shorter time period, as indicated on p. ES-26: "Chloride modeling results were updated: New calculation of exceedances of the 150 mg/L chloride objective were prepared based on calendar years 1976-1990 of the original modeled results (i.e., 15 years instead of 16) because the objective applies on a calendar year basis." The City's prior analysis evaluated model results provided by DWR for the 1974–1991 time period.] To further illustrate the impacts of selecting a biased and incorrect baseline, Table 2 [ATT2] shows the conditions that were modeled for each scenario and the number of usable days [footnote#9: Consistent with the City's Agreement with DWR, water at the City's intake was defined as usable when salinity is below 250 ppm chloride, equivalent to an electrical conductivity of about 976 µS/cm. This conversion was made using the relationship between chloride concentration and EC for "normal" years in Guivetchi (1986). See Attachment C	Although Alternative 4A has been identified as the preferred alternative, Alternative 4 remains a viable option. For further information about environmental baselines, please see Master Response 1. For background on alternatives development, please see Master Response 4. Please refer to Final EIR/EIS Appendix 5A and Master Response 30 for additional information regarding modeling conducted for the RDEIR/SDEIS and Final EIR/S for the alternatives. For additional information on water quality refer to Final EIR/EIS Chapter 8 and Chapter 8 appendices and Master Response 14.

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		for detail.] for each scenario. For example, the incorrect "Existing Conditions" baseline (EBC1) predicts that, for the modeled time period of 1974-1991, usable water will be available for 148.6 days, while the correct "Existing Conditions" baseline (EBC2) predicts that usable water will be available for 163.9 days; thus, the incorrect choice of the baseline conditon means that the number of usable days is underpredicted by about 15.3 days per year (more than 9%), or about 245 days during the simulation period. The failure to implement a Fall X2 condition in the "Existing Conditions" model runs artificially biases the model results with respect to the current condition at Antioch's intake, and in effect gives the Proposed Project an unwarranted "free pass" for 245 days during the 16-year period. Failing to include Fall X2 in the Existing Conditions scenario makes the baseline condition appear to be more saline than it actually is, so that the potential impacts of the BDCP appear to be significantly smaller than they would be with an appropriate baseline.	
2492	13	[ATT2: Table 2. Description of available baseline scenario model runs, together with DSM2 model results showing the number of days Antioch will be able to use water at its intake under EBC1, EBC2, and NAA ELT scenarios (1974–1991) by year type]	This comment describes a table in an attachment to the comment letter. See response to comment 2492-12.
2492	14	Operations of the Proposed Project, Alternative 4A, are not defined. The RDEIR/SDEIS states that Operations Scenario H3+, which is bounded by Operations Scenarios H3 and H4 from the 2013 Alternative 4, is representative of the operations proposed under Alternative 4A. As with Alternative 4 Operations Scenarios H3 and H4, the operations scenario described for the Proposed Project includes both Fall X2 operations and criteria for spring outflow, bounded by the criteria associated with H3 and H4. However, these operations will be modified via the use of an Adaptive Management and Monitoring Plan (AMMP). The AMMP is to be implemented to develop additional science during the course of project construction and operation, to inform and improve conveyance facilities operational limits and criteria, and the AMMP is anticipated to result in modifications to operations of the North Delta bypass flows, South Delta export operations, head of the Old River barrier operations, spring Delta outflows, and the Rio Vista minimum flow standard in January through August. [Footnote#10: RDEIR/SDEIS at p. ES-18.] No operational "limits" are provided in the RDEIR/SDEIS that would inform the City of Antioch regarding how the project may be operated, and no additional model runs are provided that would indicate the water quality impacts that may result from modified operations. Thus, the operational conditions described for Alternative 4A are essentially unconstrained, providing an undefined degree of flexibility that can be expected, based on model runs for Alternative 4 Operations Scenarios H1 and H2 (which do not include Fall X2) to result in significant impacts to water quality at Antioch's intake. Further, the criteria for some operational parameters, such as winter and summer outflow, are worded vaguely: "Flow constraints established under D-1641 will be followed if not superseded by criteria listed above." [Footnote#11: RDEIR/SDEIS at p. 4.1-10, regarding the operations parameter "winter and summer outflow."] It is difficult to discern the proposed water operations flow criteria with this lack of clarity in description. Particularly noteworthy to the City is the fact that the very limited discussion of operational flexibility that does exist indicates that operations will be modified based solely on impacts to fish species, including critically important operations parameters for both spring outflow (to be managed for longfin smelt) [footnote#12: For example, p. 4.1-9 of the RDEIR/SDEIS indicates that, for spring outflow, "To ensure maintenance of longfin smelt abundance,	This Final EIR/EIS includes updated modeling for the proposed project, Alternative 4A, which includes Fall X2 assumptions for Delta smelt and spring outflow criteria to protect the longfin smelt (see Chapter 5 and associated appendices). Actual operations at project initiation will likely range between operational scenarios H3 and H4 and will be determined based on monitoring and research to address uncertainties about spring outflow for longfin smelt fall outflow for delta smelt. However, the EIR/EIS analyzes impacts resulting from all operational scenarios, including scenarios H1-H4 for Alternative 4 and scenarios H3 and H4 for Alternative 4A. These operational scenarios (H1-H4 for Alt. 4 and H3-H4 for Alt. 4A) generally represent the limits of potential operations. Please refer to Chapter 3, Description of Alternatives for an updated description of the Collaborative Science and Adaptive Management Program under the proposed project and Master Response 33 which addresses comment related to the proposed adaptive management and monitoring program. In regards to winter and summer outflow requirements, operations under the proposed project will be consistent with D-1641 standards in the Delta. In some instances, the new operating criteria (described in Chapter 3, FEIR/EIS) will provide even greater flow protections compared to the minimum flow requirements under D-1641. Furthermore, operations during the entire year will be required to comply with all applicable Delta water quality standards, including D-1641 and any new requirements that may implemented from the Water Quality Control Plan Updates. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.

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		initial operations will provide a March-May average outflow bounded by the requirements of Scenario H2, which are consistent with D-1641 standards, and Scenario H, which would be scaled to Table 3-24 in Chapter 3, Section 3.6.4.2 of the Draft EIR/EIS… Adjustments to the criteria above and these outflow targets may be made using the Adaptive Management Process and the best available scientific information available [sic] regarding all factors affecting longfin smelt abundance."] and Fall X2 (to be managed for delta smelt). [footnote#13: For example, p. 4.1-9 of the RDEIR/SDEIS indicates that "September, October, November implement the USFWS (2008) BiOp Fall X2 requirements. However, similar to spring Delta outflow and consistent with the existing RPA adaptive management process, adjustments to these outflow targets may be made using the Adaptive Management and Monitoring Program described below and the best available scientific information regarding all factors affecting delta smelt abundance."] No mention is made of the importance of spring outflow and Fall X2 to water quality in the western Delta, and no indication is given that operations would be constrained to avoid a worsening of water quality in the western Delta. As detailed below, operations criteria are vitally important as a determinant of water quality at Antioch's intake. For this reason, the City requests that project proponents make a direct and binding commitment to operate the project in such a manner that water quality degradation in the western Delta is limited to the range evaluated in the RDEIR/SDEIS, or else full mitigation of any potential impacts from such operations. The Adaptive Management and Monitoring Program (AMMP) is undefined, and is likely to have adverse environmental impacts, including impacts to water quality. The AMMP is included within the RDEIR/SDEIS as a means to accommodate flexibility in the proposed project that is required due to the "considerable scientific uncertainty… regarding the Delta ecosystem, including the effects of CVP and SWP operations and the related operational criteria." [Footnote#14: RDEIR/SDEIS at p. 4.1-18, line 17.] It is well established that there is substantial uncertainty in the Delta ecosystem, and an adaptive management strategy is necessary. However, an adaptive management strategy should not be used as a means to circumvent project planning. Proposed Project Alternative 4A relies heavily on the AMMP to dictate changes in operation of water conveyance facilities, habitat restoration, and other factors during project construction and operation. The AMMP is a central component of Alternative 4A, yet remains almost wholly undefined. Beyond an introduction to basic principles of adaptive management, there is little discussion of how the AMMP will be implemented, nor does it appear that there will be a review process for the considerable changes that may be recommended as a result of the AMMP. Although the AMMP is described as a means of making adjustments to operations criteria, there is no discussion of how this iterative process will occur. In addition, no operational boundaries are defined with regard to its potential application of the AMMP within Alternative 4A. [footnote#15: See also the September 30, 2015, report of the Delta Independent Science Board, which noted at p. 5, "There is a very general and brief mention of the steps in the adaptive management process in Section 4 (p. 4.1-6 to 4.1- 7), but nothing more about the process… We did not find examples of how adaptive management would be applied to assessing—and finding ways to reduce—the environmental impacts of project construction and operation… To be effective in addressing unexpected outcomes and the need for mid-course corrections, an adaptive-management team should evaluate a broad range of actions and their consequences from the beginning, as plans are being developed, to facilitate the early	

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		implementation and effectiveness of mitigation activities." The Delta Independent Science Board report is attached to the City's comments as Attachment D.] The RDEIR/SDEIS indicates that "collaborative science and adaptive management will, as appropriate, develop and use new information and insight gained during the course of project construction and operation to inform and improve… the operation of the water conveyance facilities under the Section 7 biological opinion and 2081b permit…". [footnote#16: RDEIR/SDEIS at p. 4.1-18.] As with the discussion of project operations, the RDEIR/SDEIS appears to indicate that the only factor that will be considered in modifying operations will be impacts to fish. The City is concerned that an AMMP focused solely on fish will fail to consider the potentially substantial water quality impacts that could be induced by even modest changes to project operations. Considering the previous discussion, it is unreasonable and without foundation for the RDEIR/SDEIS to state, "For the purposes of analysis, it is assumed that the Collaborative Science and Adaptive Management Program (AMMP) developed for Alternative 4A would not, by itself, create nor contribute to any new significant environmental effects." [footnote#17: RDEIR/SDEIS at p. 4.1-18.]	
2492	15	Even given concerns with the modeling analysis, it is clear that water quality impacts are significant. As noted throughout these comments, there are significant differences between the 2013 Alternative 4 (which was modeled) and the Proposed Project (2015 Alternative 4A, which was not modeled). However, the 2013 EIR/EIS identified "significant and unavoidable" impacts with respect to chloride concentrations in the western Delta as a result of the implementation of Alternative 4 (the 2013 Proposed Project). [footnote#18: See prior comments submitted by the City of Antioch in Attachment A [ATT3], and p. 8-429 of the 2013 EIR/EIS.] Even though the current RDEIR/SDEIS envisions that Alternative 4A would use preliminary project operations based on Operations Scenarios H3 and H4 (which would have lesser impacts on salinity than Operations Scenarios H1 and H2), these scenarios were part of the original project modeling, and thus, the basis for a shift from "significant and unavoidable impacts" to "no significant impacts" is unclear. (In fact, effects on chloride concentrations are listed as "LTS," or "less than significant," for Alternative 4 in the RDEIR/SDEIS Executive Summary, [footnote#19: RDEIR/SDEIS at p. ES-43.] even though the same alternative was determined, using the same model runs, to have "significant and unavoidable" impacts to salinity in the western Delta in 2013; the basis for this change relative to findings for Alternative 4 in the 2013 EIR/EIS is also unclear.) As noted in previous comments (see Attachment A [ATT3]), the severity of impacts at Antioch's intake is concealed, because the RDEIR/SDEIS presents model results as daily, monthly, or yearly averages. Antioch's use of its intake does not rely on average salinity, but rather, on salinity measured at each instant in time. Thus, it is only through a detailed examination of model results that Antioch can evaluate the water quality impacts that the Proposed Project is expected to induce. In addition, the sensitivity analyses performed in support of the RDEIR/SDEIS appear to indicate significant increases in chloride concentrations in the western Delta, including at Antioch, under certain conditions. For example, the Supplemental Modeling for New Alternatives indicates that the Proposed Project (Alternative 4A, Operations Scenario H3) would cause increases in chloride concentrations at Antioch relative to the existing condition run (which, as noted above, is biased toward higher-than-actual salinity) in drought years during the months of March (19% higher), April (+25%), May (+22%), June	Please refer to Master Response 14 regarding the modeling conducted for the water quality assessments in the RDEIR/SDEIS and Final EIR/S for Alternatives 4A, 2D, and 5A. Regarding the Executive Summary, the impact call for Alternative 4 for chloride should have been shown as significant and unavoidable (SU), which was the impact call in Chapter 8, Water Quality, Impact WQ-11. Please refer to Master Response 14 regarding the use of monthly and annual averaging periods in the assessment of water quality impacts at Delta assessment locations relying on DSM2 modeling output. The drought period and long-term average modeled changes in chloride noted in the comment are one component of assessing whether chloride conditions under the alternative would rise to the level of triggering one of the significance thresholds in Section 8.3.2.3, Effects Determination, in Final EIR/EIS Chapter 8, Water Quality. An increase in concentration by a certain percent is not itself an adverse effect. The absolute concentration change in concentration is a consideration, as is the use of assimilative capacity, and the duration of the effect are also considerations as to whether beneficial uses would be adversely affected. And the comparison to the No Action Alternative is important to understand the effects of the alternative separate from climate change effects and increased water demands. Based on the modeled changes for the RDEIR/SDEIS, and updated modeling for the Final EIR/S, during many of the months of March through June (months highlighted in the comment), there would be little change or an improvement in chloride concentrations relative to the No Action Alternative (Final EIR/S Appendix 8G, Chloride, Table Cl-69), and there would be an overall improvement in the long-term average concentrations.

