State of California
State Water Resources Control Board
DIVISION OF WATER RIGHTS
P.O. Box 2000, Sacramento, CA 95812-2000
Info: (916) 341-5300, FAX: (916) 341-5400, Web: http://www.waterboards.ca.gov/waterrights

PROTEST– PETITION

This form may also be used for objections

CA Water Fix Change Petition related to Water Right Permits 16478, 16479, 16481, and 16482 (Applications 5630, 14443, 14445A, and 17512, respectively) of the California Department of Water Resources for the State Water Project; and Water Right Permits 11315, 11316, 11967, 11968, 11969, 11971, 11973, 12364, 12721, 12722, and 12723 (Applications 13370, 13371, 5628, 15374, 15375, 16767, 17374, 17376, 5626, 9363, and 9364, respectively) of the U.S. Bureau of Reclamation for the Central Valley Project.

We, the County of San Joaquin, San Joaquin County Flood Control and Water Conservation District, and the Mokelumne River Water and Power Authority (collectively "County"), have carefully read the October 30, 2015 Notice of Petition for Change related to the California WaterFix Project.

Address, email address and phone number of protestant or authorized agent:

Kurtis C. Keller
Neumiller & Beardslee
Post Office Box 20
Stockton, CA 95201-3020
Telephone: (209) 948-8200
Facsimile: (209) 948-4910
Email: kkeller@neumiller.com

Protest based on ENVIRONMENTAL OR PUBLIC INTEREST CONSIDERATIONS:

- the proposed action will not be within the State Water Resources Control Board's jurisdiction ☐
- not best serve the public interest ☑
- be contrary to law ☑
- have an adverse environmental impact ☑

State facts which support the foregoing allegations:

See Attachment.

Under what conditions may this protest be disregarded and dismissed? (Conditions should be of a nature that the petitioner can address and may include mitigation measures.):

See Attachment.

Protest based on INJURY TO PRIOR RIGHTS:

To the best of my (our) information and belief the proposed change or transfer will result in injury as follows:

See Attachment.

Protestant claims a right to the use of water from the source from which petitioner is diverting, or proposes to divert, which right is based on (identify type of right protestant claims, such as permit, license, pre-1914 appropriative or riparian right):

_____

_____

List permit or license or statement of diversion and use numbers, which cover your use of water (if adjudicated right, list decree).

_____

_____

Where is your diversion point located?_ ¼ of ____ ¼ of Section , T ___, R____, ___ B&M

If new point of diversion is being requested, is your point of diversion downstream from petitioner's proposed point of diversion?

_____

_____

The extent of present and past use of water by protestant or his predecessors in interest is as follows:
a. Source
b. Approximate date first use made
c. Amount used (list units)
d. Diversion season
e. Purpose(s) of use

Under what conditions may this protest be disregarded and dismissed?

See Attachment.

All protests must be signed by the protestant or authorized representative:

Signed: Curtis C Keller Date: 1/5/16

All protests must be served on the petitioner. Provide the date served and method of service used:

Protest served on Petitioners via email on January 5, 2016.

DWR:
James.Mizell@water.ca.gov

Reclamation:
Amy.Aufdemberge@sol.doi.gov

COUNTY OF SAN JOAQUIN

KURTIS C. KELLER (SBN 287724)
THOMAS J. SHEPHARD, SR. (SBN 029047)
NEUMILLER & BEARDSLEE
A PROFESSIONAL CORPORATION
Post Office Box 20
Stockton, CA 95201-3020
Telephone: (209) 948-8200
Facsimile: (209) 948-4910

Attorneys for Protestants
COUNTY OF SAN JOAQUIN;
SAN JOAQUIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT;
and MOKELUMNE RIVER WATER AND POWER AUTHORITY

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the matter of DWR and USBR Petition for Change to Add Points of Diversion and Rediversion to Certain Water Rights for the California WaterFix Project	**PROTEST OF PETITION**

The County of San Joaquin, San Joaquin County Flood Control and Water Conservation District, and the Mokelumne River Water and Power Authority (collectively "County") herein Protest the above-named Petition Requesting Changes in Water Rights of the Department of Water Resources and U.S. Bureau of Reclamation for the California WaterFix Project and in support of this Protest respectfully allege and state as follows:

I. Introduction and overview of Protestants' interest in the Petition

Protestant COUNTY OF SAN JOAQUIN is a political subdivision of the State of California. The County is located at the northern end of the San Joaquin Valley encompassing an area which includes approximately 921,600 acres, much of which is used for agricultural purposes, with a current population of 710,731.[1] The County is bordered on the east by the Sierra Nevada foothills, and the western portion includes most of the Sacramento-San Joaquin Delta. The San Joaquin River flows south to north through the County, and the Mokelumne, Calaveras, and Stanislaus Rivers flow

[1] State Dept. of Fin., 2014.

east to west through the County and into the Delta. Nearly two-thirds of the San Joaquin-Sacramento Delta is within San Joaquin County.

Protestant SAN JOAQUIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT is a political subdivision of the State of California created by the California Legislature under the San Joaquin County Flood Control and Water Conservation District Act, chapter 46 of the statutes of 1956. The boundaries of the District include the entirety of San Joaquin County. Among the primary purposes of the District is the acquisition of water and water rights and to commence, intervene in, or defend any action or proceeding involving or affecting the ownership or use of waters or water rights within or without the district.[2] The District, with the County, has previously submitted Application 29657 to appropriate water from the American River for use within the County. The American River is listed in the Notice of Petition as a watercourse that could be affected by the Petition.[3]

Protestant MOKELUMNE RIVER WATER AND POWER AUTHORITY is a joint powers agency formed by the County of San Joaquin and the San Joaquin County Flood Control and Water Conservation District. Among its purposes is the acquisition of water and water rights and to finance projects for the benefit of its members. The Authority has previously submitted Application 29855 to appropriate water from the Mokelumne River for use within the County.

San Joaquin County is made up of various water interests, ranging from municipalities to large irrigation districts to smaller landowner districts. Surface water diversions by these interests represent both riparian and appropriative rights to the rivers flowing through the County and to the Sacramento-San Joaquin Delta.

The uses of water on Delta lands located within the County are primarily agricultural but also include municipal, recreational, and significant aquatic and habitat beneficial uses. Those beneficial uses are dependent upon the water supply in the Delta channels. Failure to enforce statutory and regulatory protections endangers the Delta water supply and beneficial uses.

---

[2] Wat. Code App., § 79-5(5).

[3] See Notice of Petition, posted October 30, 2015, http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/docs/cwfnotice_pet_hrg.pdf.

Outside of the Delta, the surface water currently available to county interests is not sufficient to meet all demands. Even with significant efforts and investments over the past several decades to develop additional surface water supplies, a significant portion of the County's water supply is met through groundwater extractions.

The County of San Joaquin overlies a groundwater basin that is designated by the State of California to be in a state of "critical overdraft" (Department of Water Resources' Bulletin 118-80). Since that original determination in 1980, the County and its local entities have responded by emphasizing projects which would alleviate the overdraft to the benefit of the groundwater basin. Approximately $700 million has been spent by the community on such projects, including the City of Stockton's Delta Water Supply, South San Joaquin Irrigation District's South County Water Supply Project, Stockton East Water District's water treatment plant expansion, and surface water transfers from Woodbridge Irrigation District to the Cities of Lodi and Stockton. Although progress has been made in alleviating conditions of overdraft, several areas within the County continue to deal with the impacts of depressed groundwater levels resulting from prolonged overdraft and now exacerbated by the present drought.

Protecting existing water rights held by County interests and developing the County's pending water rights are critical to the continued development of a reliable surface water supply and management of the underlying groundwater basin. In particular, the County has partnered with EBMUD in a Groundwater Recharge and Extraction Demonstration Project in eastern San Joaquin County to deliver additional water supplies in that depleted region. Such conjunctive use projects in the project will play an important role in successful groundwater basin management.

The County and County interests have made significant investments to benefit the basin. With the enactment of the Sustainable Groundwater Management Act in 2014, a critical step in the California Water Action Plan, great responsibility has been placed local interests and the County to continue those efforts. The significant and pervasive impacts caused by California WaterFix and the pending Petition will necessarily impact available surface water supplies, resulting in greater reliance on groundwater and impeding successful management of the basin.

The County is listed in the Notice of Petition as a county that could be affected by the Petition.[4] The County is strongly committed to protecting existing water rights held by county interests, ensuring the health and sustainable management of the underlying groundwater basins, and requiring that sufficient water of sufficient quality be available to support current and future beneficial uses in the Delta and the County.

The Protestants, collectively referred to hereinafter as the "County", protest the above-named Petition on the bases that (1) the Petition and proposed processing thereof is procedurally defective and contrary to law, (2) the proposed changes would not serve the public interests and are contrary to law, and (3) the proposed changes will result in significant adverse environmental impacts, injury to other legal uses of water, and will not best serve the public interest.

II. The Petition and proposed processing thereof is procedurally defective and contrary to law

A. Reliance on a draft environmental document will preclude the State Board from satisfying its obligation to make findings and order conditions to mitigate or avoid impacts

The Petitioners have only recently concluded its public comment period with respect to its Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement ("RDEIR/SDEIS") for the California WaterFix. Despite the well-documented extent of the environmental document, thousands of interests submitted significant and substantive comments to the RDEIR/SDEIS and analysis contained therein. The County submitted comments jointly with the Central Delta Water Agency and South Delta Water Agency; said comments to the RDEIR/SDEIS are attached hereto as Exhibit A. The County's previous comments to the draft BDCP, EIR/EIS, and Implementing Agreement are attached hereto as Exhibit B.

A final EIR/EIS must address the comments submitted and should result in further evaluations of the impacts and alternatives which were given either cursory or no evaluation in the RDEIR/SDEIS. Until the final environmental document is adopted, it is inappropriate and contrary

[4] See Notice of Petition, posted October 30, 2015, http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/docs/cwfnotice_pet_hrg.pdf.

to law for the State Water Resources Control Board ("State Board") to process the petition or conduct the currently-scheduled evidentiary hearing.

The Petition Notice proposes to conduct the evidentiary hearing in parts. Part I would evaluate the effects of the Petition on municipal, industrial, and agricultural uses of water and Part II would evaluate the effects of the Petition on fish, wildlife, and recreational uses. The Notice proposes to conduct Part I of the proceedings while considering only the RDEIR/SDEIS and that Part II would be scheduled for some time in the future after finalization of the environmental document.

As the Notice mentions, when considering the Petition, the State Board must make independent findings concerning significant environmental effects and is responsible for mitigating or avoiding significant environmental impacts within the State Board's jurisdiction.[5] Significant environmental impacts include, among others, impacts to water quality, hydrology, and agricultural and municipal uses and supplies. As matters to be considered during Part I of the hearing process, the State Board and hearing participants will not be afforded a final and complete analysis of the environmental effects or identification and mitigation of impacts. A meaningful evidentiary hearing, including any Part of it, cannot be conducted until CEQA and NEPA requirements have been satisfied and a final EIR/EIS is adopted. To do otherwise would prevent participants from the opportunity to address impacts and preclude the State Board from satisfying its obligation to make findings and order conditions to mitigate or avoid impacts.

B. The Petition does not satisfy the requirements of Water Code Section 1701.2 and the proposed process unlawfully shifts the burden of the "no injury" standard from Petitioners to Protestants

The Water Code requires that change petitions "include sufficient information to demonstrate a reasonable likelihood that the proposed change will not injure any other legal user of water."[6] It is clear from even a cursory review of the Petition and the RDEIR/SDEIS that the Petitioners have failed to provide such information. Merely stating that the Petition does not seek any modification

[5] Cal. Code Regs., tit.14, § 15096.

[6] Wat. Code § 1701.2(d).

to the obligations of D-1641—obligations which are routinely and regularly violated by the Petitioners—does not satisfy the Water Code requirements.

The Petitioners appear to expect that the State Board in this process will identify and mandate mitigation to prevent injury to other legal users. In turn, the State Board expects protestants and hearing participants to make arguments and bring evidence of injury. This unlawfully shifts the burden from Petitioners. The Water Code provides that prior to State Board approving a petition for change, "the ***petitioner shall establish***... that the change will not operate to the injury of any legal user of the water involved."[7] Similarly, State Board regulations provide that changes "may be allowed only upon petition and provided that ***the petitioner establishes*** that the proposed change(s) will neither in effect initiate a new right nor injure any other legal user of water."[8] The Petitioners clearly must bear the burden of establishing no injury and should not be allowed to defer the issue through the proposed process. If the current Petition is allowed, the State Board will sanction the Petitioners' circumvention of the petition process.

C. The proposed processing of the Petition is inconsistent with the Delta Reform Act's requirements

The 2009 Delta Reform Act (Water Code Section 85000 et seq.) requires that the State Board include "appropriate Delta flow criteria" in any order approving a change such as that sought by Petitioners.[9] Specifically, the flow criteria is to be informed by the 2010 Delta Flow Criteria Report also required by the 2009 Act and approved by the State Board in 2010.[10]

Contrary to Petitioners' assertion in the Petition,[11] the State Board cannot lawfully rely on the existing Bay-Delta Water Quality Control Plan and D-1641 in assessing protection of public trust resources and injury to beneficial uses including fish and wildlife. Specifically, the 2010 Delta Flow Criteria Report found that "[t]he best available science suggests that current flows are insufficient to

---

[7] Wat. Code § 1702 (emphasis added).

[8] Cal. Code Regs., tit.23, § 791(a) (emphasis added).

[9] Wat. Code § 85086(c)(2).

[10] Wat. Code § 85086(c)(1)-(2).

[11] Petition, at 11 (stating "Thus the WQCP and the water rights decisions stemming from implementation of the WQCP and earlier water quality plans, including D-1641, are protective of beneficial uses until replaced through the update process and constitute the standard for determining injury to those beneficial uses when considering this Petition").

protect public trust resources."[12] The RDEIR/SDEIS similarly admits that current flows and standards expected under the No Action Alternative will result in significant adverse impacts to fish and wildlife.[13] Thus it is clear that Petitioners' statement that the existing Bay-Delta Water Quality Control Plan and D-1641 are protective of beneficial uses until replaced through the update process is erroneous.[14] The Petition may not be approved absent the development of appropriate flow criteria, which is not satisfied by the fact that the "Petition does not seek any modification to the requirements of D-1641."[15]

The Petition Notice attempts to address the deficiency in the Petition by stating that any order approving the Petition "would include interim Delta flow criteria and other conditions" that will be revisited in subsequent phases of the Water Quality Control Plan update.[16] This similarly defers the State Board's statutory obligation and is contrary to law. The "appropriate Delta flow criteria" protective of beneficial uses and public trust resources cannot be developed in a vacuum. Just as the 2010 Delta Flow Criteria Report informs development of the flow criteria at issue here, the phases of the update process each include considerations necessary to that development.

The County takes this opportunity to remind the State Board that federal law specifically obligates Reclamation to update its New Melones Operating Plan to reduce reliance on New Melones Reservoir for meeting water quality and fishery flow objectives.[17] This obligation has not been met. Water right holder and interests on the Stanislaus River, including several County interests, have disproportionately borne the burden of Reclamation's obligations with respect to flow on the San Joaquin River. The State Board must ensure Reclamation obligations are met to prevent unlawful injury to other legal users and beneficial uses.

The State Board must complete its review and update of the Bay-Delta Water Quality Control Plan prior to approving the Petition. The use of current flow standards, D-1641, or interim

---

[12] 2010 Delta Flow Criteria Report, Exec. Summ., pp. 1-2.

[13] RDEIR/SDEIS, at ES-48(listing potential impact AQUA-NAA4: Effects of water operations on spawning and egg incubation habitat for covered fish species under the No Action Alternative as significant and unavoidable for winter-run Chinook salmon and green sturgeon).

[14] See Petition, at 11.

[15] See Petition, at 11.

[16] Notice, at 8.

[17] HR 2828 (PL 108-361), 118 Stat. 1688, § 103(d)(2)(D)(vii).

Delta flow criteria will not satisfy the State Board's statutory obligation to include Delta flow criteria protective of beneficial uses and public trust resources.

III. The proposed changes would not serve the public interests and are contrary to law

The Watershed Protection Act (Water Code §§ 11460 et seq.), the Delta Protection Act (Water Code §§ 12200 et seq.), the County of Origin protection (Water Code §§ 10500 et seq.), and protected area provisions (Water Code §§ 1215 et seq.) each include protections to which Petitioners' must adhere, and the State Board should include as conditions, in project operations.

A. The Petition is inconsistent with the Delta Protection Act

The Delta Protection Act of 1959 was enacted to ensure that water right holders within the legal Delta have an adequate supply of good quality water. The Act requires that the Petitioners coordinate to provide "salinity control and an adequate water supply for the users of water in the Sacramento-San Joaquin Delta."[18] Reclamation and DWR are required to release stored water to meet salinity requirements set by the State Board to ensure that Delta water users have access to water sufficient to "maintain and expand agriculture, industry, urban and recreational development in the Delta."[19] Further, no person, corporation or public or private agency should divert water from the Delta "to which the users within said Delta are entitled."[20] No water can be exported if needed to meet current in-Delta water demand, and exports are required to diminish if additional reasonable in-Delta demand develops in the future.[21]

The mandates in the Delta Protection Act are clear. Water may not be exported from the Delta where insufficient water quantity and quality exist to meet in-Delta demands. Through the proposed changes, Petitioners seek to maximize exports inconsistent with these Delta protections.

B. The Petition is inconsistent with the Watershed Protection Act

The Watershed Protection Act was enacted in 1933 as part of the Central Valley Project Act to ensure residents access to waters that originate within their watershed. The Act provides that in the operation of the project, "a watershed or area wherein water originates, or an area immediately

[18] Wat. Code § 12202.
[19] Wat. Code § 12201.
[20] Wat. Code § 12203.
[21] See Wat. Code § 12204.

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."[22] This mandate applies to both DWR and Reclamation in their operations of the State Water Project and the Central Valley Project, respectively.[23]

Petitioners' operations in the past have, and the proposed changes will continue to, deprive residents in the Delta watershed of an adequate water supply. This violation is most evident on the Stanislaus River, but also threatens reliable supplies in the County due to impacts on the Mokelumne, Calaveras, and elsewhere. Through the proposed changes, Petitioners seek to further deprive County residents an adequate water supply inconsistent with the Watershed Protection Act.

IV. The proposed changes will result in significant adverse environmental impacts, injury to other legal uses of water, and will not best serve the public interest

The Petition gives only cursory treatment to impacts to the environment, fish and wildlife, or other legal users. Despite the Petitioners' attempt to minimize the impacts by highlighting disputable "benefits," it is clear from the Petition and the RDEIR/SDEIS that there will be significant impacts and injury to beneficial uses.

