Letter-Comment Number	Comment	Response
497-1	The San Luis & Delta-Mendota Water Authority and Westlands Water District appreciate the opportunity to comment on the Draft Environmental Impact Report ("Draft EIR") prepared by the Department of Water Resources ("DWR") pursuant to the California Environmental Quality Act ("CEQA") for the proposed Delta Conveyance Project ("Project"). The SLDMWA and Westlands provide three comments.	This information describes the structure or organization of the comment letter, the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
497-2	1. The Draft EIR emphasizes that DWR is proposing the Project to restore and protect the reliability of State Water Project ("SWP") water deliveries by modernizing SWP infrastructure in the Delta. The Draft EIR informs the decision makers and public that the Project would further that objective by providing operational flexibility to respond to sea level rise and climate change, potential water supply disruption due to seismic events, and aquatic conditions in the Delta. The Draft EIR acknowledges the coordinated nature of SWP and the Central Valley Project ("CVP") operations and, as a result, the fact that the Project and its objectives may bear relevance to the SWP and CVP. (See, e.g., Draft EIR, p. 33-3.) It is thus appropriate for the final EIR to recognize that the resilience and adaptation benefits of the Project may also restore operational flexibility for the CVP as a result of a coordinated component, involving both the SWP and CVP, of the evolving suite of federal, state, regional, and local strategies needed to protect and ensure a safe and adequate water supply for California.	Please see Common Response 6, Climate Resilience and Adaptation, regarding adaptation to climate change and climate analyses within the EIR. Please also refer to Chapter 4, Framework for the Environmental Analysis, regarding the consideration of the U.S. Bureau of Reclamation or Central Valley Project contractors in the EIR.
497-3	2. As noted in the Draft EIR, participation in the Project by the United States Bureau of Reclamation ("Reclamation"), operator of the CVP, or by any of the water agencies that contract with Reclamation for CVP water ("CVP contractors") remains uncertain at this time. Nonetheless, the SLDMWA [San Luis & Delta-Mendota Water Authority] and Westlands support the Draft EIR's approach to the environmental analysis of the	The comment is about participation of the U.S. Bureau of Reclamation and cites or summarizes information from the EIR.

Letter-Comment Number	Comment	Response
	Project as set forth in "Chapter 4: Framework for the Environmental Analysis," which includes the CVP in evaluating the alternative ways in which the state's water infrastructure and north to south conveyance can be modernized and any adverse effects of SWP and CVP operations can be avoided or substantially lessened. Both Alternatives 2a and 4a studied in the Draft EIR provide a comparison of impacts and potential benefits of CVP involvement in the Project, either through coordinated involvement by Reclamation, as a cooperating agency, or through engagement from individual CVP contractors. (Draft EIR, pp. 4-16--4-17.) Alternatives 2a and 4a describe potential CVP participation as a result of constructing and operating infrastructure linking the Project to the Jones Pumping Plant, allowing Reclamation to use 1,500 cubic feet per second ("cfs") of the total Project capacity of 7,500 cfs. (Ibid.; see Id. at pp. 3-7, 3-9, 3-14, 3-27, 3-39, 3-41--3-42, 3-80--3-86, 3-104--3-115.). In addition, although Alternative 5 does not include CVP participation as described in the Draft EIR, the analysis shows that potential impacts disclosed for Alternative 5 would not change in any appreciable way with CVP involvement. (Draft EIR, p. 4-17; see Id. at pp. 3-116--3-133.) It is important to note that, if Alternative 2a, 4a, or 5 were implemented with CVP participation, water made available from the Project to CVP contractors would not result in new or more severe environmental impacts than those already analyzed, as reflected in the Draft EIR's evaluation of growth inducing effects. (Draft EIR, p. 31-1; see Id. at pp. 31-7--31-10.) The above-noted approaches in the Draft EIR should be maintained in the final EIR.	

Letter-Comment Number	Comment	Response
497-4	3. Consistent with the DWR's stated objective of the Project, as noted above [see comment 2], the final EIR should make clear that the Project was developed and will be implemented to avoid or fully mitigate any potential adverse impacts to the CVP and CVP contractors, such as water supply reductions, changes to the timing when water is made available, or increases in the cost of water made available.	Potential changes to SWP and CVP water supplies that could result from implementation of the Delta Conveyance Project are disclosed in Chapter 6, Water Supply. Potentially significant physical environmental impacts that could result from changes in water supply are further addressed in Chapters 7–32, as applicable. As shown in the Executive Summary, in the table titled Summary of Delta Conveyance Project Impacts and Mitigation Measures table, the analysis in Chapters 7–32 did not find any significant impacts on the CVP or CVP contractors. Please also see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding a discussion of water-dependent resource evaluations in the EIR and the selection of the study area(s) in the EIR.
497-5	Thank you for your consideration of these comments.	This information is general closing text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
498-1	The Kern County Water Agency (Agency) would like to thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Delta Conveyance Project (DCP). The Agency is a public agency created in 1961 by an act of the California Legislature. The Agency serves as the local contracting entity in Kern County for the State Water Project (SWP) and is the second largest participant in the SWP. The SWP is a critical component of the water supply for Kern County. The Agency contracts with, and delivers water supplied by the SWP to municipal and industrial and agricultural districts in Kern County which, in turn, deliver the SWP water to their residents and retail customers. In all, the Agency water deliveries serve over 800,000 people and over 650,000 irrigated acres.	This information describes the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.

Letter-Comment Number	Comment	Response
	Therefore, the Agency is uniquely qualified to provide comments.	
498-2	Comment 1: Project Purpose and Objectives The DCP is intended to "restore and protect the reliability of SWP water deliveries" to the Agency [Kern County Water Agency] and other local water agencies across the state with contracts with DWR by modernizing SWP infrastructure in the Sacramento-San Joaquin Delta (Delta). [Footnote 1: See DEIR, p. 2-2, Section 2.3 (Project Purpose).] The Agency agrees with the DEIR's description of the underlying purposes of the DCP. The Agency has committed substantial resources to support planning and design of the DCP. The Agency believes that the design, construction and operation of the DCP on an expedited basis will yield significant benefits. As explained throughout the DEIR, these benefits include: • The ability to capture higher volumes of water when precipitation in the Delta watershed leads to high flows down the rivers tributary to the Delta for storage and use; • Greater flexibility to divert, transport and deliver water in a manner that optimizes the mix of costs and benefits and is responsive to evolving regulatory conditions; • The ability to mitigate the anticipated effects of climate change, including sea level rise resulting in, among other things, reduced snowpack and greater salinity intrusion into the central and south Delta, on SWP water supplies; and • The ability to mitigate the potential effects of seismic events,	The comment summarizes or quotes information contained in Chapter 2, Purpose and Project Objectives, or agrees with information contained in the EIR. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding comments that state opinions of general support for the project.

Letter-Comment Number	Comment	Response
	including possible levee breaches and greater salinity intrusion into the south Delta, on SWP water supplies.	
498-3	The DEIR further identifies four specific objectives of the Project. The Agency [Kern County Water Agency] generally supports the DEIR's discussion of the Project's purpose and key objectives. However, the Agency recommends that the third Project objective be revised as follows: Restore and protect the ability of the SWP, and potentially the CVP, to deliver water up to the full contract amounts when hydrologic conditions result in the availability of sufficient amounts of water, consistent with the requirements of state and federal law, including the California and federal Endangered Species Acts and Delta Reform Act, as well as the terms and conditions of water delivery contracts and other existing applicable agreements. The above revisions are consistent with the California Environmental Quality Act rule that the statement of objectives should describe the underlying purpose of the project. [Footnote 2: See Cal. Code Regs., tit. 14 ["CEQA Guidelines"], § 15124(6).]	The fundamental purpose of the project is stated in Chapter 2, Purpose and Project Objectives, as: "to restore and protect the reliability of SWP water deliveries and, potentially, CVP water deliveries south of the Delta, consistent with the State's Water Resilience Portfolio in a cost-effective manner." From this fundamental purpose the four related objectives are derived. As such, the third project objective does not need to be revised as suggested by the comment because the fundamental purpose captures the information already.
498-4	Comment 2: Environmental Justice Considerations. The Interagency Working Group on Environmental Justice 2019 Community Guide to Environmental Justice and NEPA Methods defines the "affected environment" under NEPA as "the areas(s) where the governmental action will occur and where its effects will be experienced and recognizes that "[t]he affected environment for analysis can be much larger that the immediate geographic boundaries of the action under consideration." [Footnote 3: p. 25, available at	Chapter 29, Environmental Justice, of the EIR provides an environmental justice analysis that identifies minority communities and low-income communities from census tracts and block groups intersected by the footprint of the project and assesses impacts associated with resource topics that were analyzed on a broader or regional scale (e.g., air quality) that may extend beyond the environmental justice study area. The environmental justice analysis also identifies and provides discussion of minority populations and low-income populations in the SWP export service areas. Additionally, the effects of water supply reliability on environmental justice communities from elements such as the frequency

Letter-Comment Number	Comment	Response
	https://www.energy.gov/nepa/downloads/community-guide-environmental-justiceand-nepa-methods.] Specifically, the affected environment for purposes of environmental justice impacts should include those populations that may be directly, indirectly, or cumulatively affected by the DCP, including communities that may be not necessarily be contiguous with the location of DCP construction and operation activities. [Footnote 4: See ibid.] This approach is consistent with the Working Group's 2016 guidance on Promising Practices for EJ Methodologies in NEPA Reviews that is cited in the DEIR. [Footnote 5: See p. 15, available at https://www.epa.gov/sites/default/.files/2016-08/documents/nepa_ promising_practices_ document_2 016.pdf] The DEIR limits the environmental justice study area for the DCP to the Delta area. [Footnote 6: DEIR, p. 29-7, Fig. 29-1.] However, elsewhere in the DEIR, DWR acknowledges that the No Project alternative could result in adverse impacts to communities south of the Delta, including decreases in the availability of water for agricultural, environmental and urban uses, the associated reductions in local governmental fiscal conditions and programs and reduced agricultural production. [Footnote 7: See DEIR, pp. 15-28, 17-49.] The Agency's [Kern County Water Agency's] service area includes low-income and minority populations in agricultural, incorporated and unincorporated communities that would be adversely affected by severe drought conditions and the lack of a reliable water supply. In order to ensure that DWR, responsible agencies that will rely on the DCP DEIR and stakeholders have a balanced account of the environmental costs and benefits of the DCP, the Agency encourages DWR to supplement the environmental	and severity of droughts were considered in Chapter 29. Overall, increases in reliability of the total existing water portfolio is expected with implementation of the proposed project and its alternatives by sustaining and improving water supply reliability and supplementing or reducing groundwater use, which would increase water supply reliability in the export service areas that ultimately serve environmental justice communities. Please see Chapter 6, Water Supply, for details on the water supply reliability changes from the project alternatives.

Letter-Comment Number	Comment	Response
	justice analysis in the DEIR to fully articulate south of Delta environmental justice impacts under all project alternatives.	
498-5	The Agency thanks DWR for this opportunity to provide comments on the DCP DEIR and looks forward to future opportunities to support DCP's efforts to deliver this crucially needed project.	Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding comments that state opinions of general support of the project. DWR is committed to continuing to work with interested parties and the public.
500-1	East Bay Municipal Utility District (EBMUD) appreciates the opportunity to provide comments to the Department of Water Resources (DWR) on the Draft Environmental Impact Report (DEIR) for the Delta Conveyance Project (DCP or "Project"). Based on EBMUD's review of the DCP DEIR, EBMUD has identified five primary areas of concern with the environmental analysis in the DCP EIR. These areas of concern are (1) a failure to include EBMUD's planned Mokelumne Aqueducts Resiliency Project (MARP) in Cumulative Impact Conditions; (2) a failure to fully analyze and address potential impacts to EBMUD's Mokelumne Aqueducts and Mokelumne Aqueducts right-of-way (ROW); (3) a failure to recognize EBMUD's planned Mokelumne Aqueducts Resiliency Project (MARP) and provide an analysis of impacts related to MARP; (4) the lack of an operations plan to allow for a complete analysis of impacts on water supplies and operations; and (5) an inability of the existing biological modeling and data to adequately assess potential impacts on Mokelumne River salmonids. Each of these is discussed in detail below.	This information describes the structure or organization and clarification on the submittal of the comment letter. DWR has reviewed all comments and will consider all comments in its decision-making process. Responses to detailed comments summarized in this comment are provided herein. Please see responses to comments 500-2 through 500-16.
500-2	1. Appendix 3C - Existing Conditions, No Project Alternative, and Cumulative Impact Conditions should be updated to reflect the most recent status of the projects discussed and to add the Mokelumne Aqueducts Reliability Project (MARP).	The revisions requested in the comment to update descriptions in the table titled Descriptions of Programs, Projects, and Policies Considered for Existing Conditions, No Project Alternative, and Cumulative Impact Analysis in Appendix 3C, Defining Existing Conditions, No Project Alternative, and

Letter-Comment Number	Comment	Response
	The discussion in Table 3C-2 in Appendix 3C regarding EBMUD [East Bay Municipal Utilities District] Projects and Programs is out of date. The information regarding EBMUD's projects and programs should be updated as follows: A. EBMUD Camanche Permit Extension (Page 3C-54). The EBMUD Camanche Permit extension effort was completed in August 2016, with the issuance of Order WR 2016-0019-EXEC. The text should be updated as follows: EBMUD holds water right Permit 10478 (Application 13156) for appropriation of water by direct diversion and storage at Camanche and Pardee Reservoirs. Pursuant to Permit 10478, EBMUD was required to put water to beneficial use by December 1, 2000, and in 2000, EBMUD petitioned for an extension of time for construction and full beneficial use until December 31, 2040. On August 2, 2016, the SWRCB issued Order WR 2016-0019-EXEC approving an extension of time until December 31, 2040. Order WR 2016-0019-EXEC added some terms to Permit 10478 and deleted others. Among other changes, the Order incorporated a condition requiring measures, including flow and stream survey and streambed improvements, to ensure passage for salmon and steelhead downstream of Woodbridge Dam. B. Lower Mokelumne River Spawning Habitat Improvement Project (Page 3C-54). Table 3C-2 should be updated as follows: The Mokelumne River is tributary to the Delta and supports five species of anadromous fish. The implemented project	Cumulative Impact Conditions, have been made for the Camanche Permit Extension, the Lower Mokelumne River Spawning Habitat Improvement Project, and the Water Supply Management Program 2040. These projects were implemented prior to the issuance of the Delta Conveyance Project EIR Notice of Preparation (NOP) and were erroneously left off the table presented in Appendix 3C. This table has been revised for inclusion in the Final EIR. None of the revisions described in the EIR to this table resulted in a new significant environmental impact or substantial increase in the severity of an environmental impact or required additional mitigation measures to which DWR was unwilling to commit. The Mokelumne Aqueducts Reliability Project (MARP) was not added to the table because the NOP for that project was released on March 28, 2022, which was after the January 15, 2020, release date of the Delta Conveyance Project NOP. At the time of the Delta Conveyance NOP, MARP had not yet been identified as a reasonably foreseeable probable future project because it was in the planning stage for many years (prior to March 28, 2022, and expected to continue from 2022 to 2026) with no discernable potential approval and implementation date. Furthermore, the MARP EIR is not expected to be released for at least another year and a half to 2 years (winter 2024/2025).Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the approach to the cumulative analysis in the EIR and the selection of projects. While not considered a reasonably foreseeable probable future project for purposes of the EIR's cumulative analysis, DWR acknowledges EBMUD's objective with the MARP to address a vulnerable section of its delivery system that transports untreated water from Pardee Reservoir and the Sacramento River to EBMUD's service area. The MARP is a proposed resiliency project to replace the existing Mokelumne Aqueducts with a

Letter-Comment Number	Comment	Response
	completed habitat enhancement designs over the past few years and currently provides annual supplementation of 600 to 1,000 cubic yards in the maintenance phase to ensure long-term functioning of habitat restoration. Fall-run Chinook salmon and steelhead are the primary management focus in the river. Availability of spawning gravel in this section of the Mokelumne River [has] historically been determined to be deficient because historical gold and aggregate mining operations removed gravel annually and upstream dams have reduced gravel transport to the area. This area was chosen because it is known to have supported fall-run Chinook salmon and steelhead spawning in the past and because the substrate is suitable for habitat improvement. C. Water Supply Management Program 2040 (Page 3C-55). Table 3C-2 should be updated as follows: East Bay Municipal Utility District's Water Supply Management Program (WSMP 2040), adopted in 2012, describes EBMUD's planning for water supply reliability through 2040. It identifies and recommends a Preferred Portfolio of solutions to meet dry-year water needs through 2040, including water conservation, recycling, water transfers, desalination, and groundwater banking. D. The Mokelumne Aqueducts Reliability Project (MARP). Table 3C-2 should be updated to add a discussion of MARP. The background information on this project can be found here: https://www.ebmud.com/about-us/construction-and-maintenance/construction-myneighborhood/mokelumne-	proposed buried tunnel within the existing Mokelumne Aqueduct right-of-way (ROW) for the 16.5-mile reach where they cross the Delta.

Letter-Comment Number	Comment	Response
	aqueducts-resiliency-project-marp. As noted on EBMUD's website, EBMUD released a Notice of Preparation of a Draft EIR for the MARP on March 28, 2022. In the Notice of Completion and Environmental Document Transmittal, DWR was identified as an agency for recommended distribution. The following is a brief description of MARP: EBMUD has started the planning phase of the MARP to replace a vulnerable section of the system that transports untreated water from Pardee Reservoir and the Sacramento River to EBMUD's service area. EBMUD's Mokelumne Aqueduct System, which includes the Pardee Tunnel, Mokelumne Aqueducts and Lafayette Aqueducts, transports untreated water from Pardee Reservoir and the Sacramento River to EBMUD's service area. Failure of one or more of the Mokelumne Aqueducts would severely reduce the level of water service to EBMUD's customers. To address this potential public health impact from a failure of the Mokelumne Aqueducts due to earthquake hazards and levee failure hazards, the MARP is being planned to improve the resiliency of the existing Mokelumne Aqueducts by replacing them in a proposed buried tunnel within the existing Mokelumne Aqueduct ROW for the 16.5-mile reach where they cross the Delta. The tunnel could be constructed from four access shafts along the alignment. Two of the existing Aqueducts would be permanently decommissioned and one would be retrofitted and kept for operational flexibility and future outages of the tunnel. Design of the project is scheduled from 2026-2031 and the construction schedule has not yet been determined.	

Letter-Comment Number	Comment	Response
500-3	2. The DEIR Should Acknowledge Potential Impacts to the Mokelumne Aqueducts and Propose More Detailed Mitigation A. Impacts due to construction and long-term operation and maintenance The proposed tunnel alignment for the Bethany Reservoir Alternative and other alignments would pass directly underneath the existing EBMUD [East Bay Municipal Utilities District] Mokelumne Aqueducts which are a vital supply line in EBMUD's water distribution system. On a long-term basis, the Aqueducts provide virtually all of EBMUD's drinking water supply to its East Bay service area and its nearly 1.4 million inhabitants. The fact that the alignment crosses the Mokelumne Aqueducts is recognized in the Summary of Utility Crossings Technical Memoranda prepared for the Bethany Reservoir Alternative and Central and Eastern corridor options. These documents recognize the potential for construction to impact the Mokelumne Aqueducts, although this assessment is not complete and contains some inaccuracies. The Summary of Utility Crossings TM for the utility crossings for the Central and Eastern corridor options, which is referenced in the Bethany Reservoir Alternative TM, should be updated to include EBMUD's most recent plans and activities. EBMUD has implemented a program to survey the Mokelumne Aqueducts and monitor observed settlement, and as part of this program, EBMUD also replaces Aqueduct temperature anchors as needed to rectify observed settlement problems. The current temperature anchor replacement projects replace	DWR will coordinate design work at the existing Mokelumne Aqueduct crossing with East Bay Municipal Utility District (EBMUD). The vertical alignment of the Delta Conveyance Project tunnel would be finalized during the detailed design phase to avoid risks to existing EBMUD facilities. The Delta Conveyance Project tunnel vertical and horizontal alignment would be chosen based on existing and additional geotechnical investigations to avoid conflict and protect existing underground utilities, including providing proper vertical clearance under the EBMUD Mokelumne Aqueducts and other utilities, as described in the Tunnel Excavation and Drive Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022i). Additional detailed evaluations of the Delta Conveyance Project tunnel/Mokelumne Aqueduct crossing involving 3-D soil-structure and tunnel interaction modeling will be performed once site-specific geotechnical explorations and laboratory tests have been completed. DWR will coordinate with EBMUD on this future work, including with respect to temperature anchors and support bent depths. The results of additional detailed evaluations will be documented and used to avoid impacts on existing EBMUD facilities during construction and operation of the Delta Conveyance Project. It is expected that this will be documented in a Right-of-Way (ROW) Agreement between EBMUD and DWR. A robust settlement monitoring program will be required as stated in the Tunneling Effects Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022j) and described in the Potential Future Field Investigation technical memoranda (Delta Conveyance Design and Construction Authority 2022e, 2022f). Baseline readings will be performed prior to any construction commencing, including a condition assessment of existing EBMUD utilities in coordination with EBMUD.

Letter-Comment Number	Comment	Response
	piles with deeper recommended pile tip elevations. The most recent replacement project installed piles to the approximate depth of -80 feet msl, which is 20 feet deeper than the depths set forth in the TM. In the future, replacement projects may be at depths greater than that. The TM should be updated to include this information. In addition, there should be a recognition that some record documents for the Mokelumne Aqueducts may be incomplete or imprecise, and thus a margin of safety is required to ensure that impacts are avoided.	
500-4	EBMUD owns the right-of-way, including surface and subsurface rights, within which the Mokelumne Aqueducts are located. The three proposed DCP tunnel alignments (Central, Eastern, and Bethany Reservoir) would cross the Mokelumne Aqueducts and EBMUD's ROW on either Woodward Island or Jones Tract. DWR will need to secure a tunnel ROW [right of way] agreement with EBMUD in order to gain access and construct the DCP tunnel through its crossing of the Mokelumne Aqueducts ROW.	Impact UT-2 in Chapter 21, Public Services and Utilities, recognizes the project's potential conflict with existing EBMUD infrastructure and that more in-depth analysis of easement locations associated with potential parcels and utilities surveys would be completed to locate, understand, and avoid conflicts with existing utilities during the design phase. In addition, DWR will engage in consultation with EBMUD regarding the Delta Conveyance Project. This coordination will continue as design develops and is expected to result in a Right-of-Way (ROW) Agreement with EBMUD. DWR will coordinate with utility owners/operators, including EBMUD, regarding project facilities during the design phase to avoid interference or interruption of service. Please see response to comment 500-5 regarding potential approaches to avoid conflicts with existing EBMUD infrastructure.
500-5	The project also raises concerns with the DCP tunnel interfering with and damaging the Mokelumne Aqueducts if the DCP tunnel construction occurs within the zone of influence for the piles supporting the Mokelumne Aqueducts. Even if the tunnels do not directly encounter the piles, if the tunneling results in settlement, it is possible for the Mokelumne Aqueduct pipelines to be deflected, resulting in a failure with significant consequences, including the loss of water supply for EBMUD customers[,] flooding and scour of the area surrounding the failure site. Common tunneling methods	DWR is aware of EBMUD concerns and is committed to continuing coordination with EBMUD to resolve outstanding concerns, as appropriate. This coordination and commitment to adopting measures to avoid conflicts with existing EBMUD infrastructure is expected to be documented in a Right-of-Way (ROW) Agreement with EBMUD. Please see Chapter 10, Geology and Seismicity, Impact GEO-4, which analyzes the potential for tunnel-induced ground settlement and surface structure-related ground settlement. As stated below, the Delta Conveyance Project shaft locations are currently located outside the zone

Letter-Comment Number	Comment	Response
	could result in some ground settlement from stress redistribution in the ground, face losses, radial overcut greater than the shield diameter, and voids around the segmental lining. Tunneling and other construction activities can also cause vibrations resulting in pile support system settlement. Ground loss beginning at the tunnel level migrates upward, resulting in loose soils and causing settlement within a zone of influence. Although tunneling equipment and methods may be employed to control the ground, localized zones of settlement may occur unexpectedly due to ground conditions and mechanical problems with the tunnel excavation process, resulting in major ground loss, large voids in the soil profile, and sinkholes near the ground surface. This ground loss could result in major settlements extending to the ground surface. In addition, even if loosened ground associated with tunnel construction did not directly cause settlement of the Mokelumne Aqueducts, the loosened ground would be susceptible to settlement over time, which may be exacerbated by soil liquefaction causing associated ground movements post-construction during seismic events. Complications during construction could also result in lowering the groundwater table. The groundwater table may be lowered temporarily to address a construction complication, or it could be lower for a longer period of time if groundwater is infiltrating the DCP tunnel gaskets. If the groundwater table is lowered for any reason, such as tunneling or shaft construction, it would likely result in consolidation from an increase in effective stress on soft soils. This settlement could impart an increased risk of damage to the Mokelumne Aqueducts, or the surrounding levee that protects the Aqueducts. In addition, accelerated deterioration of wooden	of potential settlement influence caused by shaft construction because the shafts are at least 300 feet from existing levees, and the shaft site on Upper Jones Tract is more than 1,500 feet from the Mokelumne Aqueducts and surrounding levees that protect the aqueduct. However, ground settlement of some form is expected at the Mokelumne Aqueduct crossings, as discussed in the Tunneling Effects Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022j:12-17). The settlement values included in the technical memorandum are unmitigated and are based on the excavated diameter that includes the overcut. With today's state-of-the-art pressurized tunneling boring machines, face losses are unlikely to cause surface settlement problems as long as face pressures are maintained, voids around the segmental lining are filled with backfill grout, injection quantities are continuously monitored and checked with theoretical volumes, and additional backfill grout is automatically injected if needed. The analyses included in the technical memorandum described that surface settlements can occur due to ground losses caused by the tunnel excavation based on industry calculation methods. This analysis would be updated during the design phase following completion of additional geotechnical field investigations. The results of those investigations and subsequent analyses would be used during coordination with the EBMUD to develop the final design criteria to ensure that all conflicts are avoided. In addition, the Conclusion section of the Tunneling Effects Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022j:22) noted that further site-specific studies would be conducted, and specific methods to reduce settlement potential are anticipated to be required, especially at the EBMUD Mokelumne Aqueducts crossing locations. When site-specific geotechnical data becomes available, if engineering analysis suggests potential impacts on the existing pile support system from the proposed Delta Conveyance Project tunnel, measures will include the evaluation of in situ ground

Letter-Comment Number	Comment	Response
	piles supporting the Aqueducts would likely occur due to lower or fluctuation of groundwater levels. Construction of the DCP tunnels shafts could also result in ground movements, especially lateral displacements in the foundation or levee embankment in the vicinity of the shafts. These ground movements could result in detrimental impacts on the Aqueducts and pile foundations, either directly or indirectly due to damage to the surrounding levees. For the DCP tunnel proposed maintenance shaft on Upper Jones Tract, the finished top of shaft is elevation 37 msl with a pad width of 200 feet (Sheet No. STPB-S-5160TN). The close proximity of this facility raises concerns about access impacts and truck traffic impacts to EBMUD maintenance activities. Haul routes and utilities necessary for construction of the DCP tunnel may also have adverse impacts on the Mokelumne Aqueducts. Adverse impacts could include direct impacts from road/utility crossings or impacts to the surrounding levee system. Roads may result in adverse loadings, and the construction of both roads and utilities could result in ground settlement, vibrations, and other unforeseen damages to the Mokelumne Aqueducts. Finally, throughout the service life of the DCP tunnel, there is the possibility for adverse impacts such as settlement and sinkholes beneath the existing Mokelumne Aqueducts alignment. The DCP tunnel is currently designed as a single pass system of bolted and gasketed precast concrete segments. Unlike many large diameter water conveyance tunnels, the design does not include a secondary lining, such as welded steel. The proposed single-pass segmental lining	improvement techniques. These techniques may include soil stabilization, jet grouting, permeation grouting, compaction grouting, or other methods that can enhance the soil load-bearing capacity and provide additional support to the existing pile system. As discussed in the Potential Future Field Investigation technical memoranda (Delta Conveyance Design and Construction Authority 2022e, 2022f), monitoring for settlement during construction would be conducted. Inclinometers and extensometers would be installed in vertical borings along levees at the intakes, Bouldin Island, Lower Roberts Island, Byron Tract, King Island, Upper Jones Tract, Victoria Island, Union Island, and Coney Island (depending on selected alternative); along levees near bridge improvements; at the Southern Complex or Bethany Complex; along the tunnel alignment; and at tunnel shafts. Additionally, tilt meters, settlement plates, and survey monuments would be installed at all construction sites and approximately every mile along the tunnel alignment (Delta Conveyance Design and Construction Authority 2022e:23, 2022f:26). In regard to changes in groundwater levels affecting the Mokelumne Aqueducts, the impact analysis in Impact GW-2 in Chapter 8, Groundwater, found that no dewatering would occur along the tunnel during tunnel boring and limited removal of groundwater would occur as a result of tunnel shaft construction through the use of slurry cutoff walls and a bottom plug (concrete slab) as part of project construction. Thus, it would not cause significant groundwater table changes in the vicinity of the shafts during construction. In addition, the nearest tunnel shaft close to the Mokelumne Aqueducts is located 1 mile away for the Bethany alignment (Upper Johns Tract Shaft) and 0.9 mile away for the Central Alignment (Bacon Island Shaft), and each is expected to cause insignificant groundwater level changes during construction. As described in Chapter 8, the threshold of significance for changes in groundwater elevations (Impact GW-2) as a result of project operations is +/- 5 feet, and the groundwater

Letter-Comment Number	Comment	Response
	system with bolted and gasketed joints introduces a number of risks and has the risk of long-term degradation of the gasketed joints that may result in groundwater infiltration into the tunnel or water exfiltration depending on the net internal pressure. This water transfer could carry soil particles resulting in piping and erosion that may cause voids, settlement, and/or potentially sinkholes. Depending on the magnitude of the soil erosion, the Mokelumne Aqueducts could be damaged or there could be failure due to settlement and/or formation of large sinkholes.	simulation model results showed no significant impact. Additionally, groundwater elevations can naturally fluctuate with much greater changes in the subbasins underlying the project. The tunnels would be excavated with pressurized tunnel boring machines, and the ground would be supported with pre-cast gasketed concrete tunnel segments that would be installed within the tail shield of the tunnel boring machine. The pressurized tunnel boring machine and the tunnel lining would be constructed with dimensional checks on each ring assembled to ensure that the spacing between adjacent segments would be minimized in accordance with design criteria to be developed during the detailed design phase. To prevent displacement of the tunnel lining segments during construction and operations, the grout mix, pump pressure, and injection volume criteria will be developed during design to ensure complete filling of the annular void. This will prevent any water from leaving or entering the tunnel excavation, as discussed in the Conceptual Tunnel Lining Evaluation technical memorandum (Delta Conveyance Design and Construction Authority 2022a). As discussed in the Potential Future Field Investigation technical memoranda, where groundwater monitoring wells were installed before construction, they could continue to be used during and following construction. Additional groundwater monitoring wells would be installed during construction if permanent easements or land ownership were not acquired before construction or if initial monitoring results indicated the need for more detailed information related to groundwater elevation or water quality. It is anticipated that the additional groundwater monitoring would be located at the intakes, tunnel shafts, access roads, Southern Complex or Bethany Complex, and approximately every 2 miles along the tunnel alignment between shafts (Delta Conveyance Design and Construction Authority 2022e:24, 2022f:26-27).

Letter-Comment Number	Comment	Response
		In regard to the comment on access impacts, existing levee conditions were evaluated within the vicinity of the project construction sites, as described in the Levee Vulnerability Assessment technical memorandum and the Levee Vulnerability Assessment and Flood Risk Management Supplement—Bethany Reservoir Alternative technical memorandum (Delta Conveyance Design and Construction Authority 2022c, 2022d). The results were used to develop alignments to minimize levee risks and determine whether existing levees would need to be improved prior to construction. These technical memoranda also stated that haul routes were sited to avoid using roads on top of levees to the extent possible to minimize the effects of construction on existing levees and foundations. As described in Chapter 20, Transportation, under Mitigation Measure TRANS-1, DWR will require provisions be included in construction contracts stating that contractors' crews and schedules are to be coordinated to reduce total construction employee vehicle miles traveled (VMT) during construction periods through the use of site-specific Transportation Demand Management Plans and Transportation Management Plans. Please see Common Response 14, Transportation, for information on the transportation measures that would decrease construction employee travel. As described in the Flood Risk Management technical memorandum (Delta Conveyance Design and Construction Authority 2022b) and Levee Vulnerability Assessment and Flood Risk Management Supplement—Bethany Reservoir Alternative technical memorandum (Delta Conveyance Design and Construction Authority 2022d), stockpiles and other fill placement would not be allowed within 300 feet of existing levees to minimize the effects of surcharge loading on existing levees and foundations. In addition, the tunnel alignments were identified to cross beneath existing levees at as near to perpendicular angles as practicable to minimize effects of tunneling operations to existing levees and foundations as shown in the Engineering Concept Drawings (Delta Conveyance Design

Letter-Comment Number	Comment	Response
		and Construction Authority 2022g, 2022h). In regard to ground movements, especially lateral displacements along levees near shafts, the shafts would be constructed with stiff support systems consisting of 5-foot-thick reinforced diaphragm walls that would have minimal impact on surface settlement. The Delta Conveyance Project shaft locations are located outside the zone of potential settlement influence caused by shaft construction because the shafts are at least 300 feet from existing levees, and the shaft site on Upper Jones Tract is more than 1,500 feet from the Mokelumne Aqueducts and surrounding levees that protect the aqueduct. In regard to concerns about roads, Impact GEO-5 in Chapter 10 analyzes the potential for the use of pile driving and heavy equipment to damage roads and found that project construction would not result in ground failure. Additionally, as described in the Potential Future Field Investigations technical memorandum for the central and eastern alignments (Delta Conveyance Design and Construction Authority 2022f:24), equipment for monitoring movement and settlement during levee repairs and new levee construction would be installed during construction. Limits of movements on these facilities would be set and construction activities would be halted if these limits are exceeded. Additionally, non-structural measures would be considered in coordination with levee maintenance agencies to reduce risk of flooding during construction and operations. In regard to the lining design criteria, the gaskets would be required to provide at least a 100-year design life, such as used on many modern-day transit and highway tunnels that are also constructed with one-pass precast gasketed segmental liners, which are designed to prevent leakage. It is common to specify 100-year design life for the gaskets where gasket manufacturers will be required to submit laboratory tests for approval.

Letter-Comment Number	Comment	Response
		Instrumentation such as extensometers would be used for monitoring of sinkholes as described in the Tunneling Effects Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022j:19). Additionally, see the discussion earlier in this response regarding monitoring for settlement during construction using inclinometers, extensometers, tilt meters, settlement plates, and survey monuments (Delta Conveyance Design and Construction Authority 2022e:23, 2022f:26).
500-6	B. Proposed Mitigation The Draft EIR and the accompanying TMs include only a cursory discussion of the potential for impacts, and Chapter 21 - Public Services and Utilities, states that crossing existing water pipelines like the Mokelumne Aqueducts does not necessarily represent a physical conflict but represents an area where conflicts could occur. At this point, there are many unknowns related to the ground conditions and the proposed tunnel vertical alignment, tunnel and shaft design, construction means and methods, and operation of the DCP tunnel. Notwithstanding these unknowns, it is clear that the risk profile associated with EBMUD's [East Bay Municipal Utility District] Mokelumne Aqueducts as they cross the Delta would be different without the DCP tunnels, and it is important that the potential impacts to the Mokelumne Aqueducts be addressed. In addition to the generalized statement on Page 21-33 of Chapter 21 regarding the completion of more in-depth analysis and utilities surveys in order to avoid conflicts with existing utilities, EBMUD requests the inclusion of specific mitigation to ensure that there will be no impact to EBMUD's critical infrastructure. The following measures should be included:	Please see response to comment 500-5 regarding analysis of potential impacts on Mokelumne Aqueducts and response to comment 500-8 regarding future analysis and assessment of ground conditions. Also, please see responses to comments 500-3 and 500-7 regarding site-specific explorations, tests, 3-D modeling, and coordination with EBMUD. DWR will coordinate future design work at the Mokelumne Aqueduct crossing. Where EBMUD right-of-way access is necessary, it is expected that all relevant measures to address any potential conflicts will be reflected in a Right-of-Way (ROW) Agreement with EBMUD.

Letter-Comment Number	Comment	Response
	A. A ROW Encroachment Agreement with EBMUD. As noted above, the proposed DCP tunnel would cross the EBMUD-owned Mokelumne Aqueduct ROW [right of way]. Prior to commencement of construction of the DCP tunnel, DWR must execute a written agreement with EBMUD to obtain the right to construct the DCP tunnel in EBMUD's Mokelumne Aqueducts ROW. The ROW agreement would commit DWR to work with EBMUD to evaluate the crossings and work with EBMUD to address potential impacts. EBMUD suggests that DWR begin this process immediately so that the DCP tunnel design work can include safeguards to protect both the existing Mokelumne Aqueducts and the future MARP tunnel. EBMUD has adopted Procedure 718 to address the review and authorization of use of EBMUD ROWs. (See Attachment 1, Procedure 718). As noted in this procedure, EBMUD's policies require EBMUD to ensure that any construction impacts from third-party use of EBMUD rights of way are mitigated to a level that will avoid significant impacts. To comply with EBMUD's policies and procedures, DWR should anticipate that the DCP tunnel must be located at a depth, or low enough elevation, to avoid direct interference with the pile tips of the Mokelumne Aqueducts and future Aqueduct foundation repair projects and also avoid indirect impacts related to adverse effects on ground stability.	
500-7	B. EBMUD [East Bay Municipal Utility District] access and coordination on geotechnical evaluations DWR should commit to coordinating with EBMUD and seeking comment on geotechnical investigations. Data obtained will	DWR is aware of EBMUD concerns and is committed to continuing coordination with EBMUD to address outstanding concerns. Please see response to comment 500-3 regarding additional detailed evaluations of the Delta Conveyance Project tunnel and Mokelumne Aqueducts crossing involving 3-D modeling. DWR will coordinate with EBMUD on this future

Letter-Comment Number	Comment	Response
	need to support the development of a geotechnical model for characterization of ground conditions within the alignments to allow ground improvement and the avoidance of geological risks associated with construction of the facilities, as well as long-term risk of seismic induced liquefaction and settlement. An acceptable geotechnical investigation program will include, but is not limited to, several deep borings, sampling, in-situ testing, laboratory testing, and geophysical surveys. DWR should commit to coordinating on model development and refining of models and investigations to analyze potential interference with pile supports of the Mokelumne Aqueducts. C. Commitment to avoiding direct and indirect interference with Mokelumne Aqueducts DWR should commit to locating the DCP tunnel at a depth, with a low enough elevatiDon, to avoid direct or indirect interference with the Mokelumne Aqueducts. It is possible that future projects to replace temperature anchors and support bents may extend deeper than -80 feet msl (NAVD [North American Vertical Datum] 88) due to continuing ground subsidence and variable ground conditions, and it is important to ensure that the DCP tunnel does not interfere with EBMUD's replacement of the support structures for the Mokelumne Aqueducts. D. Monitoring DWR should commit to coordinating with EBMUD on the development of a monitoring plan that would address means of obtaining data in real time to ensure that construction procedures can be modified immediately in the event that	work, including with respect to temperature anchors and support bent depths. A robust settlement monitoring program will be required as stated in the Tunneling Effects Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022j) and described in the Potential Future Field Investigation technical memorandum (Delta Conveyance Design and Construction Authority 2022e, 2022f). Baseline readings will be performed prior to the start of any construction, including a condition assessment of existing EBMUD utilities in coordination with EBMUD. In regard to the inspection methods, both manned and unmanned inspections could be used to inspect the tunnels, as stated in the Tunnel Inspection and Maintenance Considerations technical memorandum (Delta Conveyance Design and Construction Authority 2022k). Remotely operated vehicles have been successfully used to detect infiltration and exfiltration areas in tunnels and this has been confirmed with inspection companies that perform this specialized work. The estimated dewatering time was calculated based on information provided by the DWR Operations and Maintenance team. In regard to ground loss and settlement, additional detailed evaluations of the Mokelumne Aqueducts crossing involving 3-D modeling would be performed once site-specific geotechnical explorations and laboratory tests have been completed. If results from future evaluations indicate unacceptable settlement values, appropriate measures, such as ground improvement, could be used, as discussed in the Tunneling Effects Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022j). This work will be coordinated with EBMUD. Based on preliminary geotechnical information, using a one-pass tunnel lining is feasible based on results from analysis documented in the Conceptual Tunnel Lining Evaluation technical memorandum (Delta

Letter-Comment Number	Comment	Response
	adverse impacts are identified. The purpose of a monitoring plan is to allow rapid and reliable detection of problems during construction within the tunnel crossing zone by monitoring groundwater levels, the Mokelumne Aqueducts pipelines and structural supports, perimeter levee elevations, and ground surface within the Mokelumne Aqueduct ROW [right of way]. Prior to construction, there should be a thorough establishment of a pre-construction baseline, and the monitoring plan should continue until the close out of construction. Monitoring data should be made continuously available. In addition, for the operational phase once construction is completed, DWR should commit to coordinating on the development of a long-term plan for groundwater and settlement monitoring and corrective action that contains allowable groundwater and ground surface changes within the tunnel crossing zone. In the event that increased seepage or water inflow is detected during the operational life of the DCP tunnel, the situation should be addressed by repair of the lining to eliminate groundwater infiltration or exfiltration from the tunnel. Two 60 cfs portable pumps are listed in the Description of the Proposed Project on page 3-18, for dewatering the tunnel for manned inspections and maintenance. DCA memo 023 CE-B recommends routine inspections be performed by ROV [Remotely Operated Vehicle]. EBMUD does not consider submerged ROV inspections adequate to inspect the condition of precast concrete segmental lining gaskets and identify areas of infiltration/exfiltration. Given that a one-pass tunnel liner is proposed for the 36-foot diameter DCP tunnel, EBMUD	Conveyance Design and Construction Authority 2022a). The results of the future geotechnical investigations would be shared with EBMUD during the design phase to develop the final design criteria at the Mokelumne Aqueducts crossing.

Letter-Comment Number	Comment	Response
	recommends a schedule of manned inspections. The approximate one-month dewatering time does not provide a rapid response time should the tunnel lining require repair. E. Minimization of Ground Loss and Settlement Overall, within the zone where the DCP crosses the Mokelumne Aqueducts, DWR should commit to provide construction mitigations, such as ground treatment, with a recognition of the high risk associated with tunneling under the Mokelumne Aqueducts due to the significant consequences of failure. Additional special detailing should be implemented to supplement the currently proposed one pass lining system with an additional watertight interior lining system to provide redundancy, such as a secondary tunnel lining system to mitigate potential gasket and/or bolt failure in the joints of the DCP precast concrete segmental tunnel lining. DWR should also commit to selecting a tunnel vertical alignment in stable soils that will minimize loss of ground during tunnel excavation and minimize the potential for ground settlement.	
500-8	3. The EIR Should Acknowledge Potential Impacts Related to the Implementation of MARP [Mokelumne Aqueduct Reliability Project] and the DCP in the area where the DCP tunnels cross EBMUD's ROW [East Bay Municipal Utilities District's Right of Way] A. Impacts due to construction and long-term operation and maintenance	DWR will coordinate future design work at the Mokelumne Aqueduct crossing. The final vertical alignment of the Delta Conveyance Project tunnel would be developed during the detailed design phase to avoid risks to existing EBMUD facilities, to be reflected in the Right-of-Way (ROW) Agreement with EBMUD. In addition, this coordination will consider additional avoidance measures for potential future conflicts with EBMUD's proposed MARP. Where appropriate, DWR will coordinate final tunnel design to be consistent with EBMUD's proposed MARP tunnel alignment.

Letter-Comment Number	Comment	Response
	As noted above [comments 3-7], EBMUD's Mokelumne Aqueducts are a key component of the system that delivers water to approximately 1.4 million inhabitants of the East Bay, and the existing conveyance through the Delta is vulnerable to earthquakes and flooding. EBMUD has been evaluating risks to the Mokelumne Aqueducts since the Middle River levee failed on the west levee of Lower Jones Tract in 1980. The vulnerability of the Aqueducts was again highlighted in 2004 when the Middle River levee failed and inundated the Mokelumne Aqueducts on Upper Jones Tract. EBMUD began the planning and engineering phase of MARP with a detailed analysis of projects that were necessary to maintain the reliability of the Mokelumne Aqueducts in the Delta for the next 100 years and an identification of the potential environmental impacts and permitting requirements associated with various alternatives. The preferred project identified through a ranking of alternatives that considered reliability, land use, environmental effects, cost, schedule, and risk is the deep tunnel under the Delta which is the MARP tunnel. EBMUD has now completed conceptual engineering, and in March 2022, EBMUD released the Notice of Preparation (NOP) for preparation of an Environmental Impact Report. EBMUD has provided DWR with the NOP and other geotechnical data developed by EBMUD to evaluate foundation issues with the existing Mokelumne Aqueducts and support the preliminary design of the MARP tunnel. The alignment of the DCP tunnel and the MARP tunnel cross on Woodward Island or Jones Tract, depending on the final alignment selected by DWR. (See Attachment 2, Figure 1 [ATT 2]). The DCP tunnel is proposed to occupy the same	The final Delta Conveyance Project tunnel's vertical and horizontal alignment would be chosen based on geotechnical investigations and to avoid conflict with existing underground utilities, including to provide proper vertical clearance under the EBMUD Mokelumne Aqueducts and other utilities, as described in the Tunnel Excavation and Drive Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022i). Please also see response to comment 500-5 for additional context to address this comment.

Letter-Comment Number	Comment	Response
	underground elevation band as EBMUD's MARP tunnel in the area where the DCP tunnel is proposed to cross the Mokelumne Aqueduct (see Attachment 3, Figure 2 [ATT 3]). This could result in several potential impacts. The DCP tunnel could directly interfere with the proposed MARP tunnel. In addition, construction and operation of the DCP tunnel could cause undermining of the area of the MARP tunnel. Seepage into the DCP tunnel due to failure during the lifespan could cause settlement, piping and sinkholes beneath the MARP tunnel. EBMUD could incur additional costs for construction and long-term operation of the MARP tunnel due to the potential adverse impacts of the location of the DCP tunnel and the possible need to construct the MARP tunnel at a more shallow elevation, requiring enhanced measures to address risks from seismic events. Depending on the timing of the implementation of the DCP tunnel, it is also possible that construction of the MARP tunnel could commence prior to construction of the DCP tunnel. If this is the case, it will be important to consider any resulting changes in soil properties and surrounding ground conditions, including the development of a zone of loosened soil. If the DCP tunnel was constructed second and was positioned above the MARP tunnel, the zone of loosened soil could make construction more difficult due to the potential for increased ground losses and a need for greater attention to ground control measures. Also, if the DCP tunnel was constructed second and was positioned below the MARP tunnel, ground loss and settlement from construction could adversely impact and endanger the MARP tunnel due to ground movements, including potential heave if higher face pressures are used to reduce loss of ground. Adequate separation of the two tunnels	

Letter-Comment Number	Comment	Response
	will be important to protect both tunnels, regardless of which is constructed first, and this potential for impacts should be recognized and addressed in the EIR.	
500-9	B. Mitigation to address potential impacts related to MARP [Mokelumne Aqueduct Reliability Project] Many of the mitigation measures set forth above [comments 6,7] will also assist in mitigating impacts related to the MARP tunnel and the need to ensure that EBMUD [East Bay Municipal Utilities District] can undertake the MARP project to avoid the significant impacts that would result from a failure of the Mokelumne Aqueducts. Due to the closer proximity of the proposed DCP tunnel to the MARP tunnel alignment, impacts from the siting of the DCP tunnel, as well as ground loss, settlement, and heave during construction may be more significant in relation to the MARP tunnel. It should also be noted that, depending on the alignment and elevation, there is currently the potential for the proposed DCP tunnel to directly interfere with the proposed location of the MARP tunnel. (See Attachment 3, Figure 2 [ATT 3]). DWR should commit to working with EBMUD to ensure vertical separation and buffer zones as necessary to avoid adverse impacts to both tunnel systems. The separation distance should consider ground conditions, construction methods, ground improvement, lining types and designs, and other factors. DWR should commit to treating the ground within the zone of influence at and/or above the DCP alignment prior to tunneling to form a more stable ground mass not susceptible to ground movement. Ground treatment should include corrective	Please see responses to comments 500-3 and 500-7 regarding site-specific explorations, tests, 3-D modeling, and coordination with EBMUD. A monitoring plan would be developed in coordination with EBMUD in the zone of the crossing to address the need for long-term management of groundwater and settlement risks.

Letter-Comment Number	Comment	Response
	actions such as jet grouting, deep soil mixing, permeation grouting, and potentially other methods prior to tunneling in the area of the zone of influence and plans for ground treatment should be provided to EBMUD prior to finalization. EBMUD will review, comment and approve the DWR Ground Treatment Plan for the Tunnels Crossing Zone. The DWR Ground Treatment Plan will be designed to protect both the existing Mokelumne Aqueducts and the MARP tunnel. Long-term degradation of the DCP segmental concrete lining may also result in ground movement and settlement which could cause failure to the MARP tunnel. DWR should commit to address enhanced risks created by the DCP tunnel through a ROW agreement with EBMUD. A monitoring plan should also be developed in coordination with EBMUD in the zone where the crossing will occur in order to address the need for long-term management of groundwater and settlement risks. In the event that increased seepage or water inflow is detected during the operational life of the DCP tunnel, it is important to have measures in place to ensure that corrective action is taken to avoid impacts to the area where the DCP tunnel crosses near the MARP tunnel.	
500-10	4. The Lack of an Operations Plan Precludes Adequate Analyses of Potential Impacts to Water Supply and Freeport Regional Water Project (FRWP) As an initial comment, it should be noted that there is an error in Chapter 6 -- Water Supply. Footnote c. in Table 6-5 states that EBMUD diverts CVP North-of-Delta M&I water in drought years when EBMUD's total system storage is forecast to be less than 450,000 acre-feet. The contract threshold is 500,000 acre-feet.	A detailed response regarding an operations plan is presented in response to comment 500-11. The text in Chapter 6, Water Supply, has been revised per the comment. None of the revisions described in the EIR resulted in a new significant environmental impact or substantial increase in the severity of an environmental impact or required additional mitigation measures to which DWR was unwilling to commit.

Letter-Comment Number	Comment	Response
500-11	The DCP represents a significant new water infrastructure in the Delta that would permanently change Delta hydrodynamics, operations of the State Water Project (SWP), and coordinated operations with the Central Valley Project. While bypass flow criteria are helpful in elucidating one area of project operations, there are uncertainties as to the specifics of integrated system operation of proposed intakes with ability to divert up to 7,500 cfs from the North Delta to the South Delta. The DEIR does not contain an alternatives analysis that maximizes the use of the full capacity that the Project may be operated to once complete. The lack of an operations plan or detailed description within the DEIR that connects planned operations to DEIR alternatives to provide full information on the integrated operation of the facility precludes a full and accurate assessment of potential impacts to water supply availability and operation of the FRWP [Freeport Regional Water Project]. In particular, reverse flows can require temporary FRWP shutdowns, which directly impacts water supply availability to EBMUD [East Bay Municipal Utilities District]. The FRWP intake is located near a major wastewater discharge point. The Sacramento Regional County Sanitation District ("Regional San") discharges treated wastewater into the Sacramento River through a wastewater outflow diffuser 1.3 miles downstream from the FRWP intake. The discharged wastewater remains downstream of the FRWP intake during normal flow conditions, but it can become a concern during reverse flow conditions. When reverse flows occur on the Sacramento River near Freeport, discharged wastewater from Regional San flows upstream towards the FRWP intake. To prevent wastewater effluent from entering the FRWP intake, the facility must stop	Common Response 3, Alternatives Development and Description, provides a discussion of the operational scenario evaluated in the Draft EIR. The section titled Existing Conditions in Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Systems Operations Modeling, describes 10 specific sections, including Delta channel depletion and accretions aggregating into seven subregions of the Delta. These factors are incorporated into the CalSim 3 model that forms the basis for the analysis presented in the respective chapters of the EIR. As described in Common Response 3, proposed intakes would only be permitted to operate with regulatory protections of existing standards and as prescribed by the federal and state environmental permitting process. A description of the parameters and requirements under which the Delta Conveyance Project will operate is provided in EIR Chapter 3, Description of the Proposed Project and Alternatives, in the sections addressing proposed operations criteria and the real-time operational decision-making process. The information provided in Chapter 3 is an accurate depiction of operations under the proposed project and alternatives, and DWR is not proposing to operate the project outside of the operational criteria. Chapter 5, Surface Water, discussed reverse flows in the Draft EIR. As noted in the comment, the Sacramento County Water Agency (SCWA) is required to implement controlled shutdowns of Freeport Regional Water Project (FRWP) when certain reverse flow conditions occur on the Sacramento River. SCWA is required to implement a controlled shutdown of FRWP if effluent being discharged from Sacramento Regional Wastewater Treatment Plant moves 0.9 mile upstream of their outfall. Diversions at FRWP may only restart when the reverse flow event recedes to a point 0.7 mile upstream of the Sacramento Regional Wastewater Treatment Plant outfall. Chapter 5 now includes figures titled Frequency of Duration of Reverse Flow Events and Frequency of Reverse Flow Distances that depict the limited duration and frequency of reverse flows on the Sacramento River, as well as the extent (measured in miles) of reverse

Letter-Comment Number	Comment	Response
	diverting water immediately when Regional San's wastewater effluent has traveled an average distance of 0.9 miles upstream from its discharge point. This distance of upstream travel is referred to as the "advective transport distance." The FRWP intake may not resume operation until the Sacramento River's flow returns to a normal downstream flow and the wastewater effluent zone has retreated downstream to a location not more than 0.7 miles upstream from Regional San's discharge point. These criteria are contained in a coordinated operations agreement between the Freeport Regional Water Authority and Regional San, and they are enforceable conditions of the domestic water supply permit issued to EBMUD by the State Water Resources Control Board ("SWRCB") Division of Drinking Water. To the extent that there is significant unused capacity available for diversion via the north Delta intakes as indicated by modeling, this, coupled with the potential for USBR and the CVP contractors to negotiate for the use of the unused capacity, could result in operations of the project that are different from what is described and modeled in the DEIR. Maximizing the use of the capacity could reduce carryover storage going into droughts, which could impact the joint SWP and CVP obligations to meet Delta regulatory requirements, with an effect on allocations for North of Delta users. If this is an element of the Project, it should be specifically included in the Project description, and impacts should be analyzed. Conversely, if this is not intended to be part of the Project, then that should be clearly stated.	flows when they occur. The total number of reverse flow events was analyzed using DSM2, and for each event the total flow and distance was analyzed. As shown in the figure titled Frequency of Reverse Flow Distances, there is no increase in frequency of stronger reverse flow events between existing conditions and project alternatives. For example, this figure identifies that there is no change in the frequency and duration of reverse flow events at a distance of 0.8 mile from the Sacramento Regional Wastewater Treatment Plant outfall. Furthermore, as described in Chapter 3, operation of the project includes sweeping velocity requirements that limit the diversions to times when velocity at the north Delta intakes is in the downstream direction at 0.4 foot per second. This sweeping velocity requirement would minimize changes in reverse flows. The inclusion of the information in Chapter 5 does not result in a change to an impact determination or require DWR to implement additional mitigation measures. Additionally, regarding the comment concerning reductions in carryover storage impacting SWP and CVP obligations to meet regulatory requirements, aggressive increases in exports and related potential impacts as a result of hypothetical future changes in regulatory criteria for overall SWP operations (and/or CVP operations) are beyond the scope of this EIR. Any changes in requirements proposed in the future would be appropriately analyzed if/when such requirements (e.g., Bay Delta Water Quality Control Plan, water rights decision, applicable Biological Opinions, and California Endangered Species Act Incidental Take Permit) are revised. In addition, prior to incorporation of any changes in operations beyond those analyzed in this EIR, additional CEQA analysis will be required.
500-12	5. The Delta Passage Model Does Not Allow for a Definitive Assessment of Potential Impacts to Mokelumne River Salmonids.	The comment focuses on the Delta Passage Model, as well as the Perry et al. (2018) model, not providing an assessment of potential impacts on Mokelumne River salmonids. The EIR does not attempt to use these tools

Letter-Comment Number	Comment	Response
	Juvenile salmonids from the Lower Mokelumne River typically migrate to the ocean in the spring. Outmigrating juvenile salmonids enter the interior Delta via the Mokelumne North and South Delta Forks, downstream of the Delta Cross Channel. All available migration routes pass through the interior Delta because the Mokelumne River is an eastside tributary to the Delta. Difficult conditions in the interior Delta affect the survival rate of juvenile Mokelumne River salmonids currently. Mokelumne River juvenile salmonids migrating through the Delta may be exposed to predation, entrainment in export pumps, unscreened diversions, and water quality impacts. Naturally-produced salmonids cannot avoid these conditions; they must navigate the interior Delta to reach the ocean. Any change in conveyance that may alter velocities in the interior Delta during peak migration in spring, may increase resident time of Mokelumne salmonids, and increase route entrainment toward the South Delta pumps, creating an additional impact to those fisheries. The DCP DEIR states that the project has less than significant impacts on Central Valley fall- and late fall-run Chinook salmon based on a "professional judgement" threshold of 5 percent or greater change relative to existing conditions. However, the analyses presented do not allow for a definitive assessment of the significance of impacts to Mokelumne River outmigrating salmonids, due to the inadequacy of the tools used for analyses. Further, the DCP DEIR does not present sufficient information to conclude that there are no impacts to Mokelumne origin Central Valley steelhead from the Project. The two main tools used in the EIR are 1) a spreadsheet model from Perry 2018, and 2) the Delta passage model (DPM) (Appendix 12B). Perry 2018 explicitly states that there were not enough fish in the Mokelumne route to make any definitive	in such a manner because these tools are focused on the effects on juvenile Chinook salmon emigrating from the Sacramento River basin and not the Mokelumne River basin. The analysis for Mokelumne River fall-run Chinook salmon is provided in Impact AQUA-4, wherein it is described that the main issue of concern is south Delta entrainment risk and for which the indicators of such risk (south Delta exports and hydrodynamic effects represented by factors such as proportion of flow entering the south Delta) have limited difference between the project alternatives and existing conditions. With respect to steelhead, the comment suggests that February/March south Delta exports under the preferred alternative are higher than under existing conditions. This is not supported by the information in the EIR: the March south Delta exports summarized in the table in Chapter 12, Fish and Aquatic Resources, titled Mean South Delta Exports (cubic feet per second) by Water Year Type, March in Impact AQUA-4 and under Alternative 5 (the proposed project) are similar or slightly lower than existing conditions. February exports are not summarized in Chapter 12, but Old and Middle River flows (another indicator of entrainment risk, which reflects the combined effects of SWP and CVP south Delta exports on south Delta hydrodynamics) are summarized in Impact AQUA-6 (in the table titled Mean Old and Middle River Flow (cubic feet per second) by Water Year Type, February), showing generally similar Old and Middle River flows between the proposed project and existing conditions. Based on these indicators, there is no evidence that there would be a significant impact on Mokelumne River salmonids. Although DWR is not required to provide mitigation where there are no significant impacts, DWR would commit to participating in a monitoring program related to Mokelumne origin salmonid fisheries migration and survival, if a program is established. Prior to operation of the Delta Conveyance Project, future discretionary actions will be required by DWR. If new information demonstrates that impacts on Mokelumne origin salmonid fisheries migration and survival will be substantially more severe than shown in this EIR, then subsequent CEQA review would be required to

Letter-Comment Number	Comment	Response
	assessments. “Most survival and travel time parameters associated with reach 6 (the Delta Cross Channel) exhibited wide credible intervals because only six release groups were released prior to mid-December when the Delta Cross Channel undergoes mandatory closures for fish protection (Fig. 4). Consequently, there was relatively little data from which to estimate the effects of river discharge on travel time and survival for reach 6.” Reach 6 is the only migration route available to Mokelumne origin salmonids. The Delta Passage Model is inadequate for similar reasons. The current model is based on acoustically tagged winter-run, spring-run, fall-run and late fall-run individuals (≥ 80 mm) released in the upper reaches of the Sacramento River and within the Delta. It is based on fish >80 mm so can only be used to assess smolt metrics (survival, travel time, etc.), and does not address impacts to fry or parr sized fish from any river system, including the Mokelumne. This life stage can make up a significant portion of the migrating population in some years. The DPM still defines the “Georgiana/DCC” as one reach which includes both Sacramento fish coming from the north with Mokelumne fish coming from the east, so it is impossible to assess the impacts of each run independently (Figure 12B-56 in Appendix 12B.) Additionally, the DPM explicitly states it is not used to assess steelhead (Table 12-3 in Chapter 12), so no inferences about Central Valley steelhead, which are Federally Threatened under the Endangered Species Act, can be provided by this model. For steelhead populations, the DCP DEIR states that impacts are potentially significant, but less than significant with mitigation (but only for Sacramento River steelhead due to North Delta Diversion impacts). The DEIR states in Chapter 12 (Page 12-152) that, “Effects on steelhead from the San Joaquin River and Mokelumne basins would not	identify feasible mitigation measures to avoid or substantially lessen such operational impacts.

Letter-Comment Number	Comment	Response
	be negative under the project alternatives, relative to existing conditions," ostensibly based on slightly reduced South Delta diversions. However, this conclusion appears contradictory as the results show increased pumping at Jones and reduced pumping at Banks. Based on EBMUD's modeling review, it appears that diversions are higher under the preferred alternative than under existing conditions in February/March – which are prime timing for steelhead migration. The EIR uses Perry (2018) data on late fall-run Chinook released in the Sacramento River to assess steelhead impacts as "analogous to those of juvenile Chinook salmon." Perry, however, does a poor job even analyzing Chinook from Mokelumne, let alone expanding that to include steelhead from the Mokelumne, due to lack of release groups that experience the Mokelumne forks in the study. Juvenile production from the Mokelumne River Fish Hatchery could be utilized in targeted studies to improve analysis of migration impacts from operations of the DCP moving forward. To ensure that there is no potential for significant impacts to Mokelumne River steelhead and Chinook, DWR should commit to addressing any impacts if they materialize in recognition that the tools currently used for assessing the potential impacts are not sufficient for a specific assessment of Mokelumne River.	
500-13	EBMUD looks forward to discussions with DWR on measures to mitigate impacts to the Mokelumne Aqueducts and MARP and address any uncertainties regarding other impacts to EBMUD's operations and the Mokelumne River resources.	This is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process. DWR is committed to working with all interested parties.
500-14	[Attachment 1: EBMUD Procedure 718 Authorized Uses of Pipeline Rights-of-Way]	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter.

Letter-Comment Number	Comment	Response
500-15	[ATT 2: Figure 1, MARP Tunnel Alignment]	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter.
500-16	[ATT 3: Figure depicting the elevations of the EBMUD MARP components relative to the proposed DCP tunnel for the Bethany Reservoir alternative.]	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter.
505-1	Thank you for providing the City of Vallejo (the City) with the opportunity to comment on the Delta Conveyance Draft Environmental Impact Report (DEIR). The purpose of this letter is to provide the California Department of Water Resources (DWR) comments that the City deems vital to Vallejo citizens and Vallejo's regional water customers. The City is a member agency of the Solano County Water Agency (SCWA), which submitted a comment letter titled "SCWA Comment Letter | Draft EIR on Delta Conveyance," (SCWA Letter) dated December 5, 2022, and is included with this letter as Attachment 1 [Attachment 3] for ease of reference. The City fully agrees with all points in the SCWA letter and is submitting this separate letter with more specific comments related to Vallejo's historic water right and Vallejo's historic Cache Slough Pumping Plant facility (CSPP). The Delta is the primary source of water for the City and its regional customers, providing over half of the water supply for the City on an annual basis through an allocation of State Water Project (SWP) Table A water and a historical right that pre-dates the SWP on Cache Slough. The City supplies raw and potable water to approximately 150,000 people including the residents of Vallejo, Travis Air Force Base (one of the largest employers and economic drivers in Solano County), areas of rural Solano County (Green Valley and Gordon Valley), as well as some areas of Napa County. During times of drought, and through	The SWP and CVP must operate to permit requirements, water quality standards, and other regulatory requirements described throughout the EIR as part of baseline conditions. Water deliveries are made based on hydrologic water years, water rights, contracts, and operation to permits, water quality standards, and other regulatory requirements as described throughout the EIR (e.g., Chapters 5, Surface Water; 6, Water Supply; and Appendix 5A, Modeling Technical Appendix, 5A-B, Hydrology and Systems Operations Modeling). As described in Chapter 3, Description of the Proposed Project and Alternatives, section titled Key Existing Delta Operations Criteria, the project would be operated consistent with regulatory requirements, specifically State Water Board Water Right Decision 1641 (D-1641). Potential significant environmental impacts of the project and proposed mitigation measures are evaluated in Chapters 7–32 of the EIR. The EIR addresses water supply and water quality in Chapter 6, Water Supply and Chapter 9, Water Quality. Responses to detailed comments are provided herein. Responses to comments from the Solano County Water Agency can be found in letter 312 (312-1 through 312-27).

Letter-Comment Number	Comment	Response
	good-neighbor agreements, Vallejo also periodically provides water to the Cities of American Canyon, Napa, Benicia, and Fairfield. The importance of the reliability of the City's historic water right to the Solano County region cannot be overstated. This letter provides a summary of Vallejo's key concerns that need to be addressed in the DEIR. The overlying concern for the City is the importance and protection of a reliable, high-quality water supply for the City and the surrounding region. The City's primary concerns are that the Delta Conveyance project would negatively impact its ability to divert water from the Delta either through a reduction in water supply reliability and/or a reduction in water quality.	
505-2	The City [of Vallejo] has an historic water right that predates the State Water Project, commonly referred to as Vallejo Permit Water (VPW) (License 7848). The City maintains the original point of diversion (POD) for that water right on the Maine Prairie branch of the Cache Slough Complex referred to internally as the Cache Slough Pumping Plant (CSPP). The CSPP is approximately 3 miles from the North Bay Aqueduct (NBA) intake at Barker Slough. The CSPP is identified as a water quality objective monitoring location in Water Right Decision 1641 as Station C-19, referred to in the DEIR as "Cache Slough at the City of Vallejo Intake", and referred to in the SCWA Letter as the "City of Vallejo Pump Station". Please see attached Figure 2 [Attachment 2] for the location of the CSPP. Prior to construction of the NBA, the CSPP pumped water into the City's Cache Slough pipeline and conveyed 22,896 acre-feet per year (afy) of water from Cache Slough to Vallejo. The City of Vallejo subsequently paid DWR to increase the size of the NBA for additional capacity and the right to use the NBA to convey VPW. Under the existing contract, DWR has limited the	The comment provides an historic account of its water right with respect to operations within the Delta; however, it does not raise a significant environmental issue relating to the proposed project or address the adequacy, accuracy, or completeness of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.

Letter-Comment Number	Comment	Response
	annual conveyance amount of VPW through the NBA to 17,287 afy.	
505-3	Specific Concerns Water Quality The City [City of Vallejo] concurs with SCWA [Solano County Water Agency] the Delta Simulation Model II (DSM2) model is not a reliable predictive model for the CSC region, including the NBA intake and existing CSPP [Cache Slough Pumping Plant]. The City also concurs with SCWA regarding the coarse resolution (monthly timestep) of the model. The City owns three water treatment plants, two of which utilize water from the NBA. [North Bay Aqueduct] The City tests raw water quality every four hours and adjusts its treatment protocol based on the results of those analyses. A modeled monthly average is not a fine enough resolution to provide an assurance that water quality impacts as modeled are negligible for treatment operations. The City owns and operates the Travis Water Treatment Plant (Travis WTP) and primarily supplies the base with water using the NBA. Attached Figure 1 [Attachment 1] shows the results of raw water analyses for Total Organic Carbon (TOC) taken at the Travis WTP during times the influent water supply was from the Delta. The Travis WTP was selected as it is the closest City facility that utilizes water from the NBA. As compared to the DEIR modeling results shown in Figure 4 of the SCWA Letter, it is obvious the monthly timestep is too coarse to plan for treatment operations and is an insufficient predictor of water quality impacts identified in the DEIR. Please note, data gaps on Figure 1 of this letter indicate times the water supplied to	Since modeling results are being used for comparative analysis, and not as a predictor, DSM2 is being appropriately used to assess impacts on organic carbon in the Delta, including the North Bay Aqueduct intake at Barker Slough. As shown in Appendix 9B, Source Water Fingerprinting, in the 10 figures showing assessment location Barker Slough at North Bay Aqueduct, the change in source water present at the Barker Slough intake is less than 1% when the project alternatives were compared to the existing conditions, which indicates minimal effect of project operations on the hydrodynamics within Cache Slough and in the vicinity of the Barker Slough intake. Please refer to Common Response 10, Surface Water Quality and Groundwater Resources, regarding DSM2 calibration and verification and averaging modeling output and use of these results in the impact assessment. The commenter does not offer a different numerical model that is better calibrated and validated. DSM2 is the best available model that can be used to model 93-year hydrodynamics and water quality simulations in the Delta.

Letter-Comment Number	Comment	Response
	the Travis WTP was not solely from the NBA due to operational needs or curtailments. The City recommends utilizing a model better suited to the Cache Slough, inclusive of the CSPP and the NBA specifically, and to improve any modeling efforts by using weekly timesteps instead of monthly.	
505-4	Habitat Improvement: As outlined in the SCWA [Solano County Water Agency] Letter, it is clear the North Delta Habitat Arc (Cache Slough to Suisun Marsh) is identified as a preferred location for environmental mitigation and specifically identified as a location that should be prioritized for habitat mitigation. There are several habitat mitigation projects planned, in progress, or completed in the North Delta Habitat Arc and the Cache Slough Complex, the cumulative effects of which will reduce water quality and water supply availability for municipal purposes. The DEIR does not clearly identify a mitigation effort, nor does it explore the cumulative impacts of an additional mitigation project in the North Delta Habitat Arc and the CSC. Should yet another focused habitat restoration effort be identified as a mitigation action for the Delta Conveyance project, increased biological activity will likely occur in the area surrounding the CSPP which will affect the City's ability to operate the pumping plant and fully utilize its water right.	Please see Common Response 10, Terrestrial Biological Resources and Compensatory Mitigation Plan, regarding the location of tidal habitat restoration. DWR acknowledges the specific tidal restoration locations have not been determined at this time but that they are generally planned to occur in the North Delta Arc, a recognized priority area for tidal habitat restoration to benefit native fishes. No decisions have been made to locate potential restoration sites near the City's facilities. Potential impacts of the CMP, which is a mitigation measure in the EIR, are disclosed for each impact. Should it be determined in the future that additional environmental review is required for individual tidal restoration sites, the requirements of CEQA, including disclosure of cumulative impacts, would be included in the appropriate CEQA document. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the CEQA process and the level of detail currently included in the CMP. The final compensatory habitat mitigation needs for the project will be determined once all regulatory permits and approvals are secured. The mitigation approaches are described in sufficient detail to meet the requirements of CEQA. It is anticipated that additional design and management planning, including more detailed performance standards, monitoring methods, and adaptive management actions, would be refined through the permitting process prior to project approval and initiation.

Letter-Comment Number	Comment	Response
505-5	Due to the existing SWP Incidental Take Permit (ITP), the NBA and Barker Slough Pumping Plant (BSPP) facilities were curtailed for 92 days due to the presence of Delta and Longfin smelt. Due to the pumping limitations on the BSPP, the City's [City of Vallejo's] available water supply from the Delta was reduced by 87%. Cumulative reductions in supply at that time, due to the extremely low allocations of the SWP that year, the BSPP curtailments, and curtailments imposed from the implementation of the Water Unavailability Methodology for the Delta Watershed (Water Unavailability Methodology) and the regulatory authority of the State Water Resources Control Board (SWRCB) reduced the City's [City of Vallejo] total available supply, including from other sources, by approximately 50%. The ITP can also limit NBA diversions from January - June, a period of 6 months/year, which have the possibility to reduce the City's available water supply by over 50% without the additional water rights curtailments imposed. This existing condition will only be exacerbated by increased mitigation in an area already over-populated with mitigation related projects. Figure 2 [Attachment 2] is a map included in the SCWA letter showing constructed and planned tidal wetland restoration projects in the CSC. The location of the CSPP [Cache Slough Pumping Plant] was added to the map created by SCWA. The City recommends identifying locations outside of the Cache Slough Complex that are available for habitat mitigation measures of the Delta Conveyance Project.	As described in Appendix 3F, Compensatory Mitigation Plan for Special-Status Species and Aquatic Resources, "the Tidal Habitat Mitigation Framework…focuses first on the suitable restoration areas identified in the Delta Plan, such as the tidally influenced regions of Cache Slough and lower Yolo Bypass. However, it is uncertain that all tidal wetland habitat needs can be feasibly met in this region." DWR acknowledges the exact location for tidal habitat restoration mitigation has not been determined at this time but generally is planned to occur in the North Delta Arc. The North Delta Arc includes areas both in and outside of the Cache Slough Complex. As described in Appendix 3F, section titled Site Selection Criteria and Tools, site selection for tidal habitat restoration would be dependent on a number of criteria including the location of existing water supply intakes, source water and local hydraulics. Based on the above considerations, DWR does not expect the proposed tidal habitat mitigation to adversely affect City of Vallejo water supplies diverted from the North Bay Aqueduct.

Letter-Comment Number	Comment	Response
505-6	Water Supply Impacts In May 2021, the State Water Board announced development of the Water Unavailability Methodology for the Delta Watershed (Water Unavailability Methodology) to identify when supply and demand data indicate that water is unavailable for diversion by water right holders. [Footnote 1: Water Unavailability Methodology for the Delta Watershed (website) https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/drought_tools_methods/delta_method.html]. The Water Unavailability Methodology was created to serve as the technical basis for curtailment orders pursuant to directives in the emergency drought proclamation. [Footnote 2: Water Unavailability Methodology, May 12, 2021 (page 5) and updated June 27, 2022 (page 4)] The Water Unavailability Methodology employs the use of CalSim 3, which was also utilized in the DEIR, to model the hydrologic supply and demand estimations as well as the operations of the SWP and the Central Valley Project (CVP) in order to assess whether enough water was available for diverters in the Delta. If there was not enough water available as modeled, diverters and right holders were informed of a curtailment status and ordered to cease diverting, including the rights associated with the SWP and CVP. As stated in Section 2.1.3 Subwatershed Delineation of the Summary Report for the Water Unavailability Methodology, "The supply data is generally only available at the HUC8 watershed scale or larger, while the demand data includes both the HUC8 watershed and the precise spatial location (latitude and longitude) of each POD."	The commenter has provided a statement of opinion regarding the applicability of the Water Unavailability Methodology for the Delta Watershed as it relates to the operability of the project however, the comment does not provide new information, raise a significant environmental issue relating to the proposed project or address the adequacy, accuracy, or completeness of the EIR; therefore, no further response is required. DWR has reviewed all comments and will consider all comments in its decision-making process.

Letter-Comment Number	Comment	Response
	Relocating the point of diversion of the SWP intakes will move the diversions into a different HUC8 sub-watershed [Footnote 3: Current HUC 1804003, proposed HUC 18020163]. This relocation would update the results of the Water Unavailability Methodology leading to alterations of the project operations and available water supplies throughout the Delta during times of drought, negatively impacting downstream diverters. Although the Water Unavailability Methodology was implemented specifically to address the impacts of the drought on the Delta, it has fundamentally changed the way the projects have been operated during times of drought and has had wide-reaching impacts for diverters throughout the Delta. In Section 5.3.1.1 of the DEIR, CalSim 3 was identified as the chosen model to simulate SWP/CVP operations for the Project Alternatives. In Section 3.5 No Project Alternative, the DEIR states, "Under the No Project Alternative, DWR would continue to operate the existing SWP facilities to divert, store, and convey SWP water consistent with applicable laws, regulations, and permit conditions, and SWP contractual obligations for water deliveries." It is later stated in Section B.10 of Appendix 5A, "…the No Project Alternative (2040) model provides information about storage, flow, and water deliveries that would occur under a repeat of the historical weather sequence transformed for (a) climate change and (b) operations of water management facilities" (emphasis added). The Water Unavailability Methodology was implemented as a result of a drought emergency which was caused by unprecedented climatic conditions. Again, the implementation of the Water Unavailability Methodology fundamentally changed the way the Delta was operated, including the SWP and CVP, likely	

Letter-Comment Number	Comment	Response
	rendering the DEIR model results during dry or drought years obsolete. In August 2022, Governor Newsom announced the release of a strategic water supply document which outlines at a high level the sweeping impacts of climate change on the State and provides high-level strategic efforts with implementation steps to address the issue of a diminishing water supply [Footnote 4: California's Water Supply Strategy: Adapting to a Hotter, Drier Future. Https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Water-Resilience/CA-Water-Supply-Strategy.pdf]. One of the strategies identified is to "Modernize water rights administration for equity, access, flexibility, and transparency" with the intention to simplify California's management of water supply at the State level. The implementation steps for this strategy include more robust supply/demand modeling for the Delta watershed, and the consideration of adopting regulations that would allow for curtailments of water rights during years when there is not a declared drought emergency. Utilizing historic operations as a predictive tool for future operations is premature given the significant changes that have been seen in operations in the past two years, and the impending changes outlined in the Governor's strategy. Although the CEQA baseline for assessing significance of impacts of any proposed project is the conditions at the time a Notice of Preparation (NOP) is issued (CEQA Guidelines § 15125(a)), the significance of the altered operations due to the results of the Water Unavailability Methodology and the drought emergency regulations the City strongly urges the	

Letter-Comment Number	Comment	Response
	State to reevaluate the Project Alternatives by incorporating the impacts of the results of the Water Unavailability Methodology for a more realistic predictive model of projected Project impacts during times of drought.	
505-7	Thank you for taking the time to review our concerns.	This information is general closing text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
505-8	[ATT 1: Raw Water Analyses Results - Total Organic Carbon - Travis WTP - Source: North Bay Aqueduct]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
505-9	[ATT 2: Planned & Constructed Tidal Wetland Restoration Projects in the Cache Slough Complex in Proximity to the NBA, Compliance Point 716, and the CSPP]	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter.
505-10	Attachment 3: DCP Comment Letter From Solano County Water Agency	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter. DWR has reviewed all comments and will consider all comments in its decision-making process.
506-1	The Northern Delta Groundwater Sustainability Agency ("NDGSA") submits these comments on the August 2022 Draft Environmental Impact Report ("DEIR") for the Delta Conveyance Project ("project" or "DCP") prepared by the California Department of Water Resources ("DWR"). [Footnote 1: This comment focuses on the DEIR's analysis of Alternative 5 unless otherwise noted.] The NDGSA is a joint powers agency comprised of seven local agency members and two associate members formed under the Sustainable Groundwater Management Act of 2014 ("SGMA"). (Wat. Code, § 10720 et seq.) The NDGSA members have formed Groundwater Sustainability Agencies ("GSAs") in response to the mandate of SGMA in order to support the unique local agricultural, social, and environmental needs of the Delta. Managed by a board of	This information describes the structure or organization of the comment letter, the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.

Letter-Comment Number	Comment	Response
	directors comprised of Delta residents, the NDGSA provides a unified perspective on agricultural and rural communities, protecting local interests and the need for sustainable groundwater management under SGMA. The NDGSA is a signatory of both the 2022 South American and Solano Subbasin Groundwater Sustainability Plans ("GSPs"). The NDGSA has several concerns regarding the DEIR's analysis of the project's potential impacts on local groundwater resources.	
506-2	1. The DEIR Fails to Identify the Project's Impacts that May Create Barriers to Meeting SGMA's [Sustainable Groundwater Management Act] Sustainability Requirements The purpose of GSPs [Groundwater Sustainability Plan] is to provide GSAs [Groundwater Sustainability Agency] with a toolkit for ensuring their respective groundwater basins will reach long-term sustainability. These plans are submitted to DWR, and DWR determines whether a GSP complies with SGMA and is likely to achieve the sustainability goal for the basin. (See Wat. Code, §§ 10733-10735.) The DEIR provides some background information regarding the GSPs in the project area. (DEIR, pp. 8-7 to 9.) Ironically, however, the DEIR fails to analyze the project's potential impacts on the region's GSPs. Under the No Project Alternative analysis, the DEIR also determines that "Implementation of the GSPs and the resulting achievement of groundwater sustainability by 2040 or 2042 would result in stable groundwater levels and the active management of groundwater extractions within predetermined operating ranges." (DEIR, p. 8-21.) Yet, none of the DEIR's impact analyses discuss whether the project would impede achievement of groundwater sustainability within the subbasins in which the project would be carried out. This is a failure to inform the public of the potential impacts of the	Please see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding consideration of California's Sustainable Groundwater Management Act (SGMA) and Groundwater Sustainability Plans (GSPs). The EIR fully discloses impacts on groundwater during construction and operations and concluded impacts would be less than significant, and as described in Common Response 8, the project would not interfere with implementation of GSPs.