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		(+11%), July (+6%), August (+20%), and September (+14%). Similarly, in all year types during the 1976–1991 simulation period, salinity would increase in the months of March (+9%), April (+16%), May (+9%), June (+2%), and August (+9%). Even relative to the No Action Alternative-Early Long Term, salinity would increase at Antioch in nearly all of these months by as much as +15% (in August of drought years). [footnote#20: See RDEIR/SDEIS Appendix B at p. B-94.]	
2492	16	The City of Antioch is concerned about increases in bromide concentrations that will be caused by the Proposed Project. The RDEIR/SDEIS notes that "multiple interior and western Delta assessment locations would have an increased frequency of exceedance of 50 µg/L, which is the CALFED Drinking Water Program goal for bromide as a long-term average applied to drinking water intakes… These locations [include] San Joaquin River at Antioch… Similarly, these locations would have an increased frequency of exceedance of 100 µg/L, which is the concentration believed to be sufficient to meet currently established drinking water criteria for disinfection byproducts… The greatest increase in frequency of exceedance of 100 µg/L would occur at Franks Tract (6% increase) and San Joaquin River at Antioch (4-5% increase depending on operations scenario)." [footnote#21: RDEIR/SDEIS at p. 4.3.4-9. The RDEIR/SDEIS discussion regarding bromide states (incorrectly) that "the use of seasonal intakes at these locations is largely driven by acceptable water quality, and thus has historically been opportunistic. Opportunity to use these intakes would remain, and the predicted increases in bromide concentrations at Antioch and Mallard Slough would not be expected to adversely affect MUN beneficial uses, or any other beneficial use, at these locations."] Appendix B to the RDEIR/SDEIS presents the results of sensitivity studies showing estimated bromide concentrations at Antioch for "periods of historically acceptable water quality for withdrawal." The sensitivity studies show that bromide concentrations would increase significantly at Antioch; for example, in February through April of wet and above- normal year types, model analyses indicate that bromide concentrations are expected to increase from below the 100-µg/L threshold for both the Existing Conditions and the No Action Alternative-ELT scenarios to levels well above the 100-µg/L threshold for Alternative 4 Operations Scenarios H3 and H4, respectively. [footnote#22: See RDEIR/SDEIS Appendix B at p. B-87. Note that two methods were used to evaluate bromide concentrations (the "mass-balance modeling approach" and the "EC to chloride and chloride to bromide" modeling approach), and results from the two methods differ. However, 18 of 24 entries in Tables Br-5 and Br- 6 at RDEIR/SDEIS Appendix B at p. B-87 show predicted bromide concentrations for Alternative 4, Scenarios H3 and H4 (ELT) greater than 100 µg/L, with the highest value of 178 µg/L; only 6 of 24 entries for either the Existing Conditions or No Action Alternatives show concentrations greater than 100 µg/L. Despite differences in results obtained using the two methods, it is clear that bromide concentrations are expected to increase significantly and to exceed applicable thresholds a much greater percentage of the time.] Yet the RDEIR/SDEIS concludes that impacts due to bromide are "less than significant." [footnote#23: RDEIR/SDEIS at p. ES-43.] This conclusion is not credible.	Please refer to Master Response14 regarding the modeling conducted for the water quality assessments in the RDEIR/SDEIS and Final EIR/S for Alternatives 4A, 2D, and 5A. Regarding bromide, the increased frequency of exceeding the noted thresholds was one factor in the assessment. The comparison to the No Action Alternative is also important to understand the effects of the alternative separate from climate change effects. Regarding the San Joaquin River at Antioch, the increase in frequency of exceedance of the 50 ug/L threshold was shown to be go from 98% to 99% and the increase in the frequency of exceedance would go from 95% to 97% (Final EIR/S Appendix 8E, Bromide, Table 22). Further, the long-term average concentrations would decrease substantially (Final EIR/S Appendix 8E, Table 22). On a long-term average, bromide at these locations can be extremely high at the intakes (>3,000 µg/L at Antioch and >8,000 ug/L at Mallard Island), but during seasonal periods of high Delta outflow levels can be <300 µg/L, as the modeling results noted in the comment demonstrate. As stated in Bromide in Section 8.3.1.7, Constituent-Specific Considerations Used in the Assessment, source water with bromide between 100 µg/L and 300 µg/L is believed sufficient to meet currently established drinking water criteria for DBPs, depending on the amount of Giardia inactivation required. The impact conclusion was based on these considerations that the project alternatives would not preclude continued seasonal use of the intakes. See also response to comment 2492-1.
2492	17	Two differences between the model runs and the Proposed Project will have particularly significant impacts on salinity at Antioch's intake, and these are not disclosed in the RDEIR/SDEIS. The first is the impact of tidal marsh restoration. The model runs for the Proposed Project include 25,000 acres of tidal marsh restoration at the ELT timeframe and 65,000 acres of tidal marsh restoration at the LLT timeframe, but this restoration is not part of the Proposed Project (Alternative 4A includes only "up to 59 acres" of marsh restoration; see Table 1). Model runs were conducted in 2013 as part of the 2013 EIR/EIS process to	Please refer to Master Response 14 regarding modeling analyses conducted to support the RDEIR/SDEIS and Final EIR/EIS. Please refer to Final EIR/EIS Appendix 5A and Master Response 30 for additional information regarding modeling conducted for the RDEIR/SDEIS and Final EIR/S for the alternatives.

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		evaluate the impact of tidal marsh restoration on salinity levels within the Delta; those model runs determined that tidal marsh restoration under ELT conditions is expected to decrease tidally averaged EC (surrogate for salinity) by 5.49% at Antioch, compared to the base case. [footnote#24: See Figure 6-26 in the 2013 Draft BDCP EIR/EIS Appendix 5A, Section D, Attachment 2, which presents the percent increase in tidally averaged EC for the ELT scenario compared to baseline for September 2002.] By contrast, because the proposed Alternative 4A ELT does not include 25,000 acres of the tidal marsh, it is reasonable to assume that salinity levels at Antioch during the subject time period would be at least 5% higher than disclosed in the RDEIR/SDEIS. This inaccuracy in predicted salinity levels would apply to bromide as well. Thus, salinity and bromide impacts that are disclosed in the RDEIR/SDEIS are almost certainly underestimated because of the failure to conduct model runs that accurately represent the limited tidal marsh restoration contemplated by the Proposed Project.	
2492	18	A major concern with the modeling is the treatment of the Suisun Marsh Salinity Control Gates. The RDEIR/SDEIS indicates that "Modeling of all alternatives assumed no operation of the Suisun Marsh Salinity Control Gates, but the project description for all alternatives now assumes continued operation of the Salinity Control Gates, consistent with assumptions included in the No Action Alternative."25 Chapter 2 of the RDEIR/SDEIS states that a sensitivity analysis was conducted to evaluate the impacts of operational Suisun Marsh Salinity Control Gates on electrical conductivity (a surrogate for salinity) under Existing Conditions and the No Action Alternative for several locations in the Marsh and for several months. The sensitivity analysis found that operating the Suisun Marsh Salinity Control Gates resulted in freshening (lower salinity) within the Suisun Marsh. However, model results describing predicted salinity in the western Delta were not provided, to our knowledge, anywhere within the RDEIR/SDEIS. Our evaluation of those model runs indicates that salinity at Antioch is higher when the Suisun Marsh Salinity Control Gates are operated. If actual Suisun Marsh Salinity Control Gate operations had been modeled, salinity values at Antioch would almost certainly be higher than disclosed in the RDEIR/SDEIS. Once again, salinity and bromide impacts in the RDEIR/SDEIS have been underestimated because of the failure to conduct model runs that included operation of the Suisun Marsh Salinity Control Gates.	Please refer to Final EIR/EIS Appendix 5A and Master Response 30 for additional information regarding modeling conducted for the RDEIR/SDEIS and Final EIR/S for the alternatives. For additional information on water quality refer to Final EIR/EIS Chapter 8 and Chapter 8 appendices and Master Response 14.
2492	19	[ATT3: Attachment A Technical Comments on the BDCP and Associated EIR/EIS Letter Prepared by Flow Science Incorporated]	This comment describes an attachment to the comment letter presenting technical comments to the BDCD. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.
2492	20	Att4: Attachment B Analysis of Water Quality Impacts to Antioch — Evaluation of DSM2 Modeling Performed in Support of the BDCP Proposed Project by Flow Science Incorporated	This comment describes an attachment to the comment letter. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. .
2492	21	ATT5: Attachment C Agreement between the State of California and the City of Antioch	This comment describes an attachment to the comment letter which extends the term of the 1968 agreement between the California Department of Water Resources and the City of Antioch to year 2028. The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.
2492	22	ATT6: Attachment D	This comment describes an attachment to the comment letter. The attachment does not raise any

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		Review by the Delta Independent Science Board of the Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement	additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS. .Please see responses to Letters 1448 and 2546.
2492	23	1. Inappropriately Deferred Studies. Operational Scenarios and Impacts: The WATERFIX Project indicates that certain studies and certain operational aspects of the Project remain incomplete and will be analyzed at some unknown point in the future: a. The recent Change Petition for the WATERFIX Project submitted to the SWRCB references additional studies regarding the operation and design of the project that are as yet uncompleted (see pg. 14 of the original Supplemental Information Attachment attached to this letter/appendix as Ex. B-1). Because these studies will "inform design and operation of the diversion structures," we conclude that the proposed Project and the RDEIR are currently incomplete. 2 Adaptive management and operating scenarios for the Project are indicated to be developed at a later time, thus improperly deferring a critical aspect of the project. [footnote#2: As noted by the Delta Independent Science Board in comments submitted to the Delta Stewardship Council on September 30, 2015 and in the DSC's WaterFix Comments:. "There is a very general and brief mention of the steps in the adaptive management process in Section 4 (p. 4.1-6 to 4.1-7), but nothing more about the process… We did not find examples of how adaptive management would be applied to assessing—and finding ways to reduce—the environmental impacts of project construction and operations… The current draft defers details on how adaptive management will be made to work: 'An adaptive management and monitoring program will be implemented to develop additional scientific information during the course of project construction and operations to inform and improve conveyance facility operational limits and criteria' (p. ES-17). This is too late." The City of Antioch agrees. B.] It is impossible to know the full extent of water quality and flow impacts on the City's water supply and Delta public trust resources without this critical information being fully disclosed and analyzed in the Project's description and environmental impact analysis. The fact that these details of Project design and operation are currently unknown or not yet disclosed indicates that the Project's description and impact analysis are incomplete, because all the potential impacts of the Project to water users and to fish and wildlife remain unknown and therefore undisclosed at this time. See generally CEQA Guidelines 15121, 15126, 15126.2. The uncertainty of such future operational impacts in relation to the City's superior water rights for domestic purposes (a City of over 100,000), renders the Project unreasonable per se under the California Constitution and Water Code section 100. See generally In re Waters of Long Valley Creek Stream System (1979) 25 Cal.3d 339 [creating uncertainty with respect to the exercise of water rights is unreasonable].	Please see the response to comment letter 2653-102 and 2623-17 regarding real-time operations and CSAMP under the proposed project. Please also see Master Response 2 for information regarding project level versus program level analysis and Master Response 33 for information regarding adaptive management. Please see also responses to comments 2492 1 and 2492-4. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.
2492	24	2. The RDEIR/SDEIS fails to properly inform the public of potential environmental impacts Put simply, the environmental documents are very difficult to read – and Chapter 4 of the RDEIR/RDEIS in particular. The documents cite and incorporate portions of the prior DEIR/DEIS from the prior Bay-Delta Conservation Project by reference only, and so the public is forced to go back and forth between the main document and numerous	The Final EIR/EIS is a lengthy complex document but the lead agencies have complied with CEQA in informing the public of the significant environmental effect of the proposed project as required under CEQA. Please see Master Response 38 for discussion of the complexity of the environmental document. Further, in order for the Lead Agencies to effectively communicate with the public, several different types of summary documents and presentations on the BDCP, Draft EIR/EIS, and related documents were made available on the BDCP website. For instance, user -friendly highlight documents for both the BDCP and the

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		appendixes – including the prior chapters of the original DEIR/DEIS. The discussion of the new alternatives including the new preferred project alternative is over 2,000 pages long, containing complex hydrologic scenarios, dense technical and science based discussions, and citations to outside documents (e.g. D-1641). While the City of Antioch recognizes that this technical information may be important to the content of the documents and impact analysis, one of the fundamental requirements of CEQA is to "inform . . . the public of the significant environmental effect of the project." CEQA Guideline 15121. Further, "public participation" is an essential element of CEQA. CEQA Guideline 15201. The City contends that the RDEIR/SDEIS is not prepared in a manner to inform the public because as presently written it would be very difficult for a downstream landowner, recreational participant or water rights owner to determine any potential environmental impacts specific to them from reviewing Chapter 4 – without the assistance of a scientist, hydrologist, or hydrologic modeler. The City is aware that others have similar concerns about the complexity and readability of this document (see for example Delta Independent Science Board comments submitted to the Delta Stewardship Council on September 30, 2015). The discussion needs to include readable summaries and clear explanations of potential impacts. The State Water Resources Control Board ("SWRCB") has accumulated specific information on the majority of large in-Delta water users this past spring downstream of the Project in database form, and the Department of Water Resources has already used this information in its Amended Change Petition Application for the Project. The environmental documents should additionally use this information (perhaps in a series of tables) to specifically identify potential impacts to specific water users identified in this information. It is hard to imagine a better way to inform specific water users of anticipated impacts from the Project. In fact, Antioch contends that such specific water rights information and reference to specific impacts to those individual rights is required in order to proceed under the Change Petition submitted to the SWRCB. Water Code 1702; Lester v. Doetsch (1935) 7 Cal.App.2d 551, 555.	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, as well as California Water Fix, 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 documents. Additionally, as state agencies, the Department of Water Resources and the California Natural Resources Agency have an obligation and duty to provide the public with educational information that is rooted in fact, based on reasonable assumptions supported by facts and expert opinions substantiated by facts. Doing so for a project of large scale and complexity can be a challenge. The BDCP website, blog, Your Questions Answered, and social media platforms have been the primary vehicle for communicating important project information and correcting misinformation. Brochures, factsheets, webinars and videos are other tools the State has employed to educate the public about the proposed BDCP and the EIR/EIS process. Representatives from the State have also held numerous meetings and briefings around the state to educate stakeholders and provide them with critical information about project developments and the EIR/EIS process. Brochures, factsheets, webinars, reports and other information are kept on the project website, www.BayDeltaConservationPlan.com and is available for review. Historical materials remain available for review and are labeled as achieved or superseded. For additional information regarding public involvement and transparency, please see Master Responses 40 and 41, respectively. For responses to comments related to the Delta Independent Science Board's letters, please refer to comment letters BDCP 1448 and/or RECIRC 2546.
2492	25	The DSEIR/SDEIS contains factually incorrect statements regarding Antioch's use of its water rights The WaterFix environmental documents yet again incorrectly conclude that the City of Antioch only occasionally uses its own water rights and that such use has been historically 3 opportunistic (see for example Chap. 4, 4.3.21-3. In fact, the City maximizes the use of those rights when water quality is sufficient for municipal use. The City pumps potable water from the Delta every day when it is not too saline to do so, which has been approximately 208 to 225 days per year since the 1930s – and nearly year-round in many years. [footnote#3: Prior to the early 1930s and the advent of significant upstream diversions on both the Sacramento and San Joaquin Rivers, the City could pump potable water year around every year except in the most severe drought years. See the City's prior comments on the BDCP which are included with these comments.] The City contends that this improper conclusion has invalidly impacted the preparer's view of the potential impacts to the City's water supply. As discussed in more detail in Antioch's Appendix A of its WATERFIX Comments, the Project will have potential adverse impacts to the City's water rights and water supply by reducing Delta outflow and increasing salinity.	Please see response to comment 2492-1. See also Master Response 14 for more information about salinity effects and Antioch intakes water quality analysis.