A. The proposed changes will significantly impact Delta water quality

The glaringly significant water quality impacts associated with diverting up to 9,000 cfs of water that otherwise would have flowed into the Delta have been well-documented at each iteration of BDCP/California WaterFix development. The Water Board is reminded of the US EPA letter dated August 26, 2014 commenting on the BDCP draft EIS for BDCP. Therein the EPA stated, "...operating any of the proposed conveyance facilities which constitute Conservation Measure 1 (CM1) [tunnel conveyance] would contribute to increased and persistent violations of water quality standards in the Delta, set under the Clean Water Act, measured by electrical conductivity (EC) and chloride concentrations." Although there are some slight differences between the BDCP CM1 and the current California WaterFix Project, those differences in no way alter the impacts on EC and

[22] Wat. Code § 11460.
[23] Wat. Code § 11128.

chlorides in the Delta. Moreover, the California WaterFix Project does not, and cannot, mitigate these water quality impacts.

The RDEIR/SDEIS, in its analysis of the revised Alternative 4A—California WaterFix Project, admits that the Project would result in adverse, significant, unmitigated effects to water quality and damage to one or more beneficial uses within the Delta. The analysis considers the No Action Alternative and Existing Conditions, which contemplate the current Bay-Delta Water Quality Control Plan (containing EC objectives for the Delta to protect agricultural and fish and wildlife beneficial uses and chloride objectives to protect municipal and industrial water supply beneficial uses) and CALFED Drinking Water Program goals (regulating bromide, a significant precursor to brominated disinfection byproducts). The environmental document estimates that EC, chloride, mercury, and bromide concentrations would increase relative to the No Action Alternative and Existing Conditions for certain Delta locations.[24] The RDEIR/SDEIS predicts increased exceedances of numeric water quality standards, which suggests that California WaterFix would result in a loss or reduction of protection for municipal, agricultural, and aquatic life beneficial uses.

Specific to EC concentration in the Delta, California WaterFix would result in:

- A 17% increase in days out of compliance with the agricultural EC standard at Emmaton compared to Existing Conditions.[25] The EC objective at Emmaton is intended to protect agricultural beneficial uses, but also has ancillary benefits to aquatic life. Increasing noncompliance days would further contribute to existing EC water quality impairments in the western Delta, and degrade beneficial use protection for agricultural and aquatic life beneficial uses.
- A 13% increase in days out of compliance with the agricultural EC standard at Prisoner's Point compared to Existing Conditions.[26]
- Increased EC levels in Suisun Marsh, exacerbation of the existing EC water quality impairment, and degradation of aquatic life beneficial use protection (despite the

[24] See RDEIR/SDEIS, at 4.3.4-8 through 4.3.4-35 (regarding WQ-5 [bromide], WQ-7 [chloride], WQ-11 [EC], WQ-13 [mercury]).
[25] RDEIR/SDEIS, at 4.3.4-24, lines 25-27.
[26] RDEIR/SDEIS, at 4.3.4-26, lines 6-8.

attempt in the RDEIR/SDEIS to minimize modeling results for California WaterFix by comparing to modeling results for prior preferred Alternative 4). "The most substantial EC increase would occur in Montezuma Slough near Beldon Landing, with long-term average EC levels increasing by 1.1–5.3 mS/cm, depending on the month and operations scenario, at least doubling during some months the long-term average EC relative to Existing Conditions."[27]

Increased EC concentration, an indicator of increased salinity, also threatens groundwater in and around the Delta. The Eastern San Joaquin groundwater sub-basin underlying the County east of the Delta has historically suffered salinity intrusion from Delta. Impacts from the proposed changes threaten to thwart the ongoing effort of County stakeholders to sustainably manage the at-risk basin.

The RDEIR/SDEIS identifies increased EC concentration as a significant impact, but provides to mitigate for those quality impacts through "adaptive management."[28] As discussed below, Petitioners have repeatedly failed in meeting the existing Delta water quality standards. There is no reason to trust that Petitioners will manage the Project to meet existing or future standards without clear obligations and strict enforcement. Notices of non-compliance by the Petitioners have become routine even previous to the present drought. Developing appropriate conditions to protect Delta water quality will require completion of the Bay-Delta Water Quality Control Plan update to ensure sufficient protection of municipal, agricultural, and aquatic life beneficial uses.

B. The Petition does not address the current and ongoing failure by Petitioners to meet statutory and regulatory obligations regarding Delta water quality

In light of the injury and impact associated with the Petition and California WaterFix, and the proposed mitigation, it is important to recall what the Petitioners have not done with respect to their current statutory and regulatory obligations.

[27] RDEIR/SDEIS, at 4.3.4-27, lines 9-12, and App. B, Tab. EC-5.

[28] RDEIR/SDEIS, at ES-44.

Perhaps most prominent is Reclamation's failure to meet its more than twenty year old obligation stemming from the Central Valley Project Improvement Act (HR 429, PL 102-575), signed into law in 1992, to double anadromous fish populations. Reclamation, with DWR, meeting this mandate would go a long way to resolving the current problems in the estuary.

Similarly, Reclamation is delinquent in meeting its obligation under HR 2828 (PL 108-361) to develop and implement a "Plan to Meet Standards" whereby it would meet all of its water quality obligations as mandated by the State Board. Ten years after the required plan was supposed to have been implemented, Reclamation continues to fail to meet its permit obligations for water quality.

Recent history is resplendent with water quality standard and other fishery-related violations by Reclamation and DWR, with little to no enforcement of the obligations by the State Board. The closest the State Board has come to enforcing the Petitioners' permit obligations was the 2006 Cease and Desist Order process against Petitioners.[29] Despite the mandate to "obviate future" water quality violations, the Order has largely been ignored by the Petitioners. Currently, the Petitioners are in violation of the CDO by not producing a plan to meet southern Delta salinity standards within 180 days of January 1, 2013.[30] The deadline to meet southern Delta salinity standards has passed without compliance or enforcement.

Petitioners now seek to alter their operations, with the accompanying impacts, without first setting forth how they will meet the current obligations, much less the statutorily mandated—but as-yet undetermined—Delta flow criteria. As mentioned above, the Petitioners propose to mitigate for significant water quality impacts through "adaptive management" of operations. Petitioners have repeatedly failed to manage operations to meet obligations. They cannot be given a pass here. Prior to approving the Petition, the State Board must establish standards as required by law through the Bay-Delta Water Quality Control Plan update, require Petitioners to establish an operations plan to meet its obligations, and the State Board must enforce those obligations.

///

///

[29] See Order WR 2010-0002.

[30] See WR 2010-0002, pp. 21-22.

C. The proposed changes will significantly impacts fisheries and other aquatic beneficial uses.

As with water quality, the proposed change to divert water before it enters the Delta poses significant impacts to the already fragile fishery and aquatic resources in the Delta and upstream. It appears from information contained in the RDEIR/SDEIS that California WaterFix is likely to contribute to declining populations of Delta smelt, Longfin smelt, green sturgeon, and winter-run, spring-run, fall-run and late-fall run Chinook salmon. Although the environmental document concludes that some of these impacts are not significant with mitigation as opposed to the No Action Alternative, any impact should be strictly scrutinized.

For example, California WaterFix would result in:

- Significant decline in Longfin Smelt abundance due to effects of water operations.[31] Long-term and recent sharp declines in fish abundance have been cited by the lead federal agencies, their partners, and EPA as evidence of collapse in the Bay Delta ecosystem. Longfin smelt relative abundance is estimated to decline for all water year types under Scenario H3_ELT and almost all water year types under Scenario H4_ELT when compared to Existing Conditions.[32]
- Significant reduction in through-Delta survival of emigrating juvenile fall-run and late-fall run Chinook Salmon due to effects of water operations.[33] Petitioners' modeling predicts a 5.8% reduction in survival during all year types when compared to Existing Conditions.[34]
- Increased entrainment of juvenile Delta Smelt due to effects of water operations.[35] Petitioners' modeling predicts increased juvenile Delta smelt entrainment in below-normal, dry, and critical water years when compared to Existing Conditions.[36]

---

[31] See RDEIR/SDEIS, at 4.3.7-36 et seq. (evaluating Impact AQUA-22: Effects of Water Operations on Spawning, Egg Incubation, and Rearing Habitat for Longfin Smelt).

[32] RDEIR/SDEIS, at 4.3.7-39, Tab. 11-4A-8.

[33] See RDEIR/SDEIS, at 4.3.7-168 et seq. (evaluating Impact AQUA-78: Effects of Water Operations on Migration Conditions for Chinook Salmon (fall/late fall-run)).

[34] RDEIR/SDEIS, at 4.3.7-177, Tab. 11-4A-74.

[35] See RDEIR/SDEIS, at 4.3.7-21 et seq. (evaluating Impact AQUA-3: Effects of Water Operations on Entrainment of Delta Smelt).

[36] RDEIR/SDEIS, at 4.3.7-22, Fig. 11-4A-1.

These fishery impacts cannot be overlooked in the fragile Delta ecosystem. As the recent Biological Opinions have made clear, several anadromous fish species in the Delta are critically threatened. The proposed changes will apparently only exacerbate that condition.

D. In particular, the proposed changes threaten the health of Mokelumne River fisheries

The Delta Cross Channel (DCC) is located on the Sacramento River near Walnut Grove, California. The primary purpose of the DCC is to reroute large quantities of Sacramento River water out of its natural channel and into the Central and Eastern Delta for conveyance southward to the Projects' Delta export facilities. The DCC does this by connecting to Snodgrass Slough, which, along with Dead Horse Cut, connects to the North and South forks of the Mokelumne River; the rerouted Sacramento River water flows through the DCC to these natural channels toward the Petitioners' export facilities in the South Delta.

The North and South Forks of the Mokelumne River are also the key migratory pathway for adult and juvenile fall-run Chinook salmon and steelhead migrating to and from the lower Mokelumne River. DCC operations generally result in the Cross Channel gates being open during anadromous fish migration periods. This leads to two types of impacts to the lower Mokelumne River anadromous fishery: (a) increased straying of returning adult Mokelumne River fall-run Chinook salmon and steelhead because, in the fall, high volumes of Sacramento River water funneled through the DCC attract migrating adult Chinook salmon into the Sacramento River instead of the Mokelumne River; and (b) rerouting of out-migrating naturally produced juvenile anadromous fish from the Mokelumne River toward the South Delta and the Projects' export facilities, leading to increased mortality caused by migration delays which increase the exposure of the juvenile anadromous fish to predation and other diversions. Studies have demonstrated that juvenile salmonids entrained into the interior Delta via the DCC or Georgiana Slough have lower survival than along other migratory routes.[37]

///

[37] Perry, et al. (2010); Newman and Brandes (2010).

The operation of the DCC has long been identified as having a potential adverse impact on salmonid migration. For example, in 1989 the Mokelumne River Technical Advisory Committee identified the DCC as a significant factor contributing to straying of Mokelumne River salmonids. In addition, the Lower Mokelumne River Partnership, which includes representatives from California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and National Marine Fisheries Service, worked with Reclamation to develop a low-risk study plan looking at the effects of DCC closures on migrating salmon. Reclamation issued a Finding of No Significant Impacts (FONSI) on the study plan in 2012. Under the plan, Reclamation proposed closing the DCC for up to ten days during the first half of October over a five year study period to evaluate the effects of the closures on reducing Mokelumne River fall-run Chinook salmon straying. The proposal was "anticipated to have a beneficial effect on LMR adult fall-run Chinook salmon by reducing straying...."[38] This proposal was not a comprehensive solution to the fishery impacts caused by DCC operations, but it was a reasonable first step. Due to limitations related to Delta water quality standards, however, the planned study closures did not occur.

However, preliminary data indicates that when the DCC has periodically been closed in the fall, the stray rates for Mokelumne River salmonids are significantly reduced. In addition, as part of the State Board's Bay-Delta Plan update Notice of Preparation in 2012, USFWS, Reclamation, and CDFW submitted comments supporting continued evaluation of DCC closures to improve salmon returns to both the Sacramento and Mokelumne river systems.

While it is well settled that DCC operations adversely impact Mokelumne River fisheries, it is difficult to ascertain the additional impacts from DCC operations resulting from the Petition because no operations plan has been prepared by Petitioners. It is clear that with new points of diversion in the North Delta, Delta operations will fundamentally and significantly change. These changed operations could result in the DCC being open more than it has been historically, leading to increased impacts on the lower Mokelumne River anadromous fishery. These impacts have not been evaluated by the Petitioners.

[38] Reclamation FONSI Number 12-10-MP (2012), p. 3.

For example, the RDEIR/SDEIS lumps the Mokelumne River together with the San Joaquin River, and contains no analysis addressing the project's impacts specifically on the Mokelumne River fishery. The RDEIR/SDEIS must assess impacts specifically on the Mokelumne fishery, as the Mokelumne River contributes a very high percentage of non-Sacramento-origin salmonid return in the Central Valley and to the commercial and recreational ocean fishery. While the RDEIR/SDEIS recognizes the hazards and low survival of migratory fish passing through the central Delta, the document makes no attempt to assess the potentially significant environmental impacts of the revised DCC operations likely as a result of Alternative 4A.

There must be a full consideration by the State Board of (a) of how the SWP and CVP will operate if the requested Petition is approved; at this time that critical information is missing, as Petitioners have not provided an operations plan describing how the requested new North Delta points of diversion will be operated in conjunction with the existing South Delta points of diversions; (b) how Alternative 4A will change the operations of the DCC; and (c) how those changed operations will cause potentially significant environmental effects to the Mokelumne fisheries resources. This must be done in an adequate RDEIR/SDEIS to meet legal requirements under CEQA, and it must be conducted by the State Board in carrying out its public trust obligations in this proceeding. Finally, conditions must be included in any approval of the Petition to ensure full mitigation of impacts resulting from the proposed change, such as requiring DCC gate closures during critical anadromous fishery migration periods related to Mokelumne River populations.

V. Conclusion

Petitioners have not met their burden in the petition process. The proposed changes will clearly injure other legal users, have an adverse impact on the environment and fisheries, and will not best serve the public interest. The County strongly encourages the State Board to reject the Petition on the bases described herein, proceed in its update of the Bay-Delta Water Quality Control Plan, and enforce the statutory and regulatory obligations of the Projects.

///

///

Dated: January 5, 2016

NEUMILLER & BEARDSLEE
A PROFESSIONAL CORPORATION

By: _____
KURTIS C. KELLER
Attorney for County of San Joaquin; San Joaquin County Flood Control and Water Conservation District; and Mokelumne River Water and Power Authority

BOARD OF SUPERVISORS

44 NORTH SAN JOAQUIN STREET, SUITE 627
STOCKTON, CALIFORNIA 95202
TELEPHONE: 209/468-3113
FAX: 209/468-3694

MIMI DUZENSKI
Clerk of the Board

KATHERINE M. MILLER
Chair
Second District

CHUCK WINN
Vice Chair
Fourth District

CARLOS VILLAPUDUA
First District

VACANT
Third District

BOB ELLIOTT
Fifth District

October 27, 2015

By email to: BDCPComments@icfi.com

BDCP/WaterFix Comments,
P.O. Box 1919
Sacramento, CA 95812

San Joaquin County's Comments on
the BDCP/WaterFix Partially Revised Draft Environmental Impact Report
and Draft Environmental Impact Statement

Dear Ms. Enos:

The San Joaquin County Board of Supervisors hereby submits the County's comments on the BDCP/WaterFix Partially Revised Draft Environmental Impact Report and Draft Environmental Impact Statement. These comments are also submitted as joint comments with the Central Delta Water Agency and South Delta Water Agency. Additionally, San Joaquin County joins in any comments which may be submitted independently by the Central Delta Water Agency and the South Delta Water Agency. Additionally, San Joaquin County incorporates by reference its previously submitted comments of July 25, 2014.

With nearly two-thirds of the Delta located in San Joaquin County, we are deeply concerned about the protection of water quantity and quality available within the Delta. We are equally concerned with the negative effects the BDCP/WaterFix will have on the County's communities, land use, infrastructure, agriculture and economy. Further, the elimination of any role for local oversight of the operation of WaterFix is wholly unacceptable.

San Joaquin County strongly urges that the State fully consider the County's comments and fully address the concerns and issues outlined in the following pages.

Sincerely,

Katherine M. Miller, Chair
San Joaquin County Board of Supervisors

Attachment

c: San Joaquin County's State and Federal Delegation
San Joaquin County Board of Supervisors
Monica Nino, County Administrator, San Joaquin County
J. Mark Myles, County Counsel, San Joaquin County
Kris Balaji, Director, Public Works, San Joaquin County
Kerry Sullivan, Director, Community Development, San Joaquin County
Timothy Pelican, Agricultural Commissioner, San Joaquin County

BEFORE THE BOARD OF SUPERVISORS OF THE COUNTY OF SAN JOAQUIN
STATE OF CALIFORNIA

RESOLUTION

R-15-162

Resolution Affirming San Joaquin County's Opposition to the BDCP/WaterFix, Approving the County's Comments to the Revised Draft EIR and Revised Supplemental EIS, Authorizing the Submission of those Comments to the Appropriate State and Federal Agencies and Reaffirming San Joaquin County's Support for the Delta Counties Coalition Principles

---

WHEREAS, the Sacramento - San Joaquin Delta (hereinafter Delta) is a unique natural and geographic feature of the State of California, and is the largest estuary on the Pacific Coast of the United States encompassing an area of over 730,000 acres with islands and tracts of rich fertile soil surrounded by miles of sloughs and winding channels protected by levees; and

WHEREAS, the Delta is one of the most productive agricultural regions in the United States, with approximately 80% of the Delta classified as Prime Farmland, as contrasted with 20% for all of California, and Delta agriculture has an economic impact of roughly 9,700 jobs and $1.4 billion in economic output in the five Delta counties, but when value-added manufacturing such as wineries, canneries and dairies are included, has a total Statewide economic impact of approximately 25,000 jobs and $5.372 billion in economic output; and

WHEREAS, the islands and waterways of the Delta provide habitat for many species of plants and animals, including several listed as either threatened or endangered under State and Federal endangered species laws; and

WHEREAS, recreation in the Delta generates roughly 12 million visitor days of use and approximately $250 million in visitor spending each year, with Delta recreation and tourism supporting over 3,000 jobs in the five Delta counties; and

WHEREAS, the Delta is a critical infrastructure and transportation hub for the regional and State economy, with important east-west highway and rail facilities, major electrical transmission lines connecting California to the Pacific Northwest, and gasoline and aviation fuel pipelines crossing the Delta supplying large portions of Northern California and Nevada; and

WHEREAS, two-thirds of the legal Delta is located within San Joaquin County and the Delta comprises one-third of this County's total area, meaning that the health and vitality of the Delta is critically important to the economic health, culture and social fabric of San Joaquin County and its citizens; and

WHEREAS, the Delta is also the key conveyance point for California's two largest water projects, the Central Valley Project (CVP) and the State Water Project (SWP) with massive pumps in the Southern Delta near Tracy, California which transport water from the Delta primarily to farms in Central California and municipalities in Southern California; and

WHEREAS, because of the failure to complete the ultimate build-out of water supplies for the CVP and SWP, leaving the system approximately 5 million acre-feet short of water per year, coupled with oversubscription by the water contractors and the water system's State and Federal operators of the water that is available, this has resulted in degradation of both the quality and quantity of water in the Delta and harm to the ecology and economy of the Delta, and

WHEREAS, the water contractors and the State and Federal operators of the CVP and SWP have over the years sought to find ways to transport water directly from the Sacramento River to the pumps near Tracy in order to obtain a greater quantity and quality of water than they could pump out of the South Delta, which efforts would result in further degradation and destruction of the Delta and economic and social harm to the citizens of San Joaquin County, and

WHEREAS, those water interests proposed a Peripheral Canal which the voters voted down in 1982, but are now promoting a new twin-tunnels project which is capable of diverting huge quantities of fresh water directly from the Sacramento River to the Tracy pumps, but this time the proponents of the twin-tunnels project have attempted to hide their massive and incredibly expensive water project inside a so-called conservation plan known as the Bay Delta Conservation Plan (BDCP); and

WHEREAS, for the reasons set forth in the documents attached hereto and adopted herein as the County's comments to the BDCP/WaterFix Revised Draft Environmental Impact Report (RDEIR) - Supplemental Draft Environmental Impact Statement (SDEIS), the BDCP/WaterFix Draft RDEIR-SDEIS fails to meet the legal requirements for a valid EIR-EIS, and also fails to meet the co-equal goals of water supply reliability for the State and restoration of the health of the Bay-Delta ecosystem as required by the Delta Reform Act of 2009; and

WHEREAS, there are less expensive and more effective ways than the twin tunnels and the BDCP/WaterFix to address the legitimate water needs of the various water interests in the State of California without needlessly sacrificing the Delta and San Joaquin County, or pitting Northern California against Southern California and farmer against farmer;

NOW, THEREFORE, BE IT RESOLVED that this Board of Supervisors:

Does hereby reaffirm its opposition to any isolated water conveyance system in the Delta such as the twin-tunnels project, and further specifically opposes the BDCP; and

Does hereby approve and adopt the documents attached hereto as San Joaquin County's official comments to the BDCP/WaterFix Draft RDEIR and SDEIS; and

Does hereby authorize submission of these adopted comments to the appropriate State and Federal agencies, both as comments from San Joaquin County and as joint comments with the Central Delta Water Agency and the South Delta Water Agency: and

Does hereby join in any comments which will be filed by the Central Delta Water Agency and South Delta Water Agency, and further that County staff is authorized to supplement the County's comments between today and October 30, 2015, to the extent that the comments submitted by others or other information comes to light which in staff's discretion should be included in the County's comments; and

Does reaffirm the County's support for the principles adopted by the Delta Counties Coalition; and

Does hereby direct staff to take all necessary and appropriate actions to carry out the direction and intent of this Resolution.