Letter-Comment Number	Comment	Response
	project.	
506-3	2. The DEIR Lacks a Quantitative Analysis for Construction Impacts The DEIR lacks a quantitative analysis of groundwater impacts during construction of the project. DWR states that this approach was chosen because there is a "lack of an available analytical tool at the spatial scale required for the site-specific quantitative analysis." (DEIR, p. 8-13.) However, as one of the two State agencies overseeing the implementation of SGMA, DWR should be able to create a model to quantify potential construction impacts. This type of analysis is needed in part because, as the DEIR recognizes, high salinity has been "attributed to poor-quality groundwater intrusion from the Delta caused by the decline of groundwater levels and worsened by sea level rise." (DEIR, p. 8-10.) The DEIR's analysis is insufficient to detect and quantify local groundwater impacts that could lead to undesirable effects under SGMA in several additional areas, such as interconnected surface waters, groundwater dependent ecosystems, impacts to domestic wells in under-served/represented communities, and decreases in water table elevations. Therefore, an in-depth quantitative analysis of all groundwater impacts must be included in the DEIR.	DWR fully evaluates the construction-related groundwater impacts of the Delta Conveyance Project in the EIR. Common Response 10, Surface Water Quality and Groundwater Resources, provides additional clarifying information regarding the methodology and information used to adequately and appropriately evaluate construction-related impacts described in Chapter 8, Groundwater. As described in Common Response 10 and Chapter 8 (in the section titled Methods for Analysis), the Delta Conveyance Project construction-related impacts are evaluated using existing groundwater conditions and hydrogeology, standard design and construction methods (Delta Conveyance Design and Construction Authority 2022b, 2022c), and anticipated changes in groundwater elevations, storage, and quality during construction. As described in Common Response 10, cutoff walls would be designed to applicable standards depending on the unique site-specific conditions and the location of the facility being constructed. Cutoff walls are designed and used to minimize need for dewatering and the movement of groundwater outside of the cutoff walls. Given this, and the other information provided in Common Response 10, construction would not result in substantial changes to groundwater levels or groundwater water quality. Furthermore, the analysis in Impact GW-1 and Impact GW-2 shows that under construction groundwater levels would generally be maintained at the level of existing conditions during the use of cutoff walls or dewatering. As the proposed project and project alternatives would not result in a substantial change in groundwater levels, they would also not result in a substantial change in groundwater salinity associated with a decline in groundwater levels. And, if unanticipated changes to groundwater levels occurred during construction, the changes would be localized and in the immediate construction area. The EIR also includes Mitigation Measure GW-1, which requires monitoring during construction and adjustments to construction activities as needed, depending on the groundwater level monitoring results. Although it is determined that the project would not impact

Letter-Comment Number	Comment	Response
		groundwater quality, Mitigation Measure GW-1 has been revised to include monitoring of electric conductivity at select locations during construction to provide data confirming the conclusions in the EIR. Impact GW-1 and Impact GW-2 remain less than significant prior to the implementation of the revised mitigation measure, as described in Chapter 8. The revision does not result in a new significant environmental impact, substantial increase in the severity of an environmental impact, or require additional mitigation measures to which DWR was unwilling to commit. Potential impacts of dewatering and construction are considered less than significant. The potential for project construction activities to result in groundwater contamination is addressed in Chapter 25, Hazards, Hazardous Materials, and Wildfire, under Impact HAZ-1. Additionally, groundwater removed with the dewatering system would be treated as necessary, stored, and reused for water supply on-site (see Chapter 3, Description of the Proposed Project and Alternatives). If the total volume of on-site water flows, including treated dewatering flows, exceed the on-site storage and water demands, water would be discharged in accordance with the Stormwater Pollution Prevention Plan described in Appendix 3B, Environmental Commitments and Best Management Practices. During construction, slurry cutoff walls would be installed around project intakes to reduce the amount of dewatering pumping required for construction. At the project intakes, deep cutoff walls would be constructed in the foundations of the sedimentation basin, outlet channel perimeter embankment, and the temporary levee, as well as at the back of the intake structure to isolate the internal subsurface from surrounding local groundwater for both construction and operations phases. Dewatering during operations and maintenance would occur very infrequently, likely decades between events. Additional context about the rates and duration of construction dewatering is provided in Common Response 10. Please see Common Response 8, Relationship to Other Plans, Projects,

Letter-Comment Number	Comment	Response
		Policies, and Programs, regarding consideration of California's Sustainable Groundwater Management Act (SGMA) and groundwater sustainability plans. As described in Common Response 8, the groundwater analysis contained in Chapter 8 found construction and operation groundwater impacts to be less than significant, and the project would not interfere with implementation of groundwater sustainability plans.
506-4	Dewatering Activities Would Significantly Impact Groundwater Levels The DEIR states that there is potential for "temporary localized changes" due to dewatering at construction sites. (DEIR, p. 8-1.) The DEIR later states that dewatering events could temporarily reduce stream gains or increase stream losses, but that DWR would use slurry cutoff walls to reduce the amount of groundwater entering the construction site. (DEIR, p. 8-30.) This analysis fails to properly address these two different impacts separately. This analysis likewise fails to address cutoff walls as a source of an entirely new impact to interconnected surface waters. The DEIR concludes that "the impacts of these dewatering events on interconnected surface waters would occur during the construction period and would be short term in nature, and would be minimized through construction practices, including Mitigation Measure GW-1[.]" (DEIR, p. 8-30.) Yet, the omission of quantified construction impacts creates significant uncertainty regarding the extent of dewatering events that would occur during construction, and where that water would go. The DEIR vaguely asserts that these impacts would be "short term in nature," and would be minimized through mitigation, therefore the impact would be less than significant.	Please see response to comment 506-3 regarding the use of cutoff walls and dewatering and the analysis contained in the EIR. Information regarding the effectiveness of cutoff walls is found in Common Response 10, Surface Water Quality and Groundwater Resources. As described in response to comment 506-3, Common Response 10, and Chapter 8, Groundwater (in the section titled Methods for Analysis), the Delta Conveyance Project construction-related impacts are evaluated using existing groundwater conditions and hydrogeology, standard design and construction methods (Delta Conveyance Design and Construction Authority 2022b, 2022c), and anticipated changes in groundwater elevations, storage, and quality during construction. As described in Common Response 10, cutoff walls would be designed to applicable standards depending on the unique site- specific conditions and the location of the facility being constructed. Cutoff walls are designed and used to minimize need for dewatering and the movement of groundwater outside of the cutoff walls. Given this, and the other information provided in Common Response 10, construction would not result in substantial changes to groundwater levels and no significant impacts on groundwater are anticipated during project construction as a result of construction dewatering activities. Furthermore, the EIR includes Mitigation Measure GW-1, further reduce less than significant impacts and allows DWR to monitor and address unanticipated change in groundwater levels. As described in the Disposal of Reusable Tunnel Material section of Chapter 3, Description of the Proposed Project and Alternatives, at the intakes, tunnel shafts, and Southern Complex, all water from dewatering activities and stormwater runoff on the construction site would be collected, treated,

Letter-Comment Number	Comment	Response
	However, the entire project would take up to 13 years to construct, including over four years for each intake. (DEIR, pp. 3-131 to 133.) This is not a short period of time. Further, without quantification of the amount of groundwater that may be dewatered during this period it is impossible for the public to understand the potential impacts to groundwater or the surrounding surface water bodies (e.g., Sacramento River, Snodgrass Slough complex, levee drains, local agricultural and stormwater infrastructure, and septic fields) that would receive dewatering, stormwater runoff, and decant water during this period or whose flows and capacities would be substantially altered as a result of the project. (DEIR, p. 9-44.)	and stored on-site to reduce the need for off-site water sources and to avoid increased peak runoff flow rates from the construction sites. The dewatering flows and stormwater runoff flows would be treated in self-contained on-site trailers (similar to freight trailers used for tractor-trailer rigs). Similar trailers would be used for on-site storage of the treated dewatering flows and stormwater runoff for future use. Based upon the size of the site and types of on-site activities, 20 to 50 trailers would be located on the construction site. If portions of the dewatering flows and stormwater runoff are not needed on-site and storage units are full, the flows would be treated prior to discharge to adjacent water bodies.
506-5	With respect to project impacts during construction, the DEIR references a "lack of an available analytical tool at the spatial scale required for the site-specific quantitative analysis." (DEIR, p. 8-13.) A qualitative assessment, however, is inappropriate for a project of this scale. Site-specific local aquifer characteristics, seasonal gradients, and other elements, using a locally calibrated, site-scale model that includes the project's physical features such as cutoff walls, dewatering pumping, "recharge" drainage networks, and all other expected project activities, should be developed for the DEIR. The absence of any local quantification of impact effectively renders the DEIR's analysis inadequate. For instance, as mentioned above, cutoff walls planned during project construction (see DEIR, p. 8-29) would directly disconnect portions of one or more aquifers from the South American Subbasin. These aquifers are a major source of groundwater to the Subbasin, and the groundwater modeling prepared for the South American GSP included this inflow as water that supports the ongoing sustainability of this Subbasin.	Please refer to responses to comments 506-3 and 506-4 regarding the adequacy of the CEQA assessment methods used in the groundwater analysis and the incorporation of information provided by the Engineering Project Reports (Delta Conveyance Design and Construction Authority 2022b, 2022c). As noted in the report, seepage cutoff walls would be constructed around the intakes as would be incorporated into the new flood control levees. The walls would not disconnect the South American subbasin from aquifers because they would only surround the intake facilities. Operational impacts on groundwater resources in the Delta and adjacent groundwater basins are evaluated using the DeltaGW model. The DeltaGW Model includes the simulation of project features including the cutoff walls associated with the tunnel and intakes, described in Chapter 8, Groundwater, in the section titled Use of the DeltaGW Model for Evaluation of Impacts of Project Operations. Impact GW-2 evaluates the changes in groundwater elevations across the region, and Impact GW-7 assesses changes to groundwater gradient and their corresponding impacts on water quality. Neither Impact GW-2 nor Impact GW-7 found any changes to groundwater flow gradients to the neighboring subbasins.

Letter-Comment Number	Comment	Response
506-6	DEIR Appendix 8B includes additional information regarding the effects of creating a permanent lateral barrier through the implementation of a lateral "deep cutoff wall" as described in the DEIR on page 8-29. In contrast to the less than significant conclusion in DEIR Chapter 8, this additional information in Appendix 8B shows a significant impact on the shallow groundwater at the proposed intakes. (DEIR, Fig. 8B-11.) Specifically, as shown by the except of DEIR Figure 8B-11 below, the project is expected to create 1-3 feet of mounding of the groundwater in the area to the east of the intakes (see pink and red areas). This mounding would likely force farms and reclamation/drainage districts to manage this water to avoid oversaturation of the root zone, negative impacts to septic systems, and other individual problems for local landowners. Pumping to reduce groundwater elevations in these locations would likely implicate these same drainage features, which would need to be assessed for capacity, longevity and maintenance needs, and the ability to maintain necessary stormwater management. In addition to the mounding impacts, facility dewatering would remove the remaining groundwater, intentionally creating a cone of depression, and potentially creating a hydraulic barrier that exacerbates the impacts of the cutoff wall. No assumptions for the estimated area of these impacts, annual and total volume of dewatering, impacts to the subbasin groundwater monitoring network and its sustainability indicators, or any other matter of substance to groundwater sustainability are provided in the DEIR. There is a proposed monitoring network, GW-1: Maintain Groundwater	Agricultural drainage is addressed in Chapter 8, Groundwater, Impact GW-5. As documented in Appendix 8B, Impact Analysis: Groundwater Model Results, the maximum change in annual agricultural drainage in the Delta Region under any project alternative is 1.33% compared to existing conditions. Furthermore, under Mitigation Measure GW-5, existing or new dewatering wells would be used to extract groundwater and reduce groundwater elevations to average seasonal elevations. At the proposed north Delta intakes, tunnel shafts, Southern Complex, and Bethany Complex, all water from dewatering (i.e., groundwater removal) would be collected, treated, and stored on-site to reduce the need for off-site water sources. Please refer to responses to comments 506-3 and 506-4 regarding the adequacy of the CEQA assessment methods used in the groundwater analysis, incorporation of information provided by the Engineering Project Reports (Delta Conveyance Design and Construction Authority 2022b, 2022c), and consideration of SGMA and GSPs. In addition, please refer to Chapter 3, Description of the Proposed Project and Alternatives, for a discussion regarding construction and dewatering timeframes. Additional details can be found in the Engineering Project Reports associated with the project. Dewatering estimates are available in the Dewatering Estimates for Intake Facilities and Southern Forebay Emergency Spillway technical memorandum (Delta Conveyance Design and Construction Authority 2022a), which is an attachment to the Engineering Project Reports associated with the project. Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding CEQA requirements related to mitigation measures and the inclusion of feasible and appropriate mitigation measures within the EIR. Mitigation Measure GW-1 has been revised in the Final EIR to clarify that monitoring wells will be selected or installed based on location, type, and depth to ensure monitoring is appropriate for the area. The revisions to Mitigation Measure GW-1 do not result in a change to an impact

Letter-Comment Number	Comment	Response
	Supplies in Affected Areas, but this does not appear to contemplate the assessment and mitigation of impacts to inflows to the Subbasin [South American Subbasin]. Instead, GW-1 provides some form of undefined monitoring, with no thresholds of significance or relationship to impacts on the GSA's monitoring network and GSP sustainability criteria. This measure fails to meet basic mitigation requirements of CEQA. (See CEQA Guidelines, § 15126.4.) In contrast, under the current regulations, a single new agricultural production well proposed in the Subbasin requires more analysis in order to meet GSP consistency requirements than the DEIR provides for the massive tunnel project. (See Governor's Drought Executive Order N-7-22, Action 9 [March 28, 2022].)	determination or require additional mitigation measures that DWR is unwilling to commit to. Mitigation Measure GW-1 meets the CEQA requirement for mitigation because it first describes the outcome expected to be avoided by groundwater monitoring (i.e., if the results of groundwater monitoring described above indicate that the difference between average groundwater elevation declines in monitoring wells inside the area of influence of dewatering and control (background) monitoring well outside the area of influence is more than 10% of the depth of the shallowest known well inside the area, which approximates the natural variability that can occur across an area) and then it describes the type of actions that would be required if that outcome to be avoided occurs (i.e., change construction practices by reinjecting groundwater; deepen or modify wells; secure temporary water supply). The monitoring frequency described in the mitigation measure was selected based on common groundwater level monitoring frequencies and to be sufficient to detect appreciable changes in groundwater levels in a manner that is timely enough to implement the mitigation measure.
506-7	Exhibit 1: DEIR Figure 8B-11 Mounding of Groundwater East of Intakes	The commenter is providing this exhibit in support of their comments. Those comments are addressed in responses to the commenter's letter.
506-8	Impact GW-3 Fails to Consider Several Existing Conditions and Utilizes an Arbitrary Depletion Percentage Impact GW-3 uses data from the Online System of Well Completion Reports ("OSWCR"), which shows a total of 3,565 production wells have been installed in the Delta. (DEIR, p. 8-19.) OSWCR also provides domestic well information, which would be critical for a substantive analysis, particularly as it relates to disadvantaged and underserved/represented communities. It does not appear that OSWCR was used for this purpose in the DEIR. Based on this sampling of wells, the DEIR uses a 20-foot decline as the threshold of significance. (Ibid.) However, the OSWCR database excludes artesian wells and	As described in Appendix 8A, Delta Groundwater Model: Development and Calibration, in the section titled Well Perforation, well construction information from OSWCR was used to determine the depth of pumping simulated in the model. As indicated in the appendix, wells are generally considered shallow, with the majority of wells less than 200-feet deep. Please refer to Common Response 10, Surface Water Quality and Groundwater Resources, regarding the suitability of the model for analysis of local impacts. The production wells used in the analysis include all wells that produce water (domestic, irrigation, public supply, and industrial), and excludes monitoring wells and wells identified as "other" in the OSWCR database. As

Letter-Comment Number	Comment	Response
	wells developed before 1977. Those two categories of wells are probably more likely to be impacted by groundwater declines of less than 20 feet than those reported to DWR. Therefore, NDGSA [North Delta Groundwater Sustainability Agency] requests that DWR obtain all additional information that more accurately represents the number and types of wells in the Delta. Additionally, the use of average and median well depths ignore the vast differences in wells in use throughout the Delta. A more in-depth analysis that considers impacts to wells within each aquifer and subbasin would be necessary to understand the potentially significant impacts the project may have on surrounding well users. Once those data for domestic and production wells are organized by aquifer and location then DWR should apply the relevant South American GSP [Groundwater Sustainability Plan] threshold of significance to assess impacts, and to propose mitigation measures that are relevant and enforceable. (See DEIR, sections 8A.4 and 8A.5.1.2.)	described in Chapter 8, Groundwater, under the discussion of Impact GW-3, the exact locations of wells in the OSWCR database are not known and only the PLSS section number of wells is included. As a result, DeltaGW Model results were evaluated at the centroid of each PLSS section to determine the total number of supply wells that could be affected by project operations due a decline in groundwater elevations when comparing the simulated groundwater levels of alternatives with the existing conditions. The Chapter 8 figure titled PLSS Sections with Supply Wells Within 3 Miles of the Delta Region shows the spatial coverage of supply wells considered in the impact analysis. Potential impacts on groundwater wells in the project area are described in Chapter 8 under Impact GW-3 and summarized in the table titled Number of Supply Wells with Decline in Groundwater Elevations Relative to Existing Conditions. The section titled Alternatives Impacts in Appendix 8B, Impact Analysis: Groundwater Model Results, details the groundwater changes expected at supply wells under each project alternative. As described in Impact GW-3, the greatest decline in groundwater elevations relative to existing conditions is 2–3 feet at any well in the region. While wells installed before 1977 were not included in the analysis, the potential impacts across the entire region are covered through the spatial coverage of wells installed after 1977, as shown in the Chapter 8 figure titled PLSS Sections with Supply Wells Within 3 Miles of the Delta Region. Please refer to Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding consideration of Groundwater Sustainability Plans.
506-9	Additionally, the DEIR fails to analyze whether the construction of the project would result in obstructing the flow to domestic and production water wells and impacts to drainage in close proximity to the construction locations. There are at least 3,565 wells in the project area. Yet, the DEIR does not include	Please see responses to comments 506-3 through 506-5 regarding the appropriate and adequate evaluation of construction-related impacts on groundwater including dewatering and the use of cutoff walls and implementation of Mitigation Measure GW-1. Please see response to comment 506-8 regarding the analysis, which includes all wells that

Letter-Comment Number	Comment	Response
	any discussion regarding the project's potential of impact on these wells. The NDGSA [North Delta Groundwater Sustainability Agency] requests that the EIR be revised to include an impact analysis depicting wells that may be impacted, under what conditions they would be impacted, and the length of time they would be impacted due to project construction.	produce water (domestic, irrigation, public supply, and industrial), and excludes monitoring wells and wells identified as "other" in the Online System of Well Completion Report database and impacts on different wells as summarized in Chapter 8, Groundwater.
506-10	3. The DEIR Ignores Long-Term Operational Impacts to Groundwater Levels and Those Impacts on Meeting Sustainable Levels Pursuant to SGMA As explained above, the DEIR is deficient for failing to adequately recognize the importance of SGMA, the legal requirements of SGMA, and the well-documented challenges of maintaining sustainability in the South American Subbasin if inflows were significantly altered, all of which are under the purview of DWR. To the extent program-scale groundwater modeling was undertaken for the project, it appears to be inadequate for the purposes of impact analysis, and as a result, the DEIR purports to rely on qualitative assessments. In order to understand the modeling that was undertaken for project operational impacts, the NDGSA [North Delta Groundwater Sustainability Agency] requested modeling data from DWR referenced in DEIR Chapter 8 and Appendix 8A as "DeltaGW"" The modeling identified a very coarse grid spacing, much more so than the CoSANA model that was applied for the development of the GSP. This is despite the assertions in the DEIR that the CoSANA model has been integrated into the impacts modeling. (DEIR, section 8A.3.2.) As a result, the DEIR model inadequately assesses potential impacts to the groundwater resources in the vicinity of the proposed intakes. The DEIR is also inconsistent with the GSP's modeling approach	Please see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding consideration of California's Sustainable Groundwater Management Act (SGMA) and Groundwater Sustainability Plans (GSPs). As described in Common Response 8, the groundwater analysis contained in Chapter 8, Groundwater, found groundwater impacts to be less than significant, and the project would not interfere with implementation of GSPs. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the suitability of the DeltaGW model for analysis of local impacts. The DeltaGW model inherits the model grid from C2VSimFG (see Appendix 8A, Delta Groundwater Model: Development and Calibration). However, data from the CoSANA model was leveraged to improve the water budget calibration of the DeltaGW Model. Land use, evapotranspiration, irrigation period, soil parameters, surface water diversions, urban demands, and well pumping from the CoSANA model were mapped to the DeltaGW model and incorporated into the historical model to improve calibration.

Letter-Comment Number	Comment	Response
	for the South American Subbasin.	
506-11	Further, the DEIR's qualitative analysis fails to consider the project's operational impacts on groundwater recharge. As was described in expert testimony in the State Water Resources Control Board's California WaterFix water rights hearings, "Lowering the flow volume by diverting water through the proposed intakes would cause a corresponding lowering of the surface water elevation." (Written Testimony of John Lambie, P.E., P.G., C.E.G., p. 5.) [Footnote 2: See Written Testimony of John Lambie, P.E, P.G., C.E.G. from Hearing in the Matter of California Department of Water Resources and United States Bureau of Reclamation Request for a Change in Point of Diversion for California WaterFix, attached here as Exhibit A [Lambie], available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/COSJ%20et%20al/part2/SJC_223.pdf.] The lowering of surface water elevation is caused by the lowering of flow volume, which is a result of increased diversions. (Ibid.) These lower flows create changes in the river stage, which impacts surface water exfiltration and results in less groundwater recharge, as depicted in the conceptual figure below. [Footnote 3: Conceptual Model Depicting Surface Water and Groundwater Interaction, available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/COSJ%20et%20al/part2/SJC_227.pdf.] Based on the proposed operations of California WaterFix, Mr. Lambie concluded that the decrease in water recharge would be substantial "over both the 20-year implementation horizon and a 50-year planning horizon described [in] SGMA." (Ibid.)	The comment assertions regarding the groundwater streamflow interaction impacts are assertions about the California WaterFix project and are being inappropriately applied to the Delta Conveyance Project. The Delta Conveyance Project EIR includes a quantitative (not qualitative) analysis of these impacts and reaches different findings from those described in the comment. The comment assertion that the EIR does not adequately analyze impacts on groundwater recharge is not consistent with the contents of the EIR. The EIR fully evaluates construction and operational-related impacts on groundwater for purposes of CEQA compliance. Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, provides additional information supporting why the groundwater analysis is considered adequate and consideration of SGMA. Common Response 10, Surface Water Quality and Groundwater Resources, provides additional supporting information regarding the methodology employed to assess construction-related impacts on groundwater. The threshold for significance for Impact GW-1 was established using the DeltaGW model's simulated historical conditions for changes in stream gains and losses for individual streams. The 5% threshold is deemed reasonable because it is small relative to the historical variations in annual stream gains/losses, which ranges from 62% to 124% of average annual stream gains/losses over the historical period from 1974 to 2015 in stream reaches in the Delta region. Operations impacts on groundwater conditions and groundwater recharge are assessed through the use of the DeltaGW Model. The DeltaGW Model uses simulated stream stage to calculate stream gains and losses to the aquifer. In Chapter 8, Groundwater, Impact GW-1 was assessed using the simulated volumes of stream gains and losses under project alternatives. Recharge from the rivers to the neighboring subbasins is assessed under Impact GW-1. On average, the difference in

Letter-Comment Number	Comment	Response
	Similar impacts would occur during operation of the DCP. However, the DEIR finds the impact less than significant because "[u]nder all project alternatives, annual changes in simulated stream gains or losses in the Delta region as a percentage of total annual stream-aquifer interaction from the corresponding stream reach are less than 5%." (DEIR, p. 8-32.) Reliance on a 5% change from existing conditions, however, is arbitrary and unsupported. The DEIR states that it is "reasonable" because it is small compared to some historic variations in stream gains and losses. But as described in Mr. Lambie's testimony, the "[l]owering of a river's stage by even a very small amount can significantly reduce the surface area of the river over which surface water can exfiltrate to groundwater." (Lambie Testimony, p. 6.) The data in the DEIR provides inadequate information to determine the project's long-term impacts to groundwater and whether those impacts would negatively impact the South American Subbasin's ability to meet SGMA requirements.	stream-aquifer interaction between existing conditions and project alternatives is 0.62% or less. The greatest difference is 1.69%. Impact GW-2, which evaluates the changes groundwater elevations across the region, did not find any changes to groundwater flow gradients to the neighboring subbasins. Furthermore, change in groundwater storage for the Delta and neighboring basins is considered under Impact GW-4. The groundwater analysis reflects the changes in surface water deliveries and results in a slight modeled increase in groundwater storage. The surface water analysis simulates that under project operations, the region would see changes in both project and non-project surface water deliveries. Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Systems Operations Modeling, includes reservoir storage results, changes in streamflow, and changes in water supply as a result of project operations. As described under Impact GW-4, modeling indicates a slight increase in groundwater storage compared to existing conditions and impacts would be less than significant.
506-12	Exhibit 2: Lambie Hydrologic Conceptual Model of Impacts to Groundwater Recharge	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
506-13	4. Conclusion The DEIR fails to analyze the project's consistency with, or effects on, implementation of the 2021 draft or the January 2022 Final South American GSP during both construction and operation of the proposed tunnel project. The DEIR does not reference applicable SGMA considerations, and instead creates its own novel standards of significance while relying on undisclosed models that do not provide quantitative data. In addition, the organization of groundwater information and	Please see detailed responses to previous comments in letter 506 (e.g.,506-1 through 506-12) regarding responses to the concerns listed in this summary comment. As described in the responses to this comment letter, SGMA is considered in the EIR and clarification regarding SGMA, GSPs, and SGMA-related thresholds and the relationship of these to the Delta Conveyance Project are included in Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs. The section titled Approach for Analysis in Chapter 8, Groundwater, provides an overview of the tools used and steps followed in the analysis of the project's impacts on groundwater. The subsection titled Thresholds of Significance provides the

Letter-Comment Number	Comment	Response
	impacts is scattered in a manner that obfuscates the project's potential impacts. As a result, the DEIR fails to adequately address the likely effects on groundwater from the project and, therefore, must be revised and recirculated to correct these deficiencies.	justification as to why the specific thresholds were selected. Modeling is used in the groundwater analysis, and it is detailed in Chapter 8 and Appendix 8A, Delta Groundwater Model: Development and Calibration. Please refer to Common Response 10, Surface Water Quality and Groundwater Resources, for a discussion of the use of the DeltaGW model for analysis of groundwater resources. Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for a discussion on the length and complexity of the EIR. Chapter 8, like the other resource chapters, is organized to allow readers to understand the impact assessment methodologies developed and applied followed by an assessment of impacts on groundwater resources occurring under the construction and operational phases of the proposed project and alternatives. For example, groundwater impacts are presented up front in Chapter 8 in the table titled Comparison of Impacts of Project Operations on Groundwater by Alternative. The EIR also includes an executive summary, which allows readers a ready reference of the conclusions made within each resource assessment as well as a cross comparison among all resources and alternatives. Please also see Common Response 1 for a discussion of the CEQA recirculation criteria, none of which are met by the EIR.
506-14	ATT 1: Written Testimony of John Lambie, P.E., P.G., C.E.G., Hearing in the Matter of California Department of Water Resources and United States Bureau of Reclamation Request for a Change in Point of Diversion for California Waterfix, November 30, 2017	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter.
508-1	(Netherlands), Reclamation District No. 999 is a public agency within the Sacramento-San Joaquin Delta, adjacent to and within the proposed Delta Conveyance Project (Delta Tunne l), area of influence. The district appreciates the opportunity to submit comments on the draft Environmental Impact Report (DEIR) for the proposed Delta Tunnel.	This information describes the structure or organization of the comment letter, the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.

Letter-Comment Number	Comment	Response
508-2	These comments are focused on the likely significant and unavoidable impacts and concerns related to flood control, drainage and the potential impacts related to access, resource scarcity, levee stability and other items tied to operations , maintenance , repairs, rehabilitation and replacement (OMRR&R) over the life of the construction and operation of this project which could impact Netherlands, a Project levee system within the Sacramento River Flood Control Project in the North Delta, upstream and across the Sacramento River from all three proposed intake-settlement basin and tunneling facilities.	This information describes the structure of the comment letter and is in the general introductory text. The concerns raised in this comment are discussed and responded to in the comments that follow.
508-3	The Department of Water Resources (DWR) has been actively pursuing potential isolated water conveyance infrastructure that would impact elements of flood control and drainage for reclamation districts in the delta, depending on the location and proximity of intakes, and intermediate shafts, including potential impacts associated with settlement along the intake and tunneling alignments in the proposed alternatives and preferred alternative, alternative 5.	The comments regarding the significance of impacts on flood control, drainage, and settlement are not supported by the analyses contained in Chapter 7, Flood Protection, and Chapter 10, Geology and Seismicity Chapter 7, Flood Protection, provides the results of the analysis of flood control and drainage impacts attributable to constructing and operating the Delta Conveyance Project. As demonstrated in Chapter 7, all flood and drainage related impacts would be less than significant for all project alternatives, with the exception of Alternatives 2a and 4a. The construction-related impacts occurring under Alternatives 2a and 4a would be reduced to a less-than-significant level through mitigation. Please see Chapter 10, Geology and Seismicity, Impact GEO-4, which analyzes the potential for tunnel-induced ground settlement and surface structure-related ground settlement. The impact was determined to be less than significant. Furthermore, the Tunneling Effects Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022d) provides a sufficient level of detail to show that settlement will be minor overall and that future geotechnical studies would determine what site-specific measures would be needed to protect existing infrastructure and buildings. With today's state-of- the-art pressurized tunnel boring

Letter-Comment Number	Comment	Response
		machines, face losses are unlikely to cause surface settlement problems as long as face pressures are maintained, voids around the segmental lining are filled with backfill grout, injection quantities are continuously monitored and checked with theoretical volumes, and additional backfill grout is automatically injected if needed.
508-4	Dual Conveyance Alternative Description A critical element of dual conveyance requires a detailed project description of the necessary rehabilitation and improvement of the existing system of levees throughout the Delta. This should include an evaluation of Project and Non-Project levee features to ensure reliability of the through Delta conveyance system. This should include not only levees and channels downstream of the Delta Cross Channel and the Old/Middle River corridor, but all levee systems to ensure protection of freshwater through the Delta, as well as ensuring protection and access to intake and shaft components of the proposed Delta Tunnel. The system of North Delta Levees are critical elements of this multi-benefit system to ensure freshwater throughout the Delta. This element of the preferred alternative is not well defined, it is difficult to determine if this is a significant element in the current DEIR. This should be included in the final EIR and added to the no-action alternative as well.	Impact FP-1 in Chapter 7, Flood Protection, and the Delta Conveyance Design and Construction Authority Intake Flood Management technical memorandum and Levee Vulnerability Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022a, 2022b) assessed impacts on urban and nonurban Delta levees during the construction and postconstruction phases of the project. The analysis in Chapter 7 concludes that the construction and operation of the Delta Conveyance Project would not result in reduction in flood protection provided by the existing levee system. Delta-wide levee work is beyond the scope of the Delta Conveyance Project. Please refer to Common Response 3, Alternatives Development and Description, for additional explanation about why levee repair and upgrades as described in this comment were not considered as an alternative or element of an alternative evaluated in the EIR. In addition, see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding DWR's role in levee management throughout the Delta. Please also see Common Response 4, No Project Alternative Description and Analysis, regarding the CEQA requirements for describing and evaluating a No Project Alternative in an EIR and how the No Project Alternative for the Delta Conveyance Project meets those requirements.
508-5	Most levees do not meet a structural, FEMA [Federal Emergency Management Agency], or USACE standard tied to future federal support or warrant the risk to the significant	Per CEQA Guidelines, Section 15124, a project description shall contain information pertaining to the general description of a project's technical, economic, and environmental characteristic, but not supply extensive

Letter-Comment Number	Comment	Response
	investment proposed without addressing the long-term reliability of the required flood control system improvements. Rehabilitation and improvement of the existing Delta levee system provides assurances for water supply reliability, water quality and support of the Co-Equal goals. Netherlands does not meet FEMA's 100-year certification and is not planning to meet that standard. The district Five-year Plan will be completed in 2023 and does provide a preliminary cost and quantity estimate to meet OMRR&R [Operation, Maintenance Repair, Rehabilitation and Replacement] requirements and maintain PL [Public Law] 84-99 eligibility, which is further defined in the LOI/SWIF documentation of the district. The Final EIR should incorporate cost estimates for the Delta Project Levees to meet PL 84-99 eligibility requirements at the least.	detail beyond that needed for evaluation and review of the environmental impact. As such, detailed costs are not presented in the EIR. Please refer to Common Response 7, Implementation Considerations, regarding further discussion on project costs. As described in Chapter 2, Purpose and Project Objectives, the fundamental purpose of the Delta Conveyance Project is to restore and protect the reliability of SWP deliveries. Although the Delta Conveyance Project is not a flood control project, it has been designed to ensure that intake structures on the Sacramento River and modified flood control levees would not reduce the protection afforded by the existing flood control system. As described in Chapter 7, Flood Protection, and Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, DWR does not own or maintain all levees in the Delta; depending on the levee and the area of protection, different standards and guidelines apply. Further, during the design phase of the project, after a project is approved, DWR and the DCA will coordinate with the local reclamation districts in the vicinity of the project footprint regarding the required levee improvements needed for project implementation. As described in Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, DWR has a role and responsibility along with local governments and special districts to maintain and improve levees that protect the Delta independent of the Delta Conveyance Project.
508-6	Any movement, or settlement caused by the construction of the intakes including excessive traffic flow through detours not designed for the proposed long duration of the construction project could impact the ability of the district to address all maintenance deficiencies effectively. There will be a significant impact due to the tunnel project on North Delta Roads (State,	Please see responses to comments 508-4 and 508-5 regarding repairs and upgrades to levees. Please also see Chapter 7, Flood Protection, regarding how the proposed temporary and permanent levees that carry State Route 160 adjacent to the Delta Conveyance Project intakes and modified flood control levee improvements around Bouldin Island or Lower Roberts Island will meet or exceed the current level of flood protection and USACE

Letter-Comment Number	Comment	Response
	County, interior private and local). Any levee failure due to construction impacts in the region of the Maintenance Area 9 levees would cause impacts to neighboring districts, and other infrastructure including roads in the region. Any single levee failure could lead to impacts to adjacent levees and channels. The Final EIR should describe how this, and other similar features are to be monitored and improved in anticipation of the proposed project and unavoidable impacts associated with the construction of the project elements in the North Delta. Significant investment in the existing levees should be considered as a pre-project requirement.	standards. Project-related road improvements proposed under each alternative alignment are described in Appendix 3D, Intakes, Roads, and Shafts Summary Tables. As described in the Potential Future Field Investigations technical memorandum for the central and eastern alignments (Delta Conveyance Design and Construction Authority 2022c:24), equipment for monitoring movement and settlement during levee repairs and new levee construction would be installed during construction. Limits of movements on these facilities will be set and construction activities will be halted if these limits are exceeded.
508-7	Waterside impacts to bank protection adjacent to the intake construction sites, related to blocking flow, stacking water in the channel upstream of temporary barriers and project controls, changes to approach velocities, scour and eddy effects, and surge related drawdown that impact slope stability need to be evaluated and explicitly stated how the project will address these impacts. This includes any operation tied to site preparation, construction, demobilization, temporary structures, and long-term operations. Any changes in water surface, flow, currents and duration due to the construction project impacts must address embankment, slope stability, seepage potential, and the drainage impacts related to the project that affect public agencies.	In-water construction along the intake sites would range from placement of the cofferdam to placement of riprap at the end of construction, as described in Chapter 7, Flood Protection, Impact FP-1. All features would be designed such that they do not increase the surface water elevation by more than 0.1 feet and therefore would ensure no reduction in performance of the federal flood project. Please see response to comment 508-4 regarding the assessment and findings of impacts on urban and nonurban Delta levees. As discussed in the sections titled CEQA Conclusion - All Project Alternatives and the sections titled Compensatory Mitigation in Chapter 7, more detailed hydraulic evaluations concerning hydraulic loading, scour, and erosion forces at the interface between the intake structures and the river terrain would be completed as part of the final project design. Also, channel margin enhancements associated with federal project levees may require permission from USACE in accordance with USACE's authority under the Rivers and Harbors Act (33 United States Code § 408) and levee vegetation policy. Any restoration activities associated with compensatory mitigation would be designed, constructed, and maintained to ensure no

Letter-Comment Number	Comment	Response
		reduction in performance of the federal flood project.
508-8	Duration of Construction (Impacts to flood control and drainage systems) A primary concern to Netherlands [Reclamation District 999] is the impacts associated with the construction and duration of the proposed Delta Tunnel. The project will rely upon hauling materials between multiple project sites to staging and laydown areas relying on trucking primarily, and local, county, and state roads, bridges and numerous channel crossings, due to the construction of the intakes and facilities within Maintenance Area 9. All access corridors for Netherlands are critical, including Highway 84 and 160, River Road, South River Road, Clarksburg Road, Netherlands Road, CR 145, and all connecting bridges and all interior county roadways. These critical access corridors will all be impacted severely during construction of the project, with detours that are not well defined or understood.	The assertion that the access corridor for Netherlands will be severely impacted is not consistent with the information presented in the EIR. The California Department of Water Resources (DWR) has developed specific construction management requirements, discussed in the section titled Impacts of the Project Alternatives on Transportation in Chapter 20, Transportation, for the contractor to reduce potential impacts on the regional transportation system serving the Netherlands (Reclamation District 999) area located in southeast Yolo County. One of the proposed construction management requirements to reduce effects on the community from construction-related traffic on Delta roadways states that "no construction traffic would be allowed in Yolo County except on I-80, or for individuals or vehicles traveling from homes or businesses in Yolo County" and "no construction traffic would be allowed on SR 160 between SR 12 and Cosumnes River Boulevard except for realignment of this highway at the intake locations, installation of SCADA cables, or individuals or vehicles traveling from homes or businesses along the affected routes." With all the proposed construction sites (Intakes A, B, C, shafts, and tunnels) located on the east side of the Sacramento River, construction of the project alternatives would not create traffic issues to Netherlands travel routes on SR 84, Clarksburg Road, Netherlands Road, or County Road 145.
508-9	A detour along the west side of the Sacramento River will severely impact the district and landowners for a system that was not designed for diversion of highway 160 traffic over an extended period. The duration and impact associated with this long- term construction project have the potential to cripple Netherlands OMRR&R activities and projects, let alone the immense landowners' impacts. Impacts due to construction	A detour along the west side of the Sacramento River was not envisioned in the conceptual design of the project alternatives, so the project alternatives would not affect Netherlands' Operation, Maintenance, Repair, Replacement and Rehabilitation (OMRR&R). No construction traffic would be allowed in Yolo County except on I-80, or for individuals or vehicles traveling from homes or businesses in Yolo

Letter-Comment Number	Comment	Response
	traffic must be monitored and coordinated well in advance to ensure all elements associated with the project have been identified in advance with contingencies, BMP's, and all avoidance measures in place, along with a robust action plan to repair and replace during construction and rehabilitation post construction. This aspect should be well defined in the final BIR.	County to minimize potential impact on unincorporated Yolo County and the census-designated area of Clarksburg. In addition, no construction traffic would be allowed on SR 160 (east side of the Sacramento River) between SR 12 and Cosumnes River Boulevard except for realignment of this highway at the intake locations, installation of SCADA cables, or individuals or vehicles traveling from homes or businesses along the affected routes. DWR will conduct pre-construction pavement analysis of access roadway segments and determine the need to improve these access roads. Improvements may include pavement remediation (e.g., fill potholes, asphalt cracking and slurry seals), road widening (minimum of 12 feet), and other roadway design options to serve construction traffic. After completion of a project site construction, the condition of the access roads for each construction site will be analyzed and remediation of roadways will be completed as needed to return the facility to the improved conditions that were constructed by DWR.
508-10	A detailed analysis of all known features along, through and traversing the district [Netherlands District] boundary, and those buried features including gas lines, active or abandoned gas wells which could be impacted by higher water table and induced seepage due to higher groundwater levels, and the impact to district drainage, land use, and levee seepage and stability need to be analyzed. Other items such as unknown water systems, communication and data portals, and structural elements such as houses, facilities, pumpstations should be evaluated and regularly monitored. Any impact to the ability of pumps to operate due to changes in water surface elevations, or power outages, needs to be identified as a possible impact due to project construction and long-term operations.	Please refer to Chapter 8, Groundwater, regarding the groundwater table, groundwater basins within the study area, and changes to groundwater elevations under construction and operation of the Delta Conveyance Project. Groundwater conditions are not anticipated to fluctuate substantially with the project and thus would not result in impacts on buried utilities such as those mentioned in the comment. Mitigation Measure GW-1 also requires the monitoring of groundwater elevation levels during construction and would require modifications to construction activities as described. See also Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for a discussion regarding the mitigation measure and construction activities such as dewatering and the use of cutoff walls. Operational impacts from the project on groundwater would be incrementally small, as described in Chapter 8, and impacts on

Letter-Comment Number	Comment	Response
		underground utilities in this regard are minimal. Additionally, as described in the Utility Potholing section of Chapter 3, Description of the Proposed Project and Alternatives, investigations including vacuum or backhoe excavations, noninvasive surface field surveys, and potholing would be conducted to identify the buried features within the construction boundaries of the project, which would be addressed in the final design. Please also refer to Chapter 21, Public Services and Utilities, which explains conflicts with existing utilities are unlikely to occur. The EIR notes that some existing utilities may need to be relocated, but DWR is consulting with utility companies, a process that would continue during the design phase and would avoid interruption to service.
508-11	The significant trucking limitations caused by the massive project could impact local resources for material delivery and hauling for OMRR&R projects and activities for Netherlands. There are concerns that local trucking capabilities, or increase in costs, due to scarcity, could impact the ability of Netherlands to perform work within limited budgets for services year over year. Given a 10+ year timeline for construction, this could impact the construction economy for many years.	The commenter's claim that project construction would impact local trucking resources for material delivery and hauling for OMRR&R projects is not supported by the information documented in the Delta Conveyance Engineering Project Reports (EPRs) (Delta Conveyance Design and Construction Authority 2022e, 2022f) and the DEIR. As noted in the Logistics Strategy EPR, trucking resources are assumed to be provided by the contractor using a larger area outside of the Delta, including throughout the Sacramento Valley, San Joaquin Valley, and the San Francisco Bay Area. Contractors may also use trucking resources from other geographical areas, including southern California or other states and relocate the required trucking assets to the area. Therefore, local truck resources serving OMRR&R projects within the Delta region would be minimally impacted. Truck trips for construction of the project alternatives are included in the roadway segment and intersection analysis contained in Appendix 20A, Delta Conveyance 2020 Traffic Analysis, and Appendix 20C, Delta Conveyance 2040 Traffic Analysis. The traffic analysis contained in the appendices were completed to aid in the understanding of potential major increases to traffic volumes on roadways and vehicle delay at intersections

Letter-Comment Number	Comment	Response
		that may be caused with the addition of project-generated construction traffic. Refer to Chapter 20, Transportation, and Common Response 14, Transportation, for additional discussion. Potential socioeconomic impacts from project construction were also assessed in Chapter 17, Socioeconomics, as they relate to local employment and community cohesion (see ECON-1 and ECON-3). These impact analyses consider all required construction activities, including truck driving.
508-12	Any construction project areas, or impact areas due to tunneling operations, that require dewatering and drainage must consider self-sufficient and independent drainage through lands within the district, operated and maintained by Netherlands. The existing system of drainage ditches and canals were designed for existing conditions only. The Netherlands pumpstation(s) are not designed for additional construction dewatering for project areas within the district. Evaluation of respective drainage systems should be performed in advance and consideration for how this drainage will impact property owners' ability to control water surface elevations, drain lands, and maintain water quality within the district.	As described in the Process and Method of Review for Impeding or Redirecting Localized Flood Flow section of Chapter 7, Flood Protection, and in the Local Water Supply, Drainage, and Utilities section of Chapter 3, Description of the Proposed Project and Alternatives, the location and capacity of existing drainage and irrigation facilities that may be affected by construction of the Delta Conveyance Project would be determined and the capacity of this infrastructure to convey drainage or irrigation water would be maintained. At all construction sites, all stormwater and dewatering flows generated at every construction site would be collected, treated on-site, and stored on-site for re-use on-site to minimize the need for diverting other water; the water would be stored in tanks on the construction site for reuse for dust control and other construction needs. The storage facilities would also eliminate the "peak flow" stormwater flows into existing drainage channels. If the storage tanks are full and on-site water demands are fully met, the water would be discharged at a rate that would not increase peak flow rates in the drainage channels because the water would be discharged infrequently and after the peak storm event had completed. The proposed project and alternatives would discharge treated water at a rate that would not increase peak flow rates for these waterways. Additionally, as noted in the discussion of Impact FP-2 in Chapter 7, a review of the drainage systems will be performed to assess the impacts of tunneling operations,

Letter-Comment Number	Comment	Response
		dewatering, and drainage as part of the final design. Please refer to Chapter 3 in the section titled Local Water Supply, Drainage, and Utilities, and Chapter 7 for more information. Please refer to Chapter 8, Groundwater, regarding the potential for the project to impact groundwater levels. Impacts on agricultural facilities are addressed in Chapter 15, Agricultural Resources, and as described in mitigation measure AG-3, affected supporting agricultural infrastructure would be replaced or relocated to reduce impacts on agriculture. As noted in Chapter 3, drainage will be addressed at each construction location, captured and treated on site.
508-13	Higher water tables, and adjacent stage in surrounding water bodies, primarily the Sacramento River, but Sutter Slough and Elk Slough could also be impacted. This could also impact the interior water table, and increase drainage costs, or change soil conditions affecting District levee embankment, foundation materials and seepage potential. This in tum impacts landowners' orchards, vineyards, crops and access within Netherlands, effecting the local economy. This must be addressed in the final EIR.	Please see response to comment 508-12 regarding DWR's plans for construction-related dewatering and groundwater analysis. Please see Chapter 8, Groundwater, regarding impacts of changes in stream gains or losses in various interconnected stream reaches. Mitigation measures described in Chapter 8, such as for increases in groundwater elevations near project intake facilities affecting agricultural drainage, including a groundwater monitoring well system, would avoid impacts on agricultural resources. Furthermore, the analysis in Impact GW-1 and Impact GW-2 shows that under construction, groundwater levels would generally be maintained at the level of existing conditions.
508-14	Highway 84, 160 and county roads along District levees, and within the district, provide access to all connected lands between Hood, Clarksburg, Freeport, Courtland, West Sacramento, Sacramento, Walnut Grove, Rio Vista, Thornton, Lodi and Stockton. The numerous landowners, businesses, schools, emergency and public service agencies, and the traveling public all rely on dependable infrastructure to safely travel, work, live and recreate in the Delta.	Please refer to Impact TRANS-3 in Chapter 20, Transportation. The California Department of Water Resources (DWR) has developed specific requirements for the contractor to reduce potential impacts on the regional transportation system serving the Netherlands District, including SR 160, S. River Road, Clarksburg Road, Courtland Road, and SR 84. No construction traffic would be allowed in Yolo County except on I-80, or for individuals or vehicles traveling from homes or businesses in Yolo County. In addition, no construction traffic would be allowed on SR 160 between SR 12 and Cosumnes River Boulevard except for realignment of this highway at the intake locations, installation of SCADA cables, or individuals or vehicles traveling from homes or businesses along the affected routes.

Letter-Comment Number	Comment	Response
		Contractors must develop and implement transportation demand management plans (TDMs) and traffic management plans (TMPs) in coordination with the State of California and local agencies to reduce potential effects on Delta roadways, including those serving the Netherlands Reclamation District.
508-15	Emergency operations during high water events due to rainfall runoff or emergency flood events occur regularly in the Delta every 5-10 years, depending on many factors. This comment is not meant to quantify the impacts associated with construction elements, rather, the final BIR must evaluate the range of potential impacts project construction sites will have on a range of river stage/flow and interior runoff scenarios which could not only impact the Delta Tunnel, but also Netherlands, Yolo County, California Department of Transportation, Clarksburg, and the State Plan of Flood Control Sacramento River Flood Control Project. The likelihood of any number of natural emergency events is high during a 10+ year construction period and all potential scenarios need to be evaluated and planned for with local, state agencies in advance and should be explicitly documented in the EIR. Any potential emergencies caused due to the Delta Tunnel project should also be generally described, for operational guidance and support with the State, counties, and local agencies.	During conceptual engineering design, all project alternatives were subject to an assessment of flood risks and a levee vulnerability assessment; see the Delta Conveyance Design and Construction Authority Intake Flood Management technical memorandum and the Levee Vulnerability Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022a, 2022b). These documents identify potential vulnerabilities within the Delta levee systems, evaluate Delta flood risk, management measures, emergency response, flood inundation mapping, and provide site specific recommendations for structure flood risk mitigations to major construction locations. At the intake sites, the jurisdictional levee would be constructed before the existing levee was removed to allow intake construction; thereby, not changing the existing protection level. At the reception and maintenance shaft sites, the tunnel shaft would be raised at a height greater than the flood elevation and this would occur prior to construction of the tunnel shaft opening. Due to the limited number of construction workers at the reception and maintenance shafts, no other measures were considered during construction. At the tunnel launch shaft sites, either the island levees would be improved (Bouldin and Lower Roberts islands) or a ring-levee would be constructed (Twin Cities Complex) to protect the workers and the sites. The tunnel launch shaft sites at the Southern Complex would be protected by existing levees; and the Bethany Complex would not be susceptible to major flooding. Please see response to comment 508-12 regarding determining capacity of and maintaining drainage and irrigation infrastructure. Please also see

Letter-Comment Number	Comment	Response
		response to comment 508-12 regarding stormwater and dewatering flows, "peak flow" stormwater flows, and drainage systems.
508-16	Netherlands, Reclamation District No. 999, urges DWR to consider addressing detailing construction related impacts due to the significant duration of the construction project related to resource limitations for the Delta including access, trucking , and the inevitable emergency operation impacts.	Please refer to Impacts TRANS-3 and TRANS-4 in Chapter 20, Transportation, which address potential construction impacts as they relate to access, roadway improvements, and emergency access. A combination of transportation demand management plans (described in Mitigation Measure TRANS-1) and improvements to the transportation system would be developed in coordination with the State of California and local agencies to reduce potential effects related to traffic safety hazards and emergency access on Delta roadways serving project alternatives construction sites.
508-17	The current preferred alternative does not clearly define the dual conveyance levee rehabilitation and improvement to ensure long-term water supply reliability or protection of critical elements of the Delta Tunnel.	Please see responses to comments 508-4, 508-5, and 508-6 regarding repairs and upgrades to levees.
508-18	Netherlands [Netherlands District] could have additional significant impacts related to the tunneling operation under the district and lands related to ground movement, impacts to buried features such as gas wells and pipelines, and ongoing construction efforts of the Delta Tunnel related to dewatering, seepage and water table impacts, construction traffic impacting access locally and regionally. The district levees do not meet FEMA 100-Year or USACE PL [Public Law] 84-99 active status and require investment to rehabilitate and improve the levee system.	As described in Chapter 7, Flood Protection, in the discussion of the process and method of review for impeding or redirecting localized flood flow, impacts on buried features could not be evaluated as they are not visible from aerial photography. As described for response to comment 508-10, Chapter 3, Description of the Proposed Project and Alternatives, in the section titled Utility Potholing, investigations such as vacuum or backhoe excavations, noninvasive surface field surveys, and potholing would be conducted to identify the buried features within the construction boundaries of the project. As described in Chapter 7, Flood Protection, in the section titled Areas Subject to Flooding, federal regulatory requirements represent the minimum level of compliance needed, while state and local requirements may be more stringent. Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, provides a discussion on the state's obligations or commitments to levee maintenance or management throughout the Delta. Additionally, the Federal Emergency Management Agency (FEMA) continues to evaluate floodplain delineations as needed based on continued hydrology changes that may affect the

Letter-Comment Number	Comment	Response
		annual exceedance probability frequency calculation and additional evaluation of facility conditions and improvement. Construction- and operation-related impacts on groundwater resources are addressed in Chapter 8, Groundwater. With mitigation (see Mitigation Measures GW-1 and GW-5), the expected impacts on groundwater resulting from the Delta Conveyance Project were determined to be less than significant. Dewatering would primarily be implemented at the intakes, tunnel shafts, and either Southern Complex or Bethany Complex within underground barriers that are constructed around the area to be dewatered. These barriers would limit the interaction of the area to be dewatered from the surrounding local or regional aquifers and nearby levees, buildings, or other infrastructure. No dewatering is anticipated between tunnel shafts along the tunnel alignment based upon available geotechnical information. However, dewatering during construction and operation of the intake sedimentation basins could be located at depths that may cause minimal changes in local groundwater conditions. Therefore, for construction and operations of the intake sedimentation basins, in accordance with Mitigation Measure GW-1, monitors will be installed around the intake. If groundwater elevations substantially decline, the dewatering flows will be collected, treated, and re-injected around the intake site to manage groundwater elevations. If the groundwater elevations substantially rise, the dewatering wells surrounding the intake site will be operated to manage the groundwater elevation. Impact UT-2 in Chapter 21, Public Services and Utilities, provides a discussion of construction-related impacts on buried public utilities and other infrastructure. It is noted that several buried public utility crossings would be encountered during construction; however, DWR has and will continue to consult with utility companies to avoid interruption to services. Additionally, conflicts with existing utilities under all alternatives are unlikely to occur, as the project elements would be constructed well below

Letter-Comment Number	Comment	Response
		existing pipelines. Impacts were determined to be less than significant on utility crossings. Chapter 20, Transportation, provides an assessment of construction-related vehicle traffic that is expected to occur. Measures that have been incorporated into the Delta Conveyance Project, such as park-and-ride lots, would reduce employee vehicles and reduce the severity of construction-related traffic. In Chapter 3, Description of the Proposed Project and Alternatives, the section titled Access Roads identifies the designated access routes that would be used during construction of the project. Construction traffic would be limited to the designated access routes. Additionally, Mitigation Measure TRANS-1 includes further measures to reduce construction-related transportation impacts.
508-19	Thank you for the opportunity to provide comments on this project; Netherlands welcomes any feedback or questions regarding this letter.	This information is general closing text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
511-1	South Sutter Water District (SSWD) appreciates the opportunity to comment on the Draft Environmental Impact Report (Draft EIR) for the Delta Conveyance Project, released for comment on July 27, 2022. In addition to the comments provided below, SSWD incorporates by reference the comment letters submitted by the Delta Independent Science Board and the Sacramento River Settlement Contractors, as though fully stated herein. SSWD was formed in 1954 to develop, store and distribute surface water supplies for irrigation and to augment and replenish the groundwater basin that underlies SSWD's service area (the Sacramento Valley North American Subbasin). SSWD owns and operates the Camp Far West Dam and Reservoir Project on the Bear River. SSWD' s service area encompasses approximately 64,000 acres within Sutter and Placer Counties, between the Camp Far West Reservoir and the Bear River ' s confluence with the Feather River. SSWD holds	This information describes the background of the organization and general introductory text. It is not a comment on the contents of the EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.

Letter-Comment Number	Comment	Response
	numerous appropriative water rights for direct diversion and diversion to storage of water from the Bear River and its tributaries.	
511-2	In 2000, SSWD [South Sutter Water District] entered a Bay-Delta Settlement Agreement (BDSA) with the Department of Water Resources (DWR) in relation to the State Water Resources Control Board' s adopt ion of the Sacramento- San Joaquin Bay Delta Water Quality Control Plan Update ("Bay-Delta Pl an") in 1995. Per the BDSA, SSWD supplies up to 4,400 acre-feet of water from Camp Far West Reservoir in dry and critical water years when requested by DWR, to satisfy Bear River water right holders' obligations to contribute to Bay-Delta Plan water quality objectives. Water supplied pursuant to the BDSA travels from the Bear River to the Feather River, thence the Sacramento River, and finally the Delta. Changes in the operation of the SWP under the proposed Project can affect the means by which DWR complies with Bay-Delta Plan criteria, which in turn could affect SSWD's obligations under the BDSA. As a result, the Project has the potential to impact water supplies in the Bear River and the North American Subbasin, but those impacts have not been analyzed. Operational criteria described in Section 3.16 include sweeping velocity requirements, bypass flow requirements, pulse protections, and low-level pumping restrictions, but the Draft EIR does not provide an actual operations plan that establishes clear parameters of DWR's operation of the proposed north Delta intakes. (See Draft EIR, Tables 3-14, 3-15.) For example, DWR anticipates shifting from south Delta intakes to the proposed north Delta intakes when "there is an operational advantage to do so at DWR's discretion." (Draft EIR, 3.16.3, at p. 3-145.) That explanation is insufficient for the public to understand when, how, and to what extent the	The Delta Conveyance Project would not affect how SSWD complies with the WQCP or the existing settlement. Please see Common Response 3, Alternatives Development and Description, regarding project operations and operational criteria. Additionally, please see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding updates to the Bay-Delta Water Quality Control Plan.

Letter-Comment Number	Comment	Response
	proposed north Delta intakes and conveyance facilities will be utilized once constructed. Unless the Draft EIR is amended, SSWD will be unable to confirm the extent and significance of the Project's potential water supply impacts.	
511-3	As required by the California Environmental Quality Act, the Draft EIR must analyze all water supply impacts arising from or associated with the Delta Conveyance Project, including but not limited to changes in State Water Project (SWP) operations that might result in (i) water supply impacts to SSWD [South Sutter Water District], (ii) impacts to the long-term sustainability of the Sacramento Valley North American Subbasin, and (iii) cumulative water supply impacts based on consideration of other reasonably foreseeable projects and actions. Moreover, these water supply impacts must be analyzed in light of the best available science regarding future climate change. Thank you for your consideration of these comments.	Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding analysis of the project as a whole, cumulative impact assessment, and the use of the best available science. As described in response to comment 511-3, the project would not affect how SSWD complies with the WQCP or the existing settlement. Please also refer to Chapter 6, Water Supply, which describes potential changes to State Water Project and Central Valley Project water supply that could result from implementation of the project. Please also see Common Response 6, Climate Resilience and Adaptation, for information regarding the analysis of climate change in the EIR.
513-1	Attached to this letter are Contra Costa County and Contra Costa County Water Agency (together, the "County") comments on the Draft Delta Conveyance Project (“Tunnel Project” or “Project”) and associated Draft Environmental Impact Report (“DEIR”) prepared by the California Department of Water Resources (“DWR”) pursuant to the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq. [“CEQA”]). The eastern portion of Contra Costa County is located within the Delta and the County’s entire northern border is bounded by waterfront that flows from the Delta to the San Francisco Bay. Thus, Contra Costa County lies at the heart of the Bay-Delta region and the future of this nationally significant resource substantially influences the future of the County. Restoring the health of the Delta also protects the Bay, which is linked to the long-term success of the County as a	This information describes the structure or organization of the comment letter, the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.

Letter-Comment Number	Comment	Response
	whole.	
513-2	In 1980, the State proposed modifying the State Water Project to include a peripheral canal. In response, the Contra Costa County Board of Supervisors adopted a resolution to vigorously oppose the Peripheral Canal because "we have seen a continuous deterioration of the water quality within the Delta as more and more “surplus” waters have been diverted away from the Delta." Over 40 years later, this is still true, and again the County [Contra Costa County and Contra Costa County Water Agency] is providing written comments on another version of an isolated conveyance project proposed by the State that does not increase water supply and sacrifices the Delta for the betterment of south of Delta exports. The County has repeatedly pointed out major flaws with the previous versions of the tunnel projects (e.g., the Bay Delta Conservation Plan/California WaterFix). In our written comments in 2015, attached as Exhibit A [See ATT 1], we encouraged the State to move in a different direction, to a fresh approach or a Plan "B". Eliminating one massive tunnel from a two-tunnel proposal is not a fresh approach, nor is it a compromise, and many of the flaws from the previous tunnel projects continue to exist. The State’s lack of vision necessary to develop a sustainable solution for the Delta -- a future that works with a changing natural environment and provides multiple benefits across the landscape, protects the historical places and its people -- is clear.	This comment describes comments submitted by the commenter on the 2015 Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Environmental Impact Statement. Comments on the 2015 Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Environmental Impact Statement do not directly address the Delta Conveyance Project or the Draft EIR, and DWR is not required to respond to comments on projects that are no longer being pursued. However, DWR has reviewed the comments provided by the commenter and provided responses where comments may still be applicable to the proposed Delta Conveyance Project. Please refer to Chapter 2, Purpose and Project Objectives, regarding the purpose of the project. Please see Chapter 1, Introduction, for a description of the State Water Project and background regarding how water supply has been developed and managed in California. Please also refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the project’s purpose and objectives, including DWR’s continuing commitment to operate the State Water Project. One of the objectives of the project is "protect the ability of the SWP, and potentially the CVP, to deliver water when hydrologic conditions result in the availability of sufficient amounts of water, consistent with the requirements of state and federal law, including the California and federal Endangered Species Acts and Delta Reform Act, as well as the terms and conditions of water delivery contracts and other existing applicable agreements." The Delta Conveyance Project would not modify existing water rights and does not propose to convey water supplies beyond those that are currently allowed by existing water rights or contracts. Please see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding other statewide activities

Letter-Comment Number	Comment	Response
		related to water management being led by different state agencies with different authorities over the water management system in California.
513-3	The County [Contra Costa County and Contra Costa County Water Agency] provided comments on the Notice of Preparation ("NOP") for the Tunnel Project dated April 17, 2020, attached as Exhibit B [See ATT 2]. It stated, at a minimum, DWR needs to provide a comprehensive analysis on a full range of alternatives, including an alternative that relies on through Delta conveyance, improving existing facilities with a smaller conveyance system, and a realistic evaluation of the No Project alternative.	Chapter 35, Public Involvement, includes a summary of scoping comments received. In addition, DWR has reviewed and responded to individual comments related to the EIR contained within this letter number 513, including the exhibits thereto. Please see Common Response 3, Alternatives Development and Description, regarding the development of the reasonable range of potentially feasible alternatives evaluated in the EIR. Through-Delta conveyance was screened from further review in the EIR at the first-level screening phase because it did not meet screening criteria for climate change and seismic resiliency and operational flexibility. Responses to specific comments raised in the scoping letter referenced by the comment are provided in responses to comments 513-31 through 513-42.
513-4	We [Contra Costa County and Contra Costa County Water Agency] also requested analyses of a full range of the water quality impacts and Delta Operations and Bay & Delta Water Quality with focus on, a) presenting modeling data and disclosure of environmental impacts in a form that is usable and useful for decision makers and the public, b) using the full historical period (at that time), 1922-2019, in the analysis of the water quality impacts from the proposed project, and c) mitigating any significant water quality impacts of the proposed project, including the potential buildup of contaminants in south and central Delta.	Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the general approach to the analysis and the adequacy of the mitigation measures proposed in the EIR. Please also see Common Response 9, Hydrologic Modeling and Approach, regarding the modeling period of record. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the presentation of data and use of monthly averages in impact analysis. The EIR provides an impact analysis of the full range of water quality impacts across multiple constituents and multiple geographic locations in the Delta. Please refer to the Executive Summary table titled Summary of Delta Conveyance Project Impacts and Mitigation Measures for a list of CEQA impact determinations for impacts on water quality by constituent. As shown in this table, the analysis in the EIR concludes that all impacts from project operations and maintenance would be less than significant for water quality. Compensatory mitigation impacts would be

Letter-Comment Number	Comment	Response
		less than significant or less than significant with mitigation incorporated.
513-5	Unfortunately, but unsurprisingly, the DEIR only provides nine various sized tunnel alternatives that are too narrow of a range of viable Project alternatives omitting a through Delta alternative, which the DEIR says is still needed. In addition, the description of the Tunnel megaproject lacks adequate detail to be "project level", and the proposed operations are extremely unclear despite many pages of material.	Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding project level analysis. Please see Common Response 3, Alternatives Development and Description, regarding adequate level of detail and description of the alternatives as well as the development of the reasonable range of feasible alternatives evaluated in the EIR.
513-6	The County [Contra Costa County and Contra Costa County Water Agency] is very concerned about the water quality implications of the project, which would add 6,000 cubic feet per second of pumping capacity to the north Delta. The scale of the proposed new diversions has the potential to change the hydrology of the entire Delta, similar to the original installation of the State Water Project facilities in the south Delta. As part of its review of the DEIR and to attempt to better understand the water quality implications of the project for the Delta, the County (together with Solano County), retained the services of Dr. Susan Paulsen of Exponent to review the DEIR and the associated modeling. The report prepared by Dr. Paulsen and her team is attached as Exhibit C [See ATT 3], and the County requests separate responses to this report. As further explained in the Exponent Report, the DEIR fails to present adequate information for the public and decisionmakers to understand the water quality implications of the project. These errors render the EIR inadequate as an informational document, and also provide false assurances regarding the water quality implications of the project.	Comments regarding attachments to letter 513 are responded to within this table of responses to comments for letter 513. The analysis contained within the EIR does not support the comment assertions that the project would change the hydrology of the entire Delta, similar to the original installation of the SWP facilities in the Southern Delta. As demonstrated in Chapter 5, Surface Water, Chapter 6, Water Supply, and Chapter 9, Water Quality, the project is not expected to change hydrology or water quality of the entire Delta. Chapter 9 describes how there could be some increases in salinity-related parameters, particularly in the fall months of some water year types at western Delta locations, in Impacts WQ-3 (bromide), WQ-4 (chloride) and WQ-5 (electrical conductivity). As demonstrated in the impact analysis of multiple water quality constituents in Chapter 9 (Impacts WQ-1 through WQ-14), water quality impacts from project operations would be less than significant.
513-7	The following specific inadequacies in the DEIR are described in the Exponent Report: [See ATT 3]	Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the use of monthly average modeling results in the water quality impact analysis.

Letter-Comment Number	Comment	Response
	1. DWR's water quality analysis is presented in the form of long-term averages, masking important information needed to assess the impacts of the proposed project on water quality within the Delta.	
513-8	The following specific inadequacies in the DEIR are described in the Exponent Report: [See ATT 3] 2. DWR's simulation of project operations does not include the relaxation of operations rules, such has occurred in recent critically dry years, and as such does not accurately simulate and represent the likely operations and impacts of the proposed project.	This comment is the title of a section of a technical report prepared by Exponent for the Contra Costa County Water Agency and attached to letter 513. It is fully addressed in responses to the other comments in letter 513 related to that section of the report. Nevertheless, please refer to Common Response 3, Alternatives Development and Description, for a discussion of TUCPs ("relaxation of operations rules") and why they fall outside the scope of the project and CEQA requirements for this EIR.
513-9	The following specific inadequacies in the DEIR are described in the Exponent Report: [See ATT 3] 3. DWR's analysis of impacts to Harmful Algal Blooms (HABs) uses scientifically unsupported and arbitrary method of evaluating residence time, and masks the impacts of the proposed project. Because the proposed project reduces inflows to the Delta as a whole, the project would increase the residence time of water in the Delta, thereby increasing the likelihood that harmful algal blooms will occur in the future. 4. DWR's velocity analysis is irrelevant to the potential for the formation of HABs, leading to false assurances that the proposed project will not affect the likelihood or frequency of algal blooms.	The assertion that EIR analysis of Harmful Algal Blooms is inadequate and unsubstantiated is not consistent with the EIR. Chapter 9, Water Quality, evaluates the impact of the alternatives on the five primary factors (i.e., temperature, flows/velocities, residence time, irradiance, and nutrient availability) that have been related to the emergence and subsequent growth and accumulation of cyanobacteria harmful algal blooms (CHABs) in the Delta in Impact WQ-14. The chapter specifically evaluated these five factors at multiple locations throughout the Delta that experience CHABs. Hydraulic residence time at various locations within the Delta was assessed directly using the QUAL module of DSM2, which is an appropriate model to assess site-specific residence time in the shallow and tidal Delta. Water velocity was considered as one of the five factors related to the emergence and subsequent growth and accumulation of CHABs to inform the potential for mixing of the water column which is very relevant to formation of CHABs. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the appropriateness of the approach to residence time modeling and analysis, and the use of DSM2-modeled channel velocities to support the CHABs analysis. Please also note that the commenter's assertion that the project would reduce "inflows to the Delta as a whole" is inaccurate. The project, when

Letter-Comment Number	Comment	Response
		operating, would reduce flows on the Sacramento River and distributary channels further downstream (e.g., GS, Steamboat and Sutter Sloughs) below the proposed North Delta Diversions, which are in the Delta.
513-10	The following specific inadequacies in the DEIR are described in the Exponent Report: [See ATT 3] 5. The DEIR's reliance on an extremely unlikely Sea Level Rise scenario makes the impact determinations unreliable. a. In choosing the H++ model scenario with 1.8 feet of sea level rise, DWR chose an extremely unlikely scenario that generated unexplained results and that appears to mask negative water quality impacts of the proposed project. b. DWR conducted CalSim 3 sensitivity modeling for multiple sea level rise scenarios, but did not model conditions in the Delta for the same scenarios. c. DWR's methodology for modeling salinity for scenarios with sea level rise is unclear and fails to provide meaningful information to understand the water quality impacts of the project, particularly in critically dry conditions when water quality standards may be waived. d. The DEIR wrongly assumes that the hydrology of the Delta will not change in the future, and will remain stationary, in the modeling completed for the project.	Project operations under climate change and sea level rise are evaluated in Chapter 30, Climate Change, and in Appendix 4A, Consideration of 2070 Conditions. This chapter and appendix conclude the project would operate under the modeled sea level rise conditions. DWR used the H++ scenario given the long-term use of the project as infrastructure that may be subject to climate change and potentially extreme scenarios. Please see Common Response 6, Climate Resilience and Adaptation, regarding project operations under climate change. Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Systems Operations Modeling, describes the use of an Artificial Neural Network (ANN) to translate water quality standards into flow equivalents so that they can be directly modeled in CalSim 3. DWR developed unique ANNs for each sea-level rise scenario. Please see Common Response 9, Hydrologic Modeling and Approach, and Approach for a discussion of modeling temporary emergency actions that may be introduced during drought conditions. Please also see Common Response 9 regarding climate change and Delta hydrology. Modeling conducted for the EIR uses different Delta hydrology under the2040 scenario compared to 2020. This includes changes to precipitation across the Delta and changes to Delta evapotranspiration as a result of climate change.
513-11	The following specific inadequacies in the DEIR are described in the Exponent Report: [See ATT 3] 6. The DEIR fails to present the information in a manner that can be understood by the public and experts alike.	Please see Common Response 1, Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the complexity and length of the EIR.
513-12	In addition, staff from the County [Contra Costa County and Contra Costa County Water Agency] reviewed the analysis of groundwater impacts in the DEIR. As described in the Technical Memorandum attached as Exhibit D [See ATT 4], the DEIR fails	Please see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding consideration of California's Sustainable Groundwater Management Act (SGMA). Comments regarding attachments to letter 513 are responded to within this table of responses to comments

Letter-Comment Number	Comment	Response
	to identify impacts that create barriers for compliance with the Sustainable Groundwater Management Act's requirements for subbasins within the Delta. The County requests separate responses to this report.	for letter 513.
513-13	Last, the County [Contra Costa County and Contra Costa County Water Agency] agrees with and supports the points made in the Delta Counties Coalition's (DCC) comment letter on the Delta Conveyance Project DEIR. The DCC is an alliance comprised of the California Counties of Contra Costa, Sacramento, San Joaquin, Solano, and Yolo. Our counties work collaboratively to give one voice on behalf of the Sacramento-San Joaquin River Delta and its four million area-wide residents. The DCC advocates to protect and enhance Delta communities and existing land uses, improve the Delta ecosystem and water quality, all while supporting a more reliable water supply for the State. Each of the five other Delta counties is also submitting individual comment letters, which include additional concerns that must be addressed by the Department of Water Resources.	Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities that are of interest. Responses to all comment letters are provided in Volume 2, Chapter 4, Response to Comments Tables.
513-14	The County and Water Agency [Contra Costa County and Contra Costa County Water Agency] remain available to work with DWR on implementing the suggestions in this comment letter to advance real improvements to the state's water supply system that also protect the Delta environment and the communities that reside there.	DWR is committed to working with all interested parties. This is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
513-15	[ATT 1:] Attached to this letter are Contra Costa County's comments on the Draft Bay Delta Conservation Plan ("BDCP")/California WaterFix ("CWF") and associated partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement ("RDEIR/SDEIS"). As further explained in this letter and its attachments, the	This attachment and the comments contained herein describe comments submitted by the commenter on the 2015 Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Environmental Impact Statement. Thus, the attachment and comments do not directly address the Delta Conveyance Project or the Draft EIR, and DWR is not required to respond to comments on projects that are no longer being pursued. However, DWR has reviewed the

Letter-Comment Number	Comment	Response
	RDEIR/SDEIS fails to consider a reasonable range of viable project alternatives, fails to model and disclose the full adverse environmental impact of the project, and assumes away what were previously considered significant adverse, but unavoidable, water quality impacts of the project without any inadequate under CEQA and NEPA, and not responsive to state policies (2009 Delta Reform Act), and should be withdrawn.	comments provided by the commenter and provided responses where comments may still be applicable to the proposed Delta Conveyance Project.
513-16	[ATT 1:] A great deal of information is circulating on the release of the BDCP/CWF and its recirculated environmental documents. The California WaterFix has been portrayed positively and unduly optimistically by the project proponents, but there are a host of major problems with the project. We [Contra Costa County and Contra Costa County Water Agency] request your personal review of the issues with the proposed project and urgent consideration of an alternative approach outlined herein.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. Here, the comment is not applicable to the Delta Conveyance Project Draft EIR; therefore, no further response is provided.
513-17	[ATT 1:] The current proposal by the California Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (Reclamation) to build new intakes in the north of the Sacramento-San Juaquin Delta (Delta) and export a significant percentage of Delta inflow will be a disaster for the Delta ecosystem, threatened and endangered dish species, the already degraded Delta water quality, and those living in or near the Delta that rely on the Delta for their water supply. The availability of good quality water in the Delta is essential for municipal drinking water for the residents of Contra Costa Count as well as agriculture, recreation, and industry in this region.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. The comment assertions regarding the impacts on the Delta ecosystem, fish and wildlife, and water quality are not supported by the analysis contained in the EIR. Please refer to Chapter 2, Purpose and Project Objectives, and Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the project's purpose and objectives, including DWR's continuing commitment to operate the State Water Project as modified to include the Delta Conveyance Project in compliance with all state and federal water quality and environmental laws. Please refer to Common Response 3, Alternatives Development and

Letter-Comment Number	Comment	Response
		Description, regarding how the project would be operated to shift diversions from the south Delta to the north Delta (during the summer and fall) or divert water in the north Delta during excess flow conditions while meeting regulatory requirements (during the winter and spring). A complete description of the hydrologic modeling undertaken for the Delta Conveyance Project environmental analysis is provided in Appendix 5A, Modeling Technical Appendix, which describes the potential changes in Delta flows. Please refer to Chapters 7–32 of the EIR for analyses of potential significant environmental impacts of the project and proposed mitigation measures, including those related to the environmental resources raised by the comment. As described in Chapter 12, Fish and Aquatic Resources, and Chapter 13, Terrestrial Biological Resources, potential impacts related to aquatic species and wildlife would be mitigated to a less-than-significant level. In addition, Chapter 9, Water Quality, and Common Response 10, Surface Water Quality and Groundwater Resources, describe the methodology and analytical approaches to evaluate water quality impacts from project operations and maintenance on designated beneficial uses (e.g., drinking water) in the Delta, which were determined to be less than significant. Please also refer to Chapter 21, Public Services and Utilities, regarding drinking water supplies.
513-18	[ATT 1:] Contra Costa County asks you both to undertake a serious review and reconsideration of this deeply flawed RDEIR/SDEIS and work with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA) fisheries to develop a new approach (including the ability to capture and store "new" water during periods of high flow) that will actually restore and sustain the Delta ecosystem and address California's water supply needs. This would greatly benefit not only California, but also the nation. The time to consider a Plan "B" is long overdue.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. Please refer to response to comment 513-17 regarding the project's purpose and objectives. Please refer to Appendix 3A, Identification of Water Conveyance Alternatives, and Common Response 3, Alternatives Development and Description, regarding the alternatives development process and the range and scope of alternatives considered. Please refer to Common Response 6, Climate Resilience and Adaptation,

Letter-Comment Number	Comment	Response
		regarding the project's anticipated water supply reliability benefits.
513-19	[ATT 1:] Despite what is stated by the project proponents in their press releases, the current project as proposed by DWR and, apparently, as supported by Reclamation, continues to have serious flaws and will harm, rather than improve the Delta ecosystem. Equally serious, it fails to produce any real increase in water supply reliability for California -- something that is even more important in view of our current drought emergency.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. Please see response to comment 513-17 regarding the Delta Conveyance Project EIR's impact analysis related to terrestrial and aquatic resources. Please refer to Common Response 6, Climate Resilience and Adaptation, regarding the project's anticipated water supply reliability benefits. Please refer to Appendix 3E, Delta Reform Act Considerations, and Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for a discussion of the requirements of the Delta Reform Act and co-equal goals.
513-20	[ATT 1:] The following are examples of the major problems with the current BDCP/CWF proposal: The preferred alternative in the current RDEIR/SDEIS fails to achieve either of the two co-equal goals of "providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem"" (See Wat. Code, [section] [section] 85054; 85301(a).) This renders the RDEIR/SDEIS noncompliant with the requirements of the state Sacramento-San Joaquin Delta Reform Act of 2009 (Wat. Code, [section] [section] 85000-85350) and division B, Title 2, Section 205 of the federal Consolidation Appropriations Act of 2012 (Pub. L. 112-74 (Dec. 23, 2011) 125 Stat. 786).	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. This comment does not directly apply to the proposed Delta Conveyance Project because the comment concerns a preferred alternative that is not part of the Delta Conveyance Project. Please refer to Appendix 3E, Delta Reform Act Considerations, and Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for a discussion of the requirements of the Delta Reform Act and co-equal goals.
513-21	[ATT 1:] The following are examples of the major problems with the current BDCP/CWF proposal: The DWR and the California Natural Resource Agency (CNRA) and Reclamation have allowed the export water contractors to	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. Here, the comment is not applicable to the Delta Conveyance Project Draft EIR; therefore, no further response is provided.

Letter-Comment Number	Comment	Response
	develop a flawed project and valuable input from Delta interests and environmental organizations and even other State Agencies (e.g., Delta Stewardship Council Independent Science Board) have gone unanswered. The Delta Independent Science Board's September 30, 2015 letter indicates in no uncertain terms that the BDCP/CWF is "sufficiently incomplete and opaque to deter its evaluation and use by decision makers, resource managers, scientists and the broader public."	
513-22	[ATT 1:] The following are examples of the major problems with the current BDCP/CWF proposal: DWR, CNRA, Reclamation and Interior have failed to consider or analyze a reasonable range of alternatives. Fourteen (14) of the 15 alternatives in the draft RDEIR/SDEIS involve an isolated facility and north Delta intakes, with no new storage or actions to reduce demand on the Delta and increase local sources of water. The three new alternatives in the RDEIR/SDEIS have the same basic configuration as those 14, meaning 17 out of 18 project alternatives are essentially the same project alternative. These project alternatives do not foster informed decision-making, and do not permit a reasoned choice.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. This comment does not apply to the proposed Delta Conveyance Project because the comment is regarding the alternatives analysis included in the 2015 BDCP/California Water Fix Partially Recirculated Draft EIR/EIS and not the alternatives analysis in the Delta Conveyance Project Draft EIR. Please refer to Appendix 3A, Identification of Water Conveyance Alternatives, and Common Response 3, Alternatives Development and Description, regarding the alternatives development process and the range and scope of alternatives considered.
513-23	[ATT 1:] The following are examples of the major problems with the current BDCP/CWF proposal: The current RDEIR/SDEIS preferred alternative still relies on exports from the existing south Delta export locations (especially in dry years when the Delta is most stressed) and often would result in worse reverse flows in Old and Middle Rivers. The new North Delta intakes also adversely impact listed fish species (i.e., species listed as threatened and endangered under the state and federal Endangered Species Acts) by reducing flows through the Delta to San Francisco Bay,	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. Please refer to Chapter 3, Description of the Proposed Project and Alternatives, regarding key existing Delta operations criteria and Old River and Middle River flow criteria. Operations of the project would remain consistent with existing regulatory requirements. Please refer to Common Response 3, Alternatives Development and Description, regarding how the project would be operated to shift diversions from the south Delta to the north Delta (during the summer and

Letter-Comment Number	Comment	Response
	reducing the percentage of flow through Sutter and Steamboat Sloughs, and increasing predation. Therefore, the project's net benefits to listed fish species are minimal, if any.	fall) or divert water in the north Delta during excess flow conditions while meeting regulatory requirements (during the winter and spring). The analyses provided in the EIR Chapters 5-32 evaluate the potential impacts of the proposed operations for all alternatives. The impact analysis contained in Chapter 12, Fish and Aquatic Resources, evaluates the proposed operational scenarios of the alternatives evaluated in the EIR for the Delta Conveyance Project and identifies either less than significant impacts, or impacts that can be mitigated to a level of less than significant regarding effects to flows and predation on fish species in the Delta.
513-24	[ATT 1:] The following are examples of the major problems with the current BDCP/CWF proposal: Astonishingly, the RDEIR/SDEIS's preferred alternative would increase exports in dry periods and would only infrequently capture additional surplus water in wet periods. This is completely contrary to the original BDCP planning principles and the "Big Gulp, Little Sip" concept touted in the BDCP "An Overview and Update" dated March 2009. Specifically, principle #2 states "Divert more water in the wetter periods and less in the drier periods." Moreover, the preferred alternative is in direct conflict with State policies of reducing reliance on the Delta in meeting California's future water supply needs. (See Wat. Code,§§ 10608© & 85021.)	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. This comment is not directly applicable to the proposed Delta Conveyance Project Draft EIR because the comment is regarding operations that are not part of the proposed Delta Conveyance Project or alternatives. The Delta Conveyance Project operations are described in detail in Chapter 3, Description of the Proposed Project and Alternatives. Please also refer to Common Response 3, Alternatives Development and Description, regarding how the project would be operated to divert water in the north Delta during excess flow conditions (during the winter and spring) and occasionally shift a portion of SWP diversions from the south Delta to the north Delta (during the summer and fall) to help manage water quality in the Delta while meeting regulatory requirements. Please see response to comment 513-17 regarding proposed Delta Conveyance Project operations, which are different than those proposed under BDCP and California WaterFix, and Common Response 6, Climate Resilience and Adaptation, regarding the project's anticipated water supply reliability benefits. Please refer to Appendix 3E, Delta Reform Act Considerations, and

Letter-Comment Number	Comment	Response
		Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for a discussion of the requirements of the Delta Reform Act and co-equal goals.
513-25	[ATT 1:] The following are examples of the major problems with the current BDCP/CWF proposal: The Operations and Water Quality modeling for the November, 2013 BDCP Draft BIR/EIS contained major errors and the computer models needed to be revised. However, no new modeling was done for the new RDEIR/SDEIS project or project alternatives. Instead DWR and Reclamation have based their RDEIR/SDEIS analyses on the original flawed modeling studies from three and a half years ago, and on water quality sensitivity analyses performed for completely different future demand, climate change scenarios, and habitat restoration conditions, i.e., late-long-term rather than early-long-term.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. This comment does not apply to the proposed Delta Conveyance Project because the comment is regarding operations and modeling, including the type of model that was used for the BDCP/California WaterFix EIR/EIS, that are not part of the Delta Conveyance Project Draft EIR. A complete description of the hydrologic modeling undertaken for the Delta Conveyance Project environmental analysis is provided in Appendix 5A, Modeling Technical Appendix, which describes the use of CalSim 3 to model alternatives.
513-26	[ATT 1:] The following are examples of the major problems with the current BDCP/CWF proposal: The estimated $15 billion cost for construction of the tunnels does not represent the total cost of the whole project, estimated upwards of $50 billion, and would most likely be rendered obsolete once the State Water Resources Control Board (SWRCB) adopts long- overdue, more-stringent, Delta flow requirements to protect fish and other beneficial uses. These major issues [ATT 1 Comments 20 through 26] are discussed in more detail in the attachments [These are the attachments to the original version of ATT 1; they were not included at the end of ATT 1 in this comment letter (#513) for the DCP.] to this letter.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. Please see Common Response 7, Implementation Considerations, regarding Delta Conveyance Project costs. Please also see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding ongoing actions of the State Water Resources Control Board, such as updates to the Bay-Delta Water Quality Control Plan.

Letter-Comment Number	Comment	Response
513-27	[ATT 1:] Time for a Fresh Approach - Plan "B" The Bay Delta Conservation Plan/California WaterFix proponents have done very little to develop a holistic and sustainable solution. The Delta is in serious decline and there are major water shortages in California, even in non-drought years. Fish populations are plummeting. DWR and Reclamation should fully embrace the responsibility and complexity of solving the problems of fish decline, degraded Delta water quality, the increasing demands for water in California, and the impacts of climate change. It is unfortunate that due to state and federal budget constraints, this responsibility has been ceded to a special interest group, the export water contractors, who do not have the interests of the environment or the rest of California at heart. Because of the control exerted by the export contractors over the BDCP planning budget, the BDCP/CWF RDEIR/SDEIS was rushed into print without any new modeling, and no new viable project alternatives. This seriously flawed document is not worthy of DWR or Reclamation, and has further delayed addressing the urgent needs of the Delta and California's water supply.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. Please see Chapter 1, Introduction, for a description of the State Water Project and background information regarding how water supply has been developed and managed in California. Please also see response to comment 513-17 regarding the project's purpose and objectives. Please also see Appendix 3A, Identification of Water Conveyance Alternatives, and Common Response 3, Alternatives Development and Description, regarding the alternatives development process and the range and scope of alternatives considered, including alternatives that would reduce or eliminate exports. The Delta Conveyance Project EIR was developed in compliance with CEQA and the analysis uses models that accurately reflect the project's proposed operations. Please see Common Response 9, Hydrologic Modeling and Approach, regarding the appropriate use of CalSim 3 results.
513-28	[ATT 1:] A sustainable solution to California's Bay-Delta fish and water supply problems can be achieved using the following approach. These are not new ideas. They have been provided by numerous Bay-Delta stakeholders to DWR and Reclamation as part of the BDCP process, and they were addressed in large part in the January 2014 California Water Action Plan. They have mainly been ignored or prematurely rejected by the single-focused BDCP/CWF proponents.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. Please see response to comment 513-17 regarding the project's purpose and objectives and proposed Delta Conveyance Project operations. Please also see response to comment 513-18 regarding the alternatives development process and the range and scope of alternatives considered in the Delta Conveyance Project EIR.

Letter-Comment Number	Comment	Response
	1. Capture water when there is high flow in the Delta and its upstream tributaries. This will require additional storage in or close to the Delta and south of the Delta. Additional storage located north of the Delta is needed, but it will not address the current problems of increasing water availability south of the Delta. 2. Storing captured water in wet periods will reduce the pressure to rely on the Delta for exports in drier periods. This will reduce resistance to adoption by the SWRCB and fishery agencies of necessary increased protections for fish in drier periods in the form of increased flows, and more stringent reverse flow limits and export restrictions. Only after the flows needed to sustain fish species are established will it be possible to determine how much water is available for export by the BDCP/CWF proponents. 3. If increases in Delta exports are focused on periods of high Delta outflow, water quality will be good enough in the western Delta to meet export needs. DWR and Reclamation should analyze alternatives involving new intakes in the western Delta in the vicinity of Sherman Island. Such an alternative would maintain flows for the fish through the Delta and eliminate the problems of reverse flows caused by both the south and north Delta intakes. During high flow periods, key pelagic fish species will be located west of Sherman Island. This alternative will also eliminate the need to construct lengthy expensive tunnels all the way under the Delta. 4. Increasing flows in the Delta during drier months will also help restore and maintain good water quality in the interior Delta.	Please see response to comment 513-17 regarding the Delta Conveyance Project EIR's impact analysis related to terrestrial and aquatic resources and water quality. Please see response to comment 513-20 regarding the Delta Reform Act and the co-equal goals. Please see response to comment 513-23 regarding comments related to the effects of flows on species in the Delta.

Letter-Comment Number	Comment	Response
	5. Exports from the south Delta could still continue but only under "safe" conditions for fish. Reverse flows in Old and Middle Rivers would need to be highly constrained, e.g., Old and Middle River flows that are never less than, say, -2,000 cfs, as a monthly average, in all months. 6. Implement a portfolio of other actions to reduce demand on the Delta, strengthen Delta levees, address other fish stressors, and restore habitat in the Delta and in its upstream tributaries. If done right, this approach will result in a win-win-win solution that achieves both coequal goals and the inherent goals of improving water quality in the Delta and protecting the Delta as an evolving place (see Wat. Code, § 85020). The current Bay Delta Conservation Plan/California WaterFix maintains the existing "lose-lose" situation that pits water users against the environment and forces the SWRCB to balance rather than enhance beneficial uses. Indeed, it is telling that despite the court decisions upholding the Fall X2 limits, the export contractors still included an analysis of the proposed project without Fall X2 in the RDEIR/SDEIS (Appendix F).	
513-29	[ATT 1:] It is unfortunate not to mention tragic for Delta smelt and other declining fish populations that after the expenditure of more than $250 million on planning studies, and after tying up the staff resources of state and federal agencies and interested stakeholders for more than nine years, the BDCP/CWF proponents have failed to produce a viable or legally-permissible solution to the water and ecosystem problems facing California, and have failed to produce a legally adequate environmental document.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. Please refer to response to comment 513-17 regarding the project's purpose and objectives.