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		Antioch's water rights are senior in priority to the rights for water to be diverted pursuant to the WATERFIX Project. And yet, the RDEIR/SDEIS fails to adequately analyze the Projects' impacts to the City's water rights or to propose any mitigation. . The RDEIR/SDEIS also fails to properly recognize that the source of Antioch's water supply includes the tributary flow of the Sacramento River via Georgiana and Three Mile Sloughs. Without acknowledging the correct facts and without understanding the nature and scope of the City's water rights, it is simply not possible for the RDEIR/SDEIS to have adequately analyzed the impacts of WATERFIX operations on the City's water rights and water supply.	
2492	26	4. The RDEIR/SDEIS relies on faulty modeling in determining impacts and thresholds of significance As further explained in the City of Antioch's technical Appendix A [coded separately], the modeling that was performed to evaluate the potential impacts of the project did not model the proposed project (i.e., the 2015 Alternative 4A), but a prior and significantly different preferred project proposal (i.e., the 2013 Alternative 4). As additionally detailed in Appendix A, the "sensitivity analyses" that were performed to assess the potential impacts of the actual proposed project were wholly inadequate. In effect, the proposed project has not been evaluated at all, and it is not possible to assess the impacts of the proposed project using the modeling analysis provided by the project proponents. The RDEIR/SDEIS uses certain standards set by applicable regulatory agencies as thresholds of significance for impacts to downstream beneficial uses (e.g. D-1641). Even assuming that the use of such regulatory standards somehow meets the requirements of Water Code section 1702 in determining downstream impacts, these thresholds are rendered useless by the application of the defective modeling used.	The proposed project would be designed and operated in accordance with regulatory standards, including State Water Resources Control Board Decision 1641. The Final EIR/EIS includes model results for Alternatives 2D, 4A, and 5A as compared to the No Action Alternative and Existing Conditions in Appendix 5A, Section C, in addition to the model results previously provided in the Draft EIR/EIS. The comparative results between Alternatives 2D, 4A, and 5A and the No Action Alternative and the Existing Conditions are generally consistent with the impact analysis results presented in the RDEIR/SDEIS.
2492	27	The DSEIR/SDEIS fails to properly identify and analyze impacts on beneficial uses downstream of the Project. Both CEQA (e.g. San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th 655) and Water Code Section 1702 require that the WATERFIX Project properly analyze impacts (flow, water quality) on beneficial uses downstream of the proposed new changed diversion locations. Specifically, a change in the location of a diversion such as that anticipated by the Project must identify and avoid impacts to specific impacted beneficial uses – especially uses with superior rights. Lester v. Doetsch (1935) 7 Cal.App.2d 551, 555. [footnote#4: The City of Antioch contends that diverting water out of the Delta for junior water rights used primarily for agricultural purposes in a manner that will adversely impact the City's senior domestic use water rights is unreasonable. See for example Joslin v. Marin Municipal Water District (1967) 67 Cal.2d 132.] The RDEIR/SDEIS fails to meet these requirements. As noted above, the RDEIR/SDEIS does not identify all beneficial uses downstream of the Project nor identify and analyze potential impacts to such uses from the Project. As also noted, the identity of the majority of large downstream beneficial uses is available from the SWRCB, and the DWR has used this information in its Amended Change Petition application. And yet, this information is absent from the Project's environmental documents. Without knowing the nature, claimed legal right, amount of diversion and season of diversion and specific	Impacts downstream beneficial uses resulting from construction and operation of the proposed project are included in the various resource sections/chapters of the RDEIR/SDEIS and Final EIR/EIS.

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		location of downstream diversions, it is not possible to know the Project's impacts on such diversions. To the extent some downstream beneficial uses such as Antioch's are identified in the environmental documents, the analysis is based on mistaken facts (e.g. that the City only infrequently uses its diversion) and flawed modeling analysis as discussed in the City's Appendix A. [coded separately] In sum, the Project fails to meet the requirements of CEQA and Water Code Section 1702 and the Project's potential impacts to downstream beneficial uses are in fact unknown.	
2492	28	6. The RDEIR/SDEIS fails to properly explain how the Project will meet the Co- Equal goals of the Delta Reform Act and comply with the Delta Plan. Public Resource Code section 29702 sets forth the dual/co-equal goals of providing a more reliable water supply and "protecting, restoring, and enhancing the Delta ecosystem." Section 29702 provides further that achieving the co-equal goals shall include protecting and enhancing the "unique cultural, recreational, natural resource" values of the Delta. The WaterFix fails to meet the co-equal goals as the requirements of section 29702 are applied to Antioch and the western Delta. As Antioch's comments indicate throughout this letter, the physical environment, the reliability of Antioch's water supply, and the unique cultural heritage of Antioch will all be potentially impacted by the WaterFix Project. The Delta Reform Act's co-equal goals are legal requirements on the Project that, put simply, require improved water quality and supply reliability within the Delta – or at a minimum to not further degrade water quality and the physical environment at Antioch. The RDEIR/SDEIS fails to provide any specific operational provisions or obligations to ensure that the co-equal goals are met during the course of the Project term. In fact, the Project documents appear to assume that the co-equal goals will be met via the operation and implementation of the Project alone, providing no assurances for in-Delta water supply reliability. However, the Delta Reform Act does not limit water supply reliability to the Project alone, and protection of in-delta water supply reliability is a critical component of complying with the co-equal goals. Given the flaws in the modeling, it is not possible to determine if the Project can even meet the co-equal goals. In addition, it is not clear how the WaterFix Project will become part of the Delta Plan (or not) as originally anticipated under Water Code Section 85320 now that the Project (4a) is no longer a "habitat conservation plan" or "natural community conservation plan" or whether such compliance must be analyzed in light of the fact that some alternatives continue to propose a habitat conservation plan approach.	The EIR/EIS was prepared in a manner that complies with the 2009 Delta Reform Act, including sections that are included in this comment, as described in Appendix 3I and 3J of the EIR/EIS. Please see also Master Response 31 for further explanation about meeting the co-equal goals put forth in the Delta Reform Act…
2492	29	7. The Project's long-term impacts are not properly considered. The Project's environmental documents indicate a 15-year initial term but also specifically acknowledge that "the project will continue indefinitely" (see the DREIS p. 4.1- 42). Obviously, given the expense of the Project, operations will continue will beyond the 15 year initial period. However, the long-term impacts of the project are mostly ignored. As the initial period will primarily involve project construction, the operational aspects and impacts of the Project will follow the initial term and are likely the impacts most in-Delta water users	Please see RDEIR/SDEIS Section 4.1.1.2 for information on impacts analyses in the late long-term for Alternatives, 4A, 2D, and 5A. Please see also Final EIR/EIS Appendix 5F for comparison of Final EIR/EIS alternative modeling results to RDIER/SDEIS modeling results. See also Master Response 9 for information about cumulative impacts assessment.

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		are concerned about. The City of Antioch believes that the environmental documents fail to comply with CEQA by ignoring the long-term impacts of the Project which are acknowledged by the Project documents to extend beyond the initial 15 year term. The City contends that this results in a failure to consider and mitigate potential long-term impacts of the project – especially on water flows and water quality. Given the absence of consideration of certain long-term operating scenarios and flaws in the modeling, it is simply impossible to know what the long- term impacts of the Project will be on in-delta beneficial uses.	
2492	30	The Project fails to properly consider all potential impacts resulting from certain land acquisitions potentially associated with the Project. Recently Metropolitan Water District and Westlands Water District have indicated the potential of purchasing large parcels of property within the Delta. There has been concern that these acquisitions will be made, in part, to facilitate the project and to potentially avoid the requirements of Water Code Section 250. The City of Antioch contends this could be improper piece- mealing and project segmenting if these property acquisitions will in any way be part of the Project. Additionally, the cumulative impacts analysis required by CEQA would necessitate a detailed evaluation of these projects. The Project should make clear whether any such proposed land acquisitions are related in any way to the Project.	Property acquisition does not irreversibly or irretrievably result in project approval and implementation. Generally, it is not unusual for property to be purchased from willing sellers during the planning stages. Environmental review for this project will be completed before the project is considered for approval. If a project is not approved or constructed, those properties may be sold to other parties. Impacts related to concurrent projects and reasonably foreseeable future projects, including those being considered by water districts and other agencies, are evaluated in the RDEIR/SDEIS as part of the cumulative impact analysis (see RDEIR/SDEIS Section 5). For more information of how the project was evaluated as a whole, please see Master Response 8.
2492	31	9. The Project fails to address how it will comply with the requirements of the Delta Protection Act. The RDEIR/SDEIS fails to explain how the Project meets the requirements of the Delta Protection Act of 1959 ("Act"). In fact, the RDEIR/SDEIS indicates that the WaterFix Project will not meet the objectives and requirements of the Act as discussed under the City's Technical Comments. [coded separately] As shown in Appendix A [coded separately] to the City's WaterFix comment letter, the Proposed WaterFix Project may increase salinity levels at Antioch's intake so significantly that the City's water rights and ability to divert its water supply will be impacted- all without any proposed mitigation for Antioch and its over 100,000 domestic water supply users. [footnote#5: As discussed above and throughout the accompanying documents, the WaterFix is subject to certain legal requirements regarding the adverse impacts to water quality in the Delta. An EIR is inadequate if '[t]he success or failure of mitigation efforts . . . May largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR.' (San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th 645, 670.) 'A study conducted after approval of a project will inevitably have a diminished influence on decision making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA.' (Communities for a Better Environment v. City of Richmond (2010) 184 Cal.App.4th 70.)] Water Code sections 12200 et seq. (the Delta Protection Act) were intended in part to ensure that water exports from the Delta do not deprive in-Delta users of water necessary for their beneficial uses and for salinity control. A similar water availability requirement is provided under Water Code section 85320(b)(2)(A). The RDEIR/SDEIS as presently proposed, however, fails to adequately analyze the amount of water available for export that would not result in adverse impacts to in-Delta uses – especially to in-Delta water rights with higher priority than the State Water Project (SWP) and Central Valley Project (CVP) export	For discussion of consistency with the 2009 Delta Reform Act see Appendix 3I and 3J of the EIR/EIS. Please see also Master Response 31 for further explanation about meeting the co-equal goals put forth in the Delta Reform Act. The requirements of the Delta Protection Act will be considered by the SWRCB during its review of the water rights change petition filed by DWR and the Bureau for the project. All water rights obligations imposed by the SWRCB on DWR and the Bureau, including those arising from the Delta Protection Act, will be complied with. See also response to comment 2492-1 regarding water rights.

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		projects such as the City of Antioch.	
2492	32	The Project will adversely impact the City of Antioch's present water substitution purchase agreement with the Department of Water Resources Antioch and Department of Water Resources (DWR) have an agreement that requires the State to reimburse the City for impacts to the City caused by the existing State Water Project ("1968 Agreement"), however, there are critical issues relating to that Agreement in light of the proposed Project and its potential impacts: • The 1968 Agreement has a remaining term of less than 15 years and the Project is anticipated to extend indefinitely; • The Agreement is not based on the projected additional adverse impacts from the WaterFix Project (which will continue beyond the agreement's 15 year term); • The Agreement between Antioch and DWR does not obligate the federal government, and does not mitigate whatsoever for impacts from any CVP operations; • The Agreement anticipates some continuing opportunity by the City to use its own water rights in many years and during certain times of any given year. However, based on the Project's flawed modeling it is not possible for the City to determine the impacts to the City's ability to use its own water rights under the Agreement. It is possible that such impacts could be so extensive as to eliminate the City's benefits under the 1968 Agreement. • The analysis of the impacts from the WaterFix Project (see City's Appendix A) [coded separately] indicate potential impacts to Antioch's primary substitute water source (Contra Costa Water District), which could impact the City's ability to purchase substitute water.	See response to comment 2492-1 regarding water rights.
2492	33	The Project will adversely impact the recreation and public trust resources in the Western Delta The City of Antioch's unique historic and cultural legacy within the Delta has been as a freshwater location for well over 150 years. Antioch is known as the gateway to the western Delta for its freshwater location and recreational opportunities. A portion of Antioch's economy is dependent on freshwater boating, recreation, and fishing. The City operates a municipal marina that is related to certain commercial uses and activities in the City. Many people have chosen to buy or rent homes in Antioch specifically because of the proximity to these freshwater boating, recreation and fishing activities or to simply to enjoy a lifestyle near a freshwater river environment. While the RDEIR/SDEIS recognizes certain potential short-term impacts of construction on recreation and attempts to mitigate such impacts, the RDEIR/SDEIS fails to adequately address the long-term impacts of the WATERFIX on recreation, boating, and fishing at Antioch and provides no mitigation for such long-term impacts. Given the potential for higher salinity and lower outflow in the western Delta, such impacts could be substantial. For example, increased salinity will impact fish species and fishing opportunities; boating preferences; and recreation (e.g. waterskiing, wakeboarding).	See response to comment 2492-4.
2492	34	The RDEIR/SDEIS fails to address any impacts to public trust resources at Antioch from	Impacts to beneficial uses of Delta waters associated with water quality changes, which includes fish and