PASSED AND ADOPTED 10/20/2015, by the following vote of the Board of Supervisors, to wit:

AYES: **Winn, Elliott, Villapudua**

NOES: **None**

ABSENT: **Miller**

ABSTAIN: **None**

ATTEST: MIMI DUZENSKI
Clerk of the Board of Supervisors
Of the County of San Joaquin,
State of California

By _____
~~Deputy~~ Clerk

KATHERINE M. MILLER
Chair of the Board
of Supervisors
State of California

(05/2015)

ROSSMANN
AND
MOORE
ATTORNEYS AT LAW
A LIMITED LIABILITY PARTNERSHIP

THE BAY-DELTA CONSERVATION PLAN/ CALIFORNIA WATER FIX PARTIALLY RECIRCULATED DRAFT EIR/ SUPPLEMENTAL DRAFT EIS

SUMMARY OF FOUNDATIONAL LEGAL ISSUES

REPORT ON JULY 2015 PUBLIC REVIEW DRAFTS

Roger B. Moore
Antonio Rossmann
Rossmann and Moore, LLP
2014 Shattuck Ave.
Berkeley, CA 94704

October 15, 2015

SYNOPSIS: THE RECIRCULATED/SUPPLEMENTAL EIR-EIS CONFIRMS THAT THE "CALIFORNIA WATER FIX" WOULD IMPOSE UNACCEPTABLE IMPACTS AND FAIL TO ADVANCE THE STATE'S FUTURE NEEDS

1. Rebranding BDCP as the "California Water Fix" fails to fix the central fallacy of the Delta tunnels project:: that this massive proposed system, which would greatly reduce the natural flow of water through the Delta, can meet the 2009 Delta Reform Act's protections, including the "co-equal" goals of protecting, enhancing and restoring the Delta ecosystem and providing reliable water.

2. Despite monumental cost and complexity, the Delta tunnels project creates no new water supply. Even as revised, it compounds reliance on water exports, to the detriment of Delta agriculture, fisheries, and wildlife, as well as communities and water users within and upstream of the Delta. The project would divert resources needed for investments in long-term water reliability, water quality, reuse, storage, drought and flood protection, and ecosystem improvements.

3. The project remains a triumph of project advocacy over sound science. Proposed revisions in the project were made only after the Environmental Protection Agency (EPA), the Delta Independent Science Board (Science Board), and other scientific reviewers undermined the notion that BDCP met the federal and state requirements for a "conservation" plan. EPA indicated that BDCP's massive conveyance system could negatively impact Delta water quality and may violate the Clean Water Act. The Science Board in 2014 compared the EIR-EIS's water analysis to "an orchestra playing music without a conductor and with the sheets of music sometimes shuffled." In its 2015 report on the Partially Recirculated Draft EIR-Supplemental Draft EIS (RDEIR-SDEIS), the Science Board reconfirmed that despite recent reshuffling, the project and its environmental review continue to flout major scientific criticisms.

4. The revised project relies on and compounds a deceptive, incomplete and piecemealed program assessment. It removes conservation measures and drastically reduces habitat restoration and species protection, consigning many major efforts to a vague parallel program, "Eco-Restore," and to poorly defined "environmental commitments." Yet the project also inconsistently relies upon many of these future efforts for mitigation of project harm. As revised, the project still lacks crucial details and complete study, which the proponent agencies seek to defer until after the twin tunnels are approved and built.

5. A Legislative Analyst's Office report underscored BDCP's fragile economic and fiscal footing, noting the likelihood of significant cost overruns and uncertain continued financial support from water contractors. As revised, the project further complicates BDCP's shaky economic foundations. It abandons efforts to obtain

long-term regulatory assurances of water deliveries, one of the cornerstones of its earlier economic assessment, and risks major costs being shifted to taxpayers.

6. The project continues to rely on phantom "paper" water, rather than actual supplies for generations to come, ensuring future conflicts over water rights. It unrealistically assumes that miracles of management and engineering can simultaneously improve Delta water quality, protect endangered species, and avoid major damage to Delta farms and communities.

7. The project continues to assign state and federal water contractors an excessive role in plan governance. As revised, it further consigns Delta counties to a marginal role, and misuses "adaptive management" as little more than a slogan to evade responsibility for the project's major risks.

8. The RDEIR-SDEIS still fails federal and state requirements for environmental review. It relies on a defective baseline for evaluation, fails to properly study direct and cumulative impacts, and lacks an adequate range of alternatives and meaningful mitigation measures. It improperly consigns mitigation to vague programmatic analysis, and improperly precludes site-specific assessment of conveyance infrastructure. It fails to fully address a host of new impacts from the revised project, such as large new areas of Reusable Tunnel Material (RTM) that could result in significant truck traffic. Rather than analyzing a reasonable range of project alternatives, the RDEIR-SDEIS focuses on multiple versions of tunnels. As confirmed by the Science Board, this review also fails to fairly test project performance in the context of climate change and other conditions affecting future conditions in the Delta.

9. With the RDEIR-SDEIS's addition of more than 8,000 new pages to an earlier 40,000 pages of poorly organized supporting documents, the project EIR-EIS is among the least user-friendly environmental reviews in history. It buries essential information in technical appendices, and fails to fully inform the reader about the project's environmental consequences.

TABLE OF CONTENTS

page

In June 2014, the San Joaquin County Board of Supervisors' EIR/EIS comments included a *Summary of Foundational Issues,* submitted also on behalf of Central Delta Water Agency and South Delta Water Agency (San Joaquin Agencies' 2014 Summary). This new summary prepared for the San Joaquin Agencies identifies foundational factual and legal issues in the July 2015 Bay Delta Conservation Plan/California Water Fix Partially Recirculated Revised Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS). Unless noted otherwise, comments in the 2014 summary remain relevant to review of the RDEIR/SDEIS.

I. REPACKAGING THE BDCP RDEIR/SDEIS AS THE "BDCP/CALIFORNIA WATER FIX" RDEIR/SDEIS CANNOT CURE THE DELTA TUNNELS PROJECT'S VIOLATION OF THE 2009 DELTA REFORM ACT.

The RDEIR/SDEIS tinkers with the mechanics of the proposed twin tunnel conveyance system under the guise of "refinements" to BDCP's Alternative 4 (RDEIR/SDEIS, ES-7). However, the project changes focus more on legal reclassification rather than engineering advancements or environmental protection. Despite being portrayed as a "response" to input from other agencies and members of the public, the new preferred alternative (Alternative 4A, or "project" in these comments) concededly still includes "all of the conveyance components" that principally prompted public and agency objections to BDCP (Alternative 4). (*Id.*)

The main "fix" in the new project effectively removes the "conservation plan" from the Bay Delta Conservation Plan. Alternative 4A abandons any pretense of qualifying as a habitat conservation plan (HCP) or natural community conservation plan (NCCP), or meeting the requirements for such plans under federal and state endangered species laws. (*Id.*, ES-7, 8; cf. Wat. Code, § 85053 (defining "Bay Delta Conservation Plan" or "BDCP" as a "multispecies conservation plan").

Put another way, faced with the historic opportunity to identify a project worthy of designation as a "conservation plan"—one capable of improving rather than worsening conditions for Delta counties and communities—the BDCP agencies have instead devised a project variation chiefly designed to lessen regulatory hurdles preceding approval. However repackaged and reclassified, this attempted "fix" leaves intact the core effort to rationalize an unsustainable, harmful and exceptionally costly conveyance system that would further reduce the natural flow of fresh water through the Sacramento-San Joaquin Delta. As with Alternative 4A, the redefined project's proposed conveyance is incompatible with the structure and specific requirements of the Delta Reform Act of 2009 (Wat. Code, §§ 85000, *et seq.*)

Adopted after years of attempted reforms failed to stop the precipitous decline of pelagic organisms and forestall major risks to communities and farms in

Delta counties, the Delta Reform Act arose out of the Legislature's recognition that "existing Delta policies are not sustainable," and that "[r]esolving the crisis requires fundamental reorganization of the state's management of Delta watershed resources." (Wat. Code, § 85001(a).) The intent to provide a "more reliable water supply for the state" cannot be separated from its context in the Delta Reform Act, in which the Legislature simultaneously sought to "provide for the sustainable management of the Sacramento-San Joaquin Delta ecosystem," to "protect and enhance the quality of water supply from the Delta", and to "establish a governance structure that will direct efforts across state agencies to develop a legally enforceable Delta Plan." (Wat. Code, §85001(c).)

The Legislature's recognition of the need to improve conditions in the Delta and protect its communities and natural resources, rather than cause their further deterioration and decline, is also evident in the Delta Reform Act's language addressing interpretation of its core provision—the "coequal goals" as "providing a more reliable water supply for California" and "protecting, restoring, and enhancing the Delta ecosystem." (Wat. Code, § 85054.) 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." (Wat. Code, § 85054.) Rather than favoring new water conveyance infrastructure over protection, restoration and enhancement of the Delta ecosystem, the Legislature identified in Water Code section 85020 the following objectives "inherent" in the coequal goals for management of the Delta:

(a) Manage the Delta's water and environmental resources and the water resources of the state over the long term.

(b) Protect and enhance the unique cultural, recreational, and agricultural values of the California Delta as an evolving place.

(c) Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.

(d) Promote statewide water conservation, water use efficiency, and sustainable water use.

(e) Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta.

(f) Improve the water conveyance system and expand statewide water storage.

(g) Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection.

(h) Establish a new governance structure with the authority, responsibility, accountability, scientific support, and adequate and secure funding to achieve these objectives.

Similarly, Water Code section 85022(c) provides the following context in delineating consistency of actions with the Delta Plan:

(1) The Delta is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced estuary and wetland ecosystem of hemispheric importance.

(2) The permanent protection of the Delta's natural and scenic resources is the paramount concern to present and future residents of the state and nation.

(3) To promote the public safety, health, and welfare, and to protect public and private property, wildlife, fisheries, and the natural environment, it is necessary to protect and enhance the ecosystem of the Delta and prevent its further deterioration and destruction.

(4) Existing developed uses, and future developments that are carefully planned and developed consistent with the policies of this division, are essential to the economic and social well-being of the people of this state and especially to persons living and working in the Delta.

Rather than enabling the BDCP agencies to favor new conveyance infrastructure and potential expansion of water exports over long-term protection of the Delta, the Delta Reform Act acknowledges a broader legal context that prevents the agency from reducing its decision to a parochial policy choice. Water Code section 85023 therefore clarifies that "[t]he longstanding constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the Delta." (See also *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419 (public trust doctrine); Cal. Const., art. X, § 2 (reasonable use doctrine); Wat. Code, §§ 12200-12205 (Delta Reform Act of 1959).)

Finally, the Delta Reform Act records the state's commitment to "*reduce reliance on the Delta in meeting California's future water supply needs* through investing in a statewide system of improved regional supplies, conservation, and water use efficiency." (Wat. Code, § 85021 (emphasis added).)

A. The Project RDEIR/SDEIS, By Necessitating Delta Flow Reductions, Defeats the "Co-Equal" Goal of Protecting, Enhancing and Restoring the Delta Ecosystem

Among other subjects, the San Joaquin Agencies' 2014 Summary pointed out that BDCP's commitment to conveyance infrastructure expected to *increase* exports out of the Delta beyond already-unsustainable levels cannot possibly qualify as a "conservation measure" in a HCP or NCCP, despite BDCP's convoluted efforts to designate it as CM-1 (*Id.*, pp.18-20.)

The revised project would dispense with the need for that single legal fiction, but cannot escape overwhelming evidence that implementing the proposed conveyance in either variation would violate the Delta Reform Act's "coequal"

commitment to protect, enhance and restore the Delta ecosystem, and abrogate its historic commitment to protect and enhance the "unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." (Wat. Code, § 85054.) The following sources highlight the role and requirements of Delta flow and their crucial relationship to the proposed tunnel system:

- The State Water Resources Control Board has long since established that Delta outflows and inflows are already insufficient to help listed species recover, even without the huge quantities of additional water the project would take out of the Delta. The best available science suggests that "current flows are insufficient to protect public trust resources" served by the Delta, including protected fisheries and their habitats and a host of other beneficial uses. (State Board, *2010 Delta Flow Criteria Report*, pp. 2- 5.)

- In March 2014, the Pacific Fishery Management Council submitted comments concluding that the BDCP will "negatively impact essential fish habitat" for Council-managed species, including all varieties of Chinook salmon, and noted it is "highly concerned" that the project's water withdrawals will unreasonably constrain the flow of fresh water through the Delta.

- In February 2014, the California Advisory Committee on Salmon and Steelhead Trout (Advisory Committee) submitted its required recommendations to the Department of Fish and Wildlife (DFW) regarding the BDCP under Fish and Game Code section 6920. Concluding that the BDCP "promotes the unproven scientific hypothesis that habitat restoration can substitute for flow," the Advisory Committee recommended that DFW deny an incidental take permit (ITP) for the BDCP project (Alternative 4) as a Natural Communities Conservation Plan (NCCP). The Advisory Committee also concluded that the BDCP "does not meet the requirements of Fish and Game Code section 2820 for an NCCP and cannot legally be approved because it will contribute to the further decline of Sacramento River Winter Run and Spring Run Chinook Salmon." (*Id.*, p. 1.).

- As the Advisory Committee pointed out, the effects analysis in BDCP Chapter 5 concedes that project operation using CM-1's proposed conveyance will *reduce* winter run and spring Chinook salmon smolt survival. (*Id.*) Under these circumstances, the BDCP is incapable of meeting key requirements of the NCCP Act or CESA. (*Id.*, p. 4; see, e.g., Fish & Game Code, §§ 2081(c)(lack of contribution to recovery, continued jeopardy), 2081(b)(2)(c); 220(e).)

- EPA's August 26, 2014 letter addressing BDCP and its environmental review (page 2) underscored major environmental risks from BDCP, and emphasized "*the need for water availability and greater freshwater flow through the Delta.*" Similarly, the State Water Resources Control Board's July 29, 2014 BDCP and EIR/EIS comments

(page 12) noted that the justification for this limited range of Delta outflow scenarios is not clear, given that significant information supports the need for more Delta outflow for the protection of aquatic resources, and the substantial uncertainty that other conservation measures will be effective in reducing the need for Delta outflow. *For this reason a broader range of Delta outflows should be considered for the preferred project.*" Other commenters, last year and in previous reviews, have expressed similar concerns after reviewing relevant scientific research. (See, e.g., United States Army Corps of Engineers, comment letter, July 16, 2014 (impacts to United States waters); Comment letter of Environmental Water Caucus, June 11, 2014 (scientific analysis of BDCP and Delta flow issues); National Marine Fisheries Service, *Progress Assessment and Remaining Issues Regarding the Administrative Draft BDCP Document*, April 4, 2013)(BDCP impacts on Delta flows).

- The RDEIR/SDEIS indicates that the revised project, like BDCP earlier, would fail to improve Delta flows, increase average exports., and risk further deterioration of flows, making them worse during critical time periods. (See., e.g., RDEIR/ SDEIS, 2015, section 4.3.1, Figures 4.3.1-15, -16, -18, -19, -20, and -21; Figures 4.3.2-7 and 4.3.2-8; Appendix B, tables B7-28 to B7-34; pp. B-357 to B-370.)

Concerns remain, detailed in specific comments, about whether the RDEIR/SDEIS has fully accounted for the project's adverse impacts on flows through the Delta. Even without that more refined analysis, however, impacts acknowledged in the RDEIR/SDEIS still show that that the proposed project, which would worsen rather than improve flows through the Delta, remains on a collision course with Delta Reform Act's "coequal" provisions designed to protect the Delta.

Reviewed in context, the revised project would turn BDCP, in both the "Bay-Delta" and "conservation plan" aspects, into a complete oxymoron, incapable of either protecting the Bay-Delta or legally qualifying as a "conservation plan." The RDEIR/SDEIS reclassifies BDCP's non-conveyance conservation measures, either as segmented components of Eco-Restore or as similarly vague "environmental commitments." However, none of these elliptical "commitments" change the twin tunnel project's central and continuing reality: building new infrastructure risking further reductions of flows through the Delta is fundamentally inconsistent with both the well-documented needs of the Delta ecosystem and fulfillment of the State's commitment to ensure its protection, restoration and enhancement.

B. The Project RDEIR/SDEIS, By Reliance on Unsustainable "Paper Water" Deliveries, Fails to Protect the Co-Equal Goal of Improving Reliability.