Letter-Comment Number	Comment	Response
513-30	[ATT 1:] Once again, Contra Costa County respectfully asks that you both take a hard look at the current flawed BDCP/CWF process (and the legally inadequate RDEIR/SDEIS). As discussed earlier, what is needed is an inclusive process - one that involves local agencies and other Bay-Delta stakeholders -to seriously consider new project alternatives that will actually solve rather than exacerbate the problems of the Delta, and that will sustain a healthy Delta ecosystem and a reliable water supply.	Please see response to comment 513-15 regarding comments on the Bay Delta Conservation Plan/California WaterFix project. Please refer to response to comment 513-17 regarding the project's purpose and objectives and response to comment 513-18 regarding the alternatives development process and the range and scope of alternatives considered in the Delta Conveyance Project EIR.
513-31	[ATT 2:] This letter is written on behalf of the County of Contra Costa ("County") and the Contra Costa County Water Agency ("Water Agency") and is in addition to the County and the Water Agency response letter dated February 14, 2020 to describe the County's role as a responsible agency, among other things, pursuant to CEQA Guidelines sections 15082, subdivision (b) and 15103. We appreciate the opportunity to comment on the project described in the California Department of Water Resources' January 15, 2020 Notice of Preparation ("NOP") of Environmental Impact Report ("EIR" for the Delta Conveyance Project ("Project").	This information describes the structure or organization of the comment letter, the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
513-32	[ATT 2:] Contra Costa County agrees with the request by the Delta Counties Coalition ("DCC"), and others, to temporarily pause the processing of the Project as many of our County employees are now serving as Disaster Response Staff during the 2019 Novel Coronavirus incident. We also agree with the DCC NOP letter dated April 17, 2020 and incorporate this comment letter by reference.	This information describes the structure or organization of the comment letter, the background of the organization or individual commenter, general political invective, clarification on the submittal of the comment letter or general introductory text. It is not a comment on the contents of the EIR. Chapter 35, Public Involvement, includes as summary of scoping comments received from commenters other than this commenter.

Letter-Comment Number	Comment	Response
513-33	[ATT 2:] Additionally, it should be noted that due to both the massive scale of the Delta Conveyance Project, and the lack of detail in the NOP regarding the location and description of all project components, including ancillary facilities, the County [Contra Costa County and Contra Costa County Water Agency] and Water Agency are disadvantaged in our ability to provide specific comments about the scope and content of the Project's potential impacts to the environment in and around Contra Costa County.	DWR issued the Notice of Preparation consistent with CEQA requirements which included a description of the project purpose and objectives, a project description, and a map of the alternative alignments proposed for evaluation in the EIR. This information was sufficient for the public and agencies to provide input on the scope of impacts to be evaluated in the EIR. Chapter 3, Description of the Proposed Project and Alternatives, provides a clear and detailed description of the project and alternatives sufficient for environmental review. Please also refer to Common Response 3, Alternatives Development and Description, regarding the approach to describing the project is sufficient for CEQA analysis. As discussed in the EIR Chapter 4, Framework for the Environmental Analysis, the Environmental Setting section of each resource chapter defines the study area for that resource. The study area boundaries vary for each resource topic depending on impact mechanisms and the extent of the area in which impacts are expected to occur for a resource. Potential impacts on Contra Costa County Water Agency and Contra Costa County are evaluated, as applicable, in Chapters 7–32.
513-34	[ATT 2:] The eastern portion of Contra Costa County is located within the Delta and the County's entire northern border is bounded by waterfront that flows from the Delta to the Bay. Thus, Contra Costa County lies at the heart of the Bay-Delta region and the future of this nationally significant resource substantially influences the future of the County. Restoring the health of the Delta also protects the Bay which is linked to the long-term success of the County as a whole.	This information describes the background of the organization or individual commenter. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
513-35	[ATT 2:] A healthy Delta requires enough water supply of good quality along with habitat to maintain healthy populations of fish and other native aquatic, terrestrial and avian species, both migratory and year-round. A healthy Delta would protect people and property (through strong levees, comprehensive	There are local, state, and federal activities to support the concept of a healthy Delta, such as the Delta Plan and the work of the Delta Stewardship Council. The purpose of the Delta Conveyance Project fits within many activities that are occurring in the Delta. The purpose of the project as described in Chapter 2, Purpose and Project Objectives, and Common

Letter-Comment Number	Comment	Response
	emergency response and a water supply of good quality). A healthy Delta would promote economic health of the region and sustain agriculture (managed for habitat and food production), recreation activities (recreational fishing, boating, camping, hiking) and commerce (industry, ports, shipping and commercial fishing).	Response 3, Alternatives Development and Description, is to restore and protect the reliability of SWP water deliveries and, potentially, CVP water deliveries south of the Delta, consistent with the State's Water Resilience Portfolio in a cost-effective manner. This stated purpose gives rise to several related objectives of the project, such as the objective to protect the ability of the SWP, and potentially the CVP, to deliver water when hydrologic conditions result in the availability of sufficient amounts of water, consistent with the requirements of state and federal law, including the California and federal Endangered Species Acts, as well as the terms and conditions of water delivery contracts and other existing applicable agreements and also the objective to provide operational flexibility to improve aquatic conditions in the Delta and better manage risks of further regulatory constraints on project operations.
513-36	[ATT 2:] With this in mind, the Draft EIR for the Delta Conveyance Project should, at a minimum, comprehensively analyze the following: 1. A full range of alternatives including a through Delta Conveyance, improving existing facilities with a smaller conveyance system and a realistic evaluation of the No Project alternative.	A through-Delta Alternative was evaluated in Appendix 3A, Identification of Water Conveyance Alternatives. It was determined that this alternative did not meet most of the project's basic objectives and was eliminated from further review in the EIR. Regarding a smaller conveyance system, Appendix 3A states, "The identification of the proposed operations considered an appropriate balance between exports and ecological issues in the Delta." As discussed in Common Response 3, Alternatives Development and Description, the project would be operated to shift diversions from the south Delta to the north Delta (during the summer and fall) or divert water in the north Delta during excess flow conditions while meeting regulatory requirements (during the winter and spring). With the operations proposed that seek to maximize diversions during excess flow events, improving existing facilities with a smaller capacity alternative would not meet the water supply reliability objective of the project as frequently as the 3,000 cfs alternative, and therefore was not considered. The statement that the EIR does not evaluate the No Project Alternative is

Letter-Comment Number	Comment	Response
		not supported by the content of the EIR. The No Project Alternative is analyzed in each resource chapter of the EIR. Please also refer to Common Response 4, No Project Alternative Description and Analysis, regarding reasonably foreseeable actions that are considered part of the No Project Alternative.
513-37	[ATT 2:] With this in mind, the Draft EIR for the Delta Conveyance Project should, at a minimum, comprehensively analyze the following: 2. A full range of the water quality impacts and Delta Operations and Bay & Delta Water Quality with focus on: a. Presenting modeling data and disclosure of environmental impacts in a form that is usable and useful for decision makers and the public b. Using the full historical period, 1922-2019, in the analysis of the water quality impacts from the proposed project c. Mitigating any significant water quality impacts of the proposed project including the potential buildup of contaminants in south and central Delta	Please see response to comment 513-4 regarding the range of water quality impacts analyzed, use of modeling data, use of historical period, and use of mitigation measures.
513-38	[ATT 2:] With this in mind, the Draft EIR for the Delta Conveyance Project should, at a minimum, comprehensively analyze the following: 3. Impacts to the East Contra Costa Groundwater Subbasin.	Common Response 10, Surface Water Quality and Groundwater Resources, provides clarifying information regarding the methodology and information used to adequately and appropriately evaluate construction-related impacts described in Chapter 8, Groundwater. As described in Common Response 10 and Chapter 8 (in the section titled Methods for Analysis), the Delta Conveyance Project construction-related impacts are evaluated using

Letter-Comment Number	Comment	Response
		existing groundwater conditions and hydrogeology, standard design and construction methods (Delta Conveyance Design and Construction Authority 2022a, 2022b), and anticipated changes in groundwater elevations, storage, and quality during construction. As described in Common Response 10, cutoff walls would be designed to applicable standards depending on the unique site-specific conditions and the location of the facility being constructed. Cutoff walls are designed and used to minimize need for dewatering and the movement of groundwater outside of the cutoff walls. Given this, and the other information provided in Common Response 10, construction would not result in substantial changes to groundwater levels or groundwater water quality. Impacts were evaluated for all areas near the project construction, including the East Contra Costa Subbasin. Common Response 10 also provides information regarding the approach to analysis of operation impacts in Chapter 8. Operational impacts on groundwater resources in the Delta and adjacent groundwater basins, including East Contra Costa subbasin, were evaluated using the Delta Groundwater Model.
513-39	[ATT 2:] With this in mind, the Draft EIR for the Delta Conveyance Project should, at a minimum, comprehensively analyze the following: 4. Impacts to the planned development of commercial solar facilities within eastern Contra Costa County and the project area.	The EIR describes the proposed facilities and evaluates potential impacts associated with construction, operation and maintenance of the project and its alternatives. The EIR addresses the effects of construction and operational activities on the local economy and development of Delta communities in Chapter 17, Socioeconomics. As described in Chapter 17, the potential effects analyzed are not expected to be adverse effects. Appendix 3C, Defining Existing Conditions, No Project Alternative, and Cumulative Impact Conditions, lists reasonably foreseeable projects such as county general plans within the project area and which are evaluated as part of the cumulative analysis. Where appropriate, Contra Costa County plans and policies are

Letter-Comment Number	Comment	Response
		incorporated into the analyses (e.g., Chapter 14, Land Use; Chapter 13, Terrestrial Biological Resources; and Chapter 24, Noise and Vibration). As described in Chapter 14, Land Use, section titled Thresholds of Significance, conflicts with existing or designated land uses do not necessarily, by themselves, equate to an adverse effect on the physical environment. Impact LU-2 in Chapter 14 addresses potential impacts associated with incompatibility with land use designations, goals, and policies.
513-40	[ATT 2:] With this in mind, the Draft EIR for the Delta Conveyance Project should, at a minimum, comprehensively analyze the following: 5. Impacts to the permanent increase in Vehicle Miles Traveled and the corresponding mitigation. 6. Impacts to the creation of permanent roadway maintenance obligations and corresponding mitigation.	Impact TRANS-1 in Chapter 20, Transportation, evaluates the project's effects on construction VMT and concludes that construction of the project alternatives would result in additional VMT in the regional transportation system and increase the total amount of driving and distances traveled for home-based work trips. Mitigation Measure TRANS-1 would reduce the severity of the increased VMT per construction employee versus regional average by implementing transportation measures that would decrease the total amount of construction employee travel on Delta roadways, incentivize carpooling and vanpooling, and establish state, regional, or local agency coordination to construct the park-and-ride lots and roadway improvements. DWR will conduct pre-construction pavement analysis of access roadway segments and determine the need to improve these access roads. Improvements may include pavement remediation (e.g., fill potholes, asphalt cracking and slurry seals), road widening (minimum of 12 feet), and other roadway design options to serve construction traffic. After completion of a project site construction, the condition of the access roads for each construction site will be analyzed and remediation of roadways will be completed as needed to return the facility to the improved conditions that were constructed by DWR. Road maintenance is the responsibility of the jurisdictional agency, and those responsibilities will be unchanged after completion of project site

Letter-Comment Number	Comment	Response
		construction. These new and/or improved transportation facilities on public roads would be part of the transportation system serving the Delta community and the cost of maintenance would be the responsibility of the agencies with jurisdiction. As described in Chapter 3, Description of the Proposed Project and Alternatives, operations and maintenance activities for the facilities would be minimal.
513-41	[ATT 2:] As part of the County's [Contra Costa County and Contra Costa County Water Agency] NOP comments please refer to the memos from the Public Works Department, Transportation Engineering, dated March 23, 2020 and from the Contra Costa County Flood Control District dated March 4, 2020, attached [These two memos are not attached to ATT 2 in this comment letter (#513).].	The comment does not raise a significant environmental issue relating to the proposed project or address the adequacy, accuracy, or completeness of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
513-42	[ATT 2:] As with past isolated conveyance projects, the County and Water Agency will continue to participate in the process of the Delta Conveyance Project by attending hearings and submitting written comments.	This information describes the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. It is not a comment on the contents of the Draft EIR. DWR is committed to working with all interested parties and has reviewed all comments and will consider all comments in its decision-making process.
513-43	[ATT 3:] Background and Summary Exponent was retained by Contra Costa County Water Agency to review and provide comments on the Draft Environmental Impact Report for Delta Conveyance Project [Footnote1: Draft EIR documents were downloaded from https://www.deltaconveyanceproject.com/read-the-document.] (Draft EIR) prepared by the California Department of Water Resources (DWR) with respect to water quality concerns of in-Delta entities.	This information describes the structure or organization of the comment letter, the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.

Letter-Comment Number	Comment	Response
513-44	[ATT 3:] As detailed below, our [Exponent] comments focused on our ability to understand the details of the proposed project, including its operation, and the impacts of the proposed project on water quality within the Delta for both existing and future conditions. Our comments are summarized as follows: 1. DWR's water quality analysis is presented in the form of long-term averages, masking important information needed to assess the impacts of the proposed project on water quality within the Delta.	Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the use of monthly average modeling results in the water quality impact analysis.
513-45	[ATT 3:] As detailed below, our [Exponent] comments focused on our ability to understand the details of the proposed project, including its operation, and the impacts of the proposed project on water quality within the Delta for both existing and future conditions. Our comments are summarized as follows: 2. DWR's simulation of project operations does not include the relaxation of operations rules, such has occurred in recent critically dry years, and as such does not accurately simulate and represent the likely operations and impacts of the proposed project.	Please refer to Common Response 3, Alternatives Development and Description, for a discussion of TUCPs ("relaxation of operations rules") and why they fall outside the scope of the project and CEQA requirements for this EIR.
513-46	[ATT 3:] As detailed below, our [Exponent] comments focused on our ability to understand the details of the proposed project, including its operation, and the impacts of the proposed project on water quality within the Delta for both existing and future conditions. Our comments are summarized as follows:	Please see response to comment 513-9 regarding response related harmful algal blooms.

Letter-Comment Number	Comment	Response
	3. DWR's analysis of impacts to harmful algal blooms is flawed due to errors in estimating residence time and analyzing the impacts of velocity 4. DWR's velocity analysis is irrelevant to the potential for the formation of harmful algal blooms	
513-47	[ATT 3:] As detailed below, our [Exponent] comments focused on our ability to understand the details of the proposed project, including its operation, and the impacts of the proposed project on water quality within the Delta for both existing and future conditions. Our comments are summarized as follows: 5. Comments regarding DWR's evaluation of climate change 5.1. DWR conducted CalSim 3 sensitivity modeling for multiple sea level rise scenarios, but did not model conditions in the Delta for the same scenarios 5.2. In choosing the H++ model scenario with 1.8 feet of sea level rise, DWR chose an extremely unlikely scenario that generated unexplained results and that may mask the likely impacts of the proposed project 5.3. DWR's methodology for modeling salinity for scenarios with sea level rise is unclear 5.4. DWR's assumption of stationarity is flawed	Please see response to comment 513-10 regarding response related to climate change assumptions and modeling.
513-48	[ATT 3:] As detailed below, our [Exponent] comments focused on our ability to understand the details of the proposed project, including its operation, and the impacts of the	Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the use of summary statistics in the impact analysis for water quality and the use of DSM2 modeled results. As described in this

Letter-Comment Number	Comment	Response
	proposed project on water quality within the Delta for both existing and future conditions. Our comments are summarized as follows: 6. DWR's method of computing and presenting summary statistics is flawed[.]	Common Response, the EIR appropriately describes the use of statistics in the EIR and appropriately uses statistics to describe modeled results in the impact analysis.
513-49	[ATT 3:] As detailed below, our [Exponent] comments focused on our ability to understand the details of the proposed project, including its operation, and the impacts of the proposed project on water quality within the Delta for both existing and future conditions. Our comments are summarized as follows: 7. The Draft EIR is lengthy and difficult to review, and our comments are not complete	Please see Common Response 1, Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the complexity and length of the EIR.
513-50	[ATT 3:] Qualifications These comments were prepared by Susan C. Paulsen, Ph.D., P.E., and Chi-Yu Lin, P.E. (WA). Dr. Paulsen has 25 years of experience with projects involving hydrology, hydrogeology, hydrodynamics, aquatic chemistry, and the environmental fate of a range of constituents. She has knowledge of California water supply issues, including expertise in California's Bay-Delta estuary. Her expertise includes designing and implementing field and modeling studies to evaluate groundwater and surface water flows, the source and distribution of water within the Delta, and contaminant fate and transport. Dr. Paulsen has also designed studies using one dimensional hydrodynamic models, three-dimensional computational fluid dynamics models, longitudinal dispersion models, and Monte Carlo stochastic models to evaluate flows,	This information describes the background of the organization or individual commenter. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.

Letter-Comment Number	Comment	Response
	water quality, and mixing within the Delta, and she has directed modeling studies and utilized the results of numerical modeling to evaluate surface and ground water flows. Dr. Paulsen's curriculum vitae is provided as Attachment A [ATT 1 of ATT 3]. Chi-Yu Lin, P.E. (WA) has a background in civil and environmental engineering focusing on surface hydrology and water resources. He is a licensed engineer (WA) with 12 years of experience specializing in hydrology, data analysis, and hydraulic and hydrodynamic modeling. Mr. Lin uses various models to support a variety of projects including water balance calculations, peak-flow hydrograph simulations, surface water and groundwater interactions, source fingerprinting on water quantity and quality, snow water and snow depth estimation, and sediment transport investigations. He has used the DSM2 model to evaluate current and proposed model scenarios for the California WaterFix project for various clients in the Sacramento/San Joaquin Delta and conducted DSM2 runs to simulate surface hydrology and water quality within the Delta, estimate water balance and volumetric fluxes, calculate source fingerprints, and compute salinity. Mr. Lin's curriculum vitae is provided as Attachment B [ATT 2 of ATT 3].	
513-51	[ATT 3:] 1. DWR's water quality analysis is presented in the form of long-term averages, masking important information needed to assess the impacts of the proposed project on water quality within the Delta Water is diverted by cities, water agencies, agricultural users, and others within the Delta and put to beneficial use for	Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the use of monthly average modeling results in the water quality impact analysis. The thresholds of significance used to make impact determinations regarding the modeled and qualitatively assessed water quality changes consider the designated beneficial uses of Delta waters, including municipal and industrial supply, agricultural supply, and fish and wildlife. Note that wastewater discharge is not a designated beneficial use of Delta waters per the State Water Resources Control Board's Bay-Delta Water Quality Control Plan and the Central Valley

Letter-Comment Number	Comment	Response
	municipal and industrial (M&I) purposes and agricultural irrigation. The Delta waterways also support a range of beneficial uses, including habitat, aquatic life and ecosystems, and human recreation. Discharges of treated wastewater and other flows to the Delta are regulated by National Pollutant Discharge Elimination System (NPDES) permits that impose requirements intended to maintain Delta water quality. Each of these beneficial uses depends upon the availability of water of suitable quality, and regulatory requirements for discharges to the Delta are determined in consideration of Delta water quality. Thus, understanding Delta water quality, and the changes that may occur to water quality as a result of the proposed project, are of paramount importance to counties within the Delta.	Regional Water Quality Control Board's Water Quality Control Plan.
513-52	[ATT 3:] DWR's Draft Environmental Impact Report for Delta Conveyance Project [Footnote 2: EIR documents were downloaded from https://www.deltaconveyanceproject.com/read-the-document.] (Draft EIR) assesses the impacts of the proposed project over a 95-year timeframe that includes water years classified as critical, dry, below normal, above normal, and wet. [Footnote 3: Water years are classified as critically dry, dry, below normal, above normal, and wet based on a formula described in https://cdec.water.ca.gov/reportapp/javareports?name=WSIHIST. Accessed on Oct 21, 2022.] DWR simulated project operations and conditions within the Delta for water years (WY) 1923-2015 using several models. The CalSim3 model, which utilizes a monthly time step, was used to simulate project operations, including reservoir releases and diversions	The comment describes content in the EIR regarding the types of models used and the presentation of results. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the use of monthly average modeling results in the water quality impact analysis.

Letter-Comment Number	Comment	Response
	and exports. Output from CalSim 3 was used as input to DWR's Delta Simulation Model II (DSM2). DSM2 simulates flows and water quality within the Delta using a 15-minute time step, which is necessary to capture tidally-driven flows and water quality conditions within the Delta estuary. An additional model, SCHISM, was used to simulate Delta hydrodynamics and water quality for future conditions (with climate change; see comment 5), and to adjust the DSM2 and CalSim 3 model parameters used to simulate Delta conditions with sea level rise. Throughout the EIR, DWR discusses water quality changes resulting from the proposed project as long-term averages aggregated statistically. For example, electrical conductivity (EC) data from DSM2 were first processed to compute monthly average EC values, from which statistical distributions were then calculated for the full 95-year simulation period. See, for example, Figures 1 [See Exhibit 1 of ATT 3] and 2 [See Exhibit 2 of ATT 3], which are reproduced from EIR Appendix 9G.	
513-53	[Exhibit 1 of ATT 3: Reproduced tables 9G-1-1-1 and 9G-1-1-2 from DEIR Appendix 9G.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-54	[Exhibit 2 of ATT 3: Reproduced Tables 9G-1-6-1, 9G-1-6-2, 9G-1-6-3, and 9G-1-6-4 from DEIR Appendix 9G.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-55	[ATT 3:] Although the long-term average salinity data presented in the EIR indicate that many locations can expect increases in salinity, particularly during the summer and fall months (see Figures 1 and 2) [See Exhibit 1 of ATT 3] [See Exhibit 2 of ATT 3], the information in the EIR does not provide the level of	The assertion that the EIR does not provide the level of detail required to assess potential project impacts is not consistent with the EIR. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the presentation of data and use of monthly average modeling results in the water quality impact analysis. The purpose of Chapter 9, Water Quality, is to assess environmental impacts resulting from project operations-caused changes in surface water quality, relative to water

Letter-Comment Number	Comment	Response
	detail required to assess likely project impacts. Most entities within the Delta, including municipal water purveyors, agricultural water users, and POTWs [Publicly Owned Treatment Works] who discharge to the Delta, operate facilities and manage treatment operations on short timeframes (e.g., hourly). Model results that are processed to show long-term averages, and then provided in summary statistical format, do not provide the information needed to assess the impacts of the proposed project on their operations.	quality for existing conditions, based on the thresholds of significance. The use of monthly averaged modeling output was appropriate relative to modeling capabilities and provided sufficient (i.e., n=93) concentration values for each month from which to assess the degree and direction of water quality changes due to project operations. As disclosed in Chapter 9, the impact on water quality due to project operations would be less than significant because (1) the project would not cause an increased frequency of exceedance of federal water quality criteria or state water quality objectives at the time-steps they are applied, which include averaging concentrations for bromide, chloride, and electrical conductivity (EC); and (2) the project would not cause degradation of water quality, including bromide, chloride, and EC, that would adversely affect the beneficial uses, including drinking water uses. Please see Common Response 10 regarding water quality analysis thresholds of significance.
513-56	[ATT 3:] In addition, DWR has made fundamental statistical errors (as detailed in Opinion 6) that make it even more difficult to assess the impacts of the proposed project. To understand the difficulty of interpreting water quality data presented as statistically-aggregated, long-term average values, consider Figure 3 [Exhibit 3 of ATT 3]. Figure 3 was generated from DWR's DSM2 model results for the no project scenarios (the 2020 existing condition and 2040, which incorporates sea level rise) and for the proposed project Alternative 5 (both for 2020 and 2040). Figure 3 aggregates water quality modeling results for the month of July in the 1922-2015 simulation period by water year type, combining results to show predicted EC for critical, dry, below normal, above normal, and wet water years. For example, the upper left panel shows simulated EC for the month of July for all	The assertion that the EIR does not adequately assess the impacts on water quality is not consistent with the EIR. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the use of monthly average modeling results in the water quality impact analysis. Compliance with D-1641 salinity objectives was a component of the chloride and EC impact analyses in Chapter 9, Water Quality, Impacts WQ-4 and WQ-5, respectively. The compliance assessment was conducted at the time-step corresponding to each objective type (e.g., 14-day running average), with tabular results provided in Appendix 9F, Chloride, in the table titled Percent of Days in Water Years 1923–2015 That Chloride Concentrations Exceeded the Municipal and Industrial Uses Water Quality Objective, Existing Conditions, No Project Alternative and the table titled Number of Years in Calendar Years 1923–2014 That the 150 Milligrams per Liter Chloride Objective for Contra Costa Water District Pumping Plant #1 Was Exceeded, Existing Conditions, No Project Alternative; and in Appendix 9G, Electrical Conductivity, in the table titled Percent of Days in Water Years 1923–2015 That Electrical Conductivity Exceeded the Agricultural Beneficial Uses Water Quality Objective, Existing Conditions and the Project

Letter-Comment Number	Comment	Response
	critical water years within the 1922-2015 simulation period. There were 15 critical water years in the simulation period. [Footnote 4: Water years are classified as critically dry, dry, below normal, above normal, and wet based on a formula described in https://cdec.water.ca.gov/reportapp/javareports?name=WSIHIST. Accessed on Oct 21, 2022.] The mean salinity in these 15 Julys was simulated to be 1,704 µmhos/cm. The monthly average EC ranged from 900 to 2,849 µmhos/cm, and the daily average EC ranged from 392 to 3,449 µmhos/cm. The DSM2 model computes EC values on a 15-minute basis, and the 15-minute EC values ranged from 221 to 7,081 µmhos/cm. The long-term average EC values, by definition, exhibit less variability than 15-minute values or values computed over shorter timescales. Additionally, water quality objectives for salinity in the Delta are specified using shorter time periods. For example, water quality objectives for municipal and industrial uses are specified as maximum mean daily chloride concentrations; water quality objectives for agricultural beneficial uses are specified as "the maximum 14-day running average of mean daily EC." [Footnote 5: State Water Resources Control Board. Revised Water Right Decision 1641. March 15, 2000.] Presenting information in the Draft EIR in the form of monthly average concentrations, or as long-term statistical distributions derived from monthly average concentrations, does not allow the reader to assess whether or when D-1641 [Water Rights Decision 1641] water quality objectives for the Delta are exceeded. By presenting information in the form of statistically-	Alternatives and the table titled Percent of Days in Water Years 1923–2015 That Electrical Conductivity Exceeded the Fish and Wildlife Beneficial Uses Water Quality Objective, Existing Conditions and the Project Alternatives.

Letter-Comment Number	Comment	Response
	aggregated, long-term averages, DWR fails to present information needed by the Delta counties to evaluate the impacts of the proposed project. DWR should provide information regarding water quality changes on shorter timescales, and should likewise analyze exceedances of the D-1641 water quality objectives for salinity, for both the proposed project and alternative scenarios, and for both existing conditions and conditions in 2040 with climate change.	
513-57	Exhibit 3 of ATT 3: Figure of the Simulated EC in July in the Sacramento River at Emmaton for the No-Project scenario and Alternative 5 in 2020 and 2040.	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-58	[ATT 3:] 2. DWR's simulation of project operations does not include the relaxation of operations rules, such has occurred in recent critically dry years, and as such does not accurately simulate and represent the likely operations and impacts of the proposed project DWR has described project operations in Appendix 5A, Section B of the Draft EIR. Project operations were simulated using the CalSim3 and DSM2 models as described in the EIR. In a section called "Relaxation of Regulatory Requirements," DWR notes that "CalSim 3 makes storage release decisions and routes water through the stream network, based on a set of pre-defined rules that represent existing or future assumed regulations and operations criteria. These pre-defined rules do not include temporary relaxation of non-discretionary regulatory requirements such as occurred in 2014 and 2015 as a result of Temporary Urgent [sic] Change Petitions submitted to the	The modeling simulations included in the EIR are complete and accurate for the purposes of impact disclosure. Please see Common Response 9, Hydrologic Modeling and Approach, regarding best available tools, modeled representation of future conditions and climate change and consideration of drought and temporary urgency change petitions. Temporary urgency change petitions are not part of the project description as described in Common Response 3, Alternatives Development and Description. As described in sections Relaxation of Regulatory Requirements, Monthly Timestep, and Extreme Conditions of Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Systems Operations Modeling, CalSim 3 does not represent real time policy and operational decisions or extreme circumstances that deviate from standard operating polices.

Letter-Comment Number	Comment	Response
	State Water Board." [Footnote 7: Draft EIR, Appendix 5A, Section B, at p. B-66. [Note that this appendix has multiple pages with duplicate page numbers. This quotation is found on the first page B-66 (pdf p. 70), not the second page B-66 (pdf p. 286).]] (emphasis added) DWR further notes that "Frequency of extreme conditions is expected to increase in the future under the combined effects of climate change and sea level rise." [Footnote 8: Ibid.] Thus, DWR's modeling and project evaluations do not incorporate the changed operations that have occurred pursuant to the Temporary Urgency Change Petitions (TUCPs) issued in recent years during critically dry conditions. In addition to the TUCPs issued in the critically dry years of 2014 and 2015, TUCPs were also issued in 2016, 2021 and 2022. [Footnote 9: https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/tucp/] The historical simulation period of 1922-2015 includes 15 critically dry years. [Footnote 10: See https://cdec.water.ca.gov/reportapp/javareports?name=WSIHIST. Accessed on Oct 21, 2022.] It is entirely foreseeable that TUCPs may be adopted and project operations may be modified during critically dry years in the future, yet DWR has not evaluated water quality conditions within the Delta under these conditions, including the potential impact of operation of the new proposed North Delta Diversion intakes. Because DWR has not simulated the changed operations that may result during critically dry conditions, DWR's modeling evaluation and discussion of impacts within the Draft EIR is incomplete. Further, DWR's model simulations of future	

Letter-Comment Number	Comment	Response
	conditions indicate that the salinity of the Delta will increase over time as a result of sea level rise. DWR has not disclosed if it anticipates requiring TUCPs more frequently under these conditions, or the water quality impacts of operating under TUCPs in the future.	
513-59	[ATT 3:] 3. DWR's analysis of impacts to harmful algal blooms is flawed due to errors in estimating residence time and analyzing the impacts of velocity DWR's analysis of cyanobacteria harmful algal blooms is presented in Chapter 9 (Water Quality) and Appendix 9E. DWR evaluated five primary factors that "provide favorable conditions" for mycrocystis to outcompete other phytoplankton in the Delta, including (1) water temperature, (2) channel flow velocities, (3) residence times, (4) water column irradiance/clarity, and (5) nutrient availability. Our [Exponent] analysis focuses on the hydrodynamic parameters of channel flow velocities and residence time. DWR's residence time analysis. DWR correctly notes that an increase in residence times may contribute to an increased likelihood of algal blooms. DWR's analysis focused on evaluating residence times in nine Delta locations "that have been part of routine Delta monitoring programs and identified as primary bloom areas" [Footnote 11: Draft EIR, Appendix 9E, at p. 9E-8.] plus additional locations "to more accurately capture how the project alternatives could potentially affect water residence times across the Delta." [Footnote 12: Draft EIR, Appendix 9E, at p. 9E-9.] DWR identified sub-regions of the Delta as indicated in Figure 4 [See Exhibit 4 of ATT 3] and used the DSM2 model to simulate a concentration of 100 units	Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the appropriateness of the DSM2 residence time modeling and the use of DSM2-modeled channel velocities to support the CHABs analysis in Chapter 9, Water Quality, Impact WQ-14. As noted in Common Response 10, the comment assertion that the residence time modeling approach supporting the CHABs analysis in Chapter 9 is flawed is not supported by the current scientific understanding of cyanobacteria growth and the formation of CHABs in the Delta. Hydraulic residence time at various locations within the Delta was assessed directly using the QUAL module of DSM2, which is an appropriate model to assess site-specific residence time in the shallow and tidal Delta. Channel velocity was considered as one of the five factors related to the emergence and subsequent growth and accumulation of CHABs to inform the potential for mixing of the water column which is very relevant to formation of CHABs.

Letter-Comment Number	Comment	Response
	within each sub-region (and zero units outside of each sub-region), then to compute the time (in hours) for 90% of the water within that subregion to leave each sub-region. [Footnote 13: Draft EIR, Appendix 5A, Section C.6.6, at p. C-21: "For this analysis, a concentration of 100 is assigned to all DSM2 channels within the zone defined, while for all other DSM2 channels outside the zone an initial concentration of zero is assigned." "For each channel within the zone, residence time for a given channel is defined as the length of time it takes for 90% of the constituent to leave through either end of channels." And "The residence time for the entire zone is defined as the average of the length of residence time for the individual DSM2 channels within the defined zone."] This "Time (in hours) to Flush 90 Percent of Water from the Location" was computed for each month in the simulation period (1923-2015), and results were averaged for each month. Results for the existing condition and project alternatives were compared; if results were the same for each alternative, DWR concluded that residence time within that sub-region of the Delta did not increase as a result of the project. Based on its analysis, DWR noted increases in residence time in some of the sub-regions it analyzed [Footnote 14: For example, the EIR noted, "In the San Joaquin River near Venice Island, model results show median residence time generally increases under all alternatives for the full simulation period for the months of July through November (Table 9-50; refer to Appendix 9E, Tables 9E-3-10-1 to 9E-3-10-6 and Figure 9E-3-10.)" (Draft EIR, Chapter 9, p. 9-166.) DWR further found that alternatives 2a and 4a, which involve higher diversion rates and potentially a third intake, have greater impacts: "The greatest increase in residence time in the San Joaquin River	

Letter-Comment Number	Comment	Response
	near Venice Island was modeled to occur in November at the 75th percentile. Residence time in the 75th percentile increase by 16 to 17 hours under Alternatives 1, 2b, 2c, 3, 4b, 4c, and 5 and by 32 hours under Alternatives 2a and 4a." (Draft EIR, Chapter 9, p. 9-167.)] [Footnote 15: For example, the EIR noted "At Mildred Island, the modeled median residence time for the full simulation period under the project alternatives, relative to existing conditions, show [sic] little to no change in residence time for June and November (Table 9-51; refer to Appendix 9E, Tables 9E-3-8-1 to 9E-3-8-6 and Figure 9E-3-8). Under all project alternatives there are increases in median residence time in July, August, September, and October…" (Draft EIR, Chapter 9, p. 9-168.] but "little to no change" in residence time in other sub-regions. [Footnote 16: For example, Table 9-47 (which is not referenced in the text of the Draft EIR) shows "modeled median residence time in hours using DSM2 for Existing Conditions and Project Alternatives for Locations with Short Residence Time (i.e., ≤ 72 hours [3 days])" and indicates little difference or slight increases between existing conditions and project alternatives (Draft EIR, Chapter 9, p. 9-160).] However, as detailed below, DWR's analysis is fundamentally flawed and is not indicative of residence times of the Delta estuary.	
513-60	[Exhibit 4 of ATT 3: A map of sub-regions used by DWR to estimate "residence time." Source: DSM2 model grid Version 8.2.1, from June 2021.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-61	[ATT 3:] Flaws in DWR's analysis of residence time. As detailed below, DWR's analysis of residence time is flawed in several respects: 1. Small sub-regions of the Delta are arbitrary, and results are a	The comment assertion that the residence time modeling approach supporting the CHABs analysis in Chapter 9, Water Quality, is arbitrary is not supported by the current scientific understanding of cyanobacteria growth and the formation of CHABs in the Delta. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the appropriateness of the residence time modeling, calculations

Letter-Comment Number	Comment	Response
	function of the subregions selected, not a function of hydrodynamics within the Delta. The methodology employed by DWR to estimate "pseudo-residence time" [Footnote 17: We use the term "pseudo-residence time" because, as detailed below, DWR's calculations are unrelated to the true residence time of an estuary.] divided the Delta into a number of sub-regions. DWR provided no basis for the selection of the sub-regions, either in terms of their size, the volume of water they contain, or any other factor. Thus, the subregions defined by DWR are arbitrary, and the "pseudo-residence time" for each sub-region is a function of the size/volume and tidal flow conditions of that sub-region. The pseudo-residence time values calculated by DWR are unrelated to the actual residence time of the estuary. To understand why DWR's methodology is flawed, consider that water may leave each defined sub-region by (1) advecting and dispersing into channels adjacent to each sub-region (i.e., remaining within the Delta) or (2) being pumped out of the region (e.g., for in-Delta consumptive use or exported from the Delta). Water that sloshes into adjacent channel segments due to tidal flows remains within the Delta, as would any algal cells that were present in the water within each defined sub-region. Many of the sub-regions are connected to multiple channels within the Delta; for example, the Middle River sub-region is connected to five separate channels [Middle River to the north, Empire Cut, Middle River to the south, North Victoria Canal, and the channel between Woodward and Bacon Islands], such that DWR's original tracer may exit this sub-region through five different channels (but remain in the Delta) in addition to being pumped out of the channels for in-Delta consumptive use (thus	performed to support the CHABs analysis in Impact WQ-14, and description of why site-specific residence times were assessed and considered in the impact analysis. Regarding the commenter's IKEA showroom analogy for Delta residence time and CHABs, the important consideration is not the residence time for the Delta as a whole as asserted, but rather residence time at specific locations within the Delta where other conditions are favorable for CHABs. As described further in Chapter 9, Appendix 9E, Cyanobacteria Harmful Algal Blooms, and Common Response 10, cyanobacteria are not produced at the same rate or to the same abundance in all areas of the Delta. Rather, CHABs form at specific locations within the Delta and cyanobacteria cells are then dispersed broadly across the Delta. Therefore, relating residence time for the Delta as a whole to CHAB formation potential is not as useful as assessing residence time in areas known to experience CHABs, as done in the EIR. Comparing this to the IKEA showroom analogy, the time a person spends in the entire IKEA store is not as useful in explaining sales (sales being analogous to CHABs) as the amount of time they spend in certain sections of the store and why. Shoppers have varying reasons for being in the store, and thus spend different amounts of time in different departments, with varying effects on sales. Total sales (in dollars) attributed to the kitchen section may be three or four times higher than those for the bedroom section, based on time spent in these departments or department-specific factors, such as inventory and discounted items. Furthermore, time spent in the store could be on nonactive shopping activities. Some shoppers may pause to take a call on their cell phone. Some shoppers may need to use the restroom. Shoppers making purchases spend time in the checkout line, the duration of which can vary greatly. Active shopping time combined with nonactive shopping time gives a single metric of time spent in the store but does not differentiate the more important metrics of time spent actively shopping in different areas of the store and why purchases are made. Hence, to understand sales (or CHAB

Letter-Comment Number	Comment	Response
	being removed from the Delta). Further, algal cells may flow through several of DWR's defined sub-regions before they are removed from the Delta. For example, a portion of the San Joaquin River water that enters the Delta at Vernalis may flow through the Stockton Deepwater Ship Channel, Venice Island, Franks Tract, and Jersey Island sub-regions (and through channels between these sub-regions) before exiting the Delta. Thus, algal cells that may be present within one sub-region of the Delta will flow through other Delta channels and remain within the Delta for far longer than indicated by DWR's calculation of the pseudo-residence time. An imperfect analogy for understanding why DWR's methodology is incorrect is the Ikea Showroom. It would not be appropriate to estimate the average length of time a person spends in an Ikea store by evaluating the average length of time spent by people in the bedding section, or in the kitchens section. Rather, because there are multiple (tortuous) paths that a person may take through an Ikea, the average time spent within the Ikea can best be estimated by monitoring the total number of people inside the store during open hours and the rate at which people enter and leave the Ikea through the exterior doors. See Figure 5 [See Exhibit 5 of ATT 3].	formation in the Delta), it is important to understand the time customers spend actively shopping in each section of the store and department-specific factors, not just the total time spent in the store. Therefore, the IKEA showroom analogy is an inappropriate representation of how residence time should be calculated for the CHABs analysis in the EIR.
513-62	[Exhibit 5 of ATT 3: Figure of an Ikea Showroom]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-63	[ATT 3:] 2. Residence time for estuary should be evaluated for the system as a whole. Chapter 7 of Fischer et al. (1979) presents a detailed analysis of	The comment assertion that the residence time modeling and calculations supporting the CHABs analysis in Chapter 9, Water Quality, should be evaluated for the Delta as a whole is not supported by the current scientific understanding of cyanobacteria growth and the formation of CHABs in the

Letter-Comment Number	Comment	Response
	mixing in estuaries, including a derivation of the residence time (called the "mean detention time," defined as the mean time that a particle of tracer remains inside an estuary). The mean residence time is estimated as the volume of water in the estuary divided by the flow rate of freshwater inflows. [Footnote 18: Fischer, H.B., E.J. List, R.C.Y. Koh, J. Imberger, and N.H. Brooks. Mixing in Inland and Coastal Waters. Academic Press: London. 1979. Chapter 7: Mixing in Estuaries. At pp. 274-275.] DWR has used DSM2 modeling to perform more detailed estimates of residence time, defined as the time required for flows entering the Delta to leave the Delta (as a whole) in other processes. Specifically, DWR calculated the residence time of fresh water in the Delta using particle tracking simulations modeled with the DSM2 HYDRO software (Mierzwa et al. 2006a [Footnote 19: Mierzwa, M., J. Wilde, and B. Suits. 2006a. Long-Term Trends of Delta Residence Time. California Department of Water Resources. Bay-Delta Office. Modeling Support Branch. Delta Modeling Section.], 2006b [Footnote 20: Mierzwa, M., J. Wilde, B. Suits, and T. Sommer. 2006b. Methodology for Flow and Salinity Estimates in the Sacramento-San Joaquin Delta and Suisun Marsh. Chapter 3: Developing a Residence Time Index to Study Changes in 1990-2004 Delta Circulation Patterns.], and Wilde et al. 2006c [Footnote 21: Wilde, J., M. Mierzwa, and B. Suits. 2006. Using particle tracking to indicate Delta residence time. California Dept. of Water Resources. Bay-Delta Office. Modeling Support Branch. Delta Modeling Section.]). Mierzwa et al. (2006a and 2006b)) simulated the residence time of water in the Delta between 1990 and 2004 by tracking water that entered the system at Freeport (on the Sacramento River) and at Vernalis	Delta. This comment presents alternative calculations of residence time for the Delta. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the appropriateness of the residence time modeling and calculations performed to support the CHABs analysis in Impact WQ-14. As described in Common Response 10, the definition of residence time and DWR's approach to evaluating residence time are scientifically supported and not arbitrary. The approach, described both in Chapter 9 and further clarified in Common Response 10, fully evaluates the potential impacts of the operation of the Delta Conveyance Project on CHABs.

Letter-Comment Number	Comment	Response
	(on the San Joaquin River). The residence time was defined as the number of days required for 75% of the particles injected over a 24-hour period at a specific location (e.g., Freeport) to leave or be removed from Delta channels. The particles were assumed to have left Delta channels when they passed (i.e., were detected) at the following locations: SWP and CVP pumps, CCWD and North Bay Aqueduct intakes, Delta island diversions, and the Sacramento River at Chipps Island. Mierzwa et al. (2006a and 2006b) determined the average 75% particle residence time for each month (e.g., every February, every October) between 1990 and 2004, and then calculated a long-term mean for each month with those averages. The long-term mean monthly residence times are shown in Table 1 [See Exhibit 6 of ATT 3], together with minimum and maximum monthly residence times during the 1990 -2004 time period. The monthly average residence times of Sacramento River inflows ranged from an average of 16 days during February (minimum of 3 days and maximum of 38 days), to 51 days during October (minimum of 37 days and maximum of 74 days). Monthly average residence times for San Joaquin River flows ranged from an average of 16 days during January (minimum of 6 days and maximum of 38 days), to 33 days during April (minimum of 8 days and maximum of 54 days). As expected, residence times were longer during dry years than during wet years; minimum residence times for Sacramento inflows occurred during 1997 and 1998, which were wet years, while maximum residence times occurred during 1992, a critically dry year.	
513-64	[Exhibit 6 of ATT 3: Table of average monthly residence time data (in days) from Mierzwa, M., J. Wilde, B. Suits, and T. Sommer. 2006b. Methodology for Flow and Salinity Estimates	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.

Letter-Comment Number	Comment	Response
	in the Sacramento-San Joaquin Delta and Suisun Marsh. Chapter 3: Developing a Residence Time Index to Study Changes in 1990-2004 Delta Circulation Patterns.]	
513-65	[ATT 3:] Corrected residence times. By definition, residence time is a function of the amount of water present in the system and the flow rate of water into (or out of) the system. Residence time can be estimated as follows: [Residence time = (Volume of water / Flow rate into system) = (Volume of water / Flow rate out of system] During high flow conditions, residence times are shorter, while during low flow (drought) conditions, residence times are longer. Exponent assessed the residence time of water within the Delta for each month in the 95-year simulation period for the existing condition scenario and the proposed project. To perform the calculation, Exponent [Engineering and Scientific Consulting] used the USGS [United States Geological Survey] estimate of the volume of water within the Delta [1.343 million acre-feet (MAF)].[Footnote 22: U.S. Geological Survey, 2007. Suisun Bay & Delta Bathymetry: Production of a 10-meter Grid. Available at https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs /SHR/SHR-407.pdf.] Total monthly inflows were calculated from DWR's DSM2 model results as the sum of flows from the Sacramento River, San Joaquin River, eastside streams, and Yolo bypass minus any diversions from the proposed North Delta intakes. Exponent also computed monthly residence times for the 2040	This comment presents alternative calculations of residence time for the Delta. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the appropriateness of the residence time modeling and calculations performed to support the CHABs analysis in Impact WQ-14. As described in Common Response 10, the definition of residence time and DWR's approach to evaluating residence time are scientifically supported and not arbitrary, contrary to the claims of the comment. In fact, it is the most appropriate approach to compute the residence time relevant to analyze effects on CHABs. The residence time calculation presented by the commenter, which does not represent the local conditions, is not relevant for the mechanisms driving the CHABs dynamics. The approach, described both in Chapter 9, Water Quality, and clarified in Common Response 10, fully evaluates the potential impacts of the operation of the Delta Conveyance Project on CHABs.

Letter-Comment Number	Comment	Response
	no-project and proposed project scenarios, which involve 1.8 ft of sea level rise. Based on the estimated surface area of the Delta (57,000 acres from Jassby and Cloern (2000)) and an increase in water level of 1.8 ft, we estimated that the volume of water in the Delta would increase by 102.6 TAF with 1.8 ft of sea level rise, and we computed Delta inflows from DSM2 model results as noted above. Results of our [Exponent Engineering and Scientific Consulting] residence time computations are shown in Table 2 [See Exhibit 7 of ATT 3]. Several observations follow from Table 2. First, the mean residence time for Alternative 5 (proposed project) is higher in all months than the mean residence time for existing conditions. Similarly, the mean residence time in 2040 for Alternative 5 (proposed project) is higher in all months than the mean residence time for the 2040 no-project condition. The long-term mean monthly residence time increases by between 8% and 15%. Second, the shift in hydrology is apparent in the computed residence times. The residence times in 2040 (no project) are lower than the residence times in 2020 (existing condition) for the months of December, January, February, March and April due to increasing Delta inflows as a result of shifting hydrological conditions. In the remaining seven months of the year, including the warmer summer months when algal blooms are most likely, climate change results in an increase in residence time, increasing the likelihood of algal blooms under these conditions, and the proposed project would increase residence time even more than climate change alone. In its use of a scientifically unsupported and arbitrary method	

Letter-Comment Number	Comment	Response
	of evaluating residence time, DWR masks the impacts of the proposed project. Because the proposed project reduces inflows to the Delta as a whole, the proposed project will increase the residence time of water in the Delta, thereby increasing the likelihood that harmful algal blooms will occur in the future. DWR should modify its analysis to evaluate the residence time of water in the Delta as a whole, and to revisit its conclusions regarding the potential impacts of the proposed project on harmful algal blooms within the Delta accordingly.	
513-66	[Exhibit 7 of ATT 3: Table titled "Mean residence time in the Delta over the 95-year simulatuon period."]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-67	[ATT 3:] 4. DWR's velocity analysis is irrelevant to the potential for the formation of Harmful Algal Blooms DWR's analysis of the potential for the formation of algal blooms includes analyses of the velocity of flows in Delta channels. For example, DWR stated "DSM2 was used to model channel velocities at various Delta locations (Appendix 9E). This analysis focused on how the project alternatives would affect 15-minute absolute velocity (regardless of direction) in channels of the Delta. Mathematical daily average velocity may approach zero when flows on the tidal cycle move in opposite directions, and thus is not very useful for determining how channel velocity affects cyanobacteria. In such tidally influenced channels, 15-minute absolute velocity (regardless of direction) is the parameter that best characterize [sic] the degree of channel mixing that occurs daily. Hence, this analysis determines how the project	The comment's assertion that modeled 15-minute channel velocities are irrelevant for the CHABs analysis in Chapter 9, Water Quality, is not supported by the current scientific understanding of cyanobacteria growth and the formation of CHABs in the Delta. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the appropriateness of using 15-minute channel velocities to support the CHABs analysis in Impact WQ-14.

Letter-Comment Number	Comment	Response
	alternatives would affect 15-minute absolute velocity, relative to velocities for existing conditions at the assessment locations. The project alternatives would have negligible, if any, effect on the probability with which any given 15-minute absolute velocity would occur at the assessment locations during the June through November period..... Consequently, the project alternatives would not alter turbulence and mixing within Delta channels sufficiently to substantially affect, or even measurably affect, the frequency or size of microcystis or other cyanobacteria blooms at any Delta assessment location, relative to existing conditions." [Footnote 23: Draft EIR, Chapter 9, at pp. 9-156 to 9-157.] As detailed below, the EIR presents a simplified analysis of Delta hydrodynamics and channel velocities, presenting cumulative probability diagrams based on 15-minute absolute velocities. However, rather than focusing on factors that may be relevant for cyanobacteria, DWR's analysis of 15-minute absolute velocities only establishes that channel velocities within the Delta are driven by the tides. To illustrate this point, Exponent has prepared several figures. Figure 6 [See Exhibit 8 of ATT 3] presents the channel velocities predicted by the DSM2 model in the channel between Venice Island and Empire Tract for water year (WY) 1987, a dry water year. [Footnote 24: https://cdec.water.ca.gov/reportapp/javareports?name=WSIHIST] Figure 6 presents the simulated velocities both as 15-minute model output and as daily average (or net) velocity. Figure 6 demonstrates that the flow near Venice Island reverses direction on a daily basis, with 15-minute velocities ranging from -0.37 feet per second (fps; upstream direction) to	

Letter-Comment Number	Comment	Response
	+0.68 fps (downstream direction). Thus, flow near Venice Island "sloshes" back and forth twice daily as a result of tidal forcing. In contrast, daily average velocities are much lower, ranging from about +0.07 fps (downstream) to +0.24 fps (downstream). Thus, while instantaneous (15-minute) velocities can reach high levels, high velocities do not persist for long periods of time, and the net velocity, with tidal fluctuations removed, is much lower in this area of the Delta. Figure 7 [See Exhibit 9 of ATT 3] presents 15-minute and daily average velocities for the month of June 1987. Consistent with Figure 6, 15-minute velocities range from about -0.36 fps (upstream) to +0.64 fps (downstream direction), but daily average velocities range from about +0.1 fps (downstream) to +0.18 fps (downstream). Finally, Figure 8 [See Exhibit 10 of ATT 3] presents 15-minute and daily average velocities for a seven-day period in June 1987; 15-minute velocities in Figure 8 range from -0.36 fps (upstream) to +0.64 fps (downstream), but daily average velocities range from about +0.11 fps (downstream) to +0.18 fps (downstream). In contrast to Figures 6-8, which show the impact of tidal forcing on velocities in the San Joaquin River near Venice Island, the EIR presents only exceedance probability plots of "15-minute absolute velocity." See, for example, Figure 9, which presents a cumulative probability distribution for the "15-minute absolute velocity" for the month of June (i.e., all Junes within the 95-year simulation period). Figure 9 indicates that the "15-minute absolute velocity" varies from about 0 fps to about +0.6 fps, and that the lines for the six model scenarios (existing condition plus project alternatives) fall nearly on top of each other (i.e., are virtually indistinguishable). Figure 9 does	

Letter-Comment Number	Comment	Response
	not indicate the "sloshing" nature of flows at this location within the Delta, or the fact that daily average absolute velocities are far lower than the range of the "15-minute absolute velocity" values. Figure 6 to Figure 8 [Exhibits 8 through 10 of ATT 3] clearly indicate that low channel velocities occur approximately four times per day near Venice Island (i.e., as the sloshing flow changes direction), and that daily average velocities can be characterized as "low" relative to peak 15-minute velocities. Because the 15- minute channel velocity indicates strong sloshing, it is expected that the velocity distribution will not change significantly as a result of implementation of the proposed project. (After all, the proposed project will not change tidal forcing, which is driven by gravitational forces exerted on the earth by the sun and the moon.) For this reason, DWR's analysis of the frequency of low channel velocities is not meaningful in the context of hydrodynamics in the Delta or the potential for the development of algal blooms. While the net channel velocity might be meaningful in the context of assessing project impacts to algal bloom formation (because it is a measure of the net movement of water through the channels of the Delta, which is related to residence time), the "15-minute absolute velocity" is not relevant (because it demonstrates only that the Delta is a strongly tidal system). Indeed, it is well established that algal blooms form within the Delta under current conditions, particularly in channels with less flushing (i.e., where tidally or daily averaged velocities are low), even though those channels currently experience "15-minute absolute velocity" values identical or similar to those modeled using DSM2 and depicted in the EIR. However, DWR	

Letter-Comment Number	Comment	Response
	did not present information regarding either tidally- or daily-averaged net velocities, and such information cannot be derived or inferred from the velocity information presented in the EIR. Thus, DWR's analysis of 15-minute absolute velocity is irrelevant to the formation of HABs in the Delta. DWR should remove its analysis of 15-minute velocity and remove channel velocity (analyzed using 15-minute absolute velocity) as an indicator of the probability of harmful algal blooms. By analyzing an indicator that will not change as a result of the proposed project (because 15-minute velocity is a function primarily of the tides within the Delta), DWR provides false assurance that the proposed project will not affect the likelihood or frequency of algal blooms. Because the Draft EIR analysis is based on irrelevant information, the Draft EIR's impact determinations that rely on that information are not reliable or suitable for informed decision making. The Draft EIR impact analysis should be revised to reconsider the project's potential to increase harmful algal blooms in light of relevant information.	
513-68	[Exhibit 8 of ATT 3: Figure of simulated flow velocities from DSM2 model at San Joaquin River near Venice Island for Water Year 1987.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-69	[Exhibit 9 of ATT 3: Figure of simulated flow velocities from DSM2 model at San Joaquin River near Venice Island for June 1987.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-70	[Exhibit 10 of ATT 3: Figure of simulated flow velocities from DSM2 model at San Joaquin River near Venice Island from June 11-17, 1987.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.

Letter-Comment Number	Comment	Response
513-71	[Exhibit 11 of ATT 3: Figure 9E-2-8-1 from the EIR, page 9E-79.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-72	[ATT 3:] 5. Comments regarding DWR's evaluation of climate change The Draft EIR evaluated several parameters that are expected to change with climate change, including precipitation patterns, temperature, and sea level rise. Because of its direct impact on salinity, water quality, and residence time within the Delta, our [Exponent] evaluation focused primarily on sea level rise. Sea level rise will increase the volume of water within the Delta, which will increase overall residence time (see Comment 3 [See comments 59 through 65]). Water quality within the Delta will also be impacted by sea level rise, which will impact water quality needed to support M&I [Municipal and Industrial], agricultural, recreational, and aquatic life beneficial uses. Chapter 5A, Section B [Footnote 25: Draft EIR, Appendix 5A, Section B.6.2., at p. B-49.] states that, "Sea level rise assumptions for the project are based on the California Ocean Protection Council's (OPC) guidance updated in 2018, the State of California Sea-Level Rise Guidance (Guidance)."[Footnote 26: State of California Sea-Level Rise Guidance (2018 update), available at https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidancerd3.pdf] OPC (2018) presented both probabilistic sea level rise projections (framework of Kopp et al. 2014 [Footnote 27: Kopp, Robert E., et al. (2014), Probabilistic 21st and 22nd- sea-level projections at a global network of tide-gauge sites. Earth's future 2.8: 383-	Please see response to comment 513-10 regarding climate change analysis. This comment primarily summarizes information contained in the EIR and does not raise a significant environmental issue with the Delta Conveyance Project or the scope of the Draft EIR.

Letter-Comment Number	Comment	Response
	406.]) and scenario-based sea level rise projections (H++ extreme sea-level rise scenario in the Fourth National Climate Assessment, developed by Sweet et al. 2017 [Footnote 28: Sweet, William V., et al. (2017), Global and regional sea level rise scenarios for the United States (No. CO-OPS 083).]). The Working Group of OPC's Science Advisory Team (OPC-SAT) concluded that the scenario-based (H++ extreme sea-level rise scenario) needs to be considered alongside the probabilistic sea-level rise projections. Kopp et al. (2014) predicted the sea level rise based on the comprehensive probability distributions for several climate scenarios. However, Sweet et al. (2017) maintained a scenario based approach but drew upon the Kopp et al. (2014) framework to localize projections and to discuss the likelihood of scenarios under different emissions pathways. Sweet et al. (2017) also developed an "extreme" scenario, which assumed rapid ice sheet loss in the Antarctic Ice Sheet in both local and global sea-level rise projections. At this point, the probability of the H++ scenario occurrence is not known, and it is not clear when the world may shift to the H++ trajectory (OPC, 2018). Table 3 [Exhibit 12 of ATT 3] presents the projected sea level rise (in feet) based on probabilistic projections as well as the H++ scenario for San Francisco. [Footnote 29: State of California Sea-Level Rise Guidance (2018 update), at p. 18.] DWR noted that, "Guidance recommends considerations of extreme H++ scenario for projects with a lifespan beyond 2050 that have a low tolerance for risk or are critical assets. Therefore, H++ sea level rise projections were used for the climate change analysis. The Delta Conveyance Project, if approved, is	

Letter-Comment Number	Comment	Response
	expected to become operational around 2040. Therefore, for the Draft EIR, an integrated operational analysis of the project was conducted for the year 2040 (climate period 2026-2055). The H++ sea level rise projection at 2040 is 1.8 feet. Additionally, a sensitivity analysis was conducted for the Draft EIR for the No Project Alternative and proposed project for a sea level rise of 0.5 feet by 2040, corresponding to a 66% probability of occurrence… For the design of project facilities, the H++ sea level rise projection of 10.2 feet at year 2100 was assumed."[Footnote 30: Appendix 5A, Section B Modeling Technical Appendix – Hydrology and Systems Operations Modeling. At p. B-50.] Table 3 indicates that there is a 66% probability that sea level rise in 2040 will be between 0.5- 0.8 ft. As noted in Table 4 [Exhibit 13 of ATT 3], for the year 2040, a sea level rise of 1.3 feet has a 0.5% probability (i.e., a 1-in-200 likelihood). The probability of the H++ scenario, with 1.8 ft of sea level rise in 2040, is unquantified but is significantly less than 0.5%.	
513-73	[Exhibit 12 of ATT 3: Table of projected sea level rise (feet) for San Francisco. Source: State of California Sea-Level Rise Guidance (2018 update), Page 18.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-74	[Exhibit 13 of ATT 3: Reproduced from Table 5A-B-9 at p. B-40 of Appendix 5A]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-75	[ATT 3:] Comment 5.1 DWR conducted CalSim 3 sensitivity modeling for multiple sea level rise scenarios, but did not model conditions in the Delta for the same scenarios. As noted above, there is a 66% likelihood of 0.5-0.8 ft of sea level rise in 2040 and an 0.5% probability of 1.3 ft of sea level rise in 2040. These represent reasonably foreseeable	The Sea Level Rise section of Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Systems Operations Modeling, describes the assumptions used to frame the analysis of sea level rise scenarios presented in the EIR. The Sea Level Rise Assumptions section and Sensitivity Analysis Results section of Appendix 30A, CalSim 3 Results Sensitivity to 2040 Climate

Letter-Comment Number	Comment	Response
	conditions, whereas the probability of 1.8 ft of sea level rise in 2040 is so small that it is unquantified. DWR performed CalSim3 (and SCHISM) model simulations for 0.5 ft of sea level rise and for two alternative versions of 1.8 ft of sea level rise.[Footnote 31: Email exchange between Ms. Kathryn Icelow of DWR and Exponent staff on September 23, 2022.] DWR did not perform CalSim 3 simulations for 1.3 ft of sea level rise. As noted previously, CalSim 3 model output was used as input to the DSM2 model. However, DWR performed DSM2 model simulations for only 1.8 ft of sea level rise. DWR did not simulate hydrodynamics or water quality within the Delta for the more likely 0.5 ft of sea level rise in 2040, and DWR did not use CalSim 3 or DSM2 to evaluate conditions with 1.3 feet of sea level rise. In our [Exponent] opinion, it is important that DWR evaluate the impacts of the proposed project for a reasonably foreseeable change in sea level, rather than only an extreme scenario that is so unlikely that its probability is not quantified. Because DWR used CalSim 3 to simulate 0.5 ft of sea level rise, it appears that DWR has the input data needed to perform DSM2 simulations for this condition, but elected not to do so. Simulating both a no-project and project alternative water quality conditions with the reasonably foreseeable 0.5 ft of sea level rise would allow the Delta counties to evaluate the impacts of the proposed DCP project under reasonably foreseeable conditions. The failure to model this more likely scenario renders the water quality modeling outputs for 2040 under with-project conditions not credible for purposes of understanding the likely water quality effects of the project.	Change and Sea Level Projections, describes these assumptions with respect to the results of a sensitivity analysis that compared the No Project Alternative 2040 with Alternative 5 using three scenarios as illustrated in multiple figures; beginning with the figure titled Shasta End-of-Month Storage (S_SHSTA), Exceedance Probability for Monthly Average End-of-Month Storage (thousand acre-feet) for May, No Project Alternative and Alternative 5 (2040); 2040 and ending with the figure titled Rock Slough Salinity (RS_EC_MONTH), Monthly Average EC (UMHOS/CM), No Project Alternative and Alternative 5 (2040). Based on these comparisons the EIR concludes that the incremental changes in Delta water quality will be similar to the detailed Delta water quality modeling and impacts described in Chapter 9, Water Quality.

Letter-Comment Number	Comment	Response
513-76	[ATT 3:] Comment 5.2 In choosing the H++ model scenario with 1.8 feet of sea level rise, DWR chose an extremely unlikely scenario that generated unexplained results and that may mask the likely impacts of the proposed project. As noted in Comment 5.1, DWR elected to simulate hydrodynamics and water quality within the Delta for 1.8 ft of sea level rise, but DWR did not simulate Delta conditions for lower (more likely) values of sea level rise. Figure 10 below shows the exceedance probabilities for electrical conductivity (a measure of salinity) in the Sacramento River at Emmaton for the existing no-project condition (Table 9G-1-1-1, top) and for the 2040 no-project condition (Table 9L.-6-1-1-1, bottom).[Footnote 32: Draft EIR, Table 9G-1-1-1 was reproduced from p. 9G-9 of Appendix 9G. Table 9L.6-1-1-1 was reproduced from p. 9L6-4 of Appendix 9L.] Figure 10 [Exhibit 14 of ATT 3] indicates that salinities are simulated to increase significantly at this location in most months of most water year types as a result of sea level rise; both increases in salinity and absolute values of salinity are greatest in the summer and fall months. The Draft EIR also includes simulation results for EC in the San Joaquin River at Jersey Point for the No Project Condition. These data are reproduced in Figure 11 [Exhibit 15 of ATT 3], which shows monthly average EC in San Joaquin River at Jersey Point for the existing no-project condition (Table 9G-5-1-1, top) and for the 2040 no-project condition with 1.8 ft of sea level rise (Table 9L.-6-5-1-1, bottom).[Footnote 33: Draft EIR, Table 9G-5-1-1 was reproduced from p. 9G-33 of Appendix 9G. Table 9L.6-5-1-1 was reproduced from p. 9L.6-28 of Appendix 9L.] Curiously, the data in Figure 11 indicate that EC in the San	Please see response to comment 513-75 regarding the sea level rise scenario modeled using DSM2. The commenter incorrectly assumes that the salinity at Jersey Point in their Figure 11 is only showing changes due to sea level rise. The modeled lower electrical conductivity (EC) levels for the San Joaquin River at Jersey Point under the No Project Alternative (at 2040) relative to existing conditions (at 2020) are due to the operational response of the Central Valley Project (CVP) and State Water Project (SWP) operations in response to the climate change hydrology and sea level rise. As shown in Appendix 5A, Modeling Technical Appendix, Section F, Sea Level Rise and Delta Water Quality Modeling, in the figure titled June 1-14 Average Salinity Change Respectively in the 1.8 feet, 2.7 feet, 3.5 feet, 5.2 feet, 6.9 feet, and 10.2 feet SLR Cases, salinity at both Emmaton and Jersey Point are expected to increase with sea level rise without operational Delta inflow changes in response to the increases in salinity. The influence of sea level rise will be greatest in the Sacramento River at Emmaton as shown in the figure, hence the higher EC under the No Project Alternative relative to existing conditions. As such, Emmaton becomes the more frequent control point for CVP and SWP operations under the No Project Alternative. Delta outflow is higher, as shown in Chapter 6, Water Supply, in the table titled Summary of Annual Delta Outflow and Exports October–September under the No Project Alternative (2040 Hydrology) as Compared to Existing Conditions (2020 Hydrology). Concurrently, CVP and SWP Delta exports are lower under the No Project Alternative, as shown in the same table. The combination of these factors leads to EC in the Sacramento River at Emmaton being higher under the No Project Alternative while the San Joaquin River at Jersey Point is lower, relative to existing conditions.

Letter-Comment Number	Comment	Response
	Joaquin River at Jersey Point is generally lower (i.e., fresher) in the months of May, June, July, and August with 1.8 ft of sea level rise than in the existing condition with no sea level rise. Because Jersey Point is located in the western Delta, it is prone to saltwater intrusion from the Bay. Saltwater from the Bay should enter the Delta in larger quantities with sea level rise than without it; the apparent freshening at this location is contrary to results for the Sacramento River at Emmaton, which is nearby and which shows higher salinity as a result of 1.8 ft of sea level rise. The reason for the apparent freshening of water in the San Joaquin River at Jersey Point during the dry months as a result of sea level rise is unclear [Footnote 34: As discussed in Comment 5.3, this apparent error may be related to either the DSM2 boundary condition for EC at Martinez or to the adjusted dispersion coefficients used in the DSM2 model.], and should be checked and explained by DWR in a revised EIR. Because the change in background salinity caused by sea level rise at two relatively close locations in the western Delta is inconsistent (see Figures 10 and 11), it is difficult to understand how Delta water quality would change as a result of sea level rise alone. Likewise, it is difficult to understand the impact of the proposed project under the sea level rise scenario. Further, as noted above, DWR elected to simulate water quality within the Delta for a sea level rise scenario of 1.8 ft, which has a probability of occurrence that could not be quantified but is much less than 0.5%. This scenario does not represent a reasonably foreseeable condition and results in larger changes in background salinity than would occur for more probable levels of sea level rise, which also makes it difficult to understand the impact of the proposed project for future	

Letter-Comment Number	Comment	Response
	scenarios.	
513-77	[Exhibit 14 of ATT 3: Monthly average electrical conductivity in the Sacramento River at Emmaton for the No Project, Existing Condition Alternative and for the No Project, 2040 Alternative. Reproduced from EIR Appendix 9G, page 9G-9. and Appendix 9L, page 9L.6-4.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-78	[Exhibit 15 of ATT 3: Monthly average electrical conductivity in the San Joaquin River at Jersey Point for the No Project, Existing Condition Alternative and for the No Project, 2040 Alternative. Reproduced from EIR Appendix 9G, page 9G-33. and Appendix 9L, page 9L.6-28.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-79	[ATT 3:] Comment 5.3 DWR's methodology for modeling salinity for scenarios with sea level rise is unclear. DWR's DSM2 model, which simulates hydrodynamics and water quality within the Delta, was calibrated by comparing simulated water levels and salinity within the Delta to measured, historical values. Because future sea level rise has not yet occurred and observations of it do not yet exist, it is not possible to use the same calibration methodology for future conditions. To adjust the DSM2 model to simulate sea level rise, DWR simulated sea level rise conditions using SCHISM, a 3-D model that includes the Delta, San Francisco Bay, and a portion of the Pacific Ocean. Specifically, the SCHISM model was used to simulate 1.8 ft of sea level rise for a 689-day period extending from February 10, 2009, through December 31, 2010. [Footnote 35: Draft EIR, Appendix 5A, Section F.4.2. DWR also simulated increments of sea level rise up to and including 10.2 ft of sea level rise.] According to Appendix 5A, Section F, "Hydrodynamics and salinity from the 20-month period (5/1/2009 to 12/31/ 2010)	The Sea Level Rise section of Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Systems Operations Modeling, describes the procedure used to adjust/train/corroborate DSM2 to recognize the hydrodynamic-salinity response in the Delta under sea level rise conditions. As described in the EIR, SCHISM 3-dimensional model was used to estimate the potential hydrodynamic and salinity conditions in the Bay-Delta and changes to hydrodynamic/salinity transport processes under the sea level rise conditions. The SCHISM results were used to corroborate DSM2 to ensure DSM2 is able to simulate the proper flow-salinity response in the Delta under sea level rise conditions. This corroborated DSM2 was then used to train the ANN. The time period simulated in SCHISM and used to corroborate DSM2 includes large variation of Delta inflows and exports. While it may not capture the full range of Delta inflows, it is sufficient duration to parameterize the hydrodynamics and salinity transport response to sea level rise in the DSM2.

Letter-Comment Number	Comment	Response
	were used to characterize salinity responses to sea level rise in the Delta and for use in lower-dimension model training."[Footnote 36: Draft EIR, Appendix 5A, Section F, at p. F-4.] However, DWR has not described how the results of the SCHISM model were used to "train" the DSM2 model. Further, the SCHISM simulation period includes the latter portion of WY2009 (classified as dry in the Sacramento River Basin and below normal in the San Joaquin River basin), WY 2010 (below normal/above normal), and the first three months of WY 2011 (wet/wet). [Footnote 37: https://cdec.water.ca.gov/reportapp/javareports?name=WSIHIST. Accessed on Oct 21, 2022.] The SCHISM simulation period did not include critically dry year types, when salinity intrusion in the Delta is greatest. Of note, California's Water Supply Strategy also notes that DWR estimates a 10% reduction in water supply by 2040. [Footnote 38: https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Water-Resilience/CA-Water-Supply-Strategy.pdf] Both the Draft EIR and our [Exponent] evaluation of DSM2 boundary conditions for a sea level rise of 1.8 ft shows that the stage (water level) at Martinez was uniformly shifted upward by 1.8 ft relative to the existing condition model runs. [Footnote 39: "For all the future 2040 studies, Martinez tide estimates for 2020 were adjusted by 1.8 feet (55 centimeters) to represent sea level rise (see Section C.6.2, Incorporating Sea Level Rise Effects in DSM2 Planning Simulations)." (Draft EIR, Appendix 5A, Section C.5.2, at p. C-12.)] The downstream boundary condition at Martinez for EC (a measure of salinity) was apparently derived by DWR using a regression equation developed by DWR from the SCHISM model results. [Footnote	

Letter-Comment Number	Comment	Response
	40: Draft EIR, Appendix 5A, Section C.6.2, at p. C-14.] Although DWR stated, "DSM2 model results were corroborated for the assumed sea level rise using SCHISM results," [Footnote 41: Draft EIR, Appendix 5A, Section C.6.3, at p. C-15.] it is unclear how the "corroboration" was performed, as the details of this analysis do not appear to be described within the Draft EIR. Additionally, DWR adjusted dispersion coefficients for seven channels in the Western Delta in DSM2 to improve the fit between DSM2 simulation results and SCHISM model results, but DWR has not described the adjusted dispersion coefficients within the Draft EIR. The Draft EIR also notes DWR used the SCHISM model results to update the artificial neural network (ANN) used by CalSim 3 to simulate salinity within the Delta. CalSim 3 is the main model used to simulate the operations of the proposed project. Although it is not clearly described, it appears that DWR (1) used SCHISM to simulate conditions within the Delta under various sea level rise scenarios for a 609-day period of 5/1/2009 to 12/31/2010; (2) used the SCHISM simulation results for this period to derive a regression equation describing EC at the DSM2 boundary at Martinez; (3) used this regression equation within DSM2 to simulate a longer time period (1923-2015) [Footnote 42: Draft EIR, Appendix 5A, Section C.6.3, at pp. C-15 to C-16.]; and then (4) used DSM2 model output to train the ANN used by CalSim 3 to simulate project operations for scenarios and alternatives involving future sea level rise. However, the details of this analysis are not provided. These details should be included in a revised EIR.	

Letter-Comment Number	Comment	Response
	In summary, DWR has not provided data and information describing the analyses and assumptions that were made, or the impact of the modeling decisions on the ability of the models to simulate conditions under climate change. Further, as noted in Comment 5.2, DWR's DSM2 model results describing salinity in portions of the western Delta, including in the San Joaquin River at Jersey Point, show a freshening of the Delta in the summer and fall months as a result of sea level rise, a result that is not credible without additional explanation. Finally, DWR failed to conduct SCHISM modeling for the full range of foreseeable conditions, and most notably did not simulate critically dry conditions. The failure to model the response of the Delta estuary during critically dry conditions carried through to both the DSM2 and CalSim 3 models, such that it is not clear that the system of models is capable of simulating hydrodynamics and salinity within the Delta, or the operation of the proposed project, over the range of conditions expected to occur with climate change in the future.	
513-80	[ATT 3:] Comment 5.4 DWR's assumption of stationarity is flawed. As noted in the Draft EIR, "The inflow hydrology for the existing conditions model is based on assumptions of stationarity. However, while there has been no obvious trend in total water year runoff into the Sacramento and San Joaquin Rivers, there have been changes in the timing of that runoff. The fraction of snowmelt runoff between April and July relative to total year-round water runoff has declined over the past century (California Department of Water Resources 2016). Additionally, as the	Please see Common Response 9, Hydrologic Modeling and Approach, regarding modeled representation of future conditions and climate change, modeled representation of CEQA baseline existing condition, climate change assumptions as input into hydrologic model. Common Response 9 also provides a discussion of why CalSim 3 is the best available tool to estimate changes in hydrologic conditions under each project alternative and disclose the environmental impacts of operating the project. The climate change discussion in Common Response 9 is also supplemented with information in Common Response 6, Climate Resilience and Adaptation, which addresses climate change assumptions, scenarios, and time frames.

Letter-Comment Number	Comment	Response
	climate continues to warm it is expected to increase variability in precipitation." [Footnote 43: Draft EIR, Appendix 5A, Section B, at p. B-65.] (emphasis added) Stationarity has been defined as the assumption that "the statistical properties of hydrologic variables in future time periods will be similar to past time period." [Footnote 44: U.S. Army Corps of Engineering, Workshop on Nonstationarity, Hydrologic Frequency Analysis, and Water Management. See https://www.usace.army.mil/corpsclimate/Climate_Preparedness_and_Resilience/Hydrology_Support_Adaptation/nonstation_workshop/] However, this assumption is unwarranted, and scientific literature (as noted below) suggests we would be wise to consider and plan for hydrologic changes already underway as a result of climate change. DWR's climate analysis is flawed in two primary ways: first, DWR's hydrology analysis in the Draft EIR assumes that the hydrology observed over the simulation period of 1921-2015 is representative of the "existing condition," even though long-term changes in hydrology due to climate change are well underway. Thus, DWR has assumed that the hydrology (rainfall, river flows, etc.) observed in the early years of the simulation period are equally likely to recur, without adjustment, as more recent years within the 2020 "existing condition" baseline used in the Draft EIR. Second, DWR has assumed that the 1921-2015 hydrologic sequence is likely to recur in the future (e.g., 2040), despite the changes underway due to climate change. Although DWR has adjusted river flows and other hydrologic variables to reflect expected changes in temperature (e.g., resulting in the loss of	The commenter has provided a statement of opinion regarding the concept of stationarity; however, the comment does not provide new information, raise a significant environmental issue relating to the proposed project or address the adequacy, accuracy, or completeness of the EIR. Therefore, no further response is required. DWR has reviewed all comments and will consider all comments in its decision-making process. The CalSim 3 model included recent historical hydrologic conditions. As noted in Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Systems Operations Modeling, Attachment 4, Climate Change Development for Delta Conveyance Project, the water year types under the 2040 scenario have been revised reflecting the projected runoff under the2040 scenario. None of the revisions to Appendix 5A, Section B, Attachment 4, resulted in a new significant environmental impact or substantial increase in the severity of an environmental impact or required additional mitigation measures to which DWR was unwilling to commit.

Letter-Comment Number	Comment	Response
	snowpack and higher river flows in the winter months, and lower flows in summer and fall months), these changes are imposed upon the same water years within the 1921-2015 simulation period. The relative ratio of wet years, critical years, etc., within the simulation period has not been adjusted. In other words, DWR uses a single, historical hydrologic period to represent both existing and future conditions. However, recent scientific research indicates that hydrologic patterns are shifting due to climate change. For example, Swain et al. (2018) found that, "Anthropogenic forcing is found to yield large twenty-first century increases in the frequency of wet extremes, including a more than threefold increase in sub-seasonal events comparable to California's 'Great Flood of 1862. Smaller but statistically robust increases in dry extremes are also apparent. As a consequence, a 25% to 100% increase in extreme dry-to-wet precipitation events is projected, despite only modest changes in mean precipitation. Such hydrological cycle intensification would seriously challenge California's existing water storage, conveyance and flood control infrastructure." [Footnote 45: Swain, D.L., B. Langenbrunner, J.D. Neelin, and A. Hall, 2018. Increasing precipitation volatility in twenty-first century California. Nature Climate Change 8, 427-433 (2018). Available at https://www.nature.com/articles/s41558-018-0140-y.] Swain et al. (2018) present figures indicating a marked increase in the frequency of extremely wet seasons and extremely dry seasons in the future relative to the preindustrial era (see Figure 12 [See Exhibit 16 of ATT 3]). Thus, while the simulation period of 1921-2015 included a mix of water year types	

Letter-Comment Number	Comment	Response
	corresponding to historically observed conditions, climate change is likely to increase both the number and frequency of critically dry and wet years. Because DWR has used a fixed observational period, the Draft EIR does not capture these larger shifts in hydrology. Regarding extremely wet events and the potential for levee overtopping or failure within the Delta, it is also important to note that Swain et al. (2018) report "a substantial increase in the projected risk of extreme precipitation events exceeding any that have occurred over the past century – meaning that such events would be unprecedented in California's modern era of extensive water infrastructure. Few of the dams, levees and canals that currently protect millions living in California's flood plains and facilitate the movement of water from Sierra Nevada watersheds to coastal cities have been tested by a deluge as severe as the extraordinary 1961-1862 storm sequence – a repeat of which would probably lead to considerable loss of life and economic damages approaching a trillion dollars. Our results suggest that such an event is more likely than not to occur at least once between 2017 and 2060, and that multiple occurrences are plausible by 2100 on a business-as-usual emissions trajectory. Therefore, recognizing that risks associated with hydroclimatic extremes may rise more rapidly than the gradual projected shift in regional mean precipitation might otherwise suggest will be a critical step in ensuring resilience amid a warming climate." [Footnote 46: Ibid.] However, the Draft EIR does not contemplate the impact of these changing hydrologic baselines on water quality within the Delta or on the operation of the proposed project. Nor does the Draft EIR analyze or disclose impacts associated with	

Letter-Comment Number	Comment	Response
	extreme wet weather events that are likely to occur over the next century. These impacts should be considered before proceeding with construction of a water resources project of this magnitude and importance.	
513-81	[Exhibit 16 of ATT 3: Change in frequency of extremely wet and extremely dry seasons. Reproduced from Swain et al. (2018).]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-82	[ATT 3:] 6. DWR's method of computing and presenting summary statistics is flawed Based upon inspection of the tables summarizing the statistical distributions of water quality parameters (e.g., Figures 1 and 2), it appears that DWR calculated statistical distributions for each scenario, then improperly calculated summary statistics describing the incremental change between scenarios as follows: Step 1: use DSM2 to simulate water quality constituent concentrations for each scenario (e.g., to compute EC in the Sacramento River at Emmaton) Step 2: compute monthly average constituent concentrations for each month in the 95- year simulation period (e.g., the average EC in the Sacramento River at Emmaton for every October in the period) Step 3: Compute summary statistics for each month (e.g., determine the exceedance probability [0.1%, 1%, 5%, etc.] for EC in the Sacramento River at Emmaton for all Octobers) (to generate tables such as Table 9G-1-1-1, shown in	The assertion that the method used for computing and presenting summary information in the EIR is flawed is not consistent with the EIR. This comment references tables in the appendices for boron (Appendix 9C, Boron), bromide (Appendix 9D, Bromide), chloride (Appendix 9F, Chloride), electrical conductivity (Appendix 9G, Electrical Conductivity), and organic carbon (Appendix 9I, Organic Carbon) in which the difference between specific percentile concentrations (i.e., 0.1%, 1%, 5%, etc.) under an alternative and existing conditions are calculated. This computation and presentation of modeling output in the appendices is correct for its intended use in interpreting modeling results and supporting the impact analysis in Chapter 9, Water Quality. The differences in the concentrations for various identified percentiles of the modeled range of values presented in these tables facilitate interpreting the probability exceedance plots that accompany the tables in the appendices, where differences at specific percentiles must be determined visually. The tables allow for seeing what the exact difference was at percentiles of 0.1%, 1%, 5%, 10%, 25%, 50%, 75%, and 99.9%. For a broad discussion regarding the presentation of results in the EIR used to support various impact analyses, please refer to Common Response 9, Hydrologic Modeling and Approach, and Common Response 10, Surface Water Quality and Groundwater Resources.

Letter-Comment Number	Comment	Response
	Figure 1) Step 4: Follow Steps 1-3 for each water quality constituent at each location to generate summary statistics for each for each scenario (e.g., to generate Table 9G-1-6-1 describing EC in the Sacramento River at Emmaton for Scenario 5) Step 5: Compute summary statistics for the difference in EC between each scenario and the existing condition by subtracting the values within the distributions (e.g., subtract the 50% value for Scenario 5 from the 50% value for the existing condition) (e.g., subtract the 50% value for EC at Emmaton for October for existing conditions [1382] from the 50% value for EC at Emmaton for October for Scenario 5 [1640 mmhos/cm], to compute a 50% value for the difference between the scenarios of 258 mmhos/cm, indicating that the median increase in EC at Emmaton would be 258 mmhos/cm) However, this procedure is flawed, and it is meaningless to compute a median (50%) difference that is larger than all the other differences in the statistical distribution. Using the example shown in Figure 13 [Exhibit 17 of ATT 3] (reproduced from a portion of Figure 2 [Exhibit 2 of ATT 3]), it is nonsensical to assert that 50% of the time, the increase in EC will be 258 mmhos/cm, but 75% of the time, the increase will be -8 mmhos/cm. In fact, probability distributions showing quantiles and other summary statistics must be monotonically increasing; see Figure 14 [Exhibit 18 of ATT 3]. Rather than following the flawed procedure outlined in Step 5,	

Letter-Comment Number	Comment	Response
	DWR should have computed the difference in EC at Emmaton (Alternative 5 EC – existing condition EC) for each month in the simulation period, then should have computed the summary statistical distribution from the 95 values for each month. In other words, DWR should have computed the monthly average EC for Alternative 5 for October 1923 and subtracted the monthly average EC for the existing condition for October 1923, then repeated for all other months, and finally computed the summary statistical distribution from the monthly difference values. DWR should adjust the tables and figures in the Draft EIR to fix this statistical error, in order to provide summary information that accurately reflects the anticipated effects of the proposed project.	
513-83	[Exhibit 17 of ATT 3: Tables 9G-1-6-3 and Table 9G-1-6-4, reproduced from EIR Appendix 9G, page 9G-14.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-84	[Exhibit 18 of ATT 3: Example of an exceedance probability curve, with values that increase monotonically as a function of probability.]	The commenter is providing this exhibit in support of their comments. Those comments are addressed in these responses to the commenter's letter.
513-85	[ATT 3:] 7. The Draft EIR is lengthy and difficult to review, and our [Exponent] comments are not complete As detailed in the citations throughout these comments, the Draft EIR is comprised of multiple chapters, many of which have multiple, lengthy appendices. [Footnote 47: For example, one appendix to Chapter 5 is provided as "RevisedPublicDraft_ModelingTechnicalAppendix_5A_SectionD_Attachment1_Attachment2_ADA.pdf." This document is 4,040	Please see Common Response 1, Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the complexity and length of the EIR. As described in Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, section titled Length and Complexity of the EIR, the EIR necessarily includes a considerable amount of information to adequately analyze potential impacts and was presented in a format with emphasis on information useful to the public. As described in Chapter 4, Framework for the Environmental Analysis, the overall organization and content of the resource-specific analyses in the EIR

Letter-Comment Number	Comment	Response
	pages long.] Analyzing and understanding the operations and potential impacts of the proposed project involved locating information found in many different places throughout the EIR documents. In many cases and as detailed in Comment 1 [Comments 51 through 57] (regarding the presentation of information in the form of statistically-aggregated, long-term averages) and Comment 6 [Comments 81-83] (regarding the flawed computation of summary statistics), we [Exponent] were unable to find the information needed to evaluate the impacts of the proposed project, and we needed to review modeling files provided by DWR. Although the comment period for the Draft EIR was extended, we were unable to complete our review of the impacts of the proposed project because of these factors. For example, our review of model results focused on the no-project conditions (2020 and 2040) and Alternative 5; we were unable to review model results for other project alternatives. We anticipate having additional comments as we continue to review and evaluate the information contained in the Draft EIR and in the modeling results.	were developed to meet CEQA (Pub. Resources Code § 21000 et seq.) content requirements. The main resources chapters contain the information and analyses for the public and decision makers to conduct a meaningful review. The environmental analyses are presented in a clear, logical manner and do not obfuscate information as the comment asserts. Chapter 3, Description of the Proposed Project and Alternatives, provides a clear and detailed description of the project and alternatives sufficient for environmental review. Additional details regarding methods and modeling results are provided in appendices in instances where it would be too voluminous to include in the main chapter. Different statistical metrics (e.g., averages) are used throughout the EIR to evaluate different resources depending on the resource being evaluated, the impact mechanism, and the best available quantitative tools to evaluate them. The resource chapters discuss the methods for evaluation which are specific to each of the resources evaluated and supported by evidence provided in the references cited. For the purposes of a CEQA analysis, a variety of metrics can be acceptable, including statistically aggregated data and averages. Please refer to Chapter 35, Public Involvement, regarding the outreach activities conducted during the Draft EIR public review period to help reviewers navigate the document and better understand the technical information provided in the EIR.
513-86	[ATT 1 of ATT 3: Curriculum Vitae of Dr. Susan Paulsen, Ph.D., P.E.]	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter. DWR has reviewed all comments and will consider all comments in its decision-making process.
513-87	[ATT 2 of ATT 3: Curriculum Vitae of Mr. Chi-Yu Lin, P.E. (WA)]	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter. DWR has reviewed all comments and will consider all comments in its decision-making process.