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		potential higher salinity such as impacts to aesthetics (from freshwater river to tidal marsh), aquatic plants and wildlife (Tule islands), and navigation (decreased outflow, increased salinity). Without acknowledging such potential impacts, and given the flawed modeling, it is not possible to adequately analyze and potentially mitigate any impacts.	wildlife, and recreation uses, are addressed in Chapters 8, 11, 12, and 15 of the Final EIR/EIS, respectively. For more information about Public Trust obligations, see also Master Response 13.
2492	35	The project documents fail to provide any operating procedures or obligations to specifically protect or mitigate in-delta recreational and cultural resources or non-covered public trust uses (e.g. navigation, fishing, boating) from projected operational impacts – either short term or long term.	Impact and mitigation from operating the proposed projects as mentioned in the comment are presented in the RDEIR/SDEIS; Impact TRANS-13: Potential Effects of Navigation from Changes in Surface Elevations Caused by Operation of Intakes, Impact REC-5: Result in Long-Term Reduction of Recreational Fishing Opportunities as a Result of the Operation of the Proposed Water Conveyance Facilities and 3.3.1.2 Operational Components, of the Final EIR/EIS.
2492	36	12. The Project's environmental documents fail to consider potential urban decay impacts related to the long-term operation of the Project The RDEIR/SDEIS acknowledges certain potential impacts to in-Delta communities including but not limited to declining property values, declining economic stability in communities relying on recreation, and potential abandonment of structures and buildings (especially those near proposed construction). As noted above, the RDEIR/SDEIS also acknowledges potential short-term impacts to in-Delta recreation. And yet, there is almost no analysis within the RDEIR/SDEIS of any potential urban decay impacts within specified in- Delta communities and none with respect to the City of Antioch. When there is evidence that adverse effects caused by a project could result in a reasonably foreseeable indirect environmental impacts such as urban decay or deterioration (as here), then the CEQA lead agency is obligated to analyze these indirect environmental impacts. (Anderson First Coalition v. City of Anderson (2005) 130 Cal.App.4th 1173, 1182). In the present case, the RDEIR/SDEIS indicates potential significant changes in the environment within the western Delta, significant changes to the City's water supply, and acknowledges further potential physical impacts to local communities as noted above. The RDEIR/SDEIS, however, fails to analyze the potential for urban decay impacts within Delta communities including Antioch. And since protection and preservation of in-delta cultural resources is a requirement of the Delta Reform Act, the WaterFix is legally required to mitigate potential adverse impacts.	Community character is discussed in Impacts ECON-3, 9, and 15 in Chapter 16, Socioeconomics of the RDEIR/SDEIR. Property values may decline in areas that become less desirable in which to live, work, shop, or participate in recreational activities. For instance, negative visual- or noise-related effects on residential property could lead to localized abandonment of buildings. While water conveyance construction could result in beneficial effects relating to the economic welfare of a community, adverse social effects could also arise as a result of declining economic stability in communities closest to construction effects and in those most heavily influenced by agricultural and recreational activities. Implementation of mitigation measures and environmental commitments related to noise, visual effects, transportation, agriculture, and recreation, would reduce adverse effects (see Final EIR/EIS Appendix 3B, Environmental Commitments, AMMs, and CMs). See also response to comment 2492-4.
2492	37	[ATT7: Selection from Change Petition to State Water Board regarding WaterFix operation and design.]	This comment describes an attachment to the comment letter The attachment does not raise any additional issues related to the environmental analysis in the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS that are not already addressed in comment referencing the attachment or the Final EIR/EIS.
2494	1	Water supply reliability: The Final EIR/EIS should provide additional information on water supply yield during each type of water year (normal, dry and wet) so that the water reliability benefits can be better understood and all storage assets in southern California optimized to enhance reliability during the inevitable dry periods.	The EIR/EIS addresses the changes in long-term conditions under the action alternatives (including the Proposed Project) as compared to the Existing Conditions and No Action Alternative. The changes in total exports and deliveries to all SWP and CVP water users are presented for long-term and dry/critical dry conditions in Appendix 5A, Section C, of the EIR/EIS. The changes in total exports are also presented for all water year types in tables included in Appendix 5A, Section C, of the EIR/EIS.
2494	2	Endangered Species Act permitting: The change in regulatory approach for Endangered Species Act compliance from the BDCP's Habitat Conservation Plan/Natural Community Conservation Plan to a Section 7 consultation is a significant change to achieve more regulatory certainty. We strongly urge the lead agencies and the permitting agencies to incorporate adaptive management and participative governance in operational decisions into the Final EIR/EIS and supporting agreements to ensure consistent delivery of SWP	Please see Chapter 3 in the FEIR/EIS for a full description of the Adaptive Management and Monitoring Program (AMMP) under Alternative 4A, including details on how adaptive management decisions will be made.

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		supplies.	
2494	3	Habitat mitigation: The amount of mitigation acreage under the modified Preferred Alternative has significantly increased. There is no clear description of how the amount of acreage was determined or why it has become the responsibility of the water supply facilities. The Final EIR/EIS should provide a detailed explanation and nexus between the proposed mitigation acreage for Alternative 4A and why water suppliers and ultimately water ratepayers will shoulder those costs.	The commenter suggests that the amount of habitat and mitigation related to construction of the water conveyance facilities under the modified Preferred Alternative 4A has substantially increased from the amount identified under the BDCP. The analysis for the loss of habitat and/or direct mortality of a species considers the collective loss of habitat from water conveyance construction and the Conservation Measures/Environmental Commitments. Alternatives 4 and 4A utilize the same water conveyance construction footprint but differ in that they have different levels of restoration with Alternative 4 having greater impacts to biological resources from restoration actions when compared to Alternative 4A (note some restoration actions to benefit one species or natural community result in effects on other species or land cover types). The proposed restoration under Alternative 4A is less than that proposed under Alternative 4. Alternative 4 would result in the protection of 69,275 acres and restoration 83,839 acres (see Table 12-ES-2 in the EIR/EIS) and Alternative 4A would result in the protection of up to 13,340 acres and restoration of up to 2,496 acres. The analysis in Chapter 12 of the EIR/EIS does not separately discuss the compensation acreages for water conveyance impacts and restoration. Language to explain how the proposed protection and restoration acreages were generated has been added to Chapter 3 of the EIR/EIS in Section 3.3.2.2 Non-HCP Alternative Environmental Commitments. In summary, this new language states that the acreages for the Environmental Commitments under the non-HCP alternatives were developed by taking into consideration the analysis conducted in Appendix 12D, Feasibility Assessment of Conservation Measures Offsetting Water Conveyance Facilities Construction Impacts on Terrestrial Biological Resources for the BDCP alternatives, which used typical mitigation ratios to determine the sufficiency of the BDCP conservation strategy as CEQA and NEPA mitigation (i.e., whether the BDCP conservation strategy includes sufficient land acquisition and restoration to adequately mitigate the impacts of CM1 for purposes of CEQA and NEPA). The first step involved applying these mitigation ratios to the water conveyance facility impacts on natural communities to obtain the restoration and protection acreages necessary to offset these impacts. Once these initial natural community restoration and protection acreages were obtained, they were then compared to the mitigation requirements for species addressed in the EIR/EIS that use these natural communities as habitat. Several of the species analyzed in the EIR/EIS utilize the same general natural communities but may only use specific subsets of these natural communities or are geographically restricted to certain portions of the study area where these natural communities occur. Therefore, the total acreages of proposed natural community restoration and protection increased to account for species needs. Where restoration is anticipated to result in additional impacts on natural communities and species habitats, the restoration and protection acreages were increased further. Through an iterative process, final acreages for natural community protection and restoration were arrived at when it was determined by project biologists that proposed restoration and protection was sufficient to offset the loss or conversion of natural communities and species habitats from water conveyance construction and proposed restoration activities.
2495	1	As a responsible agency under CEQA, RD [Reclamation District] 551 expects that DWR will provide us with a specific response to our comments at least ten days prior to the Department taking any action on the California WaterFix Project.	DWR will comply with all statutory requirements including the transmittal of responses prior to taking any action. No issues related to the adequacy of the environmental impact analysis in the EIR/S were raised.
2495	2	Any seepage of water into the soils or canals of the Pearson District as a result of a water conveyance facility must be addressed in the RDEIR/SDEIS and properly mitigated pursuant to CEQA. The Project envisions conveying exported water through an intake facility on the opposite side of Snodgrass Slough, adjacent to Pearson District. It is actually unclear from the RDEIR/SDEIS whether water is anticipated to seep from the intake pipe in a way that would	The pipelines associated with the intakes would be designed to not leak, as described in Appendix E of the Conceptual Engineering Report which is referenced in the EIR/EIS.

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		impact Pearson District and contribute to the local water table, possibly requiring pumping off the island. Even a very small percentage of seepage from the facilities into the District could impact the existing drainage infrastructure, increase groundwater elevations, and threaten to destroy crops and damage permanent structures. Seepage can also compound existing problems related to the buildup of salt and alkalinity in the soil, which can bum crop roots. If there is an increase in seepage, the district pumps would need to run many more hours each day, and the drainage ditches would need to be more actively maintained-all at great cost to the district. Drainage operations are expensive (e.g., electricity, repair, equipment, maintenance) and are paid for by entirely the local landowners. Unlike with levee maintenance activities, there is no State contribution to pay for drainage activities undertaken by local districts. Intake 5 is planned to be located adjacent to Pearson District; therefore, seepage considerations will be a critical consideration for siting. As DWR's own Bulletin 125 seepage investigations have shown, the interior of the district-unlike conditions on some nearby islands and tracts- has significant seepage. In large part, this seepage results from the local peat soils. Any facility constructed near the district should be located in an area with mineral soils; the surrounding peat would need to be excavated and replaced with imported fill in order to both reduce seepage and provide greater stability.	
2495	3	The RDEIR/SDEIS is poorly organized and difficult to follow, and therefore fails to satisfy the most basic requirement of CEQA: to inform the public about the environmental consequences of a proposed decision or project. A good example of this relates to seepage. The RDEIR/SDEIS discusses seepage or changes in groundwater elevation resulting from construction and operation of water conveyance facilities, including Intake 5, in Chapter 14 (Agricultural Resources). However, the discussion in the RDEIR/SDEIS lacks basic information necessary for the District [Reclamation District 551]to understand what effects are anticipated in and around Pearson District with respect to seepage. The discussion of Impact AG-2 (Other Effects on Agriculture as a Result of Constructing and Operating the Proposed Water Conveyance Facility) describes temporary lowering of groundwater levels in the vicinity of intakes, but does not address possible permanent impacts. That discussion also fails to state whether seepage will be monitored over time at the intakes (but it does, however, note that seepages will be monitored at the forebays). Confusingly, the Agriculture chapter references mitigation measures from the Groundwater chapter as addressing this issue (e.g., Mitigation Measure GW-5: Agricultural Lands Seepage Minimization), but those measures likewise fail to mention whether monitoring will take place at the intake facilities. It appears that the BDCP proponents will decide at a later time which areas will require monitoring (see RDEIR/SDEIS at pp. 7-6 and 7-7).	Please note that the BDCP is no longer the preferred alternative. (For more information about BDCP please see Master Response 5.) The preferred alternative is now Alternative 4A. The EIR/EIS analyzes all alternatives, including Alternative 4A. 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. The discussion of seepage in Chapter 14 referred to in this comment is related to seepage from the intermediate forebay and the expanded Clifton Court Forebay. As described in the Final EIR/EIS, slurry walls would be constructed around the construction site at the intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells on groundwater and to reduce the potential of seepage, especially from the unlined sediment basins at the intakes and the unlined forebays. 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; monitoring changes in groundwater levels during construction; monitoring seepage effects prior to, during, and following construction; and relocating or replacing agricultural infrastructure in support of continued agricultural activities.
2495	4	From RD [Reclamation District] 551's perspective, every effort must be made (and described in the CEQA document) to prevent seepage from the BDCP facilities: the Project [Alt 4A] must include contingency measures to address incidental seepage. These measures should include, at a minimum: (1) water table and soil moisture detection devices throughout the entire district so that conditions can be constantly monitored; (2) relief wells along the tunnel alignment and forebay so that any seepage can be captured and pumped back to the forebay or the Delta channels, and (3) a response plan that will require BDCP operations to cease long enough to locate and fully repair any leaks or any other cause of	As described in Appendix E of the Conceptual Engineering Report which is referenced in the EIR/EIS, the pipelines and tunnel reaches would be designed and maintained to be watertight both to protect the adjacent land and groundwater, and to prevent migration of adjacent groundwater into the pipelines. As described in the Final EIR/EIS, slurry walls would be constructed around the construction site at the intakes, tunnel shafts, and forebays to reduce the effect of dewatering wells on groundwater and to reduce the potential of seepage, especially from the unlined sediment basins at the intakes and the unlined forebays. 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

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		high-water elevation conditions. These measures are not currently included in the RDEIR/SDEIS discussions, as far as RD 551 is able to understand them, and they are certainly feasible.	agricultural production; monitoring changes in groundwater levels during construction; monitoring seepage effects prior to, during, and following construction; and relocating or replacing agricultural infrastructure in support of continued agricultural activities. At the forebays, toe drains would be installed on the land side of the levees and any water that migrates under the slurry walls or accumulates along the land side of the levees would be captured and diverted into the forebays. During operations, DWR would monitor and maintain these facilities to be consistent with the initial design criteria. With regard to seepage related to the water conveyance facilities, please see Response to Comment 2495-2.
2495	5	RD [Reclamation District] 551 is also concerned about impacts on groundwater wells within its jurisdiction. The RDEIR/SDEIS's discussion of Impact GW-1 (During Construction, Deplete Groundwater Supplies or Interfere with Groundwater Recharge, Alter Local Groundwater Levels, or Reduce the Production Capacity of Preexisting Nearby Wells) notes that dewatering operations would be required for construction of the conveyance facilities, and that such dewatering could affect the productivity of existing nearby wells (i.e., within 2,600 feet). In the related NEPA conclusions section (page 7-11), the document states that "substantial lowering of groundwater levels" could occur "in the vicinity of intake pump stations 2, 3 and 5," including to the extent that water levels are not able to support existing land uses. Figure 7-27 appears to show the anticipated groundwater level decline affecting Pearson District, but the RDEIRISDEIS does not specifically address any such impacts within the District (indeed, the discussion appears to lack specificity regarding the locations of such impacts), and it is thus very difficult based on the RDEIRISDEIS to gauge what those impacts may be for RD 551. It is stated, however, that where water level data indicate that dewatering operations are responsible for reductions in well productivity, "mitigation will be required and implemented." This vague statement regarding mitigation lacks any specificity or discussion of feasibility, as is required under CEQA. RD 551, and the public, must understand exactly how such effects would be mitigated in order to weigh in on the adequacy of such measures.	As described in the Final EIR/EIS, during construction, 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 because the drilling would occur with a positive hydraulic head that can construct the tunnel in conditions with saturated soils. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. 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; monitoring changes in groundwater levels during construction; monitoring seepage effects; and relocating or replacing agricultural infrastructure in support of continued agricultural activities.
2495	6	It is apparent that implementation of conservation measures CM2-CM21 could deplete groundwater supplies or interfere with groundwater recharge, reduce the production capacity of nearby wells, or interfere with agricultural drainage. This is described as impact GW-6, and is addressed in the RDEIR/SDEIS's discussion of Alternative 4A on page 4.4.3-4. It is also referenced in Chapter 7, which purports to discuss impacts related to groundwater but completely lacks any discussion of what the impact is, forcing a reader to look in a few other places for a description of the impact. This is another example of the poor organization of the document, which leaves the public confused about what the impacts of the Project [Alt 4A] will be. Chapter 4's discussion of this impact states: "Implementation of the environmental commitments under Alternative 4A could result in additional increased frequency of inundation of areas associated with the proposed tidal habitat, channel margin habitat, and seasonally inundated floodplain restoration actions, which would result in increased groundwater recharge. Such increased recharge could result in groundwater level rises in some areas. More frequent inundation would also increase seepage, which is already difficult and expensive to control in most agricultural lands in the Delta (see Chapter 14, Agricultural Resources, of the Draft EIR/EIS). Impacts associated with the implementation of those environmental commitments would result in significant impacts."	The text referenced in this comment refers to habitat restoration that would be implemented as mitigation for construction and operation of the conveyance facility. The locations for those mitigation areas have not been defined at this time. Therefore, the EIR/EIS describes potential impacts that could occur. However, subsequent analyses would need to be completed prior to finalization of the mitigation measures that include habitat restoration. Please see Master Response 22 for additional discussion of mitigation.