Having undermined one of the two "coequal goals" in its disregard of its Delta protection requirements, the revised project also lacks credibility in advancing

the second goal of "a more reliable water supply for California." (Wat. Code, §85054.) Commenting on the EIR/EIS, San Joaquin County and its water agencies took issue with BDCP's reliance on "paper water" assumptions in its delineation of project objectives. (*Op. cit.* at pp. 19-20.) The RDEIR/SDEIS fails to address this flaw. The revised draft confirms the BDCP agencies' refusal to conduct further modeling testing the reality of its water supply assumptions identified below. This refusal is particularly remarkable, considering the draft's heavy reliance on now-outmoded operational assumptions and the proliferation of recent research on drought and climate's consequences for water supply, and the implications of new legal mandates not yet existing at the time of the previous draft--notably, enactment in 2014 of the transformative Sustainable Groundwater Management Act (SB 1168, ch. 346; AB 1739, ch. 347; SB 1319, ch. 348), with major supply consequences for the Delta region.

Ignoring the need for a disciplined account of the project's water supply consequences, the RDEIR/SDEIS reflects the BDCP agencies' unjustified confidence in the project's contribution to reliable deliveries. (See, e.g., section 4.3 and Appendix 5A.) The Water Fix statement of project objectives and project continues to rely upon a fictitious and unattainable ambition to "restore and protect" the SWP and CVP's nonexistent ability to deliver "up to full contract amounts...." (RDEIR/SDEIS, p. 1-8.) The revised/supplemental draft actually exposes the fallacy of this vaunted rationale, by reducing it to impotency with "sweet nothing" qualifiers: (1) "when hydrologic conditions result in the availability of sufficient water"; and (2) "consistent with the requirements of state and federal law and the terms and conditions of water delivery contracts and other existing applicable agreements." (*Id.*)

In contrast to the unqualified statement linking the project to delivery of "full contract" amounts, these tautological qualifiers lack in critical details. First, they fail to disclose that the SWP and CVP cannot capably or consistently deliver these contractual amounts, even under relatively favorable hydrologic conditions. Second, they fail to mention or meaningfully address problems of oversubscription and potentially conflicting claims on supply affecting the state and the Delta region in particular. (See, e.g., T. Grantham and J. Viers, *100 years of California's water rights system: patterns, trends and uncertainty,* 9 ENVIRON. RES. LETT. 084012 (2014); available at https://watershed.ucdavis.edu/files/biblio/WaterRights_UCDavis_study.pdf.) Lastly, the RDEIR/SDEIS, like its predecessor, lacks substantive analysis of potential conflicts between downstream users seeking deliveries of "full" contract amounts and allocations to instream uses and senior water rights holders.

The project cannot credibly base its water supply contributions on "paper water" contract amounts exceeding reliable deliveries. (See, e.g., *Planning and Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 912 (criticizing the resulting "aura of unreality"); *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 432 ("speculative sources and

unrealistic allocations are insufficient bases for decision-making under CEQA").) Thus, neither the project's underlying plan nor the EIR/EIS analyze the expectations stemming from overreliance on water contract amounts (either permanent or "interruptible" allocations), or the environmental consequences of furthering that expectation. Overreaching assumptions from Central Valley Project contracts were recently rejected in *San Luis & Delta-Mendota Water Authority v. Jewell*, (9th Cir. 2014) 747 F.3d 581, cert. denied (2015) 135 S. Ct. 948, 950 (*San Luis v. Jewell*); this ruling vindicated the reliance of the U.S. Fish and Wildlife Service (USFWS) and Bureau of Reclamation (BOR) on the 2008 biological opinion (2008 BiOp) to which the Central Valley Project contracts must conform. (*Id.* at 640, fn. 45.)

II. REPACKAGING BDCP RDEIR/SDEIS AS THE "BDCP/CALIFORNIA WATER FIX" RDEIR/SDEIS CANNOT CURE THE DELTA TUNNELS PROJECT'S SCIENTIFIC AND INSTITUTIONAL DEFICIENCIES.

A. In Derogation of the Criticisms of Public Agencies and Independent Scientific Reviewers, the Project RDEIR/SDEIS Lacks Support in the Best Available Science.

Anchoring the project in the "best available science" remains essential to ensure the project's adherence to multiple legal requirements, including laws protecting listed species and water quality. (See, e.g., H. Doremus, *The Purposes, Effects and Future of the Endangered Species Act's Best Available Science Mandate* (2004)34 ENVTL. LAW 397; J.B. Ruhl, *Ecosystem Services and the Clean Water Act: Strategies for Fitting New Science into Old Law* (2010) 40 ENVTL. LAW 1481.)

In the RDEIR/SDEIS, the BDCP agencies applaud themselves for consistently adhering to the "best available science." (Appendix G, p. G-4.) Elevating this promotional statement to surreal extremes, the revised draft claims the BDCP agencies have developed the project on this basis "since 2006" and have undertaken "an unprecedented commitment to public access and government transparency." (*Id.*)

In at least four respects, the project and its review plainly fail to honor the BDCP agencies' self-professed regard for the best available science. First, the RDEIR/SDEIS is conspicuously lacking in scientific analysis supporting its "best available science" claims. Appendix G mistakenly focuses on the high number of documents and meetings, while failing to reference and confront the torrents of critical scientific reviews of the project and its BDCP variations between 2006 and the present.

Second, scientific criticisms since 2006 belie the RDEIR/SDEIS's benign claims. Evidence of the Delta tunnels project's disconnect with scientific reality in addressing flows through the Delta and other key environmental issues have come

from numerous commenters, and reports of National Research Council, the EPA, NMFS, USFWS, and the State Board, among others Last year, EPA indicated that BDCP's massive proposed conveyance system could negatively impact Delta water quality and may violate the Clean Water Act. In 2014 and 2015 reports respectively addressing the EIR/EIS and RDEIR/SDEIS, addressed more thoroughly in section III, *infra*, the Science Board identified many scientific deficiencies in the project review. The 2015 report, which finds the deficiencies severe enough to undercut the review's usefulness for decision-making, confirms that the current project and its environmental review continue to flout major scientific criticisms.

Third, the project review fails to match the RDEIR/SDEIS's hyperbolic claim of unprecedented public access and transparency. While providing extensive access to agency and consultant-prepared documents, the BDCP agencies excluded critical public comments during key periods of review. During the comment period on the BDCP EIR/EIS last year, the BDCP website's "correspondence" section denied that access, offering the dubious premise that allowing it would not "maintain the integrity" of the public review period. The RDEIR/SDEIS, which acknowledges changing the project in response to "numerous comments" on the EIR/EIS (ES-2), fails to make these comments available or provide even draft responses.

Finally, the RDEIR/SDEIS fails to apply the detailed regulatory standards for adherence to the "best available science" in the context of BDCP review. In either the Alternative 4 or Alternative 4A variations, the project constitutes a "covered action" under Water Code 85057.5 for purposes of determining consistency with Delta Plan, whose prerequisites include use of a "best of available science" standard. (Wat. Code, § 85302(g).) The Delta Stewardship Council has adopted a definition and guidelines to clarify the steps needed to adhere to this standard and the relevant criteria, including relevance, inclusiveness, objectivity, transparency, timeliness, and peer review. (23 Cal. Code Regs., § 5001(f), appx. 1A.) Instead of applying these regulatory standards, the RDEIR/SDEIS uses "best available science" as if it were a marketing term, rationalizing a review that has often lacked transparency and has thus far failed to adhere to the best available science.

B. The Project RDEIR/SDEIS Drastically Reduces its Commitment to Conservation, while Compounding Reliance on Segmented Program Assessment.

In the RDEIR-DSEIS's descriptions of the BDCP agencies' new "preferred" project (Alternative 4A), the project's first and foremost objective is to construct and operate a new conveyance system for the "movement of water" to exporters south of the Delta. (See, e.g., ES-6, 1-7.) The new "preferred" alternative (4A) drastically reduces the project's conservation commitments and is short on content that would even minimally preserve, much less enhance or restore, the Delta ecosystem. As just one illustration, moving to Alternative 4A shrinks the project's commitment to "tidal

wetlands restoration would shrink from 65,000 acres (Alternative 4) to "up to 59" acres (ES-17; 4.1-15 (i.e., up to 59, not 59,000).) Even without considering the mitigation and financing problems addressed in specific comments below, the new project would, by the RDEIR-DEIS's concession, produce more than fifty unmitigated significant environmental impacts, most of whose impacts would be heavily concentrated within Delta counties. (ES 40, Table ES-9.)

Adherence to laws protecting species and communities, and environmental review requirements under NEPA and CEQA, first requires complete and accurate disclosure of the entire project under review, and avoidance of segmented analysis. (See, e.g., *Great Basin Mine Watch v. Hankins* (9th Cir. 2006) 456 F.3d 955, 969; 40 C.F.R. 1508.25 (NEPA); *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 654; CEQA Guidelines, § 15124.) Had the BDCP agencies sought to candidly pursue priority for additional exports over the Delta ecosystem and its farms and communities, they might at minimum have acknowledged this would require legal changes and sought legislative and voter approval. The RDEIR/SDEIS follows a more convoluted path, adding new layers of unlawful segmentation and inconsistent description to an already disjointed project assessment. For example:

- The RDEIR/SDEIS indicates that Alternative 4A transforms some of BDCP's remaining conservation provisions—CM 3, 4, 6-12, 15, 16--from "conservation measures" (a term that retains legal accountability under HCP and NCCP laws) to "environmental commitments," a more ambiguous term lacking commensurate accountability.

- The RDEIR/SDEIS refuses to analyze these "environmental commitments" with anything more than an opaque program overview, and concedes that "[s]pecific locations for implementing many of the activities associated with these commitments have not been identified at this time." (RDEIR/SDEIS, 4.1-15.) Whether and how these measures would be implemented and paid for, and whether some may produce conflicts or adverse results in Delta counties, remains unknown.

- The RDEIR/SDEIS adds further confusion to the project's murky relationship to conservation. It concedes, although vaguely, that Alternative 4A consigns much of what had been project conservation measures to EcoRestore and other "separate projects and programs," including pending activities lacking project-level accountability that are associated with 2008 and 2009 biological opinions and the California Water Action Plan. (RDEIR/SDEIS, 4.1-15.) However, it inconsistently describes these measures, insisting both that they are "separate from, and independent of the project," yet also part of a broader "BDCP conservation strategy" that will continue to be pursued. (*Id.*)

- The RDEIR/SDEIS fails to disclose the extent of Eco-Restore commitments that are already slated for implementation. As confirmed in a July 2015 meeting at

Metropolitan Water District, only a small portion of EcoRestore whose funding remains uncertain extends beyond existing obligations.

- The RDEIR/SDEIS fails to disclose the extent of the project's interrelationship with other actions, including review of coordinated operation of the state and federal water projects, and the State Board's pending review of Delta water quality requirements.

C. The RDEIR/SDEIS and Revised Project Fail to Provide for Responsible Project Governance, Further Marginalizing Delta Counties and Communities and the Public Interest.

The San Joaquin Agencies' 2014 Summary (pages 2-9) identified major defects in the governance and implementation structure then proposed for BDCP/Alternative 4, focusing on relevant portions of the 2013 Public Review Draft BDCP (particularly chapters 6-8) and the draft Implementing Agreement released in May 2014. These defects included the following with respect to analysis of Alterative 4:

- BDCP and the Implementing Agreement generally created major gaps in accountability for project implementation, mitigation and financing.

- BDCP's governance structure would marginalize Delta counties and stakeholders, limiting them to service along with many others on an advisory Stakeholder Council, even as unnamed water contractor representatives were assigned decision-making authority as part of an "authorized entity group" (AEG).

- BDCP's approach to governance and implementation would weaken accountability over the state and federal water projects, hampering sound governance without even securing legislative approval, contract amendments, or approval by the California Water Commission.

- BDCP agencies failed to adopt the alternative governance proposal of the Delta Counties Coalition, which would have secured a voice for each Delta county on decision-making bodies with project-related oversight, implementation and approval authority.

In the RDEIR/SDEIS, the BDCP agencies have continued to ignore the Delta Counties' Coalition's recommendations, and all the deficiencies specified above remain relevant at least for Alternative 4. Daunting as these governance problems are, however, the revised project (Alternative 4A) creates an even more unsatisfactory and unaccountable condition. Incredibly, the RDEIR/SDEIS fails to establish that *any* specific governance provisions protecting Delta counties and stakeholders that apply to the revised project (Alternative 4A). Appendix D of the RDEIR/SDEIS, which

ostensibly provides all "substantive BDCP" revisions, sidesteps specific discussion of Delta county protections, and only cryptically suggests that "*most* of the revisions presented below would also be applicable" to Alternatives 4A, 2D and 5A. (Appendix D, 1-1.)

Revisions in BDCP chapters on governance and implementation fail to delineate, what if any, provisions listed apply to Alternative 4A, as do the RDEIR/SDEIS's descriptions of that alternative. (See, e.g., RDEIR/SDEIS Appendix D, at pp. 235-260; sections 2 (EIR/EIS revisions), 3 (conveyance facility modifications), and 4 (new alternatives).) Especially after years of critical commentary on plan governance issues, leaving such crucial needs unresolved undermines the RDEIR/SDEIS's ability to assure decision-makers and the public that impacts in the Delta will be addressed, avoided, and mitigated if the project was constructed and eventually operated.

As noted in the San Joaquin Agencies' 2014 Summary (page 2), the May 2014 draft IA lacked crucial details bearing directly upon BDCP's environmental consequences. Remarkably, however, the new RDEIR/SDEIS expressly declines to include new analysis of the draft Implementing Agreement as it pertains to Alternative 4. Instead, the RDEIR/SDEIS argues that it and other unspecified administrative agreements need not even be "referenced" within the environmental review because they "*would not change the impact analysis.*" (RDEIR/SDEIS, 3-1 (emphasis added).)

The RDEIR/SDEIS's suggestion that provisions related to governance and implementation are environmentally irrelevant fails on multiple levels. First, Delta counties and stakeholders, who will principally bear the project's adverse consequences, cannot view the absence of clear and effective governance so indifferently. Leaving this circumstance unresolved would compound the risk that those affected might be forced to look to other costly, timely and uncertain approaches to address project harm, such as litigation under the Tort Claims Act. (Gov. Code, §§ 815, *et seq.*)

Second, the argument is inconsistent within the RDEIR/SDEIS, which selectively relies on and even expands the disproportionate role of contractor representatives in another of BDCP's proposed governance institutions, the AEG. (See, e.g., RDEIR/SDEIS, Appendix D, 253-254.)

Lastly, this argument fails to heed the Science Board's warning in its 2015 review that the "exuberant display of optimism" in the current draft may have damaging environmental consequences, in part because crucial details remain lacking on such subjects as implementing and financing. (2015 Science Board Review, pp. 9-15.)

Due to this evasive discussion, the RDEIR/SDEIS appears to set forth one earlier version of the project (Alternative 4) with thoroughly inadequate governance provisions, and a current project (Alternative 4A), which is likely to be much worse because there are no governance provisions at all. This deficient governance cannot be cured by the RDEIR/SDEIS's mild assurance that "[a]n environmental permitting coordinator" will supposedly enforce the "environmental commitments" listed in Appendix 3B. (Appendix 3C, p. 3B-3.) Such vague statement about already-vague commitments cannot substitute for a well-planned system for addressing the project's major impacts on the local environment and communities, which may otherwise escape accountability. (See, e.g., Gov. Code, § 53091(e)(limiting role of zoning for certain projects).) Such impacts include: interruption and degradation of drinking and irrigation water supplies, interruption of access to farms and homes, damages to homes and other structures from subsidence induced by dewatering, and structural or other damages from excessive construction noises and vibrations, just to name a few.

The complete absence of any cohesive plan to address these localized impacts indicates not only a complete disregard for the burdens the project would put on local communities, but also is an abrogation of CEQA and NEPA's most basic mitigation requirements.

D. The Project RDEIR/SDEIS Promotes a Distorted Version of "Adaptive Management" to Evade Accountability for Major Risks.

Perhaps even more than its predecessor, the RDEIR/SDEIS attempts to finesse numerous instances of deferred analysis or deficient mitigation by asserting a commitment to a "robust program" of collaborative science, monitoring, or adaptive management. As detailed below in more specific comments, the Science Board has discredited in detail this stylized effort to use "adaptive management" as little more than an agency excuse to avoid timely and responsible assessment of impacts, alternatives, mitigation, governance and financing before commitment to the project becomes a *fait accompli*.

Having failed to make such a clearly defined adaptive management program an "integral" part of the project, the BDCP agencies also cannot qualify the project for consistency with the Delta Plan, since the Delta Reform Act expressly requires such an integration. The RDEIR/SDEIS's rhetorical use of "adaptive management," chiefly as an excuse for delaying and avoiding difficult long-term problems, is a poignant example of misuse of the term as identified both legal commentators and scientists. (See, e.g., E. Biber, *Adaptive Management and the Future of Environmental Law* (2013) 46 AKRON L.R. 933; J. Lund, et al., *Adaptive management means never having to say you're sorry*; available at http://californiawaterblog.com/2011/07/21/adaptive-management-means-never-having-to-say-you%E2%80%99re-sorry/.)

Indispensable elements of genuine "adaptive management" missing from the

project and review include reliable funding and monitoring, independence of data review from institutional tilting, and effective off-ramps. Nor can the BDCP agencies claim surprise about adaptive management's potential misuse in the Delta tunnels project. In 2011, the National Research Council reviewed the then-draft BDCP's use of science and adaptive management. (National Research Council, *A Review of the Use of Science and Adaptive Management in California's Draft Bay Delta Conservation Plan* (National Academy of Sciences, 2011), available at http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/cmnt081712/dfg/cdfgnationalresearchcouncil2011.pdf.)

The Council sharply criticized the draft. Among the problems noted:

• The draft failed to provide a quantitative assessment of "specific hydrological and biological consequences," including consequent changes in "tributary watersheds, aquifers, demands, risks of levee failure, and ecology of the BDCP plan area." (NRC *Review*, at p. 27.)

• The draft did not clearly analyze the feasibility of meeting the Bay-Delta's future demands, or the tradeoffs between the plan's co-equal goals (i.e., Delta ecosystem restoration, and a more reliable water supply for California). (*Id.*, p. 28.)

• The draft expressed concern that built-in requirements would compromise a key condition of adaptive management: that "opportunities for adjustments" remain available. (*Id.*, p. 34.)

The council also pointed to research showing than more than a hundred adaptive management efforts have failed due to institutional problems ranging from lack of funding to lack of leadership in implementation. It noted that the aims of adaptive management often conflict with "institutional and political preferences," such as the preference for known and certain outcomes. (*Id.* at p. , 4.)

E. The Project RDEIR/SDEIS Cannot Support a Finding that the California Water Fix is Unlikely to Jeopardize Protected Species or Adversely Modify their Critical Habitat.