Letter-Comment Number	Comment	Response
513-88	[ATT 4:] Contra Costa County and Contra Costa County Water Agency Comments on the Delta Conveyance Project Draft Environmental Impact Report. Groundwater Resources The comments provided herein focus on tunnel impacts on groundwater resources. Contra Costa County is located within the East Contra Costa (ECC) Subbasin, which is situated within the domain of the proposed Delta Conveyance Project (Project). The County, and the remaining six groundwater sustainably agencies, would be directly impacted if the Project is completed as described in the Delta Conveyance Environmental Impact Report (DEIR). The County is concerned that the Project would have a negative impact on the future sustainable management of groundwater resources in the ECC Subbasin. The review of the DEIR focused on whether the impacts analysis on groundwater resources in the DEIR is adequate. An evaluation of and comparison of relevant aspects of the modeling assumptions and inputs used in the development of Tunnel Project impacts was conducted, in addition to whether the DEIR accurately represents the Hydrogeological Conceptual Model (HCM) of the groundwater system in the ECC Subbasin. This evaluation is important to assess whether the model used in the impacts analysis was suitable to adequately identify Tunnel Project impacts on the groundwater system. Based on our [Contra Costa County and Contra Costa County Water Agency] review, several components of the DEIR are identified that would impact the sustainability of the ECC Subbasin. This review uncovers significant issues with the DEIR	Common Response 10, Surface Water Quality and Groundwater Resources, provides additional clarifying information regarding the methodology and information used to adequately and appropriately evaluate construction-related impacts described in Chapter 8, Groundwater. As described in Common Response 10 and Chapter 8 (in the section titled Methods for Analysis), the Delta Conveyance Project construction-related impacts are evaluated using existing groundwater conditions and hydrogeology, standard design and construction methods (Delta Conveyance Design and Construction Authority 2022a, 2022b), and anticipated changes in groundwater elevations, storage, and quality during construction. As described in Common Response 10, cutoff walls would be designed to applicable standards depending on the unique site-specific conditions and the location of the facility being constructed. Cutoff walls are designed and used to minimize need for dewatering and the movement of groundwater outside of the cutoff walls. Given this, and the other information provided in Common Response 10, construction would not result in substantial changes to groundwater levels or groundwater water quality. Impacts were evaluated for all areas near the project construction, including the East Contra Costa Subbasin. Common Response 10 also provides information regarding the approach to analysis of operation impacts in Chapter 8. Operational impacts on groundwater resources in the Delta and adjacent groundwater basins, including East Contra Costa subbasin, were evaluated using the Delta Groundwater Model. The currently available groundwater sustainability plans in the domain of the DeltaGW model used for the groundwater analyses in Chapter 8 included the East Contra Costa subbasin. The modeling analysis conducted using the DeltaGW model is detailed in Chapter 8 and Appendix 8A, Delta Groundwater Model: Development and Calibration; 8B, Impact Analysis: Groundwater Model Results; and 8C, Groundwater 2040 Analysis. Please refer to Appendix 8A for a discussion of the model selection process and Common Response 10 for more information about the suitability of the model for assessing groundwater impacts. Please see Common Response 8, Relationship to

Letter-Comment Number	Comment	Response
	and warrants the Department of Water Resources (DWR) to conduct additional evaluation of the feasibility of the Tunnel Project. The County requests DWR to cease any further advancement of the Tunnel Project until the comments in this letter have been fully addressed. This letter presents general comments that are in response to specific sections within the DEIR.	Other Plans, Projects, Policies, and Programs, for more discussion regarding the groundwater sustainability plans (GSPs), including the timeline for submittal and approval.
513-89	[ATT 4:] The DEIR Fails to Identify Impacts that Create Barriers to Meeting SGMA's Sustainability Requirements The purpose of GSPs [groundwater sustainability plan] is to provide GSAs [groundwater sustainability agencies] with a toolkit for ensuring their respective groundwater basins will reach long-term sustainability. These plans are submitted to DWR, and DWR determines whether a GSP complies with SGMA and is likely to achieve the sustainability goal for the basin. (See Wat. Code, §§ 10733-10735.) The DEIR provides some background information regarding GSPs in the project area. However, the DEIR fails to analyze the project's potential impacts on the region's GSPs. Under the No Project Alternative analysis, the DEIR also determines that "Implementation of the GSPs and the resulting achievement of groundwater sustainability by 2040 or 2042 would result in stable groundwater levels and the active management of groundwater extractions within predetermined operating ranges." (DEIR, p. 8-21.) Except that none of the DEIR's impact analyses discuss whether the project would impede achievement of groundwater sustainability within the subbasins in which the project would be carried out. This is a failure to inform the public of the potential impacts of the project.	Please see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding consideration of California's Sustainable Groundwater Management Act (SGMA) and Groundwater Sustainability Plans (GSPs). The EIR impact analysis describes how the construction and operation of the Delta Conveyance Project would affect groundwater storage within the project's study area. As summarized in the table titled Comparison of Impacts of Project Operations on Groundwater by Alternative in Chapter 8, Groundwater, and as described in the supporting impact assessment, changes in groundwater levels and storage attributable to constructing or operating the Delta Conveyance Project were found to be less than significant. Implementation of projects under the GSPs is considered in a qualitative fashion unless supporting environmental documentation has been adopted and design parameters defined. These projects cannot be included in groundwater simulations until the design parameters are known. However, the scale of the impact of operation of the Delta Conveyance Project on regional groundwater levels and storage would not adversely affect sustainability goals of GSPs.

Letter-Comment Number	Comment	Response
513-90	[ATT 4:] Surface Water Quality and Sea Level Rise Impacts Several entities in the ECC [East Contra Costa] Subbasin receive surface water deliveries from diversion points in the Sacramento-San Joaquin Delta (Delta). Under the Tunnel Project, lower salinity water would be removed from the Delta upstream of ECC surface water diversion points, and therefore would i.) decrease the availability of lower salinity water making its way to the County's region of the Delta near surface water diversion points to blend with the higher salinity water from the San Pablo Bay and ii.) increase the likelihood that higher salinity water from the San Pablo Bay could migrate further into the Delta towards the ECC Subbasin surface water diversion points.	Chapter 9, Water Quality, provides a complete assessment of impacts on salinity-related parameters in the Delta. The analysis in Chapter 9 in Impacts WQ-3 (bromide), WQ-4 (chloride), and WQ-5 (electrical conductivity) concluded the impacts would be less than significant. Chapter 9 describes how there could be some increases in these salinity-related parameters, particularly in the fall months of some water year types at western Delta locations. The results provided in Chapter 9, the incremental change in salinity between baseline conditions and operating conditions, and the less than significant determination mean that the modeled increases are not of sufficient magnitude to adversely affect beneficial uses, including municipal and industrial supply, and agricultural supply.
513-91	[ATT 4:] When groundwater suppliers within the ECC Subbasin are unable to blend good quality surface water from the Delta, higher amounts of groundwater will be utilized. This will lead to an increased reliance on groundwater in the ECC Subbasin and will lead to increased groundwater use in the region. The DEIR failed to discuss the potential impacts from increased groundwater use by ECC Subbasin entities in the region because of increased Delta Salinity.	This comment presupposes impacts and potential responses that may occur. As described in Chapter 9, Water Quality, under Impact WQ-5, the project alternatives would not cause additional exceedances of applicable electrical conductivity water quality criteria/objectives by frequency, magnitude, and geographic extent that would result in adverse effects on any beneficial uses of study area waterbodies. Project facilities would continue to be operated to meet Bay-Delta Water Quality Control Plan electrical conductivity objectives and project operations would meet DWR-North Delta Water Agency contract electrical conductivity requirements at the same frequency that occurs under existing conditions. The project alternatives would not degrade electrical conductivity by measurable levels on a long-term basis such that beneficial use impairment would be made discernibly worse.
513-92	[ATT 4:] Additionally, there are several entities within the Subbasin that supply water to Disadvantaged Areas (DAs) comprised of both Severely Disadvantaged and Disadvantaged	Chapter 9, Water Quality, analyzes potential surface water quality impacts. The analysis concluded that the Delta Conveyance Project would result in a less-than-significant impact on the quality of surface water and would not

Letter-Comment Number	Comment	Response
	Communities. If these DAs lose the ability to receive good quality surface water from the Delta and are forced to seek more expensive water supplies or groundwater from other entities, there could be significant economic impacts on an already strained area and potentially impact the ability of the Subbasin entities to sustainably use groundwater resources.	adversely affect designated beneficial uses. Chapter 29, Environmental Justice, found that there would be no disproportionately adverse effects on environmental justice communities related to water quality or supply changes. Impacts on water quality are fully addressed in EIR Chapter 8, Water Quality. Chapter 5, Water Supply, provides a summary of hydrologic modeling conducted for the proposed project and alternatives are reported that each would result in an increase in the reliability of water supplies delivered through the SWP.
513-93	[ATT 4:] The DeltaGW model was used to simulate existing and future conditions with and without the Tunnel Project. The DEIR mentions sea level rise several times with respect to degradation of water quality, but there is no indication that sea level rise was simulated in the DeltaGW model. In fact, the DEIR states: "Notably, the DeltaGW modeling analysis did not include effects of sea level rise, which could contribute to saltwater intrusion in the Delta under 2040 conditions. [Footnote 1: This statement is made on line 39-40 on page 8-24 of Chapter 8.]" The DeltaGW model did not simulate sea level rise with its 2040 analysis, and therefore the DEIR is [sic] did not quantify, and failed to provide a qualitative analysis, the potential impacts of sea level rise on groundwater resources with the construction and implementation of the Tunnel Project.	Please refer to Chapter 4, Framework for the Environmental Analysis, for an explanation of how climate change was incorporated into the EIR's analysis. Though CEQA does not require an analysis of impacts of the environment on the project, the EIR includes analysis beyond the requirements of CEQA using hydrological modeling scenarios at years 2040 and 2070 that consider changes as a result of climate change and sea level rise. As described in Chapter 8, Groundwater, under Impact GW-2 and Impact GW-7, changes in groundwater elevations caused by project construction and operations are expected to be minimal, with little to no changes in the groundwater gradient. While sea level rise is expected to occur under climate change conditions, the changes to groundwater elevations caused by the project are not expected to affect the potential impacts of sea level rise that would otherwise occur without the project.
513-94	[ATT 4:] Chapter 3 describes an extreme sea level rise scenario in which sea levels would rise by 1.8 feet by 2040 at the tide gage in San Francisco. This extreme scenario is used for water quality criteria but was not described in any of the groundwater impact discussions in Chapter 8 (nor the appendices 8A, 8B, and 8C). Furthermore, the Sustainable Groundwater Management Act (SGMA) regulations required	Please refer to Chapter 4, Framework for the Environmental Analysis, for an explanation of how climate change was incorporated into the EIR's analysis. As described in the section titled Additional Analyses of Potential Future Conditions, the purpose of a 2070 analysis is to provide additional information regarding potential impacts and benefits of the proposed longer-term future scenario but is not used as the basis for CEQA findings. Please refer to Appendix 4A, Consideration of 2070 Conditions, regarding a

Letter-Comment Number	Comment	Response
	GSAs [groundwater sustainability agencies] to model future groundwater conditions up to 2070 in their submitted Groundwater Sustainability Plans. The use of the DeltaGW model projecting conditions into 2040 fails to adequately use a time frame to draw conclusions on future impacts from climate change and changes in sea levels. The DEIR must look at climate change and sea level rise impacts projected by 2070 as part of any cumulative impacts analysis and/or future projections.	discussion of 2070 conditions. Please refer to Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for discussion regarding consideration of the Sustainable Groundwater Management Act. As described in Chapter 8, Groundwater, in Impact GW-2 and Impact GW-7, changes in groundwater elevations caused by project construction and operations are expected to be minimal, with little to no changes in the groundwater gradient. While sea level rise is expected to occur under climate change conditions, the changes to groundwater elevations caused by the project are not expected to affect the potential impacts of sea level rise that would otherwise occur without the project.
513-95	[ATT 4:] Groundwater Storage Changes The DEIR states that groundwater storage would experience an overall increase under the Tunnel Project (Table 8-8: Long-Term Changes in Groundwater Storage in Acre-Feet and Change Relative to Existing (CEQA Baseline) Conditions); hypothesizing any reductions in groundwater storage would be localized and short-term in nature. Impact GW-4: Changes to Long-Term Change in Groundwater Storage describes an increase in groundwater storage under all Tunnel Project alternatives due to an increase in surface water supplies and a decrease in groundwater demand, however, this would only be applicable to entities that receive surface water deliveries from the Tunnel Project. In the DeltaGW model's Subregion 4, which contains the ECC [East Contra Costa] Subbasin, most entities do not receive Tunnel Project water deliveries, therefore, the increased storage simulated under the Tunnel Project alternatives is likely overestimated for the ECC Subbasin.	Please refer to Common Response 10, Surface Water Quality and Groundwater Resources, regarding the suitability of the model for analysis of local impacts. The groundwater analysis in Impact GW-4 reflects the changes in surface water deliveries. Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Systems Operations Modeling, includes reservoir storage results, changes in streamflow, and changes in water supply as a result of project operations. As discussed in Impact GW-4, modeling indicates a slight increase in groundwater storage compared to existing conditions. These modeled changes are so small that they would have no noticeable effect on East Contra Costa County Subbasin. Therefore, model simulation supports the understanding that the project will not affect surface water deliveries within the region. Impact GW-4 has been updated to clarify statements regarding changes in groundwater storage under project operations. The revision does not result in a new significant environmental impact, substantial increase in the severity of an environmental impact, or require additional mitigation measures to which DWR was unwilling to commit.

Letter-Comment Number	Comment	Response
513-96	[ATT 4:] Monitoring of Baseline Conditions The DEIR fails to establish a clear plan for monitoring baseline conditions to evaluate Project impacts. 'Mitigation Measure GW-1: Maintain Groundwater Supplies in Affected Areas' states that groundwater monitoring would begin upon completion of monitoring wells close to the Tunnel Project sites, however, it does not establish a baseline timeframe in which data would be collected prior to Tunnel Project commencement. Mitigation Measure GW-1 also states that existing wells would be used to evaluate groundwater conditions. This statement incorrectly assumes that existing wells are actually present at appropriate locations and depths and owners of those wells are willing to provide access to their wells for monitoring purposes. Using existing wells to establish a baseline would only be sufficient if the wells are constructed solely in the shallow zone where recharge and dewatering activities will occur. Furthermore, if the existing wells are used for supply, data from such wells may not represent true static conditions. Without a reliable baseline upon which to compare, determining Tunnel Project impacts is incomplete, unreliable and erroneous.	During the design phase of the Delta Conveyance Project, the locations of existing wells that would require monitoring would be determined. The information would be used to determine the need and location for construction of new monitoring wells. If existing wells are not suitable for monitoring purposes, due to their depth or landowner approval, additional monitoring wells would be constructed. Suitable locations would be identified based on facility locations. Information regarding testing/monitoring is described in Chapter 3, Description of Proposed Project and Alternatives, in the section titled Field Investigations (under the subtitle Groundwater Testing and Monitoring). This section describes the data collection efforts that will occur prior to and during construction. Mitigation Measure GW-1 provides clear timelines for monitoring during construction activities (e.g., monitoring would continue through the construction phase for up to 6 months following termination of construction dewatering activities and for at least 5 years after commencement of conveyance operations at the intakes). The mitigation measures also acknowledge that additional wells may need to be constructed (e.g., injection wells would be constructed if needed for mitigation to maintain the non-project groundwater elevations). For a broad discussion regarding CEQA requirements related to mitigation measures and the adequacy of the EIR approach to mitigation measures based on level of detail and performance standards, please see Common Response 1, Process, General Approach to Analysis, and Other Environmental Review Issues.
513-97	[ATT 4:] Equally, the use of average seasonal variations as a baseline for determining recharge and dewatering impacts is not sufficient if the data record is too long (Impact GW-2: Changes in Groundwater Elevations). A long data record, such as the almost 100 year record used in the DeltaGW Model (1922-2015), mutes the shorter-term seasonal variation averages while not accounting for recent groundwater conditions that are closely related to climatic changes.	The thresholds developed for Impact GW-2 are based on historical data for the 1974-2015 period from 132 wells within the Delta region, as described in the section titled Thresholds of Significance in Chapter 8, Groundwater. Measurements from the 132 wells were evaluated to determine interannual and seasonal variability over a 41-year period. A 41-year record is sufficiently long to detect decadal climate variability and any possible effects from climate change over that period. The historical fluctuations over the 41-year period were used to establish the threshold of +/- 5 feet

Letter-Comment Number	Comment	Response
		change in groundwater elevations more than 5% of the time.
513-98	[ATT 4:] Groundwater Elevation Change in Supply Wells Changes in groundwater elevation can impact the reliability of water supply wells used by private domestic well owners and water suppliers. The DeltaGW model provides an estimate of changes in groundwater level for different nodes in different layers of the model grid to determine the impact of the construction and implementation of the Tunnel Project. The model makes no attempt to simulate actual wells pumping specified amounts at specified times, but rather the IWFM [Integrated Water Flow Model] modeling platform distributes pumping within elements or areas based on the groundwater demand in that water balance area. This essentially smooths any localized changes in groundwater elevation over a larger area, resulting in the simulation of groundwater level changes that do not represent the declines in groundwater levels that are experienced in real wells in real time during and after Tunnel Project construction and implementation.	Please refer to Common Response 10, Surface Water Quality and Groundwater Resources, regarding the suitability of the model for analysis of local impacts, including a discussion of how local wells were considered in the modeling analysis, and model resolution and representation of local surface water features.
513-99	[ATT 4:] The DEIR fails to acknowledge this deficiency in the evaluation of Tunnel Project impacts. Water levels in supply wells, including domestic, irrigation, industrial, and public supply wells, may exhibit greater drawdown in areas where slurry walls or cutoff walls provide an impedance to lateral flow towards wells, thereby resulting in greater than normal decreases in groundwater elevations within wells. A more thorough analysis of the impact the slurry/cutoff walls will have on local drawdowns from supply wells is crucial to determine the significance of this particular groundwater impact from the Tunnel Project, as the DeltaGW model is an inadequate tool to make that determination.	Please refer to responses to comments 513-95 to 513-98 regarding the groundwater analysis contained in the EIR. The Delta GW model used to support the EIR adequately addresses impacts on groundwater. Appendix 8A, Delta Groundwater Model: Development and Calibration discusses the calibration of the groundwater model. Slurry walls and cutoff walls are included in the model and assessed as part of the model simulations for project alternatives. Changes in groundwater elevation and reductions in groundwater levels affecting supply wells are assessed as part of Impact GW-2 and Impact GW-3, respectively; the impacts of which are determined to be less than significant. Design criteria for the slurry walls and cutoff walls is discussed in Common Response 10, Surface Water Quality and Groundwater Resources, and would be developed during the design phase based upon site-specific geotechnical investigations.

Letter-Comment Number	Comment	Response
513-100	[ATT 4:] Lack of Southern Complex Simulation The DeltaGW model simulates slurry walls or cutoff walls along the intake and conveyance for the Tunnel Project. The "deep cut walls" that are to be installed in the Southern Forebay levees are not simulated in the DeltaGW model. These walls will be no-flow barriers, and may impact the operation of local wells, and potentially impede groundwater flow toward surface water features that rely on groundwater (e.g. Groundwater Dependent Ecosystems [GDEs] as well as areas where gaining stream conditions occur). The permanent footprint of the Southern Complex is estimated to be approximately 900 acres, located within the ECC Subbasin. This feature was not described in the DeltaGW model documentation (Chapter 8, as well as Appendices 8A, 8B, and 8C), and so it is assumed that this large feature was not simulated at all. Therefore, the impacts to groundwater based on the DeltaGW model are deficient to determine impacts in the model's Subregion 4 area.	Please see response to comment 513-99 regarding cutoff walls. As described in Chapter 8, Groundwater, the physical features of the project are modeled for each alternative as low-permeability model elements whose alignments are shown in figure titled DeltaGW Model Physical Project Components. The Southern Complex is included within the footprint of the model elements associated with the Central and Eastern Corridors.
513-101	[ATT 4:] Groundwater Dependent Ecosystem The DEIR notes the presence of Groundwater Dependent Ecosystems (GDEs) within the Tunnel Project area and maps the permanent and non-permanent Tunnel Project areas in Ch. 13 and on Mapbook 13-1. GDEs are not discussed in Ch. 8 in the context of potential Tunnel Project impacts related to groundwater conditions. A large percentage of ECCs [East Contra Costa] GDEs are located near Clifton Court Forebay which is designated as a potential Tunnel Project area. It is acknowledged in the DEIR that some of the GDEs will be permanently destroyed as a result of the Tunnel Project. GDEs that will not be permanently destroyed have no defined	Please see Common Response 8, Relationship to Other Plans, Projects, Policies and Programs, regarding a description and discussion of GDEs. GDEs are not discussed in Chapter 8, Groundwater, because substantial changes in interconnected surface waters and groundwater elevation would not occur. The EIR addresses temporary and permanent impacts on GDEs as a result of other potential impact mechanisms by identifying and evaluating potential impacts on all natural systems and habitat supported by groundwater that could be impacted by the project in Chapter 13, Terrestrial Biological Resources. For example, groundwater dependent ecosystems including tidal and nontidal perennial aquatic, tidal and nontidal freshwater emergent wetland, tidal brackish emergent marsh, valley/foothill riparian, alkaline seasonal wetland and vernal pool complex are evaluated in Impact BIO-1 through Impact BIO-8 in Chapter 13,

Letter-Comment Number	Comment	Response
	threshold of significance for impacts or mitigation measures. SGMA [Sustainable Groundwater Management Act] regulations specifically call out the need for the Subbasin to protect GDEs.	Terrestrial Biological Resources. Where appropriate, potentially significant impacts on these resources are reduced to less than significant with implementation of feasible mitigation measures. Thresholds of significance for these and other sensitive resources are listed in the section titled Thresholds of Significance. Mitigation and Avoidance and Minimization Measures are allocated in the following sections: Appendix 3F, Compensatory Mitigation Plan for Special-Status Species and Aquatic Resources, describes the mitigation that would be implemented to offset impacts on these land cover types. Attachment 3F.1, Compensatory Mitigation Design Parameters, provides the design commitments and guidelines for compensatory mitigation of impacts. Avoidance and minimization measures that would apply during construction of the project (including but not limited to construction of the compensatory mitigation sites themselves) are contained in Appendix 3B, Environmental Commitments and Best Management Practices.
513-102	[ATT 4:] Cumulative Impacts Covered in Simulation Cumulative impacts were not simulated using the DeltaGW model, so despite the brief statements in Chapter 8 that claim most of the Tunnel Projects alternatives will improve surface water reliability and therefore benefit groundwater resources, this is a conclusory statement since there is no analysis on the cumulative impact on groundwater resources in the ECC Subbasin with the introduction of slurry walls, cutoff walls, conveyance tunnels, new intake feature, and a large forebay structure. Table 8-10 lists 26 programs or projects that could have impacts on groundwater resources in the vicinity of the Tunnel Project, but the DEIR fails to explain how those programs/projects would cumulatively impact groundwater with the addition of the Delta Conveyance construction and implementation.	Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for a discussion of the qualitative nature of the cumulative impact assessment. Where there is insufficient information in the record to perform a quantitative analysis of reasonably foreseeable future projects, CEQA directs the agency to prepare a qualitative analysis. In addition, there is no specific CEQA requirement to synthesize or integrate cumulative effects of the project across multiple impact or resource types. Physical features of the project described in the comment (slurry walls, cutoff walls, conveyance tunnels, new intake feature, and a large forebay structure) are all simulated by the DeltaGW model for all project alternatives. As described in the section titled Cumulative Impacts of the Project Alternatives in Chapter 8, Groundwater, the simultaneous operation of the Delta Conveyance Project and the projects listed in the table titled Cumulative Impacts on Groundwater from Plans, Policies, and Programs is anticipated to have more beneficial impacts on groundwater than adverse impacts for all alternatives. Please see Common Response 8, Relationship to Other Plans, Projects, Policies, and

Letter-Comment Number	Comment	Response
		Programs, regarding consideration of groundwater sustainability plans. As described in Common Response 8, the groundwater analysis contained in Chapter 8 found groundwater impacts to be less than significant and would not interfere with the ECC basin's ability to maintain sustainability.
513-103	[ATT 4:] Climate Change Covered in Simulation Climate change was simulated using the DeltaGW model by using 2040 climate change conditions. In this climate change scenario, evapotranspiration is assumed to increase by approximately 5% and increased agricultural and urban demands would result in increased pumping of groundwater due to higher future temperatures. According to Chapter 30, the global average surface temperature will increase by approximately 1.4°F. The climate change enforced on the DeltaGW model was for 2040 only, but future conditions for Tunnel Project Alternatives and the No Project Scenario were not simulated for climate change conditions for 2070. DWR has produced several future climate scenarios that have been adopted by subbasins conforming to SGMA [Sustainable Groundwater Management Act] requirements, including future wet scenarios, future dry scenarios, and climate change out past 2040 into 2070. The DeltaGW model simulates only the 2040 future climate scenario, which provides an insufficient assessment of project impacts due to different potential future climate changes.	The comment assertions stating that the DeltaGW model provides an insufficient assessment of project impacts is not consistent with the EIR. Please refer to Chapter 4, Framework for the Environmental Analysis, for an explanation of how climate change was incorporated into the EIR's analysis. As described in Chapter 4, in the section titled Additional Analyses of Potential Future Conditions, the purpose of a 2070 analysis is to provide additional information regarding potential impacts and benefits of the proposed longer-term future scenario but is not used as the basis for CEQA findings. Please refer to Appendix 4A, Consideration of 2070 Conditions, regarding a discussion of 2070 conditions. Common Response 6, Climate Resilience and Adaptation, provides additional information in DWR approach to addressing climate change in the EIR, including the selection of climate change scenarios for consideration.
513-104	[ATT 4:] Data Gaps in Simulation Surface water and Groundwater Interaction: Data used in the DEIR to consider surface water and groundwater interaction in the ECC [East Contra Costa] Subbasin is incomplete in the DeltaGW model. During development of the ECC GSP [Groundwater Sustainability Plan] model, several other surface	Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the definition of the existing conditions baseline for the EIR. The DeltaGW model is based on the best available model and data at the time of the Notice of Preparation. Please refer to Common Response 10, Surface Water Quality and Groundwater Resources, which explains why the model is suitable for analysis of local impacts on groundwater. The DeltaGW Model represents

Letter-Comment Number	Comment	Response
	water data sources were incorporated to create a more complete analysis. For example, the DeltaGW model relied on surface water features simulated in the DWR C2VSim model, which did not simulate the Middle River, Old River, or Marsh Creek. These features are important components when understanding the relationship of surface water and groundwater within the ECC Subbasin. The DEIR does not have the same level of analysis as the Subbasin utilized for the development of the ECC Subbasin GSP. Therefore, the DEIR's analysis of surface water and groundwater interaction (or streamflow depletion) is inadequate within the ECC Subbasin.	the best available planning-level analytical tool for the Delta region and is an improved and expanded version of C2VSimFG, which has been the standard planning model for the Central Valley since 2012. The DeltaGW model inherits the model grid from C2VSimFG (see Appendix 8A, Delta Groundwater Model: Development and Calibration). However, data from the CoSANA model was leveraged to improve the water budget calibration of the DeltaGW Model. Land use, evapotranspiration, irrigation period, soil parameters, surface water diversions, urban demands, and well pumping from the CoSANA model were mapped to the DeltaGW model and incorporated into the historical model to improve calibration.
513-105	[ATT 4:] Sea Level Rise: Sea level rise is only discussed in terms of the overall basin hydrogeology and in a no-Project context. The DEIR fails to address sea level rise in any of the Tunnel Project alternatives. Sea level rise is a concern for the ECC [East Contra Costa] Subbasin due to the proximity to the Delta and the relatively shallow topography that is observed throughout most of the Subbasin. Additionally, the agricultural users in the Subbasin utilize tile drains to artificially keep groundwater levels lower. While the DEIR does mention sea level rise in Chapters 5 and 30, it is in regard to surface water rather than potential groundwater impacts. The DEIR must address the potential impacts of sea level rise and how it will affect groundwater users in the Delta.	As described under Chapter 8, Groundwater, in Impact GW-2 and Impact GW-7, changes in groundwater elevations caused by project construction and operations are expected to be minimal, with little to no changes in the groundwater gradient. While sea level rise is expected to occur under climate change conditions, the changes to groundwater elevations caused by the project are not expected to affect the potential impacts of sea level rise that would otherwise occur without the project.
513-106	[ATT 4:] SGMA [Sustainable Groundwater Management Act] Project and Management Actions: During the development of the GSP [Groundwater Sustainability Plan] for the ECC [East Contra Costa] Subbasin, several Project and Management Actions (PMA) were proposed, in addition to all the projects that other Subbasin developed for their GSPs. The DEIR does not discuss any potential impacts the Tunnel Project may have on implementing the PMAs.	Please refer to Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding consideration of Groundwater Sustainability Plans. The East Contra Costa Subbasin is discussed in Common Response 8. That discussion concludes that the duration of dewatering activities near the East Contra Costa Subbasin would not adversely affect groundwater storage within the subbasin.

Letter-Comment Number	Comment	Response
513-107	[ATT 4:] Groundwater Resources Conclusion Our [Contra Costa County and Contra Costa County Water Agency] review of the Draft Delta Conveyance DEIR leaves several concerns about groundwater resources in the ECC Subbasin unanswered. Significant negative impacts in changes to surface water quality, sea level rise, and groundwater elevation changes are not sufficiently discussed, and no mitigations or a mitigation plan is provided. The DEIR has several modeling data gaps and thus the DEIR review model simulations is inadequate for the Tunnel Project, particularly focusing on future simulations, surface water groundwater interactions, sea level rise and SGMA PMAs. The current Tunnel Project in the DEIR has the potential to significantly impact the sustainability of the ECC Subbasin. ECC Subbasin is currently sustainable and is projected to maintain sustainable conditions based on model computations and current management of the Subbasin. The DEIR is inadequate because groundwater analyses is incomplete. The current sustainable conditions will be impacted with the construction and operation of the proposed Tunnel Project and erns [sic] that would impact the continual sustainability observed in the ECC Subbasin.	Detailed responses to all concerns listed in this summary comment can be found in responses to other comments within the letter. The EIR provides an impact analysis of environmental resources raised by the comment. The comment assertions regarding the significance of impacts on water quality and groundwater are not supported by the analyses contained in the EIR. In addition, the EIR considers multiple climate change scenarios throughout the document as addressed in Chapter 30, Climate Change, and the modeling (please see Common Response 6, Climate Resilience and Adaptation, for a discussion of all climate change related analysis). As discussed in Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, changes to surface water and water supply are addressed in Chaters 5 and 6, respectively, and then used throughout the EIR to evaluate potentially significant environmental impacts on multiple resources. Groundwater elevation impacts are assessed for the Delta region and adjacent subbasins in Chapter 8, Groundwater, in Impact GW-2 and were determined to be less than significant. Mitigation Measure GW-1 addresses actions that could be taken if groundwater levels and supplies were to be affected by the project. Future simulations under 2040 conditions are detailed extensively in Appendix 5B, Surface Water 2040 Analysis; Appendix 6A, Water Supply 2040 Analysis; and Appendix 8C, Groundwater 2040 Analysis. Potential effects on groundwater under a 2070 condition scenario are documented in Chapter 4, and Appendix 4A, Consideration of 2070 Conditions. Please see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding consideration of Groundwater Sustainability Plans. As described in that Common Response, the groundwater analysis contained in Chapter 8 found groundwater impacts to be less than significant and are not expected to interfere with the ECC basin's ability to maintain sustainability. The Delta Conveyance EIR has been prepared in

Letter-Comment Number	Comment	Response
		compliance with CEQA and evaluates the full range of potential impacts that may result from construction and operation of the proposed project and its alternatives.
514-1	This letter provides the Delta Counties Coalition's (DCC) comments on the Delta Conveyance Project Draft Environmental Impact Report (DEIR). The DCC is an alliance consisting of the California Counties of Contra Costa, Sacramento, San Joaquin, Solano, and Yolo. These counties work collaboratively to give one voice on behalf of the Sacramento-San Joaquin River Delta and its four million area-wide residents. The DCC advocates to protect and enhance Delta communities and existing land uses, improve the Delta ecosystem and provide a more reliable water supply for the State.[Footnote 1: https://savethedelta.saccounty.gov/pages/default.aspx] Each of the five Delta counties is also submitting individual comment letters, which include additional concerns that must be addressed by the Department of Water Resources (DWR). To the extent possible, the counties have coordinated to reduce overlap between issues, and the DCC as a group supports the individual submissions of each of the five Delta counties. This letter provides a brief overview of the counties' major concerns with the Delta Tunnel project and the Draft EIR.	This information describes the structure or organization of the comment letter and provides background of the organization. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
514-2	Disappointment with State's Policy Direction on Tunnel The DCC [Delta Counties Coalition] is disappointed that DWR continues to pursue the destructive Tunnel project, which would not create new water for agencies within the State Water Project's (SWP) service area. DCC has worked for over a decade to help guide the State toward more effective, less impactful means to continue to secure Delta water supplies from the Delta. Upon the announcement that the State would	Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding comments that state opinions of general opposition to the project. The EIR fully evaluates potentially significant environmental impacts from construction and operation of the alternatives on multiple resources in Chapters 7 through 32. As summarized in the Executive Summary, most of the potentially significant environmental impacts on resources within the Delta such as fisheries, wildlife, and vegetation can be reduced to less than significant levels after the implementation of feasible mitigation measures. Please

Letter-Comment Number	Comment	Response
	take a new look at Delta conveyance under the leadership of Governor Newsom, the counties and other entities participated in good faith in the Governor's Water Resilience Portfolio process,[Footnote 2: https://resources.ca.gov/Initiatives/Building-Water-Resilience/portfolio] as directed under Executive Order N-10-19, which was supposed to be a set of actions to meet California's water needs through the 21st century. Executive Order N-10-19, directed the state to "inventory and assess"… "Current planning to modernize conveyance through the Bay Delta with a new single tunnel project." That was never done.	refer to Chapter 2, Purpose and Project Objectives, regarding the purpose of the project. Please also see Common Response 3, Alternatives Development and Description, regarding the alternatives evaluated and the reasonable range of feasible alternatives evaluated in the EIR. For more information on the relationship between the Delta Conveyance Project and the Water Resilience Portfolio and the progress state agencies are making to achieve the separate actions in the Water Resilience Portfolio, please see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs.
514-3	In January 2020, DWR released its Notice of Preparation, which, included a tunnel proposal very similar to the twin tunnel California WaterFix project, with limited exceptions. The DCC commented on the "new" Delta Conveyance Project, requesting that DWR consider feasible alternatives to a tunnel that would meet the identified project objectives, explain that the "truncated and incomplete approach to project alternatives in the prior BDCP and California WaterFix environmental review processes must not be repeated." [Footnote 3: https://savethedelta.saccounty.gov/Documents/Letters/2020-04-17%20DCC%20Tunnel%20NOP%20Comments%20to%20DWR.pdf]. DCC suggested that the Draft EIR, at minimum, analyze and evaluate a through Delta conveyance alternative, alternative intake locations, improving existing facilities with a smaller conveyance system, and an accurate evaluation of the no project alternative. Instead, the current Draft EIR analyzes nine versions of a tunnel (in addition to the no project alternative).	The Department of Water Resources followed CEQA requirements when identifying alternatives to be considered for evaluation in the EIR. As described in Common Response 3, Alternatives Development and Description, CEQA requires lead agencies to develop project objectives to inform the identification of the project and a reasonable range of potentially feasible alternatives. CEQA requires an EIR to include a reasonable range of alternatives that meet most of the basic project objectives, are potentially feasible, and would avoid or substantially lessen one or more of the significant effects of the proposed project. Common Response 3 provides an explanation of the alternatives screening process and how project objectives are used to identify potential alternatives to the proposed project. The through-Delta conveyance alternative was determined to not meet project objectives based on screening criteria identified in Appendix 3A, Identification of Water Conveyance Alternatives. Please refer to Common Response 3 for discussion of alternative intake locations considered for the proposed project and alternatives. Chapter 3, Description of the Proposed Project and Alternatives, describes a range of project intake capacities considered, from 3,000 cfs to 7,500 cfs. Regarding a smaller conveyance system, Appendix 3A states, "The identification of the proposed operations considered an appropriate

Letter-Comment Number	Comment	Response
		balance between exports and ecological issues in the Delta." As discussed in Common Response 3, the project would be operated to shift diversions from the south Delta to the north Delta (during the summer and fall) or divert water in the north Delta during excess flow conditions while meeting regulatory requirements (during the winter and spring). With the operations proposed that seek to maximize diversions during excess flow events, improving existing facilities with a smaller capacity alternative would not meet the water supply reliability objective of the project as frequently as the 3,000 cfs alternative, and therefore was not considered. Please also refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the adequacy of the purpose and objectives statements for the purposes of CEQA, the agencies discretion in developing the project objectives, and consideration of other objectives.
514-4	The State has Failed to Meaningfully Engage with Delta Entities In early 2019, the State indicated that it intended to build on work that has already been done and do additional design and engineering to avoid or minimize the project's local impacts. That process was to include significant engagement with the public, especially Delta communities. As part of that process, the Delta Conveyance Design and Construction Authority created the Stakeholder Engagement Committee (DCA Committee), for instance. The DCC and its counties declined to participate in the DCA's Stakeholder Committee; one of the primary reasons for the DCC's absence, was the limited scope of the Committee, which did not include considerations of any other alternatives to address the SWP's water supply needs besides an isolated tunnel project with intakes in two to three already specified locations. These locations, Courtland, Hood	The comment assertions that a reasonable range of alternatives was not analyzed in the EIR and that DWR did not consider community input on design are incorrect. Chapter 35, Public Involvement, describes DWR's various outreach and engagement efforts with Delta interested parties including members of the public, Tribal members and representatives, environmental justice and disadvantaged communities, and the Delta Conveyance Design and Construction Authority Stakeholder Engagement Committee. The table in Chapter 35 titled Presentations and Briefings 2019-2023 lists the organizations that DWR met with starting in 2019. The Stakeholder Engagement Committee provided a forum for interested parties in the Delta to provide feedback on conceptual project designs and ways to minimize the effects of the project buildout on a broad array of considerations. In part as a result of these comments, Alternative 5,

Letter-Comment Number	Comment	Response
	and Clarksburg are legacy Delta communities [Footnote 4: https://savethedelta.saccounty.gov/Documents/Letters/2019-10-02%20DCA%20Stakeholder%20Engagement%20Committee.pdf]. Again in October of 2020, DCC expressed its concerns to the Resources Agency and DWR that the alternatives being considered were too narrow [Footnote 5: https://savethedelta.saccounty.gov/Documents/Letters/20.10.27%20DCC%20Ltr%20to%20DWR%20and%20DCA%20re%20Alts%20and%20Scope%20of%20SEC.pdf]. The letter also cited the failure of DWR to "work with Delta communities and other stakeholders to limit local impacts" and to coordinate project planning "with a variety of actions to strengthen existing levee protections, protect Delta water quality, recharge depleted groundwater reserves, and strengthen local water supplies across the state" to "build Water supply resilience." While some of the local impacts of the current Tunnel project may be incrementally reduced, relative to prior iterations of the project, the Tunnel and all of the alternatives continue to contain nonstarter components for an acceptable project for the DCC, and none of the Delta Community input on these primary components of the project has been incorporated into project planning. As the area that would be directly burdened in a multitude of ways, the DCC and Delta stakeholders deserve a far greater role in planning any new infrastructure in the Delta.	Bethany Reservoir alternative, was developed to further reduce impacts on Delta communities and resources, and DWR selected it as the proposed project. DWR also developed a Community Benefits Program, which is a set of commitments made by project proponents and created in coordination with the local community to address local effects that may occur as a result of the Delta Conveyance Project. These commitments are intended to go beyond environmental mitigation to foster goodwill and address the adverse effects local communities may encounter during long construction periods (see Chapter 34, Community Benefits Program Analysis, and Appendix 3G, Community Benefits Program Framework). The Community Benefits Program framework will ensure there are ample opportunities for meaningful community participation (see the section titled Introduction in Chapter 34). Furthermore, the Efforts to Minimize Delta Community Effects technical memoranda in the Engineering Project Reports (Delta Conveyance Design and Construction Authority 2022a, 2022b) summarize the approach by the DCA to minimize local community effects. Please also refer to Appendix 1A, July 2020 Delta Conveyance Project Scoping Summary Report and Addenda; Appendix 29A, Environmental Justice Community Survey Report; and Chapter 32, Tribal Cultural Resources, section titled Consultation and Engagement with Tribes, describes DWR's good faith effort to foster meaningful consultation that recognizes Tribal expertise in the identification and consideration of Tribal cultural resources. Regarding the range of alternatives, please refer to response to comment 514-3.
514-5	Another example of subpar community engagement, DWR failed to hold any public meetings in the Delta regarding the DEIR, despite requests from the DCC and the Delta Legislative	The assertion that DWR did not hold public meetings and facilitate community engagement is not consistent with the contents of the EIR. Please refer to Chapter 35, Public Involvement, which details the

Letter-Comment Number	Comment	Response
	Caucus. To accommodate the desire of local people to participate in the DEIR process in person, the DCC and the Legislative Caucus hosted a public meeting in Hood on December 6, 2022. With about 110 people in attendance, the meeting demonstrated the high level of interest and concern of Delta and Sacramento area residents about the project. [Footnote 6: A video recording of the meeting is here: https://www.youtube.com/watch?v=JVi6-Q6kfHA. DCC requests this video be included in the record for this project. Public comments on the DEIR were transcribed by a court reporter and are being submitted to DWR by the Delta Legislative Caucus.]	completed and planned public involvement activities related to the project's environmental review process. Please also refer to Common Response 2, Public Outreach Activities, regarding the public meetings held during the public review period for the Draft EIR. The link to the video recording provided by the commenter will be included in the administrative record for the Delta Conveyance Project EIR. Please refer to the EIR Volume 2 Introduction for information regarding how commenter submitted materials, including links, were handled.
514-6	Specific Comments on the Draft EIR The Draft EIR Fails to Credibly Describe the Project and its Operations While the Draft EIR purports to describe the Tunnel at the "project" level under CEQA, the description and the resulting analysis fail to provide enough information that the public can understand the project and its environmental implications of this very massive project. As just one example, the Draft EIR fails to include a meaningful overview map of the massive proposed project in the Executive Summary and Chapter 3. Draft EIR Figures ES-2 and 3-2, for instance, attempt to include all three potential alignments on one page, and include no geographical information about the landscapes and communities upon which the intakes, Tunnel and other facilities would be placed. Due to the lack of an understandable map, it was necessary for the public to develop maps based on DWR's GIS data for the project. An example of such a map is attached as Exhibit A [ATT 1] [Footnote 7:	Please see Chapters 7 through 32, in the sections titled Environmental Impacts for a detailed, project-level discussion regarding the Delta Conveyance Project's potential impacts on specific environmental resources. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for a description of why the length and complexity of the EIR is adequate and how DWR focused on presenting information in plain language that is useful to the public, agencies, and decision makers. Additionally, the EIR makes extensive use of summary tables in the Executive Summary and each resource chapter, as well as in appendices to provide the important information up front for readers. Maps, figures, and graphics contained in chapters and appendices are designed to provide the level of detail appropriate to depict potential effects and orient readers to locational information. Accordingly, not all maps are all the same scale; rather, the scale was selected based on the nature of the effects for a given resource area. The labeling in many map figures was minimized to be consistent with discussions in the narrative to maintain clarity and ease of use in the maps. Exhibit A [ATT 1] identifies general project features generated by the commenter, which are provided

Letter-Comment Number	Comment	Response
	https://savethedelta.saccounty.gov/Documents/Tunnel_Impacts_Map.pdf].	in more detail on multiple figures and on mapbooks throughout the EIR. Exhibit A [ATT 1] conflates the levees and the shaft pads in the Shaft Site (detail) callout box. Whether levees would be required at a shaft site depends on the location of the shaft site and the alternative. For example, as described in Chapter 3, section titled Alternative 3—Eastern Alignment, 6,000 cfs, Intakes B and C, portions of the Lower Roberts Island site would have targeted repairs to existing levees to address geometry and historic performance. This type of detailed information for each alternative is noted throughout Chapter 3 and the associated mapbooks (see Mapbook 3-3 for detailed maps of the proposed project and its major facilities). The figures referenced by the comment provide an overview of the Delta Conveyance alignments along with its major facilities imposed on the major water features in the area. Resource chapters include more detailed figures that portray the project alignment against specific resources to support the impact analysis.
514-7	In addition to the locations of major project features, the proposed operation of the project is also unclear. While "Preliminary Proposed Operations Criteria" are included in Chapter 3 (Draft EIR, pp. 3-149 to 3-156), the Draft EIR also refers to Real-Time Decision-making and Adaptive Management (Draft EIR, pp. 3-156 to 3-161), and the Draft EIR fails to explain what different operations than presented in the Draft EIR may ultimately be undertaken. According to the Draft EIR, the new north Delta diversions would be rarely utilized and the south Delta diversions would have priority. The Draft EIR states that SWP will first use south Delta facilities, and that "Shifting from south Delta intakes to proposed north Delta intakes has trade-offs and is not expected . . . ." (Draft EIR, p. 3-145.) As a result, the water supply modeling in the Draft EIR estimates that only 13% of	Please refer to Chapter 3, Description of the Proposed Project and Alternatives, section titled Integration of North Delta Intakes with South Delta Facilities, in addition to the section and table titled Delta Conveyance Project Preliminary Proposed Operations Criteria, related to specific operations criteria that would be used to operate the proposed north Delta intakes. Additional clarifications in the section titled Integration of North Delta Intakes with South Delta Facilities in Chapter 3 have been provided regarding project operations, which are reflected in the hydrologic modeling. None of the clarifications in Chapter 3 described in the EIR resulted in a new significant environmental impact or substantial increase in the severity of an environmental impact or required additional mitigation measures to which DWR was unwilling to commit. The hydrologic modeling performed for the EIR reflects how the project would operate. Multiple permits would be issued based on the operations in the project description (for list of permits, see Chapter 1, Introduction, table titled, Summary of Potential Agencies and Review, Approval, or Other Responsibilities, in

Letter-Comment Number	Comment	Response
	total Delta exports would be conveyed through the Tunnel, and that the diversions would be unused in the majority of calendar months. (See Draft EIR, Table 6-7.) It is not credible that the largest and most expensive water supply infrastructure project in California history would sit largely unused after it is built. According to the Delta Independent Science Board's Interim Draft Comments: [Footnote 8: DISB Comments, Appendix A: Additional Comments on Individual Chapters of the Draft Environmental Impact Report for the Delta Conveyance Project Dec, 1, 2022, pp. 35-36, available at: https://deltacouncil.ca.gov/delta-isb/meetings (Dec. 8, 2022 meeting, item 4). "The tunnel capacity factor is the ratio of additional annual North Delta diversions to those that would occur with the tunnel operating at 100% of its physical capacity.] The tunnel export capacity utilization rate is small on average, less than 15% for the preferred alternative, as an annual average over the 93-year simulation period for 2020 conditions." Common sense dictates that if the tunnel was built, it would be operated to divert far more than 13% of the SWP's water supplies in an average year, and that the operations described in the Draft EIR are incomplete and not credible. The unreasonably low utilization described in the Draft EIR skews all of the other impact analyses related to flow in the river, including water quality and fisheries impacts, for instance. At the same time, the operating parameters provided in the Draft EIR are not limited to diversions during high flow conditions, and pumping from the north Diversions could occur	Addition to Those under CEQA). DWR would not be at liberty to change operations to significantly increase the use of the Delta Conveyance Project facilities without also seeking new or amended permits. The description of operations in the EIR, including newly proposed and key existing criteria satisfying all applicable regulatory requirements, accurately and completely represent how the project would be operated and are accurately reflected in the modeling assumptions supporting the impact analyses. Real-time operations addressed in the EIR include decisions to protect sensitive fish species and comply with permit conditions. As described in Common Response 3, Alternatives Development and Description, the Operations Adaptive Management and Monitoring Plan would further allow for a process to adjust operations in consultation with fish agencies for fish and aquatic resources protections, if they are needed. The proposed north Delta intake facilities would be operated to capture excess flow when applicable environmental and regulatory conditions allow diversions and to provide additional Delta operational flexibility. The Delta Conveyance Project is a dual conveyance project. Existing south Delta SWP export facilities would be prioritized. Appendix 4B, North Delta Priority Sensitivity Analysis, indicates that prioritizing use of north Delta diversions versus south Delta facilities would not result in substantive changes to the EIR analyses. The effects of the proposed project operations are fully described in EIR resource chapters. Please refer to Chapter 5, Surface Water; Chapter 6, Water Supply; Chapter 7, Flood Protection; Chapter 9, Water Quality; Chapter 12, Fish and Aquatic Resources; and Chapter 13, Terrestrial Biological Resources. Please also refer to Common Response 3, Alternatives Development and Description, for additional descriptions of operations. Please also refer to Common Response 7, Implementation Considerations, regarding economic evaluations such as benefit-cost or financial feasibility analyses which are neither required nor typically included in an EIR as

Letter-Comment Number	Comment	Response
	year-round, including during late summer and fall months when water supply and quality issues are typically most severe. Given frequently existing degraded water quality and fishery conditions in the Delta, any new diversions considered in the Delta could only operate in high flows to avoid injury to other water users and unreasonable effects on fish and wildlife. Any new diversions would also need to be scaled appropriately and sited on lands already owned by the state or other project proponents. The project described in the Draft EIR does not meet these basic criteria. The DCC and the public need to know the likely effects of project operations, and the Draft EIR's failure to fully describe the project, along with its apparent underestimation of use of the new proposed diversions, at the same time as allowing potential diversions during low flow conditions, renders the Draft EIR's impact analyses incomplete and not credible.	project costs are not considered impacts under CEQA. As such, the potential project cost is not relevant to the proposed project operations as described in Chapter 3.
514-8	Draft EIR's Range of Project Alternatives too Narrow In 2019, after the decertification of the environmental review for the California WaterFix project, the DCC asked the state to truly have a "fresh start" to the conversation around upgrades to the state's water infrastructure to meet water supply needs of the state without causing devastating impacts in the Delta. For instance, in its April 17, 2020, comments on the Notice of Preparation, DCC suggested inclusion of a feasible alternative that improves the existing through Delta conveyance system to meet the state's water supply needs. Such an alternative would include levee improvements to ensure protection of the state's water supply infrastructure, along with other local and state infrastructure. Such infrastructure could include preparing the existing South Delta facilities for sea level rise and increased	Please refer to Appendix 3A, Identification of Water Conveyance Alternatives, and Common Response 3, Alternatives Development and Description, regarding the alternatives development process, and the adequacy of the range and scope of alternatives analyzed in the EIR which do not support the assertion that the range of project alternatives is too narrow. Levee improvements would not meet the project objectives for water supply, climate change and seismic resilience and were not considered further for detailed review in the EIR. Delta levee improvements are the responsibility of local state and federal agencies and occur on an on-going basis as needed. Other suggested facility improvements such as south Delta facility improvements for sea-level rise, Delta Cross-Channel gate operational changes and fish screens on diversions may occur as separate projects but do not directly address the stated purpose and project objectives and were not considered further in the EIR.

Letter-Comment Number	Comment	Response
	salinity, modifying the Delta Cross Channel gate operations to reduce diversions of protected fish from the Sacramento River, as well as improving fish screening and salvage operations to reduce mortality from entrainment and salvage from existing facilities, installation of fish screens operable at low flows at the existing Clifton Court Forebay facilities is a potential action that could reduce fish salvage and predation losses, leading to reduced mortality of sensitive species and increasing water supply reliability. Through-Delta conveyance meets the state's co-equal goals mandate of water supply reliability and ecosystem restoration in the Delta, provides critical flow through the Estuary to the Bay, preserves water quality and helps control invasive species while irrigating prime farmland in the Delta. Strengthening Delta levees is vital to protecting over $60 billion of critical infrastructure, including pipelines, state highways and power and communication lines, along with the state's water supply delivery system. In addition to statewide benefits, this infrastructure safeguards the lives and livelihoods of four million Delta Counties residents, and protects a vital Delta agricultural industry that contributes more than $4 billion to the state's economy each year and supports a Northern California mega-region economy with an $875 billion annual gross regional product. The state and local partner investment program in Delta levees is incredibly successful. With an average $22 million per year investment since the 1980's, there has been a 50 percent reduction in levee failures. For about $1-2 billion (spent over 10-15 years), Delta levees could be improved to the baseline Bulletin 192-82 standard with a 24-foot wide crown and an interior levee bench to further safeguard against potential earthquakes and rising sea levels. Through an adaptive design, the need for incremental levees raises as conditions change can be accommodated. Operations	Please refer to response to comment 514-3; Common Response 3, Alternatives Development and Description; and EIR Appendix 3A, Identification of Water Conveyance Alternatives for additional information on the range of alternatives considered. Specifically, Appendix 3A explains that a Through-Delta Conveyance with No New Conveyance alternative was eliminated from further review because it would not meet water supply reliability and climate and seismic resilience objectives because of increasing limitations on one south Delta diversion location. Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities that are of interest (e.g., Delta Independent Science Board). Responses to all comment letters are provided in Volume 2, Chapter 4, Response to Comments Tables.

Letter-Comment Number	Comment	Response
	and maintenance upgrades to existing conveyance infrastructure in the Delta to maintain flow sand continue providing water to other parts of the state are essential. Upgrades reduce fish entrainment and reduce reverse flows have been considered, but have been delayed while hundreds of millions are spent planning a controversial and damaging Delta tunnel. For example, non-physical fish barriers and/or physical screens should be implemented to safeguard fish along the freshwater pathway to the existing state and federal water project diversions. The use of existing water infrastructure in the Delta, coupled with brackish water treatment, should also be considered. The early dismissal of these and other alternatives in Draft EIR Appendix 3A is unsupported. Notably, Table 3A-2 Alternatives Eliminated at First Level Screening appears to be based on analyses of the California WaterFix project, and has not been updated. In addition, this analysis fails to account for the feasibility of a continued through Delta alternative, ignoring the successes of work in recent decades to improve levee resilience to protect against both potential earthquakes and sea level rise. The failure to include levee upgrades is also contrary to the statements in the Draft EIR to the effect that the project would be "dual conveyance", meaning the SWP would also continue to pump water from the existing south Delta facilities. In addition, to the extent the Draft EIR considers smaller sized tunnel projects, it should have considered smaller tunnel capacities as well. According to the Interim Draft comments of the DISB [Delta Independent Science Board], average tunnel utilization is small, relative to its maximum conveyance capacity. Tunnel utilization is below 40% in 50% of years, which raises questions about optimal tunnel sizing [Footnote 9: DISB Comments, Delta Conveyance Project Draft Environmental	

Letter-Comment Number	Comment	Response
	Impact Report Review, Dec, 1, 2022, p. 10, available at: https://deltacouncil.ca.gov/delta-isb/meetings (Dec. 8, 2022 meeting, item 4)] as well as the ability of the SWP to finance construction (addressed in separate expert comments). The fact that DWR is authorized to develop its own project objectives as a project applicant does not justify the failure to analyze reasonable alternatives to the Delta Tunnel. In addition, as recognized by the DISB, the presentation of alternative performances and tradeoffs in the Draft EIR needs improvement [Footnote 10: DISB Comments, Delta Conveyance Project Draft Environmental Impact Report Review, Dec, 1, 2022, pp. 21-24, available at: https://deltacouncil.ca.gov/delta-isb/meetings (Dec. 8, 2022 meeting, item 4)].	
514-9	Exhibit 1: Cumulative Levee Failures from 1925-2020	The commenter provided this exhibit for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter. See responses to comments 514-3 and 514-8 regarding the range of project alternatives.
514-10	Project Impacts are not Fully Disclosed or Mitigated to the Extent Feasible Despite the massive scale of the project, the Draft EIR concludes that many impacts of the project would be less than significant. Many of these conclusions are incomplete and not credible in light of readily available information. The Draft EIR appears to overstate the likely effectiveness of mitigation for many impacts, including impacts on important salmon fisheries that would all need to pass by the experimental fish screens. As noted by other experts, these fish may spend more than an hour and a half attempting to pass the lengthy screens; no other comparable installations have been built and tested to support the Draft EIR's conclusions regarding effectiveness in preventing fish mortality. In addition, as referenced above, the	Fish screens have been used and are a proven technology, as reflected in citations included in Chapter 12, Fish and Aquatic Resources, Impacts AQUA-2 and AQUA-6. The comment provides no detail as to its rationale for why mitigation effectiveness is overstated; mitigation has been developed consistent with prior project mitigation requirements and further detail has been added to the Final EIR to document the means of calculation of mitigation extent for Mitigation Measure CMP, specifically CMP-25. With respect to the duration of fish passing the intakes, the EIR cites specific studies conducted at UC Davis to inform risk of screen contact/injury, with mortality considerations related to predation being informed by several Central Valley studies, which suggest limited potential for negative effects. Per National Marine Fisheries Service and California Department of Fish and Wildlife criteria, the maximum approach velocity described for the intakes is 0.2 feet per second. In combination with minimum sweeping velocities, minimum bypass flows, and additional

Letter-Comment Number	Comment	Response
	low tunnel utilization rate suggested in the Draft EIR also skews the significance findings for many impacts.	"pulse" protection, this results in less-than-significant impacts as a result of near-field effects. Uncertainty is addressed with fisheries studies as part of adaptive management considerations. The impact analysis presented in Chapter 12 accurately reflects modeling that represents the proposed operational criteria.
514-11	Long Term Water Quality Impacts According to the Draft EIR Chapter 9, all water quality impacts except those related to the Effects on Mercury Resulting from Facility Operations and Maintenance (WQ-6) would be less than significant with no mitigation. Other technical comments on the Draft EIR go into more detail, but DCC does not agree that long term water quality impacts would be less than significant. Major concerns include: Water quality modeling relies on monthly average outputs, which do not provide the information needed to assess the impacts of the proposed project on water diversion operations, which are conducted on an hourly timeframe. Reliance on monthly averages tends to mask water quality impacts on local water uses. The Draft EIR fails to fully assess the project's potential to increase the incidence of Harmful Algal Blooms (HABs), which are becoming increasingly common in the Delta and warmer temperatures, reduced flow, high residence time, and more concentrated nutrients are likely to exacerbate the problem. Unlike the 2016 California WaterFix Final EIR (2016), there is no analysis of impacts to the San Francisco Bay. The Sacramento River is the primary source of freshwater for the Delta and the San Francisco Bay. The project would reduce outflow as	Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the presentation of data and use of monthly average modeling results in the impact analysis. A complete assessment of the impacts on CHABs is provided in Chapter 9, Impact WQ-14, which addresses the factors that affect CHABs, including temperature, flow velocity, residence time, and nutrients. Water quality impacts in San Francisco Bay are addressed in Chapter 9, Impacts WQ-1 through WQ-14, and in the Cumulative Analysis section.

Letter-Comment Number	Comment	Response
	compared to existing conditions, and the impact on the health of the San Francisco Bay should be considered.	
514-12	Water Supply Impacts The DCC's [Delta Counties Coalition's] comments on the NOP requested that the Draft EIR analyze the changes in water supplies for all water users, both in and out of the Delta, using a readily understandable analytical approach. While the Draft EIR includes a description of water agencies within the Delta (Draft EIR, pp. 6-31 to 6-33), there is no analysis of the water supply impacts on these water users in the DEIR. Effects on local water supplies should be considered, not just effects on export water supplies. The DCC is disappointed that the Delta's own longstanding beneficial uses of Delta water are overlooked in the Draft EIR.	As described in Chapter 2, Purpose and Project Objectives, the basic objective of the Delta Conveyance Project is to restore and protect the reliability of SWP water deliveries. The Delta Conveyance Project is not proposing changes to operations or amount of storage provided by upstream facilities and water would be primarily diverted from the Sacramento River during excess conditions/high flow events (please see Chapter 38, Glossary, for a definition of excess and Common Response 3, Alternatives Development and Description, for details regarding project operations during excess conditions). Chapter 3, Description of the Proposed Project and Alternatives, identifies that the Delta Conveyance Project is not proposing to increase the total quantity of water permitted for diversion under existing DWR water rights. DWR is required to, and will continue to comply with, the State of California water rights priority system, including area of origin statutes. As described in the section titled Water Demands and Water Use in Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Operations Modeling, CalSim 3 incorporates input related to agricultural water demands and water use, managed wetlands water demands, urban water demands, and water contracts, including agencies and water districts within each of the counties represented by the DCC. These were all considered in the analysis of water supply in the EIR in Chapter 6, Water Supply. Chapter 9, Water Quality, provides analysis of water quality impacts that would occur as a result of both project construction and operations. Impact discussions WQ-2 through WQ-14 provide discussions of expected impacts relative to specific water quality constituents and are organized by geographical area, including the Delta. This chapter determines impacts on water quality would be less than significant and therefore would not affect water supply. As described in Chapter 5, Surface Water, flows would not be substantially reduced in the Sacramento River. Please see Common

Letter-Comment Number	Comment	Response
		Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the scope of the analysis in the EIR, including the evaluation of water-dependent resources that consider changes in water supply or surface water.
514-13	Agricultural Impacts Each year California loses an average of 50,000 acres of farmland. The Delta is the largest contiguous area of prime farmland in the state (738,000 acres total, with over 415,000 acres in over 70 types of crops), and gross revenue of farms within the legal Delta totaled $965 million in 2016. [Footnote 11: Delta Protection Commission, The State of the Delta Agriculture: Economic Impact, Conservation and Trends February 3, 2020, can be accessed at https://delta.ca.gov/wp-content/uploads/2020/07/Ag-ESP-update-agricultural-trends-FINAL-508.pdf] Delta farms and related food and beverage manufacturing supported over 23,000 jobs across California and $4.6 billion in output. While the Draft EIR asserts that farmland in the Delta has been and will continue be subject to conversion pressure, this is incorrect, as state and local laws prevent most farmland conversion in the Primary Zone of the Delta. The DCP tunnel, not other types of development, is currently the largest threat to Delta farms. The DCP would directly convert 3,787 acres of farmland to nonagricultural uses to build the tunnel and associated compensatory mitigation. (Draft EIR, p. 15-3.) The Draft EIR fails to fully address these impacts, as well as to provide adequate farmland mitigation. Among other flaws, Mitigation Measure AG-1 requires 1:1 mitigation for conversion, but mitigation acreage is not targeted to preserve agricultural land in the Delta that is	The commenter asserts that the EIR does not fully address impacts on agricultural resources and that the proposed mitigation measures are inadequate to address impacts on agricultural resources within the study area. That assertion is not supported by the analyses contained in the EIR. The impact analysis within Chapter 15, Agricultural Resources, considers direct and indirect effects of project construction and operational effects to agriculture. Direct effects to agriculture include conversion of farmland associated with construction of permanent water conveyance facilities and appurtenant infrastructure. The EIR also considers the effects of stockpiling of RTM on farmland. Furthermore, the EIR analyzes indirect effects to agricultural including the effects of project construction and operation on factors such as groundwater elevations, as it pertains to the ability for agricultural operators to have effective drainage of their farmlands, and the project's operational effects to the salinity levels in the Delta as it affects agricultural irrigation water quality. Additionally, the last portion of Chapter 15 also considers the cumulative effect of the project on agricultural farmland conversion when taking consideration of other restoration and development plans, projects, and programs in the region. All mitigation measures presented in the EIR were developed in compliance with current CEQA guidelines, including but not limited to that the measure is feasible (CEQA Guidelines § 15041) and maintains a rough proportionality between the measure and the impact associated with the project (CEQA Guidelines § 15126.4, subd. (a)(4)(B)). Please see Common Response 12, Agricultural Resources, for further discussion of the effectiveness of mitigation measures specifically identified in Chapter 15 that lessen the adverse effects of the project on agricultural resources. As described in Common Response 12, when evaluating areas to serve as

Letter-Comment Number	Comment	Response
	actually under development pressure. Moreover, the "optional approach" authorized by Mitigation Measure AG-1 to fund farm improvements to enhance farmland productivity consistent with "Agricultural Land Stewardship Consideration A2," as an alternative to agricultural conservation, fails to include any performance criteria that would be necessary to ensure it actually mitigated agricultural impacts identified by the Draft EIR.	agricultural mitigation, it was important for DWR to consider whether those areas provide an equivalent quality of farmland as the farmland to be permanently converted (i.e., “like for like”). A myriad of factors can affect the quality of farmland, including character, productivity, and heritage. As described in Common Response 12, land targeted for mitigation under Mitigation Measure AG-1 will include agricultural areas vulnerable to development pressure. Given that much of the interior of the Delta is protected from urbanizing growth as a result of the Delta Protection Act, implementation of Mitigation Measure AG-1 is expected to consider farmland areas within the Delta counties that are located outside the study area for this project (i.e., statutory Delta and certain areas immediately adjacent to the Delta) that are subject to foreseeable development pressure. Also described in Common Response 12, farmland areas considered to be subject to foreseeable development include those areas immediately adjacent to the outer extent of established spheres of influence, since those farmland areas can reasonably be expected to be targeted for future growth within future municipal or county level planning processes. Additionally, as described in Common Response 12, farmland areas vulnerable to foreseeable development include existing agricultural areas that have already been zoned in general plans for non-agricultural use. The commenter asserts that the EIR is incorrect in stating that farmland in the Delta is subject to ongoing development pressure as laws prevent most farmland in the Primary Zone of the Delta. While the Delta Protection Act largely protects farmland within the interior Delta (i.e., the Primary Zone of the Delta) from development, urban conversion pressures remain in the outer portions of the Delta (i.e., the Secondary Zone), especially in certain portions of San Joaquin County around the Stockton area. The commenter expresses a concern regarding performance criteria for Mitigation Measure AG-1 if DWR uses an optional approach of funding

Letter-Comment Number	Comment	Response
		farm improvements to enhance the productivity of lower-quality farmland. As described in Common Response 12, improvements to productivity for an agricultural property not considered to be an Important Farmland type (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance) would be implemented in a manner to improve in part or in whole an agricultural property to Prime Farmland or Farmland of Statewide Importance status as shown on subsequent Farmland Mapping and Monitoring Program Important Farmland Maps following completion of such improvements.
514-14	Flood Control Impacts The Draft EIR fails to recognize strides made in recent years to improve flood control resiliency in the Delta. The Metropolitan Water District (MWD), along with state and local partners, has significantly improved the Freshwater Pathway to the state and federal water export pumps. This work has focused on improving levees and emergency preparedness along the corridors that freshwater flows. As a result of these efforts, MWD estimates that the maximum outage for exports of water from the Delta has been reduced to less than six months, which is well within the regional storage capacity of areas served by the State Water Project.	This comment does not raise a significant environmental issue associated with the Delta Conveyance Project and is beyond the scope of the EIR. DWR has reviewed all comments and will consider all comments in its decision-making process. Please refer to the Regional Planning Efforts Related to Delta Flood Management section in Chapter 7, Flood Protection, regarding planning efforts to address flood management and emergency preparedness in recent years.
514-15	Exhibit 2: Risk Mitigation Options for Flooding	The commenter provided this exhibit for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter.
514-16	In addition, the Draft EIR does not recognize the potential of the project to reduce funding availability for non-project levees that are currently the responsibility of private landowners and reclamation districts. The conversion of nearly 3,800 acres of farmland would reduce agricultural productivity and the ability of landowners to provide cost sharing for levee maintenance and improvement projects. The indirect impacts on agricultural	Funding for local reclamation districts supporting non-project levees would continue to be collected from converted lands in the project footprint because the state would continue to pay the district assessments. ECON-4 qualitatively discusses effects on local governments. As described in ECON-4, California law requires full mitigation of property taxes or assessments levied by local governments or special districts for any land that DWR would acquire for the project (California Water Code § 85089). Therefore,

Letter-Comment Number	Comment	Response
	operations from worsened water quality under the project would also reduce resources available for flood control investments.	any property taxes or assessments for levee improvements to local reclamation districts affected by productive acreage removed in the project footprint would be mitigated. Please also refer to Common Response 7, Implementation Considerations, regarding flood control funding and assessments to special districts. The potential effects on agricultural resources due to water quality changes are discussed in Chapter 15, Agriculture. Impact AG-3 finds that, under each project alternative, salinity levels would not exceed the water quality standards set by the State Water Resources Control Board put in place to protect beneficial agricultural uses, and that no additional farmland would be converted to non-agricultural uses as a result.
514-17	Groundwater Impacts The Delta counties are within subbasins subject to adopted Groundwater Sustainability Plans under the Sustainable Groundwater Management Act. (Wat. Code, § 10720 et seq.) The Draft EIR, however, fails to analyze the effects of the project during construction and operation on these subbasins' ability to successfully implement their Groundwater Sustainability Plans. During construction, the project would place cutoff walls and implement dewatering in a variety of locations, yet the Draft EIR fails to examine how these physical changes would affect groundwater levels and uses in the vicinity of these activities, which would occur in the South American, Eastern San Joaquin and East Contra Costa Subbasins. In addition, the diversion of up to 1/3 to 1/2 of the flow of the Sacramento River would decrease water recharge from the River to the South American and Eastern San Joaquin Subbasins. The Draft EIR also fails to quantitatively assess these impacts and no mitigation is provided. As the agency that determines whether a Groundwater Sustainability Plan	Please refer to Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding consideration of groundwater sustainability plans, including the south American, Eastern San Joaquin, and East Contra Costa. As described in that Common Response, the groundwater analysis contained in Chapter 8, Groundwater, found groundwater impacts to be less than significant and the project would not interfere with successful implementation of GSPs. Please refer to Common Response 10, Surface Water Quality and Groundwater Resources, which provides additional clarifying information regarding the methodology and information used to adequately and appropriately evaluate construction-related impacts described in Chapter 8. As described in Common Response 10 and Chapter 8 (in the section titled Methods for Analysis), the Delta Conveyance Project construction-related impacts are evaluated using existing groundwater conditions and hydrogeology, standard design and construction methods (Delta Conveyance Design and Construction Authority 2022c, 2022d), and anticipated changes in groundwater elevations, storage, and quality during construction. In addition, as described in Chapter 8, DWR proposed Mitigation Measure GW-1 to monitor during construction to identify

Letter-Comment Number	Comment	Response
	complies with SGMA and is likely to achieve the sustainability goal for the basin, the DCC would expect DWR to provide a more detailed analysis of groundwater impacts of the tunnel project. (See Wat. Code, §§ 10733-10735.)	substantial decline in groundwater due to construction of the project facilities.
514-18	Recreation and Aesthetic Impacts Recreation in the Delta is important to Delta residents, visitors and the local economy. The Delta is California's most crucial water and ecological resource, and is the largest freshwater tidal estuary of its kind on the west coast of the Americas. In addition to providing important habitat for birds on the Pacific Flyway and for fish that live in or pass through the Delta, the Delta houses historic towns, scenic roads, farm stands, and ample opportunities for recreation, including boating, birding, biking and fishing. This unique place brings people from all over the state for recreation and tourism. The Delta supports a recreation and tourism industry that provides an estimated $251 million in direct Delta recreation spending each year. [Footnote 12: Delta Protection Commission, Economic Sustainability Plan for the Sacramento-San Joaquin Delta, Recreation and Tourism Chapter 2020 Update [DPC 2021b], p. v.]	This information describes specific attributes of the Delta recreation, aesthetics, and tourism. It is not a comment on the contents of the EIR. DWR has reviewed all comments and will consider all comments in its decision-making process. The uniqueness and specific attributes of the Delta are discussed in Chapter 16, Recreation, in the section titled Description of Existing Conditions in the Study Area. Also please refer to the descriptions provided in Chapter 18, Aesthetics and Visual Resources, in the section titled Visual Characterization of the Study Area.
514-19	Additionally, the Delta Protection Commission (DPC) found that "Nature and access to the water are the most appealing aspects of the Delta." (DPC 2021b, p. 41.) Part of the DPC's Sacramento-San Joaquin Delta Economic Sustainability Plan's recreation enhancement goals is to promote recreation destinations as focal points in the Delta and highlight Delta values by highlighting Legacy Communities. (Id. At 81.) The Economic Sustainability Plan determined that "The first focal point destination is proposed to include the Legacy Communities of Locke, Walnut Grove, Ryde, Courtland, and	The Delta Conveyance Project has been designed to lessen potential effects on communities and visitors using River Road (State Route 160) that connects them. Chapter 3, Description of the Proposed Project and Alternatives, in the section titled On-Site Roads at the Intakes, states permanent separate paved roads and gravel-surfaced roads and work areas would be constructed at the intakes for use during construction and later operation. As noted in this section, under each alternative intake configuration, new roads would be developed and construction access and primary maintenance access to the intake site would be from the new intake road. These roads and access areas will keep construction activity

Letter-Comment Number	Comment	Response
	Hood. (Id. At 86.) All of these communities would be severely impacted by the tunnel project. As discussed in additional detail below, the construction, muck piles, and permanent infrastructure would decimate the aesthetic value of several areas of the Delta. In doing so, the project would not only create aesthetic and recreational impacts, but also create additional barriers to obtaining the goals of the Economic Sustainability Plan.	away from community access routes along State Route 160. Spoils will only be located at Twin Cities Complex near Interstate 5 (all alternatives), on Bouldin Island interior (Alternatives 1, 2a, 2b, and 2c), and on Lower Roberts Island (Alternatives 3, 4a, 4b, 4c, and 5), and these locations are not readily visible from or adjacent to the communities themselves. The comment assertions regarding potential aesthetic or other effects on the communities in the Delta are not supported by the analysis in the EIR. Please refer to Chapter 17, Socioeconomics, and Chapter 18, Aesthetics and Visual Resources, for discussion of effects and the potentially significant environmental impacts on the resources mentioned in the comment. Specifically, the Chapter 18 table titled Affected Viewer Groups and Associated Sensitivities for the Project in the section titled Characterization of Viewers provides a comprehensive list and definitions of viewer types, including residential, recreational, and business/institutional viewers. Effects on residential viewers in the study area from stationary vantage points, as well as traveling State Route 160 and County Route E9 (across the Sacramento River from the intake sites) are considered in intake impacts described under Impact AES-1, including the communities of Clarksburg and Hood, which were identified as areas with a high density of residential viewers affected by the project. The analysis of visual impacts attributable to the project in Impact AES-1 found the project would create a strong visual contrast at many project component sites, including the RTM stockpile. In summary, under Impact AES-1, it was found the project would have significant unavoidable impacts on the visual quality and character of the project study area even with the implementation of Mitigation Measures AES-1a, AES-1b, and AES-1c. While the Delta Community Fund is not a CEQA requirement, as described in Appendix 3G, Community Benefits Program Framework, the fund could

Letter-Comment Number	Comment	Response
		be used to fund actions to enhance efforts that would support the unique culture and history of the Delta community, as well as recreation, agriculture, and the economic vitality of Delta communities, which is consistent with the goals of the Delta Protection Commission's Economic Sustainability Plan.
514-20	In 2019, the Delta was designated as a National Heritage Area, commencing the influx of support for development of the Delta National Heritage Area Management Plan, among other activities. It is expected that the National Heritage Area designation and resulting federal investment will support improvements to recreational and tourist activities in the Delta. The Delta Counties have been working alongside local, state and federal leaders for decades to improve conditions in the Delta and to maintain and enhance the Delta for local residents as well as visitors from around the world. Many of these opportunities serve low-income residents, including subsistence fishing and other low-cost recreational opportunities. The Tunnel project, with its decade plus construction period, and then the permanent changes to the river and local landscapes, would interfere with realization of these recreational access improvements. In addition, though the Draft EIR recognizes that aesthetic impacts of the project would be significant, it fails to assess how these aesthetic changes would affect recreational opportunities in the Delta near the many areas that the project impacts and changes would occur.	The comment assertion that the project construction and permanent presence of the project features would interfere with upcoming recreation and tourism improvements is not supported by the analyses contained in the EIR. The project plans are generally away and apart from the main tourist areas and would not remove or change the recreation utility of river channels or recreation areas. Chapter 17, Socioeconomics, evaluates the recreational experience by recreationists and considers multiple variables, including aesthetics, of the recreational experience in the Delta as part of ECON-5. As noted in the beginning of Chapter 17, socioeconomics covers economic conditions, community character, and demographic characteristics of the study area that may be affected by the construction or operation of water conveyance facilities. CEQA does not require a discussion of socioeconomic effects, except where they would result in reasonably foreseeable physical changes to the environment. For additional information regarding the potential physical environmental impacts on aesthetics and recreation, please refer to Chapter 16, Recreation, and Chapter 18, Aesthetics and Visual Resources, respectively. Chapter 18 includes the analysis of site-specific physical environmental impacts associated with aesthetics. The recreation impact analysis in Chapter 16 considered a variety of short- and long-term changes to the physical environment as a result of construction and operation of the project. Please refer to Chapter 16, including Impacts REC-1 and REC-2, for analysis of impacts on recreation.
514-21	Air Quality, Health and Transportation Impacts The DCC is also very concerned about the air emissions from up	The project would be implemented in a manner intended to minimize regional and localized air quality emissions and the potential for adverse health effects in neighboring communities. As described in Appendix 3B,

Letter-Comment Number	Comment	Response
	to 13 years or more of construction, much of which would be near existing communities and on roads with little capacity for construction of what is known as a "megaproject" As explained in separate expert comments, the air emissions analysis underestimates emissions as well as resulting health risks from the project. In addition, the Draft EIR fails to adequately disclose all of the traffic that would result from project construction, including trips that would be through counties outside of the direct footprint. Especially for a project intended entirely to serve other areas of the state, the DCC finds these burdens on its residents and businesses to be unacceptable.	Environmental Commitments and Best Management Practices, all feasible onsite emissions reduction measures have been incorporated into the project design. These include performance standards to ensure construction contractors utilize newer offroad (including marine and locomotive) and on-road engine technologies that are significantly cleaner and generate fewer emissions than older models. Fugitive dust emissions would be reduced through implementation of a robust dust control plan and best management practices at new concrete batch plants. These environmental commitments will limit onsite construction emissions to the greatest extent practical, reducing both regional and local pollutants and associated human health impacts. Project design criteria have also been developed to restrict heavy-truck traffic on several Delta roadways (refer to Appendix 20A, Delta Conveyance 2020 Traffic Analysis). Construction workers likewise will not be allowed to use most Delta roadways. Restricting construction traffic along certain Delta roads will minimize heavy-truck travel through residential communities and associated receptor exposure to project-generated emissions. This is confirmed by analysis conducted for the EIR, which demonstrates diesel emissions from haul trucks would not result in a significant health risk impact (refer to Appendix 23C, Health Risk Assessment and Ambient Air Quality Analysis Methodology, and Chapter 23, Air Quality and Greenhouse Gases). The commenter references separate expert comments to support their assertion of emissions underestimation. The air quality analysis was conducted using standard analysis methods and software recommended and accepted by the U.S. Environmental Protection Agency (USEPA), California Air Resources Board (CARB), and local air districts. Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities that are of interest. Responses to all comment letters are provided in Volume 2,

Letter-Comment Number	Comment	Response
		Chapter 4, Response to Comments Tables. See also Common Response 15, Air Quality and Greenhouse Gases, regarding the methodology and approach, including software used, that is recognized and supported by state and federal agencies. Chapter 20, Transportation, and supporting appendices provide disclosure of traffic impacts within the described study area and meets CEQA requirements related to transportation and the methodologies to analyze potential traffic impacts. Please see Common Response 14, Transportation, for a description of the analysis conducted in Chapter 20.
514-22	Conclusion The DCC is disappointed that despite years of effort and attempted engagement, the State is still pursuing what is essentially the same Tunnel project as was set aside in 2019. While the State is moving forward on more resilient, less damaging and smarter water projects in other areas, the Tunnel would continue to turn the Delta into a sacrifice zone. This is unacceptable.	Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding comments that state opinions of general opposition to the project. This comment does not raise a significant environmental issue relating to the proposed project or address the adequacy, accuracy, or completeness of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process. Please refer to Chapter 2, Purpose and Project Objectives, as well as Common Response 1 regarding the purpose and objectives of the project. Please also refer to Appendix 3A, Identification of Water Conveyance Alternatives, and Common Response 3, Alternatives Development and Description, regarding the alternatives development process and the range and scope of alternatives considered.
514-23	The DCC continues to be available to work with DWR to advance real improvements to the state's water supply system that also protect the Delta environment and the communities that reside there.	DWR is committed to working with all interested parties. This is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
514-24	Attachment 1: Map of DCP project area developed by public using DWR's GIS data that includes landscape and community information.	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter.

Letter-Comment Number	Comment	Response
517-1	Reclamation District N0. 2029 (Empire Tract) and Reclamation District No. 2044 (King Island) (collectively "the Districts") are public agencies within the Sacramento-San Joaquin Delta, adjacent to and within the proposed Delta Conveyance Project (Delta Tunnel), area of influence. The Districts appreciate the opportunity to submit comments on the draft Environmental Impact Report (DEIR) for the proposed Delta Tunnel.	This information describes the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
517-2	These comments are focused on the likely impacts and concerns related to flood control, drainage and potential impacts related to access, resource scarcity, buried and exposed resources, levee stability and other items tied to operations, maintenance, repairs, rehabilitation and replacement (OMRR&R) over the life of the construction of this project which could impact the Districts.	This information describes the structure of the comment letter and is general introductory text. The concerns raised in this comment are discussed and responded to in the comments that follow.
517-3	The Department of Water Resources (DWR) has been actively pursuing potential isolated water conveyance infrastructure that would impact elements of flood control and drainage for reclamation districts in the delta, depending on the location and proximity of intakes, and intermediate shafts, including potential impacts associated with settlement along the tunneling alignments in the proposed alternatives and preferred alternative, alternative 5.	The comments regarding the significance of impacts on flood control, drainage, and settlement are not supported by the analyses contained in Chapter 7, Flood Protection, and Chapter 10, Geology and Seismicity Chapter 7, Flood Protection, provides the results of the analysis of flood control and drainage impacts attributable to constructing and operating the Delta Conveyance Project. As demonstrated in Chapter 7, all flood and drainage related impacts would be less than significant for all project alternatives, with the exception of Alternatives 2a and 4a. The construction-related impacts occurring under Alternatives 2a and 4a would be reduced to a less-than-significant level through mitigation. Please see Chapter 10, Geology and Seismicity, Impact GEO-4, which analyzes the potential for tunnel-induced ground settlement and surface structure-related ground settlement. The impact was determined to be less than significant. Furthermore, the Tunneling Effects Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022e) provides a sufficient level of detail to show that settlement will be

Letter-Comment Number	Comment	Response
		minor overall and that future geotechnical studies would determine what site-specific measures would be needed to protect existing infrastructure and buildings. With today's state-of- the-art pressurized tunnel boring machines, face losses are unlikely to cause surface settlement problems as long as face pressures are maintained, voids around the segmental lining are filled with backfill grout, injection quantities are continuously monitored and checked with theoretical volumes, and additional backfill grout is automatically injected if needed.
517-4	Dual Conveyance Alternative Description A critical element of dual conveyance requires a detailed project description of the necessary rehabilitation and improvement of the existing system of levees throughout the Delta. This should include an evaluation of Project and Non-Project levee features to ensure reliability of the through Delta conveyance system. This should include not only levees and channels downstream of the Delta Cross Channel and the Old/Middle River corridor, but all levee systems to ensure protection of freshwater through the Delta, as well as ensuring protection and access to intake and shaft components of the proposed Delta Tunnel. This element of the preferred alternative is not well defined, it is difficult to determine if this is a significant element in the current DEIR. This should be included in the final EIR, and added to the no-action alternative.	Please refer to Common Response 3, Alternatives Development and Description, for a discussion of comment-suggested infrastructure and water management alternatives and why levee repairs and upgrades were not included as a project alternative in the EIR. Delta-wide levee work is beyond the scope of the Delta Conveyance Project. Impact FP-1 in Chapter 7, Flood Protection, and the Delta Conveyance Design and Construction Authority Intake Flood Management technical memorandum and Levee Vulnerability Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022a, 2022b) assessed impacts on urban and nonurban Delta levees during the construction and postconstruction phases of the project. The analysis in Chapter 7 concludes that the construction and operation of the Delta Conveyance Project would not result in reduction in flood protection provided by the existing levee system. Please also see Common Response 4, No Project Alternative Description and Analysis, regarding the CEQA requirements for describing and evaluating a No Project Alternative in an EIR and how the No Project Alternative for the Delta Conveyance Project meets those requirements.
517-5	Rehabilitation and improvement of the existing Delta levee system provides assurances for water supply reliability, water quality and support of the Co-Equal goals. King Island does not meet Bulletin 192-82, the Five-year Plan to be completed in	Please refer to Chapter 2, Purpose and Project Objectives, regarding the purpose of the project. Although the Delta Conveyance Project is not a flood control project, it would not affect current or future flood control activities within the Delta.