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		(RDEIR/SDEIS, p. 4.3.3-5). This discussion lacks detail about the location of impacts, the nature of the impacts, and the basis for the conclusion of significance. RD [Reclamation District] 551 is left to assume that there could very well be a significant impact with respect to groundwater recharge in the Pearson District, but has to speculate because the RDEIRISDEIS is fundamentally lacking in information.	
2495	7	Impacts on RD [Reclamation District] 551 Levees: Any Project [Alt 4A] facilities will require protection from tidal and seasonal flooding, and presumably will be bordered by extensive new levees. Any such levees will need to be tied in to the existing Sacramento River and Snodgrass Slough levees. As discussed above, the Pearson District's Sacramento River levees-which were originally constructed by RD 551 and its predecessor districts-form an integral part of the Sacramento River Flood Control Project, which is a Federal-State project with RD 551 responsible for local operation and maintenance. The BDCP will need to work with the U.S. Army Corps of Engineers, the Central Valley Flood Protection Board, and RD 551 to complete any work that ties in to these Project levees. The Snodgrass Slough levees were built in part by local landowners and by RD 551, and since then have been operated, maintained, repaired, and improved by RD 551 without Federal or State oversight; therefore, any tie in to these levees will require substantial cooperation and collaboration with RD 551's engineering staff. Critically, the BDCP proponents will need to ensure that new levees are designed in a way that will not create a weak point in the adjacent, existing levees. Tie-ins, like repairs, can sometimes introduce weaknesses where the new levee segment has a different fill density than the old, making the new interface vulnerable to erosion, seepage or even failure. Some expected efforts to avoid differential settlement and related impacts may include pre-loading, stability berms, and geotechnical evaluations prior to design and construction.	The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS. During final design, standard engineering practices will be followed to avoid adverse effects to the levees.
2495	8	RD [Reclamation District] 551 engineering staff will require a significant amount of time to review any proposed tie-ins and/or encroachments upon the district levees, and to propose comments and conditions, all for the purpose of avoiding third-party effects upon district operations and the significant environmental impacts that could otherwise result. As with any other encroachment upon the district works, RD 551 will look to the BDCP to pay for the hourly cost of RD 551 's staff time in conducting this review.	Comment is requesting funding to review documents. The comment does not raise any environmental issue related to the 2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2495	9	The new location for placement of Reusable Tunnel Material (RTM) across the Snodgrass Slough channel from RD [Reclamation District] 551 raises concerns regarding possible increased water surface elevations and/or increased flow velocities along the RD 551 levee. The forebay will be located across Snodgrass Slough on RD 1002, and RTM from the tunnel boring at this location will be placed on a conveyor and transported over Zacharias Island. Although this is a leveed area, the levees are quite low and overtop very early during floods. Zacharias Island then becomes part of the Snodgrass Slough flood channel that drains the area to the north (Morrison Creek stream group via Beach/Stone Lakes). Therefore, the tunnel muck will be blocking some of the existing floodway. During high water events, the area on which RTM will be placed is part of the floodway draining a large portion of south Sacramento County. By restricting the floodway with RTM, the Project will likely increase the water surface elevations and/or increase the flow velocities along the RD 551 levee. The RDEIR/SDEIS fails to evaluate this potential impact,	As discussed in Chapter 6, flood standards imposed by the Corps of Engineers and Central Valley Flood Protection Board assure that new projects do not increase the flood risk to other areas by increasing the risk of failure of existing flood projects. The CVFPB assumes that each flood project is properly maintained and will function as designed, and it is the responsibility of each flood agency to maintain the levees under their jurisdiction to design standard. The project is not responsible for maintenance of flood facilities elsewhere to assure they convey their design flow. Also please review Appendix 6A of the Final EIR/EIS. As described in Appendix 3B of the EIR/EIS (Also see the Final EIR/EIS Chapter 31), storage locations for RTM will be selected based upon specific criteria, including: • Material will be located in areas where it will not interfere with existing roads, rail lines, or infrastructure. • Landowner concerns and preferences will be considered in designating sites for material

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		which is critical for RD 551. The BDCP proponents must address this issue in the RDEIR/SDEIS and then recirculate the document for public review.	storage. DWR will consult directly with landowners to refine the storage area footprint to further minimize impacts to surrounding land uses, including agricultural operations. • Where feasible, dredged material will be stored on higher elevation land that is set back from surface water bodies a minimum of 150 feet. Upland disposal will help ensure that the material will not be in direct contact with surface water prior to its draining, characterization, and potential treatment. Based upon these factors in the project description, it was determined that the RTM would not be placed within a floodway or flood channel unless the material was specifically being used for levee or habitat restoration maintenance which would require subsequent engineering and environmental analyses. For additional information regarding RTM, please see Master Response 12.
2496	1	The City of Stockton is greatly concerned that the Project will have significant impacts that would adversely affect the City of Stockton and its residents. The City expressed its concerns with the BDCP in its July 29, 2014 comments on the Draft EIR/EIS. Those comments identified numerous problems with the BDCP and DEIR/DEIS, which failed to adequately assess or mitigate the BDCP's impacts to the City's water supply and operations or the Delta ecosystem, among other concerns. Chief among these problems was the failure to recognize the City as a major diverter of water for municipal and industrial uses whose supply could be at risk by the BDCP. To the City's surprise and dismay, none of the problems identified in our July 29, 2014 comments were addressed by the changes to the Project or the revised environmental documents. By altering flows and water quality in the Delta, the California Water Fix Project, like the BDCP, threatens to have significant impacts that would adversely affect the City and its residents. The DEIR/DEIS contained no analysis of potential changes to water quality at the location of the City's drinking water intake on the San Joaquin River. Despite the City's comments, the RDEIR/SDEIS failed to incorporate, or address any of our concerns regarding potential water quality impacts at our intake. As a result, the City remains unable to understand the California Water Fix Project impacts on the issues of greatest concern to our residents.	Public comments submitted during the official public comment period and the previous comment period for the 2013 Public Draft will be made available to the public upon the release of the Final EIR/EIS. The Final EIR/EIS will include all comments received during the official comment period and responses to substantive comments. For more information about water quality analysis, please see Master Response 14. For more details about the adequacy of operational criteria, please also see Master Response 28.
2496	2	The RDEIR/SDEIS fails to address the City's prior comments on the effects of the proposed north Delta diversions & conveyance. The City of Stockton provided extensive comments on the DEIR/DEIS. None of the concerns raised in these comments was addressed in the supplemental or revised analyses included in the RDEIR/SDEIS, including the new evaluation of Alternative 4A and Alternatives 2D and 5A. As noted, among the City's chief concerns with the BDCP was the potential for the North Delta diversion to adversely affect water quality and the City's water supply. In particular the City objected to the DEIR/DEIS's failure to evaluate water quality and flow changes at the location of the City's drinking water intake. The City also raised concerns about impacts to agricultural resources, groundwater, air quality, roadways and traffic, as well as socioeconomic impacts. These issues remain unaddressed in the RDEIR/SDEIS. Because no changes were made to the Project or RDEIR/SDEIS that would address the City's comments and concerns, to the extent new alternatives, including Alternative 4A, are similar to the previously proposed BDCP CM1 , the City's prior comments apply to the California Water Fix Project and RDEIR/SDEIS, and the City reasserts its prior comments here and incorporates them by reference as comments on the RDEIR/SDEIS and California Water Fix Project alternatives.	Public comments submitted during the official public comment period and the previous comment period for the 2013 Public Draft will be made available to the public upon the release of the Final EIR/EIS. The Final EIR/EIS will include all comments received during the official comment period and responses to substantive comments. For more information about water quality analysis, please see Master Response 14. For more details about the adequacy of operational criteria, please also see Master Response 28.
2496	3	The RDEIR/SDEIS repeats and compounds the problems of the DEIR/DEIS. The water quality impact analysis provided for Alternative 4A fails to answer or address any of the questions	The assessment locations for the water quality Impacts analysis in Chapter 8, Water Quality, were selected within key portions of the Delta, including the eastern Delta where the City's intake is located. Given the

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		or concerns the City of Stockton raised in its comments on the original project proposal. There is no discussion of water quality effects at the City's intake. Moreover, the analysis of impacts at the locations that were included is hopelessly vague, convoluted and, ultimately, uninformative. The analysis is made even more unintelligible and factually suspect by the RDEIR/SDEIS's reliance on the flawed modeling methodology of the DEIR/DEIS. Rather than conduct a comprehensive analysis of the fundamental project changes in the California Water Fix Project, the RDEIR/SDEIS attempts to bootstrap an analysis of California Water Fix impacts on to modeling that was unique to the abandoned BDCP. The authors thus spend considerable time explaining why the model results are not necessarily accurate, or predictive of actual Project impacts, with the result that the public is asked to take on faith the RDEIR/SDEIS's conclusion of no significant impacts.	purposes of the assessment, the effects of alternatives at the locations assessed are considered representative of the effects of the alternatives in various portions of the Delta as a whole. Thus, although different locations can vary in their instantaneous water quality, effects of the project on water quality at locations assessed are considered representative of the degree and direction of water quality changes at other locations. Four interior Delta locations were assessed, including one in the eastern Delta at Buckley Cove, which provides information regarding the direction of water quality changes in this portion of the Delta. Also, please refer to Master Response 30regarding the assumptions used in the modeling to support the water quality assessment.
2496	4	An example is the discussion of electrical conductivity (EC) impacts for Alternative 4A on pages 4.3-24 through 4.3-26. (footnote 1: The problems with the RDEIR/SDEIS EC analysis are representative of the analysis in other water quality areas of key concern to the City, including bromide, chloride, organic carbon, nitrate and pesticides.) The section starts by attempting to explain the methodology used to estimate electrical conductivity impacts and justify the lead agencies' decision not to model the effects of the Alternative 4A changes, which eliminate habitat restoration actions that affect Delta hydrodynamics, a fundamental factor in the analysis. The result of these shortcuts and omissions is that "the quantitative modeling results presented in this assessment is not entirely predictive of actual effects under Alternative 4A, and the results should be interpreted with caution .... In this assessment the modeling results are described and then in most cases are qualified in light of findings from sensitivity analyses." (p 4.3.4-23.)	Please see Master Response 30 regarding the modeling approach used for the RDEIR/SDEIS and updated for the Final EIR/EIS.
2496	5	Of concern to the City of Stockton regarding adverse effects to the water quality is the failure of the RDEIR/SDEIS to adequately consider the effects of modified in-Delta flow regimes and increased residence time changes associated with the proposed project. For example, it is commonly accepted that flow is a prime driver of the undesirable proliferation of cyanobacteria (e.g. Microcystis) in the Delta. The occurrence and magnitude of this undesirable species is associated with low velocities and increased residence times in the system. While the RDEIR/SDEIS includes new information regarding Microcystis and other harmful aquatic species, the document does not properly link the acknowledged project-related increases in residence times in the Delta to a worsening of the Microcystis problem. The RDEIR/SDEIS should be modified to acknowledge these impacts in the vicinity of the City's drinking water intake. The RDEIRISDEIS then states that model results show the Project will result in an increase in the number and frequency of exceedances of electrical conductivity (EC) water quality objectives. However, the RDEIR/SDEIS downplays the significance of these exceedances, offering vague and noncommittal assurances that "modeling results without restoration areas would be expected to show a lesser effect and are expected to be able to be addressed [in] real time operations, including real time management of the north Delta and south Delta intakes, as well as Head of Old River Barrier management." (pp. 4.3-25 through 4.3-26.) Not only does this statement fail to quantify the actual exceedances, or the degree of any "lesser effect," but the assurance that effects could be "addressed" is not tied to any definable or enforceable mitigation commitment. The RDEIR/SDEIS provides no information about how "real time management" will occur, what type and extent of water quality sampling will occur to verify project effects on EC, the specific actions that Project operators will take, including the time lapse between identification of an exceedance and changes to operations, and the corresponding time lapse between any change in operations resulting from "real time management" and	Regarding the Microcystis assessment and consideration of residence time changes, please see Master Response 14. Also see section 8.1.3.18, Microcystis, in Ch. 8 of the Final EIR/EIS. Also see Master Response 22, for more details about the standards governing the adequacy of mitigation measures. Please see Master Response 30 regarding the modeling approach used for the RDEIR/SDEIS and updated for the Final EIR/S. Please see Master Response 32, Adaptive Management and Monitoring.