The BDCP agencies have abandoned efforts to pursue approval of the project as a "conservation plan" due to inability, confirmed by public agency reviewers last year, to meet the demanding legal requirements for approval of an HCP or NCCP. However, the RDEIR/SDEIS fails to make clear that the project, even as revised, will be equally unable to secure an incidental take permit under section 7 of the Endangered Species Act, which prohibits federal agency actions that are likely to jeopardize the continued existence of any endangered species or that "result in the destruction or adverse modification of [critical] habitat of [listed] species" (16 U.S.C.

§ 1536 (a)(2)), or under the California Endangered Species Act (Fish & Game Code, § 2081(b).) Nor would the project comply with Water Code section 85021, which calls for exporters to reduce reliance on the Delta for water supply.

Commentators on BDCP, including EPA and other public agencies drawing on extensive scientific analysis, identified major problems with modification of critical habitat of multiple endangered or listed species. Although the RDEIR/SDEIS has other deficiencies noted below that likely result in understatement of the project's species impacts, even the impacts acknowledged there would be sufficient to reject permitting of the project. (See, e.g., RDEIR/SDEIS, ES-48 (significant impacts of water operations on rearing habitat for covered fish species, and significant and unavoidable impacts on spawning and egg incubation habitat for winter run Chinook salmon and green sturgeon).)

Proceeding with the project based on presumed compliance with federal and state laws protecting species would be unlawful in light of devastating science-based criticisms from EPA and other agencies. As with the deficiencies under the Delta Reform Act addressed above, the critical problems stem from the project's adverse effects on flows through the Delta. Even though public comment on the RDEIR/SDEIS is coming to a close, the Bureau of Reclamation has still provided no Biological Assessment to the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS). ESA Section 7 consultations have not occurred, and these federal agencies have prepared no biological opinion with respect to the project's effects on listed fish or their designated critical habitats. Moreover, the agencies have yet to analyze or suggest "reasonable and prudent alternatives" (RPAs) to avoid species jeopardy or adverse modification of designated critical habitat. In the absence of a rigorous analysis of such alternatives, which remains lacking, the project cannot be approved in accordance with section 7 of the ESA.

F. The Project RDEIR/SDEIS Cannot Support a Finding of Consistency with the Delta Plan, or Requirements for Water Quality Certification or Wetlands Protection.

The RDEIR/SDEIS's Appendix G strains to postulate that the revised project, which abandons the pretense of a lawful "conservation plan," can nonetheless potentially meet a determination of consistency with the Delta Plan. However, the BDCP "shall not" be incorporated into the Delta Stewardship Council's Delta Plan, and make its public benefits qualify for state funding, unless the BDCP complies with the NCCPA and CEQA. (Wat. Code, § 85320(b).) Moreover, the project's adverse consequences for Delta flow, discussed above, are also likely to undermine the basis for the State Board's water quality certification under section 401 of the Clean Water Act, and the Army Corps' section 404 permitting relating to wetlands.

III. THE DELTA INDEPENDENT SCIENCE BOARD HAS RECONFIRMED THE LACK OF SCIENTIFIC AND LEGAL FOUNDATION FOR THE RDEIR/SDEIS AND ITS PROJECT.

The Legislature has noted that CEQA compliance for the BDCP requires "*comprehensive review and analysis*" of all the following:

(A) A reasonable range of flow criteria, rates of diversion, and other operational criteria required to satisfy the criteria for approval of a natural community conservation plan as provided in subdivision (a) of Section 2820 of the Fish and Game Code, and other operational requirements and flows necessary for recovering the Delta ecosystem and restoring fisheries under a reasonable range of hydrologic conditions, which will identify the remaining water available for export and other beneficial uses.

(B) A reasonable range of Delta conveyance alternatives, including through-Delta, dual conveyance, and isolated conveyance alternatives and including further capacity and design options of a lined canal, an unlined canal, and pipelines.

(C) The potential effects of climate change, possible sea level rise up to 55 inches, and possible changes in total precipitation and runoff patterns on the conveyance alternatives and habitat restoration activities considered in the environmental impact report.

(D) The potential effects on migratory fish and aquatic resources.

(E) The potential effects on Sacramento River and San Joaquin River flood management.

(F) The resilience and recovery of Delta conveyance alternatives in the event of catastrophic loss caused by earthquake or flood or other natural disaster.

(G) The potential effects of each Delta conveyance alternative on Delta water quality.

(Wat. Code, § 85320(b)(emphasis added).

The RDEIR/SDEIS makes perfunctory claims in an appendix to have covered these BDCP-related environmental review issues. (EIR/EIS, Table 3I-1.) However, as detailed further, the 2014 and 2015 Delta Independent Science Board reports demolish the scientific basis for that conclusion and undermine the ability of the RDEIR/SDEIS and its underlying project to meet the environmental review requirements of CEQA and the Delta Reform Act. Unless these errors are corrected before issuance of a Final EIR/EIS, the review's major "mass of flaws" will require

additional recirculation after the major shortcomings of the EIR/EIS are corrected. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 741-742.) If left uncorrected, these errors would preclude informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR/EIS process. (*Berkeley Keep Jets Over the Bay Com. v. Board of Port Cmrs.* (2001) 91 Cal.App.4th 1344, 1355.)

A. Overview: Neither the EIR/EIS nor RDEIR/SDEIS Provide Obligatory Scientific Support for the Delta Tunnels Project.

On September 30, 2015, the Delta Independent Science Board released its final report entitled *Review by the Delta Independent Science Board of the Bay Delta Conservation Plan/California Water Fix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement* (2015 Science Board report). The 2015 report, like its predecessors addressing earlier drafts, was submitted to the Delta Stewardship Council (DSC) and California Department of Fish and Wildlife (DFW) as directed under the 2009 Delta Reform Act. (Wat. Code, § 85320(c).)

Noting the profound statewide importance of the project's environmental review, the Science Board found that "reasonable expectations" for completeness and clarity remained "largely unmet." (2015 Science Board report, p. 1.) The Science Board found the current draft "sufficiently incomplete and opaque to deter its evaluation and use by decision-makers, resource managers, scientists, and the broader public." (*Id.*) Despite identifying a short list of items deemed improvements over the preceding draft (*id.*, pp. 3-4), the Science Board found the RDEIR/SDEIS's strengths "outweighed by several overarching weaknesses: overall incompleteness through deferral of content to the Final EIR/EIS; specific incompleteness in treatment of adaptive management, habitat restoration, levees, and long-term effects; and inadequacies in presentation." (*Id.*, p. 4.)

The Science Board's 2015 review eviscerates any casual inference that minor adjustments can "fix" major and continuing deficiencies. The Science Board sharply criticized repeated deferral of content until the final report following the close of public review, including such crucial matters as the modeling of levee failures, analysis of climate change and water supply scenarios, and informative comparisons of alternatives. Moreover, the Science Board rejected the draft's uncertainty-based rationalizations for failure to analyze, finding that "[i]gnorance to this degree does not apply" to subjects such as the project's impacts on levee maintenance and San Joaquin agriculture. (*Id.* at 5.) Finally, the 2015 Science Board report found the current draft lacking in "key information, analyses, summaries, and comparisons. The missing content is needed for evaluation of the science that underpins the proposed project. *Accordingly, the Current Draft fails to adequately inform weighty decisions about public policy.*" (2015 Science Board report, p. 4 (emphasis added).)

As elaborated further below, the 2015 Science Board report identified numerous specific areas of missing content needed to properly inform decision-makers and the public, including these:

- Details on adaptive management and collaborative science. (2015 Science Board report, p. 5.)

- Modeling how levee failures would affect operation of dual-conveyance systems. (*Id.*, p. 7.)

- Analysis of whether operation of the proposed conveyance would alter the economics of levee maintenance. (*Id.*, p. 7.)

- Analyses of the effects of climate change on expected water exports from the Delta. (*Id.*, p. 35.)

- Potential impacts of climate change on system operations, even during the shortened time period emphasized in the Current Draft. (*Id.*, pp. 8 and 11).

- Potential effects of changes in operations of the State Water Project (SWP) and Central Valley Project (CVP), or other changes in water availability, on agricultural practices in the San Joaquin Valley. (*Id.* p. 12.)

- Concise summaries integrated with informative graphics .(*Id.*, , pp. 9, 13.)

These essential missing items underscore the need for an environmental review that is "more complete, comprehensive and comprehensible" than the current draft. (2015 Science Report (introductory letter).) Moreover, as the Science Board has clarified the reviewing agencies must also still address continuing problems detailed in its May 15, 2014 report on BDCP and the EIR/EIS (2014 Science Board Report). The 2014 Science Board report followed a similarly critical review prepared by the Delta Science Program's Independent Science Review Panel (Panel), which analyzed the "Effects Analysis" (BDCP, chapter 5) prepared in connection with requirements of endangered species law. The 2014 reports of the Science Board and the Panel were sharply critical of the tendency in BDCP and its review documents to tilt the analysis in favor of the proposed project and avoid sound science.

The San Joaquin Agencies' 2014 Summary (pages 9-21) identified key environmental review issues illuminated in the 2014 Science Board report. The problems identified in the 2014 report remain highly relevant to the current project review and must still be addressed, both to fully address Alternative 4 (BDCP) and to address deficiencies in the EIR/EIS that remain uncorrected in the RDEIR/SDEIS. As the Science Board confirmed in its 2015 report (page 9): "Our persistent concerns

include the treatment of uncertainty, the implementation of adaptive management, and the use of risk analysis. These topics receive little or no further attention in the Current Draft. We also found few revisions in response to points we raised previously about linkages among species, ecosystem components, or landscapes; the potential effects of climate change and sea-level rise; and the potential effects of changes in water availability on agricultural practices and the consequent effects on the Delta."

The 2014 Science Board report examined "the science in the DEIR/DEIS" and the BDCP, focusing on "how well the statements and conclusions are supported by current scientific information; how science is applied to proposed actions; how completely actions and their potential consequences have been assessed; and how science is communicated." (2014 Science Board Report, p. 4.) The Science Board in 2014 provided the still-unheeded advice that leaving its concerns unaddressed "may undermine the contributions of BDCP to meeting the co-equal goals for the Delta." (2014 Science Board Report cover letter, p. 1.)

The 2014 Science Board report summarized its major concerns:

1. Many of the impact assessments hinge on overly optimistic expectations about the feasibility, effectiveness, or timing of the proposed conservation actions, especially habitat restoration.

2. The project is encumbered by uncertainties that are considered inconsistently and incompletely; modeling has not been used effectively to bracket a range of uncertainties or to explore how uncertainties may propagate.

3. The potential effects of climate change and sea-level rise on the implementation and outcomes of BDCP actions are not adequately evaluated.

4. Insufficient attention is given to linkages and interactions among species, landscapes, and the proposed actions themselves.

5. The analyses largely neglect the influences of downstream effects on San Francisco Bay, levee failures, and environmental effects of increased water availability for agriculture and its environmental impacts in the San Joaquin Valley and downstream.

6. Details of how adaptive management will be implemented are left to a future management team without explicit prior consideration of (a) situations where adaptive management may be inappropriate or impossible to use, (b) contingency plans in case things do not work as planned, or (c) specific thresholds for action.

7. Available tools of risk assessment and decision support have not been used to

assess the individual and combined risks associated with BDCP actions.

8. [The presentation] makes it difficult to compare alternatives and evaluate the critical underlying assumptions.

(2014 Science Board report, p. 3; see also 2015 Science Board report, pp. 10-13 (highlighting continuing relevance).)

B. Crucial Details Remain Missing on the Adaptive Management Process, Collaborative Science, Monitoring, and the Resources for These Efforts.

As noted in the 2015 Science Board report, the RDEIR/SDEIS places heavy reliance on "adaptive management" to address uncertainties and finesse crucial missing details relating to project impacts and mitigation. (2015 Science Board report, pp. 5-6). However, despite "ample time" since release of the Draft EIR/EIS, the current draft "does little more than promise that collaborations will occur and that adaptive management will be implemented. This level of assurance contrasts with the central role of adaptive management in the Delta Plan and with the need to manage adaptively as climate continues to change and new contingencies arise." (*Id.*, p. 6.)

Despite the "very general and brief" reference to adaptive management in section 4 of the RDEIR/SDEIS (pp. 4.1-6 to 4.1-7), the Science Board determined that the analysis in the current draft lacks "serious consideration" of the barriers that have impeded implementation of adaptive management in the Delta and elsewhere, as detailed in the Delta Plan, or of "lessons learned" on how these problems can be overcome. (2015 Science Board report, p. 5.). To be effective, adaptive management needs to be "integral with planned actions and management—the Plan A rather than a Plan B to be added later if conditions warrant." By contrast, the draft fails to provide a "substantive" analysis of adaptive management for the Delta tunnels project. (*Id.*)

The Science Board expressly rejected the revised draft's deferral of critical details about how adaptive management will be made to work, countering the RDEIR-DSEIS's assertion that "an adaptive management and monitoring program will be implemented to develop additional scientific information during the course of project operations and construction to inform and improve conveyance facility operational limits and criteria." (2015 Science Board report, p. 5 (quoting RDEIR/SDEIS, ES-17).) Concluding that this was "too late," the Science Board indicated that the details and resources for adaptive management were needed now, including such items as (1) "species-specific thresholds and timelines for action"; (2) "specific scenarios with target thresholds, decision points, and alternatives"; (3) "commitments and funding needed for science-based adaptive management and

restoration to be developed and, more importantly, to be effective." (2015 Science Board report, p. 8.) Among other crucial details missing, the Science Board noted that "[a]dequate funding to support monitoring, collaborative science, and adaptive management is a chronic problem." (2015 Science Board report, p. 15.) The draft often relies on opaque constructs, rather than concrete details on accountability, implementation and financing. Using the example of mitigation for terrestrial resources, the Science Board noted that mitigation should compensate for the project's "habitat losses and disturbance effects," and the test for implementation will be "whether the measures will be undertaken as planned, be as effective as hoped, and continue long enough to fully mitigate effects." (2015 Science Board report, p. 13.)

C. Analysis is Lacking on Landscape-Scale Restoration, Restoration Timing and Funding, and the Strategy of Avoiding Damage to Existing Wetlands.

The 2015 Science Board report found that the current draft still lacks the "landscape-scale" review it previously requested, noting that this remains relevant for projects envisioned as mitigation in the current draft, as well as for the conservation measures now consigned the ostensibly separate EcoRestore program. (2015 Science Board report, p. 6.)

Although the RDEIR/SDEIS presents wetlands restoration as a key element of mitigation of significant impacts (see, e.g., Chapter 12), the Science Board "noticed little attention to the sequence required for assessing potential impacts to wetlands: first, avoid wetland loss; second, if wetland loss cannot be avoided, minimize losses; and third, if avoidance or minimization of wetland loss is not feasible, compensate. Much of the emphasis in the Current Draft is on the third element." (2015 Science Board report, p. 6; see p. 18.) The Science Board recommended a mitigation ratio exceeding 1:1 for enhancement of existing wetlands in lights of problems and delays associated with restoration, and utilization of "science-based" approaches to aid decision-making at watershed scales. (*Id.*, p. 7.)

D. Analysis is Lacking on How Levee Failures Would Affect Water Operations, and How the Implemented Project Would Affect the Economics of Levee Maintenance.

The 2015 Science Board report criticized the RDEIR/SDEISs failure to "consider how levee failures would affect the short-term and long-term water operations spelled out in Table 4.1-2," or even to reference existing rough estimates relating to this consideration. (2015 Science Report, p. 7.) Addressing the revised draft's failure to meaningfully address the relationship between levees and water conveyance, Science Board observed that the draft also "fails to consider" how project implementation would affect the basis for setting statewide priorities for

Delta levee maintenance. The Science Board pointed to a recent scoring system for levee project proposals that awarded points for expected benefits to "export water supply reliability." (*Id.*) Criticizing the current draft's selective reference to levee fragility "mainly as a reason to build isolated conveyance for Sacramento River water" (e.g., pp. 1-1, 1-7, 1-9), the Science Board called for further analysis that would "examine interacting impacts of conveyance and levees." (2015 Science Board report, p. 8.)

E. Deficiencies Remain as to the Treatment of Uncertainties and their Consequences.

Finding that "uncertainties and their consequences remain inadequately addressed" in the current draft, the 2015 Science Board report criticized the current draft's misguided attempts to finesse uncertainties by referring to a "robust program" of collaborative science, monitoring and adaptive management. (ES 4.2.) Far from providing such a program, the analysis is so lacking in critical details that "there is no way to assess how (or whether) uncertainties will be dealt with effectively." (2015 Science Board report, p. 11.) Despite "sensitivity modeling" used in the current draft to address the latest changes to the proposed project, the reviewing agencies have failed to provide "full model runs" as to these changes, or to correct other deficiencies in project modeling and presentation of date from modeling outputs. (*Id.*.)

Among other issues, these problems raise particular concerns for the analysis of fisheries impacts, which also suffers from other major deficiencies (*Id.*; cf. RDEIR/SDEIS Ch. 11.) For example, the analysis of water temperature in Chapter 11 (Fish and Aquatic Resources) lacks a credible assessment of extreme highs and lows, and relies on comparisons that use "current baseline conditions" and "did not consider climate change effects on temperatures." (2015 Science Board report, p. 17.) Likewise, the draft relies upon fish screens to express exaggerated confidence in the absence of significant impact (e.g., Ch. 11, 1-100) even though the draft lacks specific data on "how well screens function" and it is "unclear how (and how well) fish screens would work." (2015 Science Board report, p. 15.)

F. Linkages Among Species, Landscapes, and Management Actions are Inadequately Addressed.

Addressing previous criticisms relating to linkages among species, landscapes, and management actions, the current draft acknowledges that impacts for one species or community type may negatively affect other species or communities. However, the 2015 Science Board report concludes that "the trade-offs do not seem top be analyzed or synthesized," and that a broader landscape or ecosystem approach is needed "that comprehensively integrates these conflicting effects." (2015 Science Board report, p. 12.)

G. The Relationship of Climate Change to Project Operation is Underestimated and Lacks Essential Analysis.

The 2015 Science Board report noted that crucial climate-related issues are of great concern in the current review, and remain highly relevant to the project's long-term operation notwithstanding revisions in the latest version of the project. First, despite extensive earlier criticism, the RDEIR/SDEIS "generally neglects recent literature, suggesting a loose interpretation of the 'best available science'." ((2015 Science Board report, p. 11.) The draft "does not demonstrate consideration of recently available climate science, and it defers to the Final Report analysis of future system operations under potential climate and sea-level conditions." (*Id.*) As Appendix A of the current draft confirms, no changes were made to the climate change chapter (chapter 29) in the Draft EIR/EIS. No attempts were made to address the most recently-available scientific information, including recent analyses addressing climate extremes, computer simulations of ecological futures, and "unprecedented" drought risk. (*Id.*, p. 11.)