Letter-Comment Number	Comment	Response
	2023 does estimate that cost to build out to Bulletin 192-82. The Final EIR should incorporate cost estimates for the Delta to meet Bulletin 192-82. A critical encroachment element within Empire Tract and King Island that traverses north of the Eight Mile Road Alignment is the City of Stockton Water Supply Project pipeline. This feature is bored through the levees and buried through "the Districts" interior levees. Any movement of this line could impact this critical feature as well.	Per CEQA Guidelines, Section 15124, a project description shall contain information pertaining to the general description of a project's technical, economic, and environmental characteristic, but not supply extensive detail beyond that needed for evaluation and review of the environmental impact. As such, detailed costs are not presented in the EIR. Please refer to Common Response 7, Implementation Considerations, regarding further discussion on project costs. As described in the Process and Method of Review for Impeding or Redirecting Localized Flood Flow section of Chapter 7, Flood Protection, and in the Local Water Supply, Drainage, and Utilities section of Chapter 3, Description of the Proposed Project and Alternatives, the location and capacity of existing drainage and irrigation facilities that may be affected by construction of the Delta Conveyance Project would be determined and the capacity of this infrastructure to convey drainage or irrigation water would be maintained. As described in Areas Subject to Flooding section of Chapter 7, federal, state, and local regulatory requirement represent the minimum level of compliance needed. As described in the Utility Potholing section of Chapter 3, investigations including vacuum or backhoe excavations, noninvasive surface field surveys, and potholing would be conducted to identify the buried features within the construction boundaries of the project, which would be addressed in the final design.
517-6	Duration of Construction (Impacts to flood control and drainage systems) A primary concern to the King Island is the impacts associated with the construction and duration of the proposed Delta	Consultation with San Joaquin County is a requirement established by DWR for contractors to develop and implement transportation demand management plans (TDMs) and traffic management plans (TMPs) prior to construction of the maintenance shaft on King Island. These San Joaquin County-approved documents could include the need to monitor and repair

Letter-Comment Number	Comment	Response
	Tunnel. The project will rely upon hauling materials between multiple project sites to staging and laydown areas relying on trucking primarily, and local, county, and state roads, bridges and numerous channel crossings, due to the construction not the Maintenance shaft proposed within King Island. Impacts due to construction traffic have to be monitored and coordinated well in advance to ensure all elements associated with the project have been identified in advance with contingencies, BMP's, and all avoidance measures in place, along with a robust action plan to repair and replace during construction and rehabilitation post construction. This aspect should be well defined in the final EIR.	the transportation network serving King Island, including Eight Mile Road, King Island Road, and Bacon Island Road to their pre-construction condition. These requirements are discussed in Impact TRANS-3 in Chapter 20, Transportation. DWR will conduct pre-construction pavement analysis of access roadway segments and determine the need to improve these access roads. Improvements may include pavement remediation (e.g., fill potholes, asphalt cracking and slurry seals), road widening (minimum of 12 feet), and other roadway design options to serve construction traffic. After completion of a project site construction, the condition of the access roads for each construction site will be analyzed, and remediation of roadways will be completed as needed to return the facility to the improved conditions that were constructed by DWR.
517-7	A detailed analysis of all known features along, through and traversing the district boundary [King Island and Empire Tract], and those buried features including gas lines, water and sewer systems, communication and data portals, and structural elements should be evaluated and regularly monitored.	Potential impacts of project construction on utilities, including specific pipelines, telecommunication lines, and water/sewer conveyance systems, were evaluated in the EIR. Please see the discussion in the section titled Impacts of the Project Alternatives on Public Services and Utilities in Chapter 21, Public Services and Utilities. As discussed in Chapter 21, DWR will continue to consult with utility operators prior to finalization of design regarding any proposed uses to avoid conflicts. During design and construction, DWR will use subsurface techniques to identify the locations of all utilities within the construction area (e.g., vacuum potholing) as described in the section titled Investigations Prior to Construction Phase in Chapter 3, Description of the Proposed Project and Alternatives, and in the Potential Future Field Investigations technical memoranda (Delta Conveyance Design and Construction Authority 2022c, 2022d). DWR will incorporate methods to protect those utilities during construction and subsequent operations.
517-8	The significant trucking limitations caused by the massive project could impact local resources for material delivery and	The commenter's claim that project construction would impact local trucking resources for material delivery and hauling for OMRR&R projects

Letter-Comment Number	Comment	Response
	hauling for OMRR&R projects and activity for Empire Tract and King Island. There are concerns that local trucking capabilities, or increase in costs, due to scarcity, could impact the ability of King Island to perform work within limited budgets for services year over year. Given a 10+ year timeline for construction, this could impact the construction economy for many years.	is not supported by the information documented in the Delta Conveyance Engineering Project Reports (EPRs) (Delta Conveyance Design and Construction Authority 2022f, 2022g) and the Draft EIR. As noted in the Logistics Strategy EPR, trucking resources are assumed to be provided by the contractor using a larger area outside of the Delta, including throughout the Sacramento Valley, San Joaquin Valley, and the San Francisco Bay Area. Contractors may also use trucking resources from other geographical areas, including southern California or other states and relocate the required trucking assets to the area. Therefore, local truck resources serving OMRR&R projects within the Delta region would be minimally impacted. Truck trips for construction of the project alternatives are included in the roadway segment and intersection analysis contained in Appendix 20A, Delta Conveyance 2020 Traffic Analysis, and Appendix 20C, Delta Conveyance 2040 Traffic Analysis. The traffic analysis contained in the appendices were completed to aid in the understanding of potential major increases to traffic volumes on roadways and vehicle delay at intersections that may be caused with the addition of project-generated construction traffic. Refer to Chapter 20, Transportation, and Common Response 14, Transportation, for additional discussion. Potential socioeconomic impacts from project construction were also assessed in Chapter 17, Socioeconomics, as they relate to local employment and community cohesion (see ECON-1 and ECON-3). These impact analyses consider all required construction activities, including truck driving.
517-9	Any construction project areas that require dewatering and drainage must consider self sufficient and independent drainage through lands within the District, operated and maintained by King Island. The existing system of drainage ditches and canals were designed for existing conditions only. The King Island pump stations are not designed for additional	Please see response to comment 517-5 regarding determining capacity of and maintaining drainage and irrigation infrastructure. At all construction sites, all stormwater and dewatering flows generated would be collected, treated on-site, and stored on-site for re-use on-site to minimize the need for diverting other water; the water would be stored in

Letter-Comment Number	Comment	Response
	construction dewatering for project areas within the District. Evaluation of respective drainage systems should be performed in advance and consideration for how this drainage will impact property owners' ability to control water surface elevations, drain lands, and maintain water quality within the District.	tanks on the construction site for reuse for dust control and other construction needs. The storage facilities would also eliminate the "peak flow" stormwater flows into existing drainage channels. If the storage tanks are full and on-site water demands are fully met, the water would be discharged at a rate that would not increase peak flow rates in the drainage channels because the water would be discharged infrequently and after the peak storm event had completed. The project and alternatives would discharge treated water at a rate that would not increase peak flow rates for these waterways. Additionally, as noted in the discussion of Impact FP-2 in Chapter 7, a review of the drainage systems will be performed to assess the impacts of tunneling operations, dewatering, and drainage as part of the final design. Please refer to Chapter 3 in the section titled Local Water Supply, Drainage, and Utilities, and Chapter 7 for more information.
517-10	Higher water tables could also impact the interior access for King Island and landowners; this must be addressed in the final EIR. The County Road, Eight Mile Road, bisects the district, and provides access to all connected lands to the west, including Empire Tract, Venice Island, Medford Island, as well as marina and barge access to St. Francis Yacht Club and Tinsley Island. The District main drainage canal is along the south side of this county road, any impacts to the District drainage system could damage the county roadway.	Please see response to comment 517-9 regarding DWR's plans for construction-related dewatering. In addition, please see Chapter 8, Groundwater, regarding increases in agricultural drainage under No Project and project alternatives. Furthermore, the analysis in Impact GW-1 and Impact GW-2 shows that under construction, groundwater levels would generally be maintained at the level of existing conditions. In general, roads in the vicinity of facility construction areas or those used for haul routes will be upgraded and maintained during the construction process and left in good working condition following the construction process.
517-11	Emergency operations during high water events due to rainfall runoff or emergency flood events occur regularly in the Delta every 5-10 years, depending on many factors. This comment is not meant to quantify the impacts associated with construction elements, rather, the final EIR must evaluate the range of potential impacts project construction sites will have on a range of river stage/flow and interior runoff scenarios which could not only impact the Delta Tunnel, but also King Island, San Joaquin County, King Island Marina and Trailer Park and	The Delta Conveyance Design and Construction Authority Intake Flood Management technical memorandum and the Levee Vulnerability Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022a, 2022b) identified potential vulnerabilities within the Delta levee systems, evaluate Delta flood risk, management measures, emergency response, flood inundation mapping, and provide site specific recommendations for structure flood risk mitigations to reduce flood risk during construction of the intakes and tunnel shafts. The results of the analysis of the Delta Conveyance Project's potential impact on flood

Letter-Comment Number	Comment	Response
	other residents within King Island, City of Stockton, and the State. The likelihood of any number of natural emergency events is high during a 10+ year construction period and all potential scenarios need to be evaluated and planned for with local, state agencies in advance and should be explicitly documented in the EIR.	protection is provided in Chapter 7, Impact FP-1. The hydraulic analysis concluded that the construction and operation of any of the Delta Conveyance Project alternatives would not result in a significant impact on flood protection with the exception of Alternatives 2a and 4a, whose construction-related impact would be reduced to a less-than-significant level by application of proposed mitigation. Please see response to comment 517-9 regarding stormwater and dewatering flows, "peak flow" stormwater flows, and drainage systems.“
517-12	The Districts [King Island and Empire Tract] urge urges [sic] DWR to consider addressing detailing construction related impacts due to the significant duration of the construction project related to resource limitations for the Delta including access, trucking, and the inevitable emergency operation impacts.	Please refer to Impacts TRANS-3 and TRANS-4 in Chapter 20, Transportation, which address potential construction impacts as they relate to access, roadway improvements, and emergency access. A combination of transportation management plans (described in Mitigation Measure TRANS-1) and improvements to the transportation system would be developed in coordination with State of California and local agencies to reduce potential effects related to traffic safety hazards and emergency access on Delta roadways serving project alternatives construction sites.
517-13	The current preferred alternative does not clearly define the dual conveyance levee rehabilitation and improvement to ensure long-term water supply reliability or protection of critical elements of the Delta Tunnel.	Please see response to comment 517-4 regarding repairs and upgrades to levees.
517-14	The Districts could have additional significant impacts related to the maintenance shaft construction related to project area controls required to support the site development and ongoing construction efforts of the Delta Tunnel related to dewatering, seepage and water table impacts, construction traffic impacting access locally and regionally. The Districts' levees do not meet Bulletin 192-82 sustainable design standards and require investment to improve the levee system.	During conceptual engineering design, all project alternatives were subject to an assessment of flood risks and a levee vulnerability assessment; see the Delta Conveyance Design and Construction Authority Intake Flood Management technical memorandum and the Levee Vulnerability Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022a, 2022b). These documents identify potential vulnerabilities within the Delta levee systems, evaluate Delta flood risk, management measures, emergency response, flood inundation mapping, and provide site specific recommendations for structure flood risk mitigations to major construction locations.

Letter-Comment Number	Comment	Response
		As described in Chapter 7, Flood Protection, Impact FP-2, a review of the drainage systems will be performed to assess the impacts of tunneling operations, dewatering, and drainage as part of the final design. Chapter 8, Groundwater, Impact GW-6 provides as assessment of potential impacts of dewatering on land subsidence and concluded that any changes in groundwater levels attributable to the Delta Conveyance Project would not be large enough to result in subsidence. Chapter 11, Soils, provides discussion of soil subsidence occurring with the Delta study area, and Impact SOILS-3 concluded that the Delta Conveyance Project would not make a significant contribution to soil subsidence occurring with the Delta. Chapter 20, Transportation, discloses impacts related to constructing and operating the Delta Conveyance Project. Adverse impacts on the transportation within the Delta study area would be minimized through use of designated construction routes. Dewatering would primarily be implemented at the intakes, tunnel shafts, and either Southern Complex or Bethany Complex within underground barriers that are constructed around the area to be dewatered. These barriers would limit the interaction of the area to be dewatered from the surrounding local or regional aquifers and nearby levees, buildings, or other infrastructure. No dewatering is anticipated between tunnel shafts along the tunnel alignment based upon available geotechnical information. However, dewatering during construction and operation of the intake sedimentation basins could be located at depths that may cause minimal changes in local groundwater conditions. Therefore, for construction and operations of the intake sedimentation basins, in accordance with Mitigation Measure GW-1, monitors will be installed around the intake. If groundwater elevations substantially decline, the dewatering flows will be collected, treated, and re-injected around the intake site to manage groundwater elevations. If the groundwater elevations substantially rise, the dewatering wells surrounding the intake site will be operated to

Letter-Comment Number	Comment	Response
		manage the groundwater elevation.
517-15	Thank you for the opportunity to provide comments on this project and the Districts welcome any feedback or questions regarding this letter.	This information is general closing text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
520-1	I write to provide comments on behalf of the County of Yolo (“County”) regarding the Draft Environmental Impact Report ("Draft EIR") prepared by the California Department of Water Resources ("DWR") for the Delta Conveyance Project ("Project"). While the Project’s footprint is outside of Yolo County and the Project’s haul routes do not use local County roads, the County has significant concerns about the effects the Project would have on Yolo County and its natural resources and residents. The County therefore joins in the comment letters submitted by the various public agencies that would be affected by the Project and writes here separately to highlight certain issues of particular importance to the County.	This information describes the structure or organization of the comment letter, the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
520-2	A. The Draft EIR is unnecessarily complex and unmanageable. As an initial matter, I note that the Draft EIR is an unwieldy collection of chapters, appendices, maps, and tables that encompasses over 27,000 pages. [Footnote 1: Cf. CEQA Guidelines § 15141 (“The text of draft EIRs … for proposals of unusual scope or complexity should normally be less than 300 pages.”).] Granted, the size and complexity of the Draft EIR is reflective of the size and complexity of the Project, but the Draft EIR is prepared in a way that obscures the nature of the Project, its environmental impacts, and the mitigation measures proposed by DWR. Important discussion regarding the Project’s impacts and mitigation measures are scattered among various cross-referenced chapters and appendices, leading the reader on a hunting expedition to find the relevant discussion on a topic within the 157 electronic files that make up the Draft EIR. [Footnote 2: Cal. Oak Foundation v. City of	Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the length and complexity of the EIR. As described in Common Response 1, in the discussion of the length and complexity of the EIR, the EIR necessarily includes a considerable amount of information to adequately explain potential impacts and was presented in a format with emphasis on information useful to the public. The comment assertion that the Draft EIR fails to serve as an informational document to assist the public and decision-makers to evaluate the project is unfounded. As described in Chapter 4, Framework for the Environmental Analysis, the overall organization and content of the resource-specific analyses in the EIR were developed to meet CEQA (Pub. Resources Code § 21000 et seq.) content requirements. The main resource chapters contain information and analyses for the public and decision-makers to conduct a meaningful review. The environmental analyses are presented in a clear,

Letter-Comment Number	Comment	Response
	Santa Clarita, 133 Cal. App. 4th 1219, 1238 (2005) ("[I]nformation scattered here and there in EIR appendices, or a report buried in an appendix, is not a substitute for a good faith reasoned analysis in response.") (internal quotations omitted).] The 119-page Executive Summary does little to remedy this problem, as it obfuscates the project description and the associated impacts in a confusing and convoluted summary of DWR's alternatives analysis rather than presenting the Project and its impacts front and center in a clear and concise way. As a result, the Draft EIR fails to serve as an informational document to assist the public and decision-makers to evaluate the Project. [Footnote 3: See Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova, 40 Cal.4th 412, 442 (2007) ("The data in an EIR must not only be sufficient in quantity, it must be presented in a manner calculated to adequately inform the public and decision makers, who may not be previously familiar with the details of the project.").]	logical manner and do not obfuscate information as the comment asserts. Chapter 3, Description of the Proposed Project and Alternatives, provides a clear and detailed description of the proposed project and alternatives sufficient for environmental review. Additional details regarding methods and modeling results are provided in appendices in instances where it would be too voluminous to include in the main chapter. Additionally, the table in the Executive Summary titled Summary of Delta Conveyance Project Impacts and Mitigation Measures summarizes all of the impacts, mitigation measures, and impact significance after mitigation for all resource topics evaluated in the EIR and is followed by summary discussions of each major impact for each resource evaluated in the EIR. Tables providing a summary comparison of important impacts by alternative are included at the beginning of each resource chapter of the EIR as well.
520-3	B. The Draft EIR's project description is presented in a way that makes it incomprehensible to the average reader. Some of the Draft EIR's most significant faults have their genesis in the manner in which DWR devised of and describes the Project. "Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the 'no project' alternative), and weigh other alternatives in the balance." [Footnote 4: County of Inyo v. City of Los Angeles, 71 Cal. App. 3d 185, 192-93 (1977).] However, the reader of the Draft EIR must wade through dozens of pages before the Draft EIR reveals what the "Conveyance Project"	Please refer to Chapter 3, Description of the Proposed Project and Alternatives. The section titled Proposed Project and Alternatives Overview provides a brief project overview. The subsection titled Alternatives Overview provides a summary of the differences between the alternatives, and the sections that follow it provide details for each alternative. Chapter 4, Framework for the Environmental Analysis, explains the framework for the environmental analysis and organization of the EIR. Please refer to Common Response 3, Alternatives Development and Description, regarding the adequacy of the approach for describing the project and alternatives. Please refer to response to comment 520-2 and Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the length and complexity of the EIR.

Letter-Comment Number	Comment	Response
	actually is.	
520-4	B. The Draft EIR's project description is presented in a way that makes it incomprehensible to the average reader. Even though an EIR should "contain a brief summary of the proposed actions and [their] consequences," [Footnote 5: CEQA Guidelines § 15123.] the Draft EIR's 119-page Executive Summary [Footnote 6: Cf. CEQA Guidelines §15123(c) ("The summary should normally not exceed 15 pages.").] does not actually identify the Project until page 13, and then only in the description of DWR's process to identify its preferred alternative. Even then, the Project is revealed in a roundabout way in the middle of the paragraph. [Footnote 7: Draft EIR, p. ES-13 ("Based on the engineering feasibility, conceptual design, constructability, and the potential to reduce key environmental impacts on cultural resources, wetlands and other waters of the United States, wildlife habitat, transportation, air quality, noise, and Delta community effects, DWR selected the Bethany Reservoir alignment at 6,000 cfs conveyance capacity as the proposed project, which is presented as Alternative 5 in this Draft EIR.").] A careful reader would miss this revelation, and the Draft EIR's repeated reference to the project as "Alternative 5" rather than "the Project," causes confusion as the reader tries to comprehend the exact nature of the Project and its impacts.	Please refer to response to comment 520-3 regarding the adequacy of the project description.
520-5	B. The Draft EIR's project description is presented in a way that makes it incomprehensible to the average reader. The lack of a clear project description is repeated throughout the Draft EIR. The Introduction chapter takes 28 pages of background discussion before finally describing the Project as consisting generically of the "design and construct two	Please refer to response to comment 520-3 regarding the adequacy of the project description.

Letter-Comment Number	Comment	Response
	diversion facilities, each at 3,000 cfs capacity, on the Sacramento River, a single tunnel for conveyance, tunnel shafts, and a pumping plant and appurtenant facilities through which water would be discharged directly to the Bethany Reservoir along the California Aqueduct." [Footnote 8: Draft EIR, p. 1-28.] The Project Description chapter further obscures its description of the actual Project behind a convoluted discussion about how DWR developed its alternatives. Similarly, each of the resource chapters analyze the various alternatives without clear indications of what the Project is.	
520-6	B. The Draft EIR's project description is presented in a way that makes it incomprehensible to the average reader. DWR should not allow the complexity of the Project and DWR's conceptual development to obscure what the Project actually is. The Draft EIR should be revised to clearly and definitively state a project description that is accessible to the reader. Without a clear and definitive project description, the Draft EIR cannot inform the public or decisionmakers about the Project's impacts and mitigation measures.	Please refer to response to comment 520-3 regarding the adequacy of the project description.
520-7	C. Agriculture Agriculture is Yolo County's most important economic industry. While the Project does not convert agricultural land within Yolo County's borders, the Project will still affect Yolo County's agricultural businesses, which are part of a regional economy that includes the Delta. A critical mass of agricultural operations in the region results in economies of scale for the availability of specialized suppliers, workers, processors, and vendors. The loss of thousands of acres of farmland in Yolo County's neighboring counties will therefore significantly affect Yolo County itself.	Please refer to Chapter 17, Socioeconomics, regarding the potential effects that the project would have on the Delta economy. Depending on the alternative, the project is expected to result in a minor reduction in agricultural employment as a result of conversion of agricultural lands, of between 49 full-time equivalent (FTE) annual jobs and 69 jobs. During construction, the project would generate thousands of construction-related jobs. The project would also result in creation of between 41 and 53 FTE jobs associated with the operations and maintenance of the water conveyance facilities.

Letter-Comment Number	Comment	Response
520-8	C. Agriculture The Project will convert 3,787.9 acres of farmland, of which 2,154.2 acres are "important" (prime farmland, farmland of statewide importance, unique farmland, farm land of local importance), and 1,217.8 acres are under Williamson Act or Farmland Security Zone contracts.[Footnote 9: Draft EIR, pp. 15-3 & 15-34.] To mitigate for the permanent conversion of important farmland, the Draft EIR proposes "a combination of acquisition and dedication of agricultural land, acquisition of development rights or conservation easements to permanently protect agricultural land, or payment of in-lieu fees to fully fund the acquisition and maintenance of such real property interests by a third party" at a 1:1 ratio, with mitigation located within the six Delta counties.[Footnote 10: Draft EIR, p. 15-39.] The Draft EIR also allows DWR to "consider an optional approach," which consists of "funding farm improvements to enhance the productivity of the lower-quality farmland, consistent with Agricultural Land Stewardship Consideration A2."[Footnote 11: Draft EIR, p. 15-39.] The Draft EIR does not describe these optional mitigation measures any further or explain why they were omitted from discussion. The EIR concludes that impacts would remain significant after mitigation "because conservation of agricultural farmland through acquisition of agricultural conservation easements, even at a ratio of 1:1 or greater, would not avoid a net loss of Important Farmland in the study area."[Footnote 12: Draft EIR, p. 15-39.]	Please see Common Response 12, Agricultural Resources, regarding how DWR could fund farm improvements to enhance the productivity of the lower-quality farmland, if there is interest in such a process by Delta agricultural interested parties. DWR would also continue to implement Mitigation Measure AG-1 through a combination of acquisition and dedication of agricultural land, acquisition of development rights or conservation easements to permanently protect agricultural land, or payment of in-lieu fees to fully fund the acquisition and maintenance of such real property interests by a third party.
520-9	C. Agriculture The County [Yolo County] has several concerns with the Draft EIR's analysis regarding agricultural impacts. First, the Draft EIR	No agricultural lands within Yolo County will be converted as a result of implementation of the project. As described in Appendix 15B, Agricultural and Land Stewardship Considerations, the conversion of Delta agricultural land was minimized to the extent possible through careful project planning.

Letter-Comment Number	Comment	Response
	does not consider whether additional mitigation at a 2:1 or 3:1 ratio might further reduce the impact to agriculture. For example, Yolo County generally requires mitigation easements at a 3:1 ratio for the conversion of prime farmland and 2:1 for non-prime farmland. The Draft EIR does not consider whether such an increased mitigation ratio is feasible, instead just summarily concluding that additional mitigation would "not avoid a net loss of Important Farmland in the study area."[Footnote 13: Draft EIR, p. 15-39.] However, "avoiding" an impact is not the only way to mitigate an impact under CEQA.14 [Footnote 14: CEQA Guidelines § 15126.4(a)(1).] Mitigation also includes minimizing impacts, rectifying the impacts, reducing or eliminating the impact over time, and, significant here, "compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements."[Footnote 15: CEQA Guidelines § 15370.] While it is true that an increased mitigation ratio will not "avoid" the loss of farmland, requiring additional agricultural conservation easements can lessen the impact by compensating for the loss. The EIR should analyze the mitigative effect of additional mitigation and explain why or why not it is appropriate here.[Footnote 16: See, e.g., Save the Hill Group v. City of Livermore, 76 Cal.App.5th 1092, 1117 (2002) (holding that mitigating at 2.6:1 ratio was "adequate compensatory mitigation" for permanent loss of habitat); see also Masonite Corp. v. County of Mendocino, 218 Cal. App. 4th 230, 241 (2013) ("The economic feasibility of offsite [agricultural mitigation easements] to mitigate the Project's impact on the loss of 45 acres of prime farmland must be explored.").]	Sizing of individual project infrastructure components generally was developed based on design and engineering constraints. As described in Chapter 15, Agricultural Resources, conservation of agricultural farmland through acquisition of agricultural conservation easements, even at a ratio of greater than 1:1, would not avoid a net loss of Important Farmland in the study area. Furthermore, Chapter 15 considered many areas where no permanent physical structures were planned as part of construction to be considered permanent impacts on farmland due to the potential for peat soil compaction that may hinder the ability for such areas to be returned to productive farmland. Mitigation Measure AG-1 would require that any Important Farmland considered permanently converted be mitigated at an acreage ratio of at least 1:1 through a combination of acquisition and dedication of agricultural land, acquisition of development rights or conservation easements to permanently protect agricultural land, or payment of in-lieu fees to fully fund the acquisition and maintenance of such real property interests by a third party. DWR has not identified any mitigation ratio that would avoid or substantially lessen the significant and unavoidable impact. In selecting this mitigation ratio, DWR considered ratios used in the surrounding area. For example, Policy AG-1.6 in the County of Yolo 2030 Countywide General Plan establishes “a ratio of no less than 1:1 the conversion of farm land and/or the conversion of land designated or zoned for agriculture, to other uses” (Yolo County 2009). Similarly, for projects “resulting in the conversion of more than fifty (50) acres of farmland[,]” Policy AG-5 in the County of Sacramento 2030 General Plan generally requires impacts to be “mitigated within Sacramento County … based on a 1:1 ratio” (Sacramento County 2019). (See also *Citizens for Open Gov't v. City of Lodi* (2012) 205 Cal. App. 4th 296 [upholding 1:1 mitigation for significant and unavoidable impact on prime agricultural land].) In addition to implementation of Mitigation Measure AG-1, as described in Common Response 12, Agricultural Resources, DWR is committed to attempt to return any prior farmland that is converted as part of construction activities and no longer needed for long-term

Letter-Comment Number	Comment	Response
		operation of the Delta Conveyance Project back to productive agricultural use or habitat/grasslands through land reclamation (see also section titled Evaluation of Construction Activities, and Impact AG-1, in Chapter 15, Agricultural Resources). Previously cultivated lands that cannot be reclaimed for agricultural purposes following disturbance because of topographic alteration may be reclaimed as grasslands. The land reclamation process will include identifying strategies appropriate for Delta soils that can address soil compaction.
520-10	C. Agriculture The second deficiency with the Draft EIR's agricultural analysis is that the mitigation is not targeted to preserve agricultural land in the Delta that is under development pressure. Again, as an example, Yolo County generally requires that that the easements be placed within a mile of cities, where development pressure is the greatest. The 3:1 and 2:1 mitigation ratios can be reduced to 1:1 if the mitigation is located even closer to cities, in recognition that the mitigative value of such easements is greater the closer they are placed to existing development. In contrast, Mitigation Measure AG-1 merely requires that any preservation be "within the Delta counties (i.e. Sacramento, San Joaquin, Contra Costa, Alameda, Solano, and Yolo)," regardless of whether there is a risk of development or whether the mitigation is in the Delta or not. [Footnote 17: Draft EIR, p. 15-39.] By authorizing mitigation anywhere in a six-county area, the mitigation measure does ensure that it will reduce future impacts to agriculture. Preservation of agricultural land that will never be converted does nothing to compensate for the losses resulting from the Project. The Draft EIR should therefore direct mitigation to areas that are under development pressure, such as the peripheries of cities or their spheres of influence in or near the	As described in Common Response 12, Agricultural Resources, when evaluating potential areas within Sacramento, San Joaquin, Contra Costa, Alameda, Solano, and Yolo counties to serve as agricultural mitigation, DWR carefully considered whether those areas provide an equivalent quality of farmland as the farmland to be permanently converted. One of these considerations is targeting existing agricultural areas that are threatened with a change to non-farmland use. Protection of such farmland is often a critical component in farmland mitigation strategies because it provides a clear linkage in how implementation of mitigation for a project can protect farmland that otherwise would have been lost without the project's mitigation. Such farmland threatened with future change to non-farmland use includes (1) areas that are currently mapped as agricultural under the Farmland Mapping and Monitoring Program but which are zoned in general plans as nonagricultural use, and (2) farmland in close proximity but outside the existing spheres-of-influence of local government general plans, since it is reasonable that such farmland would be subject to development pressure in future decades.

Letter-Comment Number	Comment	Response
	Delta, or otherwise show that the conservation easement will prevent the future conversion of agricultural land, with a focus on agricultural lands in the Delta.[Footnote 18: See Gov't Code § 56076 (defining "sphere of influence" as "a plan for the probable physical boundaries and service area of a local agency, as determined by the [local agency formation] commission.").] In addition, any easements that seek to lock in the uses of land into perpetuity should be placed in coordination with the affected cities and counties whose future ability to plan for the orderly growth of their communities might be hampered by DWR's easements.	
520-11	C. Agriculture Finally, the "optional approach" authorized by Mitigation Measure Ag-1 to fund farm improvements to enhance farmland productivity consistent with "Agricultural Land Stewardship Consideration A2," as an alternative to agricultural conservation, is not a viable mitigation method because the EIR does not explain how this approach can serve as effective mitigation for the Project's impacts. The "Agricultural and Land Stewardship Considerations" in the Draft EIR's appendix merely states that Strategy A2 "could help farmers address some challenges hindering productivity of their land, including excessive sedimentation in channels that are not dredged, which can preclude effective irrigation pumping."[Footnote 19: Draft EIR, p. 15B-14.] However, the Draft EIR does not explain how productivity will be improved or the extent of the improvements needed to receive credit for mitigating the impact. If DWR plans to develop specific details of this mitigation measure, the EIR must include "specific performance standards the mitigation will achieve" and "the type(s) of potential action(s) that can feasibly achieve that	As described in Common Response 12, Agricultural Resources, improvements to productivity for an agricultural property not considered to be an Important Farmland type (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance) would be implemented in a manner to improve all or part of an agricultural property to Prime Farmland or Farmland of Statewide Importance status as shown on subsequent Farmland Mapping and Monitoring Program Important Farmland Maps following completion of such improvements. Such improvements may include providing irrigation infrastructure for agricultural properties or parts thereof with soils that meet the physical and chemical criteria for Prime Farmland or Farmland of Statewide Importance as determined by the Natural Resources Conservation Service but had been dryland farmed due to lack of requisite infrastructure. Such improvements may also include providing improved drainage infrastructure for agricultural properties or parts thereof that could potentially be considered Prime Farmland or Farmland of Statewide Importance (based on presence of suitable soil conditions and irrigation infrastructure) but are not mapped as such by the Farmland Mapping and Monitoring Program because they had not been used for irrigated agricultural production at any time during the four years prior Farmland Mapping and Monitoring Program mapping due to ongoing drainage issues.

Letter-Comment Number	Comment	Response
	performance standard that will be considered, analyzed, and potentially incorporated in the mitigation measure." [Footnote 20: CEQA Guidelines §15126.4(a)(B).] The Draft EIR provides none of that kind of information to allow the reader to evaluate the effectiveness of this "optional approach." The County would welcome additional detail from the DWR on this potential approach to mitigation.	
520-12	C. Agriculture In sum, the agricultural mitigation described in the Draft EIR is incomplete and ineffective. DWR should explore and describe mitigation measures that can lessen the Project's impacts on agriculture, including enhanced mitigation ratios that result in easements that are placed where they can protect Delta agriculture land from being converted to non-agricultural uses.	Please see responses to comments 520-8 through 520-11 and Common Response 12, Agricultural Resources, regarding the approach and sufficiency of the mitigation measures in Chapter 15, Agricultural Resources.
520-13	D. The No-Project Alternative's sea-level rise projections rely on the most conservative, risk-averse climate forecasts that do not represent what is reasonably expected to occur. In its discussion of the no project alternative, the Draft EIR considers the conditions as they'd exist in 2020 and 2040 if the project were not approved. For the 2040 analysis, the Draft EIR includes assumptions for climate change related to sea level rise and changes in precipitation patterns, using the "H++ scenario, or extreme risk aversion scenario" described in the California Ocean Protection Council's Sea-Level Rise Guidance ("OPC Guidance"). [Footnote 21: Draft EIR, pp. 3-10 & 3C-10. The 2018 Update to the OPC Guidance is available at https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf.] The OPC Guidance provides probabilistic projections using low emission and high emission assumptions through 2150. The	Please see Common Response 9, Hydrologic Modeling and Approach, for a description of the model assumptions and uncertainty regarding selection of climate change scenario and sea level rise inputs. Projections provided are for the H++ scenario, a single scenario for extreme sea level rise, not a probabilistic projection; it does not have an associated likelihood of occurrence but is recommended for consideration in significant, long-term decisions. In addition, DWR evaluated project impacts considering a smaller, 0.5-foot sea level rise under the 2040 scenario in a sensitivity analysis, the results of which are summarized in Appendix 30A, CalSim 3 Results Sensitivity to 2040 Climate Change and Sea Level Projections. Please see Appendix 30A and Common Response 6, Climate Resilience and Adaptation, regarding the results of the sensitivity analysis, which showed the climate change and sea level rise analysis contained in the EIR is sufficient and no further analyses are necessary. Given all of the above, the assumptions related to sea level rise and climate change are reasonable for the EIR. DWR has exceeded CEQA requirements by evaluating climate change and project impacts in multiple locations in the document using

Letter-Comment Number	Comment	Response
	purpose of the OPC Guidance is to "assist decision makers at state and local levels in planning for, and making decisions about, sea-level rise and related coastal hazards in light of the current state of science."[Footnote 22: OPC Guidance, p. 8.] Based on the H++ scenario described in the OPC Guidance, the Draft EIR's baseline for the no-project alternative is that sea-levels would rise by 1.8 feet in 2040. The H++ scenario is not an appropriate measure of sea-level rise for purposes of CEQA. [Footnote 23: CEQA Guidelines § 15126.6€(2).] The no project alternative must discuss "what would be reasonably expected to occur in the foreseeable future if the project were not approved…."" [Footnote 24: CEQA Guidelines § 15126.6€(2); id. § 15126.6€(3)(C).] The no project description should be "a factually-based forecast of the environmental impacts of preserving the status quo. It thus provides the decision makers with a base line against which they can measure the environmental advantages and disadvantages of the project and alternatives to the project." [Footnote 25: Planning & Conservation League v. D.W.R., 83 Cal. App. 4th 892, 917-18 (2000).] The H++ scenario does not reflect what scientists expect is most likely to happen in the future. The scenario assumes ice loss from the West Antarctic Ice Sheet that would result in 8.2 feet of global mean sea-level rise in 2100 as the "maximum physically plausible sea-level rise." [Footnote 26: OPC Guidance, p. 16.] The OPC [California's Ocean Protection Council's Sea-Level Rise Guidance]Guidance acknowledges that "sea-level rise is not following the H++ scenario at this moment," [Footnote 27: OPC Guidance, p. 16.] and states that "[t]he probability of this scenario is currently unknown."	different climate change and sea level rise scenarios. Common Response 6 summarizes these analyses and their locations in the EIR.

Letter-Comment Number	Comment	Response
	[Footnote 28: OPC Guidance, p. 12.] The Draft EIR describes the H++ scenario as "the most conservative, risk-averse scenario." [Footnote 29: Draft EIR, p.] In contrast to the unknown probability of there being a 1.8 feet sea-level rise in 2040 under the H++ scenario, the OPC [California's Ocean Protection Council's Sea-Level Rise Guidance] Guidance also provides a "median" projection that estimates a "50% probability sea-level rise meets or exceeds" 0.6 feet in 2040. Relying on the H++ scenario overestimates sea level rise in 2040 by 300% when compared to the median expected sea level rise provided in the OPC Guidance. Indeed, the 1.8 feet sea-level rise projections under the H++ scenario exceed even those of the "1-in-200" chance high-emission scenario. In other words, while the OPC Guidance does not estimate the likelihood of the H++ scenario occurring, the H++ scenario's estimates of sea-level rise exceed those of 99.5% of the projected scenarios. The Draft EIR justifies its use of the H++ scenario because it is recommended for "long-term decisions and for projects with a lifespan beyond 2050 that have a low risk tolerance." [Footnote 30: Draft EIR, p. 3C-10.] This is a misuse of the OPC [California's Ocean Protection Council's Sea-Level Rise Guidance] Guidance and does not meet CEQA's requirements for the no project alternative. DWR is free to use the "most conservative, risk-averse scenario" for planning associated with critical infrastructure to, for example, design for catastrophic earthquakes or flood events. [Footnote 31: See, e.g., Draft EIR, p.4-13 (describing design criteria used to withstand catastrophic events).] But those worst-case scenarios do not represent "what would reasonably be expected to occur in the	

Letter-Comment Number	Comment	Response
	foreseeable future," as CEQA requires for the no-project alternative.[Footnote 32: CEQA Guidelines § 15126.6€(3)(C).] The Draft EIR should not rely on a scenario that is so far on the tail of the probability curve that its possibility is unknown. The Draft EIR's reliance on an unlikely scenario as the future baseline of the Project has significant ramifications throughout the document. For example, the overestimate of sea-level rise overstates the benefits of the Project, given that the Project's first objective is to "help address anticipated rising sea levels and other reasonably foreseeable consequences of climate change and extreme weather events."[Footnote 33: Draft EIR, p. 2-2.] Further, the model simulations for sea level rise and water quality will not accurately simulate Delta salinity conditions to estimate water quality impacts. [Footnote 34: Draft EIR, Appx. 5A, pp. B-49 & F-2 (using the 1-in-200 and H++ scenarios).]	
520-14	D. The No-Project Alternative's sea-level rise projections rely on the most conservative, risk-averse climate forecasts that do not represent what is reasonably expected to occur. The County [Yolo County] agrees that climate change is a crisis that will have far-reaching impacts that deserve careful consideration in an environmental document. However, an EIR cannot rely on the worst-case scenario as what is expected to occur in its analysis. The EIR should use the best science available to estimate the most realistic sea level rise, and not a scenario that scientists believe has less than a 0.5% chance of occurring.	The comment assertions that the EIR relied upon a narrow climate change scenario that was not based on best available science is not supported by the analysis in the EIR. Please refer to response to comment 520-13 regarding the climate change analysis. As described in Chapter 30, Climate Change, future temperature, precipitation, and sea level rise conditions were simulated for the project alternatives using CalSim 3 for use in the project's integrated operational analysis. These simulations were used to understand the impact of climate change on a range of project operations, including water supply (e.g., storage, deliveries, project operations) and water quality (e.g., salinity changes). As noted in Appendix 5A, Modeling Technical Appendix, Section F, Sea Level Rise and Delta Water Quality Modeling, the simulations were used to understand salinity changes and to analyze the response of water quality in seven sea level rise scenarios ranging in severity of sea level rise

Letter-Comment Number	Comment	Response
		assumptions, including a base condition with no sea level rise, compared to recent historical conditions. For this analysis, the CalSim 3 model was run with inputs based on year 2040 (climate period 2026 - 2055) anticipated conditions, as described in Appendix 5A. Ten CMIP5 global climate models and two GHG concentration scenarios (RCP 4.5 and RCP 8.5) were used to develop 20 climate model projections. These projections were then downscaled using the Localized Constructed Analogs method to develop the 2040 (2026 - 2055) central tendency climate change scenario, based on temperature and precipitation projections from the 20-model ensemble. Generally consistent with the Bay Delta Conservation Plan/California WaterFix Analysis, Water Storage Investment Program Application, Sustainable Groundwater Management Act, Reinitiation of Consultation on the Long-Term Operations of SWP and CVP (ROC on LTO), and the SWP Incidental Take Permit (ITP), a quantile mapping approach was used to adjust historical daily temperature and precipitation time series based on the climate projections. Please refer to Common Response 6, Climate Resilience and Adaptation, regarding the approach to climate change analyses in the EIR. DWR has exceeded CEQA requirements by evaluating climate change and project impacts in multiple locations in the document using different climate change and sea level rise scenarios. Common Response 6 summarizes these analyses and their locations in the EIR. Please refer to Appendix 4A, Considerations of 2070 Conditions, for a qualitative analysis of potential impacts under a 2070 climate change scenario with and without the project, provided for informational purposes. EIR Chapter 3, Description of the Proposed Project and Alternatives, in the

Letter-Comment Number	Comment	Response
		section titled Design for Climate Change and Sea Level Rise, explains how DWR incorporated future sea level rise projections into the design of project alternatives in accordance with the latest statewide sea level rise guidance. The higher projections were used as a conservative assumption to ensure project facilities would be able to continue to operate if the "worst case" scenario was realized.
520-15	E. The Draft EIR does not justify its omission of truck trips from the VMT analysis. In its Transportation Chapter, the Draft EIR considered the vehicle miles traveled ("VMT") from construction workers' commutes to determine transportation impacts, but omits any consideration of the VMTs associated with the thousands of heavy trucks trips to and from the Project site to deliver and haul away equipment and material. [Footnote 35: Draft EIR p. 20-22.] The Draft EIR claims that the omission of truck trips is mandated by SB 743 and CEQA Guidelines § 15064.3. [Footnote 36: Draft EIR, p. 20-23.] This is a misapplication of SB 743.	The comment assertion that the Draft EIR incorrectly considers Senate Bill 743 in the analysis of vehicle miles traveled (VMT) is unsupported and inaccurate. The VMT analysis in the Draft EIR followed best practices and guidance provided by the California Governor's Office of Planning and Research (OPR) in its Technical Advisory on Evaluating Transportation Impacts in CEQA (California Governor's Office of Planning and Research 2018). This guidance clarifies that heavy-duty vehicles are excluded from the definition of "automobile" in CEQA Guidelines Section 15064.3(a). Please refer to Common Response 14, Transportation, for additional information on the VMT analysis conducted for the EIR.
520-16	E. The Draft EIR does not justify its omission of truck trips from the VMT analysis. SB 743 directed the Office of Planning and Research ("OPR") to promulgate regulations establishing "criteria for determining the significance of transportation impacts of projects within transit priority areas" that would "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." [Footnote 37: Public Resources Code § 21099(b)(1).] OPR was authorized to adopt guidelines "establishing alternative metrics to the metrics used for traffic levels of service for	Please refer to response to comment 520-15 and Common Response 14, Transportation, regarding the VMT analysis and threshold of significance used in the EIR. To offset the project alternatives' projected increase in VMT above 22.5 miles per employee during the construction period, it was determined that 25% of the construction workforce would need to carpool to and from the park-and-ride lots. Because of the uncertainty that this goal would be achieved, EIR Impact TRANS-1 is conservatively considered significant and unavoidable with mitigation.

Letter-Comment Number	Comment	Response
	transportation impacts outside transit priority areas," which could include "retention of traffic levels of service, where appropriate and as determined by the office." [Footnote 38: Public Resources Code § 21099(c)(1).] Importantly, SB 743 was clear that it did not preclude agencies from "establish[ing] or adopt[ing] thresholds of significance that are more protective of the environment." [Footnote 39: Public Resources Code § 21099(e).] OPR codified its guidance implementing SB 743 in CEQA Guidelines Section 15064.3. Section 15064.3 states, "[g]enerally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." [Footnote 40: CEQA Guidelines § 15064.3(a) (emphasis added).] By using the word "generally," Section 15064.3 acknowledges that automobile VMT alone may not always be the most appropriate measure of transportation impacts. The legislative intent of SB 743, and the associated CEQA Guidelines Section 15064.3, was to ensure that lead agencies include the appropriate analysis of VMT from infill projects in transit priority areas,[Footnote 41: See, e.g., Senate Analysis, available at https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201320140SB743# (describing the relevant purpose of SB 743 as, "Require OPR to propose revisions to the CEQA Guidelines to establish new, non-LOS criteria for determining the significance of transportation impacts of projects within 'transit priority areas.'") (emphasis added).] which explains the focus on passenger car and light truck trips related to land use projects. Consistent with the OPR guidance, for urban infill	

Letter-Comment Number	Comment	Response
	development it is defensible to exclude heavy truck trips based on this premise.	
520-17	E. The Draft EIR does not justify its omission of truck trips from the VMT analysis. However, this is no infill project; it is one of the most extensive public works projects in the State's history. Truck trips associated with hauling construction materials and equipment are a significant concern that could - and should -- be analyzed in the EIR. If the EIR is to omit this important consideration, the EIR must include analysis, supported by substantial evidence, that explains why the omission of truck trips in the VMT [Vehicle Miles Traveled] analysis is the most appropriate measurement of transportation impacts. The EIR also should explain clearly how the VMTs associated with truck trips are considered in the Draft EIR's analysis of air quality and greenhouse gas emissions. The EIR cannot shield this important information behind the premise that SB 743 and Section 15064.3 prohibit the consideration of truck trips in the traffic analysis, which they don't.	Please refer to responses to comments 520-15 and 520-16 and Common Response 14, Transportation, regarding the VMT impact analysis and methodology for the EIR. The VMT impact analysis in the EIR is consistent with CEQA Guidelines and OPR guidance. Potential emissions and air quality impacts from construction truck trips and VMT are evaluated in Chapter 23, Air Quality and Greenhouse Gases. Please refer to Impacts AQ-1 through AQ-6 and AQ-9 in Chapter 23.
520-18	F. The Draft EIR fails to adequately analyze water quality and water supply impacts. As expressed in a separate letter from the Delta Counties Coalition ("DCC"), the Draft EIR gives short shrift to the analysis of water quality impacts and entirely omits any discussion of water supply impacts to Delta users. Both issues are of concern to the County [of Yolo], but the latter omission is particularly concerning because water supply impacts in and near the Delta have long been a leading concern with proposals to construct new water conveyance facilities. The County urges DWR to consider and address this issue directly or include a persuasive	As described in Chapter 2, Purpose and Project Objectives, the basic objective of the Delta Conveyance Project is to restore and protect the reliability of SWP water deliveries. The Delta Conveyance Project helps meet this by constructing and operating new water supply facilities within the Delta. The Delta Conveyance Project is not proposing changes to operations or amount of storage provided by upstream facilities. Chapter 3, Description of the Proposed Project and Alternatives, identifies that the Delta Conveyance Project is not proposing to increase the total quantity of water permitted for diversion under existing DWR water rights. DWR is required to and will continue to comply with the State of California water rights priority system and area of origin laws. Please also refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other

Letter-Comment Number	Comment	Response
	explanation for its omission. Without this information, the County (and other Delta local agencies) cannot credibly assure concerned constituents that the proposed conveyance facilities will not impair existing beneficial uses of Delta water.	Environmental Review Issues, regarding the project's purpose and objectives, including DWR's continuing commitment to operate the State Water Project as modified to include the Delta Conveyance Project in compliance with all state and federal water quality and environmental laws. Chapter 9, Water Quality, provides analysis of water quality impacts that would occur as a result of both project construction and operations. Impacts WQ-2 through WQ-14 provide discussions of expected impacts relative to specific water quality constituents and are organized by geographical area. Each impact discussion includes analysis that is specific to water quality effects within the Delta. The beneficial uses of the Delta are considered in the analysis in Chapter 9. Chapter 9 concluded that project operations would have a less-than-significant impact on water quality constituents in the Delta relative to existing conditions. As described in the section titled Water Demands and Water Use in Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Operations Modeling, CalSim 3 incorporates input related to agricultural water demands and water use, managed wetlands water demands, urban water demands, and water contracts. These were all considered in the analysis of water supply in Chapter 6, Water Supply. In addition, please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the scope of the analysis in the EIR, including the evaluation of water-dependent resources that consider changes in water supply or surface water. Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities that are of interest. Responses to all comment letters are provided in Volume 2, Chapter 4, Response to Comments Tables.

Letter-Comment Number	Comment	Response
520-19	We appreciate DWR's extension of comment period for the Draft EIR, given the size and complexity of the document. We hope to see these issues addressed in this letter are addressed in the Final EIR.	This information describes the structure or organization of the comment letter, the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general conclusory text. Please refer to Common Response 2, Public Outreach Activities, regarding the duration of the comment period and the Department of Water Resources' extension of the comment period.
521-1	The San Joaquin Tributaries Authority (SJTA) reviewed the Delta Conveyance Project Draft Environmental Impact Report (EIR). The SJTA has concerns regarding the environmental impacts assessment of the Delta Conveyance Project (Project). Specifically, the EIR fails to (a) analyze the redirected impacts to water users in the San Joaquin River Watershed, (b) analyze how the Project impacts surface water supplies in the Project area and surrounding areas impacted by the Project, including the Delta and the southern San Joaquin areas, due to tunneling water under and around the Delta rather than through it, (c) analyze Project impacts on groundwater, and (d) disclose the assumptions and inputs for the CalSim 3 model related to the San Joaquin system. The SJTA appreciates the opportunity to comment and the outreach it has received from the Department of Water Resources (DWR) team. The SJTA encourages DWR to revise the EIR in a manner that evaluates and assures upstream water users that the Project will not impact their water supply, and otherwise provides legally sufficient disclosure and analysis.	This information describes the structure or organization of the comment letter, the background of the organization or individual commenter, clarification on the submittal of the comment letter, or general introductory text. Responses to specific comments raised in the comment letter (e.g., potential impacts on water supply and upstream water users), are provided in responses to comments 521-2 through 521-15.
521-2	Purpose of the California Environmental Quality Act The California Environmental Quality Act, Pub. Res. Code, § 21000 et seq. (CEQA), requires a governmental agency to evaluate the environmental impacts whenever it considers approval of a discretionary project. (California Sportfishing Protection Alliance v. State Water Resources Control Bd. (2008)	The comment does not raise a significant environmental issue relating to the proposed project or address the adequacy, accuracy, or completeness of the Draft EIR. The comment is introductory in nature and summarizes portions of the public resource code sections defining CEQA, case law, and the State CEQA Guidelines. More specific comments regarding the EIR in relation to these requirements are addressed within the other responses to this letter. For additional information regarding the applicable CEQA

Letter-Comment Number	Comment	Response
	160 Cal.App.4th 1625, 1642.) The purpose of environmental review is to inform the public and its responsible officials of the environmental consequences of decisions before they are made. Thus, environmental review protects not only the environment but also informed self-government. (Napa Citizens for Honest Government v. Napa County Bd. Of Supervisors (2001) 91 Cal.App.4th 342, 355.) An accurate, stable and finite project description is essential for an informative and legally sufficient environmental review. (County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 193; see also San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th 645, 656 ["[W]hen an EIR contains unstable or shifting descriptions of the project, meaningful public participation is stultified"; "curtailed and inadequate characterizations of the Project [are] enough to mislead the public and thwart the EIR process"].) "[O]nly through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives." (City of Santee v. County of San Diego (1989) 214 Cal.App.3d 1438, 1454.) "[T]he ultimate decision of whether to approve a project, be that decision right or wrong, is a nullity if based upon an EIR [environmental impact report] that does not provide the decisionmakers, and the public, with the information about the project that is required by CEQA. The error is prejudicial if the failure to include relevant	requirements, please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues. This Common Response discusses the purpose of CEQA and informing decision making through reasoned analysis, as well as discusses the scope of analysis in the EIR based on appropriate level of detail provided in the project description and reasonable assumptions. It also discusses substantial evidence, including what constitutes substantial evidence, in support of the impact conclusions.

Letter-Comment Number	Comment	Response
	information precludes informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR process." (Napa Citizens for Honest Government, 91 Cal.App.4th at 355-356 (citation omitted) (internal quotation omitted); see also California Oak Foundation v. City of Santa Clarita (2005) 133 Cal.App.4th 1219, 1237 [citing Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agricultural Assn. (1986) 42 Cal.3d 929, 935].) Similarly, CEQA's purpose to facilitate informed decision making and public participation is contravened when important information is "scattered here and there in EIR appendices," or significant analyses are "buried in an appendix." (California Oak Foundation, 133 Cal.App.4th at 1239 [citing Santa Clarita Organization for Planning the Environment v. County of Los Angeles (2003) 106 Cal.App.4th 715, 723].) Information that cannot be found or is not readily accessible is not a substitute for a good faith reasoned analysis. (Ibid.) When evaluating the significance of an environmental effect of a project, CEQA requires a lead agency to "consider direct physical changes in the environment which may be caused by the project and reasonably foreseeable indirect physical changes in the environment which may be caused by the project." (Cal. Code Regs., tit. 14, [section] 15064[d].) Decisions as to whether a project may have a significant effect must be based on substantial evidence. (Cal. Code Regs., tit. 14, § 15064[f].) Substantial evidence requires "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion." (Bakersfield	

Letter-Comment Number	Comment	Response
	Citizens for Local Control v. City of Bakersfield (2004)124 Cal.App.4th 1184, 1198 [quoting Association of Irritated Residents v. County of Madera (2003) 107 Cal.App.4th 1383, 139].) Substantial evidence "shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." (Cal. Code Regs., tit. 14, [section] 15384[b]; Public Resources Code, § 21082.2[c].) "Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." (Cal. Code Regs., tit. 14, § 15384[a]; Public Resources Code, [section] 21082.2[c].)	
521-3	The EIR Fails to Evaluate Project Impacts on Water Users in the San Joaquin River Watershed The EIR fails to identify, disclose, or otherwise analyze Project impacts on water users in the San Joaquin River Watershed. The EIR states, "[s]urface water resources associated with the San Joaquin River are not expected to be affected and therefore are discussed only briefly." (EIR, at 5-14.) The EIR further states the project, "is not expected to affect the operations of reservoirs south of the Delta on the tributaries of the San Joaquin River," so those reservoirs are "not evaluated." (EIR, at 5-14.) However, the EIR fails to explain or support DWR's "expectation" of no impact. As noted above, the purpose of an EIR is to identify and evaluate Project impacts. (Napa Citizens for Honest Government, 91 Cal.App.4th at 355–356; see also California Oak Foundation v. City of Santa Clarita (2005) 133 Cal.App.4th 1219, 1237; Concerned Citizens of Costa Mesa, 42 Cal.3d at 935.) The conclusory "expectation" is not supported by information or analysis. Instead, DWR openly	The proposed project operations do not conflict with the operational criteria at any San Joaquin River and tributaries water storage facilities. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for further discussion regarding the selection of the study areas for evaluation in the EIR, including those areas upstream of the proposed north Delta intakes and the San Joaquin River. Modeling information regarding the San Joaquin River System can be found in Appendix 5A, Section B Attachment 2, CalSim 3 Regulatory Assumptions and State Water Project/Central Valley Project Operations Criteria and Section B Attachment 3, CalSim 3 Model Results for Existing Conditions and Alternatives at 2020 (e.g., Section titled San Joaquin River at Vernalis). Please see response to comment 521-15 regarding the CalSim 3 modeled representation of the San Joaquin River system.

Letter-Comment Number	Comment	Response
	concedes it does not identify or evaluate Project impacts on the San Joaquin system but fails to provide support for this foundational "expectation" that no impact will occur.	
521-4	The conclusion that the Project will not impact the San Joaquin River system is contradicted by other information in the EIR and elsewhere that recognizes the Sacramento, Delta and San Joaquin systems are interrelated, and that changes to DWR's operations in the Sacramento watershed can foreseeably alter its and others' operations and related impacts elsewhere. For example, the EIR acknowledges that the Sacramento River is one of the main tributaries to the Delta watershed, and that the Delta and San Joaquin systems are connected and influenced by the Sacramento [River] watershed. (EIR, at 5-9 ["The Sacramento River is the primary contributor to Delta inflows. Typically, it contributes over 73% of the total inflow into the Delta, averaging about 16.1 MAF per year"]; EIR, at 1-2 to 1-21.)	Please see responses to comments 521-3, 521-6, and 521-15 regarding the San Joaquin River and the scope of the EIR analysis based on the project description contained in Chapter 3, Description of the Proposed Project and Alternatives. Chapter 5, Surface Water, and Chapter 6, Water Supply, disclose the changes in hydrologic characteristics attributable to each project alternative including reservoir storage, river flows, and water deliveries.
521-5	In addition, DWR is aware that water quality objectives currently in place through D-1641 include several objectives that recognize the connectivity of the Sacramento, Delta, and San Joaquin River systems. For example, the outflow X2 objectives require specific outflows from the Sacramento and San Joaquin Rivers through the Delta to control the influx of brackish or saline waters. D-1641 also requires Old and Middle River flows and restrictions to prevent reverse flows that pull water from the San Joaquin system while both Sacramento and San Joaquin River flows are being exported. (e.g., Revised Water Right Decision 1641, at p. 138 ["Export pumping by the SWP and the CVP adversely impacts fish and aquatic resources in the Delta, including species listed under the state and federal Endangered Species Acts. Meeting the flow objectives generally results in lower exports in the spring months than in	Please see response to comment 521-3, as well as Common Response 9, Hydrologic Modeling and Approach, regarding the geographic extent of the CalSim 3 modeling effort. Please also see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for further discussion regarding the selection of the study areas evaluated in the EIR including those areas upstream of the proposed north Delta intakes and the San Joaquin River.

Letter-Comment Number	Comment	Response
	the base case (D-1485). This should reduce entrainment at the project pumps and reduce the adverse effects of reverse flows in the critical period for spawning and rearing of many aquatic species in the Delta"].) The 2018 Bay Delta Plan amendment included southern Delta salinity objectives that may be met, at least in part, by flows on the San Joaquin Tributaries, which further connects obligations on the San Joaquin to Delta flows and water quality. (2018 Bay Delta Plan, at 34-41.) Finally, in recent years, the United States Bureau of Reclamation has begun operating systems in the San Joaquin River watershed in response to Sacramento River operations. For example, New Melones Reservoir on the Stanislaus River has released flows to comply with Delta requirements that have historically been met by Sacramento River flows. (See "Reclamation Increases Flow Releases from New Melones Reservoir for Bay-Delta Requirements," United States Bureau of Reclamation Press Release (dated May 10, 2021) ["Today, the Bureau of Reclamation announced a plan to increase flow releases from New Melones Reservoir to assist with meeting Delta salinity and outflow requirements"].) DWR is a statewide agency that runs the State Water Project and understands the connectivity of the San Joaquin, Delta, and Sacramento systems. DWR is also aware of the legal challenges to the unimpaired flow regulations which are based on the health of the San Joaquin, Delta, Sacramento, and ocean conditions, and of the impact changes in its operations of the Sacramento River could have on statewide water operations, including in the Delta and on the San Joaquin River Watershed. The dedication of a few conclusory and unsupported statements that dismisses the consideration of Project impacts	

Letter-Comment Number	Comment	Response
	on the San Joaquin system is woefully inadequate. The EIR must be revised to identify all potential impacts to the San Joaquin system, including the identification of the timing, quantity, and impact of reduced flows into the Delta. If, after completing its analysis, DWR concludes the Project may affect water supplies and resources on the Lower San Joaquin River, it should avoid or mitigate those impacts to the maximum extent feasible. If, on the other hand, DWR affirms its operations on the Sacramento River will not impact water operations and resources on the Lower San Joaquin River and South Delta, DWR must support that conclusion with evidence and additional analysis.	
521-6	The EIR's Project Description Violates CEQA CEQA Guidelines sections 15124 and 15125 require that DWR provide a description of the "precise location and boundaries of the proposed project" and further describe the "physical environmental conditions in the vicinity of the project." The EIR narrowly describes the project area as the "footprint of the project facilities" that are proposed to be constructed – limited to the new intakes, tunnel shafts, access roads, and park-and-ride lots. (EIR, at 1-30.) The EIR explains that although the project area is defined very narrowly, each resource has a "study area" which is specifically defined for the analysis of each resource. For example, Chapter 5 of the EIR defines the surface water study area as comprising the "the Sacramento River Basin and the Delta." (EIR, at 5-1.) Chapter 6 of the EIR defines the water supply study area as including "the SWP and CVP water supply analysis in this chapter includes the Delta region, areas upstream of the Delta (if modeling indicates a potential change as a result of the project alternatives), and	The EIR project description is in compliance with CEQA requirements. Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the analysis of the project as a whole and the scope of the analysis based on the level of detail provided in the project description. This Common Response also defines and describes baseline existing conditions pursuant to CEQA requirements and describes the selection of study areas evaluated in the EIR based on substantial evidence. As is common professional practice, the EIR defines specific study areas for different resources based on the location of potential impact mechanisms. Please also see Common Response 3, Alternatives Development and Descriptions, regarding the stability and adequacy of the project description. Please refer to Common Response 3 regarding Delta Conveyance Project proposed operations, which do not include modifications to State Water Project reservoir operations upstream of the project. DWR would not increase storage withdrawal for exports, except flood releases, even though the proposed Delta Conveyance Project may provide additional diversion capacity. The project would not include modifications to Central Valley Project reservoir operations upstream of the project because Reclamation is not a

Letter-Comment Number	Comment	Response
	the SWP and CVP south-of-Delta export service areas (i.e., areas that receive water from the Delta watershed that is delivered by the Harvey O. Banks Pumping Plant [Banks Pumping Plant] and C. W. "Bill" Jones Pumping Plant [Jones Pumping Plant]) and SWP's north-of-Delta export service areas (e.g., areas in Napa and Solano Counties delivered through the North Bay Aqueduct)." (EIR, at 6-1.) Chapter 8 describes the study area for groundwater by qualitative and quantitative analyses – the Delta is the study area for which the EIR will provide quantitative analysis, while the Central Valley groundwater subbasins are provided with a qualitative analysis. The EIR's failure to provide a comprehensive and static project description and scope is confusing, relies on significant unsupported assumptions, and does not comply with CEQA requirements that require the description of an environmental setting that provides "the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts." (CEQA Guidelines, 15125.) The EIR bases the study area for critical resources on unsupported assertions. For example, the surface water study area concludes study area does not include the Lower San Joaquin River watershed because it is "not expected" to be affected. (EIR, at 5-1.) The EIR concludes the study area for groundwater relies on the subbasins that the EIR concludes "could potentially be directly affected by project construction and operations." (EIR, at 8-3.) However, these conclusions are not supported with data or information. The issue of which geographic areas could potentially be affected by the Project is the purpose of the EIR; excluding	participant in the project. As described in Chapter 4, Framework for the Environmental Analysis, Reclamation or a CVP contractor (or contractors) have not expressed interest in participating in the Delta Conveyance Project as project proponents. However, also described in Chapter 4, potential direct and indirect impacts of CVP participation are evaluated in the EIR under Alternatives 2a and 4a (central and eastern alignments, respectively). These two alternatives describe potential CVP participation as a result of constructing and operating infrastructure linking the project to the Jones Pumping Plant, allowing 1,500 cfs delivery to Reclamation of the total project capacity of 7,500 cfs. Thus CalSim 3 modeling throughout the EIR does evaluate CVP operations where appropriate, even though there are no proposed modifications upstream as part of the project description. Chapter 3, Description of the Proposed Project and Alternatives, in the section titled Real-Time Operational Decision-Making Process details the Delta Conveyance Project operations in the Delta. Upstream SWP reservoir operations would not be modified by the Delta Conveyance Project. Appendix 5A, Modeling Technical Appendix, presents the modeling approach used for the Delta Conveyance Project, assumptions used, and the results obtained. For example, Appendix 5A, Section B Attachment 2, Attachment 3, CalSim 3 Model Results for Existing Conditions and Alternatives at 2020, provides information on reservoir storage at Trinity, Shasta, and CVP San Luis storage, as well as CVP North and South of Delta water supply results. The modeling supports analyses in Chapter 5, Surface Water; Chapter 6, Water Supply; Chapter 7, Flood Protection; Chapter 8, Groundwater; Chapter 9, Water Quality, and Chapter 12, Fish and Aquatic Resources. In particular, refer to Appendix 5A, Section B, Hydrology and Systems Operations Modeling, for supporting details for operations. Details of the groundwater modeling and analysis results are provided in Appendix 8A, Delta Groundwater Model: Development and Calibration; Appendix 8B, Impact Analysis: Groundwater Model Results; and Appendix 8C, Groundwater 2040 Analysis.

Letter-Comment Number	Comment	Response
	areas based on premature and unsupported conclusions the Project will not have an impact violates CEQA. DWR must revise the Project description to identify a comprehensive, static Project area and scope, in which the EIR should identify and evaluate all environmental impacts from the Project. At minimum, this Project scope must include an analysis of how the Project may foreseeably change operations at both DWR's and the U.S. Bureau of Reclamation's Sacramento and Lower San Joaquin River facilities assuming the Project is approved and constructed. Only with such information can DWR—and the public—be better able to understand and evaluate the direct, indirect, and cumulative impacts of the Project, and how to avoid or mitigate those impacts to the maximum extent possible.	
521-7	The EIR Fails to Sufficiently Disclose or Analyze Project Impacts on Water Supply The EIR fails to identify, disclose, or otherwise analyze impacts of the Project on Delta or San Joaquin water supplies and resources, despite its purpose to construct a new conveyance system moving water around rather than through the Delta. As the EIR recognizes, the Delta relies on Sacramento River and San Joaquin River water for 87% of its inflows. (EIR, at 5-9.) In addition, the EIR acknowledges the Project will move up to 6,000 cfs of water around the Delta rather than through the Delta. (EIR, at 3-6.) The EIR fails to analyze the impacts of this loss of flow through the Delta, instead evaluating only changes to river flows or SWP or CVP reservoir storage levels. (EIR, at 5-11.) The EIR includes separate chapters for each Surface Water and Water Supply. However, in each of these chapters, it appears	Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding a discussion of Chapter 5, Surface Water, and Chapter 6, Water Supply, and the evaluation of water-dependent resources throughout the EIR. As described in Common Response 1, changes to surface water and water supply on various resources are appropriately explained throughout the EIR. The EIR fully evaluates impacts on multiple resources, such as water quality, fish and aquatic resources, and terrestrial biological resources in Chapters 9, Water Quality, 12, Fish and Aquatic Resources, and 13, Terrestrial Biological Resources, using information and changes presented in Chapters 5 and 6. For example, the change in flow in the Sacramento River and Delta are evaluated in Impact AQUA-2 in Chapter 12 under the heading titled Far-Field effects. This impact specifically evaluates the changes in flow patterns and resulting revival or routing of fish into migration pathways with differing survival probabilities. As described in the section titled Water Demands and Water Use in Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Operations Modeling, CalSim 3 incorporates input related to agricultural water demands and water use, managed wetlands

Letter-Comment Number	Comment	Response
	the goal of the EIR is to evaluate the Project impacts of increased storage and ignore any Project impacts related to reducing water from the Delta system. For example, the EIR analysis for surface water evaluates the impacts to the Trinity, Sacramento, Feather, and American River surface water flows. (EIR, at 5-11.) Despite recognizing that Delta hydraulics were dependent on Sacramento River flows earlier in the chapter, the EIR failed to analyze Project impacts on the Delta water supply. (EIR, at 5-9 to 5-10.) The failure of the EIR to identify the impact of the Project on the water supply and flows in the Delta and the San Joaquin River systems is a foundational deficiency. Changes in water supply and surface water flows within the Delta and its watersheds are reasonably foreseeable. Because the Project may foreseeably cause potential impacts to these resources, including by moving Sacramento flows around the Delta rather than through it, the EIR is required to analyze these impacts. (Cal. Code Regs., tit. 14, § 15064[d].) The failure of the EIR to disclose or evaluate these potentially significant environmental impacts renders it unlawful. (Pub. Res. Code, § 21100 [b][2].) DWR must revise the EIR's Water Supply and Surface Water chapters to evaluate the Project's impact on re-routing water that would otherwise move through the Delta system.	water demands, urban water demands, and water contracts. These were all considered in the analysis of water supply in the EIR. Please also see Common Response 1 regarding the selection of the study areas evaluated in the EIR, including the area of the Delta as well as the San Joaquin River. Given the above, there is no failure of the EIR to fully evaluate direct and indirect impacts on all resources as a result of changes to surface water or water supply.
521-8	The EIR Fails to Evaluate Project Impacts on Groundwater The EIR's analysis of Project impacts on groundwater has several significant deficiencies. First, the EIR fails to evaluate whether the Project will affect the ability of groundwater sustainability agencies in the Plan or study area to comply with their respective groundwater sustainability plans (GSP) and achieve sustainability under the Sustainable Groundwater	With respect to groundwater, CEQA Appendix G specifically identifies conflicting or obstructing implementation of a sustainable groundwater management plan. Please see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding consideration of groundwater sustainability plans. As described in Common Response 8, the groundwater analysis contained in Chapter 8, Groundwater, found groundwater impacts to be less than significant, and the project would not interfere with implementation of GSPs. The project would not reduce the

Letter-Comment Number	Comment	Response
	Management Act (SGMA). This failing is compounded by the fact that the Plan and study areas are too narrow. The Project could impact and affect SGMA compliance for all subbasins within the San Joaquin Valley. The evaluation of Project impacts on GSPs is required by the CEQA Guidelines, Appendix G, section X(e), which requires the lead agency determine whether the Project would "[c]onflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan." Certainly, DWR, as the agency responsible for reviewing GSPs should prioritize the evaluation of Project impact on GSP and SGMA sustainability, especially because the Project may reduce the total volume of water infiltrating into one or more groundwater basins. The EIR does provide some background information regarding GSPs in the project area (EIR, at 8-7 to 8-9), but the EIR fails to analyze the Project's impacts on achieving sustainability or otherwise complying with GSPs in all areas that could be impacted by the Project including subbasins underlying the SJTA members.	total volume of water infiltrating into one or more groundwater basins. As described in Common Response 8, the Delta Conveyance Project's construction and operation would not have a significant negative impact on groundwater elevations or storage. The project will meet rigorous standards to control potential groundwater effects during construction and ensures that groundwater quality, land subsidence, and sea water intrusion will not be adversely affected. The project also aligns with existing groundwater sustainability plans and supports local recharge projects using nearby water sources.
521-9	The second failure of the EIR's groundwater analysis is reliance on unsupported thresholds. The EIR recognizes that the San Joaquin Valley is "heavily dependent upon groundwater." (EIR 8-6.) It also acknowledges that groundwater levels in the San Joaquin Valley have been lowered "beyond what natural recharge can replenish" and that the San Joaquin River is a "losing river." (Id.) Yet, the EIR ignores potential groundwater impacts and chooses arbitrary thresholds not based on substantial evidence that avoid calling an impact significant, violating CEQA. (Pub. Res. Code, § 21100 [b][2]; Cal. Code Regs., tit. 14, § 15064.7[b].) The analysis is separated into two different categories – impacts from construction and impacts from long term	Chapter 8, Groundwater, in the section titled Approach for Analysis, provides an overview of the tools used and steps followed in the analysis of the project's impacts on groundwater. The section titled Thresholds of Significance provides the justification as to why the specific thresholds were selected. The thresholds for impacts GW-1 through Impact GW-7 are all based on historical data as follows: - Impact GW-1: Threshold is based on historical variations in annual stream gains/losses, which ranges from 62% to 124% of average annual stream gains/losses over the historical period from 1974 to 2015 in stream reaches in the Delta region. - Impact GW-2: Threshold is based on historical groundwater elevation changes measured at 132 wells in the Delta region. - Impact GW-3: Threshold is based on construction information from 3,565 production wells in the Delta region.

Letter-Comment Number	Comment	Response
	operation. The thresholds of impact that the EIR uses to evaluate Project impacts are the same for both construction and operation. The EIR developed several thresholds of significance; however, as explained more fully below, none of the thresholds are supported by sufficient technical information or analysis.	- Impact GW-4: Threshold is based on historical changes in storage as simulated by the calibrated DeltaGW historical model. - Impact GW-5: Threshold is based on variations in agricultural drainage simulated by the calibrated DeltaGW historical model. - Impact GW-6 and Impact GW-7: Thresholds are based on historical conditions that have previously led to subsidence and degradation of groundwater quality respectively. Chapter 5, Surface Water, provides an assessment of the effects of the operation of the proposed project and alternatives on upstream hydrologic conditions. As summarized in the body of the chapter and as provided in detail in supporting appendices, the operation of the project would not change the operations of upstream reservoirs or the hydrologic conditions of rivers flowing to the Delta, including the San Joaquin River.
521-10	The EIR relies on Impact GW-1 to evaluate Project impacts on interconnected streams based on a threshold of 5% change in stream gains or losses. (EIR, at 8-19.) The EIR explains that this threshold was derived based on historic variations in annual stream gains and losses that range from 62% to 124%. The EIR contemplates that 5% is small in comparison to these historical variations. However, the EIR provides no support for selecting 5% as opposed to a different number such as 1% or 10%. In addition, the EIR does not acknowledge that the existing fluctuation will remain and the 5% will be in addition to such fluctuation. It is further unclear how, in a losing water system or a critically overdrafted basin, DWR could determine that even a 1% decrease in overlying surface water supplies would not exacerbate already significant impacts such that it could determine this further decrease could be directly, indirectly, or cumulatively less than significant. Finally, the EIR fails to analyze how this threshold will impact interconnectivity. The EIR should analyze a range of different percentages of stream gains or losses and their corresponding impact on the	The DeltaGW model uses simulated stream stage to calculate stream gains and losses to the aquifer. In Chapter 8, Impact GW-1 was assessed using the simulated volumes of stream gains and losses under project alternatives. Recharge from the rivers to the neighboring subbasins is assessed under Impact GW-1. On average, the difference in stream-aquifer interaction between existing conditions and project alternatives is 0.62% or less. The greatest difference is 1.69%. Furthermore, change in groundwater storage for the Delta and neighboring basins is considered under Impact GW-4. As discussed in Impact GW-4, modeling indicates a slight increase in groundwater storage compared to existing conditions. The surface water analysis simulates that under project operations, the region would see changes in both project and non-project surface water deliveries. The groundwater analysis reflects the changes in surface water deliveries. Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Systems Operations Modeling, includes reservoir storage results, changes in streamflow, and changes in water supply as a result of project operations. These modeled changes are so small that they would have no noticeable effect on subbasins. Therefore, model simulation supports the understanding that the project would not affect surface water deliveries

Letter-Comment Number	Comment	Response
	groundwater in order to support the selection of the specific 5% threshold. The EIR's analysis of Impact GW-1 concluded that there would be reductions in annual stream-aquifer interaction but concluded the reductions would not be significant based on the 5% threshold. (EIR, at 8-33.)	within the region. Chapter 8, Groundwater, has been updated to clarify statements regarding changes in groundwater storage under project operations. The revision does not result in a new significant environmental impact, substantial increase in the severity of an environmental impact, or require additional mitigation measures to which DWR was unwilling to commit.
521-11	The EIR relies on impact GW-2 to evaluate project impacts on groundwater elevations by determining whether the Project results in elevation changes of 5-feet at a rate of more than 5%. (EIR, at 8-19.) The only evidence used in support of this threshold is historical data in the Delta region showing that groundwater elevations fluctuate by more than 5 feet about 23% of the time and by more than 15 feet about 5% of the time. The EIR does not consider the impact of an additional fluctuation of +/- 5 feet in groundwater levels. The application of analysis of Impact GW-2 acknowledges that the Project will result in a reduction in surface water flows, which may reduce recharge to the underlying groundwater basins. (EIR, at 8-37.) However, the EIR fails to analyze whether this reduction in flows would result in reduced recharge, and whether such further reductions in already overdrafted basins would be directly, indirectly, or cumulatively significant. The EIR simply concludes in a single sentence that the groundwater levels are not significantly impacted. (EIR, at 8-39.)	The EIR provides evidence for the threshold related to Impact GW-2 and GW-4. The thresholds developed for Chapter 8, Groundwater, Impact GW-2 are based on historical data for the 1974-2015 period from 132 wells within the Delta region. The historical fluctuations over the 41-year period were used to establish the threshold of +/- 5 feet change in groundwater elevations more than 5% of the time. The impact of reduced recharge to underlying groundwater basins is addressed under Impact GW-4 as described in response to comment 521-10.
521-12	The EIR relies on impact GW-3 to measure the Project impact on groundwater levels at supply wells by setting a threshold of 20 feet of groundwater decline in supply wells in the Delta. (EIR, at 8-19.) The EIR estimates the average depth of Delta groundwater wells and determines that a 20-foot decline is less than 10% of the average depth of supply wells in the Delta. The EIR does not analyze how many wells have already gone dry or the average elevation compared to depth. This means that the	The EIR provides evidence for the threshold related to Impact GW-3. The threshold for Impact GW-3 is based on information from the 3,565 production wells in the Delta region. Groundwater elevations at 132 monitoring wells within the area were used to determine frequency and magnitude of historical fluctuations in the region. A query of DWR's Dry Well Reporting system shows that only 3 wells within the Delta region have been reported as going dry since the Dry Well Reporting System was developed in 2013. As described in Impact GW-3, the greatest decline in

Letter-Comment Number	Comment	Response
	EIR does not evaluate whether the Project impact of 10% of the total depth will impact access to groundwater. Further, the EIR provides no evidence that suggests a decline that is less than 10% of the average depth would not be directly, indirectly, or cumulatively harmful. Again, the EIR acknowledges the Project's potential to impact groundwater levels, but the analysis concludes that the impact is not significant based on the 10% threshold. (EIR, at 8-43, 44.)	groundwater elevations relative to existing conditions is 2-3 feet at any well in the region.
521-13	The EIR relies on impact GW-4 to measure long-term changes in groundwater storage by using a threshold of 5% difference in the change in long-term storage compared to existing conditions in the Delta region. (EIR, at 8-20.) The EIR relies on this threshold because historical fluctuations in storage are estimated at 20%. The EIR does not analyze how the Project will affect the existing fluctuation. There is also no analysis evaluating the quantity of groundwater loss at a reduction of 5% in long-term storage or whether this loss would not be harmful. Instead of disclosing the estimated loss of storage, the EIR concludes that the percent change in volume of groundwater storage was less than the threshold and therefore not significant. (EIR, at 8-48.)	Impact GW-4 assesses the project's impacts on existing fluctuations in change in groundwater storage by comparing the long-term change in groundwater storage between project alternatives and existing conditions. Both the volume and percentage associated with historical fluctuations in groundwater storage reported in Impact GW-4 are discussed in the Thresholds of Significance section of Chapter 8, Groundwater. Please see response to comment 521-10 regarding more information on Impact GW-4.
521-14	The EIR relies on impact GW-5 to measure the Project impacts on groundwater levels that affect agricultural drainage. The EIR uses a threshold of a 10% increase in annual agricultural drainage flows. (EIR, at 8-20.) This threshold relies, without evidence, on the assumption that existing drainage systems have sufficient capacity for some increased volumes of drainage. (Id.) The EIR fails to evaluate whether existing drainage systems have additional capacity for increased volumes of drainage due to the project.	The EIR provides evidence for the threshold related to Impact GW-5. As described in Chapter 8, Groundwater, in the Thresholds of Significance section, large scale variations in agricultural drainage (70% to 150%) were observed under historical conditions. The 10% increase in annual agricultural drainage flows is within the range of fluctuations that have occurred naturally without the project. As documented in Appendix 8B, Impact Analysis: Groundwater Model Results, the maximum change in annual agricultural drainage in the Delta Region under any project alternative is 1.33% compared to existing conditions. Furthermore, under Mitigation Measure GW-5, existing or new dewatering wells would be used to extract groundwater and reduce groundwater elevations to average

Letter-Comment Number	Comment	Response
		seasonal elevations.
521-15	The CalSim3 Model Results Are Different from Previous Modeling, and the Changes Are Not Disclosed The EIR uses the CalSim 3 model as a basis for its surface water impacts analysis (EIR 5- 11-13) and uses data and the inputs from the CalSim 3 model in the DeltaGW used for the EIR's groundwater impacts analysis. (EIR, at 8-16.) As noted above, the EIR does not evaluate the Project's impacts on the San Joaquin River system. However, CalSim 3 depicts the average annual flows at Vernalis at about 2,650-thousand-acre feet (TAF). This projected flow is significantly lower than average annual flow estimates that were produced from CalSim 2, which estimated Vernalis flows at around 3,000 TAF. The EIR does not include a full explanation of the differences between CalSim 2 and CalSim 3 assumptions, inputs, or parameters such as climate change, land use, or regulatory requirements, making it difficult to fully understand the difference of projected Vernalis flows. In addition, the CalSim 3 inputs or assumptions related to 2018 Bay Delta Plan program of amendment is not clear; it appears that CalSim 3 has included assumptions outside the implementation included the Bay Delta Plan. However, the EIR does not clearly identify the baseline or any modeling assumptions therein.	The CalSim II depiction of the San Joaquin Valley was developed in 2006/2007. CalSim 3 is built on this representation but includes many significant refinements, including revised boundary inflows from the upstream watersheds, explicit representation of rainfall-runoff from the valley floor, and dynamic simulation of stream-groundwater interaction along the San Joaquin River and the major eastside tributaries. Land use and agricultural water demands and managed wetland water demands were updated to better reflect 2020 conditions. Similarly, urban demands were updated to reflect current water use. Therefore, the CalSim 3 simulation of streamflows in the San Joaquin Valley would differ from those for CalSim II. The simulated flow for the San Joaquin River at Vernalis depends on both the model hydrology and reservoir operation assumptions. In particular, flows are influenced by assumptions regarding the San Joaquin River Restoration Program and recapture of restoration flows below the Merced River confluence. Flows are also influenced by assumptions regarding the operation of New Melones Reservoir and Reclamation's obligation to meet D-1641 flow and water quality standards at Vernalis. For the common period of analysis, 1922-2003, the average annual flow for the San Joaquin River at Vernalis for Existing Conditions is 2,675 TAF for CalSim 3 compared to 3,135 TAF for CalSim II (depending on which version of CalSim II is considered). To date, CalSim II, CalSim 3, C2VSim Coarse Grid, and C2VSim Fine Grid models have struggled to reproduce the hydrology of the San Joaquin Valley. Typically, these models tend to under-estimate the San Joaquin River flow at Vernalis. A bias correction was added to CalSim II based on the discrepancy between the observed flow at Vernalis and the computed flow based on a monthly historical water balance (1922-2003) that considers historical reservoir releases, historical diversions, and modeled

Letter-Comment Number	Comment	Response
		accretions and depletions. CalSim 3 also includes flow bias corrections. However, unlike CalSim II, the bias corrections are based on a recent 20-year period (1996-2015). The hydrology of the San Joaquin Valley has changed significantly over the last 100 years. Irrigation return flows and groundwater inflows to the stream system have been considerably reduced. Therefore, bias corrections based on an early historical period may not be applicable. For the 20-year period 1996-2015, CalSim 3 simulated flow for the San Joaquin at Vernalis averages 2,920 TAF/year compared to the historical value of 2,929 TAF/year. As noted in Chapter 5, Surface Water, the surface water resources within the San Joaquin River are not expected to be affected by the Delta Conveyance Project and therefore are discussed only briefly. The comment also suggests that the disparity between CalSim II and CalSim 3 outputs should be explained. The Water Demands and Uses section of Appendix 5A, Modeling Technical Appendix, Section B, Hydrology and Systems Operations Modeling, provides an explanation of the additions and enhancement over CalSim II and why it was used. More information about the differences between CalSim II and CalSim 3 can be found here: https://water.ca.gov/Library/Modeling-and-Analysis/Central-Valley-models-and-tools/CalSim-3
521-16	The SJTA appreciates the opportunity to comment on the EIR and looks forward to working with DWR to address the above concerns.	This information is general closing text. It is not a comment on the contents of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
522-1	On behalf of the 18 [Footnote 1: The 18 SWC members currently provide funding for planning costs and include: Alameda County Flood Control & Water Conservation District, Zone 7; Alameda County Water District; Antelope Valley East Kern Water Agency; Coachella Valley Water District; Crestline-	Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding comments that state opinions of general support for the project.