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		measured EC levels. Depending on the time sequence, EC levels could remain elevated above water quality objectives indefinitely. Without data and analysis based on actual Project effects, and information about the triggers for and concrete elements of such "adaptive management," these vague and unenforceable assurances do not demonstrate to the City that EC impacts will not be significant nor does this satisfy CEQA's requirement that an EIR actually mitigate significant environmental impacts.	
2496	6	The RDEIR/SDEIS does not indicate whether it intends to rely on mitigation measures included in the DEIR/DEIS, including DEIR/DEIS mitigation measures WQ11, WQ11a and WQ11b. However, even assuming reliance is intended, those measures contain the same flaws identified in the City of Stockton's 2014 DEIR/DEIS comments and are especially inapplicable to mitigating effects of alternative 4A, as they are predicated on future assessment of impacts from the massive habitat restoration actions that were included in the BDCP but are not longer a part of the California Water Fix Project or Alternative 4A. A mitigation measure that is based on an entirely different project (BDCP) with actions directed at study and adjustment of project elements that are no longer part of the proposed project (massive habitat restoration activities) cannot satisfy CEQA's requirement that actual project effects be clearly mitigated.	The proposed project, Alternative 4A, no longer includes an HCP or the extensive tidal habitat restoration areas that contributed to the significant impacts to EC. The tidal habitat restoration proposed as Environmental Commitment of Alternative 4A is much smaller in area and is only that required to mitigate significant environmental impacts of WaterFix. With Alternative 4A, significant impacts to EC were identified for Emmaton and Prisoners Point, and Mitigation Measures WQ-11e and WQ-11f are provided to reduce those impacts to less than significant. Mitigation Measures WQ-11a and WQ-11b apply to Alternative 4 See also Master Response 22, for more details about the standards governing the adequacy of mitigation measures.
2496	7	The purpose of an EIR is not only to protect the environment but also to demonstrate to the public that it is being protected. By omitting or deferring evidence and analysis on issues of key importance to the City of Stockton and others, including the development of mitigation measures necessary to avoid significant environmental impacts, the DEIR/DEIS and RDEIR/SDEIS fail to demonstrate to City residents that they and their environment are being protected . These problems are compounded by the California Water Fix Project's elimination of any role for affected local governments in the ongoing governance of BDCP/ California Water Fix. This change excludes those most affected by the Project from participating in or understanding the important processes and decisions that the DEIR/DEIS and RDEIR/RDEIS rely on to excuse their lack of information about Project impacts and mitigation (i.e., adaptive management, facility design and construction, research, etc.). By allowing critical decision making processes such as the Real Time Operations Team to be dominated by South of Delta water supply interests (footnote 2: See, e.g., Appendix D, section 3.4.1.4.5 of the RDEIRISDEIS) at the exclusion of local government, the California Water Fix Project works an end run around CEQA and NEPA's fundamental purpose: informed decision making and public participation.	As state agencies, the Department of Water Resources and the California Natural Resources Agencies have an obligation to provide the public with educational information that is rooted in fact, based on reasonable assumptions supported by facts and expert opinions substantiated by facts. Doing so for a project of large scale and complexity can be a challenge. The BDCP website, blog, Your Questions Answered, and social media platforms have been the primary vehicle for communicating important project information and correcting misinformation. Brochures, factsheets, webinars and videos are other tools the State has employed to educate the public about the proposed BDCP and the EIR/EIS process. Representatives from the State have also held numerous meetings and briefings around the state to educate stakeholders and provide them with critical information about project developments and the EIR/EIS process. Brochures, factsheets, webinars, reports and other information is kept on the project website, www.BayDeltaConservationPlan.com and is available for review. Historical materials remain available for review and are labeled as achieved or superseded. For more information on the public outreach efforts made during the BDCP and EIR/EIS process, please see Chapter 32 of the EIR/EIS and Master Response40. More information on how DWR has developed the project in an open and transparent manner is provided in Master Response 41.
2496	8	The project is inconsistent with the Delta Plan. The State policy regarding the Delta, as set forth in the Delta Reform Act of 2009, states "it is the intent of the Legislature ... to provide for a more reliable water supply for the state, to protect and enhance the quality of water supply from the Delta, and to establish a governance structure that will direct efforts across state agencies to develop a legally enforceable Delta Plan." (Wat. Code, § 85001 (c).) To implement this policy, the Delta Plan requires that "covered actions," including the Project, demonstrate that they are consistent with all applicable Delta Plan policies as well as the State's coequal goals for the Delta of "providing a more reliable water supply for California" and "protecting, restoring and enhancing the Delta ecosystem." (Wat. Code,§ 85054.) The Legislature's goal for a more reliable water supply includes areas in the Delta, and reliable water supplies for all beneficial uses, including cities and farmlands. The RDEIR/SDEIS fail to demonstrate the protection or enhancement of the quality of water supply from the Delta for users other than the BDCP/California Water Fix proponents. Thus even assuming the Project may increase reliability of water supplies for South of Delta interests, its adverse	DWR recognizes and intends to fully comply with its obligations under the 2009 Delta Reform Act. See Master Response 31, Compliance with Applicable Delta Reform Act Requirements. Water Quality impacts are addressed in Chapter 8 of the 2013 Public Draft EIR/S, Appendix A, Chapter 8, of the RDEIRE/SDEIS and in Master Response 14, Water Quality.

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		effects on flows and water quality threaten to reduce the reliability of water supply for Delta water users, including the City. Moreover, given the scale of the Project's known adverse effects, including but not limited to impacts to fish and water quality, it would be an abuse of discretion to conclude that the Project furthers the coequal goal of "protecting, restoring, and enhancing the Delta ecosystem."	
2496	9	For all the reasons stated herein, and in the City of Stockton's July 28, 2014 comments on the DEIR/DEIS, and as amply demonstrated by the comments and criticism levied on the BDCP and California Water Fix Project by federal resource agencies, the Delta Independent Science Board , local governments and nongovernmental organizations, the Project and accompanying environmental studies demonstrably fail to satisfy the requirements of CEQA and NEPA or the coequal goals for the Delta as established by the California Legislature. Because the BDCP/ California Water Fix fails to meet these standards, the City remains opposed to both the original project and the new alternatives, including the new preferred alternative 4A. Due to the numerous and overarching problems with the DEIR/DEIS and RDEIR/SDEIS, the only way to ensure that the City and other affected entities can understand the Project's impacts and meaningfully participate in the Project environmental review is for the state and federal lead agencies to start over and prepare a new draft EIR/EIS that addresses the concerns raised in comments on the DEIR/DEIS and RDEIR/SDEIS. So that the City can continue to participate in the development of adequate environmental documentation for the Project, please send the City any new or updated documents prepared pursuant to CEQA or NEPA. Also, please send the City any notices filed pursuant to those statutes, including any Notice of Determination (Pub. Resources Code §21092.2.)	All comments received during the 2013 and 2015 public comment period are included in the FEIR/EIS. Please refer to the table of commenters to locate the letter of interest. See Master Response 10 for a response to the compliance with the Delta Reform Act. Please see also Master Response 40 for additional detail on the public outreach that has been done for stakeholders, Master Response 41 for discussion of transparency of the process and Master Response 42 regarding treatment of public comments.
2497	1	Background and environmental justice of the RDEIR/SDEIS. Impact on the learning of children in meaningfully greater minority and low income communities such as Clarksburg. The Bay Delta Conservation Plan ("BDCP") proposes to dramatically alter the way in which the Delta Elementary Charter School ("DECS") meets its mission of delivering the finest education possible for its students meeting all state standards with a special emphasis on agriculture, music, art and project based learning. Its agricultural program in particularly relies on the health of the local Clarksburg Ag community which is an integral part of making the Ag education happen at DECS. DECS provides this education to the 411 students it serves. (BDCP contains an erroneous enrollment figure which should be corrected.) DECS is located in Clarksburg in the Delta. Clarksburg, Hood and Courtland are three Delta communities that are "the small towns along the Sacramento River" where “meaningfully greater proportions of Hispanic residents are present". DECS is a Clarksburg "Public School" funded almost exclusively with public funds. It educates all its students tuition free. The noise during construction is a very serious issue for DECS this impact represents a disproportionate effect and is adverse. This is due to many years of enormous amount of pile driving strikes each day at each intake facility. DECS is ½ mile from Intake #2. This is a very significant impact and should not be neglected in the RDEIR/SDEIS. The pulsating noise from pile driving during the construction of Intake #2 will have a significant negative impact on the educational environment for students at DECS. The incessant pulsating noise to unacceptable levels during the school day will drastically impact their ability to attend to instruction and make academic progress. The distraction that this level of noise will cause will require constant teacher redirection which will decrease both time on task and instructional time overall. In addition to impeding the learning of typically developing students, the noise caused by the pile driving will have a profound effect on students with	As described under Impact NOI-2 under Alternative 4A (discussed in Chapter 23, Noise, and in Chapter 28, Environmental Justice, of the Final EIR/EIS) constructing the water conveyance facilities would generate noise in exceedance of daytime and nighttime noise standards in areas zoned as sensitive land uses including residential, natural/recreational, agricultural residential, and schools. Similarly, ground borne vibration from impact pile driving would exceed vibration thresholds in areas zoned for residential, including agricultural residential. This effect of noise and vibration generated during construction would remain adverse after application of mitigation. Because the alignment of the water conveyance facility is proximate to census blocks and block groups where meaningfully greater minority and low-income populations occur it is expected that generation of noise and vibration in exceedance of thresholds would result in a potentially disproportionate effect on minority and low-income populations. The following mitigation measures would be implemented but would not reduce impacts to a less than significant level: Mitigation Measure NOI-1a: Employ Noise-Reducing Construction Practices during Construction; Mitigation Measure NOI-1b: Prior to Construction, Initiate a Complaint/Response Tracking Program; and Mitigation Measure NOI-2: Employ Vibration-Reducing Construction Practices during Construction of Water Conveyance Facilities. For more information on mitigation please see Master Response 22. The footprint of Intake #2 is located nearest to the Delta High, Clarksburg Middle, and Delta Elementary Charter schools in Clarksburg. Worst-case daytime noise levels during pile driving are indicated in the EIR/EIS. Based on the current footprint, the nearest pile driving locations for Intake #2 are located approximately 5,000 feet from the nearest school (Clarksburg Middle School). As indicated in Table 23-17 in Chapter 23, Noise, at a distance of 5,000 feet, worst-case noise levels during periods of pile driving are predicted to be about 50 dBA Leq (1hr). This assumes an average 100% utilization of pile drivers during construction, in combination with other heavy equipment (mostly heavy trucks). Assuming a conservative outdoor-to-indoor attenuation rate of 20 dB for structures with closed windows, worst-case interior levels would be about 30 dBA. With windows open, the level would be about 40 dBA.

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		disabilities. At our school we have students with Autism Spectrum Disorders, Attention Deficit Disorders as well as students with other learning disabilities. Often, these students have sensory processing disorders and have difficulty being able to regulate their senses in the face of drastic change such as the spiking of noise levels with each pile driving strike. In addition, it is often difficult for students with these disabilities to attend to and focus on instruction in optimal environments, let alone when their senses are being overloaded by the proposed level of pulsating noise from seven plus years of pile driving ½ mile from the school. It should also be known that there are two other public schools in Clarksburg (Clarksburg Middle School & Delta High School) that will be similarly impacted. While we do not speak for these schools, the impact on the learning of the children in these schools should be analyzed as well. It is our professional opinion that pile driving ½ mile and more from DECS will significantly reduce the ability of our students to concentrate on their studies and progress in their learning and even more adversely impact those students in our population who have learning disabilities that make concentration a real challenge without multiple years of pile driving ½ mile away! We believe that it may be so adverse as to make functioning as a school impossible during the multi-year construction period. As it relates to DECS, we propose a solution to the sound problems caused by BDCP over a large number of years which is to build another school for use during the multi-year pile driving construction period close by that would be sound proof to the extent of not having the pile driving increase the sound in the class room or equivalent measures.	The EPA, in its guidance about noise levels and public health states the following: "The principal consideration in the education environment is the prevention of interference with activities, particularly speech communication. An indoor noise level not exceeding Leq(24) of 45 dB is identified as adequate to facilitate thought and communication. Since teaching is occasionally conducted outside the classroom, an outdoor Leq(24) of 55 dB is identified as the maximum level to prevent activity interference." (EPA 1974) Given this standard, noise levels during periods of pile driving are not anticipated to interfere with indoor or outdoor classroom activities.
2497	2	Delta Elementary Charter School contends: that the conclusion in the BDCP related to "feasibility" of mitigations is completely unacceptable. It indicates that mitigating for these impacts won't be done as they are not feasible. It should be noted that the costs for BDCP have been estimated from a low of $16 billion in the document to other estimates of over $40 billion from various sources. That is a very broad cost range as well as being huge at either end. All elements necessary to achieving the goals of BDCP are accommodated even if it adds a few more billion dollars to the cost. However, a completely different standard is utilized when considering the mitigation of BDCP impacts (indicating that solving a large number of the problems BDCP causes isn't feasible and therefore won't be done). While those putting forth the BDCP, continue to contend that the residents and businesses in the Delta will benefit from BDCP, local residents and farmers many of whose families have made the Delta what it is today over as many as seven generations who have spoken at the vast majority of public hearings conducted over the last 5 or so years indicate quite the opposite. Accordingly, if the vast majority of the benefit from the BDCP will be outside of the Delta in the southern part of the state, and if it is so critical to be done for the good of those in the south, then the least that can be done is to make sure that citizens, businesses and farmers in the Delta are made whole from ALL the negative impacts of the project. And further, actually indicating in BDCP that it is assumed that many of the residents in Hood and other places close to facilities to be built may simply have to abandon their homes and not be compensated is not acceptable either. To do this is to deprive one group of people their property without compensation for others who then don't have to pay their fair share of the true cost of the BDCP. In summary for this section, I ask that the standards used to determine what mitigations "are not feasible" be revisited and ensure that there is appropriate and adequate budget in BDCP to compensate all of those who will be deprived of the use of their property not just	The costs of the proposed action (Alternative 4A) include all relevant costs of land acquisition. These land acquisition costs include compensating landowners for the fair market value of their land through purchase in fee title or various easements (e.g., subsurface, flood, etc.). Please see the Chapter 16, Socioeconomics, of the public draft EIR/EIS and RDEIR/SDEIS regarding the socioeconomic effects of relocating a small number of residents as a result of project construction. The cost of this relocation is included in the cost estimates for the project. Please also refer to Master Response 5 for additional details on the costs of project implementation. For more information on mitigation please see Master Response 22.