Second, the 2015 Science Board report criticized the partial and inconsistent manner in which the current draft attempts to incorporate climate change and sea-level rise in the no-action alternative. (See, e.g., RDEIR/SDEIS, § 4.3.1 (considering changes in outflow from the Delta due to seasonal effects of climate change and the need to meet fall X2 requirements).) Instead of new and rigorous analysis, the draft relies upon loose "sensitivity" analysis that makes the outcome depend heavily on operational assumptions. The RDEIR/SDEIS reports that "Delta exports would either remain similar or increase in wetter years and remain similar or decrease in drier years under Alternative 4A as compared to the conditions without the project." (RDEIR/SDEIS, 4.3.1-4.) According to the Science Board, "[s]uch an inconclusive conclusion reinforces the need to be able to adapt to different outcomes. Simply because the Alternatives are expected to relate similarly to a No Action Alternative that includes climate change does not mean that the Alternatives will be unaffected by climate change." (2015 Science Board report, p. 12.)

Finally, the 2015 Science Board report noted how the RDEIR/SDEIS uses overly general references to "resiliency" and "adaptability" to avoid more rigorous analysis of climate change and sea level rise (cf. section 4.2.25.) The "failure to consider how climate change and sea-level rise could affect the outcomes of the proposed project is a concern that carries over from our 2014 review and is accentuated by the current drought." (2015 Science Board report, p. 8.)

H. Effects of Changed Water Availability and Its Environmental Consequences are Inadequately Addressed (Including Consequences for the San Joaquin Valley Agriculture)

As highlighted in the 2015 Science Board report, the RDEIR/SDEIS continues to fail to account for the potential effects of changes in operation of the state and federal projects, or other changes in water availability, on agricultural practices in the San Joaquin Valley ((2015 Science Board report, pp. 4, 12.) For example, "although the current draft considers how the project might affect groundwater levels south of the Delta (7.14 to 7.18), it continues to neglect the environmental effects of water use south of (or within) the Delta." (*Id.*, p. 12.) The revised draft cavalierly dismisses the need for additional analysis of agricultural consequences, particularly in the San Joaquin Valley--even though sufficient information is available to conduct further review bearing directly on the "feasibility and effectiveness" of the project. (*Id.*, p. 13.) Moreover, the environmental analysis improperly fails to consider and analyze project operation taking into account the water supply consequences of implementing the Sustainable Groundwater Management Act of 2014 (SGMA)((*Id.*)

I. Assessment of Alternatives Remains Deficient.

In its 2015 report, the Science Board revisited and reconfirmed criticisms of the deficient assessment of alternatives, addressed in more detail in its 2014 report. Noting a "fundamental inadequacy" the current draft shares with earlier versions, the Science Board confirmed that "[r]udimentary comparisons of alternatives" remain "almost entirely absent" in the draft environmental review. (2015 Science Board report, p. 13.) The draft still contains "few examples" of concise text and graphics that compare alternatives and "evaluate critical underlying assumptions." (I*d.*)

J. Environmental Impacts of the Project Must be Assessed More Completely and Clearly.

The 2015 Science Board report noted the current draft's continuing failure, despite three years of its requests, to consistently provide "cogent summaries, clear comparisons, or informative graphics" in the report. (2015 Science Board report, p. 9, citing 40 CFR 1502 (calling for plain language and appropriate graphics "so that decision-makers and the public can readily understand them").) The report noted that "[f]or policy deliberations, the presentation of alternatives should include explicit comparisons of water supply deliveries and reliabilities as well as economic performance. For decision-makers, scientists, and the public, summaries of impacts should state underlying assumptions clearly and highlight major uncertainties. The Current Draft is inadequate in these regards." (*Id.*, p. 9.)

IV. THE RDEIR/SDEIS AND ITS PROJECT RELY ON A SHIFTING, INCONSISTENT AND INACCURATE PROJECT DEFINITION.

A. Legal Requirements for Environmental Review.

Under CEQA, the project must include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment…" (14 Cal. Code Regs., § 15368; see also *Nelson v. County of Kern* (2010) 190 Cal.App.4th 252, 271.) The project description must address "not only the immediate environmental consequences of going forward with the project, but also all 'reasonably foreseeable consequence[s] of the initial project'." (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 82.)

CEQA cases have long established that "[a]n accurate, stable and finite project description" is "the *sine qua non* of an informative and legally sufficient EIR." (*County of Inyo v. City of Los Angeles* (*Inyo III*) (1977) 71 Cal.App.3d 185, 199.) Reliance on a "curtailed, enigmatic or unstable definition of the project" stands as the paradigm of legal error under CEQA, because it "draws a red herring across the path of public input." (*Id.* at p. 199.)

NEPA requires federal agencies to articulate the "purpose and need" for a proposed action for which environmental review is required. (40 C.F.R. §1502.13.) That articulation is crucial for the "heart" of NEPA, the alternatives analysis, which enables the EIS to provide "a clear basis for choice among options by the decision-maker and the public." (40 C.F.R. §1502.14.) NEPA prohibits the use of a truncated "purpose and need" statement, in which the articulation of objectives is defined in a manner that curtails full assessment of the project and alternatives. (*City of Carmel-by-the-Sea v. United States Department of Transportation* (9th Cir. 1997) 123 F.3d 1147, 1155; *Friends of Southeast's Future v. Morrison* (9th Cir. 1998) 153 F.3d 1059, 1066.)

B. Foundational Project Definition Problems in the RDEIR/SDEIS and its Project.

1. Misleading and Inconsistent References to "Proposed Action," "Conservation," "Restoration" and "Mitigation."

The San Joaquin Agencies' 2014 Summary (pages 17-25) provided an extensive analysis of project definition problems that remain relevant to the revised draft The RDEIR/SDEIS fails to correct the project definition errors noted earlier, and in some respects makes them worse. Notably, although the BDCP agencies' preferred project (Alternative 4A) no longer even includes an attempt to qualify a "conservation plan" as a HCP or NCCP, the BDCP agencies have not bothered to circulate a complete revised plan incorporating that key shift in the project's legal

foundation. Likewise, the bland and cluttered title of the new environmental review document (*Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement*) fails to convey the significance of the proposed project shift.

Instead, a complex and confusing list of "substantive" BDCP revisions is improperly buried in Appendix D to the RDEIR/SDEIS rather than clearly delineated in the text. Text revisions to the EIR/EIS are relegated to another appendix (Appendix A) that omits other unrevised sections. Contrary to the central task of CEQA and NEPA to clearly inform the reader of the project and its environmental consequences, the RDEIR/SDEIS places an unreasonable and unattainable burden on the reader to synthesize an incomprehensible hodgepodge of original and "partially" recirculated documents.

This convoluted analysis is not simply user-unfriendly, but highly prejudicial. The revised document fails to illuminate crucial ambiguities and inconsistencies in the use of key terms—notably "conservation," "restoration," and "mitigation" -- needed to understand how dozens of impacts associated with the Delta tunnels project are analyzed and proposed for correction. For example, the RDEIR/SDEIS fails to analyze and disclose the legal implications of removing all its "conservation measures" from accountability under HCP and NCCP requirements. The RDEIR/SDEIS retains many of these former "conservation measures" under the legally murky term "environmental commitments. " (See, e.g., Appendix 3B). It expressly relies upon many of these "commitments" to mitigate environmental impacts of the project, and in particular, the proposed conveyance system (*Id.*; see also Appendix D, D.1-1.) The RDEIR/SDEIS also fails to illuminate the specific role of "restoration" under project operation.

Despite the crucial role assigned to "environmental commitments," the RDEIR/SDEIS leaves the reader baffled to decipher the legal basis for these commitments, their precise relationship to the project, or how to ensure accountability for their implementation and funding. The lists of operative commitments appear to be internally inconsistent (Compare, e.g., RDEIR/SDEIS, ch. 4.1,-15 (listing "environmental commitments under Alternative 4A" derived form conservation measures); Appendix 3B, Table 3B-1 (listing separate set of tasks as "environmental commitments" under multiple alternatives, from "geotechnical studies" to "selenium management").) The RDEIR/SDEIS inconsistently references "environmental commitments" as part of the project, part of the mitigation for project impacts, or some legally indefinite territory in between (*Id.*) Appendix 3B also includes an even more elliptical laundry list of 31 other abstract concepts, designated as "avoidance and mitigation measures," without identifying their legal foundation or the basis for ensuring their accountability. As the Court of Appeal stated in the fifth of the *Inyo* series of cases, "An EIR may not define a purpose for a project and then remove from consideration those matters necessary to the assessment whether the

purpose can be achieved." (*County of Inyo v City of Los Angeles (V)* 124 Cal.App.3d 1, 9.)

Appendix D illustrates the depth of the RDEIR/SDEIS's morass over environmental "commitments." It relies on former conservation measures CM3-CM11 to "offset effects associated with" the proposed conveyance (CM1), but characterizes them as "*de facto* CEQA and NEPA mitigation measures with respect to those effects." (RDEIR/SDEIS, Appendix D, D.1-1.) It mentions another list of activities claimed to have undergone separate "independent" environmental review, yet also claims them as "meaningful examples of the activities that would be credited towards implementation" of these very same environmental commitments. (*Id.*) If NEPA and CEQA review are to retain any genuine value for decision-makers and the public, they cannot leave basic elements of the project and proposed mitigation so inscrutable that they would confound even an ace detective.

2. Incomplete and Segmented Project Assessment.

Rarely has a revised project review so cavalierly announced its intention to rework the project definition simply to avoid a major area of public controversy, rather than focusing on the underlying environmental concerns that sparked this controversy.

The RDEIR/SDEIS concedes that the "ecological health of the Delta continues to be at risk," and acknowledges the growing tension between Delta water exports and species protection. (1-7.) It also recognizes that "systemic change" is necessary because the present design and operation of the "overall system" is no longer environmentally sustainable. (ES-5.) Faced with these systemic problems, agency reviewers examining BDCP and its EIR/EIS last year issued blistering science-based critiques, raising major concerns affecting the project's ability to comply with numerous legal requirements, including federal and state laws protecting species, water quality, and wetlands. These agency reviewers, building on concerns expressed earlier by the NAS and the Science Board, underscored the need to better address the project's consequences for Delta flows and the need for better analysis of mitigation and alternatives. (See, e.g., EPA review (August 26, 2014); State Board review (July 29, 2014); United States Army Corps of Engineers review (July 16, 2014).) Unfortunately, the RDEIR/SDEIS fails to provide or even fairly summarize these agency critiques, as well as similar concerns expressed by the Science Board, the county and other commenters.

From these major critiques, one might have expected any revisions in the project and its review to focus on finding ways to *improve* rather than impair flows of water through the Delta, and to more effectively protect, enhance and restore the Delta ecosystem and its communities. Instead, the RDEIR/SDEIS establishes that the new project *reduces or removes* project-related conservation measures, and modifies

the project objectives to *eliminate* the need for permitting of a "conservation plan" lawfully qualifying as a HCP or NCCP. (See, e.g., RDEIR/SDEIS, 1-1 to 1-12.) To rationalize this attempt to weaken project-related Delta protections even further, the RDEIR/SDEIS seeks to segment review of the conveyance-dominated revised project from other, vaguely defined conservation efforts—even as the agencies continue to rely on these efforts—principally the Eco-Restore program—as part of a "BDCP conservation strategy." (*Id.*, 4.1-15.) This poorly defined "strategy" is paradoxically used to put a conservation-conscious face on the project even as it is claimed to be separate from and not subject to the project. (*Id.*; see also ES-8, 9.)

Segmentation and simultaneous reliance on EcoRestore in the project review obscures the varied nature of its project list, which includes many already-existing projects and others that may well never go forward. It also obscures that plainer fact that none of the EcoRestore projects, or the broader extra-project conservation strategies," is subject to any accountability within this project review. Moreover, since the location and specific features of numerous "commitments" remain unknown and unstudied (4.1-15), they may well either never go forward or have adverse and still-unstudied impacts on the Delta ecosystem or its counties and communities. The RDEIR/SDEIS's efforts to segment project-related conveyance and conservation greatly complicates review of a project that also fails to analyze the consequences of other parallel actions acknowledged to profoundly affect the future sustainability of the Delta ecosystem, such as the framing of Delta water quality requirements and the coordinated operation of state and federal water projects.

3. Unequal Status of Non-Conveyance Project Components.

Although the BDCP agencies' preferred action no longer defines the conveyance itself as a "conservation measure," it retains that approach for analytic purposes in Alternative 4 and disingenuously refuses even to concede the infeasibility of this approach, notwithstanding the lack of any remaining foundation for it following EPA's review and other scientific critiques. (Cf. RDEIR, 1-5.)

The RDEIR/SDEIS concedes that the BDCP agencies' review cannot lawfully pre-commit to agency approval of the proposed conveyance. (See 1-7 (quoting *Save Tara v. City of West Hollywood* (2008) 45 Cal.4th 116, 136-137).) However, the RDEIR/SDEIS continues to skew project review in favor of conveyance by failing to correct the key project-related error the San Joaquin agencies identified in comments last year (page 20): singling out the conveyance for project-specific review while consigning conservation and mitigation components to far more vague programmatic assessment.

The RDEIR/SDEIS's division of project and program components, as with the EIR/EIS last year, creates a major obstacle to ensuring timely consideration of the "whole" of the project in accordance with CEQA and NEPA. Ignoring the

county's criticisms, the review provides project-level analysis of the conveyance, while offering far vaguer program-level analysis for conservation and other measures portrayed as addressing adverse consequences. This creates an untenable imbalance in which approval of the conveyance based on project-specific review may well go forward while essential details of the remaining conservation measures, as well as their funding and implementation status, remain unstudied and unknown. Under these circumstances, it is clear that conservation is far from "coequal" with conveyance. The project-specific review of conveyance and highly opaque program review of conservation also amount to unlawful segmentation and piecemealing, undermining the ability of the EIR/EIS to serve as decision-making documents under CEQA and NEPA. Further skewing the project analysis, as discussed in section II.B above, is the RDEIR/SDEIS's reliance upon expectations of "paper water" deliveries.

4. Rote Assumption of Regulatory Compliance.

The description of project operation improperly assumes the protection of beneficial uses and meeting of other regulatory requirements, without consistently analyzing hydrologic constraints over the project term. (See, e.g., RDEIR/SDEIS 16-19.) The project assessment therefore improperly continues to seek insulation of permit holders from further responsibility to meet federal and state environmental laws, as well as other legal standards and permit requirements. This prejudicial assumption runs counter to the RDEIR/SDEIS's recognition that the "system" as presently operated does not sustainably protect the Delta. (ES, 1-5). In addition to skewing the present project review in favor of conveyance, the EIR/EIS's misguided analysis of existing regulatory standards should not be used in other settings to prejudice other efforts to improve conditions for the Delta ecosystem and protect the health and well-being of communities in Delta counties.

The same disjointed approach to regulatory compliance is also evident in the RDEIR/SDEIS's statements referring to the balance of water supply and endangered species objectives. (See, e.g., ES-18, 19.) Although the discussion is vague, it appears to contemplate precisely the sort of balancing rejected by Congress in the ESA. (See *Tennessee Valley Authority v. Hill* (1978) 437 U.S. 153, 174.) Moreover, even if Congress had permitted the general approach to balancing described in the BDCP, it would fail in light of the overwhelming scientific evidence that the twin tunnel-driven project will not meaningfully protect endangered and threatened species, and will likely harm them instead.

V. THE RDEIR/SDEIS AND PROJECT RELY ON A DEFECTIVE ANALYSIS OF THE PROJECT BASELINE.

A. Legal Requirements for Environmental Review.

Baseline selection is a foundational requirement under CEQA serving the EIR's "fundamental goal" to "inform decision makers and the public of any significant adverse effects a project is likely to have on the physical environment." (*Neighbors for Smart Rail v. Exposition Metro Line Const. Authority* (2013) 57 Cal.4th 439, 505 (citing *Vineyard Area* Citizens, 40 Cal.4th at 428.)

Reliance on a faulty baseline distorts an agency's ability to assess project impacts and benefits, and provide effective mitigation. (See *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1217.) CEQA analysis must employ a realistic baseline that will give the public and decision makers the most accurate picture practically possible of the project's likely impacts." (*Neighbors for Smart Rail*, 57 Cal.4th at 507; see also *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 322, 325, 328; see also BDCP 2013 EIR/EIS, 3D-2 (recognizing that under *Neighbors*, "any sole reliance on a future baseline is only permissible where a CEQA lead agency can show, based upon substantial evidence, that an existing conditions analysis would be 'misleading without informational value'").)

NEPA regulations require an EIS to describe the "affected environment" of a proposed action and alternatives, placing a premium on brevity and clarity. The EIS "shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration." (40 C.F.R. §1502.15.) NEPA also incorporates baseline review by requiring analysis of "the alternative of no action." (40 C.F.R. §1502.14(d).) The no-action analysis "provides a benchmark, enabling decision-makers to compare the magnitude of environmental effects of the action alternatives." (CEQ, *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 Fed. Reg. 18026 (March 23, 1981).)

B. Baseline Problems in the RDEIR/SDEIS and Project.

1. Overview: Failure to Fully Account for Existing Conditions, and Defective Assessment of Future Conditions

The San Joaquin Agencies' 2014 Summary extensively chronicled baseline errors prejudicing the project and "no action" assessments (pages 25-30), which in turn prejudiced the EIR/EIS's ability to fairly evaluate project alternatives and mitigation. As detailed in those comments, while the use of multiple baselines in an EIR or EIS is not automatically unlawful, the specific baselines uses in the EIR/EIS

were fundamentally inconsistent, failing to either fully account for existing conditions or meet the Supreme Court's standards for refusing to analyze existing conditions. Moreover, selective and unrealistic assessment of future conditions in the EIR/EIS's baseline review also prejudiced the remaining analysis.

Baseline errors and related modeling problems also receive detailed analysis in the 2014 and 2015 Science Board reviews, and in extensive public comments on the EIR/EIS, which the RDEIR/SDEIS has neither included nor addressed in analysis. (See, e.g., MBK Engineers Report; EIR-EIS and RDEIR-SDEIS comments of Center on Urban Environmental Law, Contra Costa Water District, Sacramento County, and the Environmental Water Caucus.) As detailed further below, these comments remain of continuing relevance. The RDEIR/SDEIS has failed to correct the key baseline errors in the preceding draft, and to coherently address existing and future conditions. In some respects it has made the deficient assessment even worse.

2. Reliance Upon Multiple Inconsistent Baselines.

Despite these powerful criticisms, the RDEIR/SDEIS confirms the absence of major changes to the baseline analysis criticized earlier and summarized below. (See RDEIR/SDEIS, appendix A, sub-appendix 3D (identifying all interlineated changes to EIR/EIS appendix 3D, which set forth the review's approach to existing conditions, the "no project" and "no action" alternatives, and cumulative impact conditions).) Although it attempts to provide updates to related ongoing programs, the RDEIR/SDEIS assumes "continued implementation of operations, maintenance, enforcement, and protection programs by federal, state, and local agencies and non-profit groups that affect or could be affected by the Proposed Project and alternatives, as summarized in Table 3D-10-2." (RDEIR/SDEIS 3D-1; see also attachment 3D-A.)