Letter-Comment Number	Comment	Response
	Lake Arrowhead Water Agency; Desert Water Agency; Dudley Ridge Water District; Kern County Water Agency; Metropolitan Water District of Southern California; Mojave Water Agency; Palmdale Water District; San Bernardino Valley Municipal Water District; San Gabriel Valley Municipal Water District; San Gorgonio Pass Water Agency; San Luis Obispo County Flood Control & Water Conservation District; Santa Clara Valley Water District; Santa Clarita Valley Water Agency; and, Ventura County Watershed Protection District.] State Water Contractors (SWC) members, we are writing to support the Delta Conveyance Project (DCP) a project that is essential to modernizing California's water transport infrastructure. California's new reality represents extreme weather events and climate trends including intense but unpredictable storms, extended and more frequent droughts, rising sea levels, increasing temperatures, and an earlier winter runoff making water management in California much more challenging, and requiring modernization of our infrastructure to meet these challenges. We must invest in our Delta infrastructure to ensure the State Water Project (SWP) can capture, move, and store water when it is available.	
522-2	The SWP is California's primary water distribution system. It captures and transports water to communities throughout the state–providing an affordable source of high quality, clean water for more than 27 million Californians from the Bay Area to San Diego and 750,000 acres of farmland. In fact, more than 1 in 12 Americans receive some portion of their water from the SWP. But the infrastructure that protects, collects, and moves water through the Delta to California homes, farms, and businesses was constructed more than 50 years ago and is at an ever-increasing risk of failure from climate change, sea level rise, and seismic events. The proposed DCP is the right project	Please refer to response to comment 522-1 regarding comments that state opinions of general support for the project.

Letter-Comment Number	Comment	Response
	at the right time to help ensure the SWP can continue to meet California's water needs into the future. For many of our agencies, it is also one of the most cost-effective climate resiliency measures they can invest in. This is why they continue to pursue this extremely important project even as they make investments in local and regional projects, conservation efforts, and storage. In fact, the delivery of clean, affordable water from the SWP does projects like water recycling, storage, groundwater recharge, and water quality blending work. The DCP DEIR addresses impacts on the Delta communities. Having worked hard to avoid and reduce environmental and community impacts, today's proposed project is very different from the State's previous proposals. An extensive amount of design refinements has helped avoid or minimize local impacts. The project includes a Community Benefits Program to ensure the communities most affected by the construction of the project are provided with the means and resources to achieve local benefits	
522-3	The DEIR is comprehensive and relies on the best available science to define the proposed operations criteria, analyze environmental impacts and identify mitigation measures. In addition to the fisheries and water quality, the DEIR includes a comprehensive analysis of potential impacts on the Delta communities and tribal cultural resources. While the proposed operations criteria are designed to minimize the impacts to the listed species based on the current and best scientific understanding, it is encouraging to see the DEIR includes a robust Adaptive Management and Monitoring Program to address any uncertainties before and after the DCP is constructed and operated.	Please refer to response to comment 522-1 regarding comments that state opinions of general support for the project.

Letter-Comment Number	Comment	Response
522-4	It is prudent and responsible to pursue the DCP now. We cannot afford to delay modernizing the SWP's Delta infrastructure the cost of doing nothing could disrupt our State's primary water supply. Moreover, with increasingly erratic hydrologic conditions, the ability to capture water when high flows are present makes DCP a critical climate change adaptation measure.	Please refer to response to comment 522-1 regarding comments that state opinions of general support for the project.
522-5	California needs the SWP, and the SWP needs the DCP. Therefore, we encourage state certification of the Final Environmental Impact Report and the advancement of this essential project.	Please refer to response to comment 522-1 regarding comments that state opinions of general support for the project.
522-6	If you have any questions, please do not hesitate to contact (name and phone number redacted).	This information describes contact information for the commenter. It is not a comment on the contents of the EIR. DWR has reviewed all comments and will consider all comments in its decision-making process.
523-1	Dear Department of Water Resources: The County of Sacramento submits the following comments on the Draft Environmental Impact Report (DEIR) prepared by the Department of Water Resources (DWR) for the Delta Conveyance Project (DCP or Project). In our comments eight years ago on a prior iteration of this Project, we stated that "[the project] will irreversibly alter and, in many cases, permanently destroy the generations-old socioeconomic fabric and physical landscape of the Delta." That assessment has not changed for this slightly downsized version of the Project. The current DEIR similarly fails to recognize the scope of significant environmental impacts, overstates the effectiveness of its proposed mitigation measures, fails as an informational document and summarily abandons viable alternatives that address the DEIR's core objectives. Construction and operation of the Project, which proposes to construct new diversion and conveyance facilities to carry	This comment is introductory and summarizes concerns addressed later in this letter. These general comments are addressed here to the extent possible, and more specific comments are responded to herein. The EIR has been prepared in accordance with CEQA and adequately discloses the potential, scope, severity, and magnitude of potential impacts for the environmental resources analyzed. The EIR also describes the effectiveness of potential mitigation. Further, the Mitigation Monitoring and Reporting Program (MMRP) being prepared by DWR pursuant to CEQA for the Delta Conveyance Project will include all mitigation measures adopted by DWR, including the environmental commitments and best management practices included in Appendix 3B, Environmental Commitments and Best Management Practices, of the EIR. The MMRP will include specific details regarding the responsible parties, timing, location, and reporting requirements. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding CEQA requirements for mitigation and the adequacy of mitigation measures included in the EIR.

Letter-Comment Number	Comment	Response
	water from points in the north Delta through an underground system to facilities in the south Delta, will significantly transform current landside and hydrologic conditions in the Delta. The Project will significantly and adversely affect Sacramento County residents and businesses in a multitude of ways both immediate and permanent. County historic communities and their residents will bear a disproportionate burden of the Project's numerous significant unavoidable environmental impacts, for the exclusive benefit water users south of the Delta. The proposed facilities also will slow or prevent the realization of the Delta National Heritage Area's economic development, tourism, and historic preservation goals that are critical to maintaining the "Delta as a Place." The Project also may significantly impact water supplies in the County. The Sacramento County Water Agency (SCWA), which currently supplies potable and recycled water to approximately 150,000 users throughout its service area, is among the regional water purveyors most affected by Project impacts. SCWA's service area includes the major growth areas of Sacramento County, south of Jackson highway and east of State Route 99, which are anticipated to accommodate roughly 100,000 new persons and more than 20,000 new connections by buildout. SCWA's detailed comments on the DEIR and Project—citing major concerns regarding potentially significant impacts to the Freeport Regional Water Project from reverse flow events in the Sacramento River, as well as to the Sacramento region's and Delta residents' water supply through impacts to surface and groundwater quality and changes in upstream reservoir operations—are submitted separately and incorporated into these comments by reference.	Please refer to Appendix 3A, Identification of Water Conveyance Alternatives, and Common Response 3, Alternatives Development and Description, regarding the alternatives development process and the range and scope of alternatives considered. Please also see Common Response 3 regarding suggested infrastructure and water management alternatives, as well as the approach to describing the project and alternatives. The comment assertion that the project would have an impact on hydrologic conditions is not consistent with the analysis provided in the EIR. As discussed in Chapter 5, Surface Water, monthly Sacramento River flows would be similar to long-term averages. Please refer to the section in Chapter 5 titled Changes to Sacramento River Basin Flows, regarding the frequency and duration of reverse flow events north of the proposed intakes. Chapter 6, Water Supply, analyzes the project's potential impacts on water supply. The proposed project does not include changes to operational criteria associated with upstream reservoirs. As described in Chapter 7, Flood Protection, and Chapter 8, Groundwater, the impacts of the project on these resource areas would be less than significant or less than significant with mitigation. Chapter 17, Socioeconomics, addresses potential socioeconomic effects that could result from project construction, operations, and maintenance. This analysis concluded that effects would not be adverse. Chapter 19, Cultural Resources, addresses potential impacts on built and archaeological cultural resources. Chapter 29, Environmental Justice, includes an in-depth discussion of impacts and mitigation measures to environmental justice communities in the Delta. Please refer to Appendix 3E, Delta Reform Act Considerations, and

Letter-Comment Number	Comment	Response
	As expressed throughout these comments, uncertainties about critical details of the Project, including construction, operations, potentially significant impacts, and mitigation, are hugely problematic for a public infrastructure project of this scale. The proposed plan and preferred Project (Alternative No. 5) has the potential to permanently damage the Delta as a whole, as well as result in irreversible and significant physical, environmental, and socioeconomic impacts to the portion of the Delta within unincorporated Sacramento County, including established legacy communities. The DCP also will violate several state laws intended to protect the Delta and Delta water users from the Project's impacts.	Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for a discussion of the requirements of the Delta Reform Act. As described in Appendix 3G, Community Benefits Program Framework, the Delta Community Fund could be used to fund actions to enhance tourism and the economic vitality of the Delta communities. Please see Common Response 1 for a discussion on why the level of detail of the project design and engineering is adequate for the purposes of analysis under CEQA. It is unclear which state laws the commenter asserts the project would violate, however, please refer to Common Response 8 for a discussion related to the consistency or relationship between the Delta Conveyance Project and various state, regional, and local plans, projects, policies, and programs. Please also refer to Common Response 1 regarding the project's purpose and objectives, including DWR's continuing commitment to operate the State Water Project as modified to include the Delta Conveyance Project in compliance with all state and federal water quality and environmental laws. Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities that are of interest. Responses to all comment letters are provided in Volume 2, Chapter 4, Response to Comments Tables.
523-2	The DCP would change the face of the Delta through the construction and operation of multiple industrial facilities in previously natural, agrarian settings. In Sacramento County alone, DWR would construct two intake diversion facilities totaling 232 acres adjacent to the Town of Hood, two 14-acre concrete batch plants at Lambert Road, a 222-acre double-launch shaft at Twin Cities Road and a 214-acre, 15-foot-high reusable tunnel material pile at the "Twin Cities Complex." The	The comment's assertion that construction and operation of the project would change the Delta from agrarian to industrial is not supported by analysis the contained in the EIR. As discussed in Chapter 14, Land Use, Impact LU-2, construction of the project would not result in a significant physical effect on the environment. Likewise, as noted in Impact LU-3, facilities constructed in or near existing communities would be along road rights-of-way and would not result in a physical division of existing communities. Permanent and temporary conversion of Important

Letter-Comment Number	Comment	Response
	total Delta footprint of the proposed project (Alternative 5 or the Bethany Alternative) would occupy 1,313.75 acres. [Footnote 1: DEIR, p. 3-20.]	Farmland is assessed in Chapter 15, Agricultural Resources. While construction of the project's water conveyance facilities would result in the conversion of Important Farmland, the total impacted acreage represents approximately 1% or less of all the Important Farmland available within the Delta. Refer to Chapter 15 for additional discussion.
523-3	In addition to these scars upon the Delta landscape, the Project would divert up to 6,000 cubic feet/second of Sacramento River water at the Hood intakes. This is more than half of the capacity of the existing State Water Project Banks pumping plant and more than the capacity of the CVP Jones pump at Tracy. [Footnote 2: DEIR, pp. 6-13, 6-19.] Under certain conditions, diversions would remove 25% to 33% of the Sacramento River water downstream of the intakes. [Footnote 3: DEIR, p. 3-155 (e.g., Oct.-Nov. diversions up to 5,000 cfs during 20,000 cfs Sac River flows).] The DEIR acknowledges that: "[T]here are consistent decreases among project alternatives in long-term average flows for all months on the Sacramento River north of Courtland (i.e., downstream of the proposed north Delta intakes) due to the diversions of available excess water at the proposed north Delta intakes beyond the needs to satisfy downstream regulatory requirements in the Delta, including Delta outflows..."[Footnote 4: DEIR, p. 5-2, lines 2-6; see also p. 5-27, lines 6-11.] One consequence of these reductions would be as follows: "...the magnitude and duration of reverse flows...decrease as inflow of the Sacramento River increases. Consequently, reduced Sacramento River inflow increases the frequency of reverse flows at this junction..., thereby increasing the proportion of fish that are entrained into the interior Delta,	As described in Chapter 2, Purpose and Project Objectives, the basic objective of the Delta Conveyance Project is to restore and protect the reliability of SWP water deliveries, not to create additional water transfer capacity. The Delta Conveyance Project helps meet this by constructing and operating new water supply facilities within the Delta. DWR proposes to operate the Delta Conveyance Project consistent with the operational criteria described in Chapter 3, Description of the Proposed Project and Alternatives, in the sections titled Delta Conveyance Project Preliminary Proposed Operations Criteria and Real-Time Operational Decision-Making Process, as well as within the operational constraints as required by the permitting processes, including federal and state endangered species act requirements. Common Response 3, Alternatives Development and Description, further explains that the proposed intakes would only be permitted to operate with regulatory protections of existing standards and as prescribed by the federal and state environmental permitting process. The project alternatives do not include actions to modify current water rights. The comment summarizes fall diversion percentages for the Sacramento River based on data presented in the figure titled Seasonal Diversions in Chapter 3. The presentation of these statistics is taken out of context. Sacramento River diversions are based on many factors, as explained in Common Response 3. Importantly, as noted in the figure used by the commenter, the maximum allowable diversion for the new intakes is limited to 6,000 cubic feet per second when the river is at the applicable flow and other conditions are met. Operations would require a level of

Letter-Comment Number	Comment	Response
	where mortality is high..." [Footnote 5: DEIR, p. 12-17, lines 26-30.] DWR proposes to override and accept these significant impacts notwithstanding the availability of one or more alternatives that avoid the Project's worst effects while meeting the core objective.	Sacramento River flow passing the intakes before water could be diverted. Refer to Common Response 3 for additional discussion. As discussed in Chapter 5, Surface Water, monthly Sacramento River flows would be similar to long-term averages. Please refer to the section in Chapter 5 titled Changes to Sacramento River Basin Flows regarding the frequency and duration of reverse flow events north of the proposed intakes.
523-4	The DEIR repeatedly laments the condition of Delta levees and their susceptibility to rising water levels caused by climate change. [Footnote 6: See, e.g., DEIR, pp. ES-2, lines 32-35; ES-7, lines 9-13; p. 1-14, lines 11-14; p. 1-15, lines 4-5; pp. 1-15 to 1-18.] Yet, when presented with multiple viable proposals involving strengthening and raising Delta levees ("Portfolio" alternatives at pp. 3A-18 and 3A-24, "Water Plan" at p. 3A-16), the DEIR cursorily dispenses with them, depriving the public of full consideration of options that could preserve the Delta's health and natural character.	The Department of Water Resources followed CEQA requirements when identifying alternatives to be considered for evaluation in the EIR. As described in Common Response 3, Alternatives Development and Description, CEQA lead agencies develop project objectives to inform the identification of the project and a reasonable range of potentially feasible alternatives; an EIR should include a reasonable range of alternatives that meet most of the basic project objectives, are potentially feasible, and would avoid or substantially lessen one or more of the significant effects of the proposed project. Common Response 3 provides an explanation of the alternatives screening process and how project objectives are used to identify potential alternatives to the proposed project. The purposes and project objectives of the Delta Conveyance Project are presented in Chapter 2, Purpose and Project Objectives, of the EIR. Common Response 3 also explains how the screened-out alternatives, including levee improvements, do not meet a majority of the basic project objectives or are not potentially feasible alternatives to the proposed project. The proposed Delta Conveyance Project is one part of a diverse portfolio of strategies that would assist in meeting California's water management needs and would not preclude other measures that may be taken by DWR or other entities. Please refer to Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding DWR's role and responsibilities regarding levee management.

Letter-Comment Number	Comment	Response
523-5	Based on our review of the DEIR and appendices, we have concluded that the Project has the potential to cause significant impacts to Sacramento County residents and businesses and to the environment in the Delta, many of which the DEIR fails to identify and mitigate in violation of CEQA. These comments, which were prepared in consultation with technical experts on hydrology, water quality, groundwater and more, identify several key areas where the DEIR is deficient and where DWR has failed to proceed in the manner required by the California Environmental Quality Act (CEQA), including: -Adoption of inappropriately narrow project objectives which preclude consideration of a reasonable range of alternatives -Failure to provide a clear and consistent project description -Failure to provide information necessary for the public and decision-makers to meaningfully evaluate the Project's impacts, or to present information in a manner that is meaningful and useful to the public and decisionmakers -Failure to identify and consult with responsible agencies as required by CEQA and the Delta Plan -Failure to use the best available and sound science to analyze Project impacts -Failure to identify a reasonable range of alternatives to the Project -Inadequate and improper identification of mitigation	The comment assertions regarding an inadequate and narrow analysis are not consistent with the analysis contained in the EIR. Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the scope of the project purpose and objectives and the discretion CEQA affords lead agencies in describing the objectives of a project. Please see also Common Response 3, Alternatives Development and Description, regarding development of a reasonable range of feasible alternatives evaluated in the EIR that meet the basic project objectives. As described in Chapter 3, Description of the Proposed Project and Alternatives, the alternatives selection process included consideration of an initial 21 potential alternatives, a two-step filtering process used to develop a reasonable range of alternatives, including 11 alternatives removed from further consideration and rationale for their removal. Appendix 3A, Identification of Water Conveyance Alternatives, also provides additional information and explanation of how the discussion of alternatives was developed for consideration in the EIR, background of the Delta Conveyance project that discusses previously proposed projects, iterations of those projects, diversion operations, means of conveyance, and how those processes have been used to inform the development of the current project. The approach used to describe the project and the details that provide a clear and consistent project description, is also discussed in Common Response 3. Please refer to Common Response 1 regarding length and complexity of the document and the multiple ways in which DWR presented and summarized the information in the EIR to make it easily understandable and easy to locate. DWR received public scoping comments from responsible agencies and consulted with responsible agencies throughout the preparation of the Draft EIR. Please see Chapter 1, Introduction, for identification of responsible agencies, as required by CEQA, and their expected use of the

Letter-Comment Number	Comment	Response
	measures -Improper use of analytical methodology which obscures and disguises Project impacts as less significant than they are -Failure to adequately identify, analyze, and mitigate significant impacts resulting from Project construction and operation -Failure to support conclusions with substantial evidence "An EIR is an 'environmental "alarm bell" whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.' The EIR is also intended 'to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.'" [Footnote 7: Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 499, citing Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal. (1988) 47 Cal.3d 376.] Courts have held that an EIR is a "document of accountability," reasoning that "[i]f CEQA is scrupulously followed, the public will know the basis on which its responsible officials either approve or reject environmentally significant action, and the public, being duly informed, can respond accordingly to action with which it disagrees." [Footnote 8: Ibid.] In order for this process to work as it should, "[a]n EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project." [Footnote 9: Ibid.] The DEIR, by failing to meet these requirements and omitting	EIR. The EIR uses best available tools and best available science as described in each methodology section of Chapters 5 through 32, and as described in Common Response 1. Please also refer to Common Response 1 regarding a discussion of the use and requirements of CEQA related to mitigation measures. As described in that Common Response, DWR proposes feasible mitigation measures for all potentially significant impacts identified by the impact analyses in Chapters 5 through 32 as summarized by the table in the Executive Summary titled Summary of Delta Conveyance Project Impacts and Mitigation Measures. Where feasible, these mitigation measures are identified and described as reducing most impacts to less than significant. However, if impacts cannot be reduced to less-than-significant levels, the EIR explains why and makes a conclusion of significant and unavoidable (e.g., Tribal cultural resources, cultural resources, noise). Please also see Common Response 1 for a description of substantial evidence and the use of substantial evidence throughout the entire EIR to support CEQA determinations. Please also see Common Response 1 for a discussion of the CEQA recirculation criteria, none of which are met by the EIR.

Letter-Comment Number	Comment	Response
	information necessary for readers to engage in independent review of the Project's impacts, must be revised and recirculated for public comment in accordance with CEQA.	
523-6a	I. PROJECT OBJECTIVES A project's objectives should not be so narrowly defined that they preclude consideration of reasonable alternatives for achieving the project's underlying purpose. [Footnote 10: North Coast Rivers Alliance v. Kawamura (2015) 243 Cal.App.4th 647, 668; In re Bay-Delta Programmatic Envt'l Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1166.] In 2019, Governor Newsom signed Executive Order N-10-19 directing state agencies to establish a "set of actions to meet California's water needs through the 21st century," giving rise to the California Water Resilience Portfolio. Recognizing that "no single solution can fully address the state's water challenges," the Portfolio identified a suite of actions aimed at addressing issues of water supply reliability and environmental protection using a "broad, diversified approach," including a plan to "modernize conveyance of a critical portion of the state's water supply through the Sacramento-San Joaquin Delta." [Footnote 11: California Water Resilience Portfolio, July 2020, pp. 5, 7, available at https://resources.ca.gov/-/media/CNRAWebsite/Files/Initiatives/Water-Resilience/Final_California-Water-Resilience-Portfolio-2020_ADA3_v2_ay11-opt.pdf.] Proposed by DWR, the DCP's stated purpose is "to restore and protect the reliability of SWP water deliveries and, potentially, CVP water deliveries south of the Delta, consistent with the State's Water Resilience Portfolio in a cost-effective manner."	Please see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding the relationship between the Delta Conveyance Project and Executive Order N-10-19 and the California Water Resilience Portfolio. As described in Common Response 8 and Chapter 1, Introduction, DWR recognizes there is no one-size-fits all approach, as does the California Water Resilience Portfolio. This is why the California Water Resilience Portfolio includes more than 100 separate detailed actions needed to ensure California's water systems work in the coming decades. The Delta Conveyance Project is one of many projects that will help meet California's water management needs but is not intended to be the only project that could meet water management needs. Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the discretion CEQA affords lead agencies in defining the project purpose and objectives and the scope of the purpose and objectives statements for the purposes of CEQA. The project objectives presented in Chapter 2, Purpose and Project Objectives address what the Delta Conveyance Project is focused on accomplishing, in part, to further the California Water Resiliency Portfolio action to modernize Delta conveyance infrastructure and improve water supply reliability. The executive order criteria and priorities are intended to guide the development of the portfolio of options to improve water resilience in California as a whole and are not intended to be CEQA alternatives screening criteria for project EIRs. Appendix 3A, Identification of Water Conveyance Alternatives, and Common Response 3, Alternatives Development and Description, describe further the alternatives development process and the range and scope of alternatives considered

Letter-Comment Number	Comment	Response
	[Footnote 12: DEIR, p. 2-2, lines 24-26.] Several related objectives follow this fundamental purpose: -To help address anticipated rising sea levels and other reasonably foreseeable consequences of climate change and extreme weather events. -To minimize the potential for public health and safety impacts from reduced quantity and quality of SWP water deliveries, and potentially CVP water deliveries, south of the Delta as a result of a major earthquake that could cause breaching of Delta levees and the inundation of brackish water into the areas where existing SWP and CVP pumping plants operate in the southern Delta. -To protect the ability of the SWP, and potentially the CVP, to deliver water when hydrologic conditions result in the availability of sufficient amounts of water, consistent with the requirements of state and federal law, including the California and federal Endangered Species Acts and Delta Reform Act, as well as the terms and conditions of water delivery contracts and other existing applicable agreements. -To provide operational flexibility to improve aquatic conditions in the Delta and better manage risks of further regulatory constraints on project operations. [Footnote 13: Id., pp. 2-2 to 2-3, lines 23-38, 1-4.] The Water Resilience Portfolio was designed to facilitate innovation in the face of a changing climate and challenges to water security. [Footnote 14: California Water Resilience Portfolio, July 2020, p. 6, available at https://resources.ca.gov/-	using the project purpose and objectives. CEQA Guidelines Section 15124(b) requires a clearly written statement of objectives to help the lead agency develop a reasonable range of alternatives to evaluate in the EIR.

Letter-Comment Number	Comment	Response
	/media/CNRAWebsite/Files/Initiatives/Water-Resilience/Final_California-Water-Resilience-Portfolio-2020_ADA3_v2_ay11-opt.pdf.] The Governor's Executive Order directing establishment of the Portfolio mandated a comprehensive approach to solving the state's water needs, identifying seven principles on which the Portfolio was to be based: 1) Prioritize multi-benefit approaches that meet several needs at once 2) Utilize natural infrastructure such as forests and floodplains 3) Embrace innovation and new technologies 4) Encourage regional approaches among water users sharing watersheds 5) Incorporate successful approaches from other parts of the world 6) Integrate investments, policies, and programs across state government 7) Strengthen partnerships with local, federal, and tribal governments, water agencies and irrigation districts, and other stakeholders. [Footnote 15: Id., pp. 6–7.] In light of the Water Resilience Portfolio's clear directive, repeated often throughout its pages, that reliance on any one water source must be reduced and water supplies must be diversified, [Footnote 16: Id., p. 5.] it is clear that the Project's	

Letter-Comment Number	Comment	Response
	objectives are too narrowly defined, focusing only on benefits to State Water Project operations and south of Delta water deliveries. As described more fully in the following sections, the Project falls short of achieving the above principles.	
523-6b	The objectives [identified in the Purpose and Need] reference providing "operational flexibility to improve aquatic conditions in the Delta," yet the Project does not commit to improving aquatic conditions, nor does it include any objectives that would protect water quality in the Delta from degradation. Further, the DEIR provides no evidence to demonstrate that the Project would be capable of improving aquatic conditions in the Delta, as explained more fully in Section VIII's discussion of mitigation measures below. Indeed, the Project worsens aquatic conditions, including impacts to fish, rather than improving them. A lead agency should not adopt artificially narrow project objectives that would preclude consideration of reasonable alternatives for achieving the project's underlying purpose. [Footnote 17: North Coast Rivers Alliance v. Kawamura (2015) 243 Cal.App.4th 647, 669; County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 203 (EIR for expansion of groundwater extraction failed to consider water conservation as alternative to increased groundwater extraction).] This approach is not only inconsistent with CEQA's mandate to offer a reasonable range of alternatives and the Water Resilience Portfolio's instruction to employ a diversified approach, but it is also inconsistent with the Delta Reform Act's coequal goals of improving water supply reliability for the State (not just Delta exporters) and protecting, restoring, and enhancing the Delta ecosystem. The Project's objectives should be expanded to include prevention of water quality degradation in the Delta	Please see response to comment 523-6a regarding the project objectives presented in Chapter 2, Purpose and Project Objectives, as well as the discretion CEQA affords lead agencies in defining the project purpose and objectives and the scope of the purpose and objectives statements for the purposes of CEQA. Please also refer to response to comment 523-4 regarding the adequacy of the alternatives evaluated for the purposes of CEQA. As discussed in Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, and in Common Response 3, Alternatives Development and Description, the project objectives are sufficiently broad to allow for a reasonable range of potentially feasible alternatives in accordance with CEQA requirements. Please see response to comment 523-6a regarding the relationship between the Delta Conveyance Project and the Water Resilience Portfolio.

Letter-Comment Number	Comment	Response
	and avoidance of adverse impacts to current land uses and communities in the Delta, which is consistent with the Delta Plan, as discussed further in Section VI. Below.	
523-7	The unreasonably narrow range of proposed alternatives, discussed in Section III, do not offer the range of multi-benefit approaches designed to meet multiple needs outlined in Principle 1, but this could be addressed with the addition of an alternative proposing through-Delta conveyance and including a mechanism for levee improvements and maintenance. A through-Delta conveyance alternative also would avoid conflicts with current land uses in the Delta, consistent with the Delta Plan Policy P2. (See Section VI.)	The comment's assertion that the EIR presents an unreasonably narrow range of alternatives is not supported by the content of the EIR. Please see response to comment 523-4 regarding adequacy of the range of alternatives. A through-Delta conveyance alternative including levee improvements was screened-out because it does not meet a majority of the basic project objectives, as described in Common Response 3, Alternatives Development and Description, and EIR Appendix 3A, Identification of Water Conveyance Alternatives. The project would be consistent with the Delta Reform Act and other applicable legislation and agreements as shown in Appendix 3E, Delta Reform Act Considerations. Please also refer to Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding the relationship of the Delta Conveyance Project to the Delta Reform Act, DWR's authorities, and levee management.
523-8	The Project is in direct conflict with Principle 6's call for the integration of investments, policies, and programs across governments, due to the Project's potentially adverse impacts to regional programs and projects, such as the Harvest Water program being implemented by the Sacramento Regional County Sanitation District (Regional San), discussed in detail in that agency's comments on the proposed Project and incorporated by reference herein.	This comment is focused on one of the seven principles (Principle 6) on which the Water Resilience Portfolio was to be based. Please see response to comment 523-6a regarding the relationship between the Delta Conveyance Project and Executive Order N-10-19 and the California Water Resilience Portfolio. The executive order criteria and priorities are intended to guide the development of the portfolio of options to improve water resilience in California as a whole and are not intended to be CEQA alternatives screening criteria for project EIRs. Regarding the assertion that Delta Conveyance Project activities would directly impact lands prioritized for the implementation of the Harvest Water Program, the Twin Cities Complex, including the associated RTM

Letter-Comment Number	Comment	Response
		footprint, and the northern concrete batch plants along Lambert Road are not located on properties that would receive Harvest Water, and there are currently no pipelines identified in the project map in the most recent CEQA document for Harvest Water to those locations (Ascent Inc. 2020). Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities that are of interest. Responses to all comment letters are provided in Volume 2, Chapter 4, Response to Comments Tables.
523-9	DWR's failure to consult with agencies in the preparation of the DCP likewise makes the Project inconsistent with both this principle and Principle 7's edict to strengthen partnerships with local, federal, and tribal governments, water agencies, and irrigation districts, and other stakeholders.	At the time of the Draft EIR's publication for public and agency review, DWR had satisfied all requirements for formal consultation with federal, state, and Tribal governments. Additional consultation is ongoing. Please refer to EIR Chapter 1, Introduction, regarding the use of the EIR by other entities and a listing of some of the federal agencies and their respective potential review, approval, and other responsibilities, in addition to those under NEPA. Please refer to Chapter 35, Public Involvement, regarding the outreach activities conducted to engage local agencies, landowners, and other interested parties throughout the EIR process. Chapter 32, Tribal Cultural Resources, section titled Consultation and Engagement with Tribes, describes DWR's good-faith effort to foster meaningful consultation that recognizes Tribal expertise in the identification and consideration of Tribal cultural resources. DWR has also been in coordination and consultation with federal, state, and local agencies, utility providers, and other interested parties throughout the development of the EIR.
523-10	II. The DEIR's Size and Structure Frustrates Public Participation in Violation of CEQA CEQA requires that an EIR "be organized and written in a manner that will be meaningful and useful to decision-makers and the public." [Footnote 18: Pub. Resources Code, §	Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the EIR that was written and organized consistent with CEQA and written in plain language with an emphasis on clearly and adequately disclosing the project's potential environmental impacts to assist public, agencies, and decision-maker review of the EIR. Due to the highly technical and complex

Letter-Comment Number	Comment	Response
	21003(b).] An EIR should be written in a way that readers are not forced "to sift through obscure minutiae or appendices" to find important components of the analysis. [Footnote 19: San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th 645, 659; California Oak Foundation v. City of Santa Clarita (2005) 133 Cal.App.4th 1219, 1239.] "Documents that are confusing in their presentation are incomprehensible to the very people they are meant to inform." [Footnote 20: San Franciscans for Reasonable Growth v. City & County of San Francisco (1987) 193 Cal.App.3d 1544, 1548.] The sheer enormity of the DEIR, whose chapters and appendices amount to more than 20,000 pages, is prohibitive to an effective, independent review of the Project's impacts. The Project's analyses of impacts are scattered throughout, with conclusions often far-removed from the evidence that supports them, if the evidence is included at all. Support for conclusory findings is often buried deep in appendices, and cross-references directing readers to other sections or appendices for explanatory information are often vague and requires searching through reams of unrelated findings. The Delta Independent Science Board (DISB), for instance, found the information contained in the DEIR to be extremely difficult to navigate, noting that imprecise language and ill-defined terms further magnified its lack of clarity and incoherence. The DISB noted that often the most relevant information helpful to understanding potential Project impacts was haphazardly dispersed throughout the DEIR's thousands of pages and dozens of chapters and appendices, making synthesis of impacts sometimes impossible. The Board also indicated that some of the document's analyses omitted	nature of the proposed project and alternatives, the EIR includes a considerable amount of information to enable disclosure of impacts. This information is organized and grouped with similar impacts being discussed together to reduce the overall length of the document including a summary comparison of alternatives in each EIR resource chapter. Depending on the nature of the impact analysis, more detailed and technical analyses may be contained in the corresponding appendices; however, the main information used to make CEQA determinations is contained in Chapters 7 through 32. These efforts were made in an effort to eliminate duplication and avoid inclusion of highly technical analyses in the EIR consistent with CEQA, while still presenting adequate information to inform decision making. Regarding the ease of locating the discussion of the screening process, the section titled Public Scoping and Issues of Known Controversy in the Executive Summary discusses this being located in Appendix 3A, Identification of Water Conveyance Alternatives, which provides additional details on the information that was used in developing the alternatives. Appendix 3A explains how the discussion of alternatives was developed for consideration in the EIR, background of the Delta Conveyance Project that discusses previously proposed projects, iterations of those projects, diversion operations, means of conveyance, and how those processes have been used to inform the development of the current project. The Engineering Project Reports noted by the commentor are fully cited in Appendix 3A, Identification of Water Conveyance Alternatives, section title References Cited. These reports are available on the DCA's website: https://www.dcdca.org/info-center/document-library/#Engineering-Project-Reports. Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities that are of interest (i.e., Delta Independent Science Board).

Letter-Comment Number	Comment	Response
	information critical to independent evaluation, and that many of the DEIR's main chapters lacked information sufficient to evaluate methodologies used in impact analyses. Sacramento County and its consultants identified the same flaws and frustrations in attempting to review and understand the DEIR. Readers "could not reasonably be expected to ferret out an unreferenced discussion" in the depths of a DEIR or supporting document. [Footnote 21: Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal.4th 412, 442.] "The data in an EIR must not only be sufficient in quantity, it must be presented in a manner calculated to adequately inform the public and decision makers, who may not be previously familiar with the details of the project. Information 'scattered here and there in EIR appendices' or a report 'buried in an appendix,' is not a substitute for 'a good faith reasoned analysis.'" [Footnote 22: Ibid., quoting California Oak Foundation v. City of Santa Clarita (2005) 133 Cal.App.4th 1219, 1239.] Reliance on information not actually incorporated or described and referenced in the DEIR indicates a failure to proceed in the manner provided in CEQA. The DEIR contains countless examples of conclusions and findings for which supporting evidence is either not presented or buried in an appendix or external report. Readers who wish to evaluate the adequacy of such findings are often left to independently hunt down such evidence. For example, a description of the screening process for alternative intake locations, a critical issue of interest to Sacramento County and its residents, refers readers to "Attachment A to the Engineering Project Reports (Delta Conveyance Design and	Responses to all comment letters are provided in Volume 2, Chapter 4, Response to Comments Tables.

Letter-Comment Number	Comment	Response
	Construction Authority 2022a, 2022b)" with no page number or location of where such report and the analysis it contains can be found. [Footnote 23: DEIR, Appendix 3A, pp. 3A-4 to 3A-5, lines 42, 1-2.] Other sections present conclusory statements regarding Project impacts but omit any relevant information necessary to evaluate the adequacy of such statements. Even if the DEIR contained adequate information to satisfy CEQA's substantive requirements, which it does not, the failure to present such information in a manner reasonably calculated to inform the public renders is a prejudicial violation of CEQA's informational mandate.	
523-11	III. PROJECT DESCRIPTION Courts have long established that an accurate, stable, and consistent project description is an indispensable prerequisite to an informative and legally sufficient EIR. A project description that omits integral components of the project may result in an EIR that fails to disclose all of the impacts of the project. [Footnote 24 CEB Practice Under the California Environmental Quality Act, 2nd Ed., § 12.2; County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 199.] Such accuracy and consistency in a project description is necessary in order for the public and decision makers to "ascertain the project's environmentally significant effects, assess ways of mitigating them, and consider project alternatives." [Footnote 25: Sierra Club v. City of Orange (2008) 163 Cal.App.4th 523, 533.] Courts have linked the adequacy of an EIR's project description with the adequacy of its analysis of a project's impacts.	Please refer to response to comment 525-10 and Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the length and complexity of the EIR. Please refer to Chapter 3, Description of the Proposed Project and Alternatives, section titled Proposed Project and Alternatives Overview, which provides a brief project overview. The subsection titled Alternatives Overview provides a summary of the differences between the alternatives, and the sections that follow it provide details of each alternative. The information regarding the operation of the Delta Conveyance Project intakes provided in Chapter 3, in the sections titled Intake Operations and Maintenance and Real-Time Operational Decision-Making Process, is an accurate description of the criteria under which the Delta Conveyance Project will operate. Chapter 4, Framework for the Environmental Analysis, explains the framework for the environmental analysis and organization of the EIR. Please refer to Common Response 3, Alternatives Development and Description, regarding the adequacy of the approach for describing the project and alternatives.

Letter-Comment Number	Comment	Response
	[Footnote 26: See, e.g., Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal. (1988) 47 Cal.3d 376.] A legally adequate project description, in addition to being accurate and consistent, must discuss reasonably foreseeable activities and must not minimize project impacts. [Footnote 27: Lotus v. Department of Transp. (2014) 223 Cal.App.4th 645; Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal. (1988) 47 Cal.3d 376.] An EIR that fails to provide a consistent description of the project and its impacts throughout the entire document prevents meaningful and intelligent evaluation by the public and decision makers and thus violates CEQA's requirement of public participation in the decision-making process. [Footnote 28: County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 197.] If an EIR's project description is found to be deficient because it fails to discuss the entire project, the environmental analysis will likely reflect the same mistake. [Footnote 29: CEB Practice Under the California Environmental Quality Act, 2nd Ed., § 12.7; Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal. (1988) 47 Cal.3d 376.] "When the informational requirements of CEQA are not complied with, an agency has failed to proceed in 'a manner required by law.' If the deficiencies in an EIR 'preclude[] informed decision making and public participation, the goals of CEQA are thwarted and a prejudicial abuse of discretion has occurred.'" [Footnote 30: Bakersfield Citizens for Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184, 1220, citing Save Our Peninsula Committee v. Monterey County Bd. Of Supervisors (2001) 87 Cal.App.4th 99, 118.] The DEIR does not comport with the mandate that its project description and accompanying analyses be consistent throughout the EIR for several reasons, including numerous	

Letter-Comment Number	Comment	Response
	references to Project components so vague that readers could not possibly evaluate their impacts, and the omission of reasonably foreseeable Project operational aspects that could significantly affect Delta stakeholders.	
523-12	A. The DEIR Omits Description of Crucial Project Elements, Thereby Obscuring Impacts and Preventing Independent Review The DEIR fails to fulfill its essential purpose as an informational document due to its tendency to omit critical information in some instances and to mislead the reader by presenting inconsistent information about Project details in others. It fails to present clear and concise summaries of key elements of the Project, which serves to mislead the public about the Project's true scope. In some many chapters it offers only cursory explanations of critical Project components, while in others it leaves out entirely the information necessary to evaluate all aspects of the Project's construction and operations. For example, several chapters refer to "soil conditioners," chemical additives to be mixed with soil excavated during the tunnel boring procedure. [Footnote 31: See, e.g., DEIR, Ch. 3, p. 3-32, lines 18-20; Ch. 25, p. 25-24, lines 25-33, p. 25-36, lines 14-20.] Despite asserting that they would be "nontoxic and biodegradable," the DEIR, without offering any explanation of their chemical profile, acknowledges that "conditioners or additives used to facilitate tunneling could cause eye and skin irritation if mishandled." [Footnote 32: DEIR, Ch. 25, p. 25-36, lines 17-19.] The Sacramento Environmental Commission, in its comments on the DEIR, noted that soil conditioners: [P]rimarily consist of foaming agents and lubricants . . . typically composed of anionic surfactants such as sodium lauryl	Please see response to comment 523-11 regarding DWR's approach to describing the project and alternatives. See also Common Response Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the length and complexity of the EIR. The comment's assertion that the EIR does not adequately address the character or toxicity of soil conditioners is not supported by the analyses in the EIR. The chemical constituents of the reusable tunnel material, including conditioners, were evaluated in the Reusable Tunnel Material technical memorandum in the Engineering Project Report (Delta Conveyance Design and Construction Authority 2022h). This analysis includes evaluation of the potential health, environmental, and ecological impacts associated with extracting, handling, storing, and reuse of RTM, which are summarized in EIR Chapter 25, Hazards, Hazardous Materials, and Wildfire, and other EIR chapters as applicable. As discussed in the Engineering Project Report Technical Memorandum, when the conditioner is blended with soil, the soil conditioners do not pose a health hazard to humans or the environment. However, Chapter 25 notes that soil conditions could cause irritation "if mishandled." The Chapter 3, Description of the Proposed Project and Alternatives, section on Disposal of Reusable Tunnel Material states that the RTM would be tested daily, chemically characterized, and appropriately treated or disposed of if found to exceed thresholds of the Central Valley Regional Water Quality Control Board and the Department of Toxic Substances Control. The comment's assertion that the EIR does not adequately address the transportation impacts of temporary operation of concrete batch plants is

Letter-Comment Number	Comment	Response
	ether sulphate (SLES) or sodium lauryl sulphate (SLS). SLS/SLES and similar surfactants are classified as hazardous for their corrosive character and toxicity to aquatic life. Most surfactants are classified as skin irritants, while some can cause more serious damage. In raw form, SLS is categorized as moderately toxic to aquatic life. Other surfactants have been categorized as harmful to aquatic lifeforms. The level of toxicity is dependent on the concentration of SLS, the specific species exposed to discharges, water chemistry, and water temperature. [Footnote 33: Sacramento Environmental Commission, DCP DEIR Comment Letter, Sept. 21, 2022, p. 2.] The DEIR omits any discussion of the potential for toxicity in these chemical additives, and no evidence for its conclusion that their use will not cause any significant impacts. Additional omissions of essential or consistent information in the DEIR's Project Description include: Failure to specify the supply source or the method of transportation for aggregate material that will be brought to the site, stored, and used at the concrete batch plants for construction of the tunnel. [Footnote 34: DEIR, pp. 3-31, 3-47, 3-64.] The DEIR does not identify impacts to County roads outside of the immediate construction area, but all roads that experience a marked increase in truck traffic as a result of Project construction activity, particularly if those trucks are hauling heavy loads such as aggregate, will be impacted. Materials delivered via County roads should be identified and off-site impacts to County roadways analyzed. Inconsistency in post-construction reclamation activities. A	not supported by analyses presented in Chapter 20, Transportation. As discussed in the section titled Process and Methods for Vehicles Miles Traveled Analysis, the vehicle miles traveled (VMT) analysis for all project features, including the concrete batch plants, considered the relative location of either a park-and-ride facility serving a project feature or a designated project feature and the location of the construction worker's home. The estimates of construction worker origin were developed separately for project facilities located in the north Delta (southern Sacramento County and northern San Joaquin County) and the south Delta (southern and western San Joaquin County). Intersection and roadway impacts from material hauling and truck trips required for construction are assessed in Appendix 20A, Delta Conveyance 2020 Traffic Analysis. Regarding traffic impacts on access roads; DWR will conduct pre-construction pavement analysis of access roadway segments and determine the need to improve these access roads. Improvements may include pavement remediation (e.g., fill potholes, asphalt cracking and slurry seals), road widening (minimum of 12 feet), and other roadway design options to serve construction traffic. After completion of a project site construction, the condition of the access roads for each construction site will be analyzed and remediation of roadways will be completed as needed to return the facility to the improved conditions that were constructed by DWR. Refer to the Chapter 3 section titled Concrete Batch Plants for a description of the concrete batch plants. As noted in this section, concrete batch plant structures and equipment would be removed following construction. The 14-acre post-construction footprint represents the area impacted following structure removal. As described in Chapter 2, Purpose and Project Objectives, the basic

Letter-Comment Number	Comment	Response
	description of concrete batch plants that will be constructed, two located at Lambert Road and Franklin Boulevard within the County, indicates that the batch plant structures and equipment will be removed following construction. Other sections, however, indicate that the Lambert Road plants will require 15 acres during construction and 14 acres post-construction, implying the plants will remain at the locations. [Footnote 35: DEIR, p. 3-16, Table 3-2.] Still other sections mention reclamation efforts following tunnel construction that will include "areas used during construction for material and equipment laydown and staging, material stockpiles, slurry/grout mixing plants, parking areas, and facilities/trailers" but does not mention specifically concrete batch plants. [Footnote 36: DEIR, p. 3-58, lines 17-21.] These inconsistencies make independent evaluation impossible. Failure to indicate which access and adjacent roads will be utilized during final overlays and final pavement restoration, leaving the County unable to assess which roads will be impacted or potentially left unrepaired. [Footnote 37: See, e.g., DEIR, p. 3-133.] Failure to adequately describe and analyze impacts from non-SWP water wheeled through the Project's new north Delta intakes. The Project Description explains that Project facilities "could provide the ability for water transfers to occur through the facility by providing increased capacity" and points readers to Appendix 3H for an analysis of increased available export capacity, which concludes that "even though the project may add additional export capacity, it is unlikely to increase the amount of water transfers, since the current capacity is not even fully utilized. For this reason, potential direct or indirect	objective of the Delta Conveyance Project is to restore and protect the reliability of SWP water deliveries, not to create additional water transfer capacity. The project alternatives do not include actions to modify current water rights. Refer to Common Response 3, Alternatives Development and Description, for further discussion on water transfers.

Letter-Comment Number	Comment	Response
	impacts of water transfers are not further discussed in this Draft EIR." [Footnote 38: DEIR, p. 3-147, lines 26-28.] This confounding analysis leaves out any detail necessary to an assessment of impacts due to exports of water around the Delta through the new north-Delta intakes that would otherwise have flowed through the Delta. The illogical conclusion ignores that transfers are often prevented by lack capacity of the south Delta pumps, and a narrow transfer window due to limitations from biological opinions, and the NDD [New North Delta (intakes)] would provide a wider transfer window, enabling greater exports. If the NDD enables diversions at times when exports through the South Delta pumps are constrained, as demonstrated in the comments of SCWA, then it is reasonable to assume the Project will increase the number of transfers.	
523-13	IV. ALTERNATIVES It is a fundamental policy of CEQA that, as part of reducing a project's environmental impacts, an EIR must identify a reasonable range of alternatives and mitigation measures that could avoid or substantially lessen the project's significant impacts. [Footnote 39: Pub. Resources Code §§ 21002, 21002.1(a), 21100(b)(4), 21150.] This discussion of alternatives and mitigation measures, which allows the public and decision makers to evaluate the ways in which a project might achieve its objectives while avoiding some of its impacts, has been called "the core of an EIR." [Footnote 40: Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 564.] In considering alternatives to a proposed project, a lead agency must first identify potential alternatives that satisfy threshold criteria, including whether an alternative could substantially reduce significant impacts while attaining most project	This comment provides background information in support of other comments in this letter. Those comments are addressed in these responses to the commenter's letter. Please see response to comment 523-4 regarding adequacy of the range of alternatives.

Letter-Comment Number	Comment	Response
	objectives. An EIR must include an evaluation of the alternatives it considered and those it eliminated, including "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." [Footnote 41: 14 Cal. Code Regs. § 15126.6(d).] Included should be a discussion of the rationale used in selecting alternatives, as well as an explanation of why other alternatives were rejected as infeasible. [Footnote 42: 14 Cal. Code Regs. § 15126.6(c).] Courts have rejected as inadequate EIRs that failed to consider alternatives which would reduce project impacts. [Footnote 43: See Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 17 Cal.App.5th 413, 436–437 (transportation plan EIR that failed to consider alternatives that would reduce vehicle miles traveled found inadequate, particularly in light of Climate Action Strategy acknowledgement that reduction in vehicle miles traveled was imperative to reaching greenhouse gas emissions goals); Watsonville Pilots Assn. v. City of Watsonville (2006) 183 Cal.App.4th 1059, 1089–1090 (general plan EIR violated CEQA because it failed to consider reduced-development alternative that would significantly reduce project impacts even though the alternative would not meet all of the project's objectives).] A lead agency should not adopt artificially narrow project objectives that would preclude consideration of reasonable alternatives for achieving the project's underlying purpose. [Footnote 44: North Coast Rivers Alliance v. Kawamura (2015) 243 Cal.App.4th 647, 669; County of Inyo v. City of Los Angeles (1977) 71 Cal.App.3d 185, 203 (EIR for expansion of groundwater extraction failed to consider water conservation as alternative to increased groundwater extraction).]	
523-14	In Cleveland Nat'l Forest, the adequacy of an EIR prepared for a	This comment provides background information in support of other

Letter-Comment Number	Comment	Response
	regional transportation plan was challenged on grounds that it had failed to discuss a reasonable range of alternatives to the proposed project. Petitioners contended, and the court agreed, that the EIR analyzed only alternatives that represented slightly modified iterations of the proposed project, and none that were capable of significantly reducing vehicle miles traveled. [Footnote 45: Id.] The court found this omission "inexplicable given [the lead agency's] acknowledgment in its Climate Action Strategy that the state's efforts to reduce greenhouse gas emissions from onroad transportation will not succeed if the amount of driving, or vehicle miles traveled, is not significantly reduced." [Footnote 46: Id.]	comments in this letter. Those comments are addressed in these responses to the commenter's letter. Please see response to comment 523-4 regarding adequacy of the range of alternatives. The second-level alternatives screening presented in Appendix 3A, Identification of Water Conveyance Alternatives, addresses an alternative's ability to reduce significant environmental impacts.
523-15	Similarly [Similarly to the EIR in comment #14], here, the Delta Plan includes Policy WR P1 which calls for reduced reliance on the Delta through improved regional water self-reliance. [Footnote 47: Delta Plan, Ch. 3, p. 122.] The Project, however, increases, rather than reduces, reliance on the Delta as a water source, including as a result of the massive investment ($16 billion or more) that will be charged to SWP customers regardless of the amount of water that will be delivered as a result of the Project [Footnote 48: DWR already has approved the issuance and imposition of this massive debt, through bond resolutions that it presently, and improperly, is seeking to validate in Sacramento County Superior Court. (See California Department of Water Resources v. All Persons Interested in the Matter of the Authorization of Delta Program Revenue Bonds, etc., Sacramento County Superior Court Case No. 34-2020-00283112).)]; it is reasonable to assume those customers will expect and demand that Sacramento River water deliveries be maximized in return for these massive additional binding financial obligations.	This comment does not raise a significant environmental issue relating to the proposed project or address the adequacy, accuracy, or completeness of the Draft EIR. DWR has reviewed all comments and will consider all comments in its decision-making process. Please refer to Chapter 2, Purpose and Project Objectives, and Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for detailed information on the purpose and objectives of the Delta Conveyance Project. Please refer to Common Response 7, Implementation Considerations, regarding project costs, costs to taxpayers, and costs to water districts that contract with DWR for a supply of water from the SWP. Please refer to Appendix 3E, Delta Reform Act Considerations, regarding information in the EIR that may be related to Delta Plan policies. Please also see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for information on the relationship of the project to the Delta Reform Act and the Delta Plan. While not a CEQA requirement, DWR will further address WR P1 during preparation of Delta Plan consistency efforts.

Letter-Comment Number	Comment	Response
523-16	None of the alternatives proposed in the DEIR include actions that could serve to reduce reliance on the Delta or improve regional water self-reliance. The DEIR, in fact, specifically rejected alternatives that proposed reducing reliance on exports of Delta water as "antithetical to the water supply reliability criteria" without considering that such proposals sought to increase the reliability of existing water sources in other ways, such as levee improvement and maintenance [Footnote 49: DEIR, Appendix 3A, p. 3A-34]. Though CEQA does not require that alternatives lessen or mitigate every environmental impact anticipated by the proposed project, they must be environmentally superior in some way [Footnote 50:14 Cal. Code Regs., § 15126.6(b)]. Because the purpose of CEQA's environmental review process is to identify ways to reduce adverse impacts resulting from proposed projects, an EIR's discussion of alternatives must "focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." [Footnote 51: 14 Cal. Code Regs., § 15126.6(b)]. If an EIR concludes that no environmentally superior alternatives are available, it must support its conclusion with enough facts and analysis to allow decision makers to evaluate whether that conclusion is correct [Footnote 52: Habitat & Watershed Caretakers v. City of Santa Cruz (2013) 213 Cal.App.4th 1277, 1305]. "Since the purpose of an alternatives analysis is to allow the decision maker to determine whether there is an environmentally superior alternative that will meet most of the project's objectives, the key to the selection of the range of alternatives is to identify	Please see response to comment 523-4 regarding the range of alternatives and their ability to meet most project objectives described in Chapter 2, Purpose and Project Objectives. Appendix 3A, Identification of Water Conveyance Alternatives, explains how Alternative 5, Bethany Reservoir alternative, was selected as the proposed project for a variety of construction and operational reasons including the potential to reduce environmental impacts as compared to other alternatives. Please refer to Common Response 3, Alternatives Development and Description, regarding why reduced exports alone or with levee improvements would not meet project objectives. Please refer to Chapter 33, Other CEQA-Required Analyses, for a discussion of the Environmentally Superior Alternative.

Letter-Comment Number	Comment	Response
	alternatives that meet most of the project's objectives but have a reduced level of environmental impacts." [Footnote 53: Watsonville Pilots Assn. v. City of Watsonville (2006) 183 Cal.App.4th 1059, 1089].	
523-17	The 2020 Notice of Preparation (NOP) for the DEIR identified the proposed project as a "6,000 cubic feet per second (cfs) diversion capacity alternative, which was proposed to be located on either a central or eastern alignment from intakes in the north Delta to pumping facilities in the south Delta near Clifton Court Forebay." [Footnote 54: DEIR, p. ES-12]. DWR asserts that it considered alternatives suggested during the current DEIR scoping period "by interested parties and technical experts and during past planning efforts (including the Bay Delta Conservation Plan and California WaterFix)." [Footnote 55: DEIR, p. ES-12]. Twenty-one potential alternatives were identified, and were screened through a "two-level filtering process," during which alternatives were assessed first for whether they would meet the project's purpose and objectives, and then evaluated for whether they tended to lessen the environmental impacts of the proposed project. [Footnote 56: DEIR, p. ES-12; Project Description, p. 3-5; Appendix 3A, p. 3A-1 et seq.]. Eleven alternatives were eliminated during the first phase of the filtering process for their failure to meet at least two of the four criteria of climate resiliency, seismic resiliency, water supply reliability, and operational resiliency [Footnote 57: DEIR, Appendix 3A, pp. 3A-27–3A-30]. The DEIR's evaluation and winnowing of alternatives under this first filter fails for several reasons, most notably because its conclusions were unsupported by substantial evidence and it employed an improperly narrow analysis designed, it seems, to	Please refer to Appendix 3A, Identification of Water Conveyance Alternatives, and Common Response 3, Alternatives Development and Description, regarding the alternatives screening process and the range and scope of alternatives considered. Please also refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the adequacy of the purpose and objectives statements for the purposes of CEQA, the agencies discretion in developing the project objectives, and consideration of other objectives. Common Response 1 also addresses the alleged lack of substantial evidence. Please refer to Common Response 3 for a discussion of why project objectives and screening criteria were not unreasonably narrow and DWR's approach to screening alternatives that could meet most of the project objectives and reduce significant impacts. Common Response 3 further describes why DWR's selection of alternatives that met the purpose and most of the basic project objectives is the correct approach for alternatives development and allows for meaningful alternative comparisons that aid in decision-making. The Water for All of California proposal was fully evaluated as an alternative to the proposed project in Appendix 3A, Identification of Water Conveyance Alternatives. Specifically, this alternative was found to meet two of the project objectives. Analysis in the second phase screening eliminated this alternative because it would create construction traffic, cause noise and air quality impacts in a populated urban area, impact

Letter-Comment Number	Comment	Response
	eliminate any alternative that did not feature north Delta intakes and an around-Delta tunnel conveyance. Some of those alternatives rejected by Filter 1, however, would have ultimately met the Project's objectives while also reducing Project impacts—a benefit not one of the alternatives ultimately selected can offer. Ensuring that Filter 1 would eliminate any choices that deviated from the DCP North Delta intake and tunnel concept required application of an even narrower interpretation of consistency with Filter 1's four criteria. In some cases, this appeared to involve simply tailoring the analysis of an alternative or Project objectives to result in selection of DCP-concept alternatives and rejection of choices that offered a more diverse water supply and conveyance system. In considering alternatives for their tendency to provide "operational resiliency," for example, the DEIR narrowly identified only dual-conveyance systems with north Delta diversion intakes as possessing that resiliency [Footnote 58: DEIR, Appendix 3A, p. 3A-30, lines 3-5]. Alternatives that suggested a range of approaches to meet Project objectives, or those that favored a through-Delta conveyance, or those that advocated for a more comprehensive list of intake locations, were rejected for their lack of "operational flexibility," without explanation of how they allegedly failed to satisfy this objective. The DEIR similarly rejected alternatives specifically designed to add diversity to the Project's goal of water supply reliability, such as the portfolio-based approach and Congressman Garamendi's Water Plan for All California, both of which proposed a divergent range of water supply measures such as a	riparian areas in the Deep Water Ship Channel, locate facilities in an area prone to sedimentation that could include hazardous materials, potentially create navigation hazards related to the in-channel fish screen location, conflict with development restrictions adjacent to the Deep Water Ship Channel in the West Sacramento General Plan, and require construction in the Yolo Bypass Wildlife Area that could adversely affect biological resources. Alternatives involving levee improvements were determined to not meet project objectives for climate, seismic and operational resiliency, and water supply reliability because levee improvements alone would not reduce current and future risks to the SWP south Delta facilities from sea level rise, seismic events, or threats to water supply operations from environmental and regulatory limitations in the Delta. Implementing the Delta Conveyance Project would not preclude implementing other complimentary projects in the Delta such as those proposed in the portfolio-type alternatives. These and other actions are presented in the State's Water Supply Resiliency Portfolio.

Letter-Comment Number	Comment	Response
	tunnel conveyance, increased water storage capacity, increased water recycling and conservation, and improvements to levees. DWR rejected both alternatives, though Table 3A-2 includes only an explanation for rejecting the portfolio approach, which was purportedly eliminated for its "specific goal of reducing SWP exports, which is antithetical to the water supply reliability criteria (i.e., restoring and protecting the ability of the SWP to deliver water)." [Footnote 59: DEIR, Appendix 3A, p. 3A-34]. Even more baffling, the suggestion of levee improvements to increase water supply and seismic reliability—two of Filter 1's four criteria, both of which were arguably met by both the portfolio and Garamendi proposals—was rejected because "these actions would require extensive construction and result in substantial environmental impacts." [Footnote 60: Id.]. Exactly how levee improvement and maintenance would require more construction or result in more environmental impacts than a 45-mile tunnel buried 100 feet below ground with countless ancillary facilities that would displace thousands of Delta residents and take nearly 15 years to construct is conspicuously omitted from the DEIR. Notably those alternatives were capable of avoiding the Project's numerous long-term and permanent impacts to historic Delta legacy communities, making DWR's decision not to evaluate them in the DEIR even more troubling. In sum, several different scenarios that were eliminated during the DEIR's Filter 1 screening, including all those mentioned above, would likely offer far more flexibility and/or reliability than the proposed Project or alternatives. The DEIR's screening under Filter 1, therefore, was inadequate and reduced the field of alternatives to an unreasonably narrow range, even before Filter 2 was applied.	

Letter-Comment Number	Comment	Response
	The DEIR offers an unreasonably narrow range of alternatives, which consist of slight variations in tunnel alignments and diversion amounts ranging from 3,000 cfs to 7,500 cfs, as well as three options for intake locations, from which two will be chosen. In fact, the DEIR does not offer a range of alternatives at all, but rather one concept—tunnel diversion from intakes in the north Delta to pumping facilities in the south Delta—with slight variations in alignment and capacity, and all of the EIR alternatives apart from Alternative 5 would have greater impacts than the proposed project (by, for example, building an additional intake and diverting 25 percent more water than the proposed project). Despite the Project's devastating impacts to the Delta communities of Hood, Locke, Courtland and Clarksburg, the DEIR proposes no alternative intake locations, apart from the three proposed in and around these north Delta communities. It appears to Sacramento County that such potentially feasible alternatives exist. A review of information in the Fish Facilities Technical Team (FFTT) report [Footnote 65: See FFTT Technical Memorandum, July 2011 (attached herein as "Exhibit A")]. developed for the BDCP, which was conducted at the time BDCP was in development, indicates that there are at least two suitable intake locations farther downstream below Steamboat Slough which would reduce impacts to the Delta historic towns and their residents, as well as the potential for conflicts with upstream Delta land uses (including the Sacramento Regional Wastewater Treatment Plant and Freeport Regional Water Project) and operations and have the benefit of being better for salmon. At that time, an agreement between the FFTT and the project proponent assured that the EIR prepared for the BDCP would include a full analysis of the two intakes (intakes 6 and 7 in that	

Letter-Comment Number	Comment	Response
	project) south of Steamboat Slough: Regarding intake locations, the goal and default assumption is that the project will determine the location of all intakes (for both Phase 1 and possible Phase 2) no later than the Final EIS. For now, intakes 6 and 7 will receive full analysis for biological effects, and conceptually be included in one or more alternatives over 6,000 cfs capacity in the DEIS. If analysis shows these intakes locations are expected to provide benefits to covered aquatic species, then they would advance into one or more of the alternatives in the draft EIS/EIR, for further review prior to the final EIS/EIR. At the final EIS/EIR stage, the applicants and lead NEPA/CEQA agencies would make the determination as to whether to include intakes 6 and/or 7 as one or two of the five proposed intake locations, exclude them from further consideration, or maintain then in the analysis as "alternative locations" to be selected through adaptive management during the initial design study period or following completion of phase 1 of the project (i.e. all 7 locations would be fully described in the document, and the final determination would be made after phase 1 results are analyzed). [Footnote 66: BDCP Phased Construction FFTT Report, October 12, 2011, p. 16 (attached herein as "Exhibit B").] The DEIR asserts that the Delta Conveyance Design and Construction Authority (DCA) "reviewed and reconsidered the previously considered intake site locations again in 2019 and reexamined the reach of the Sacramento River between Freeport and the confluence with Sutter Slough for other viable intake sites." [Footnote 67: DEIR, Appendix 3A, p. 3A-4, lines 27-30]. The DCA evidently rejected these sites, but the DEIR provides no details of this analysis apart from a conclusory statement and a vague reference to a DCA engineering report	

Letter-Comment Number	Comment	Response
	appendix for readers seeking a more detailed explanation [Footnote 68: Id., at lines 41-42]. The significant purportedly unavoidable impacts of the proposed intakes pose an existential threat to the historic Delta communities of Hood, Courtland, Clarksburg, and Locke, and thus the decision of how those locations were selected is a matter of substantial public concern. The DEIR fails as an informational document not only in neglecting to meaningfully evaluate alternative intake locations that would avoid these impacts, but also in its failure to even disclose the basis for its rejection of such alternatives, so Delta residents could understand the decision making process that led to a proposing a project that would destroy their communities. Furthermore, the DCA's analysis evidently failed, without reason, to consider the two intake sites further south which were part of a binding agreement in place at the time of the BDCP. There is also no rationale provided for limiting the range of potential intake locations to the reach between Freeport and the confluence with Sutter Slough, when intakes further south might also be feasible and further reduce or avoid the proposed project's significant unavoidable impacts to Delta communities and the environment. Given the interest and concern of Delta residents living in and around the proposed intake locations in the Project's ruinous effect on their communities, it is inexplicable why DWR did not provide meaningful information in the DEIR itself to inform the public about the basis for rejecting alternative intake locations. The DEIR relies on siting information and criteria that is more than a decade old, and provides no information or analysis to demonstrate the intake siting considerations are still relevant	

Letter-Comment Number	Comment	Response
	given changing conditions in the Delta, nor does that analysis appear to have evaluated all viable locations anyway. No analysis supports a conclusion that alternative intake locations are not feasible, or that other locations may even be preferable in light of the DEIR's stated objective to improve aquatic conditions in the Delta and reduce regulatory risks. The DEIR further asserts that it omitted from consideration intake locations in the western Delta due to the potential for higher salinity in western Delta waters. However, the DEIR elsewhere assures readers that the new intakes will divert Delta water only when flows are high. During high flows, freshwater would be present at locations further west in the Delta, as salinity is diluted from freshwater sources coming from the north and east, thus negating the need for intakes at locations further north. This also fails to consider the viability of brackish water desalination, of some or all of the project diversion, as is being implemented for the City of Antioch. What's more, the rejection of all proposed alternatives that had the tendency to reduce impacts to communities in the Delta demonstrates that DWR continue to favor and prioritize the desires of water exporters south of the Delta at the expense of in-Delta users. While the DEIR insists that the SWP would continue to prioritize the south Delta export facilities over the new north Delta intakes, which would be used only to "augment" the south Delta operations to "capture additional excess flows when the south Delta exports are limited" and when needed to meet State Water Board salinity requirements, [Footnote 71: DEIR, p. 3-145, lines 31-32; p. 3-146, lines 1-2.] a reasoned analysis of the DEIR casts serious doubt on this assertion. Despite the massive investment of	

Letter-Comment Number	Comment	Response
	time and money into the new north Delta intakes and tunnel conveyance, this occasional use appears to result in only modest improvements to salinity levels of Delta exports, [Footnote 72: LA County Sanitation Districts Comment Letter on the DEIR, November 28, 2022, p. 2.] reinforcing the idea that other potentially feasible alternatives, such as brackish water desalination with levee improvements, would be equally or more capable of meeting project objectives.	
523-18	Of the remaining alternatives, "[o]nly the dual conveyance Bethany Reservoir alignment passed Filter 2 screening for its potential to avoid or reduce impacts compared to the proposed project." [Footnote 61: DEIR, p. ES-12.] The remaining alternatives analyzed throughout the entire DEIR, therefore, do not satisfy CEQA's requirement that the alternatives considered must be ones that offer substantial environmental advantages over the proposed project. [Footnote 62: Pub. Resources Code, § 21002; Cal. Code Regs., § 15126.6(a)–(b); Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 566.] Alternative 5 was thus redefined as the Proposed Project [Footnote 63: DEIR, p. 3-6, lines 28-29.] and the rest of the tunnel concepts are labeled project alternatives. This does not satisfy CEQA's requirement that alternatives considered in an EIR must offer substantial environmental advantages over the proposed project. [Footnote 64: Pub. Resources Code, § 21002; Cal. Code Regs., § 15126.6(a)–(b); Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 566.]While CEQA mandates that alternatives to a proposed project mitigate or reduce at least some of the project's environmental impacts, none of the alternatives considered in the DEIR have the potential to reduce any impacts caused by the proposed Project. As DWR readily acknowledges, the proposed Project, Alternative 5, is in	Please refer to Appendix 3A, Identification of Water Conveyance Alternatives, and Common Response 3, Alternatives Development and Description, regarding the adequacy of the range of alternatives analyzed for the purposes of the CEQA analysis and the genesis for identifying the Bethany Reservoir alternative as the proposed project.

Letter-Comment Number	Comment	Response
	fact the only tunnel concept that reduces or avoids any impacts anticipated by the project identified by the NOP [Notice of Preparation]. The DEIR, therefore, offers no alternative with the potential to reduce impacts—and therefore no alternatives analysis at all that comports with CEQA—since Alternative 5 is identified as the proposed Project and no longer considered an alternative for the purposes of CEQA.	
523-19	Decisions that may have prioritized protection of Delta smelt over other protected species (e.g., salmon) may be less relevant now that smelt trawl surveys regularly find zero Delta smelt. [Footnote 69: No Delta smelt were found in the annual September midwater trawl survey in 2021, marking four years in a row with no smelt found in the September survey. California Department of Fish and Wildlife, Monthly Abundance Index for Delta smelt, October 2021, at https://www.dfg.ca.gov/delta/data/fmwt/indices.asp. For the sixth November in a row, no smelt were found in the 2022 CDFW Fall Midwater Trawl Survey of the Sacramento-San Joaquin River Delta, either. See https://www.dailykos.com/stories/2022/12/8/2140750/-As-Delta-Tunnel-plans-move-forward-CDFW-midwater-trawl-survey-reportszero- Delta-smelt-in-November.] This has caused some scientists to assert that Delta smelt may disappear from the wild in 2021 or 2022. [Footnote 70: Peter Moyle et al., "2021: Is This the Year That Wild Delta Smelt Become Extinct?," California Water Blog, press release, January 10, 2021, at https://californiawaterblog.com/2021/01/10/2021-is-this-the-year-that-wild-delta-smeltbecome-extinct/.] Based on these changed conditions, intake locations that are more beneficial for salmon should be prioritized and considered.	The comment provides no evidence that there has been a change in delta smelt distribution, despite lower overall indices of abundance, that would warrant the type of intake siting consideration suggested in the comment. As noted in Impact AQUA-6 of Chapter 12, Fish and Aquatic Resources, absolute population abundance of delta smelt could increase because of hatchery supplementation, which is ongoing. As summarized in Appendix 3A, Identification of Water Conveyance Alternatives, intake sites were selected in consideration of multiple factors, including various species' potential exposure and not solely delta smelt. The proposed north Delta intakes would include fish screens operated to fishery agency standards and, as shown in Chapter 12 (in particular, Impact AQUA-2), near-field effects to salmon were concluded to be limited, with far-field effects limited by operational criteria and reduced to less than significant by Mitigation Measure CMP (specifically CMP-25 and CMP-26).

Letter-Comment Number	Comment	Response
523-20	The Project, with its monumental price tag - estimated at $16 billion [Footnote 73: Delta Conveyance Design and Construction Authority. Https://water.ca.gov/News/Blog/2021/February/How-is-the-Delta- Conveyance-Project-Financed]] but generally expected to surpass $20 billion or more - and alleged modest improvements in water quality, appears to be of limited value to those who will purportedly fund it, the south-of-Delta exporters. It is reasonably foreseeable that pressure from these exporters will cause DWR to abandon its south Delta facilities in favor of fresher exports from the north intakes. [Footnote 74: Already, south-of-Delta interests have begun to apply this pressure: The Los Angeles County Sanitation Districts, troubled by the projected modest improvements to salinity in export deliveries reported in the DEIR, urged DWR to implement an operations strategy that would control salinity "to the maximum extent practical." LA County Sanitation Districts Comment Letter on the DEIR, November 28, 2022, p. 2.] The Project, therefore, will not operate as insisted in the DEIR, which assumes that south Delta diversion will be prioritized and north intakes used only as needed. As exports increasingly leave from the north intakes and less water flows through the Delta, the County's concerns about water quality degradation are likely to be confirmed.	The comment does not address the content, analyses, or conclusions in the Delta Conveyance Project EIR. Speculation related to future operational conditions are not within the scope of the EIR. However, the EIR does provide analyses in Appendix 4A, Consideration of 2070 Conditions, Appendix 4B, North Delta Priority Sensitivity Analysis, and Appendix 4C, Alternative Regulatory Scenario Sensitivity Analysis. This information is provided for information purposes only and is not used in the proposed project and alternatives CEQA conclusions presented in Chapters 7–32. Please also refer to Common Response 7, Implementation Considerations, regarding economic evaluations such as benefit-cost or financial feasibility analyses which are neither required nor typically included in an EIR as project costs are not considered impacts under CEQA. As such, the potential cost of the project does not supersede existing regulatory requirements in determining how it would be operated. The description of operations in the EIR, including newly proposed and key existing criteria satisfying all applicable regulatory requirements, accurately and completely represent how the project would be operated and are accurately reflected in the modeling assumptions supporting the impact analyses, consistent with CEQA. Economic evaluations such as benefit-cost and financial feasibility analyses are neither required nor typically included in an EIR as project costs are not considered impacts under CEQA. As such, the potential project cost is not relevant to the project operations as described in Chapter 3, Description of the Proposed Project and Alternatives. Please also refer to Common Response 3, Alternatives Development and Description, for additional description of the operational approach and issues raised about the Delta Conveyance Project operations.
523-21	Given that potential impacts to residents and businesses in the Delta would result from all iterations of the tunnel concept	Please see Common Response 3, Alternatives Development and Description, for a description of DWR's process in evaluating and selecting

Letter-Comment Number	Comment	Response
	considered in the DEIR, a reasonable range of alternatives, as required by CEQA, would include alternative intake locations and conveyance scenarios, as well as impact-reducing measures such as levee improvement, increased water storage, recycling, and conservation, and desalination options. The DEIR features several slightly modified versions of just one project concept, none of which would reduce environmental impacts. This impermissibly narrow range of alternatives suggests to the public that no environmentally superior options exist and that decision makers must choose a variation on this one theme in order to meet Project objectives at all. This is simply not true, and does not relieve DWR of the duty imposed by CEQA to identify and consider a truly diverse range of alternatives. The DEIR must be revised to include and present to the public for its input a range of alternatives that can be independently evaluated.	potential intake locations for the project alternatives. This Common Response also provides information on why infrastructure and water management alternatives, including levee improvement, water storage, recycling, conservation, and desalination options, were judged to not meet a majority of the basic objectives of the project or would not reduce the significant impacts of the proposed project. Common Response 3 also describes that alternatives to the proposed project selected for further review in the EIR are appropriate and provide for a reasonable range of alternatives in terms of variations in potentially feasible facility types, locations, and functions that differ from those of the proposed project and would aid in decision-making. The alternatives evaluated, for example, provide options for the locations and types of impacts that could occur compared to the proposed project, including construction impacts on land uses, transportation systems, air quality, noise, fish and wildlife habitat, and cultural resources. These analyses provide DWR with valuable information about the location and magnitude of impacts in the Delta that could be created by the range of alternatives, allowing for informed decision-making. Alternative 5, the Bethany Reservoir alternative, which is now identified as the proposed project in the EIR, is the product of the engineering and environmental analyses used in this EIR, which has resulted in a proposed project that would reduce impacts on wetlands and waters of the U.S., transportation systems, agricultural land, and cultural and historic resources, compared to the proposed project identified in the Notice of Preparation. Please also refer to Chapter 33, Other CEQA-Required Analyses, for an explanation of the environmentally superior alternative.
523-22	V. The DEIR/EIS Fails to Provide an Accurate and Objective Assessment of the Project's Impacts The DEIR improperly defers numerous studies and	The EIR has not improperly deferred studies or investigations. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the scope of analysis and the level of detail needed in an EIR required to inform decision makers of

Letter-Comment Number	Comment	Response
	investigations necessary to fully analyze potential Project impacts until after the CEQA process is complete, including: -An investigation into the seismic risk posed by the West Tracy Fault -A Phase I Environmental Site Assessment to identify current conditions such as hazards present in soils -Field investigations to identify potential for land subsidence at proposed facility locations -Investigations of geotechnical and hydrogeologic sampling to identify appropriate construction methodologies "While proper tiering of environmental review allows an agency to defer analysis of certain details of later phases of long-term linked or complex projects until those phases are up for approval, CEQA's demand for meaningful information 'is not satisfied by simply stating information will be provided in the future.'" [Footnote 75: Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal.4th 412, 431.] Notably, the DEIR is not a programmatic EIR subject to the tiering provisions of CEQA. It is a project specific EIR, and as such, must include sufficient detail regarding its potential impacts, both near-term and long-term. [Footnote 76: 14 Cal. Code Regs., § 15151.] While a lead agency is not required to "foresee the unforeseeable," it "must use its best efforts to find out and disclose all that it reasonably can." [Footnote 77: 14 Cal. Code Regs., § 15144.] The DEIR's deferment of studies and analyses essential to an effective evaluation of Project impacts violates these directives.	the type of impacts and severity and magnitude of impacts. As described in Common Response 1, the scope of analysis that provides sufficient detail to inform decision makers, the public, and other interested parties of the potentially significant environmental impacts associated with construction and operation of the Delta Conveyance Project and that a project need not be 100% designed in order for an EIR to sufficiently and adequately disclose potentially significant environmental impacts. Please also refer Chapter 4, Framework for the Environmental Analysis, which discusses State CEQA Guidelines Section 15151 and the degree of specificity, sufficiency, and what is reasonably feasible. Please refer to Chapter 10, Geology and Seismicity, for discussion of the geotechnical testing that would occur to minimize potential impacts from the West Tracy Fault. Please refer to Chapter 11, Soils, for a discussion of subsidence and field investigations. Please refer to Chapter 8, Groundwater, and Chapter 14, Land Use, which discuss geotechnical and hydrogeologic investigations. Please refer to Chapter 25, Hazard, Hazardous Materials, and Wildfire, regarding requirements for additional site-specific field testing.

Letter-Comment Number	Comment	Response
523-23	Like the County [Sacramento County], the DISB [Delta Independent Science Board] found that the DEIR lacks key information necessary to support informed decision making, such as a clear depiction of how the Project will achieve its claimed benefits, evidence to support many of its findings that impacts will be less than significant, and explanations of predictions regarding future climate effects and how mitigation measures will achieve their purported degree of effectiveness in reducing Project impacts. A DEIR must be recirculated when it is "so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." [Footnote 78: 14 Cal. Code Regs., § 15088.5, subd. (a)(4).] The DEIR is neither accurate nor objective. It is replete with critical errors and omissions and repeatedly overstates positive outcomes and downplays the Project's negative effects. The net result is a document that appears tainted by a pro-project bias and thus does nothing to demonstrate to an apprehensive public that the public agencies promoting the Project have objectively and meaningfully considered the Project's environmental impacts. The DEIR's failure to provide adequate, balanced scientific analyses, and use of incorrect, biased data, which resulted in unfounded conclusions, has deprived the public and decisionmakers of significant information about the relative merits of the Project, and its potential environmental outcomes.	This comment does not specifically identify the critical errors and omissions purportedly asserted to be in the EIR. The Delta Conveyance Project EIR has been prepared in compliance with CEQA and evaluates the full range of potential impacts that may result from construction and operation of the proposed project and its alternatives. Please refer to responses to comments 523-5 and 523-10 regarding the scope of the project purpose and objectives, substantial evidence provided in support of the CEQA impact conclusions contaminated throughout the EIR, and the requirements and use of feasible mitigation measures throughout the EIR. Please see Chapters 7–32 regarding an analysis of environmental impacts and proposed mitigation measures on multiple environmental resources. Benefits of the project include enabling continued water deliveries and operational flexibility should a catastrophic event occur, flood control, and increased storm-water diversions. These benefits are discussed as applicable throughout the EIR. Climate change effects are evaluated and disclosed in numerous locations throughout the EIR including Chapter 30, Climate Change. For additional information regarding climate change, please see Common Response 6, Climate Resilience and Adaptation, and the EIR chapters referenced therein, regarding how the project will provide climate change resilience to the SWP. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the CEQA requirements for recirculation, none of which the EIR meets and therefore recirculation is not needed. Finally, please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities (i.e., Delta Independent Science Board) that are of interest. Responses to all comment letters are provided in Volume 2, Chapter 4, Response to Comments Tables.
523-24	THE PROJECT CANNOT DEMONSTRATE CONSISTENCY WITH APPLICABLE REGIONAL PLANS An EIR must discuss any inconsistencies between the proposed	The EIR fully evaluates and incorporates the types of local or regional plans identified by the commenter, where appropriate. For example, Chapter 23, Air Quality and Greenhouse Gases, incorporates various standards and criteria from the appropriate air pollution control districts (e.g., San

Letter-Comment Number	Comment	Response
	project and applicable local or regional plans. [Footnote 79: 14 Cal. Code Regs., section 15125(d).] Regional plans that may apply to a project include air quality attainment or maintenance plans, areawide waste treatment and water quality plans, regional transportation plans, greenhouse gas reduction plans, habitat conservation plans, natural community conservation plans, and regional land use plans. A project is inconsistent with a plan if a "reasonable person" could not have found the project to be consistent. [Footnote 80: CEB Practice Under the California Environmental Quality Act, 2nd Ed., section 12.33.] A. The Project is Not Consistent with the Delta Plan The Delta Reform Act of 2009 established two coequal goals: (1) securing a reliable water supply for California, and (2) protecting, restoring, and enhancing the Sacramento-San Joaquin Delta ecosystem and the fish, wildlife, and recreation it supports. The Act recognized the Delta as an "evolving" environment and outlined a state policy of reduced reliance on Delta water exports, opting for a strategy of improved conservation, the development and enhancement of regional supplies, and water use efficiency. Adopted in 2013 under the authority of the Act, the Delta Plan set forth 14 regulatory policies and 73 non-regulatory recommendations that contribute to the achievement of the coequal goals, including reduced reliance on Delta exports; enhanced water quality standards; protection of the Delta's unique ecosystem; mitigation of the multiple stressors affecting the Delta; improvement of emergency preparedness throughout the Delta region; reduction of flood risk; and	Joaquin Valley Air Pollution Control District) throughout the analysis (e.g., Impact AQ-2). It also incorporates various requirements regarding greenhouse gas reductions (e.g., Senate Bill 100) into the impact analysis (e.g., Impact AQ-9). In addition, Chapter 9, Water Quality, incorporates standards from the State Water Board's Bay-Delta Water Quality Control Plan and the Central Valley Regional Basin Plan throughout the impact analyses (e.g., see Impact WQ-5). Finally, Chapter 13, Terrestrial Biological Resources, Impact BIO-54, discusses conflicts with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Regarding consistency with County General Plans, it should be noted that State agencies, such as DWR, are generally immune from local regulation and land use controls based on the doctrine of sovereignty and therefore are typically not bound by city and county general plans or local ordinances. Please see Appendix 3E, Delta Reform Act Considerations, for a discussion of the Delta Reform Act's coequal goals and how the practical effect of many of the proposed mitigation measures in the EIR and environmental commitments in the EIR would protect Delta values. Please also see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for information on the relationship of the project to the Delta Reform Act and the Delta Plan. Please refer to Chapter 2, Purpose and Project Objectives, regarding the purpose of the project. Please see Chapter 1, Introduction, for a description of the State Water Project and background information regarding how water supply has been developed and managed in California. Please also refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the project's purpose and objectives, including DWR's continuing commitment to operate the State Water Project as modified to include the Delta Conveyance Project in compliance with all state and

Letter-Comment Number	Comment	Response
	prioritization of state investment in levee maintenance and upgrades. The Delta Plan contains policies, recommendations, and performance measures designed to protect the Delta environment and existing Delta land uses from the impacts of major new projects, including the proposed Delta Conveyance Project. The Delta Plan also contains priority recommendations that identify actions "essential to achieving the coequal goals" [Footnote 81: Delta Plan, p. ES-17.] and performance measures related to meeting the Plan goals and policies. [Footnote 82: Delta Plan, Appendix E: Performance Measures for the Delta Plan, as amended Apr. 26, 2018.] The Delta Reform Act requires that projects within the boundaries of the Delta that will significantly impact the achievement of the coequal goals demonstrate consistency with the Act and each of the Plan's regulatory polices before the project may be implemented. [Footnote 83: Wat. Code, sections 85054, 85057.5, 85225; Cal. Code Regs., tit. 23, section 5002, subd. (b)(1).] The DEIR asserts that the "Delta Conveyance Project is consistent with and furthers the achievement of the coequal goals by providing the water supply resilience needed to address seismic risks, sea level rise, and other reasonably foreseeable consequences of climate change and extreme weather events." [Footnote 84: DEIR, Appendix 3E, p. 3E-5, lines 1-4.] The Project's stated purpose and objectives, however, do not commit the Project to improve or even maintain current conditions for the Delta's imperiled fisheries, nor do they ensure that the Project will attempt to protect, restore, and enhance the Delta ecosystem. Instead, the Project's objectives promise to seek "operational flexibility" and to maximize Delta exports in the face of threats from climate change and seismic events. The DEIR explains this by	federal water quality and environmental laws.