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		those that experience the legal "taking" of their property (being under a physical Intake Station that has to be taken under eminent domain.) More specifically an approach that should be considered follows: if the impacts of BDCP are not feasible to be mitigated for in a certain area and are within an area of unacceptable impact that would reasonably cause someone to leave their homes just to be able to live during the multi-year pile driving construction period or period of unacceptable impact, then they should be able to opt into having their property taken by eminent domain specified proximity outright or rendering it unusable. If this means compensation for "takes" outside of the normal standards for eminent domain then that must be done to not deprive property owners of the enjoyment of their property rights.	
2497	3	The mission and purpose of Delta Elementary Charter School is to provide a quality education to its students. In order to meet this mission and purpose DECS relies upon a number of existing physical and economic facts, including: 1. A system of roads and travel routes for bringing students to DECS as well as suppliers to bring purchased materials to the school; 2. The maintenance of existing levees and flood protection to reduce the risk of floods and the damage to DECS cause by inundation by water. A number of State and federal entities are discussing formulating various devices, strategies, policies, habitat conservation plans, reports and other procedures (together, "Plans") which appear to have the potential to significantly and seriously disrupt or even prevent the DECS from accomplishing its mission and purpose by alteration of the physical and economic facts listed above. The BDCP is one example of one of these Plans currently under consideration.	Please see Master Response 3 and Chapter 2 of the Final EIR/EIS for information on the project's purpose and need. Resource areas are addressed separately in the EIR/EIS under sections for each of the new project Alternatives, including: transportation (Chapter 19), agricultural resources (Chapter 14), hazards (Chapter 24), and others. Where impacts are determined to be significant, environmental commitments and mitigation measures will be implemented to avoid and/or offset these effects, where feasible. For information on mitigation please see Master Response 22. Also see Appendix 3B of the Final EIR/EIS. For a discussion on BDCP/California WaterFix Coordination with Flood Management requirements please see Appendix 6A of the Final EIR/EIS. For a discussion of socioeconomic impacts please see Chapter 16 of the Final EIR/EIS.
2497	4	Comments regarding groundwater: BDCP does not appear to address changes in water quality upon Delta Elementary Charter School operations. Poor water quality in groundwater, is believed to significantly and seriously deteriorate and negatively affect the efficiency of water use most importantly as drinking water in the school. The RDEIR/SDEIS must fully analyze serious and significant impacts and effects arising from changes in water quality upon DECS operations in order to be complete. DECS relies to a great degree on groundwater through an existing well located on school property. The well supplying DECS water is within one-half mile of the project's #2 water intake pumping station. BDCP needs to analyze and deal with the quality or quantity of ground water available or used by existing groundwater users as either impacts or effects as a result of any of the project alternatives. Further, it needs to provide a mechanism for an unbiased testing of water quality before the project commences so there will be a benchmark against which to measure the ultimate impact. Specific to DECS, various project alternatives, must analyze the significant and substantial impacts or effects of lowered groundwater tables, and thus failures or significant or substantial loss of access to water.	In the Final EIR/EIS the description of the proposed project, Alternative 4A, was modified to include slurry wall installation to protect local groundwater conditions during construction including at intake locations, tunnel shafts, and forebays. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. 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 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 feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional approaches. For more information on groundwater please see Chapter 7 of the Final EIR/EIS. Water quality is discussed in Master Response 14 and Chapter 8 of the Final EIR/EIS. For more information on mitigation please see Master Response 22 and Appendix 3B of the Final EIR/EIS.
2497	5	Comments regarding socioeconomics: The Socioeconomics of the Delta is founded on the belief that the "rural communities" of the Delta are the towns of the Delta, the collection of	Chapter 16, Socioeconomics, of the Final EIR/EIS, is based on the five-county Delta region, as described in Section 16.1.1. The comment does not raise any issues related to the environmental analysis in the in the

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		improvements lying within the historic townships in the Delta. In truth, the Delta communities are composed of both the townships together with their surrounding agricultural lands, each in symbiotic relationship with the other. In the Clarksburg area this truth is illustrated by the almost weekly meetings, gatherings, two annual district parades, three annual community dinners at the district firehouse, two garden clubs, a boy scout troop that has consistently produced for many years one of the greatest number of Eagle Scouts on an annual basis in the United States of America, together with innumerable events at the schools, church, library, and with other community groups, all bringing together residents of both the town area of Clarksburg with the residents outside the town area, into one cohesive single community unit bound together with unified and common values, united traditions, and family histories going back on the same land as far as seven generations ("Community Cohesion"). The Clarksburg community is also characterized by an important multi-cultural history. Whether it is the example of farmers who during the Second World War paid the taxes on the lands and building of their fellow Japanese farmers so they would not lose their land during internment, protection of the historic Japanese School, or the example of German prisoners of war choosing to remain in the Delta upon their release in 1945, the Portuguese social hall (in the Lisbon District), the residents from Holland, in the area with the same name, or the large Hispanic population which participates in the life of the Delta, these facts and more demonstrate that the Delta community and its social fabric is not divided along the lines of township vs. non-township.	2015 RDEIR/SDEIS or the 2013 DEIR/EIS.
2497	6	In the demographics, it important to note that only a part of West Sacramento lies within the Delta. The numbers offered for West Sacramento mislead because those numbers describe the whole of West Sacramento, not the Delta portion of the city. The Draft RDEIR/SDEIS ensure that data derived from outside the Delta is not offered as analysis of the Delta. Data should be limited to in-Delta residents, population, employment, etc. This same comment applies to cities and other areas which lie partly within the Delta, but the data for which is given for the entire city or area, not just the portion of the city or area which lies within the Delta.	As currently stated in Section 16.1 of Chapter 16, of the Final EIR/EIS, the Delta is located within portions of Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties and includes portions or all of the cities of Sacramento, Isleton, Elk Grove, West Sacramento, Rio Vista, Pittsburg, Antioch, Oakley, Brentwood, Stockton, Lathrop, Manteca, Tracy, and Lodi. This chapter describes socioeconomics effects in the Delta region. The study area for the socioeconomics analysis comprises Sacramento, San Joaquin, Yolo, Solano, and Contra Costa Counties, collectively referred to as the Delta region. The discussion of the Delta region describes the existing socioeconomic conditions of the statutory Delta and the surrounding Delta counties.
2497	7	The Draft RDEIR/SDEIS must mention or include at all in its analysis the 2001 Clarksburg General Plan, duly passed as an integral part of the Yolo County General Plan and is a matter of public record. As Yolo County is a cooperating agency and recognized arm of local government, the portions of its General Plan, specifically the 2001 Clarksburg General Plan, must be given the respect required by both state and federal law. The failure to include and analyze the 2001 Clarksburg General Plan is a fatal flaw.	The Clarksburg General Plan is incorporated as part of the Yolo County General Plan. The EIR/S addressed the land use effects within Yolo County as a whole. As stated in the Yolo General Plan, "All of these unincorporated communities are under the jurisdiction of Yolo County and are considered in this General Plan." The Clarksburg General Plan was retained and updated as part of the last Yolo County General Plan. Therefore, the analysis of the proposed project (and alternatives) was considered with in the construct of the Yolo County land use assessment. For more information regarding the applicability of city and county general plans please see Master response 11.
2497	8	Comments Regarding Transportation: The plan must address serious and significant impacts and effects of each of the Alternatives on the transportation network and routes relied upon by Delta Elementary Charter School to perform its mission The pavement conditions must be analyzed and ensure that damages during the multi-year construction are repaired to impact traffic to and from DECS. When 24-hour traffic diversions, and volunteer rerouting due to extremely heavy dump truck traffic to transport tunnel spoils and construction related vehicular, light equipment and heavy equipment	Mitigation Measures TRANS-2a, b, and c seek to eliminate or reduce traffic on deficient segments or to improve the condition of those pavement sections if use cannot be avoided. However, the proponents realize that this may not be feasible for all segments. Mitigation Measure TRANS-2c also includes remediation of roads to their condition prior to project construction, or better. Mitigation Measure TRANS-2c also includes coordination with affected agencies to accomplish this objective. Please see Chapter 19, Transportation, of the Final EIR/EIS. The lead agencies acknowledge that construction truck traffic may impact the local community (residents,

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		trips, the Draft RDEIR/SDEIS must address how inadequate roads that are damaged will be repaired so as to not further fracture and degrade Community Cohesion. Disruption of traffic operations inclusive of the parents bringing children to school and then getting them home must be addressed. Traffic rerouting, whether directed by governmental authority, or voluntary in nature as people change their transportation routes as a result of, and to avoid construction and operation impacts, will seriously impact and effect DECS For example and in particular, but not by limitation, the admitted time of "at least 1 hour" delay due to construction over multiple years is not acceptable and needs to be addressed. The project must analyze the serious impacts and effects of increased traffic, and in particular the serious impacts and effects of long periods of heavy equipment traffic, on the levee roads. Observable information related to the negative impact can be provided through actual observation of impacts in a home 60 feet away from the levee and 90 feet from Highway 160. The failure and omission of analysis of these issues must not happen.	schools, and farmers). Therefore, Mitigation Measure TRANS-1c also seeks to work with affected jurisdictions to enhance capacity of congested roadway segments where construction traffic will substantially affect transportation facilities. Under Mitigation Measure TRANS-1a, the lead agencies will also coordinate with Yolo County to develop a site-specific construction traffic management plan (TMP) that address impacts on Yolo County roadway segments, including State Route 84 / Jefferson Boulevard. However, some significant impacts may be unavoidable as discussed on page 19-122 of the Chapter 19, Transportation, of the RDEIR/SDEIS. For more information on mitigation please see Master Response 22. Regarding significant and unavoidable impacts please see Master Response 10.
2497	9	Comments regarding public services and utilities: The Draft RDEIR/SDEIS claims to describe the public services and utilities in the study area which may be affected by the construction, operations and maintenance of the action alternatives in the Plan Area. Fire Protection and Emergency Response, must be to ensure that travel time for fire personnel is not impeded due to the reduced availability of a road network to get to the scene of an emergency. As the Clarksburg Fire Department is a volunteer fire department, the ability of the volunteers to get to the fire station over the roadway network is critical for a timely response to a fire at Delta Elementary Charter School.	Mitigation Measures TRANS-1a requires the project proponents to develop site-specific construction traffic management plans (TMPs) that address specific steps to be taken before, during, and after construction to minimize traffic impacts. Per this mitigation measure, the TMPs would include notifications for the public, emergency providers, cycling organizations, bike shops, and schools, the U.S. Coast Guard, boating organizations, marinas, city and county parks departments, and the California Department of Parks and Recreation, where applicable, describing construction activities that could affect transportation and water navigation. Please also see response to comment 2497-8 for more information.
2497	10	Comments regarding public health: The Draft RDEIR/SDEIS must take into account various flood potential, flood dangers, and flood risks. In particular, the Draft RDEIR/SDEIS in final form should include the Lower Sacramento River/Delta North Regional Flood Management Plan (July 2014), its findings, analysis, conclusions and recommendations. Flood risk, flood events, and high water events have been a significant and serious part of life at all levels in the Delta. Flood dangers and risks, and actual flood events, should be an integral part of each and every chapter of the Draft RDEIR/SDEIS. The lack of such analysis throughout and in every chapter would be a fatal flaw.	Appendix 6A, of the FEIR/EIS, incudes a compilation of flood and levee-related information that is provided in detail in the other applicable EIR/EIS chapters. Levees are an important public safety resource and the proposed project would not change levee policy or replace ongoing programs and grant projects aimed at facilitating and supporting levee improvements in or outside the Delta. It recognized that levee maintenance and safety in the Delta is an important issue for the residents of the Delta and for statewide interests. DWR will consult with local reclamation districts and other flood management entities to ensure that construction activities and operations of the project would not conflict flood protection measures and routine maintenance. Also, see Section 6A.6.2.1.3 of Appendix 6A for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. In addition, implementation of the proposed project would not affect existing flood management programs and funding mechanisms, including those outlined in the CVFPP and associated RFMP's.
2497	11	Comments regarding public participation, consultation and coordination: The public participation, consultation and coordination activities on the part of the preparers of the Draft RDEIR/SDEIS did not include any directed or specific outreach to Delta Elementary Charter School itself. The largest outpouring of people coming to public meetings occurred in Clarksburg. Although DECS is a major public entity in the Clarksburg area, the lack of outreach from the	As state agencies, the Department of Water Resources and the California Natural Resources Agencies have an obligation to provide the public with educational information that is rooted in fact, based on reasonable assumptions supported by facts and expert opinions substantiated by facts. Doing so for a project of large scale and complexity can be a challenge. The BDCP website, blog, Your Questions Answered, and social media platforms have been the primary vehicle for communicating important project information and correcting misinformation. Brochures, factsheets, webinars and videos are other tools the State has employed to educate the public about the proposed BDCP and the EIR/EIS process. Representatives from the State have also held numerous meetings and briefings around the state to educate stakeholders and provide