- The ***existing conditions baseline*** assess the significance of impacts of the BDCP alternatives in relation to existing conditions. "Existing" conditions in this baseline review generally include "facilities and existing conditions" that existed on February 13, 2009 (the time of the most recent Notice of Preparation/Notice of Intent), and "that could affect or be affected by" implementation of the BDCP and alternatives. (BDCP EIR/EIS, 3D-2.) Yet in "some instances", the RDEIR/SDEIS concedes, "certain assumptions were updated", including some (but not all) of the standards noted in NMFS's June 2009 biological opinion for salmonids (notably, it did not include the "Fall X2" salinity standard challenged in water users' litigation). Many of the most important details are buried in an appendix disclosing assumptions for State Water Project and Central Valley Project. (See BDCP EIR/EIS, Table 3D-1 and Appendix 5A.) Other still-pending events or judicially-challenged events -- for example, renewal of the FERC license for the Oroville project, or operation of the SWP under the Monterey Amendments -- are simply assumed as part of existing conditions. (See, e.g., BDCP EIR/EIS, 3D-6 and Appendix 5.A, B-68, B-138.)

- *The* ***no-action baseline*** includes the existing conditions baseline's programs, actions and policies, including many of the same assumptions relating to continued operation of the SWP and CVP. Unlike the existing conditions baseline, the no-action baseline does include implementation of the Fall X2 salinity standard in the 2008 USFWS Biological Opinion, "as well as changes due to climate change that would occur with or without the proposed action or alternative." (BDCP EIR/EIS, 4-5.) It also includes facilities under construction at the time of the NOP/NOI, and programs, projects and policies with "clearly defined management and/or operational plans" deemed *likely to occur by 2060.* (BDCP EIR/EIS 4-6.) Although the no-action baseline was developed for NEPA purposes, the EIR/EIS concedes that it is also used to explain many of the CEQA conclusions. (*Id.*)

- The ***existing biological condition baseline*** used for the BDCP's effects analysis reflects the environmental conditions of the Study Area at the time of BDCP approval (BDCP, chapter 2) as well as the anticipated ecological effects of implementing most (but not all) of the actions in the BiOps developed by USFWS for delta smelt (2008) and NMFS (2009) for salmonids and green sturgeon for the long-term operations of the SWP/CVP facilities. (BDCP, Table 5.2-2.) These actions were added to the regional water operations objectives (i.e., rules) previously required under D-1641 provisions of the State Water Resources Control Board (1999), including the Vernalis Adaptive Management Program. This baseline does not include future effects that may result from climate change, or the effects of water operation agreements that are currently being negotiated. Nor does it explain why it does not reference numerous other obligations outside of D-1641.

- The ***existing conveyance scenario*** is part of the project's August 2013 statewide economic report. It was introduced to bolster the purported economic analysis claiming significant benefits (2013 BDCP, chapter 9). This baseline assumes that water deliveries from the Delta will be dramatically lower without the project, far lower (by approximately 1 million acre-feet) than assumed in the EIR/EIS. Neither the BDCP nor the EIR/EIS provide environmental analysis for this scenario. Notably, when an MWD director asked David Sunding, the BDCP economic report's author, whether the project would be cost-effective using the baseline in the EIR/EIS, his answer was an unequivocal "no". http://mavensnotebook.com/2013/07/29/dr-sunding-makes-his-case-for-the-bdcp-to-metropolitans-special-committee-on-the-bay-delta/.

Overall, these internally inconsistent and confusing scenarios reinforce a continuing concern that, as the National Research Council concluded of an earlier iteration, "*much of the BDCP appears to be a post-hoc rationalization of the water supply elements of the BDCP.*" (2011 report, p. 13 (emphasis added); cf. RDEIR/SDEIS, 1-7 (noting unlawfulness of post-hoc rationalizations).) These rationalizations underscore the need for a genuine existing conditions analysis to supplement the efforts to project

future conditions. As the Bay Institute aptly noted in a February 29, 2012 briefing paper that remains unheeded, "[c]omparing the BDCP to recent actual conditions (conditions that are already driving the collapse of the Delta ecosystem) would reveal that the BDCP would substantially increase water exported from the Delta while severely degrading environmental conditions." That genuine comparison has still not been made in the revised project and the RDEIR/SDEIS.

3. Reliance On Speculative "No Action" Alternative.

The no-action alternative strays well beyond the boundaries of reasonably foreseeable future conditions appropriate for inclusion in NEPA's "no action" alternative or CEQA's "no project" alternative. The RDEIR/SDEIS continues to make "informed" judgments about future conditions consistent with existing planning that are far into the future, despite the RDEIR/SDEIS's recognition that the "system" under present conditions is unsustainable for the Delta. However, the RDEIR/SDEIS provides no foundation for the predicted judgments. A similar problem affects the cumulative impacts analysis. Moreover, the review continues to err in overstating projected operation under "dead pool" conditions, without considering foreseeable efforts of water managers to take steps attempting to avoid levels of depletion approaching a dead pool.

In some respects, the RDEIR/SDEIS's misuse of the "no action" and baseline assessment may be even worse than its predecessor. First, the RDEIR/SDEIS uses flatly inconsistent baselines for comparison to evaluate the impacts of the new preferred alternative (4A) and other project alternatives. Second, as the Science Board highlighted and as discussed above, the RDEIR/SDEIS's scenarios and modeling lack even elementary updates on drought and climate. The RDEIR/SDEIS recognizes that "when compared to the CEQA baseline, [the Water Tunnels], including climate change, would substantially reduce the quantity and quality of spawning and egg incubation habitat for winter-run Chinook salmon relative to existing conditions." (RDEIR/SDEIS 4.3.7-58.) Yet the revised review improperly treats climate change only as an *excuse* to avoid more nuanced assessment of the project and alternatives under a reasonable range of future hydrologic conditions. (See, e.g., *id.*, 4.3, 4-67.)

4. Inconsistent and Arbitrary Assumptions About Compliance With Laws and Regulations.

The baseline scenarios make inconsistent and arbitrary assumptions about which existing laws and regulatory requirements will be met in the absence of the project. Cherry-picking these in advance, without analyzing the physical conditions relating to compliance, is a particularly glaring error in light of critiques from the State

Board, Science Board, and federal agencies expressing concern that compliance is already heavily challenged without the project's anticipated additional extraction.

This manipulation and inconsistency underscore the legal inadequacies of the BDCP as a conservation plan. Under the ESA, "[a]n agency may not take action that will tip a species from a state of precarious survival to a state of likely extinction. Likewise, even where baseline conditions already jeopardize a species, an agency may not take action that deepens the jeopardy by causing additional harm." (*National Wildlife Federation v. National Marine Fisheries Service* (9th Cir. 2007) 524 F. 3d 917, 930.)

The EIR/EIS has failed so far to establish the foundation for compliance with requirements of the Delta Reform Act that are mandatory for BDCP to proceed and receive state funding. (See, e.g., Wat. Code, § 85320 (including NCCPA compliance, reasonable range of flow criteria, reasonable range of Delta conveyance alternatives, and potential effects of climate change and effects on migratory fish and aquatic resources).)

5. Failure to Analyze Potential Water Rights Conflicts.

Although the BDCP and the EIR/EIS simply assume that the project will be benign for holders of water rights, the State Board's comments on the administrative draft EIR/EIS reveal a problem persisting in the latest draft: "implementation of the BDCP project will require changes to water rights and water right requirements. Further, the proposed project may affect other legal users of water through changes in salinity and flows."

Moreover, the EIR/EIS fails to illuminate major potential conflicts with water rights users. The Science Board's 2015 review underscores the vague, incomplete and unproven nature of purported conservation and environmental benefits: what if these benefits fail to materialize, who may lose water, money, or both, and the resulting ecological and economic consequences. The project and environmental review continue to conceal the risk of major conflicts with existing holders of water rights, existing water users, and areas of origin protected under California law.

6. Fundamentally Flawed Cost-Benefit Analysis.

The RDEIR/SDEIS bases the revised project's benefits on a fundamentally flawed cost-benefit analysis that distorts the project baseline and undermines the integrity of the environmental review. Ignoring a deluge of earlier criticism, the analysis retains errors that repeatedly result in exaggeration of the BDCP's benefits and understatement of the BDCP's costs. Without these distortions, the BDCP's costs are highly likely to outweigh benefits. Dr. Jeffrey Michael's detailed assessments of BDCP's costs and benefits (including the socioeconomic analysis appended as Exhibit I to Sacramento County's comments) identify severe errors, as did the

Legislative Analyst in an earlier review. (See Sacramento County's 2014 EIR/EIS comments, exh. I; Legislative Analyst's Office, *Financing the Bay Delta Conservation Plan*, February 12, 2014).) As Dr. Michael pointed out in recent analysis, "the plan's already flimsy economic rationale evaporated" with the latest changes, notably the abandonment of fifty-year regulatory assurance and separation of environmental restoration . (J. Michael, *Cost of Delta tunnels doesn't add up,* Sacramento Bee, July 25, 2015; http://www.sacbee.com/opinion/the-conversation/article28509157.html.; http://valleyecon.blogspot.com/search/label/delta%20tunnels (neither water supply nor seismic safety survives cost-benefit analysis as a rationale for the revised plan).)

Baseline errors in the RDEIR/SDEIS's cast major doubt upon the required assessment of mitigation and project alternatives, and leave accountability for major costs and risks mired in doubt. Fatal errors in the cost-benefit analysis also undermine the BDCP's ability to comply with the required assessment of the project and alternatives to "take" under the ESA. The full measure of BDCP's costs remains unknown and potentially severe, while all its proposed funding sources remain speculative and uncertain.

VI. THE RDEIR/SDEIS AND PROJECT FAIL TO IDENTIFY AND IMPLEMENT MITIGATION AND ALTERNATIVES.

A. Legal Requirements for Environmental Review.

CEQA includes the "fundamental statutory directive that '[e]ach public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so." (*City of San Diego v. Board of Trustees* (2015) 61 Cal.4th 945, 962-963 (quoting Pub. Res. Code, § 21002.1, subd. (b).) This obligation extends to both onsite and offsite impacts, and does not allow the absence of legislative appropriation to support a finding of "infeasibility" (*Id.* at p. 962 (concluding that such a rule would improperly impose a "financial burden on local and regional agencies" to cover the costs of a project's "contribution to cumulative impacts on local infrastructure").)

CEQA Guideline section 15126.4(a) requires lead agencies to consider feasible mitigation measures to avoid or substantially reduce a project's significant environmental impacts. General statements about the adequacy of mitigation incorporated into a project cannot substitute for rigorous project-specific analysis. (*Lotus v Department of Transportation* (2014) 233 Cal.App.4th 645.) In *Lotus*, the duty to mitigate extended to the "area which will be affected by proposed project," including offsite areas.

To comply with CEQA, an EIR must examine a range of reasonable alternatives that would feasibly obtain most of the project objectives, but avoid or substantially lessen any significant adverse effects of the project. (14 Cal. Code Regs.

§15126.6.) In its screening and review of alternatives, the EIR must provide more than "cursory" analysis. (*PCL v. DWR*, 83 Cal. App. 4th at p. 919.) It should not construe project objectives so tautologically that only the proposed project could conceivably be capable of achieving them.

The NEPA process is intended to help public officials make decisions that are based on an informed understanding of environmental consequences. (40 CFR §1500.1(c)). This requires a clear comparison of the impacts of the project alternatives, as well as assessment of a reasonable range of alternatives.

B. The RDEIR/SDEIS and Project Improperly Rely on Vague, Unaccountable, and Unlawfully Deferred Mitigation Measures.

The San Joaquin Agencies' 2014 Summary identified deficiencies in the EIR/EIS's assessment of mitigation and alternatives (pages 26-29), which have not been overcome in the revised draft and remain relevant.

Review of the RDEIR/SDEIS confirms that, far from correcting the previously identified errors, the BDCP agencies have compounded these deficiencies in critical respects. The RDEIR/SDEIS, despite its lengthy conceptual descriptions of conservation concepts (see. e.g., appendix 3B), fails the BDCP agencies' obligation to identify mitigation measures that are reasonable, feasible, and enforceable before committing to final action on the project. In particular:

- The RDEIR/SDEIS relies heavily on listed "environmental commitments" even though their legal standing, and basis for implementation, enforcement and funding, still remain hopelessly ambiguous. On one hand, the RDEIR/SDEIS states that these "commitments" are part of the project and should *not* be construed as mitigation measures. (Appendix 3B-2.) On the other, the RDEIR relies on the same commitments as "*de facto* mitigation measures" and portrays them as "feasible means to reduce the severity of environmental effects." (*Id.* (emphasis added).) The RDEIR/SDEIS also recognizes that the "project proponents" intend to rely on them to "avoid or minimize potential adverse effects (a NEPA term) and potential significant impacts (a CEQA term)."

- The RDEIR/SDEIS strains to find a way around the legal requirements for mitigation measures identified in *Lotus v Department of Transportation* (Appendix 3B-2.) Despite these efforts at avoidance, the RDEIR still retains the key mitigation defect identified in *Lotus*, because its dependence on *de facto* "mitigation" from a project feature muddles the crucial CEQA distinction between the project and mitigation, improperly compressing these distinct legal concepts into a single concept lacking the specificity and accountability required under CEQA. (Appendix 3B-3.)

- The RDEIR/SDEIS's other attempt to overcome *Lotus* — an inscrutable new "summary of environmental commitments" (Table 3B-1) — simply makes matters worse. Far from overcoming the improper conflating of project and mitigation, it includes a citation dump lacking explanation or context, and an invitation for the reader to piece together the information by undertaking a scavenger hunt through numerous sections of the EIR/EIS. This lack of accountability is especially critical in light of the central imbalance in the project review noted above: a project-specific assessment of the proposed conveyance, and a vague program-level review of virtually everything else.

- As discussed in greater detail in the separate specific comments on the RDEIR/SDEIS, and in the Science Board's review of missing details discussed above, many of the project's "conservation measures" and other provisions intended to mitigate the project's adverse impacts are unacceptably and unaccountably vague. The "commitments" identified in Appendix 3B include numerous items that lack any clear standards and amount to no more than still-conceptual plans, ineffectively addressing such subjects as stewardship of agricultural lands, transportation demand management, erosion and sediment control, fish rescue and salvage, barge operation, construction equipment exhaust, noise reduction, hazardous materials, spill prevention, and mosquito management.

- Additional "avoidance and mitigation measures," like many of the conservation measures noted above, are similarly opaque and lacking in commitment to clear standards and enforceable steps. (See Appendix 3B (listing AMMs).) All these measures fail to make a present commitment to understandable and enforceable standards, and effectively defer any formulation of genuine and accountable standards to implementation stages following project approval. Reliance on them would violate CEQA's rule against deferred mitigation. (See, e.g., *Madera Oversight Coalition v. County of Madera* (2011) 199 Cal.App.4th 48.)

- A major and recurrent error undermining accountability for mitigation in the RDEIR/SDEIS -- discussed in the Science Board's 2015 review, in section II.D and III.B above, and in a separate attachment — is its heavy reliance on a distorted version of "adaptive management" to evade accountability for major risks.

In short, the EIR/EIS does not come close to providing a legally adequate assessment of mitigation or alternatives.

C. The RDEIR/SDEIS and Project Fail to Identify and Implement a Reasonable Range of Program Alternatives.

Despite the contrary requests of the San Joaquin Agencies in their 2014 summary and those of numerous other commenters, the RDEIR/SDEIS, like the previous draft, fails to identify and analyze a reasonable range of alternatives. As

confirmed in the RDEIR/SDEIS's assessment of alternatives (section 4 and Appendices A, F and G), all of the proposed new alternatives (alternatives 4A, 2D and 5), like the other project alternatives discussed, would fail to heed science-based recommendations to increase flows through the delta—instead, they would reduce these flows, undertaking upstream diversion of large quantities of water for the proposed Water Tunnels.

Remarkably, despite years of scientific evidence referenced above documenting the importance of water flow through the Delta to species recovery and to support other crucial beneficial uses for Delta farms and communities, the RDEIR/SDEIS fail to explore alternative approaches that would not rely on the ability to increase Delta exports. As proposed, the project's extraordinarily narrow, conveyance-dependent approach to water supply reliability is fundamentally at odds with the broader outlook that California has taken in other settings, including the California Water Action Plan and its efforts to harmonize water policy with climate change adaptation. The review continues to erroneously assumes that amendment or revision of project contracts are beyond the authority of DWR and the federal lead agencies, even though project contracts are presently being renegotiated, and even though pending contract discussions continue to explore the role of this project.

Finally, the RDEIR/SDEIS fails to sharply distinguish between alternatives and evaluate their comparative merits, as required under 40 CFR 1502.14(b). The alternatives analysis continues to rely upon a narrow and outmoded conception of water supply reliability, which presumes in favor of using water exports to meet the contract amounts referenced in the SWP and CVP contracts. However, a far wider range of options can be utilized to meet supply needs in the future, including water conservation, reoperation, water markets, alternative conveyance, wastewater reuse, water storage, desalination, and efforts toward achieving regional self-sufficiency. Reports of the National Research Council, the Delta Plan (2013), and the California Water Action Plan (2013), among others, discuss a far broader range of available options.

D. The Project and EIR/EIS Fail to Support Exclusion of Reasonable and Prudent Alternatives.

As discussed in section II.F above, a crucial deficiency in the RDEIR/SDEIS is that it fails to establish the absence of a "reasonable and prudent alternative" to avoid species jeopardy or adverse modification of critical habitat, and consequently cannot qualify for an incidental take permit under section 7 of the federal Endangered Species Act and section 2081(b) of the California Endangered Species Act. Having repeatedly sidestepped key scientific criticisms discussed above, the review does not come close to adequate study of the range of alternatives for survival and recovery of affected species.

VII. THE RDEIR/SDEIS AND THE PROJECT FAIL TO CONSISTENTLY INCORPORATE THE CONSEQUENCES OF DROUGHT, TRANSFERS, GROUNDWATER DEPLETION AND CLIMATE CHANGE.

As discussed above in section III.G, the Science Board sharply criticized the RDEIR/SDEIS for its incomplete and inconsistent treatment of climate change, and its refusal to make meaningful updates to its water and climate analysis despite years of drought and additional study since the dated analysis relied upon in the EIR/EIS. Moreover, the new review, like its predecessors, fails to analyze the effects of water transfers and diversions on groundwater basins within the areas of project impact.

With respect to climate, this indifference cannot be reconciled with DWR's own science-based climate guidance in other settings, and more than a decade of scientific research already compiled by DWR.

As DWR summarizes that research:

- "Climate change is having a profound impact on California water resources, as evidenced by changes in snowpack, sea level, and river flows . These changes are expected to continue in the future and more of our precipitation will likely fall as rain instead of snow. This potential change in weather patterns will exacerbate flood risks and add additional challenges for water supply reliability."

- "The mountain snowpack provides as much as a third of California's water supply by accumulating snow during our wet winters and releasing it slowly when we need it during our dry springs and summers. Warmer temperatures will cause what snow we do get to melt faster and earlier, making it more difficult to store and use. By 2050, scientists project a loss of at least 25 percent of the Sierra snowpack. This loss of snowpack means less water will be available for Californians to use."