Letter-Comment Number	Comment	Response
	stating that "[a]lthough the Delta Conveyance Project is not required to achieve the coequal goals, it will have a substantial positive impact on achievement of the coequal goals in a manner consistent with state policy." [Footnote 85: DEIR, Appendix 3E, p. 3E-5, lines 4-6.] The DEIR fails to explain, however, how the Project will have a "substantial positive impact on the achievement of the coequal goals." Degrading water quality in the Delta, regardless of the extent of any adverse impacts, does not improve aquatic conditions. Improving water supply reliability for exports out of the Delta, meanwhile, at the expense of water quality and related conditions in the Delta, including species dependent on the Delta ecosystem, does not preserve existing conditions in the Delta, let alone protect, restore, or enhance them.	
523-25	In fact, even the Project's benefits claimed by the DEIR do not appear reasonably foreseeable and are not adequately supported by substantial evidence. The DISB [Delta Independent Science Board] commented that the DEIR "lacks clear and compelling evidence of how the proposed project operationally meets the beneficial objectives of improving water supply reliability y across diverse water years, while minimizing the projects impacts and the risks from sea level rise, earthquakes, and levee breaches, in comparison to a future without the project." [Footnote 86: DISB, public meeting comments, December 8, 2022, draft DEIR comments, p. 7.]	The comment assertions are not consistent with the analyses contained in the EIR, which has been prepared in accordance with CEQA and adequately discloses the potential, scope, severity, and magnitude of potential impacts for the environmental resources analyzed in Chapters 5 through 32. Please refer to Common Response 6, Climate Resilience and Adaptation, regarding the project's anticipated water supply reliability benefits. Please also see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the use of best available science and the performance of project objectives. Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities that are of interest. Responses to all comment letters are provided in Volume 2, Chapter 4, Response to Comments Tables.
523-26	The DISB [Delta Independent Science Board] found equally dubious the claim made in the DEIR that the Project will have a less-than-significant impact on fish species, aquatic ecosystems	Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate DWR responses to the letter that is referenced by the comment and contained in Volume 2, Chapter 4, Response to

Letter-Comment Number	Comment	Response
	and riparian habitat. The Project's reduction in river flows of 30 percent or more would be expected to have detrimental effects on these systems, and the DEIR does not provide adequate evidence that the listed mitigation measures will be effective at reducing these impacts.	Comments Tables. Please refer to response to comment 523-3 regarding project operations and river flows. Please also see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for a description of substantial evidence and the use of substantial evidence throughout the entire EIR to support CEQA determinations. Please also refer to Common Response 1 regarding CEQA requirements for mitigation and the adequacy of mitigation measures included in the EIR.
523-27	1. The Project is not Consistent with the Delta Plan Policy to Reduce Reliance on the Delta Delta Plan Policy WR P1, Reduce Reliance on the Delta through Improved Regional Water Self-Reliance, states, among other things, that "water shall not be exported from, transferred through, or used in the Delta if: ... (3) The export, transfer or use would have a significant adverse environmental impact in the Delta." [Footnote 87: Delta Plan, as amended in 2019, p. ES-18.] The Project not only increases reliance on the Delta, through the expenditure of massive amounts of public funds and construction of permanent facilities dedicated to increasing the frequency and reliability of Delta diversions, but it also will result in numerous significant unavoidable permanent environmental impacts. Moreover, given the scale of known adverse effects (and not even accounting for the many unevaluated and likely substantial adverse effects), including but not limited to impacts to fish and water quality, there is no credible basis for finding that the Project furthers the coequal goal of "protecting, restoring, and enhancing the Delta ecosystem." In this way the Project is inconsistent with Delta Plan Policy WR P1.	Please see Appendix 3E, Delta Reform Act Considerations, for information regarding the coequal goals of the Act and the Delta Plan. Please also refer to Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, regarding the Delta Plan, the coequal goals, and reduced reliance on the Delta for water supply needs. The commenter's assertion regarding the impacts on fisheries and water quality under the Delta Conveyance Project is not supported by the analysis of the EIR. As shown in Chapter 12, Fish and Aquatic Resources, the analysis concludes that Impacts AQUA-1 through AQUA-19 would be less than significant or less than significant after implementation of feasible mitigation measures for all alternatives. Similarly, as shown in Chapter 9, Water Quality, the analysis concludes that impacts would be less than significant or less than significant with mitigation.

Letter-Comment Number	Comment	Response
523-28	2. The Project is not Consistent with the Delta Plan Policy to Respect Local Land Use Delta Plan Policy DP P2, Respect Local Land Use When Siting Water or Flood Facilities or Restoring Habitats, requires that water management facilities respect local land use and be sited to avoid or reduce conflicts with existing uses or those uses described or depicted in city and county general plans. [Footnote 88: Delta Plan, as amended in 2019, p. ES-38.] The proposed diversion facilities and associated infrastructure fail to respect local land use and will conflict with and irreparably damage the existing Delta communities of Hood, Clarksburg and Courtland by permanently altering the physical landscape, including agricultural and cultural/historic uses, substantially degrading its unique scenic qualities and cultural/historical and economic values in perpetuity. In this way the Project is fundamentally inconsistent with Delta Plan Policy DP P2.	Please see response to comment 523-24 regarding the appropriate consideration of applicable regional plans throughout the EIR. Please refer to Appendix 3E, Delta Reform Act Considerations, and Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for information on the relationship between the Delta Conveyance Project and the Delta Plan. Appendix 3E includes a discussion of the Delta Reform Act's coequal goals and details on how the practical effect of many of the proposed mitigation measures and environmental commitments cited in the EIR would protect Delta values and those resources cited in the comment. Although DWR is generally immune from local regulation and land use controls based on the doctrine of sovereignty and therefore are typically not bound by city and county general plans or local ordinances, the EIR nevertheless assessed potential land use effects associated with each alternative based on the compatibility of the project alternatives with the existing and planned land uses in the study area. The analysis in Chapter 14, Land Use, concluded the construction of the project's water conveyance infrastructure would result in temporary and permanent changes in land use in the study area, which may be incompatible with the general land uses presently designated in these areas. However, as described in the section titled CEQA Conclusion—All Project Alternatives under Impact LU-2, an incompatibility does not by itself constitute an adverse physical effect on the environment, but rather may indicate the potential for a proposed activity to indirectly have a physical effect on the environment. Although some of these changes in land use could result in a conflict with policies adopted to avoid or mitigate environmental effects, the conflicts would be unlikely to result in a significant physical effect on the environment; therefore, the potential impacts of all project alternatives on local land use plans and policies would be less than significant. See Chapter 14, Impact LU-2 for further discussion. The potentially significant physical environmental impacts associated with agricultural resources, cultural and historic resources, aesthetics and scenic resources, and socioeconomic effects are fully and adequately evaluated in

Letter-Comment Number	Comment	Response
		the following chapters: Chapter 15, Agricultural Resources; Chapter 19, Cultural Resources; Chapter 18, Aesthetics and Visual Resources; and Chapter 17, Socioeconomics.
523-29	3. The Project is not Consistent with the Delta Plan's Requirement that Covered Actions Employ the Best Available Science As part of its requirement that covered actions must make detailed findings to establish consistency with the Delta Plan, Policy G P1 requires that "all covered actions must document use of best available science." [Footnote 89: Delta Plan, as amended in 2019, p. ES-17.] The DEIR failed to use the best available science in several of its impact analyses, including in its predictions of future scenarios under climate change by applying only an extreme and unlikely sea level rise against which to measure Project impacts. Its analyses of impacts to species using a species-by-species approach, rather than examining Project effects on species interactions or ecosystem productivity, do not apply the best available science. As noted by the DISB [Delta Independent Science Board], aquatic ecosystem effects on a community scale would provide a more accurate depiction of Project impacts. The DEIR's omission of scientific uncertainty in several of its assessments, furthermore, results in skewed conclusions and underestimated impacts. The DEIR does not demonstrate consistency with the Delta Plan Policy to document use of best available science.	Please see Appendix 3E, Delta Reform Act Considerations, table titled Delta Plan Regulatory Policy Crosswalk Table, regarding the applicable policies of the Delta Plan and the content of the EIR or EPRs and application to alternatives. There is information summarized in this table that is relevant to Policy G P1, subsection (b)(3). In addition, please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the use of best available science for analysis documented in the EIR. See also Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for additional discussion of the relationship between the Delta Conveyance Project and the Delta Reform Act.
523-30	VII. THE DEIR's USE OF IMPROPER BASELINES, METHODOLOGIES, AND SIGNIFICANCE THRESHOLDS RESULTS IN INACCURATE CONCLUSIONS REGARDING PROJECT IMPACTS AND MITIGATION	The EIR has been prepared in accordance with CEQA and adequately discloses the potential, scope, severity, and magnitude of potential impacts for the environmental resources analyzed. Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the use of the appropriate baseline

Letter-Comment Number	Comment	Response
	An EIR must identify and describe direct and indirect project impacts with a "sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences." [Footnote 90: 14 Cal. Code Regs., § 15151.] Courts have found a "good faith effort at full disclosure" is necessary to inform the critical discussion of mitigation measures and project alternatives at the core of the EIR. [Footnote 91: Ibid.] A description of an environmental impact that is insufficient "because it lacks analysis or omits the magnitude of the impact" renders an EIR inadequate as an informational document. [Footnote 92: Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, 514.] The DEIR's analyses of Project impacts do not meet these standards, starting with its evaluation of existing environmental conditions. Use of improper methodology, failure to support conclusions with substantial evidence and analysis, and a tendency to mask or underestimate impacts by applying erroneous thresholds of significance all render the DEIR insufficient and inadequate as an informational document. As a result, the County is unable to understand the full scope of potential Project impacts relevant to its citizens, communities, and the environment. Impacts to water quality and supply, flood protection and management, public health, agriculture, County facilities such as roads and other infrastructure, cultural resources, and habitat critical to aquatic and terrestrial species are insufficiently or inaccurately analyzed in the DEIR, and mitigation measures thus fail to address the extent of potential impacts. Many of these impacts will have significant adverse effects on the County's residents, businesses, operations, facilities and programs, and as such,	for the purposes of the CEQA analysis, the approach contained throughout the EIR regarding thresholds of significance, and the substantial evidence that supports the conclusions and disclosures in the EIR and properly informs the public, interested parties, and decision makers.

Letter-Comment Number	Comment	Response
	must be properly evaluated using accurate data and methods and recirculated in a revised DEIR for public comment.	
523-31	A. The Use of Unreasonable Future Baseline Conditions Masks Project Impacts The DEIR must describe the environmental setting for the project, which is made up of "the physical environmental conditions in the vicinity of the project" as viewed from "a local and regional perspective." [Footnote 93: 14 Cal. Code Regs., § 15125(a).] Use of the proper baseline is critical to a meaningful assessment of a project's impacts. Though the environmental setting usually describes conditions as they exist at the time of the notice of preparation or when environmental analysis begins, an EIR should employ a realistic baseline. When existing conditions change or fluctuate over time, the lead agency may define existing conditions by taking account of historic conditions or conditions expected when the project becomes operational. [Footnote 94: 14 Cal. Code Regs., § 15125(a)(1).] Whether intended to reflect existing or future conditions, the baseline must be supported by substantial evidence, which CEQA defines as "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. [Footnote 95: 14 Cal. Code Regs., § 15384(a).]"Argument, speculation, opinion or narrative, evidence which is clearly erroneous or inaccurate . . . "does not constitute substantial evidence." [Footnote 96: Ibid.] Substantial evidence "shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by fact." [Footnote 97: 14 Cal. Code Regs., § 15384(b).]	Environmental impact reports prepared in accordance with CEQA serve to disclose the significant environmental effects of proposed projects by comparing existing baseline conditions to project conditions. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the CEQA baseline used for the analysis in the EIR. In addition to analyzing project impacts in this EIR using an environmental baseline in accordance with CEQA, DWR has disclosed reasonable expected climate change scenarios for the study area and evaluated project alternatives using a projection of future climate. Sea level rise projections referenced in Chapter 30, Climate Change, are those developed for the State of California Sea-Level Rise Guidance: 2018 Update (California Natural Resources Agency and Ocean Protection Council 2018). Projections provided are for the H++ scenario, a single scenario for extreme sea level rise, not a probabilistic projection; it does not have an associated likelihood of occurrence but is recommended for consideration in significant, long-term decisions. Please see Common Response 9, Hydrologic Modeling and Approach, for additional information regarding the assumptions and scenarios used for climate change. The sensitivity analysis summarized in Appendix 30A, CalSim 3 Results Sensitivity to 2040 Climate Change and Sea Level Projections, demonstrates the reliability of the climate change and sea level rise analysis presented in the EIR (e.g., Chapter 30 and Appendix 5A, Modeling Technical Appendix Section 5A-F, Sea Level Rise and Delta Water Quality Modeling). Based on the results of the sensitivity analysis, DWR concluded that the climate change analysis contained in the EIR is sufficient and no further analyses are necessary because any subsequent analysis of project impacts on environmental resources under differing climate change and sea level rise scenarios would be similar to the analyses already contained in the EIR. Please refer to Common Response 6, Climate Resilience and Adaptation, for a detailed explanation of the sensitivity analysis. Furthermore, as noted in Chapter 4,

Letter-Comment Number	Comment	Response
	The DEIR used as a baseline the typical environmental setting, describing conditions as they existed at the time the NOP [Notice of Preparation] was prepared, in January 2020. However, also included were comparisons of conditions as they would be expected to be in 2040 for analysis of the No Project Alternative, as well as analysis of Project impacts in 2040, when the Project is expected to be operational, to reflect conditions after climate change and sea level rise have been accounted for. [Footnote 98: DEIR, p. 4-5, lines 28-36.]The future conditions evaluated, however, apply only extreme climate change conditions, such as sea level rise of 1.8 feet by 2040, or 10.2 feet by 2100. Use of these drastic—some would say exaggerated—scenarios does not merely serve to give readers a glimpse of possible future conditions; by analyzing potential Project impacts against extreme conditions representing the outer limit of future climate projections, the severity of Project impacts is masked by the comparison to a more moderate climate change estimate. A sea level rise of 0.5-0.8 feet by 2040 will have a 66 percent probability, according to the California Ocean Protection Council's Sea Level Rise Guidance. [Footnote 99: State of California Sea-Level Rise Guidance (2018 update), available at chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf, p. 18.] A rise of 1.3 feet by 2040 has a 0.5 percent probability, a 1-in-200 likelihood. The probability of a rise of 1.8 feet by 2040 is so low it is unquantifiable. [Footnote 100: Exponent Comments on DCP DEIR for Regional San, December 16, 2022, p. 27.] Use of this extremely unlikely future scenario, which requires speculation and unreasonable assumptions, cannot meet the definition of substantial evidence. It is not reasonable to	Framework for the Environmental Analysis, the climate change scenario at 2040 used for the analysis is conservative, so that potential impacts from project operations would stand out compared to a less-conservative climate change scenario assumption. Because the project alternatives would be operational far into the future, DWR also provided a comparison of climate conditions in an even longer-term future timeframe (i.e., 2070s), although not required to do so by CEQA. These analyses are discussed in Appendix 4A, Consideration of 2070 Conditions, to provide readers with an understanding of whether the type and magnitude of impacts disclosed for 2040 may change under a possible 2070 scenario. As discussed in Appendix 4A, because the cumulative uncertainties associated with climate change, socioeconomic conditions, water demand, and regulatory changes are too complex to reasonably foresee, providing analyses beyond 2070 would not have yielded information useful to the public and decision makers and therefore is not considered. As such, the EIR provides the public and decision-makers with sufficient information about the near-term and longer-term potential impacts associated with project operations on water quality. Potential impacts associated with operations of the project are quantitatively evaluated both at the 2020 and 2040 timeframes, and qualitatively at the 2070 timeframe, thus offering decisions makers sufficient information to understand the potential changes and effects of project operations as well as climate change.

Letter-Comment Number	Comment	Response
	assume that sea level rise will reach these extreme levels, and use of these unlikely conditions minimizes the Project's actual impacts on things like water quality, because Project-induced changes appear negligible against this inflated baseline. While the worst-case scenario can be assessed, the DEIR should also evaluate impacts against other, more realistic future scenarios. In the absence of such analysis, it appears the DEIR is purposefully utilizing these extreme scenarios merely to artificially minimize Project impacts. The DEIR must be revised to use baseline conditions that will more accurately reflect potential Project impacts as they change over time, particularly since the Project will not be operational for over a decade. Impact analyses that depend on the Sacramento and San Joaquin River and Delta hydrologic conditions (including impacts to water quality, water supply and public facilities that discharge into or divert water from the Delta) must utilize a baseline that accurately reflects conditions at the time the Project is expected to begin operations, as well as reasonably foreseeable future conditions. Operational impacts to Delta water quality and operations at County facilities will occur immediately upon commencement of Project diversions and near-term impacts may be substantially different from those impacts occurring farther in the future, when background hydrologic conditions will be considerably different due to the effects of climate change. However, the use of only extreme, highly unlikely future conditions does not allow for evaluation of reasonably foreseeable Project impacts by the public and decision makers.	
523-32	1. The Baseline Likely Will Need to be Revised to Reflect New Biological Opinions and Water Quality Control Plan Update and Voluntary Agreements	Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the CEQA baseline in the EIR, which includes the 2019 biological opinions and ITP.

Letter-Comment Number	Comment	Response
	In establishing the environmental setting from which to measure the Project's impacts, the DEIR strictly follows the general baseline rule under CEQA Guidelines section 15125, which is to say that it sets the baseline as of the date of release of the 2020 Notice of Preparation of EIR. [Footnote 101: See DEIR, p. 4-4, lines 24-26.] The DEIR also considers future 2040 and 2070 baselines in select analyses as well as in connection with the No Project Alternative. [Footnote 102: See DEIR, pp. 4-5, 4-6.] The use of a 2020 baseline, however, will become increasingly unhelpful as expected changes in Delta water regulations come into effect in the near term. The DEIR acknowledges that the United States Fish and Wildlife Service and National Marine Fisheries Service have reinitiated consultation under Section 7 of the U.S. Endangered Species Act, leading to the issuance of new biological opinions (BiOps) that will govern the coordinated operations of the SWP and CVP. [Footnote 103: DEIR, p. 1-21, lines 1-5.] This process is well underway and will substantively revise the existing 2019 BiOps and corresponding restrictions on Delta diversions, pumping and exports. The DEIR does not speculate as to how the new BiOps may alter the rules governing SWP operations, but it is undeniable that the new BiOps will change the environmental setting even before DCP construction begins, potentially rendering the current DEIR impacts analysis obsolete.	This Common Response also discusses the relationship of Water Quality Control Plan (WQCP) in the EIR and baseline conditions. Please refer to Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, which further discusses the WQCP and voluntary agreements and their consideration in the EIR. This includes updates to the WCQP that were identified and evaluated as appropriate given the current planning approvals and timing of implementation. Appendix 3C, Defining Existing Conditions, No Project Alternative, and Cumulative Impact Conditions, also discusses the WQCP and considerations in the EIR. Common Response 8 also discusses voluntary agreements regarding their use to help protect environmental resources, beneficial uses, their relationship to the WQCP and status in the planning and approval process. Discussion of these topics, as well as use of the 2019 BiOps and ITP, is consistent with State CEQA Guideline §15125 and, more specifically, subsection (a)(1), which provides additional clarity to the lead agency's ability to use discretion in determining what baseline to use when conditions may fluctuate. The 2019 BiOps and ITP provide the most accurate publicly available information available to which to compare project operations. As described in Common Response 1, since the 2019 BiOps were adopted, Reclamation, DWR, USFWS, and NMFS are again consulting. These revised BiOps and ITP, however, have not yet been adopted and this process was initiated well after the NOP was published. Thus, the information and conclusions of the unadopted BiOps and ITP, are not available for use in the EIR. Further, to guess their contents would require speculation and forecasting not supported by CEQA.
523-33	Similarly, the DEIR acknowledges that the State Water Resources Control Board (SWRCB) is in the process of updating the Sacramento-San Joaquin Bay Delta Water Quality Control Plan (WQCP) which, inter alia, provides for sufficient Delta outflows to prevent the upriver encroachment of salinity	Please see response to comment 523-32 and Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for information on the relationship of the project to updates to the Bay-Delta Water Quality Control Plan and Voluntary Agreements. As discussed in this response, and Appendix 3C, Defining Existing Conditions, No Project

Letter-Comment Number	Comment	Response
	levels. [Footnote 104: DEIR, p. 4C-1, lines 13-16.] Presently, the SWRCB has proposed an "unimpaired flow standard" of 40% for the Lower San Joaquin River. [Footnote 105: WQCP Update Phase I.] It has not yet announced a final unimpaired flow standard for the Sacramento River basin. The DEIR further acknowledges that the WQCP Update may be resolved through the adoption of Voluntary Agreements (VAs) among the Water Board and various California water purveyors. The DEIR even goes so far as to provide a cursory analysis using a blended baseline derived from the 2019 draft VAs and 2022 VA Memorandum of Understanding. [Footnote 106: See DEIR, Appendix 4C.] This bonus analysis, however, does not consider the implementation of an unimpaired flow standard (i.e., that the VAs may not come to fruition and the SWRCB unilaterally adopts the WQCP Update, imposing unimpaired flow standards on water users in all Delta tributaries.) As with the new BiOps, the WQCP Update, whether it be implemented through the VAs or otherwise, will significantly alter the surface water regime in the Sacramento and San Joaquin River basins. This inevitable change will increasingly render the DEIR's impacts analysis outdated and irrelevant. DWR's strict adherence to a 2020 environmental setting will lead to a moot environmental impacts analysis. The new ESA BiOps and WQCP Update/Vas will constitute "significant new information" when they are available, either in final or preliminary form. DWR will be required to account for these changes to the environmental setting and recirculate the DEIR if this information becomes available prior to certification of the Final EIR. [Footnote 107: See CEQA Guidelines, section 15088.5.] Given the magnitude of these changes and the effect they may have on the DCP analysis, DWR should wait to	Alternative, and Cumulative Impact Considerations, the updates to the Bay-Delta Water Quality Control Plan are evaluated appropriately in the cumulative impact analysis in the EIR. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the baseline and the inclusion of the current biological opinions in the baseline. Please also see Common Response 1 regarding CEQA requirements of recirculation. DWR acknowledges there are many external planning processes being pursued by multiple agencies; however, as discussed in Common Response 8, DWR has appropriately considered these other processes in the context of CEQA in the EIR. Furthermore, DWR will continue to coordinate with other agencies as appropriate.

Letter-Comment Number	Comment	Response
	complete and certify the EIR until after the new BiOps and WQCP Update/Vas have been adopted/approved.	
523-34	B. Methodologies Used to Analyze Project Impacts are Flawed and Their Use is Not Supported by Substantial Evidence: In evaluating project impacts that will affect communities and stakeholders in Sacramento County, the DEIR must apply methodologies that will provide the most accurate assessment of the project's potential adverse effects. The DEIR's analyses of impacts to flows and water quality do not present relevant information regarding predicted water quality changes. The Delta Simulation Model II (DSM2) simulates flows and water quality within the Delta using a 15-minute time step, which is necessary to capture tidally driven flows and water quality conditions within the Delta estuary. [Footnote 108: Ibid.] Throughout the DEIR, however, changes to water quality and flows are discussed as long-term averages aggregated statistically. This long-term average data does not accurately or meaningfully disclose the project's effects. Most entities with water discharge or diversion facilities within the Delta, including those operated by Sacramento County, operate facilities and manage treatment operations on short timeframes (e.g., hourly). Model results that are processed to show changes in terms of long-term averages, and then provided in summary statistical format, do not provide the information needed to assess the impacts of the proposed project on their operations, [Footnote 109: Exponent Comments prepared for Regional San, p. 7.] As explained in expert comments by Exponent submitted in support of Regional San's DEIR comments, there is a feasible, more relevant methodology and means of evaluating and presenting	Chapter 9, Water Quality, provides Impact WQ-5 (electrical conductivity), Impact WQ-6 (mercury), Impact WQ-14 (CHABs), and impact assessments for additional water quality parameters that are based on substantial evidence, including DSM2 modeling output provided in Chapter 9 appendices, from models calibrated and verified to simulate Delta hydrodynamics and water quality. Chapter 9 determined how project operations would change water quality in the study area, relative to existing conditions, and then determined how identified water quality changes could affect the designated beneficial uses of study area water bodies (i.e., how water quality changes could cause environmental impacts). Chapter 9 concluded that project operations would have a less than significant impact on water quality constituents in the Delta relative to existing conditions. Please see Common Response 10, Surface Water Quality and Groundwater Resources, regarding DSM2 model calibration and validation, presentation of data and use of monthly average modeling results in the water quality impact analysis, and suitability for use to support water quality impact determinations. Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities that are of interest. Responses to all comment letters are provided in Volume 2, Chapter 4, Response to Comments Tables.

Letter-Comment Number	Comment	Response
	project-related impacts available that would provide meaningful information to the public and decisionmakers. In revising the DEIR to include appropriate methodology that accurately reflects project impacts, DWR should consult with Sacramento County and SCWA for input on both the appropriate methodology for impact assessment and to determine whether there are feasible means of avoiding impacts to County operations.	
523-35	C. The Use of Improper Thresholds of Significance Disguises Significant Impacts as Less Than Significant A threshold of significance is defined by the CEQA Guidelines as "an identifiable quantitative, qualitative or performance level of a particular environmental effect." [Footnote 110: 14 Cal. Code Regs., section 15064.7(a).] A lead agency has discretion to formulate standards of significance for use in an EIR. The choice of appropriate thresholds of significance must be "based to the extent possible on scientific and factual data" and requires an exercise of reasoned judgment founded on substantial evidence. [Footnote 111: 14 Cal. Code Regs., section 15064(b)(1); Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts (2017) 3 Cal.5th 497, 515; Mission Bay Alliance v. Office of Community Inv. & Infrastructure (2016) 6 Cal.App.5th 160, 206.] Compliance with thresholds of significance does not relieve a lead agency of the obligation to consider substantial evidence indicating that the project's environmental effects may still be significant, and when there is evidence that an impact may be characterized as significant, an EIR may not adopt a contrary finding without providing an adequate explanation along with supporting evidence. [Footnote 112: 14 Cal. Code Regs.,	The comment assertions regarding the improper use of thresholds of significance are not consistent with the analysis contained in the EIR. DWR appropriately developed and applied thresholds throughout the EIR, including in Chapter 9, Water Quality; Chapter 15, Agricultural Resources; Chapter 16, Recreation; Chapter 18, Aesthetics and Visual Resources; Chapter 20, Transportation; and Chapter 24, Noise and Vibration. Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the scope of analysis contained throughout the EIR, as well as a discussion of the development and use of thresholds in the EIR. As discussed in Common Response 1, the thresholds were developed based on CEQA Guidelines Sections 15064 and 15064.7(a) as well as the environmental checklist in Appendix G to the CEQA Guidelines. CEQA provides the Lead Agency with discretion to determine what thresholds to use and how they are discussed and organized in an EIR. Where appropriate, and as described in each of the chapters as relevant (e.g., subsections titled thresholds of significance in the resource chapters), thresholds are tailored to enable a more detailed and resource specific evaluation in the EIR. The thresholds in the listed chapters, as well as throughout the EIR, have been tailored to specifically address the unique nature of the project and includes measurable criteria and allow a more specific and thorough evaluation of the project, disclosure of impacts, and development of mitigation than had the standard thresholds found in CEQA Appendix G been used. Information, facts, expert judgement, conditions, and conclusions were used from

Letter-Comment Number	Comment	Response
	section 15064(b)(2); East Sacramento Partnership for a Livable City v. City of Sacramento (2016) 5 Cal.App.5th 281, 302.] The agency "must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect." [Footnote 113: Id. At 1109.] The DEIR failed to meet CEQA's standards for thresholds of significance in several impact analyses, including in its analyses of Project impacts to water quality, transportation, recreation, agriculture, aesthetics, and noise, discussed in section IX below [comments 42-69].	multiple cited documents, data sources, and models to inform the information contained in the EIR and represent substantial evidence, to enable impacts conclusions based on conformance to the thresholds (refer to Common Response 1 for a definition of substantial evidence and explanation of the use of substantial evidence in the EIR). Please also see Common Response 10, Surface Water Quality and Groundwater Resources, for a detailed discussion of thresholds used in Chapter 9, Water Quality, and Common Response 14, Transportation, regarding the thresholds used in the transportation analysis, particularly related to vehicle miles traveled.
523-36	In some instances, these thresholds [thresholds for impact significance] appear to have been chosen arbitrarily and are unsupported by substantial evidence in the DEIR or its supporting documents, such as the DEIR's analysis of noise impacts, which offers no justification for its chosen threshold of noise impacts.	Lead Agencies have discretion to formulate their own significance thresholds (CEQA Guidelines § 15064.7(b)). Chapter 24, Noise and Vibration, of the EIR uses noise level standards established by DWR based on a consensus of experts, and local and resource agencies. The basis and source of these thresholds is documented in the section titled Thresholds of Significance within Chapter 24. The thresholds for impact significance were chosen considering the potential inadequacies of using local jurisdictional standards in regard to a project of a large size, extending across numerous local jurisdictions and occurring over multiple years. For example, it is common practice to exempt construction from provisions of noise ordinances during daytime hours, due to construction being a necessary activity for growth and regional development. As such, construction in many jurisdictions, including Sacramento County, are not bound by noise limits. Noise limits for the project were set in consideration of the project's rural setting, geographic scope, and presence of protected species in the area. As explained in the Thresholds of Significance section of Chapter 24, in establishing the 60 dBA noise limit, consideration was given to DWR

Letter-Comment Number	Comment	Response
		Specification 05-16 (California Department of Water Resources 2005:01570-12) and State General Plan noise compatibility guidelines, which considers ambient levels of up to 60 dBA Ldn (equivalent to 60 dBA daytime/50 dBA nighttime) at residential use to be "normally acceptable" and not requiring sound attenuation measures. The construction noise impact threshold is based on exceedance of these noise limits in addition to an overall noise level increase of 5 dB or more relative to existing daytime ambient noise levels at sensitive receptor locations. It should be emphasized that noise compatibility is generally considered in the context of permanent ambient noise sources such as highways and airports, as construction is a temporary intermittent activity.
523-37	In others, however, they seem designed specifically to artificially reduce the appearance of the significance of project impacts. For example, in devising water quality impact thresholds of significance based on the suggested questions found in CEQA Guidelines Appendix G, the DEIR states that its "refinements" to the Appendix G language "reflect the application of professional judgment and experience to the more general language found in the original." [Footnote 114: DEIR, p. 9-36, lines 11-13.] However, the thresholds appear in fact to be tailored to justify the DEIR's conclusions regarding the project impacts. The list of 8 thresholds includes the following 4, which define an impact as significant if the project would: 1) Cause exceedance of applicable state or federal numeric or narrative water quality objectives/criteria or other relevant water quality effects thresholds identified for this assessment from the scientific literature by frequency, magnitude, and geographic extent that would result in adverse effects on one or more beneficial uses of affected waterbodies.	Please see response to comment 523-35 regarding the development and use of thresholds in the EIR. Please also see Common Response 10, Surface Water Quality and Groundwater Resources, regarding the appropriateness of the thresholds of significance defined in Chapter 9, Water Quality. Please also refer to response to comment 523-35 regarding the development and use of thresholds in the EIR. Common Response 10 discusses the use of CEQA Appendix G checklist thresholds and provides information and rationale regarding refinements made to these thresholds. These refinements to the thresholds make them more effective at evaluating the details of impact mechanisms that could lead to potentially significant environmental impacts based on the details of the Delta Conveyance Project alternatives for use in this EIR. Common Response 1 also explains that an impact determination regarding already-impaired water bodies should be more sensitive when a waterbody is already impaired (i.e., when water quality objectives or criteria are consistently not met and thus beneficial uses may be impaired). As described further in Common Response 10, the analysis and thresholds within Chapter 9 take into account that the State of California (State Water Resources Control Board), with oversight/input from U.S. Environmental Protection Agency, regulates water quality through the establishment of

Letter-Comment Number	Comment	Response
	2) Increase levels of a bioaccumulative pollutant by frequency, magnitude, and geographic extent such that the affected waterbody (or portion of a waterbody) would be expected to have measurably higher body burdens of the bioaccumulative pollutant in aquatic organisms that result in substantially increasing the health risks to wildlife (including fish) or humans consuming those organisms. 3) Cause long-term degradation of water quality in affected waterbodies that would result in substantially increased risk for adverse effects on one or more beneficial uses. 4) Further degrade water quality by measurable levels, on a long-term basis, for one or more parameters that is already impaired, and thus included on the State's CWA Section 303(d) list for the waterbody, such that beneficial use impairment would be made discernibly worse. [Footnote 115: DEIR, p. 9-36, lines 15-28.] These criteria add to pre-existing standards unnecessary conditions that artificially inflate the threshold, thereby making project impacts appear less severe. Threshold 1, for example, attempts to add to water quality objectives already established by state and federal law—the exceedance of which is necessarily an adverse effect—the unnecessary burden of an analysis to determine whether adverse effects would occur. Threshold 2 adds the qualifiers "measurably higher" and "substantially increasing" to measures of bioaccumulative pollutant levels that, under the threshold's own circular explanation, already exceed adopted fish tissue objectives. Measurable pollutant increases to these organisms would, by definition, substantially increase health risks. Threshold 3's	water quality standards. Water quality standards include (1) the designated beneficial uses of water bodies, (2) adopted water quality objectives/criteria that, when met, will achieve water quality that is protective of the designated beneficial uses, and (3) an antidegradation policy. The latter provides the State with the ability to regulate (i.e., limit) the degradation of high quality waters when water quality objectives and criteria are being met. The approach to assessing water quality impacts in Chapter 9, Water Quality, is reflective of the State's approach to regulating water quality described above. Specifically, the assessments evaluate how project operations would alter water quality and then evaluate whether such changes to water quality would, or would not, impact the designated beneficial uses of water bodies. The operation of the Sacramento Regional Wastewater Treatment Plant to dispose of effluent into the Sacramento River does not constitute a designated beneficial use of the Sacramento River and, therefore, was not assessed in Chapter 9. Please see Chapter 5, Surface Water, and Chapter 21, Public Services and Utilities, regarding potential changes related to surface water resources as a result of project operations and potential impacts on public services and utilities. As disclosed in Chapter 21, impacts on public services and utilities, including wastewater treatment plants, are identified as less than significant.

Letter-Comment Number	Comment	Response
	language, purporting to find significant impacts where degradation of water quality would cause "substantially increased risk for adverse effects on one or more beneficial uses" is decidedly vague and open to interpretation. The qualifier in Threshold 4 asserting that degradation of a 303(d)-listed waterbody would be significant if its "beneficial use impairment would be made discernibly worse" fails to consider that the Clean Water Act's Section 303(d) list consists of impaired waterbodies that are already determined to be in violation of adopted water quality objectives. Any further degradation would be significant, and impacts that would result in "measurable" degradation would, by definition, be "discernible." While DWR has discretion to adopt thresholds of significance for the project, it must support its decisions of which thresholds to apply with substantial evidence. And while the DEIR's "refinements" to Appendix G's checklist are supposedly intended to add specificity and "professional judgment" to the checklist's general language, the DEIR offers no substantial evidence in support of its chosen thresholds. The DEIR offers no indication, for example, of why Appendix G's suggestion that impacts would be significant if they would "violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality" [Footnote 116: CEQA Guidelines, Appendix G, p. 7 (emphasis added).] was changed to instead find significant only those impacts that violate a "waste discharge requirement issued to the project for construction-related activities." [Footnote 117: DEIR, Ch. 9, p. 9-36, line 38 (emphasis added).] Any evaluation of the significance of impacts to the region's various waste discharge facilities, including those owned or	

Letter-Comment Number	Comment	Response
	operated by the County, is thereby omitted from the DEIR's impact analysis.	
523-38	The DEIR must be revised to provide substantial evidence for its chosen thresholds of significance, or in the absence of such evidence, further refine its thresholds to reflect true Project impacts.	Please refer to responses to comments 523-35 through 523-37 regarding thresholds used in the EIR.
523-39	VIII. The DEIR's Treatment of Mitigation Measures Violates CEQA A fundamental purpose of CEQA is to require public agencies to avoid or reduce environmental damage when possible by requiring appropriate mitigation measures and through the consideration of environmentally superior alternatives. [Footnote 118: CEQA Guidelines, section 15002(a)(2)-(3); see also, Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners (2001) 91 Cal.App.4th 1344, 1354; Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 564; Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal.3d 376, 391, 400.] If an EIR identifies potentially significant impacts, it must then propose and evaluate mitigation measures to minimize these impacts. [Footnote 119: Pub. Resources Code, sections 21002.1(a), 21100(b)(3).] CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation measures. [Footnote 120: Pub. Resources Code, sections 21002-21002.1.] A. The DEIR Improperly Incorporates Mitigation Measures into the Project Description "A 'mitigation measure' is a suggestion or change that would reduce or minimize significant adverse impacts on the	DWR fully understands the role of mitigation as required by CEQA and appropriately and adequately applies mitigation measures throughout the EIR pursuant to CEQA requirements. As described in Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, mitigation measures are included to the resource chapters as required. The mitigation measures are listed in the Executive Summary table titled Summary of Delta Conveyance Project Impacts and Mitigation Measures, which contains an introductory paragraph that states that additional discussion of each impact and mitigation measure is found under the referenced resource-specific chapter. Accordingly, the full mitigation measure in the individual chapters reflect applicable timelines, performance standards, responsible parties, etc. DWR discloses impacts and makes impact determinations prior to the application of feasible mitigation measures and then after the incorporation and discussion of feasible mitigation measures. . Additionally, the Mitigation Monitoring and Reporting Program (MMRP) will describe specific timelines and further details regarding the mitigation measure implementation and compliance to CEQA requirements and analysis of the project as whole. Please refer to Common Response 1 and Chapter 4, Framework for the Environmental Analysis, which discuss environmental commitments and best management practices. These are differentiated from mitigation measures as described therein and are part of the project. DWR included the detailed descriptions of these in Appendix 3B, Environmental

Letter-Comment Number	Comment	Response
	environment caused by the project as proposed." [Footnote 121: Lincoln Place Tenants Assn. v. City of Los Angeles (2007) 155 Cal.App.4th 425, 445.] A mitigation measure is not part of the project. [Footnote 122: Lotus v. Department of Transportation (2014) 223 Cal.App.4th 645, 656.] To ensure that a project's potential environmental impacts are fully analyzed and disclosed, and that the adequacy of proposed mitigation measures is considered, mitigation measures that are not incorporated into the project's design should not be treated as part of the project description. [Footnote 123: Lotus v. Department of Transp. (2014) 223 Cal.App.4th 645, 656.] Mitigation measures that are mischaracterized as project components may obstruct or obscure project impacts, and should not be included in an initial analysis of a project's potential impacts. Such mischaracterization is a material error and a violation of CEQA. [Footnote 124: Mission Bay Alliance v. Office of Community Inv. & Infrastructure (2016) 6 Cal.App.5th 160, 185.] Characterizing the "environmental commitments" as part of the Project violates CEQA. In fact, the "environmental commitments" are designed to reduce or eliminate numerous project impacts, including significant impacts to water quality, soils, recreation, transportation, public health, fish and aquatic resources, and a host of other impact areas. [Footnote 125: See, e.g., DEIR, Appendix 3B, pp. 3B-2 to 3B-4.] There is hardly a resource area for which environmental commitments were not claimed to be factored into the impact analysis. The DEIR claims that Project impact analyses "consider[] the ECs and BMPs [Best Management Practices] as part of the	Commitments and Best Management Practices, so as not to further lengthen the project description. Common Response 1 describes the appropriate consideration and incorporation of these in the impact analysis and identifies that they will be included in the MMRP.

Letter-Comment Number	Comment	Response
	project, and the discussion presents the level of impact of the project, first without implementation of the ECs and BMPs to determine the significance of the impact and then, as the ECs and BMPs are applied, whether the impact has been reduced to a less-than-significant level and whether additional mitigation is required." [Footnote 126: DEIR, Appendix 3B, p. 3B-2, lines 4-7.] The DEIR appears to misunderstand the role of mitigation as required by CEQA. Mitigation measures, which must be applied after a project's impacts have been evaluated so that the public can understand the full breadth of a project's potential impacts, must be binding to ensure that these measures will actually be implemented, not merely adopted and then ignored. [Footnote 127: Fed'n of Hillside & Canyon Ass'n v. City of Los Angeles (2000) 83 Cal. App. 4th 1252, 1261; Anderson First Coal. V. City of Anderson (2005) 130 Cal.4th 1173, 1186.] The DEIR, by characterizing its measures as "commitments," misleads the public because not only are they not set forth in the project description but there is no firm commitment that they be implemented. Moreover, the DEIR ignores that, whether characterized as part of the project description or mitigation, burying the environmental commitments in an appendix subverts CEQA's informational mandate by denying the public the opportunity to review and understand them in the context of the DEIR analysis. Merely assuming their implementation will reduce impacts, without any analysis or evidence to support those assumptions, also prevents the public from understanding the full scope of the impact of the proposed actions or commenting on the effectiveness of the environmental	

Letter-Comment Number	Comment	Response
	commitments as mitigation.	
523-40	In order for the public to understand the full scope of the Project's impacts, the DEIR must be revised to clearly describe the environmental commitments in the context of the individual impact analyses and explain exactly how and to what degree they are expected to reduce project impacts. Impacts must be measured and quantified without consideration of the environmental commitments before any determination is made regarding their effect. This analysis and supporting evidence must be included in the body of the DEIR, and the document must be recirculated for public review and comment.	The impact analyses included in Chapters 7 - 32 include discussions regarding how and to what degree the environmental commitments and best management practices would reduce project impacts. Thus, the EIR considers implications of the environmental commitments on the various impact mechanisms. Please see Chapter 4, Framework for the Environmental Analysis, for a description of how environmental commitments and best management practices were considered in the EIR's analysis. Also, as stated in Appendix 3B, Environmental Commitments and Best Management Practices, the environmental commitments and best management practices would be implemented as part of the proposed project and alternatives. Therefore, it is appropriate to consider how those actions would avoid or reduce impacts along with project impacts to reach a CEQA conclusion before implementation of mitigation measures.
523-41	B. Mitigation is Improperly Deferred, is Ineffective, and Unenforceable, all in Violation of CEQA Mitigation measures must be clearly effective in reducing impacts to a less-than-significant level. [Footnote 128: Gray v. County of Madera (2008) 167 Cal.App.4th 1099, 1115.] Mitigation measures that require development of a mitigation plan based on future studies are legally inadequate if they do not describe the anticipated management actions and do not include management guidelines or performance standards which describe levels of reduction in impact significance that must be achieved in order for impacts to be fully and effectively mitigated. [Footnote 129: Preserve Wild Santee v. City of Santee (2012) 210 Cal.App.4th 260 (plan for active habitat management failed to describe anticipated management actions or include standards or guidelines for actions that might be taken).]	Please refer to responses to comments 523-22 and 523-39 regarding a discussion of the scope of analysis based on the level of current design and regarding the use of mitigation measures. As described in those responses and in Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, mitigation measures within the individual resource chapters include responsible parties, timing of implementation, and performance standards. Mitigation measures for biological resources are set forth in the Compensatory Mitigation Plan (CMP). Implementation of the CMP would be monitored by State and federal agencies such as California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS) and require approval. This is consistent with State CEQA Guidelines 15126.4 as the project is committed to mitigation, performance standards are included, and the CMP identifies the performance, elements, and monitoring the mitigation sites will undergo to ensure success. In addition, the CMP would be monitored by State and federal agencies.

Letter-Comment Number	Comment	Response
	Impermissible deferral of mitigation, in which an agency "simply requires a project applicant to obtain a ... report and then comply with any recommendations that may be made in the report," are inadequate and a violation of CEQA. [Footnote 130: Defend the Bay v. City of Irvine (2004) 119 Cal.App.4th 1261, 1275.] Mitigation measures that are so undefined that it is impossible to assess their effectiveness are legally inadequate. The majority of the DEIR's measures aimed at reducing or avoiding significant Project impacts are of unproven efficacy or are entirely unenforceable, rendering the DEIR's conclusions that impacts are reduced to acceptable levels unacceptable. Its proposed mitigation of impacts to noise, recreation, agriculture, transportation, water quality, groundwater, geology and seismicity all fail to meet CEQA's requirements that mitigation be clearly defined, enforceable and effective. Measures proposed to reduce impacts to all of these Delta resources are impermissibly vague (such as the mitigation of impacts from conversion of agricultural land "through a combination of acquisition and dedication of agricultural land, acquisition of development rights or conservation easements, or payment of in-lieu fees"), improperly deferred (as is the case with impacts public safety from Project construction in areas of unstable soils, for which soil analyses have yet to be performed), and unenforceable (such as mitigation proposed to reduce significant noise impacts from Project construction, which requires voluntary participation by property owners and therefore violates CEQA's mandate of enforceability).	The feasible mitigation measures described in the EIR for the resources identified by the comment (noise, recreation, agriculture, transportation, water quality, groundwater, and geology and seismicity) all meet CEQA's requirements that mitigation be clearly defined, enforceable, and effective. As described in Chapter 15, Agricultural Resources, Appendix 15B, Agricultural and Land Stewardship Considerations, describes the methodology employed during the initial siting and design process to greatly minimize the extent of farmland that would be permanently converted as a result of project buildout. However, as identified in Chapter 15 and further explained in Common Response 12, Agricultural Resources, DWR is required to provide feasible mitigation measures to reduce Important Farmland conversation (Impacts AG-1 and AG-2 and Mitigation Measures AG-1). DWR considered many individual factors that are important characteristics of farmland related to the farmland selected for acquiring agricultural conservations easements for mitigation purposes. In addition, the mitigation offers DWR the ability to go beyond conservation easements and fund farm improvements to contribute to increases in the extent of important Farmland present. Chapter 15 discloses that although siting of the alternatives avoided farmland the mitigation is feasible, impacts remain significant and unavoidable for all alternatives after implementation of the mitigation measures because conservation of agricultural farmland through acquisition of agricultural conservation easements, even at a ratio of 1:1 or greater, would not avoid a net loss of Important Farmland in the study area. As described in Common Response 1, the identification of future studies, such as those required for soils, geology, and seismicity identified in Chapter 10, Geology and Seismicity, and Chapter 11, Soils, are not deferral of mitigation measures. These are required studies for engineering and design purposes and are typical of large infrastructure projects that are not at 100% design during the CEQA planning process. This is consistent with CEQA and the level of detail of a project required to adequately disclose

Letter-Comment Number	Comment	Response
		the type and severity and magnitude of physical environmental impacts. The analysis in Chapter 24, Noise and Vibration, acknowledges that some elements of Mitigation Measure NOI-1 rely on voluntary participation of residences (e.g., property owners) on a case-by-case basis. The mitigation measure does not solely rely on voluntary relocation to reduce impacts, but also includes other methods that would be used to reduce noise levels at affected locations such as sound insulation, best noise control practices and installation of temporary sound barriers. Although these are proven and effective measures to reduce noise during construction, the impact regarding construction noise is determined to be significant and unavoidable. In addition, as described in Chapter 3, Description of the Proposed Project and Alternatives, in the section titled Ombudsman, the project ombudsman would be available to address concerns and claims related to noise, relocation, in addition to concerns related to other resources in the EIR.
523-42	IX. THE DEIR FAILS TO IDENTIFY AND MITIGATE SIGNIFICANT IMPACTS TO THE DELTA ENVIRONMENT RESULTING FROM THE PROJECT A. The Project May Have Significant Adverse Effects on Floodplain Management The DEIR purported to analyze potential Project impacts from construction, operation, and maintenance on flood protection resources, including flood management systems, drainage patterns and runoff flows, and flood flows within the Project's footprint. [Footnote 131: DEIR, p. 7-1, lines 10-12.] Impacts would be significant, according to the DEIR's thresholds of significance, if the Project would cause a substantial increase in water surface elevations of the Sacramento River between the American River confluence and Sutter Slough (Impact FP-1) or	The assertions that the EIR does not mitigate significant impacts on the Delta environment are not consistent with the analysis in the EIR. As described in the Process and Method of Review for Impeding or Redirecting Localized Flood Flow section of Chapter 7, Flood Protection, and in the Local Water Supply, Drainage, and Utilities section of Chapter 3, Description of the Proposed Project and Alternatives, the location and capacity of existing drainage and irrigation facilities that may be affected by construction of the Delta Conveyance Project would be determined and the capacity of this infrastructure to convey drainage or irrigation water would be maintained. During engineering conceptual design, all project alternatives were subject to an assessment of flood risks and a levee vulnerability assessment; see the Intake Flood Management technical memorandum and the Levee Vulnerability Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022b, 2022c). These documents

Letter-Comment Number	Comment	Response
	if it would alter a site's existing drainage pattern, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site or impede or redirect flood flows (Impact FP-2). [Footnote 132: DEIR, p. 7-35, lines 39-40; DEIR, p. 7-36, lines 1-4.] Potential impacts were evaluated based on changes in the water surface elevation (WSE) of the Sacramento River between the confluence of the American River and Sutter Slough, changes in the depth and areal extent of the 100-year flood event surrounding the Twin Cities Complex, and increases in risk of flooding by emergency release through the Southern Forebay Emergency Spillway. [Footnote 133: Ibid.] The DEIR concluded that application of Mitigation Measure FP-1: Phased Construction of the Proposed North Delta Intakes, would reduce any impacts associated with Impact FP-1 to less than significant, [Footnote 134: DEIR, p. 7-44, lines 2-8.] while Impact FP-2, the DEIR concluded, would be less than significant and would not require any mitigation. [Footnote 135: DEIR, p. 7-52, lines 34-35.] According to DWR, no Project construction or operation would potentially impact flood protection that phased construction of the intakes would not resolve. The DEIR's analysis failed to consider, however, several factors that could affect Project impacts, including the following: -The proposed intake locations are subject to deep flooding if there is a breach on the Sacramento River levee or the railroad embankment. -The levees on the east side of the Sacramento River are only maintained to the 1917 standard and do not meet current standards for flood control.	identify potential vulnerabilities within the Delta levee systems, evaluate Delta flood risk, management measures, emergency response, flood inundation mapping, and provide site specific recommendations for structure flood risk mitigations to major construction locations. The Delta Conveyance Project includes levee improvements at Bouldin Island, Lower Roberts Island, and Twin Cities Complex to protect workers during construction of the tunnel launch shaft sites. Access to and egress to these and all other project construction sites would be designed to meet local and regional emergency access requirements to facilitate evacuations. The Project Emergency Response Plan that would be implemented for each project alternative also requires on-site emergency response facilities and services at primary work sites during construction. Intakes B and C, tunnel launch shaft sites, and the Southern Complex under central and eastern alignment alternatives or the Bethany Reservoir Pumping Plant and Surge Basin under Alternative 5 would each have a helipad for emergency evacuations. Accordingly, workers at project construction locations would be able to be evacuated in a timely manner during construction. The Delta Conveyance Project is not a project to include levee improvements for other benefits. The section titled North Delta Intakes in Chapter 3 provides a detailed discussion of the north Delta intakes indicating that the level of flood control afforded by the existing levee would be maintained during and after construction. However, if the intakes are flooded, the tunnel inlet at each intake would be protected by gates to avoid flood impacts on the tunnel and downstream Delta Conveyance Project facilities. As described in Chapter 2, Purpose and Project Objectives, the fundamental purpose of the Delta Conveyance Project is to restore and protect the reliability of SWP deliveries. The proposed project is not a flood control project but has been designed to ensure that intake structures on the Sacramento River and modifying flood control levees would not reduce

Letter-Comment Number	Comment	Response
	-The railroad embankment immediately east of the proposed intake locations does not provide sufficient flood control to keep the Beach Stone Lakes water from flooding the proposed intake sites. -The effective FEMA base flood elevation does not accurately represent the flood levels that could occur at this site given the above circumstances. The DEIR acknowledges that the Project will cause local drainage impacts, [Footnote 136: DEIR, p. 7-28, lines 33-39.] but asserts, without adequate analysis, that impacts will be mitigated. All local drainage and floodplain impacts caused by the construction of Project features, particularly intake structures, tunnel shafts, and reusable tunnel material stockpile areas that could disrupt local drainage and affect overland release should be analyzed in detail and mitigated to the extent feasible. To inform the DEIR's analysis, and the public and decisionmakers, a preliminary grading plan for these features should be developed showing the footprint of all Project features, the type and extent of impacts caused, and the proposed mitigation measures that will be implemented. Project impacts upon flood management in the Delta are likely to be substantial and must be given adequate attention and mitigation.	the protection afforded by the existing flood control system. Additionally, Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, provides a discussion about levee management.
523-43	Furthermore, Project construction will likely cause significant deterioration of Delta levees due to the heavy volume of construction traffic utilizing the levee roads, which will deteriorate rapidly. The DEIR fails to adequately analyze these impacts from substantial increases in heavy construction traffic, and it refuses entirely to analyze any impacts from heavy truck traffic, insisting that only needs to evaluate the	The project has been designed to minimize roads on levees (including traffic on existing levee roads) and impacts on levees during construction. For example, during construction of the new intake facilities, a temporary jurisdictional levee would be built at the intake sites east of the existing jurisdictional levee to reroute SR 160 and maintain continuous flood protection (see the Chapter 3, Description of the Proposed Project and Alternatives, section titled Temporary and Permanent Flood Control Levees

Letter-Comment Number	Comment	Response
	increase in passenger vehicles and light trucks (see section IX.d. for a discussion of traffic and transportation).	and State Route 160). Nonstructural flood risk management measures would also be implemented to protect Delta levees (see the Chapter 7, Flood Protection, section titled Process and Methods of Review for Flood Protection). Finally, daily and periodic maintenance will be performed for all facilities, including inspecting levee side slopes and outside of the toe area to ensure they remain in full conformance with the CVFPB and USACE requirements. As described in Chapter 20, Transportation, under Impact TRANS-3, roads, bridges, and interchanges were evaluated to identify facilities that would need to be improved to accommodate construction traffic in a manner to protect the continued use of those facilities in a safe manner. As described in Chapter 10, Geology and Seismicity, Impact GEO-5 analyzes the potential for the use of heavy equipment to damage roads and found that project construction would not result in ground failure. Additionally, as described in the Potential Future Field Investigations technical memorandum for the central and eastern alignments (Delta Conveyance Design and Construction Authority 2022g:24), equipment for monitoring movement and settlement during levee repairs and new levee construction would be installed during construction. Limits of movements on these facilities would be set and construction activities would be halted if these limits are exceeded. Consultation with Sacramento County Department of Transportation is a requirement established by DWR for contractors to develop and implement the transportation demand management plans (TDMs) and traffic management plans (TMPs) prior to construction. See Mitigation Measure TRANS-1 in Chapter 20 for additional discussion regarding agency coordination.

Letter-Comment Number	Comment	Response
523-44	B. The DEIR Fails to Adequately Analyze and Mitigate Project Impacts to Agriculture County lands within the Delta include a substantial amount of farmland designated as Important Farmland, including a large area of land uses designated for agricultural or specified compatible open-space uses under the provisions of the California Land Conservation Act of 1965, known as the Williamson Act. Implementation of any of the proposed Project alternatives would result in the conversion of substantial areas of Important Farmland and farmland under Williamson Act contracts or in Farmland Security Zones to non-agricultural uses. Construction and operation of the proposed Project, Alternative 5, would result in the conversion of nearly 1,175 acres of Important Farmland, including nearly 800 acres of land subject to Williamson Act contracts, within Sacramento County, a significant and unavoidable impact. [Footnote 137: DEIR, p. 15-34, Table 15-7; DEIR, p. 15-45, Table 15-10.] The DEIR asserts that some of these conversions will be "temporary," defined as impacts that would be "largely limited to the duration of construction activities at a given site but could be returned to active farmland after cessation of construction activities." [Footnote 138: DEIR, p. 15-25, lines 21-23.] (Emphasis added.) Construction, however, is set to last for 14 years. Despite assurances that "short-term" conversions are "generally" considered to be no more than 2 years, the DEIR contains no legally binding commitment that conversion of agricultural land will not last longer, or that DWR will restore formerly active farmland to pre-Project conditions, and that active agriculture is likely to resume on such lands, nor does it demonstrate how land affected by construction could feasibly	As described in Appendix 15B, Agricultural and Land Stewardship Considerations, the conversion of Delta agricultural land was minimized to the extent possible through careful project planning. Sizing of individual project infrastructure components generally was developed based on design and engineering constraints. Chapter 15, Agricultural Resources, also considers many sections of the construction footprint where, although no permanent constructed features or appurtenant infrastructure is planned, as permanently converted farmland since the timeline for returning those areas to productive farmland postconstruction is uncertain. The overwhelming majority of farmland conversion is thus conservatively considered to be permanently impacted, even though, as discussed in Chapter 15, Agricultural Resources, DWR intends for many of these areas to be returned to productive agricultural use through land reclamation, as further described in Common Response 12, Agricultural Resources. Only a small fraction of the construction footprint is thus presented in Chapter 15 as temporarily converted.

Letter-Comment Number	Comment	Response
	be returned to production.	
523-45	Moreover, regardless of whether a conversion may last for 2 years or more than a decade, the DEIR assumes that the Project can suspend completely the livelihoods of the region's farmers for such a prolonged period without any impact. No assurances are provided concerning the continued viability of agricultural operations following the completion of Project construction activities, and the DEIR fails to address the issue of lost agricultural production on prime farmland and how or if growers will be fairly compensated for lost revenues while the land is out of production, such that it may be reasonably assumed they might return to farming after Project construction is concluded. To reduce Project impacts resulting in conversion of farmland, the DEIR proposes Mitigation Measure AG-1: Preserve Agricultural Land. MM AG-1 proposes mitigating permanently converted Important Farmland through a combination of acquisition of agricultural land, development rights, or conservation easements at a ratio of at least 1:1, or "payment of in-lieu fees to fund the acquisition and maintenance of such real property interests by a third party." [Footnote 139: DEIR, , p. 15-39, lines 8-12.] Land acquired for the purpose of mitigation, the DEIR asserts, will, to the extent feasible, be "of equal or better farmland quality than the land that was permanently converted." [Footnote 140: Id., lines 12-15.] MM AG-1 insists that preservation of agricultural lands will be within the Delta counties and that agricultural conservation easements will be held by "a qualified organization that has the legal and technical ability to hold and administer agricultural conservation easements for the purpose of conserving and maintaining lands in agricultural production." [Footnote 141:	The comment provides a summary and opinions of impact determinations and proposed mitigation under Impacts AG-1, AG-2, and AG-3. The impact analysis in Chapter 15, Agricultural Resources, considers direct and indirect effects of project effects to agriculture and concludes that the project impacts under Impact AG-1 and Impact AG-2 as significant and unavoidable even after proposed mitigation measures. Impact AG-3 would be less than significant with mitigation. As described in Chapter 15 under Impact AG-1, conservation of agricultural farmland through acquisition of agricultural conservation easements, even at a ratio of greater than 1:1, would not avoid a net loss of Important Farmland in the study area. Furthermore, Chapter 15 considered many areas where no permanent physical structures were planned as part of construction to be considered permanent impacts on farmland due to the potential for peat soil compaction that may hinder the ability for such areas to be returned to productive farmland. Mitigation Measure AG-1 would require that any Important Farmland considered permanently converted be mitigated at an acreage ratio of at least 1:1 through a combination of acquisition and dedication of agricultural land, acquisition of development rights or conservation easements to permanently protect agricultural land, or payment of in-lieu fees to fully fund the acquisition and maintenance of such real property interests by a third party. As described in Common Response 12, Agricultural Resources, when evaluating areas to serve as agricultural mitigation under Mitigation Measure AG-1, it was important for DWR to consider whether those areas provide an equivalent quality of farmland as the farmland to be permanently converted (i.e., "like for like"). A myriad of factors can affect the quality of farmland, including character, productivity, and heritage. During the process of acquisition of development rights or placement of agricultural conservation easements on Important Farmland within the Delta counties, DWR will target land that is subject to foreseeable development pressure. Given that much of the

Letter-Comment Number	Comment	Response
	Id., lines 25-28.] An "optional funding approach of funding farm improvements to enhance the productivity of the lower-quality farmland" will also be considered, though no indication of when this optional approach might be considered is given, nor are any organizations named that would be potentially qualified to administer such easements. Even with implementation of MM AG-1, impacts from the conversion of Delta farmland would remain significant and unavoidable "because conservation of agricultural farmland through acquisition of agricultural conservation easements, even at a ratio of 1:1 or greater, would not avoid a net loss of Important Farmland." [Footnote 142: Id., lines 2-6.] The DEIR applies MM AG-1 to both Impact AG-1, which contemplates Project impacts resulting in conversion of Prime Farmland, Unique Farmland, Farmland of Local Importance, or Farmland of Statewide Importance, and Impact AG-2, Project impacts resulting in conversion of land subject to Williamson Act Contracts or under contract in a Farmland Security Zone. Reasoning that because conversion of land evaluated under Impact AG-2 "largely represents a subset of those impacts previously described under Impact AG-1," the DEIR concludes that Impact AG-2 is "not additive to those effects" of Impact AG-1. [Footnote 143: DEIR, p. 15-42, lines 4-10.] Therefore, no additional mitigation is applied beyond MM AG-1, and impacts would remain significant and unavoidable. [Footnote 144: DEIR, p. 15-47, lines 36-38.] The DEIR fails to consider, however, that because the Williamson Act affords an additional layer of preservation protection beyond the underlying Important Farmland designation, application of the same mitigation measure does not comport with CEQA's mandate that mitigation measures be identified for each	Delta is protected from urbanization as a result of the Delta Protection Act, implementation of Mitigation Measure AG-1 is expected to consider farmland areas within the Delta counties that are located outside the study area for this project. In addition to implementation of Mitigation Measure AG-1, as described in Common Response 12, DWR is committed to attempt to return any prior farmland that is converted as part of construction activities and no longer needed for long-term operation of the Delta Conveyance Project back to productive agricultural use or habitat/grasslands through land reclamation. Previously cultivated lands that cannot be reclaimed for agricultural purposes following disturbance because of topographic alteration may be reclaimed as grasslands. The land reclamation process will include identifying strategies appropriate for Delta soils that can address soil compaction. Common Response 12 also describes how DWR could fund farm improvements to enhance the productivity of the lower-quality farmland, if there is interest in such a process by Delta agricultural interested parties. As described in Common Response 12, improvements to productivity for an agricultural property not considered to be an Important Farmland type (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance) would be implemented in a manner to improve in part or in whole an agricultural property to Prime Farmland or Farmland of Statewide Importance status as shown on subsequent Farmland Mapping and Monitoring Program Important Farmland Maps following completion of such improvements. DWR would also continue to implement Mitigation Measure AG-1 through a combination of acquisition and dedication of agricultural land, acquisition of development rights or conservation easements to permanently protect agricultural land, or payment of in-lieu fees to fully fund the acquisition and maintenance of such real property interests by a third party. Regarding Impact AG-2 which describes the effects associated with

Letter-Comment Number	Comment	Response
	significant effect described in an EIR. [Footnote 145: 14 Cal. Code Regs., § 15126.4.] The DEIR should apply a more rigorous mitigation measure to impacts that are more severe, and should require, at a minimum, a 2:1 agricultural easement on land with the same or better designation within the same county. The County of Yolo, for example, generally requires mitigation easements at a 3:1 ratio for the conversion of prime farmland and 2:1 for non-prime farmland. The DEIR does not consider whether such an increased mitigation ratio is feasible, Yolo County noted in their comments on the DEIR, because additional mitigation would "not avoid a net loss of Important Farmland in the study area." [Footnote 146: DEIR, p. 15-39.] However, "avoiding" an impact is not the only way an impact can be mitigated to "lessen" an environmental impact. [Footnote 147: CEQA Guidelines, § 15126.4(a)(1).] Mitigation also includes minimizing impacts, rectifying the impacts, reducing or eliminating the impact over time, and, significant here, "compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements." [Footnote 148: Yolo County Comments on the DCP DEIR, Dec. 16, 2022, p. 5; CEQA Guidelines, § 15370.] We agree with Yolo County that the EIR should analyze the effectiveness of additional mitigation and explain why or why not it is appropriate here. [Footnote 149: See, e.g., Save the Hill Group v. City of Livermore, 76 Cal.App.5th 1092, 1117 (2002) (holding that mitigating at 2.6:1 ratio was "adequate compensatory mitigation" for permanent loss of habitat); see also Masonite Corp. v. County of Mendocino, 218 Cal.App.4th	conversion of land subject to Williamson Act contract or under contract in a Farmland Security Zone, as described in Chapter 15, DWR would comply with all applicable provisions of California Government Code Sections 51290-51295 as they pertain to acquisition of lands under Williamson Act contract. Since the project constitutes an infrastructure improvement to State Water Facilities, acquisition of agricultural land within an agricultural preserve is exempt from requirements to avoid placement of proposed public improvements within agricultural preserve based primarily on consideration of the lower cost of acquiring land. Nonetheless, as required by California Government Code Section 51293, DWR will notify the California Department of Conservation within 10 working days following transfer of any title for property necessary to complete the Delta Conveyance Project that is within an agricultural preserve. Furthermore, if any land under Williamson Act contract is acquired for the project, but the land is ultimately not used for construction or operation of the project, those lands would be re-enrolled under a Williamson Act contract. As described in Appendix 15B, Agricultural and Land Stewardship Considerations, the conversion of Delta agricultural land was minimized to the extent possible through careful project planning. Sizing of individual project infrastructure components generally was developed based on design and engineering constraints. While DWR faced limitations on where facilities could be located due to a broad range of considerations, including avoiding special-status species habitat and areas of known cultural resources, nonetheless the project alternatives were designed to minimize conversion of agricultural resources whenever possible. During the siting process for the project, sites were ranked using a scale for various criterion. Sites that included land under Williamson Act contract or within a Farmland Security Zone were assessed with the lowest possible score for the Farmland Designation criterion. The commenter states that the significance threshold for conversion of farmland in the EIR is inadequately defined. In Chapter 15, the threshold of

Letter-Comment Number	Comment	Response
	230, 241 (2013) ("The economic feasibility of offsite [agricultural mitigation easements] to mitigate the Project's impact on the loss of 45 acres of prime farmland must be explored.").] In addition, the DEIR should take into consideration that the preservation of farmland does not reduce the impacts of lost farmland, because the total acreage of agricultural land is still reduced. Mitigation that converts vacant land to agricultural use, or that enhances the productivity of existing agricultural land might address this impact and should be considered in the DEIR. The DEIR also assessed impacts, in Impact AG-3, to farmland productivity resulting from Project caused effects such as altered groundwater elevations, degradation of irrigation water from increased salinity, or interference with agriculture-supportive infrastructure, including drainage and irrigation facilities. Impacts were considered significant if they were expected to trigger a "substantial conversion" of Important Farmland to non-agricultural uses. [Footnote 150: DEIR, pp. 15-49 to 15-52.] The DEIR does not define "substantial," nor does proposed mitigation include any performance measures by which to gauge when mitigation is effective or when it is failing to reduce impacts. Only impacts to agriculture-supportive infrastructure, such as drainage and irrigation facilities, were found to be potentially significant due to possible interference with such facilities by Project construction activities. [Footnote 152: DEIR, p. 15-52, lines 15-29.] In the case that such disruptions cannot be avoided, the DEIR proposes implementation of Mitigation Measure AG-3: Replacement or Relocation of Affected Infrastructure Supporting Agricultural Properties, which would	significance is exceeded if there is a substantial amount of Prime Farmland, Unique Farmland, Farmland of Local Importance, Farmland of Statewide Importance converted to nonagricultural uses, or land subject to a Williamson Act contract or in Farmland Security Zones. Given the geographic scale of the project, the impact analysis considers the effects of farmland conversion as a result of construction and operation of the project alternatives in the context of the entire study area. As stated previously, DWR considers Impact AG-1 and Impact AG-2 as significant and unavoidable even after implementation of proposed mitigation measures since it is acknowledged that there would be substantial conversion of Important Farmland and farmland subject to Williamson Act contract or within a Farmland Security Zone. Impact AG-3 considers the indirect effects to farmland resulting from construction and operation of the project alternatives, including those resulting from changes in salinity concentrations within the Delta from project diversions and from foreseeable disruptions to agricultural infrastructure servicing neighboring agricultural properties. Regarding the effects of changes in salinity on farmland, the scale of potential conversion of farmland to non-agricultural use was not considered substantial because Chapter 9, Water Quality, concluded that while there could be some increases in salinity (based on modeled electrical conductivity) at some Delta locations in some months, it would be in line with water quality standards in place to protect in-Delta agricultural beneficial uses. As such, the potential for conversion of existing farmland to non-agricultural specifically in response to changes in salinity regime from project operations is considered to be minimal and not substantial. With respect to the indirect effects to farmland from disruptions to agricultural infrastructure servicing neighboring agricultural properties considered under Impact AG-3, known infrastructure used to serve agricultural properties were avoided to the greatest extent possible; however, the presence of additional infrastructure (e.g., buried pipelines that are not visible on aerial imagery and not identified in publicly available maps) may be revealed during future site level investigations. Mitigation

Letter-Comment Number	Comment	Response
	provide new water wells until diversion connection is reestablished, or in the alternative, relocate and/or replace wells, pipelines, power lines, drainage systems, and other infrastructure that are needed to support ongoing agricultural uses. [footnote 153: Id., lines 39-41.] Barring these solutions, DWR would compensate owners for production losses attributable to reductions in water supply from diversions, disruptions in drainage facilities, and other infrastructure disruptions. [Footnote 154: DEIR, pp. 15-52, lines 42-43, to 15-53, lines 1-2.] Such impacts, the DEIR asserts, would be less than significant with the implementation of MM AG-3.	Measure AG-3 would reduce the impacts on agricultural land in the study area associated with infrastructure disruption to a less-than-significant level. This mitigation measure first calls for project designs to be modified to the extent feasible to avoid such conflicts with infrastructure servicing agricultural land. If avoidance is not possible through redesign, then DWR would seek to relocate or replace the affected infrastructure. In the event that none of the above options is feasible, would DWR seek a negotiated settlement process. Given the tiered structure of Mitigation Measure AG-3 to first avoid whenever feasible and otherwise mitigate or compensate for effects resulting disruption of infrastructure servicing agricultural properties, Impact AG-3 was concluded to have a less-than-significant effect with mitigation in place because the residual effects of the project alternatives on farmland conversion was considered to be minimal.
523-46	Project operations would result in increases in salinity of Delta surface water, as measured by electrical conductivity. The DEIR asserts that this increase would be modest, and therefore not expected to result in conversion of agricultural land to non-agricultural uses. [Footnote 151: DEIR, p. 15-51, lines 26-28.] However, as discussed in detail in Section VII.c. [comments 35-38] above, the DEIR's application of improper thresholds of significance disguises the project's impacts on water quality, which appear less significant than they are. Any impact determination which relies on these erroneous methodologies, therefore, is unreliable.	Please also refer to responses to comments 523-35 and 523-27 regarding the development and use of thresholds in the EIR and regarding the appropriateness of the thresholds of significance defined in Chapter 9, Water Quality.
523-47	Conspicuously absent from the DEIR's assessment of Project impacts to agricultural infrastructure is any detailed analysis of the extent of such impacts, how exactly agricultural resources could be affected, and any evidence tending to support the effectiveness of proposed mitigation. The duration of disruptions, for example, "may last only for the duration of project construction," which could persist for 7 to 15 years, and "would be permanent if the disruption to the	As described in Chapter 15, Agricultural Resources, known infrastructure used to serve agricultural properties were avoided to the greatest extent possible; however, the presence of additional infrastructure (e.g., buried pipelines that are not visible on aerial imagery and not identified in publicly available maps) may be revealed during future site level investigations. Mitigation Measure AG-3 would reduce the impacts on agricultural land in the study area associated with infrastructure disruption to a less-than-significant level. This mitigation measure first calls for project designs to be

Letter-Comment Number	Comment	Response
	infrastructure remains after construction is complete." [Footnote 155: DEIR, p. 15-52, lines 21-24.] These vague and undefined terms leave those who stand to be affected with no way to even anticipate the extent or magnitude of how the Project will upend their lives and livelihoods. Furthermore, interference with infrastructure of any kind that supports agriculture in any way, such as roads, power, or water, has the potential for impacting agricultural production by affecting harvest timing, tractor movement, spraying of pesticides, and more, but the DEIR analyzed only disruptions to specific infrastructure facilities, thereby underreporting the extent of the Project's potential impacts to agriculture and likely underestimating the significance of the impacts it does report. Whether the measures proposed in MM AG-3 would effectively reduce the Project's anticipated impacts, not to mention those that are omitted from the DEIR, is unsupported by any evidence. Conclusory statements, such as the claim that MM AG-3 would reduce impacts to infrastructure to less than significant, without management guidelines or performance standards or legally binding conditions, are insufficient and do not meet the requirements of CEQA.	modified to the extent feasible to avoid such conflicts with infrastructure servicing agricultural land. If avoidance is not possible through redesign, then DWR would seek to relocate or replace the affected infrastructure. In the event that none of the above options is feasible, DWR would seek a negotiated settlement process.
523-48	C. Geology and Seismicity The potential for seismic risks resulting from Project construction and operations is likely to have significant adverse impacts to [Sacramento] County residents, homes, and water supply wells from construction-related vibration and excavation, given the proposed below-ground boring and other construction activities in a highly seismically active region. The DEIR, however, buries analyses of these impacts in engineering project reports and technical memoranda prepared by the Delta Conveyance Design and Construction Authority. Furthermore, though seismic hazards in the Delta are difficult	Chapter 10, Geology and Seismicity, is written at a level of detail appropriate to CEQA and contains the information essential to understanding the seismic-related impacts. For those readers interested in further technical studies, the chapter points the reader to specific locations in the Engineering Project Reports (EPRs) and technical memoranda for more detail. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the length and complexity of the EIR. Chapter 10 provides substantive evidence to support the findings related to geology and seismicity. As noted in the section titled Regional and Local

Letter-Comment Number	Comment	Response
	to predict due to the difficulty in characterizing the activity of fault lines in the region, the DEIR concludes, without substantiating evidence, that Project construction and operations would not have a significant effect on geology and seismicity -- in contrast to the numerous definitive conclusions, peppered throughout the DEIR, that "risk of seismic activity and levee failures within the Delta" makes the Project necessary. [Footnote 156: See, e.g., DEIR, Ch. 2, p. 2-1, lines 32-33.] Studies intended to improve understanding of seismic risks, such as an investigation of the West Tracy Fault, a major potentially active fault, are deferred until late in the preconstruction period, which is particularly concerning, as noted by the DISB [Delta Independent Science Board], because of the potential for the fault to expose the Project and the region's communities to substantial seismic risk. [Footnote 157: DEIR, Ch. 10, p. 10-46, lines 30-34.]	Seismicity, the Delta is in one of the most seismically active areas in the United States. The chapter therefore provides a robust description of the geologic and seismic hazards in the study area. The impact analyses are presented in Impacts GEO-1 through GEO-6. These analyses were based on critical review and use of the EPRs narrative reports, associated technical memoranda, and information published by various regulatory agencies, researchers, and consultants, including the California Geological Survey, the U.S. Geological Survey, and the Working Group on Northern California Earthquake Potential 2012. The vulnerability of existing levees to seismic hazards is described in Chapter 10 and the Levee Vulnerability Assessment technical memorandum (Delta Conveyance Design and Construction Authority 2022d). The Conceptual Tunnel Lining Evaluation and Liquefaction and Ground Improvement Analysis technical memoranda also addressed design criteria related to seismic risks (Delta Conveyance Design and Construction Authority 2022a, 2022e, 2022f). The impacts associated with surface fault rupture of the West Tracy Fault are presented in Impact GEO-1. Further detail is provided in the West Tracy Fault Preliminary Displacement Hazard Analysis technical memorandum (Delta Conveyance Design and Construction Authority 2022k). Little is known about the fault; however, if required, numerous proven designs and construction means and methods to safely build a tunnel through fault zones are available. Possible designs and construction means to accommodate displacement on the fault and withstand the change in pressure are described in the Conceptual Tunnel Lining Evaluation technical memorandum (Delta Conveyance Design and Construction Authority 2022a:5). These could include over-excavating the tunnel and backfilling with compressible/collapsible material, using steel segmental lining, and using doweled or bolted joint connections. The design will be refined as data from additional investigations are received. Please also see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for a discussion of why it is appropriate to

Letter-Comment Number	Comment	Response
		evaluate impacts at a conceptual design level.
523-49	The DEIR evaluates the Project's potential impacts to geology and seismicity based on whether it would result in an increase in the risk of loss, injury, or death from: -Structural failure resulting from rupture of a known earthquake fault; -Strong earthquake-induced ground shaking; -Earthquake-induced ground failure, including liquefaction and related ground effects; -Ground settlement, slope instability, or other ground failure; -Structural failure resulting from Project-related ground motions; and -Seiche or tsunami. [Footnote 158: See DEIR, p. 10-2, Table 10-0.] The DEIR acknowledges that tunnel construction would cross under levees, railroads, highways, and aqueducts, and involve vibration-causing tunnel boring and excavation, pile driving, and use of heavy construction equipment. [Footnote 159: See DEIR, p. 10-55.] Some of these activities would have the potential to cause adverse effects such as liquefaction and ground settlement, lateral spreading, and damage to structures and levees, possibly resulting in personal injury or death. [Footnote 160: DEIR, Ch. 10, p. 10-62, lines 5-25.] The DEIR concludes, in each assessment of seismic impacts, that any impacts would be less than significant. [Footnote 161: DEIR, p. 10-2, Table 10-0.] No substantial evidence, nor the locations of analyses on which conclusions were based, is provided. The DEIR provides as support only vague assurances, such as promises (without legally binding agreements) that further studies will be done to assess the potential for increased hazards at construction sites, or statements that compliance	Please see response to comment 523-48 regarding the impacts related to geology and seismicity and the substantive analyses provided in Chapter 10, Geology and Seismicity. Impact GEO-5 describes the potential impacts of project-related ground motion, analyzes the impact for each type of construction activity (e.g., pile driving, use of heavy equipment), and explains how the impact would be less than significant. For example, for pile driving, the impact would be less than significant because liquefaction caused by impact pile driving is rare and very localized, most of the piles would be installed using non-impact driving techniques, and pile-driving-induced liquefaction would be evaluated and rechecked prior to construction at sites where seismic liquefaction potential was identified. Please also see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for a discussion of why it is appropriate to evaluate impacts at a conceptual design level.

Letter-Comment Number	Comment	Response
	with applicable safety standards and regulations will avert risks, or that because effects resulting from ground-moving activities such as liquefaction "is rare," "it is unlikely" that impacts from such activities would occur. [Footnote 162: See, e.g., DEIR, Ch. 10, p. 10-62, lines 22-25.] None of these conclusory statements offer any way for the public or decision makers to independently evaluate the adequacy of these analyses.	
523-50	D. The DEIR Fails to Fully Analyze or Mitigate Impacts to Traffic and Transportation The Sacramento County Department of Transportation (DOT) anticipates that the Project will have significant adverse impacts on the nature of travel in the Delta. Heavy construction traffic will be introduced for many years into a rural setting. Not only will communities feel the effects of substantial increases in construction traffic, but pavement conditions in the Delta will deteriorate to a point of disrepair. Much of the Delta's early roadway network was built over old trails that ran along the tops of levees. Construction impacts to roadways will be significant, and roadways may need to be reconstructed to current structural standards. Close coordination with Sacramento County on the nature and extent of mitigation will be required. Though the DEIR's evaluation of Project impacts to traffic and transportation in the Delta acknowledges that impacts from increased average vehicle miles traveled (VMT) in the Delta during construction would be significant and unavoidable even after mitigation, substantial gaps in its analysis raise serious questions about the veracity of its conclusions and whether the significance of impacts was in fact masked by faulty methods of	The comment's claim that the Draft EIR fails to fully analyze or mitigate impacts on traffic is not supported by the analysis in the EIR. The VMT analysis in the EIR is consistent with Senate Bill (SB) 743 and followed best practices and guidance provided by OPR in its Technical Advisory on Evaluating Transportation Impacts in CEQA (California Governor's Office of Planning and Research 2018). Please refer to Common Response 14, Transportation, for additional information on the methodology and approach to impact analysis conducted for the EIR. Even though Level of Service (LOS) is no longer the primary analysis criteria for the CEQA document, Appendix 20A, Delta Conveyance 2020 Traffic Analysis, and Appendix 20B, Fall 2020 Traffic Counts Analysis, were completed to aid in the understanding of potential major increases to traffic volumes on roadways and vehicle delay at intersections that may be caused with the addition of project-generated construction traffic. This LOS analysis included both passenger vehicles and construction trucks for the U.S. Army Corps of Engineers' (USACE) use in coordination with local agencies to determine improvements during the construction phase of the project. Please refer to Common Response 14 for additional discussion on the roadway segment and intersection level of service analysis used in the EIR.

Letter-Comment Number	Comment	Response
	analysis. For example, the DEIR applies what appears to be an arbitrary threshold for inclusion in its analysis - only roadways anticipated to have 50 or more vehicles on them during peak hours. [Footnote 163: DEIR, Ch. 20, p. 20-6, lines 11-14.] This results in the omission of several area roads from evaluation of impacts that are likely to be significant. In general, the DEIR fails to identify significant Project-related trucking impacts for the entire Project area, and fails entirely to assess or mitigate the degradation of roadways in the Delta resulting from the increase in heavy truck traffic in a rural location that rarely sees traffic of this magnitude. Site-specific trucking impact studies should be done for each project impact area and should contain detailed truck traffic information, including haul routes, haul volumes per truck, haul truck types, number and frequency of trucks, proposed hauling hours and affected roadway traffic volumes. Based on the results of the studies, a summary of the roadway impacts and proposed remediation efforts that will be undertaken to account for the roadway degradation and damage must be included.	In terms of site-specific, truck-related impacts, DWR will conduct pre-construction pavement analysis of access roadway segments (including the Delta areas of Sacramento County) and determine the need to improve these access roads. Improvements may include pavement remediation (e.g., fill potholes, asphalt cracking and slurry seals), road widening (minimum of 12 feet), and other roadway design options to serve construction traffic. After completion of a project site construction, the condition of the access roads for each construction site will be analyzed and remediation of roadways will be completed as needed to return the facility to the improved conditions that were constructed by DWR. In addition, the EIR anticipated repaving of some roads during construction due to the heavy projected truck traffic. See Chapter 3, Description of the Proposed Project and Alternatives, section titled Access Roads, for additional discussion on road and pavement improvement activities. A combination of transportation management plans (described in Mitigation Measure TRANS-1) and improvements to the transportation system would be developed in coordination with the County's Department of Transportation (DOT) to reduce potential traffic safety hazards at key intersections and emergency access to delta communities within Sacramento County.
523-51	The DEIR's stated thresholds of significance reject the State's own published CEQA guidance and do not fairly or accurately assess the significance of adding trips to the rural Delta region. As a threshold for VMT significance, for example, the DEIR analyzes whether Project activities would result in average VMT exceeding the regional employee average home-based work VMT of 22.5 miles per day. [Footnote 164: DEIR, p. 20-25, lines 30-31.] The Office of Planning and Research, however, in an effort to meet long-term state climate goals through VMT reduction, recommends use of an impact threshold for which	The comment assertion that the Draft EIR does not justify the project VMT threshold is not supported by the information presented in Chapter 20, Transportation, in the section titled Thresholds of Significance. The analysis threshold was developed based on guidance provided by OPR and is consistent with CEQA Guidelines 15064.3(a). Please refer to Common Response 14, Transportation, for additional information on the VMT analysis and thresholds used in the EIR.