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		preparers of the Draft RDEIR/SDEIS to DECS, is a fatal flaw. DECS requests that the final RDEIR/SDEIS presentation clearly identify and show specifically all places where each and every one of the comments above is addressed.	them with critical information about project developments and the EIR/EIS process. Brochures, factsheets, webinars, reports and other information is kept on the project website, www.BayDeltaConservationPlan.com, and are available for review. For more information on the public outreach efforts made during the BDCP and EIR/EIS process, please see Chapter 32 of the EIR/EIS and Master Response 40. Regarding transparency and the length and complexity of the document please see Master response 41 and Master Response 38, respectively. Please also see Master Response 27, Environmental Justice.
2498	1	Background and Environmental Justice of the RDEIR/SDEIS Impact on the Learning of Children in Meaningfully Greater Minority and Low Income Communities such as Clarksburg: The Bay Delta Conservation Plan (BDCP) proposes to dramatically alter the way homeowners in the Delta live during and after the multi-year construction period. The noise during construction is a very serious issue for me and homeowners in this area. The impact represents a disproportionate effect and is adverse. This is due to many years of enormous amount of pile driving strikes each day at each intake facility. My home is about 1 mile from Intake #2. This is a very significant impact and should not be neglected in the RDEIR/SDEIS. The pulsating noise from pile driving during the construction of Intake #2 will have a significant negative impact on me and fellow homeowners.	The commenter's concerns about noise effects in the school environment are acknowledged. Mitigation measures NOI-1a and NOI-1b are available to reduce the effects of noise during construction. The footprint of Intake #2 is located nearest to the Delta High, Clarksburg Middle, and Delta Elementary Charter schools in Clarksburg. Worst-case daytime noise levels during pile driving are indicated in the EIR/EIS. Based on the current footprint, the nearest pile driving locations for Intake #2 are located approximately 5,000 feet from the nearest school (Clarksburg Middle School). As indicated in Table 23-17, at a distance of 5,000 feet, worst-case noise levels during periods of pile driving are predicted to be about 50 dBA Leq (1hr). This assumes an average 100% utilization of pile drivers during construction, in combination with other heavy equipment (mostly heavy trucks). Assuming a conservative outdoor-to-indoor attenuation rate of 20 dB for structures with closed windows, worst-case interior levels would be about 30 dBA. With windows open, the level would be about 40 dBA. The EPA, in its guidance about noise levels and public health states the following: "The principal consideration in the education environment is the prevention of interference with activities, particularly speech communication. An indoor noise level not exceeding Leq(24) of 45 dB is identified as adequate to facilitate thought and communication. Since teaching is occasionally conducted outside the classroom, an outdoor Leq(24) of 55 dB is identified as the maximum level to prevent activity interference." (EPA 1974) Given this standard, noise levels during periods of pile driving are not anticipated to interfere with indoor or outdoor classroom activities. Please note that the discussion provided above is for site-specific information only, and is not included in the Final EIR/EIS. A site-specific analysis was conducted to determine noise levels at schools within the community of Clarksburg based on specifications provided by DWR, to respond to the comment in greater detail. The impact analysis in the Final EIR/EIS conservatively assumes worst-case conditions apply along the entire alignment and that construction could occur at any location within the construction footprint. Based on these worst-case assumptions, significant and unavoidable impacts may occur. In addition to the above, 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.
2498	2	I contend that the conclusion in the BDCP related to "feasibility" of mitigations is completely unacceptable. It indicates that mitigating for these impacts won't be done as they are not feasible. It should be noted that the costs for BDCP have been estimated from a low of $16 billion in the document to other estimates of over $40 billion from various sources. That is a very broad cost range as well as being huge at either end. All elements necessary to achieving the goals of BDCP are accommodated even if it adds a few more billion dollars to the cost. However, a completely different standard is utilized when considering the	Please see response to comment 2497- 2.

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		mitigation of BDCP impacts (indicating that solving a large number of the problems BDCP causes isn't feasible and therefore won't be done). While those putting forth the BDCP continue to contend that the residents and businesses in the Delta will benefit from BDCP, local residents and farmers, many of whose families have made the Delta what it is today over as many as seven generations, who have spoken at the vast majority of public hearings conducted over the last 5 or so years, indicate quite the opposite. Accordingly, if the vast majority of the benefit from the BDCP will be outside of the Delta in the southern part of the state, and if it is so critical to be done for the good of those in the south, then the least that can be done is to make sure that citizens, businesses and farmers in the Delta are made whole from all the negative impacts of the project. And further, actually indicating in BDCP that it is assumed that many of the residents in Hood and other places close to facilities to be built may simply have to abandon their homes and not be compensated is not acceptable either. To do this is to deprive one group of people their property without compensation from others who then don't have to pay their fair share of the true cost of the BDCP. In summary, I ask that the standards used to determine what mitigations "are not feasible" be revisited and ensure that there is appropriate and adequate budget in BDCP to compensate all of those who will be deprived of the use of their property, not just those that experience the legal "taking" of their property (being under a physical Intake Station that has to be taken under eminent domain). More specifically an approach that should be considered follows: if the impacts of BDCP are not feasible to be mitigated for in a certain area and are within an area of unacceptable impact that would reasonably cause someone to leave their homes just to be able to live during the multi-year pile driving construction period or period of unacceptable impact, then they should be able to opt into having their property taken by eminent domain specified proximity outright or rendering it unusable. If this means compensation for "takes" outside of the normal standards for eminent domain then that must be done to not deprive property owners of the enjoyment of their property rights.	
2498	3	Enjoying the benefits of living in the Delta relies upon a number of existing physical and economic facts, including: 1. A system of roads and travel routes to drive to and from my home as well as suppliers to bring purchased materials to my home; 2. The maintenance of existing levees and flood protection to reduce the risk of floods and the damage to my home caused by inundation by water. A number of state and federal entities are discussing formulating various devices, strategies, policies, habitat conservation plans, reports and other procedures (together, "Plans") which appear to have the potential to significantly and seriously disrupt or even prevent me from a rightful enjoyment of my property by alteration of the physical and economic facts listed above. The BDCP is one example of one of these Plans currently under consideration.	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. Resource areas are addressed separately in the EIR/EIS under sections for each of the new project Alternatives, including: transportation, agricultural resources, hazards, and others. Where impacts are determined to be significant, environmental commitments and mitigation measures will be implemented to avoid and/or offset these effects, where possible. Refer to Master Response 3 (Purpose and Need), Appendix 6A (Flood and Levees) and Master Response 24 (Delta As A Place).
2498	4	Comments Regarding Groundwater: BDCP does not appear to address changes in water quality upon me and other homeowners. Poor water quality in groundwater, is believed to significantly and seriously deteriorate and negatively affect the efficiency of water use most importantly as drinking water in the	In the Final EIR/EIS the description of the proposed project, Alternative 4A, was modified to include slurry wall installation to protect local groundwater conditions during construction including at intake locations, tunnel shafts, and forebays. The effects on groundwater at locations with slurry wall installations would not result in significant effects as compared to Existing Conditions. During the design phase, DWR would conduct site-specific analysis to determine the extent of the potential conflicts related to conveyance facility

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		home. The RDEIR/SDEIS must fully analyze serious and significant impacts and effects arising from changes in water quality upon me and other homeowners particularly during the de-watering required to build the tunnels. I rely totally on groundwater through an existing well located on my property. The well supplying my home water is within one mile of the project's #2 water intake pumping station. BDCP needs to analyze and deal with the quality or quantity of ground water available or used by existing groundwater users as either impacts or effects as a result of any of the project alternatives. Further, it needs to provide a mechanism for an unbiased testing of water quality before the project commences so there will be a benchmark against which to measure the ultimate impact. Specific to my home, various project alternatives must analyze the significant and substantial impacts or effects of lowered groundwater tables, and thus failures or significant or substantial loss of access to water.	construction, including locations of water supply 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 feasible phased actions to reduce EC levels; engaging counties, owners/operators, and other stakeholders in developing optional approaches. Please see Chapters 14 and 20 in the EIR/EIS.
2498	5	Comments Regarding Socioeconomics: The socioeconomics of the Delta is founded on the belief that the "rural communities" of the Delta are the towns of the Delta, the collection of improvements lying within the historic townships in the Delta. In truth, the Delta communities are composed of both the townships together with their surrounding agricultural lands, each in symbiotic relationship with the other. In the Clarksburg area this truth is illustrated by the almost weekly meetings, gatherings, two annual district parades, three annual community dinners at the district firehouse, two garden clubs, a Boy Scout troop that has consistently produced for many years one of the greatest number of Eagle Scouts on an annual basis in the United States of America, together with innumerable events at the schools, church, library, and with other community groups, all bringing together residents of both the town area of Clarksburg with the residents outside the town area, into one cohesive single community unit bound together with unified and common values, united traditions, and family histories going back on the same land as far as seven generations ("community cohesion"). The Clarksburg community is also characterized by an important multicultural history. Whether it is the example of farmers who during the Second World War paid the taxes on the lands and building of their fellow Japanese farmers so they would not lose their land during internment, protection of the historic Japanese School, or the example of German POWs choosing to remain in the Delta upon their release in 1945, the Portuguese social hall (in the Lisbon District), the residents from Holland, in the area with the same name, or the large Hispanic population which participates in the life of the Delta, these facts and more demonstrate that the Delta community and its social fabric is not divided along the lines of township vs. non-township.	Chapter 16, Socioeconomics, is based on the five-county Delta region, as described in Section 16.1.1. Section 16.1 describes the counties, the Delta population, and its community character, similar to what the commenter is describing.
2498	6	In the demographics, it important to note that only a part of West Sacramento lies within the Delta. The numbers offered for West Sacramento mislead because those numbers describe the whole of West Sacramento, not the Delta portion of the city. The Draft RDEIR/SDEIS ensure that data derived from outside the Delta is not offered as analysis of the Delta. Data should be limited to in-Delta residents, population, employment, etc. This same comment applies to cities and other areas which lie partly within the Delta, but the data for which is given for the entire city or area, not just the portion of the city or area	The text, as currently stated in Section 16.1 of Chapter 16, states that the Delta is located within portions of Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties and includes portions or all of the cities of Sacramento, Isleton, Elk Grove, West Sacramento, Rio Vista, Pittsburg, Antioch, Oakley, Brentwood, Stockton, Lathrop, Manteca, Tracy, and Lodi. This chapter describes socioeconomics effects in the Delta region. The study area for the socioeconomics analysis comprises Sacramento, San Joaquin, Yolo, Solano, and Contra Costa Counties, collectively referred to as the Delta region. The discussion of the Delta region

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		which lies within the Delta.	describes the existing socioeconomic conditions of the statutory Delta and the surrounding Delta counties.
2498	7	Comments Regarding Transportation: The plan must address serious and significant impacts and effects of each of the Alternatives on the transportation network and routes relied upon by me and other homeowners to get to and from work and other transportation needs with reasonable timelines. The pavement conditions must be analyzed and ensure that damages during the multi-year construction are repaired to not impact traffic to and from my and other homes. [With] 24-hour traffic diversions, volunteer rerouting due to extremely heavy dump truck traffic to transport tunnel spoils, and construction-related vehicular, light equipment and heavy equipment trips, the Draft RDEIR/SDEIS must address how inadequate roads that are damaged will be repaired so as to not further fracture and degrade traffic flows. For example and in particular, but not by limitation, the admitted time of "at least 1 hour" delay due to construction over multiple years is not acceptable and needs to be addressed. The project must analyze the serious impacts and effects of increased traffic, and in particular the serious impacts and effects of long periods of heavy equipment traffic, on the levee roads. Observable information related to the negative impact can be provided through actual observation of impacts in my home, which is 60 feet away from the levee and 90 feet from Highway 160. The failure and omission of analysis of these issues must not happen.	The lead agencies acknowledge that truck traffic may degrade the physical condition of the roadway segments as discussed on Draft EIR/EIS page 19-13. The lead agencies would also clarify that the roadway segments exceeding the Level of Service (LOS) threshold for at least one hour with the addition of background traffic growth and construction of the project is not as the commenter states "one hour of additional delay". Regardless, the lead agencies are committed to minimizing and remedying potential increases to site specific construction impacts and physical damage to deficient roadway segments. The lead agencies also acknowledge your concerns about transportation impacts on Delta and other local roads and agree with the desire to avoid further deterioration of these roads. Table 19-26 of the Recirculated Draft EIR/S Chapter 19, Transportation, identifies roadway segments that are deficient. Mitigation Measures TRANS-2a, b, and c seek to eliminate or reduce traffic on those segments or to improve the condition of those pavement sections if use cannot be avoided. However, the proponents realize that this may not be feasible for all segments. Mitigation Measure TRANS-2c also includes remediation of roads to their condition prior to project construction, or better. Mitigation Measure TRANS-2c also includes coordination with affected agencies to accomplish this objective.
2498	8	Comments Regarding Public Services and Utilities: The Draft RDEIR/SDEIS claims to describe the public services and utilities in the study area which may be affected by the construction, operations and maintenance of the action alternatives in the Plan Area. Fire Protection and Emergency Response: ensure that travel time for fire personnel is not impeded due to the reduced availability of a road network to get to the scene of an emergency. As the Courtland Fire Department is a volunteer fire department, the ability of the volunteers to get to the fire station and up and down River Road is critical for a timely response to a fire at my and neighbors' homes.	Mitigation Measures TRANS-1a requires the project proponents to develop site-specific construction traffic management plans (TMPs) that address specific steps to be taken before, during, and after construction to minimize traffic impacts. Per this mitigation measure, the TMPs would include notifications for the public, emergency providers, cycling organizations, bike shops, and schools, the U.S. Coast Guard, boating organizations, marinas, city and county parks departments, and the California Department of Parks and Recreation, where applicable, describing construction activities that could affect transportation and water navigation.
2498	9	Comments Regarding Public Health: The Draft RDEIR/SDEIS must take into account various flood potential, flood dangers, and flood risks. In particular, the Draft RDEIR/SDEIS in final form should include the Lower Sacramento River/Delta North Regional Flood Management Plan (July 2014), its findings, analysis, conclusions and recommendations. Flood risk, flood events, and high water events have been a significant and serious part of life at all levels in the Delta. Flood dangers and risks, and actual flood events, should be an integral part of each and every chapter of the Draft RDEIR/SDEIS. The lack of such analysis throughout and in every chapter would be a fatal flaw.	Appendix 6A, FEIR/EIS, incudes a compilation of flood and levee-related information that is provided in detail in the other applicable EIR/EIS chapters. Levees are an important public safety resource and the proposed project would not change levee policy or replace ongoing programs and grant projects aimed at facilitating and supporting levee improvements in or outside the Delta. It recognized that levee maintenance and safety in the Delta is an important issue for the residents of the Delta and for statewide interests. DWR will consult with local reclamation districts and other flood management entities to ensure that construction activities and operations of the project would not conflict flood protection measures and routine maintenance. Also, see Section 6A.6.2.1.3 for a discussion on DWR consistency with the State Plan of Flood Control (SPFC), and Section 6A.6.1.2 for information on project consistency with USACE, CVFPB, and DWR flood standards and regulations. In addition, implementation of the proposed project would not affect existing flood management programs and funding mechanisms, including those outlined in the CVFPP and associated RFMP's. It's important to note that the new proposed project, Alternative 4A, substantially reduces the habitat restoration footprint and does not include Conservation Measure 2 (Yolo Bypass Enhancements). Instead, the proposed project includes habitat restoration necessary to mitigate significant environmental effects

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			under CEQA and meet the regulatory standards of ESA Section 7 and California Endangered Species Act (CESA) Section 2081(b). Yolo Bypass Enhancements would be assumed to occur as part of the No Action Alternative because they are required by the existing BiOps. For more information regarding floods and levees please see Appendix 6A.