Letter-Comment Number	Comment	Response
	per capita VMT that exceeds 15 percent below existing conditions is deemed significant. [Footnote 165: OPR Technical Advisory on Evaluating Transportation Impacts in CEQA, pp. 10-11.] DWR rejects this threshold, insisting that this method of measuring impact analysis should not apply to the Project because it "varies from the standard CEQA approach of defining existing conditions as the baseline for analysis and is not directly applicable to construction of water supply infrastructure facilities." [Footnote 166: DEIR, p. 20-26, lines 7-19.] The DEIR provides no rationale for the absurd assertion that water supply infrastructure facilities merit the use of unique thresholds for evaluating significance of construction traffic impacts. As a result, the DEIR uses the 22.5 mpd per regional employee average as both a baseline and a significance threshold. Consequently, the DEIR improperly presumes that any VMT average less than 22.5 mpd (per employee) would not be significant. This is particularly problematic in light of the sheer volume of additional trips that Project construction and operation would add to the region, even if they individually average less than 22.5 miles per day.	
523-52	E. The DEIR Vastly Underestimates Project Impacts on Energy Use The DEIR indicates that the Project will increase energy consumption compared to existing conditions-shown as annual average long-term operational SWP energy generation, energy use, and net energy consumption-by 35 percent. [Footnote 167: DEIR, Ch. 22, p. 22-23, Table 22-12.] As the largest single consumer of electricity in California, any increase in energy use by the SWP is a significant increase in the state. [Footnote 168:	The assertion that implementation of the project would result in significant impacts on the environment is not supported by analysis presented in the Draft EIR. While the Delta Conveyance Project would result in an increase in energy consumption during both construction and operations, DWR has included construction and operational efficiencies to avoid and reduce the potential of unnecessary or wasteful energy usage, as indicated in the discussion of Impact ENG-1 in Chapter 22, Energy. Chapter 21, Public Services and Utilities, provides an assessment of utility services needs for power for construction of the intakes and tunnel shafts, and for the Southern Complex or Bethany Complex. Power for construction would use

Letter-Comment Number	Comment	Response
	Department of Water Resources, https://water.ca.gov/What-We-Do/Power.] California relies on an energy mix of roughly 67 percent non-renewable resources according to the DEIR. [Footnote 169: DEIR, p. 22-4, Table 22-1.] The impact of adding to the state's overall energy use a 35 percent increase in SWP uses is inadequately analyzed in the DEIR, and stands to have a significant impact on the environment, including from the additional greenhouse gas emissions generated by this increase. An EIR should consider potentially significant impacts of a project caused by wasteful, inefficient, or unnecessary consumption of energy, and must include mitigation measures to reduce these impacts.[Footnote 170: Pub. Resources Code, § 21100, subd. (b)(3).] Project impacts to energy use according to this standard are evaluated under Impact ENG-1, but the DEIR fails to adequately represent these impacts resulting from its proposal to replace a system of conveyance which requires no outside energy input with one that would require massive amounts of electricity (as exhibited by the Project's need for high-voltage power lines and energy infrastructure) to operate. Currently, water flows through the Delta to existing SWP conveyance facilities, where significant energy consumption is already required to export water from the Delta. The proposed Project, with the conveyance system's two new pumping plants that require significant additional energy to operate, will result in wasteful, inefficient and unnecessary power consumption compared to the existing condition, as such massive additional power consumption is not needed or consumed today, despite the DEIR's dubious conclusion that impacts associated with	existing power lines to the extent feasible, but some facilities would require the relocation or expansion of existing utilities (e.g., new aboveground power poles or installation of on-site electrical facilities). Please see the discussion of Impact UT-2 in Chapter 21.) Chapter 23, Air Quality and Greenhouse Gases, in the table titled Changes in Expected Renewable Energy Purchases 2011-2045 (Alternative 5), shows how the Renewable Energy Procurement Plan (REPP) (listed as OP-3 in the California Department of Water Resources Climate Action Plan Phase 1: Greenhouse Gas Emissions Reduction Plan, Update 2020) could be modified to accommodate all project alternatives. Impact AQ-9 in Chapter 23 demonstrates that the project is consistent with Update 2020 and that additional SWP pumping would not result in a significant GHG impact. Importantly, pursuant to SB 1020, DWR is required to use 100% renewable or zero-carbon resources for their facilities by 2035, meaning any additional energy use by the SWP would be from renewable/zero carbon resources. While construction and operation of the Delta Conveyance Project will result in an increase in energy consumption, as explained in Chapter 22, Energy, in the section titled Potential for New Energy Resources, the maximum expected annual electrical consumption for construction combined with the maximum annual net electrical use during operations would represent less than 1% of the state's annual electricity load, based on a daily load of about 35,000 megawatts. Any additional power needs will be addressed through SWP purchase programs already in place and will not require new or expanded electrical power generation facilities. Additionally, as described in Chapter 2, Purpose and Project Objectives, the basic objective of the Delta Conveyance Project is to restore and protect the reliability of SWP water deliveries. The Delta Conveyance Project will only be operated when there are excess flows to capture, which will likely occur in years that are wetter, resulting in increased hydrogeneration for the spring and summer, thus displacing natural gas. This type of reliable

Letter-Comment Number	Comment	Response
	energy consumption will be less than significant. This significant impact begs consideration in the DEIR of a through-Delta conveyance alternative, which would avoid this significant impact along with many others.	and sustainable management of water resources in California is not considered a wasteful, inefficient, or unnecessary use of power. Please also see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues for additional discussion on the project objectives. Please see response to comment 523-4 regarding the adequacy of the range of alternatives.
523-53	Impact ENG-2 states that the Project would result in significant impacts if it would conflict with or obstruct any state or local plan, goal, objective, or policy for renewable energy or energy efficiency. [Footnote 171: See DEIR, p. 22-2, Table 22-0.] DWR asserts on its website that "Fifty percent of the SWP's power is provided by its own emission-free hydroelectric generation. The SWP, which is committed to reducing its carbon footprint, has a power portfolio consisting of 65 percent carbon-free resources, increasing to 75 percent by 2030 and 100 percent by 2045. DWR is finding innovative ways, such as adding solar to the system, to make this happen." [Footnote 172: https://water.ca.gov/What-We-Do/Power#:~:text=The%20State%20Water%20Project%20%28SWP%29%2C%20operated%20by%20DWR%2C,the%20type%20of%20water%20year%20%28dry%2C%20average%2C%20wet%29.] This set of goals is referenced in the DEIR, [Footnote 173: DEIR, p. 22-12, lines 25-27.] but omitted from the discussion is how the increase in energy demand associated with the Project will affect these goals by making them more difficult to achieve. Furthermore, these goals are just that-goals, and not binding commitments that can be relied upon to regulate power consumption and type. It can be presumed that by increasing SWP energy demands by 35 percent, meeting these goals becomes more difficult and costly, and the lack of legal obligation makes it even more likely they will be disregarded.	Chapter 23, Air Quality and Greenhouse Gases, in the table titled Changes in Expected Renewable Energy Purchases 2011-2045 (Alternative 5), shows how the Renewable Energy Procurement Plan (REPP) (listed as OP-3 in the California Department of Water Resources Climate Action Plan Phase 1: Greenhouse Gas Emissions Reduction Plan, Update 2020) could be modified to accommodate all project alternatives and shows how additional renewable energy resources over what was programmed in the original REPP could be purchased between 2035 and 2045. The REPP is DWR's plan for incrementally reducing SWP greenhouse gas emissions by increasing the use of renewable energy (see Table 6, DWR Renewable Energy Procurement Plan, in Update 2020). Since implementation of its REPP, DWR has executed contracts to procure renewable energy from sources including solar, hydroelectric, geothermal, and landfill gas, and expects to execute future contracts to increase its renewable portfolio. DWR expects that by 2045, the energy portfolio would contain nearly 800 GWh of additional renewable energy (in addition to hydropower generated at SWP facilities). Operations and maintenance and SWP pumping activities are therefore considered consistent with Update 2020, specifically regarding DWR's implementation of OP-3, and the Delta Conveyance Project would not negatively affect achievement of these goals. Refer to Chapter 23, Impact AQ-9, for additional discussion. Also, by 2045 the CAISO market will be supplied with 100% renewable or zero-carbon resources, meaning any additional purchases by the SWP on the open market would be from renewable/zero carbon resources.

Letter-Comment Number	Comment	Response
	The increased time or energy required, as well as the additional costs that are directly attributed to the Project, needs to be quantified. Any increase in power consumption by the SWP will strain the system further. The State of California has instituted a multitude of energy-decreasing goals, including phasing out gas-powered vehicles as stated in Executive Order N-79-20. The Project's anticipated 35 percent increase in energy consumption will negatively impact the achievement of these energy-conservation objectives. The DEIR fails to adequately analyze how the Project will affect these goals, and should be revised to include itemized analysis of the state's enumerated goals and the Project's impacts on their achievement.	
523-54	F. The DEIR Fails to Properly Analyze and Mitigate Project Impacts on Noise Levels: In determining whether a project's noise impacts will be significant, CEQA guides agencies to consider whether the project will generate temporary or permanent increases in ambient noise levels in the project's vicinity that would exceed set standards, and to combine a qualitative analysis of impacts as they relate to existing conditions along with a quantitative analysis of maximum allowed noise levels and project-related increases in noise. [Footnote 174: King & Gardiner Farms, LLC v. County of Kern (2020) 45 Cal.App.5th 814, 883.] While agencies are free to choose which significance threshold to apply, they do not have discretion to consider only maximum noise levels and ignore increases in noise relative to existing conditions, and must consider both the "absolute noise level" associated with a project as well as the increase in the level of noise that will result. [Footnote 175: Id., pp. 887 and 893.] In	As noted by the commenter, the analysis in Chapter 24, Noise and Vibration, evaluates project noise in terms of absolute noise level as well as the resulting increase in noise level for both daytime and nighttime periods. The analysis evaluates construction equipment sound levels primarily on an hourly equivalent basis, rather than maximum level. The commenter indicates that the scope of a noise analysis may not be confined to an "arbitrary distance" from noise-causing activity. Accounting for the loudest types of equipment, a 2-mile radial distance from project-related noise sources was used to define a maximum distance where project related noise would attenuate to existing ambient levels. The EIR also provides counts of all affected receptors exceeding noise thresholds in Chapter 24 and Appendix 24A, Sound Level Contours. Considering the study area size includes all areas that may be influenced by project related noise, the noise analysis is not arbitrarily confined. DWR, as the lead agency, has the discretion to formulate significance thresholds (CEQA Guidelines § 15064.7(b)). In regard to use of the noise

Letter-Comment Number	Comment	Response
	addition, an EIR may not confine the scope of its analysis of noise impacts to an arbitrary distance from the project's noise-causing activity. [Footnote 176: Sierra Watch v. County of Placer (2021) 69 Cal.App.5th 86, 106.] A project's setting may be a key factor in determining whether a project's noise impacts are significant. [Footnote 177: National Parks & Conserv. Ass'n v. County of Riverside (1999) 71 Cal.App.4th 1341, 1358.] The DEIR considered in its analysis of Project noise impacts "all land within a 2-mile radius of aboveground construction sites and locations of new project-related infrastructure. This 2-mile buffer is used to describe the distance that potential levels of noise from project construction areas would attenuate below existing ambient levels." [Footnote 178: DEIR, Ch. 24, p. 24-3, lines 4-7.] Impacts from vibration from Project construction and operation of the project "would be localized within a smaller buffer (less than 1/10 mile) inside the study area and would not be discernible outside the study area." [Footnote 179: Id., lines 9-11.] To establish existing ambient sound levels in Sacramento County, sound-level monitoring, during which sound data was collected continuously over a period of at least 24 hours, was conducted at two locations in the town of Hood, one about 200 feet from State Route 160/River Road, and the other about 200 feet from Hood-Franklin Road. [Footnote 180: DEIR, Ch. 24, p. 24-10, lines 2-9.] In determining whether the Project would result in "substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies," the DEIR used criteria based on	impact thresholds in the Draft EIR, please see the response to comment 523-36. The Noise Element of the Sacramento County General Plan includes sound level criteria for specific activities and modes of transportation. In regard to construction, the general plan cites Section 6.68.090(e) of the County Code, which exempts construction from County provisions and specifies permitted hours for construction but does not set noise level limits for equipment. In consideration of the construction duration of 12 to 14 years, noise level limits were applied in the Draft EIR to address the rural character of the area and the duration of construction. The commenter's statement that the Draft EIR fails to support the use of a 5 dB increase criterion with substantial evidence is not supported by the analysis in the EIR. The increase in sound level is considered based on human perception of sound level changes. This is described in Chapter 24, in the section titled Noise: "In general, human sound perception is such that a change in sound level of 3 dB is just noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving sound level." The 5 dB increase criterion is based on how a healthy human ear would perceive a clearly noticeable change in levels (Federal Highway Administration 2011). This is a reasonable criterion for consideration of project-related noise increases, and as the commenter notes, this criterion is frequently applied in a general planning context.

Letter-Comment Number	Comment	Response
	DWR's Standard Specification 05-16. [Footnote 181: DEIR, Ch. 24, p. 24-26, lines 9-25.] Noise levels during Project construction would be considered to exceed daytime noise criteria where "overall equipment noise levels are predicted to exceed 60 dBA on an hourly Leq basis, AND overall equipment noise levels are predicted to increase by 5 dB or more relative to existing daytime ambient noise levels at sensitive receptor locations." [Footnote 182: Id., lines 13-16.] Nighttime noise criteria were exceeded where overall equipment noise levels are "predicted to exceed 50 dBA on an hourly Leq basis, AND overall equipment noise levels are predicted to increase by 5 dB or more relative to existing nighttime ambient noise levels at sensitive receptor locations." [Footnote 183: Id., lines 19-21.] The DEIR does not explain the use of this threshold of significance, and fails to support the use of DWR criteria over other noise standards, such as those set by Sacramento County in its General Plan, with substantial evidence. The DEIR fails to support with substantial evidence its use of a 5 dB increase relative to existing ambient noise levels. Courts have held that the setting of a project may play a role in determining whether a project's impacts are significant. [Footnote 187: National Parks & Consev. Ass'n v. County of Riverside (19999) 71 Cal.App.4th 1341, 1358.] It is hard to imagine a project to which this rule is more applicable: the setting of the DCP - the Delta's unique and rural character is so significant that it has been given special status as a Natural Heritage Area by the U.S. Congress - should factor into any decision regarding thresholds of significance, and especially for noise. It is unclear - because the DEIR does not provide any evidence - whether a 5 dB increase threshold was chosen because numerous agencies have chosen that same threshold	

Letter-Comment Number	Comment	Response
	when analyzing noise increases, but conformity with the custom of other agencies does not relieve DWR of the duty to support its decisions with substantial evidence.	
523-55	Courts have held that compliance with regulations, including noise ordinances, is not an adequate significance threshold because it does not foreclose the possibility of significant impacts. [Footnote 184: Keep our Mountains Quiet v. Santa Clara (2015) 236 Cal.App.4th 714, 733; CBE v. CRA (2002) 103 Cal.App.4th 98, 115-16; King & Gardiner Farms, LLC v. County of Kern (2020) 45 Cal.App.5th 814, 893.] Reliance on a maximum noise level as the sole threshold of significance for noise impacts fails to consider whether the magnitude of changes in noise levels is significant. [Footnote 185: King & Gardiner Farms, LLC v. County of Kern (2020) 45 Cal.App.5th 814, 865.] Evidence submitted by local residents and experts attesting to potentially significant noise impacts is sufficient to support a fair argument that noise impacts are potentially significant notwithstanding project compliance with existing noise regulations. An agency's reliance on the project's compliance with noise regulations did not constitute substantial evidence supporting a finding of no significant impacts. [Footnote 186: Keep our Mountains Quiet v. County of Santa Clara (2015) 236 Cal.App.4th 714, 732-734.]	This comment cites case law as basis for arguments in previous comments. In regard to the adequacy of the significance thresholds and use of maximum level thresholds, see the responses to comments 523-36 and 523-54. As discussed in those responses, the EIR does not rely on noise regulations or a maximum noise level as the sole threshold of significance for noise impacts.
523-56	Furthermore, most of the actions designed to reduce noise impacts to sensitive receptors included in Mitigation Measure NOI-1: Develop and Implement a Noise Control Plan, require voluntary participation by residents and property owners and are therefore unenforceable and their effectiveness unable to be measured. Mitigation measures must be enforceable through conditions of approval, contracts or other means that are legally binding. [Footnote 188: PRC § 21081.6(b); 14 CCR § 15126.4(a)(2); Lotus v. Dep't of Transp. (2014) 223 Cal. App.	Chapter 24, Noise and Vibration, acknowledges that Mitigation Measure NOI-1 would reduce the severity of the impact to a less-than-significant level if all affected residents approved one of the management actions described below. However, because these management actions require voluntary participation, the analysis concludes that impacts due to construction noise would be significant and unavoidable after mitigation. Mitigation Measure NOI-1 contains two management actions where voluntary participation is required to reduce the level of impact. The first

Letter-Comment Number	Comment	Response
	4th 645, 651-52.] Mitigation measures that require development of a mitigation plan based on future studies are legally inadequate if they do not describe the anticipated management actions and do not include management guidelines or performance standards which describe levels of reduction in impact significance that must be achieved in order for impacts to be fully and effectively mitigated. [Footnote 189: Preserve Wild Santee v. City of Santee (2012) 210 Cal.App.4th 260 (plan for active habitat management failed to describe anticipated management actions or include standards or guidelines for actions that might be taken).] It is particularly outrageous and objectionable to the County [County of Sacramento] that Delta residents would be subjected to significant noise impacts from a project designed only to benefit water users hundreds of miles away, and that these communities would learn in the DEIR that their State government has determined the only means of mitigating these impacts is for the impacted citizens to endure the additional burden of physical modifications to their homes and businesses. Moreover, the DEIR's improper framing of MM NOI-1 as a mitigation measure that would adequately reduce impacts if implemented to its full extent is unsupported by any evidence that MM NOI-1 would be effective, even if implemented as suggested. This gives the DEIR the appearance of having proposed adequate mitigation, when in fact no mitigation for Project noise impacts has been identified.	action is a sound insulation program, which would provide building acoustical treatments and/or new HVAC systems for greater performance of exterior-to-interior building noise reduction. As the commenter writes, a resident opting into the program would approve physical modification of their home to install these types of improvements. The noise reduction level of 5 dB cited in the measure is associated with a clear change in sound level and would be considered a minimum standard for acoustical treatments. This is consistent with guidance from the Federal Aviation Administration on sound insulation performance (Federal Aviation Administration 2022). The performance of potential acoustical treatments to buildings would vary, depending on factors relating to construction of the building and specifying insulating products that could be installed in window and door locations. This would be evaluated on a case-by-case basis during building sound insulation evaluation and testing. In some cases, new HVAC systems only or new sound insulation only may be appropriate. Installation of a new HVAC system with or without acoustical treatments would allow residents to close their windows. This would result in an interior noise reduction of 10 to 15 dB compared to a windows-open condition (Federal Highway Administration 2011). The second action where voluntary participation is required to reduce the level of impact is short-term relocation assistance for residents where sound level exceedance is measured using on-site monitors. Residents may voluntarily have a monitor installed on their property or may voluntarily accept short-term relocation assistance under the criteria in Mitigation Measure NOI-1.
523-57	CEQA requires an agency to conclude that an impact is less than significant only after it produces rigorous analysis and concrete substantial evidence justifying the finding. The DEIR concludes that even though MM NOI-1 would reduce the severity of impacts to less than significant, the lack of	Mitigation Measure NOI-1 consists of five categories of items designed to minimize or avoid increases to ambient noise during construction: 1) pre-construction actions, 2) sound insulation, 3) sound-level monitoring, 4) best noise control practices, and 5) installation of temporary noise barriers. Among these five items, only sound insulation and sound-level monitoring

Letter-Comment Number	Comment	Response
	enforceability requires a determination that impacts would remain significant and unavoidable. [Footnote 190: DEIR, Ch. 24, p. 24-64, lines 11-14.] This mischaracterizes the nature of MM NOI-1, which should not be considered mitigation at all, due to its voluntary participation and lack of enforceability.	require voluntary participation from affected residents. As such, the commenter's assertion regarding Mitigation Measure NOI-1 is not supported by the analysis in Chapter 24, Noise and Vibration. The analysis in Chapter 24 consists of a rigorous analysis of sound levels from construction and potential impacts on sensitive receptors, quantified wherever possible in the main chapter and appendices. Mitigation Measure NOI-1 includes numerical standards for the proposed sound insulation program and sound level monitoring, as well as a range of noise reduction values for different measures (e.g., noise shrouds for pile drivers have been shown to reduce pile noise by 8 to 23 dBA). The inclusion of a voluntary component to a mitigation item is entirely reasonable and excluding such an item because of the element of voluntary participation would be a disservice to mitigation analysis in the EIR. The commenter's word choice of the term "enforceability" seems to be conflated with voluntary participation, thus mischaracterizing the sound insulation program item in Mitigation Measure NOI-1. The implementation of the program is enforceable, while the voluntary participation of all affected cannot be guaranteed.
523-58	G. The DEIR Fails to Identify and Mitigate Impacts to Cultural Resources	The Delta Conveyance Project EIR has been prepared in compliance with CEQA and evaluates the full range of potential impacts that may result from construction and operation of the proposed project and its alternatives. Chapter 19, Cultural Resources, of the EIR identifies impacts on cultural resources and associated mitigation measures in the section titled Impacts and Mitigation Approaches. Although the analysis concludes that impacts would be significant and unavoidable, mitigation measures have been identified to avoid and reduce effects where feasible.
523-59	Under CEQA, objects of historic significance fall within the definition of environment that can be affected by a proposed project, and significant adverse impacts to historic resources are classified as significant environmental impacts. [Footnote	The comment summarizes the requirements related to determining historic significance and evaluating cultural resources and does not raise a significant environmental issue relating to the proposed project or address the adequacy, accuracy, or completeness of the Draft EIR. Chapter 19,

Letter-Comment Number	Comment	Response
	191: Pub. Resources Code, § 21084.1; 14 Cal. Code Regs., § 15064.5.] A resource listed or eligible for listing on the California Register of Historic Resources or the National Register of Historic Places must be treated as a historic resource for the purposes of CEQA. [Footnote 192: Pub. Resources Code, § 21084.1; 14 Cal. Code Regs., § 15064.5, subd. (a)(1).] Resources designated as historically significant in a local register of historic resources or identified as significant in an approved historical resources survey are presumed to be significant. [Footnote 193: 14 Cal. Code Regs., § 15064.5, subd. (a)(2).]	Cultural Resources, section titled Environmental Setting, includes the methods for resource identification and used the regulations cited in the comment to do so.
523-60	Every Project alternative proposed in the DEIR features facilities and construction activities that would occur in the vicinity of the Delta's unique cultural resources, including built-environment historical resources and archeological resources. According to the DEIR, the Project would result in significant impacts to these resources if it would result in material impairment of the qualities that qualify a resource as historical, such as demolition or alteration to the resource or its immediate surroundings, including introduction of incompatible features to the setting. [Footnote 194: DEIR, Ch. 19, p. 19-33, lines 12-21.] The DEIR identified 7 historic resources located in Sacramento County that are in the path of at least one of the Project's proposed alternatives and may be significantly impacted by Project construction or operation. [Footnote 195: DEIR, Ch. 19, pp. 19-17 - 19-19, Table 19-3.]	Comments regarding the approval of projects with significant and unavoidable impacts are addressed in Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues. In Sacramento County, of the eight identified built-environment resources in the area of impact for built-environment resources (AI-BE), the EIR identified five built-environment historical resources that would have a significant and unavoidable impact caused by at least one of the project alternatives. In Sacramento County, of the five identified archaeological resources in the area of impact for archaeological resources (AI-A), the EIR identified three archaeological resources that would have a significant and unavoidable impact caused by at least one of the project alternatives. See the response to comment 523-62 regarding the EIR's identification of historical resources and consideration of impacts and mitigation.

Letter-Comment Number	Comment	Response
523-61	The DEIR does not discuss or analyze the Project's impacts to cultural and historic resources in the context of the Sacramento-San Joaquin Delta National Heritage Area ("Delta NHA") legislation (2019, S.47). National Heritage Areas (NHAs) are designated by Congress as places where natural, cultural, historic, and recreation resources combine to form a cohesive, nationally important landscape. The DEIR's failure to acknowledge the Delta NHA constitutes a glaring omission in its accounting of the Delta's environmental setting with respect to cultural resources, as well as its section discussing applicable laws, regulations and programs. [Footnote 196: See pp. 19-4 - 19-28.]	National Heritage Areas are not a type of historical resource under CEQA and a National Heritage Area designation does not connote NRHP eligibility. Historic contexts for evaluating resources within the Delta NHA incorporated themes from the Delta NHA, as appropriate. This is described in Appendix 19A, Historical Resources Survey and Evaluation Report, section titled Methods.
523-62	The DEIR identified 31 built-environment historical resources within the Project's area of impact, which is defined, for built-environment cultural resources, as "one parcel out from proposed above-grade water conveyance features," except for those instances where proposed water conveyance features are all planned within a large parcel and all are situated at least 1,000 feet from the next parcel's boundary, in which case no additional parcel is included in the area of impact. [Footnote 197: DEIR, p. 19-5, lines 9-17.] The DEIR acknowledges that "[e]ach of the project activities . . . has the potential to affect built-environment historical resources . . . ." [Footnote 198: DEIR, p. 19-37, lines 30-31.] Chapter 19's impact discussion indicates that these impacts will result from Project construction of new features or alteration of existing features within the setting of historical resources, or the physical alteration of character-defining features within the boundaries of those resources. Details of those impacts and their specific causes, however, is omitted from the impact discussion; readers are directed to Appendix 19C if they want any more granularity beyond this vague description of the effects of	The EIR's Environmental Impacts section clearly identifies the methods for analysis, impact mechanisms, thresholds for significant impacts, and impacts. The discussion under Impact CUL-1 in Chapter 19, Cultural Resources, clearly explains how each project activity would impact historical resources. How each individual historical resource is impacted by the project is identified in Appendix 19C, Impact Analysis of Project Alternatives on Built-Environment Historical Resources. While not necessary to cross-reference the impact discussions with Appendix 19C, this approach was chosen because it allowed for easier comparison between alternatives. Based on the analysis in the EIR, potential damage could occur to historical resources at a maximum of 100 feet from impact pile drivers, at a maximum of 50 feet from vibratory pile drivers, and at a maximum of 25 feet from vibratory rollers. Based on the analysis in the EIR Chapter 7, Flood Protection, the project would not induce levee failure. As explained in the analysis in the EIR, the Locke Historic District (also a

Letter-Comment Number	Comment	Response
	Project construction activity on the community. That appendix, however, offers little more than terse and narrow explanations of impacts listed for each built-environment resource according to alternative alignments (Central, Eastern, Bethany Complex), as well as in the Compensatory Mitigation Areas. The DEIR's discussion of impacts obliges the reader to search through multiple documents to root out the pertinent information, which, it turns out, is uninformative and insufficient for any meaningful independent review. It is unclear what indirect impact construction vibrations may have to the historic built environment, though the document identifies mitigation measures to brace resources that may be indirectly impacted. The DEIR does not specifically identify which resources may be impacted by construction impacts. There are historic districts listed on the National Register of Historic Places that are located less than 2 miles from work sites, including the town of Locke Historic District (also a National Historic Landmark), Walnut Grove Japanese-American Historic District, Walnut Grove Chinese-American Historic District, and Walnut Grove Commercial/Residential Historic District. The potential impacts to these resources need to be addressed, including impacts that could occur if Project-induced levee failure were to result in flooding, which could destroy these resources. While levee failure remains an existing risk in the Delta, the Project construction would exacerbate this risk, increasing the chances that irreplaceable historic and cultural features may be irreparably altered or destroyed. Additionally, if mitigation is needed to brace resources during construction, this bracing may be needed for some time, as construction of the project may take up to 14 years to complete.	National Historic Landmark), Walnut Grove Japanese-American Historic District, Walnut Grove Chinese-American Historic District, and Walnut Grove Commercial/Residential Historic District are outside the AI-BE. Please also see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for a discussion of the study areas evaluated in the EIR. The conditional statement, "if demolition is required" was intended as a general statement and does not imply that there would be demolition from temporary activities. As stated in Chapter 19, "The footprint of temporary above-grade impacts is generally included in the AI-BE, except where the temporary impacts would occur within existing roadways. In these areas, the roadway would be restored to preconstruction conditions. Proposed SCADA and power facilities located below grade within existing roadways are not included in the AI-BE. Similar to temporary impacts within roadways, there would not be a potential to affect these built-environment resources because of their location beneath the roadways." The analysis in Chapter 19 sufficiently evaluates the impacts of temporary activities in the AI-BE.

Letter-Comment Number	Comment	Response
	The DEIR states that ". . . if demolition is required in temporary work areas, the resulting impact would be permanent. Temporary construction activities that include ground disturbance, such as construction of staging areas and temporary on-site access roads and utilities, have the potential to permanently affect archaeological resources and would be better characterized as a permanent impact." [Footnote 199: Ch. 19, p. 19-37, lines 18-21.] The document does not go on to specify what known built-environment resources would be permanently affected by construction of staging areas, access roads and utilities. Therefore, impacts within these areas have not been fully identified. The DEIR is deficient as an informational document for its failure to identify these impacts.	
523-63	Mitigation Measure CUL-1 includes a "Built Environment Treatment Plan," which includes: "viii. Relocation of historic buildings that would otherwise be demolished." [Footnote 200: DEIR, p. 19-47, line 43.] The location of a historical resource is one of seven points of integrity. A resource is considered historical when it has both significance and integrity. A loss of integrity is a loss of a historical resource. Relocation of a historical resource means it is no longer eligible for the California Historical Register or the National Register of Historical Places. The EIR should acknowledge this limitation of the Built Environment Treatment Plan. By failing to acknowledge that relocation of historic buildings would effectively eliminate their integrity, the DEIR fails to adequately disclose the extent of project impacts, notwithstanding its conclusion that impacts would be significant and unavoidable.	Chapter 19, Cultural Resources, section tilted Thresholds of Significance, does not support the assertion that relocation means a historical resource becomes automatically ineligible for the CRHR or the NRHP, or that relocation alone automatically eliminates a resource's integrity. Chapter 19 section titled Impacts and Mitigation Approaches, describes the potential impacts due to project alternatives, the potential limitations of the mitigation measures, and conditions informing how mitigation under Mitigation Measure CUL-1b would be implemented. Please see the section titled Impacts of the Project Alternatives on Cultural Resources, for specific circumstances and conditions under which mitigation would include resource-specific treatments that include, but are not limited to, relocation of historic buildings that would otherwise be demolished.

Letter-Comment Number	Comment	Response
523-64	H. Project Impacts to Recreation are not Analyzed or Mitigated The DEIR evaluates potential impacts to recreation in the Delta in terms of whether Project construction or operations will have an effect on parks or recreational facilities such that construction or expansion of existing or planned facilities would have an adverse physical effect on the environment. [Footnote 201: DEIR, Ch. 16, p. 16-19, lines 13-18.] The DEIR fails to evaluate, however, the impacts to Delta recreation that may result from other physical effects the Project will have on the environment. The thresholds used to determine impact significance were based on CEQA's Appendix G, [footnote 202: Id. At lines 6-8.] which seem designed to evaluate impacts on recreation in the context of a residential development, not a large-scale water supply infrastructure project that will affect the extensive recreational facilities in its path for years, if not permanently. These thresholds, furthermore, are clearly not designed to take into account a community highly dependent on a long-established and robust recreation economy, the protection and enhancement of which is an essential responsibility of several state agencies, including the Delta Protection Commission's mandate to "enhance the unique cultural, recreational, and agricultural resources of the Delta." [Footnote 203: See Delta Plan, Ch. 5, Table 5-3, pp. 190-191; Pub. Resources Code, § 29703.5.] Recreation in the Delta, whether nature-based, cultural, or enjoyed through boating, hiking, fishing, or scenic drives, is one of the region's most important land uses, as reflected by its popularity and the number of visitors it brings to the region every year. The DEIR fails to accurately or honestly disclose the full extent of Project impacts to recreation in the Delta.	The EIR has been developed to be compliant with CEQA to provide a good-faith disclosure of the potential impacts associated with the proposed project and its alternatives. Please refer to Chapter 16, Recreation, the section titled Impacts and Mitigation Approaches, for analysis of the various impact pathways including those of other environmental resources. Chapter 16, Impact REC-1, analyzes disruption to recreation as a result of project construction, maintenance and operation. Use of CEQA Guidelines Appendix G (Environmental Checklist Form) to establish impact thresholds is reasonable and adequate for the purposes of the CEQA analysis. The evaluation of potential economic effects associated with impacts on recreational opportunities is provided in Chapter 17, Socioeconomics, section titled Effects of the Project Alternatives on Recreation Economics in the Statutory Delta and Project Area. As described in Appendix 3G, Community Benefits Program Framework, the Delta Community Fund could be used to fund actions to enhance efforts that would support the unique cultural and history of the Delta community, as well as the recreation, agricultural, and economic vitality of Delta communities, which is consistent with the mandates of the Delta Protection Commission.

Letter-Comment Number	Comment	Response
523-65	Those impacts [Recreational impacts of the DCP] would impede the mission of the Delta Protection Commission, as well as conflict with Delta Plan Policy P2's directive to protect existing land uses and Policy DP R11's promise to provide new and protect existing recreation opportunities.	Chapter 16, Recreation, in the section titled Environmental Setting, identifies recreation trends using multiple sources of abundant existing information on Delta recreation, including those that may be part of potential future plans. Recreation trends are part of the baseline for the impact assessment (particularly Impact REC-1). Further analysis of potential changes to recreation opportunities is also provided in Chapter 17, Socioeconomics, particularly in ECON-5. As disclosed in Chapter 16, potential impacts on recreation facilities from increased use or impacts on the environment from the construction or expansion of recreation facilities would be less than significant for all project alternatives. As disclosed in Chapter 17, some temporary displacement or changes to use patterns of recreationists may occur during construction and in a few limited areas depending on alternative (see the table titled Dispersed and Developed Recreational Resources with Activities that Could Experience Disruptions or Quality Losses during Construction). Overall, with implementation of the identified environmental commitments and mitigation measures, the effects on recreational areas and the effects on the recreational experience of recreationists from project construction, operation, and maintenance are not expected to be substantial for all alternatives and would not lead to physical changes to the environment. Please also see Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, for information on the relationship between the Delta Conveyance Project and the Delta Plan.
523-66	Chapter 16 of the DEIR states that past studies that evaluated recreation use and recreation user characteristics showed that boating and fishing were amongst the most popular recreation uses at that time. Yet, the Recreation chapter narrowly draws its consideration of impacts to whether the Project would (1) increase the use recreational facilities and (2) include new or expanded recreational facilities that would impact the environment. The DEIR's discussion of recreation only briefly and dismissively addresses the Project's impact on	Impacts on recreational resources are fully evaluated in Chapter 16, Recreation, using methods and criteria consistent with Appendix G of the CEQA Guidelines (Environmental Checklist) and professional standards and practices. Additionally, please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding requirements for defining baseline under CEQA. The analysis did consider river and reservoir levels for potential operational effects, including Delta flows and upstream reservoirs in northern areas of

Letter-Comment Number	Comment	Response
	river/reservoir levels, water quality and the resulting effect on river-dependent recreational uses. Meanwhile, DEIR chapter 5 tersely concludes that changes in surface water levels are not considered impacts. Changes in river levels could significantly impact river-dependent recreational uses, including marinas and riverside parks. The DEIR, however, does not analyze this impact in quantitative fashion and barely so in qualitative terms. The Project (and alternatives)'s effect on surface water levels as it affects recreation opportunities and experience must be addressed in greater depth and its summary conclusions supported. In particular, the DEIR fails to examine recreation impacts to upstream (Sacramento and American Rivers) areas like the Garcia Bend Park and Marina, Miller Park, American River Parkway, and Lake Natoma. A change in river flows resulting from the Project could potentially impact access to recreation on the river, parking and trails, and may cause scouring of riverbanks, trails, and access areas near the American River. The DEIR should evaluate the Delta Conveyance effect on American River flows upstream of Discovery Park and attendant recreation impacts. The revised analysis should address American River Parkway Plan land use policies for potentially impacted land use areas. The DEIR does not mention impacts upon hiking/walking trails at Cosumnes River Preserve. The Project will have impacts (noise, dust, traffic) upon the use of the Cosumnes River Preserve due to boring and other construction activity at the Twin Cities Tunnel Shaft. The Cosumnes River Preserve has an estimated 70,000 actual visitation numbers (DEIR, p. 16-17,	the state; however, based on operational modeling using quantitative methods that identified very little flow or reservoir elevation changes and evaluating those types of changes with respect to recreation led to the finding that these changes would not affect recreation use or resources. This analysis includes river flows in the Sacramento and American Rivers, as evaluated in Chapter 5, Surface Water. Regarding the comment assertion that changes in river levels could significantly impact river-dependent recreation uses, the analysis found than seasonal flow patterns in the Delta waterways would be slightly different than current conditions, depending on throughputs in dry or wet years, but these changes as described in Chapter 5 would be within the range of variability that boaters in the Delta waterways experience currently and are not expected to affect recreationists' enjoyment in the various boating recreational opportunities. Regarding potential construction impacts on the Cosumnes River Preserve, the Chapter 16 analysis did evaluate the Cosumnes River Preserve and its current uses and also considered construction effects at this facility and others nearby, and found that construction impacts, with the environmental commitments and best management practices that would minimize dust and reduce noise-related effects, would be less than significant. The EIR does consider how construction could diminish or degraded recreation experiences, specifically under the analysis of Recreational Experience in ECON-5, in Chapter 17, Socioeconomics.

Letter-Comment Number	Comment	Response
	Table 16-6), thus a significant attractor of sensitive receptors (recreation users). Annual visitation to Cosumnes River Preserve has increased in recent years. The 14-year construction period (DEIR, p. 16-23, line 20) would significantly impact recreation opportunities at the Cosumnes River Preserve and Stone Lakes National Wildlife Refuge. Many recreation users would likely avoid recreation areas nearby construction sites due to potential concerns about increased noise, dust or traffic. Wildlife would also be impacted – during the fall/winter migration the Cosumnes River Preserve frequently has over 100,000 birds. Cosumnes River Preserve and Stone Lakes (adjacent to Intakes B and C) visitation would be significantly impacted. The DEIR vaguely observes that some recreation users would avoid “construction areas” for these reasons without expressly acknowledging the specific impact to the adjacent Stone Lakes and Cosumnes River Preserves. [Footnote 204: DEIR, p. 16-24, lines 1-3.] Again, the DEIR only considers whether some recreation use would shift to and increase the burden on other recreational locations, but does not consider how it would diminish or degrade the recreational experience at adjacent recreation areas.	
523-67	The DEIR states that "current waterways and existing parks and recreation areas in the Delta have not been found to be over capacity and could accommodate some additional recreation use if any recreationists choose not to frequent waterways or creation facilities closest to project construction areas." [Footnote 205: DEIR, p. 16-24, lines 6-9.] The DEIR does not explain how this was determined. Cosumnes River Preserve, which the County of Sacramento helps operate, frequently experiences visitor numbers over its capacity. Parking lots are full and visitors have to park along Franklin Boulevard. The	The evaluation of capacity was done by characterizing and summarizing the abundant information available about existing use as supplemented by interviews in Chapter 16, Recreation. The project construction areas tend to be away from higher use recreation areas, and while it is impossible to estimate any exact numbers of users who might be displaced by construction or in some cases operations, the large supply of existing recreation facilities in the Delta was identified in the assessment as more than adequate to absorb what would be a less-than-significant change in recreation use patterns.

Letter-Comment Number	Comment	Response
	DEIR does not explain where the 70,000 or more visitors who regularly visit the Cosumnes River Preserve might recreate as an alternative, or the impacts to facilities that would experience a substantial increase in visitors as a result of the Project. The DEIR is evasive, misleading and inaccurate in its representations regarding the proximity of Project features to existing recreational resources. The DEIR notes that above ground physical changes to the environment such as the intakes, the Twin Cities Complex shaft site and Reusable Tunnel Material (RTM) stockpile area at Twin Cities Road "potentially would be near" recreational areas. [Footnote 206: DEIR, p. 16-20, lines 1-2.] This does not account for the close proximity of the Stone Lakes and Cosumnes River Preserves to these facilities. Moreover, the assertion that "[DCP] facilities have been generally sited away from most recreation areas, other than the discharge facility under Alternative 5 which is within Bethany Reservoir SRA" is patently incorrect. [Footnote 207: DEIR, p. 16-35, lines 11-13.] From a regional or even local perspective, Intakes B and C are adjacent to the Stone Lakes and the Twin Cities Complex is adjacent to the Cosumnes River Preserve. Although the document briefly observes that "[t]he Delta Conveyance Project has features that would change the landscape of several areas of the Delta where recreationists view or sightsee," [Footnote 208: DEIR, p. 16-35, lines 10-11.] it does not meaningfully consider how those permanent changes will affect the recreational user experience, including the visual perspective, at Stone Lakes and the Cosumnes River Preserve. The effect will be significant. From the on-the-ground visual	The comment alleges that 70,000 or more visitors to the Consumnes River Preserve might be displaced or need an alternative recreation facility as a result of the project. Please refer to Chapter 16, Recreation, in the section titled Activities and Opportunities in the Study Area, including the table titled Developed Recreation Areas Nearest to Proposed Project Features and maps in the figure titled Existing Developed Recreation Facilities and Areas) for discussion of recreation areas proximate to the proposed project. Impact REC-1 and the Cumulative Analysis provide discussion on effects to these areas from the project. The Stone Lakes and Consumnes River Preserves are large areas, and there are preserve parcels that are near to proposed project facilities, but none is within the preserves. As analyzed in Impact REC-1, none of the project alternatives would likely lead to any noticeable increase in use of recreation facilities in and around the Delta or in neighboring communities, including the Stone Lakes and Consumnes River Preserves. Please also refer to Chapter 17, Socioeconomics, including the section titled Effects of the Project Alternatives on Recreation Economics in the Statutory Delta and Project Area, where further analysis of recreation effects is presented. Additionally, please refer to Chapter 18, Aesthetics and Visual Resources, which includes the analysis of impacts and mitigative measures. Specifically, the analysis of visual impacts attributable to the project in Impact AES-1 found it would create a strong visual contrast at many project component sites, including the RTM stockpile sites. Further, in the analysis of Impact AES-1, it was found that the project would have significant unavoidable impacts on the visual quality and character of the project study area even with the implementation of Mitigation Measures AES-1a, AES-1b, and AES-1c. At its nearest point, the Twin Cities Complex is approximately 1.4 miles from the northernmost point in the Cosumnes River Preserve that would host a static vantage point - Wetlands Walk Trail

Letter-Comment Number	Comment	Response
	perspective of the Cosumnes River Preserve, RTM mounds of 15 feet high (or an equally high circle levee) will be a substantial artificial change to an otherwise characteristically flat, natural Delta landscape. It will constitute an incrementally significant unnatural addition to the surrounding scenery. This is a substantial adverse impact to the public interest, both in terms of aesthetic and recreational value of viewing a natural landscape in and around the Preserve.	as it crosses Franklin Boulevard. Over this distance, views from this trail vantage point toward the Twin Cities Complex would be obscured by intervening vegetation and distance.
523-68	I. Project Impacts to Aesthetics are not Adequately Analyzed or Mitigated In general, the construction and operation of the large-scale physical features of the proposed diversion, conveyance and water operations facilities, in concert with the addition of significant levels of artificial light/glare to the night sky of this rural portion of the County, will result in a substantial adverse permanent change in the scenic quality and natural beauty of the Delta. These impacts will not only degrade the visual character of a National Heritage Area but also permanently diminish the quality of life for Delta residents.	Potential significant environmental impacts on aesthetics from the project and the proposed mitigation measures are evaluated in Chapter 18, Aesthetics and Visual Resources. This analysis found the project, in sum, would have a significant and unavoidable impacts on aesthetic and visual resources, even with the use of lighting as described in Chapter 3, Description of the Proposed Project and Alternatives, in the section titled Fencing and Lighting, and the application Mitigation Measures AES-4a, AES-4b, and AES-4c. Engineering measures to reduce light and glare are included in the Engineering Project Reports (EPRs) description of the Lighting Facilities—during Construction and Operation. Specifically, the EPR states that during construction lights would be downcast, cut-off type fixtures with non-glare finishes, and controlled by photocells. In addition, the lights would provide good color with natural light qualities with minimum intensity with adequate strength for security, safety, and personnel access. Finally, lights would comply with the Illuminating Engineering Society industry standards for light source and luminaire measurements and testing methods. During operations, lights would be motion activated to minimize light and glare to adjacent properties (Delta Conveyance Design and Construction Authority 2022i, 2022j).
523-69	The DEIR states that "[a]n important impact to consider is the permanent impact on visual resources after the completion of construction of water conveyance features." [Footnote 209: DEIR, p. 18-1, lines 15-17.] While it is certainly critical for the DEIR to consider the permanent impacts on visual resources	Construction impacts from the project on visual resources are considered and analyzed in Chapter 18, Aesthetics and Visual Resources, in the section titled Impacts and Mitigation Approaches. The description of impacts for each project component are under each impact heading (i.e., visual character and quality, state scenic highways, scenic vistas, and light and

Letter-Comment Number	Comment	Response
	after completion of the project, given the magnitude and length of the Project from a construction standpoint, impacts to visual resources are equally important during the construction phase. The DEIR identifies significant and unavoidable impacts associated with all alternatives for the following impacts: -AES-1: Substantially degrade the existing visual character or quality of public views (from publicly accessible vantage points) of the construction sites and visible permanent facilities and their surroundings in nonurbanized areas. -AES-2: Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings visible from a State Scenic Highway. -AES-3: Have substantial significant impacts on scenic vistas. [Footnote 210: See DEIR, p. 18-2, Table 18-0.] Table 18-0 indicates that all alternatives would have less than significant impacts associated with: -AES-4: Create new sources of substantial light or glare that would adversely affect daytime or nighttime views of the construction or permanent facilities. Impacts AES-1 - AES-3 narrowly consider impacts to "public views", which ignores the cumulative impacts associated with views on and from private lands, including the extensive number of private lands affected by the Project, and privately held lands that are open to the public for commercial and tourism purposes. By narrowly defining the scope of the analysis, the EIR fails to disclose the true impacts to sensitive residential, agricultural, commercial and recreational users. One of the most glaring omissions of the DEIR is the absence of	glare). The commenter reiterates the findings for the four aesthetics and visual resource impact categories evaluated in that chapter. The use of views from publicly accessible vantage points in the aesthetics and visual resources impact criteria and significant thresholds is consistent with the State CEQA Guidelines Appendix G Environmental Checklist Form and not intended to narrow the analysis of project impacts on visual character and quality. The table titled Affected Viewer Groups and Associated Sensitivities for the Project in the Chapter 18 section titled Characterization of Viewers provides a comprehensive list and definitions of viewer types, including residential, recreational, and business/institutional viewers, and acknowledges the user groups mentioned in the comment. Effects on residential viewers in the study area from stationary vantage points, as well as traveling on SR 160 and County Route E9 (across the Sacramento River from the intake sites), are considered in intake impacts described under Impact AES-1, including the communities of Clarksburg and Hood, which were identified as areas with a high density of residential viewers affected by the project. However, Courtland is approximately 1.5 miles southwest of the nearest project component (a road improvement associated with Intake C), and the project component is not visible from Courtland due to intervening vegetation and topography. In addition, the impact analysis focused on public views. The commenter refers to Impact AES-4 regarding light and glare impacts. The analysis under Impact AES-4 in Chapter 18 states in detail that construction would occur during daylight hours on a 5-day workweek schedule. The analysis also discloses that there would be limited exceptions for construction activities requiring nighttime work, such as continuous concrete pours, as indicated in Mitigation Measure AES-4a. The nighttime work would, therefore, be episodic and not consistent for the full 12- to 14-

Letter-Comment Number	Comment	Response
	any visualizations or renderings of Project facilities from the rural communities most impacted by the Project. DWR indicates it was only able to take photographs from public rights of ways. The County [Sacramento County], however, disagrees that similar photos, visual representations, and renderings could not have occurred in rural communities such as Hood, Courtland, etc. DWR provides no evidence that it attempted to obtain access to locations from which it could take photos or otherwise obtain images that would enable the creation of visualizations that would show what the Project construction and facilities would look like from Delta recreation spots, homes and businesses, such as wineries, for which the existing aesthetic is an essential component of their character and viability. This arbitrary limitation on methods is misleading and unacceptable. With respect to AES-3, the County disagrees that the Project or DEIR alternatives would have a less than significant impact associated with light and glare. The rural, undeveloped nature of the Delta renders it highly sensitive to new sources of light. For example, the introduction of fifteen years of construction sites and, thereafter, well-lit industrial facilities to existing undeveloped (and unlit) farmland on either side of the small town of Hood is a radical change to the environs and will result in significant changes in visibility of the night sky. The defined "Study Area" described in Section 18.1.1 emphasizes that visual impacts can only result from "new structures"" [Footnote 211: DEIR, p. 18-4, lines 17-29.] Reiterating the statement from Chapter 5, Surface Water, that the Project "does not propose any changes to operations of the Delta," this section acknowledges that "due to potential,	year construction period and would not create a long-term continuous change in night sky conditions in the study area. In the discussion of operations and maintenance under Impact AES-4, permanent project facilities would have security and other lighting activated by motion detectors, meaning that lights would be on only as needed. This lighting would be downcast cut-off fixtures to limit light trespass. The analysis discloses that, while this lighting would produce an ambient nighttime luminescence, this lighting would be on only on an as-needed basis and not contribute to a constant illumination of the nighttime sky. This would be the case at all permanent project facilities, including Intakes B and C near Hood. As noted in Chapter 18, one of the thresholds of significance was if the project would "Substantially degrade the existing visual character or quality of public views of the site and its surroundings in a nonurbanized area." This determination is reliant on viewer exposure or viewer sensitivity, which measure a viewer's ability to see and recognize changes in their surroundings. It is reasonable to conclude that visitors to Folsom Lake would not have the viewer sensitivity or exposure to perceive a 2 percent water level difference. Please see Appendix 18A, Expanded Methodology and Setting, for further information on viewer sensitivity level, those features that would be considered visually dominant in the landscape, and the project's overall impact from the standpoint of noticeability in the landscape to those areas that may be affected. In addition to viewer sensitivity and exposure, the analysis of impacts on visual character and quality also considers the magnitude of visual contrast created by the project relative to the baseline conditions. Given the visual expanse of Folsom Lake, it is unlikely that a 2% fluctuation in water level would create a substantial visual contrast when compared to the baseline condition and typical fluctuations created by typical operations at the reservoir (e.g., storage management). The American River and American River Parkway are located to the north and east of the city of Sacramento and are not

Letter-Comment Number	Comment	Response
	indirect upstream reservoir changes from project operations, there is a low potential for aesthetic impacts" to upstream reservoirs, including Folsom Lake. [Footnote 212: Id., lines 21-23.] Insisting that these impacts would be "minimal" and "within the existing fluctuations in storage and elevation patterns," the DEIR concludes there is no potential for a significant impact on visual character of upstream reservoirs. [Footnote 213: Id., line 27.] Footnote 1 on DEIR page 18-4 indicates that, in fact, Folsom Lake will experience the greatest impacts, as demonstrated by modeled end-of-month storage decreases at the lake, relative to existing conditions, of up to 2 percent, on average, in above-normal years in November and December under Alternatives 1, 2b, 3, 4b, and 5. Despite its failure to provide even the bare minimum of support for its conclusion that a 2 percent decrease is insignificant (in a reservoir that is already critically low), the DEIR dismisses any further discussion of these impact conditions. Further, there is no mention of visual impacts to the American River and associated American River Parkway. The DEIR attempts to categorize the sensitivity levels of certain viewer groups. [Footnote 214: See DEIR, pp. 18-13 to 18-14, Table 18-3.] With respect to "roadway travelers," the sensitivity reasoning fails to acknowledge that this group can be significantly impacted by light and glare, such as that emanating from construction sites and new industrial sites in otherwise dark areas. [Footnote 215: Ibid.] The discussion incorrectly characterizes the experience of rail travelers as being "fleeting and temporary" due to high speeds. [Footnote 216: Id.] On the contrary, given the vast, open landscapes of the Delta, a conventional passenger train (not	located in the study area, as defined in the Chapter 18 section titled Study Area. For the reasons previously stated regarding Folsom Reservoir, the project would have negligible, if not imperceptible, visual effects on the river and the parkway.- Please also see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, for further discussion regarding the selection of the study areas for evaluation in the EIR, including those areas upstream of the proposed north Delta intakes. The commenter refers to the Chapter 18 table titled Affected Viewer Groups and Associated Sensitivities for the Project. While the sensitivity rating and reasoning does not mention light and glare, the effects of light and glare on motorists, and mitigation for those impacts, are addressed under Impact AES-4. The duration of view for rail travelers is not unlike those for roadway travelers, which is also characterized as fleeting and temporary. The two project components within view of the Amtrak rail line are the Bacon Island Reception Shaft (approximately 0.7 mile north of the rail lines) and associated road improvements and the Upper Jones Tract Tunnel Maintenance Shaft (approximately 0.5 mile south of the rail line). The duration of view is dependent on speed, distance from the project component, and whether the potential viewer is observing the landscape. As there is typically little to impede rail passage through this portion of the study area, it is reasonable to assume that a passenger train would be passing through at a high rate of speed, limiting the duration of view. The text the commenter refers to is found in the Chapter 18 section titled Analyzing Visual Impacts, Light and Glare Impacts. The text in question is provided in the context of defining, in part, the no impact finding for light and glare. While a no impact finding could be based at least on the text cited, the characterization of the environmental setting and impacts are

Letter-Comment Number	Comment	Response
	"high speed rail") allows for an extended opportunity to take in the vistas along the rail lines. Indeed, a typical passenger train (e.g., Amtrak) provides large windows for this very reason: to enhance the ability of its riders to focus on scenic qualities from the vantage point of the train. The DEIR states that no impact would result from increases in light and glare that would "restore natural areas or brighten unnaturally dark conditions." [Footnote 217: See DEIR, p. 18-44, line 1.] This counterintuitive rationale allows the DEIR to mischaracterize both the environmental setting and the resulting impact based upon DWR's view of what constitutes "natural restoration" or a naturally dark condition. It is unclear how the introduction of new sources of artificial light and/or glare could restore a natural area. It is also unclear how the natural, undeveloped setting of the Delta environment could be characterized as "too dark" at night. The DEIR states that an alternative would have a significant impact if it would: "Substantially degrade the existing visual character or quality of public views of the site and its surroundings in a nonurbanized area." [Footnote 218: See DEIR, p. 18-44, lines 21-22.] This threshold is unduly narrow and thus fails to ensure that the DEIR considers and discloses the full extent of Project impacts. The scope of this significance threshold is limited to "public views" but must include within that category, and the associated impact analysis, views from privately held properties that are generally open to the public, such as vineyards, nature preserves or businesses. Moreover, given the extensive number of private views that will be affected, and the size and scale of Project activities and facilities (each intake is approximately ¼ mile long, large and	not based on that one criterion. Regardless, the project was not found to have "no impact" related to light and glare. The impact finding for the project with regard to light and glare for construction, operations, and maintenance is less than significant with mitigation incorporated. The text cited in the comment is from the threshold of significance addressing visual character and quality in the Chapter 18 section titled Thresholds of Significance. As noted above, the text is consistent with the state CEQA Guidelines Appendix G Environmental Checklist Form and not intended to narrow the analysis of project impacts on visual character and quality. Although no RKOP renderings reflected views from waterside locations across the project in general, project effects were considered from waterside locations and river-based facilities (e.g., marinas) under Impact AES-1, including from the Sacramento River (all intake sites). The analysis disclosed that impacts on visual character and quality at each intake site would occur and the rendering at Intake C would be representative of all three intakes and would occur under all project alternatives. As indicated in the analysis of visual resource impacts at the intake sites, even with implementation of Mitigation Measures AES-1a, AES-1b, and AES-1c, the impact would be significant and unavoidable. Adding KOP renderings from waterside vantage points on the Sacramento River would not change that finding. As noted in the discussion related to the rendered landside view of Intake C, it is stated in Chapter 18 that the landscaping shown in the postconstruction rendering is a representative view. The rendering is not intended to present a postconstruction view that adheres to a landscape design and planting palette or a given time span.

Letter-Comment Number	Comment	Response
	noisy construction trucks will be moving through Delta communities), there is no reasonable basis for limiting consideration of impacts to "public views." The Project's impacts on Delta residents will not be equivalent to blocking the view for a single home or a small number of homes. The DEIR primarily focuses its visual impacts analysis on proposed intake and conveyance facilities - i.e., physical improvements and structures, while summarily dismissing the potential for significant impacts to waters. There is potential, however, for substantial adverse impacts, both project-specific and cumulative, to upstream resources including river and water reservoirs. For example, the 2.0 percent decrease in Folsom Reservoir and other bodies of water is cumulatively considerable in conjunction with other factors that will decrease water levels such as drought and climate change. The DEIR suggests that fluctuating water levels in rivers and reservoirs could have impacts, yet the EIR fails to analyze potential impacts to the American River Parkway. The DEIR concludes that the aesthetic impacts associated with construction of the intakes would be "substantial." [Footnote 219: DEIR, p. 18-51, line 39.] The analysis, however, does not make it clear that the project would impact a more than 5-mile stretch surrounding the Town of Hood with substantial impacts. There is only one exhibit that shows the existing and rendered views of any of the proposed intakes (Intake C). All renderings represent misleading depictions, with fully mature trees; this is an unlikely scenario for 20-30 years until after construction is complete (up to 14 years), with the result that the DEIR misleadingly fails to accurately disclose the extent of Project impacts. Finally, the analysis of visual impacts related to the intake facilities does not provide views or renderings of	

Letter-Comment Number	Comment	Response
	the intake facilities from the river. These intakes will be visible from the river, which will substantially degrade the existing visual character for people boating and fishing along these reaches of the river, and the DEIR does not disclose the magnitude of the impacts to the visual resources along the river. It is not enough for the DEIR to simply conclude the visual impact will be significant. These omissions constitute an informational failure of the DEIR.	
523-70	X. THE DEIR FAILS TO ASSESS HOW AUGMENTED WATER SUPPLY EXPORTS WILL INDUCE GROWTH IN PARTICIPATING WATER DISTRICTS: Despite proposing the construction and operation of the largest statewide water supply project in half a century, DWR devotes only ten pages to discussion of how this massive utility infrastructure project that can be used in tandem with the existing SWP Banks pump, might induce new growth. [Footnote 220: See DEIR, Ch. 31.] The DEIR dismisses this substantial additional water supply as a growth inducing factor, insisting that it will simply stabilize SWP deliveries that have been curtailed in recent years due to pumping restrictions. [Footnote 225: See DEIR, p. 31-9.] The DEIR attempts to de-link water supply and population growth, positing that SWP deliveries south of the Delta have varied over time while southern California population growth has been consistent. [Footnote 226: DEIR, p. 31-3.] This decoupling flies in the face of 21st century California water law that views urban development and water supply as going hand-in-hand. For example, SB 610 and SB 221, respectively, require Water Supply Assessments and Water Supply Verifications to ensure availability of water for large urban development projects.	Chapter 31, Growth Inducement, evaluates the potential for inducing substantial unplanned population growth in an area, either directly or indirectly, such that additional facilities would need to be established to support such growth. This evaluation is focused on the Delta Conveyance Project as a project itself, per CEQA requirements to "discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." The use of the reliable water source provided by the Delta Conveyance Project would not provide an avenue for pursuing additional development projects, particularly beyond those that are already planned. The change in SWP water deliveries attributable to the Delta Conveyance Project should also be placed in context of being divided among the Delta Conveyance Project participating water agencies, further muting potential growth-related effects. Since the relationship between growth and water supply is such that the amount of water could potentially induce growth, it is not necessary as suggested by the commenter to review every regional plan or general plan in the service area of the public water agencies. It is sufficient to look at the volume of water each participating water agency would receive out of the Delta Conveyance Project and historical trends, to discern whether the Delta Conveyance Project would substantially induce unplanned growth that could then have significant environmental impacts. It is also noted in Chapter 31 in the tables titled Summary of Annual Average Water Delivery Volumes from SWP to South-of-Delta Area and Summary of Agreement in Principle

Letter-Comment Number	Comment	Response
	[Footnote 227: V] These statutes are premised upon the notion that the subject developments cannot be constructed without a known water supply. The Urban Water Management Planning Act [Wat. Code, § 10610 et seq.] mandates the preparation of water supply plans based, in part, upon "projected population estimates". [Footnote 228: Wat. Code, § 10631, subd. (a).] As such, the UWMP Act equates population growth with new water demand. In Vineyard Area Citizens For Responsible Growth, Inc. v. City of Rancho Cordova (2007) 40 Cal.4th 412, 431, the California Supreme Court states: "...CEQA's informational purposes are not satisfied by an EIR that simply ignores or assumes a solution to the problem of supplying water to a proposed land use project. Decision makers must, under the law, be presented with sufficient facts to "evaluate the pros and cons of supplying the amount of water that the [project] will need." [Footnote 229: Ibid., quoting Santiago County Water Dist. v. County of Orange (1981) 118 Cal.App.3d 818, 829.] While the Vineyard Court was concerned about the EIR's accounting for the source(s) of water that would supply the proposed Sunrise Douglas master planned community, the DCP DEIR presents the inverse dilemma - accounting for where and how a massive new source of water will be applied. The core principle still applies - the EIR cannot "ignore or assume a solution to the problem" of generating 543,000 AFY or more of new water. The variance in south-of-Delta SWP deliveries can be explained simply by the multiple supply options available to SWP	Participating SWP Contractors Water Delivery Volumes by Area and Comparison to Total Water Supply that a change in water supply afforded by the project is a small percentage of each region's overall water portfolio and, as such, is not driving a substantial change in baseline water supply conditions within the SWP service area. As indicated in the EIR, the primary purpose of the project is to enhance the water supply reliability of the SWP within the context of changing hydrologic conditions driven by climate change. It is also noted that outside the projected climate change conditions that may affect SWP deliveries, the project's participating water agencies are also facing reliability issues with other elements of their overall water portfolios, including local and regional water sources, imports from the Colorado River, and imports from the Owens Basin. Citations to the Vineyard case to support the comment are irrelevant to the potential indirect growth inducement of the Delta Conveyance Project, as that case ultimately required a development project that needed water supply to assess potential available water supply. It did not require a water supplier to assess development projects that would use a certain amount or type of water supply.

Letter-Comment Number	Comment	Response
	exporters, including Colorado River water and local supplies. Indeed, SWP water accounts for about a third of the water supply for SWP contractors. [Footnote 230: See Table 31-1.] Moreover, fluctuations in SWP deliveries can further be explained based upon variance in rainfall from year-to-year. The DEIR's rationale is sufficient only to show that SWP contractor areas can steadily grow without a consistent SWP supply. It does not, however, prove that the additional water that can and will be supplied as a result of the DCP is not growth inducing. The DEIR goes on to take the position that population growth is not dependent upon water supply because water demands have decreased by about 20 percent over the past 19 years while population has increased. [Footnote 231: DEIR, p. 31-3.] DWR concedes that this is "partially" due to the success of water conservation efforts and programs. [Footnote 232: Ibid.] The fact that California has achieved a level of water conservation success does not lead to the conclusion that new development does not rely upon new water. If SWP customers/contractors have coped with ESA-related curtailments in deliveries (see DEIR, pp. 1-18 to 1-19) through adoption of conservation efforts, as the DEIR suggests, the DEIR fails to sufficiently explain where the new 543,000 AFY or more will go and how it will be used. (The DEIR does not presume that SWP customers will abandon the conservation efforts/measures they have undertaken over the past 19 years, and which are mandated by State law.) The DEIR "cheats" on its own baseline by taking the position that 543,000 AFY or more of new water will "restore previously contracted amounts." [Footnote 233: DEIR, p. 31-9.] The DEIR's	

Letter-Comment Number	Comment	Response
	own stated baseline existing condition for SWP south of Delta exports is 3,509,000 AFY or 2,401,000 AFY, depending upon whether you use Table 6-5 or 6-6, respectively. [Footnote 234: DEIR, pp. 6-41 to 6-43.]Any water added to that baseline is new water that must be accounted for, even in general terms. The additional new water cannot simply disappear or merge into the baseline so as to minimize or negate the growth inducing impact. 229 Apart from the general identification of the four major SWP contractor service areas (see, e.g., Table 31-3), the DEIR does not attempt to explain or assess how the new water supply would be allocated towards growth patterns in those areas. The DEIR attempts to explain away the growth inducing potential of the DCP by noting that "neither the project nor any project alternative would include the expansion of the SWP and CVP service area." [Footnote 235: DEIR, p. 31-5.] Consider, however, the sheer geographic scope of the SWP and CVP service areas (see DEIR, p. 1-10, Figure 1-3), which retain substantial undeveloped terrain for urban growth. It is nowhere near built out, including accounting for more dense urban development and redevelopment that is dictated and incentivized by local plans and State law. Consistent with California's acknowledgement that water supply and population growth are inextricably intertwined, the DEIR needs to discern and disclose at a programmatic level where and how the 543,000 AFY of additional supply will be allocated. If the new supplies will truly be absorbed into existing regional planning efforts, the DEIR should incorporate general plan documents that reflect that planned growth. [Footnote 236: See Friends of the Eel River v. Sonoma County Water Agency	

Letter-Comment Number	Comment	Response
	(2003) 108 Cal.App.4th 859, 877 [lead agency water purveyor adequately addressed growth inducing impacts of water supply project by incorporating customer general plans].]	
523-71	The DCP will allow for at least a 23 percent increase in annual SWP Delta Exports. [Footnote 221: See DEIR, p. 6-43, Table 6-7. Even where the DEIR shows a 15% increase in SWP supplies based upon the long-term average baseline (Oct. 1921-Sept. 2015), the amount is still significant. (See DEIR, p. 31-8, Table 31-2; see also DEIR p. 6-41, Table 6-5.) The increase under this figure is still 541,000 AFY [4,050,000 - 3,509,000].] Quantitatively, that is 543,000 additional acre feet per year of deliveries south of the Delta. [Footnote 222: See DEIR, p. 6-43, Table 6-7 [2,944 TAF (w/ Alt 5) - 2,401 TAF (existing)].] Alternative 5's 6,000 cubic feet/second total diversion capacity is more than half of the existing SWP Banks pump (10,300 cfs) in the south Delta. [Footnote 223: DEIR, p. 6-13.] At max or near maximum capacity, the north Delta intakes could divert up to a third of the water in the Sacramento River. [Footnote 224: DEIR, p. 3-155, Figure 3-37 [e.g., up to 5,000 cfs diverted in Oct.-Nov. with Sac River flows at 15,000 cfs].] A technical review of the DEIR by MBK Engineers submitted with comments of the SCWA demonstrates that much more water could be exported in total, due to the lack of limitations in the project description and information in DWR's own modeling.	A description of the parameters and requirements under which the Delta Conveyance Project will operate are provided in EIR Chapter 3, Description of the Proposed Project and Alternatives, in the sections addressing proposed operations criteria and the real-time operational decision-making process. The information provided in Chapter 3 is an accurate depiction of operations under the proposed project and alternatives and DWR is not proposing to operate the project outside of the operational criteria. The operational criteria are reflected in the CalSim 3 modeling of operations and the results reported in Chapter 5, Surface Water, and used in numerous resource assessments throughout the EIR. Please refer to Volume 2, Chapter 2, Indices of Commenters and Index of Primary Forms, to locate the letter numbers of comments provided by other entities that are of interest. Responses to all comment letters are provided in Volume 2, Chapter 4, Response to Comments Tables.
523-72	XI. THE DCP VIOLATES NUMEROUS LAWS ENACTED TO PROTECT THE DELTA AND AREAS WHERE WATER ORIGINATES Approval and implementation of the DCP as proposed would violate numerous laws enacted to protect the Delta and other areas where water originates. Those laws include the 1959 Delta Protection Act (Water Code, section 12200 et seq.), the 1992 Delta Protection Act (Pub. Resources Code, section 29700	The Delta Conveyance Project would not violate the 1959 and 1992 Delta Protection Act, the 1933 Watershed Protection Statutes, or the 2009 Delta Reform Act, and it would not violate water code requirements as claimed by the comment. The project is consistent with the 1959 Delta Protection Act and the Watershed Protection Statutes. DWR is required to respect senior water rights when operating the SWP. The project would not change current

Letter-Comment Number	Comment	Response
	et seq.), Water Code section 12980 et seq., the Watershed Protection Act (Wat. Code, section 11460 et seq.), Water Code section 1215 et seq. and the 2009 Delta Reform Act. These laws apply to both the SWP and Central Valley Project (CVP). Given that the CVP is presently not participating in the DCP, and the lack of necessary information in the DEIR project description and impact analyses, it is especially unclear how DWR could operate the DCP without violating these Delta protection laws, while also achieving project objectives and not harming CVP operations or water supplies, which is a concern to Sacramento County because the Sacramento County Water Agency holds a CVP contract for municipal and industrial water use. A. The 1959 Delta Protection Act The 1959 Delta Protection Act (1) requires the SWP and the CVP to provide: [S]alinity control and an adequate water supply for the Delta (Water Code, sections 12201, 12202); (2) prohibits the export of water from the Delta to which in-Delta users are entitled, and water which is necessary for salinity control and an adequate supply "to maintain and expand agriculture, industry, urban and recreational development in the Delta" (Water Code, section 12204); (3) requires maintenance of a "common source of fresh water" in the Delta to serve both in-Delta water needs and export water needs when water surplus to the in-Delta needs is available (Water Code, section 12201); and (4) requires all releases of water from storage reservoirs into the Delta for export from the Delta to be integrated to the "maximum extent possible" in order to fulfill the objectives of	regulatory requirements that protect the beneficial use of water. When exporting water from the Delta, DWR must comply with all applicable state and federal regulatory requirements, including environmental standards, laws, and regulations relating to Delta inflow and outflow, Delta water quality, fish protection, environmental needs, and water rights, including in-Delta water rights holders. The State Water Board has also established water quality and flow requirements and limits on the rate of export of water that can be pumped by the state and federal pumping plants and is currently reviewing those requirements in its Bay-Delta Water Quality Control Plan to ensure beneficial uses are protected. Furthermore, the State Water Board considered consistency with the Delta Protection Act in adopting D-1641 and the project will be operated in accordance with D-1641 unless a new water rights decision is adopted by the State Water Board in the future. The project is also consistent with the 1992 Delta Protection Act and 12980 et seq because, as described in Common Response 8, Relationship to Other Plans, Projects, Policies, and Programs, the project can be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place. Please see Appendix 3E, Delta Reform Act Considerations, for a discussion of the Act's coequal goals and how the practical effect of many of the proposed mitigation measures and environmental commitments in the EIR would protect Delta values. Please also see Common Response 8 for information on the relationship of the project to the Delta Reform Act. As described in Chapter 3, Description of the Proposed Project and Alternatives, in the section titled Integration of North Delta Intakes with South Delta Facilities, the proposed intakes would augment the ability to capture excess flows and improve the flexibility of the SWP operations such as for meeting the State Water Board D-1641 Delta salinity requirements. The Delta Conveyance Project would not change operational criteria

Letter-Comment Number	Comment	Response
	the Act (Water Code, section 12205). The DCP conflicts with the 1959 Delta Protection Act in numerous respects, including the fact that the Project, by design, is intended to directly circumvent the maintenance and provision of that "common source of fresh water" (or "common pool") by constructing intakes and tunnels in the northernmost tip of the Delta that enable DWR to divert and export substantial amounts of Sacramento River fresh water directly into the tunnels that would otherwise flow into that common pool in the absence of the tunnels. Such a bypass deprives essentially the entirety of the Delta of the common salinity control and other benefits mandated by the 1959 Delta Protection Act that such fresh water would provide if it flowed into the common pool before it was exported. Moreover, DWR has a duty under Water Code section 12205 to integrate SWP and CVP releases of storage water into the Delta for export from the Delta "to the maximum extent possible" to fulfill the objective of maintaining that common pool and ensuring that it contains an adequate supply of suitable quality for in-Delta water users. Releasing water from storage reservoirs for diversion through the DCP for export out of the Delta, which entirely bypass that common pool, conflicts directly with that duty and would violate Water Code section 12205. Water Code section 12204 further prevents the SWP and CVP from exporting any water from the Delta that is necessary to ensure that in-Delta water users at all times have an adequate water supply of suitable quality. The DCP will in many instances result in the export of water from the Delta that directly	associated with upstream reservoirs as demonstrated throughout the EIR. Upstream of Delta facilities will continue to be operated to meet regulatory, environmental, and contractual obligations consistent with existing operations. Furthermore, as described in detail in Chapter 3 in the sections titled Bypass Flow Requirements and Delta Outflow Criteria and summarized in the table titled Delta Conveyance Project Preliminary Proposed Operations Criteria, the project would divert flows during excess conditions in the Delta and allow bypasses and flows to continue into and through the Delta. As described in Chapter 4, Framework for the Environmental Analysis, Reclamation or a CVP contractor (or contractors) have not expressed interest in participating in the Delta Conveyance Project as project proponents. As described in Chapter 3, only Alternatives 2a and 4a may involve existing CVP facilities. Please see Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the study area for resources analyzed in Chapters 5–32 and areas upstream of the project. Please also refer to Common Response 3, Alternatives Development and Description, regarding the Delta Conveyance Project's operations which does not include changes to State Water Project or Central Valley Project operations upstream of the proposed north Delta intakes. The impact analysis contained in Chapter 9, Water Quality, specifically evaluated electrical conductivity (EC) standards throughout the Delta and confirmed the standards are met and impacts would be less than significant under operating conditions. Chapter 7, Flood Protection, provides the results of the assessment conducted to determine the significance of the impact constructing and operating the Delta Conveyance Project would have on flood protection within the Delta study area. Impact FP-1 disclosed the construction and

Letter-Comment Number	Comment	Response
	deprives in-Delta water users of that supply and quality. Examples of such instances include the planned deprivation of such water supply and quality via the export of Sacramento River fresh water through the tunnels, instead of allowing that fresh water to flow through and freshen the Delta before it is exported from the common pool in the event of extended droughts and in the event of individual or widespread levee failures and/or sea level rise which draw sea water into the Delta and impair the water quality of the common pool. In such instances, rather than allowing Sacramento River fresh water to flow into the common pool to maintain and re-freshen its water quality as mandated by the 1959 Delta Protection Act, the Project will enable and encourage the SWP and CVP, instead, to abandon the common pool and bypass it via the diversion of that fresh Sacramento River water through the tunnels. B. The 1992 Delta Protection Act In the 1992 Delta Protection Act, the Legislature made numerous findings and declarations for the protection of the Delta, including the following set forth in Public Resources Code sections 29701 and 29702, respectively: [T]the Sacramento-San Joaquin Delta is a natural resource of statewide, national, and international significance, containing irreplaceable resources, and it is the policy of the state to recognize, preserve, and protect those resources of the delta for the use and enjoyment of current and future generations. [T]he basic goals of the state for the delta are the following: (b) Protect, maintain, and, where possible, enhance and restore	operational related effects on flood control levees at and in the vicinity of the intakes. Impact FP-2 disclosed the localized flood-related impacts that could occur as a result of changing drainage patterns at construction sites. In Chapter 8, Groundwater, in the table titled Water Surface Elevation Differences for the Project Alternatives at Select Locations in the Sacramento River between the American River Confluence and Sutter Slough Relative to 2022 Conditions provides the results of the hydraulic analysis conducted to determine the change in water surface elevation attributable to the project during a 100- and 200-year flood event. As shown in the table, the greatest increase in surface elevations (.10-foot) between the American River and Sutter Slough during a 100- or 200-year flood event would occur under Alternatives 2a and 4a. This modest increase would be addressed through mitigation aimed at phasing the construction of the intakes. There would be no change in the surface elevation of the Sacramento River upstream of the American River and downstream of Sutter Slough attributable to constructing or operating the Delta Conveyance Project. Please see Common Response 7, Implementation Considerations, regarding comments related to project costs and funding. The comment assertion regarding the siting of the project and alternatives is not supported by the information contained in the EIR. Please refer to Chapter 2, Purpose and Project Objectives, regarding the purpose of the project. Please also see Common Response 3, Alternatives Development and Description, regarding the alternatives evaluated and the reasonable range of feasible alternatives evaluated in the EIR, including the siting of the intake location to avoid and minimize potential impacts. The EIR fully evaluates impacts during construction and operation of all alternatives described in Chapter 3 on resources identified in this comment, including in Chapter 15, Agricultural Resources; Chapter 16, Recreation, and Chapter 17, Socioeconomics, regarding visitor serving businesses; Chapter 19, Cultural Resources, regarding historic resources; and Chapter 24, Noise and

Letter-Comment Number	Comment	Response
	the overall quality of the delta environment, including, but not limited to, agriculture, wildlife habitat, and recreational activities. As is the case with the 2009 Delta Reform Act, which contains substantially similar findings and declarations, far from "preserv[ing]," "protect[ing]," "maintain[ing]," much less "enhancing" the Delta's "irreplaceable resources" and the "overall quality of the delta environment," the DEIR confirms that the Project's construction and operation will substantially impair, and in many cases permanently destroy, those resources and qualities, in direct contravention of the 1992 DPA. C. Water Code Section 12980 et seq. Similar to the 1992 DPA, in Water Code section 12981, subdivisions (a) and (b), respectively, the Legislature made the following findings and declarations: [T]he delta is endowed with many invaluable and unique resources and that these resources are of major statewide significance. [T]he delta's uniqueness is particularly characterized by its hundreds of miles of meandering waterways and the many islands adjacent thereto; that, in order to preserve the delta's invaluable resources, which include highly productive agriculture, recreational assets, fisheries, and wildlife environment, the physical characteristics of the delta should be preserved essentially in their present form;…	Vibration.

Letter-Comment Number	Comment	Response
	Implementation of the DCP would violate these provisions because far from "preserv[ing]" "the physical characteristics of the delta . . . In their present form; . . .," the construction and operation of the Project's massive tunnels, forebays, intakes, shafts and other facilities constitute an obvious and destructive alteration of the present physical characteristics of the Delta in direct contravention of these findings and declarations. D. The Watershed Protection Act and Water Code section 1215 et seq. Water Code section 11460 of the Watershed Protection Act provides: In the construction and operation by the department of any project under the provisions of this part a watershed or area wherein water originates, or an area immediately adjacent thereto which can conveniently be supplied with water therefrom, shall not be deprived by the department directly or indirectly of the prior right to all of the water reasonably required to adequately supply the beneficial needs of the watershed, area, or any of the inhabitants or property owners therein. Water Code section 1216 similarly provides: A protected area shall not be deprived directly or indirectly of the prior right to all the water reasonably required to adequately supply the beneficial needs of the protected area, or any of the inhabitants or property owners therein, by a water supplier exporting or intending to export water for use outside a protected area pursuant to applications to	

Letter-Comment Number	Comment	Response
	appropriate surface water filed, or groundwater appropriations initiated, after January 1, 1985, that are not subject to Section 11460. The DCP as proposed would violate these mandates in many respects, and the DEIR does not establish that the construction or operation of the Project will not deprive the Delta or other areas of origin of their prior right to all of the water reasonably required to adequately supply their beneficial needs. A transparent analysis would have revealed that there are not only many instances where the construction or operation of the Project will indeed result in such deprivations, but, as noted above with respect to the 1959 DPA, it is in fact one of the objectives of the Project to bring about such deprivations to the Delta area in events such as extended droughts, individual or widespread levee failures, and sea level rise. One of the express objectives and purposes of the Project is to allow the SWP and CVP in such events to divert fresh water from the Sacramento River directly into the tunnels, thereby directly depriving the Delta area of its prior right to have that water flow into and through the Delta to meet its beneficial needs. Apart from such events, the Project's projected adverse impacts to surface and groundwater quality and quantity within the Delta and other areas of origin during the construction and operation of the Project likewise result in direct and/or indirect deprivations of those areas' prior rights to that water and to the unimpaired quality of that water in violation of Water Code section 11460 and/or 1216.	

Letter-Comment Number	Comment	Response
	E. The Delta Reform Act of 2009 The 2009 Delta Reform Act provides comprehensive protections for the Delta. The DCP as proposed violates the DRA in numerous substantial respects. The Delta Reform Act defines the coequal goals of Delta water management as "the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." [Footnote 237: Water Code, section 85054.] The DCP as proposed directly conflicts with the Delta Reform Act's co-equal goal of protecting, restoring, and enhancing the Delta ecosystem. The Project simply relocates impacts from the export of Delta water to a new area of the Delta and includes no protective, restoration or enhancement measures in excess of mitigation required to reduce project impacts pursuant to CEQA and other laws, and, as described herein, even those measures are themselves legally and practically deficient. The DCP also conflicts directly with the Delta Reform Act's requirement that Delta water be managed in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta. [Footnote 238: Water Code, section 85054.] The Project would instead cripple the Delta's sustainable and wildlife-friendly agricultural operations, destroy special status species Delta habitat in and out of the water, and plague the Project area,	

Letter-Comment Number	Comment	Response
	including the historic Delta communities and cultural landscape with overwhelming and lengthy construction activity. Project operations would impair currently reliable local surface and groundwater supplies and, eventually, the Delta communities that depend on those supplies. The DEIR also fails to actually analyze consistency of the Project with the State Plan of Flood Control as required by the 2009 Delta Reform Act, which requires that Project studies include "the potential effects on Sacramento River and San Joaquin River flood management." [Footnote 239: Water Code, section 85320, subd. (b)(2)€.] Contrary to this requirement, the DEIR examines flood protection on the Sacramento River between the American confluence and Sutter Slough, but nowhere else. Moreover, while the DEIR states on p. 7-27: "the preference and consistency with regulatory requirements for SPFC levees and CVFPB's jurisdiction would be followed, including the consistency with the CVFPP," there is no analysis to demonstrate how such regulatory requirements would be implemented, and what the implications for Project design or associated environmental effects would be. The DEIR fails to adequately analyze the Project's likely detrimental effects on Delta levees and flood control infrastructure and operations, as discussed in section IX.a.[comments 42-43]. The Project does not use best available science as defined by the Delta Reform Act's implementing regulations. [Footnote 240: See Cal. Code Regs., tit. 23, section 5001, subd. (f), Appendix 1A; see also Wat. Code, sections 85302, subd. (g), 85308.] For example, the Project's analysis uses outdated,	

Letter-Comment Number	Comment	Response
	extreme, completely improbable assumptions about sea level rise (SLR) and fails to account for the consequences of SLR (including levee overtopping) in its analysis of project impacts. It also relies on incorrect and irrelevant analyses of residence time, thus reaching unsupported conclusions about the Project's potential to increase harmful algal blooms and affect public health and water supply security in the Delta. In the Delta Reform Act, the Legislature declared State policy, in pertinent part, as follows: "The policy of the State of California is to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency . . . ." [Footnote 241: Water Code, section 85021.] Despite this policy and the DRA regulations that require such reduced reliance (Cal. Code Regs., tit. 23, section 5003), the Project does precisely the opposite. The DCP directly conflicts with the policy of reduced reliance because it would export growth inducing water supplies from the Delta that increase— rather than decrease— reliance on the Delta to meet present and future water supply needs outside the Delta. In addition to increasing reliance on Delta water, the Project will also divert funding from projects that would promote reduced reliance on Delta water. The participating water contractor agencies will incur additional financial obligations through their SWP contract charges, and possibly also bond debt, to finance Project construction. Incurring this increased public debt will impair the ability of water contractor agencies to secure funds for other water projects that improve regional water self-reliance without relying on the Delta. The DEIR fails to	

Letter-Comment Number	Comment	Response
	adequately disclose and analyze the full nature and extent to which the Project will directly and indirectly increase reliance upon the Delta, nor does it identify and analyze measures to mitigate or avoid that increase in reliance upon the Delta. Under Delta Reform Act regulations, no project implemented in the Delta may impair future potential for implementation of habitat restorations. [Footnote 242: Cal. Code Regs., tit. 23, section 5007.] Operation of the Project, if implemented, would significantly degrade water quality, thereby impairing or precluding development of other habitat restoration projects. “Water management facilities, ecosystem restoration, and flood management infrastructure must be sited to avoid or reduce conflicts with existing uses or those uses described or depicted in city and county general plans·for their jurisdictions or spheres of influence when feasible[.]" [Footnote 230: Cal. Code Regs., tit. 23, section 5011.] The siting of this Project will conflict with numerous uses in Sacramento County, by conversion of County-designated agricultural land and disruption of agricultural operations, adverse aesthetic (visual, noise) and access effects to established visitor serving businesses, historic resources local communities. DWR has not shown that it is infeasible to avoid these conflicts, by adopting a through Delta conveyance alternatives. For this and other reasons, the Project fails to avoid or reduce conflicts with existing uses.	

Letter-Comment Number	Comment	Response
523-73	XII. CONCLUSION It is well established that "the purpose of an EIR is not only to protect the environment but to demonstrate to the public that it is being protected." [Footnote 231: County of Inyo v. Yorty (1973) 32 Cal.App.3d 795,810.] As explained throughout these comments, the DEIR does not provide sufficient information, nor does it present information in a way that allows the public a meaningful opportunity to understand and comment on the Project's substantial adverse impacts. The DEIR has failed to demonstrate that the Delta's unique communities and important environmental resources will be protected from the significant impacts of constructing and operating the Project.	This information expresses opinions of the commenter based on comments provided in Letter 523. Individual comments from the attachment are addressed in these responses to the commenter's letter. DWR has prepared the EIR in compliance with CEQA. The EIR provides a complete and adequate disclosure of potential impacts and proposes mitigation measures where needed to reduce those impacts. DWR has reviewed all comments and will consider all comments in its decision-making process.
523-74	The residents and businesses of Sacramento County deserve to take an active part in evaluating such a monumental undertaking that is sure to have substantial and lasting effects on their lives. The DEIR, despite its volume, fails to provide meaningful information or to present information in a way that adequately informs the public of the DCP's many significant impacts. It is so "fundamentally and basically inadequate and conclusory in nature" that public comment is essentially meaningless. [Footnote 232: Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal. (1993) 6 Cal.4th 1112; 14 Cal. Code Regs,§ 15088.5(a); Mountain Lion Coalition v. Fish and Game Comm 'n (1989) 214 Cal.App.3d 1043.] The failure to provide sufficient information about the Project or credible evidence and objective analysis to support the DEIR's impact determinations has deprived the public of a meaningful opportunity to understand and comment on the project's substantial adverse impacts. Correcting these errors will require the addition of significant new information and, thus, the DEIR must be revised and recirculated for public review.	Please refer to Chapter 35, Public Involvement, regarding the outreach activities conducted to engage local agencies, landowners, and other interested parties throughout the EIR process. Please also refer to Chapter 35 and Common Response 2, Public Outreach Activities, regarding the outreach activities conducted throughout the EIR process to provide public information and encourage public participation and comment. The comment assertion that the Draft EIR fails to adequately present information to the public and decision-makers to evaluate the project is unfounded. As described in Chapter 4, Framework for the Environmental Analysis, the overall organization, and content of the resource-specific analyses in the EIR were developed to meet CEQA (Pub. Resources Code § 21000 et seq.) content requirements. The main resource chapters contain the information and analyses for the public and decision makers to conduct a meaningful review. The environmental analyses are presented in a clear, logical manner and are not conclusory in nature as the comment asserts. The EIR impact analysis is supported by substantial evidence using methodologies and appropriately scaled study areas as described in the Methods for Analysis sections of the respective resource chapter (i.e.,

Letter-Comment Number	Comment	Response
	[Footnote 233: 14 Cal. Code Regs, § 15088.5, subd. (a).]	Chapters 7 through 32 and are supported by numerous sources, as demonstrated in Chapter 37, References Cited). Additional details regarding methods and modeling results are provided in appendices in instances where it would be too voluminous to include in the main chapter. Please refer to Common Response 1, CEQA Process, General Approach to Analysis, and Other Environmental Review Issues, regarding the length and complexity of the EIR. The EIR fully evaluates potential impacts in Chapters 7 through 32 of the EIR. As discussed in Volume 2, Chapter 1, Introduction, of the Final EIR, recirculation is not required.
523-75	Attachment 1: Fish Facilities Technical Team Memorandum, July 2011.	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter.
523-76	Attachment 2: BDCP Phased construction Workshop Summary, Five Agency Proposal Agreement, October 2011.	The commenter provided this attachment for reference purposes in support of their comments. Those comments are addressed in these responses to the commenter's letter.