- Climate change is also expected to result in more variable weather patterns throughout California. More variability can lead to longer and more severe droughts. In addition, the sea level will continue to rise threatening the sustainability of the Sacramento-San Joaquin Delta, the heart of the California water supply system and the source of water for 25 million Californians and millions of acres of prime farmland.

(http://www.water.ca.gov/climatechange/.)

That same consensus of scholarship also undermines the notion that the range of past hydrologic conditions can adequately account for the foreseeable range of conditions in which the project must operate. In several cases, federal and state

courts have cautioned against attempts to use past hydrology to avoid climate-resilient analysis. (See *NRDC v. Kempthorne* (E.D. Cal. 2007) 506 F.Supp.2d 322, 336, 337, 369; *PCFFA v. Gutierrez* (E.D. Cal. 2008) 606 F.Supp.2d 1122, 1184; *Pacific Coast Federation of Fishermen's Ass'n* v. Gutierrez (E.D. Cal. 2008) 606 F.Supp.2d 1122, 1184.) *Voices for Rural Living v. El Dorado Irrigation District* (2012) 209 Cal.App.4th 1096

The following sources. available and hyperlinked on DWR's website, should be reviewed and included in the record for this project.

The descriptions below of climate change reports and studies are those provided by DWR http://www.water.ca.gov/climatechange/pub_video.cfm.

- ☐ California Climate Science and Data for Water Resources Management (2015)
- ☐ DWR Climate Change Achievements (2014)
- ☐ DWR Climate Change Annual Report 2013 (2014)
- ☐ "Estimating Historical California Precipitation Phase Trends Using Gridded Precipitation, Precipitation Phase, and Elevation Data", DWR Memorandum Report (July, 2014)

This exploratory study develops and describes a methodology that uses readily available research data sets to produce gridded estimates of historical rainfall as a fraction of total precipitation for areas comprising the major water-supply watersheds of California. Written by Aaron Cuthbertson (DWR), Elissa Lynn (DWR), Mike Anderson (DWR, California State Climatologist) and Kelly Redmond(Western Regional Climate Center).

- ☐ "Preparing for Change, 'N' Magazine", by Elissa Lynn, DWR (July, 2014)
- ☐ "Regional Governance of Flood Management in the Central Valley: An analysis of the Integrated Regional Water Management and Regional Flood Management Planning processes " (May, 2014)

This study analyzes the origins and functioning of the Integrated Regional Water Management and Regional Flood Management Planning processes, and the degree of coordination between them to address flood risks in the Central Valley. It examines how these two processes are working to generate multi-benefit strategies and account for climate change, and discusses opportunities for future coordination. This report was written by Esther Conrad, PhD candidate in Environmental Science, Policy and Management at the University of California at Berkeley.

- ☐ Paleoclimate (Tree-Ring) Study (February, 2014)

New Hydroclimate Reconstructions have been released, using updated tree-ring chronologies for these California river basins; Klamath, San Joaquin and Sacramento. The report, prepared by the University of Arizona, allows assessment of hydrologic variability over centuries to millennia, gives historic context for assessing recent droughts, and can be used in climate change research.

- ☐ "Cry Me a Reservoir: Water Management and Climate Change Adaptation ", Environmental Law News (Summer, 2013)

This paper presents four commentaries on water management and adaptation to climate change by four practitioners who work on these issues, including DWR's Katherine Spanos.

- DWR Climate Change Annual Report 2012 (2013)
- Preparing for New Risks: Addressing Climate Change in California's Urban Water Management Plans (June 2013)

Urban Water Management Plans (UWMPs) are an important element of California's efforts to assure reliable water supplies. This study assesses how water suppliers have considered the impacts of climate change and greenhouse gas emissions in their 2010 plans, and provides recommendations for how DWR could improve its climate change guidance for 2015 UWMPs. This report was written by Esther Conrad, PhD candidate in the Department of Environmental Science, Policy and Management at University of California Berkeley.

- DWR Climate Change Annual Report 2011 (2012)
- Analysis of the Department of Water Resources volunteer Climate Cooperator Network (December, 2012)

Discusses the current state of DWR's Volunteer Climate Cooperator Network, and makes suggestions for the future of the program.

- Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future Prepublication (June, 2012)

Committee on Sea Level Rise in California, Oregon, and Washington Board on Earth Sciences and Resources and Ocean Studies Board (Division on Earth and Life Studies, The National Academies Press, Washington, D.C., www.nap.edu)

- "Climate Change and Integrated Regional Water Management in California: A Preliminary Assessment of Regional Approaches," (June, 2012)

Written by Esther Conrad, Dept. of Environmental Science, Policy and Management, University of California, this report examines the initial steps that IRWM (Integrated Regional Water Management) regions are taking in response to new requirements to address climate change vulnerabilities and consider greenhouse gas emissions in IRWM plans in California. Specifically, this report seeks to assess the manner and degree to which the climate change requirements in the 2010 IRWM Guidelines are met in Round1 Proposition 84 Planning and Implementation grant proposals, and in recently approved IRWM plans, assess current IRWM regional approaches to analyzing and adapting climate change risks in light of the overall goal to promote an adaptive management approach, and provide recommendations on key steps for DWR IRWM regions to support the development of informative climate change analyses and mechanisms for adaptive management at regional and state levels.

- California Department of Water Resources Draft Climate Action Plan Phase I: Greenhouse Gas Emissions Reduction Plan (2012)

DWR in an effort to reduce its impact on the environment and lead by example, is developing a Department-wide Climate Action Plan. The first phase of this Climate Action Plan is a Greenhouse Gas Emissions Reduction Plan, which will guide project development and decision making with respect to energy use and GHG emissions.

- "Hydrological Response to climate warming: the Upper Feather River Watershed". Huang, G., Kadir, T., Chung, F. Journal of Hydrology (2012)
The hydrological response and sensitivity to climate warming of the Upper Feather River Basin, a snow-dominated watershed in Northern California, were evaluated and quantified using observed changes, detrending, and specified temperature-based sensitivity simulations.
- "The Climate has Changed: Now what? Integrated Regional Water Management and Climate Change Planning a Coincidental or Inevitable Union?". Katherine Spanos. 30th Annual Water Law Conference American Bar Association Section of Environment, Energy, and Resources. San Diego, California (February 22-24th, 2012)
- Climate Change Handbook for Regional Water Planning (2011)
- "Isolated and integrated effects of sea level rise, seasonal runoff shifts, and annual runoff volume on California's largest water supply.". Jianzhong Wang, Hongbing Yin, Francis Chung. Journal of Hydrology. (May, 2011)
A detailed analysis of climate change impacts on seasonal pattern shift of inflow to reservoirs, annual inflow volume change, and sea level rise on water supply in the Central Valley of California.
- DWR Climate Change Program Annual Report 2010 (2011)
- "Climate Change Characterization and Analysis in California Water Resources Planning Studies". California Department of Water Resources (December, 2010)
A comprehensive and comparative look at planning studies conducted by DWR and its partner agencies that have addressed climate change. Thirteen planning studies completed since 2006 or in the process of being completed are reviewed and summarized.
- Coastal and Oceans Climate Action Team Sea Level Rise Task Force Final Interim Sea Level Rise Guidance Document (October, 2010)
- DWR Climate Change Achievements Brochure (2010)
- DWR Climate Change Program Annual Report 2009 (2010)
- California Water Plan Update 2009: Volume 1 Strategic Plan, Chapter 5 Managing for an Uncertain Future
- 2009 California Climate Adaptation Strategy. California Natural Resources Agency (December, 2009)
A first-of-its-kind multi-sector strategy to help guide California's efforts in adapting to climate change impacts. The 2009 California Climate Adaptation Strategy summarizes the best known science on climate change impacts in seven specific sectors and provides recommendations on how to manage against those threats.
- " Using Future Climate Projections to Support Water Resources Decision Making in California." California Climate Change Center (May, 2009)
The report evaluates how climate change could affect the reliability of California's water supply. Click Here to view a Summary Factsheet. For further information, please contact Francis Chung (chung@water.ca.gov) or Jamie Anderson (jamiea@water.ca.gov)
- DWR Climate Change Program Annual Report 2008 (2009)

□ "Managing an Uncertain Future: Climate Change Adaptation Strategies for California's Water" California Department of Water Resources (October, 2008)
Focuses discussion on the need for California's water managers to adapt to impacts of climate change, some of which are already affecting our water supplies. The report proposes 10 adaptation strategies in four categories.
□ DWR News/People (Fall, 2008)
DWR's quarterly magazine highlighting the people and projects of DWR
□ "Progress on Incorporating Climate Change into Management of California's Water Resources" Climatic Change (March, 2008)
Published in the March 2008 special issue of ***Climatic Change*** *-California at a Crossroads: Climate Change Science Informing Policy.* This is an 18 page condensed version of the original 350 page 2006 report of the same name. Coauthored by DWR staff.
□ Proceedings of the Western Governors' Association/Western States Water Council/California Department of Water Resources Climate Change Research Needs Workshop. (May, 2007)
A summary of information presented at the conference and of water management-related climate information and policy needs. Recommendations are also presented for development of relationships with the federal climate science agencies and with academia.
□ "Progress on Incorporating Climate Change into Management of California's Water Resources" California Department of Water Resources (July, 2006)
In response to Executive Order S-3-05 from Governor Arnold Schwarzenegger, this report documents the Department's progress toward incorporating multiple climate change scenarios into the management of California's water resources.
□ California Water Plan Update 2005:

- From Volume 1 Strategic Plan, Chapter 4 Preparing for an Uncertain Future
- From Volume 1 Strategic Plan, Chapter 5 Implementation Plan, policy recommendation concerning climate change
- From Volume 4 Reference Guide, Climate Change and California Water Resources: A Survey and Summary of the Literature (by Michael Kiparsky and Peter H. Gleick, Pacific Institute for Studies in Development, Environment, and Security)
- From Volume 4 Reference Guide, Accounting For Climate Change (by Maurice Roos, DWR)

Other reports not included in this list also merit review and inclusion in the record: Public Policy Institute of California, *Climate Change and Water* (April 2015); P. Kibel, *Sea Level Rise, Saltwater Intrusion and Endangered Fisheries—Shifting Baselines for the Bay-Delta Conservation Plan,*(*Environs*, July 2015); and T. Zuckerman, *A Water Plan for the 21st Century: Regional Self-Sufficiency Scenario* (July 2007).

COMMENTS on the BDCP EIR/EIS PREPARED BY AMY SKEWES-COX AND ROBERT TWISS

Prepared for San Joaquin County Department of Public Works

October 4, 2015

DWR has issued a Partially Recirculated EIR/Supplemental EIS on what is now referred to as "Bay Delta Conservation Plan/California Water Fix." In these comments, we refer to the document as the "RDEIR/SDEIS." These comments focus upon the degree to which RDEIR/SDEIS adequately addresses impacts of critical interest to San Joaquin County. Below, we make specific line-by-line references to errors, failures, misleading statements, and omissions which cause the document to fall short of NEPA and CEQA requirements. Many of these issues are common to the original EIR/EIS on which we commented in 2014. However, the focus of this review will be only on the RDEIR/SDEIS. Prior to the detailed comments, we note the following basic issues which undermine the document's adequacy:

1. A full and fair assessment of impacts is impossible given the RDEIR/SDEIS's treatment of water delivery at the project-specific level and the environmental mitigation measures at the vague, programmatic level. For example, we are still left with no information on the location of the so-called "Environmental Commitments" (hereinafter referred to as ECs) which in spite of reduced eco-restoration could take up significant acreage of agricultural land in San Joaquin County. This land is critical for the economy and livelihood of the County and impacts need to be adequately addressed as part of the REIR/S. If the ECs are to be part of the project, and not simply mitigation measures, their nature and locations need to be specified and clarified.

2. Proposed mitigation measures are projects in and of themselves which would have serious impacts on the land use and economy of the County; but the extent, magnitude, location, and implications of these actions (described only at the programmatic level) can only be speculative.

3. As with the original EIR/EIS, this document is not "user friendly" and seems designed to thwart review. As someone with over 35 years of CEQA experience, I found it tragic that a typical citizen in San Joaquin County could not possibly navigate this document, or determine whether their farmland might be impacted. This could be called an "IKEA Environmental Document"....once you get in the door; you can never find your way out. And by the time you do, you're left without what you were looking for, and with things you don't need.

   In this RDEIR/SDEIS, one searches for relevant text with all the cross references, only to lose track of where one originally was reading, ending up in a "mental knot" with conclusions that are unfounded, vague generalizations, and lacking in standard analyses methodologies.

4. The lack of balance in the analysis of the new Alternative 4A was blatantly obvious. Of the 1,088 pages in Chapter 4 addressing Alternative 4A, there is only the briefest discussion (5 pages) devoted to the topic of Land Use, and similarly only brief discussion (8 pages) devoted to Agricultural Resources. Instead, the largest effort was put into the topics of Aquatic Resources (441 pages), Water Quality (70 pages), and other topics. Requests for more clarification on land use and agricultural resources impacts (per comments on original EIR/S) were not even touched upon.

5. The analysis in Chapter 4 includes broad generalizations, making statements for example that since impacts would be dispersed and because impacts would be limited compared to other BDCP alternatives, the impacts would be less than significant. First of all, the RDEIR/SDEIS is not meant to address impacts of Alternative 4A as

related to other alternatives. Impacts have to be compared to baseline conditions (but were not). And the fact that impacts are dispersed does not make them any less significant. For the landowner affected by those impacts, or the biological species impacted, dispersion is completely irrelevant.

6. There are significant and unavoidable impacts that are listed; however, the reader is not clearly shown that in the analysis in Chapter 4 when impacts and mitigation measures are addressed.

7. For a "Project EIR," this RDEIR/SDEIS refers to an incredible number of "plans" for mitigation. No clarity is provided in terms of standards. Thus, these plans would constitute deferral of mitigation. Without the standards in the plans themselves, and without seeing copies of these plans, the reviewer has absolutely no clue as to whether they would serve to mitigate potential impacts. They are just words. Some examples of all the recommended plans to serve as mitigation are the following (including Environmental Commitments):
   - Agricultural Lands Stewardship Plan
   - Transportation Demand Management Plan
   - Erosion and Sediment Control Plans
   - Fish Rescue and Salvage Plans
   - Barge Operations Plan
   - Construction Equipment Exhaust Reduction Plan
   - Noise Reduction Plan
   - Hazardous Materials Management Plan
   - Spill Prevent Plans
   - Mosquito Management Plans

   And these are only some of the 21 so called "Environmental Commitments" listed in Appendix 3B. That same appendix identifies an additional 31 "Avoidance and Minimization Measures" (AMMs). It's as if someone sat down to think about every possible mitigation measure that might apply to the project and then simply listed these separately. They are not clearly discussed or shown in the impact discussion or the text on mitigation measures. Again, the reader has to go on "the Ikea hunt" for information. This type of approach seems exactly what was challenged in the Lotus v. Caltrans case recently. Please clarify how these "mitigation measures" have been adequately assessed. Revised Chapter 31 on page 31-9 through 31-15 addresses "Mitigation Measures with the Potential for Environmental Effects under CEQA and NEPA"; however, it appears that only five mitigation measures are addressed. Even then, the impact discussion remains vague. In discussion of Mitigation Measure BIO-176 (hard to believe there are this many mitigation measures related to biology!), the issue of conversion of agricultural lands is given a cursory review with statement that further evaluation would be needed when specific locations of lands to be converted are known. No information is provided on acreage of ag lands removed, the County where this would occur, or the type of ag soils to be impacted. Such an impact discussion renders the analysis worthless.

8. Revised Chapter 31 in Appendix A of the RDEIR/SDEIS shows **FIFTY (50)** remaining **significant and unavoidable impacts** from this project. And those impacts are not just localized to a small area; these are spread over the entire area of the tunnels' route as well as additional acreage for Clifton Court Forebay expansion, areas for reusable tunnel material (RTM) and pumping plants. These impacts could occur over 4,000 acres shared by multiple counties (not accounting for acreage of habitat restoration) if data on pages 3-20 to 3-21 of the revised Chapter 3 in Appendix A are correct. Now that many of the original "restoration" activities have been delayed (or eliminated), additional acreage could be impacted by this element of the project since the earlier focus on conservation has been dropped. The following is a summarized list of the impacts that are NOT

able to be fully mitigated and that would impact many residents, businesses, and visitors of San Joaquin County as well as impact the overall environment that is so important to making San Joaquin County what it is:

- Groundwater depletion
- Interference with agricultural drainage
- Interference with groundwater recharge
- Degradation of groundwater quality (NM)[1]
- Reduced water quality related to mercury, etc.
- Loss of topsoil
- Creation of physical structures through existing communities
- Conversion of Important Farmland
- Long-term reduction in recreational opportunities
- Substantial alteration in existing visual quality
- Permanent effects on scenic vistas
- Damage to scenic resources from conveyance facilities
- New light and glare
- Effects on archaeological, paleontological, and historic resources
- Effects on buried human remains during construction
- Construction vehicle trips causing unacceptable LOS conditions
- Construction vehicle trips worsening pavement conditions
- Interference with emergency routes
- Disruption to transit service
- Effects on local and regional utilities
- Cumulative greenhouse gas (GHG) emissions due to pumping
- Generation of regional criteria pollutants
- Significant noise and vibration impacts
- Public health impacts related to water quality
- Loss of important natural gas wells

Given the recent San Diego State University CEQA case, it appears that DWR has not done enough to identify mitigation measures that are reasonable, feasible, and enforceable. There is no reason that all of the above significant, unavoidable impacts have to result from the project. And it is hard to imagine how Findings will be able to be made given over 50 significant and unavoidable impacts. The following are measures that have not even been mentioned in the mitigation discussion:

- Reducing the scale of the project.
- Committing DWR to specific assurances such as means for payment and authority for completion of mitigation measures (e.g., purchase of agricultural easements, repaving of roads needed for construction, identifying non-auto/truck construction vehicles for moving equipment, identifying and committing to developing of habitat restoration in specific locations, protecting groundwater by specific measures).
- Implementing measures that are vaguely referred to in the myriad of 'plans' that are shown as mitigation but that are only vague assurances of implementation.

[1] NM: No mitigation even provided for this impact.

9. **Overall Comments on Transportation Analysis**

Methodology -The methodology used to forecast future volumes, and future volumes with project has been reviewed. The report states that the future volumes in San Joaquin County were developed based on the SJCOG Travel Demand Model. The methodology seems sound, with one exception. The metric used is hours of congestion per day. The time period analyzed is from 6AM to 7PM. In many cases, both the future with and without project scenario show the maximum of 13 hours. In these cases, it is impossible to determine the impacts of the project. Roadway segments that are already at congested level during the entire period are inherently the most critical roadway segments.

Using total hours of delay would be a more useful metric and consistent with common practice. This metric would be especially useful in cases where the impacts of the project cannot be determined from the current analysis.

Consistency with Local Plans and Programs-The analysis does not cite the San Joaquin Council of Governments Regional Transportation Plan, or the SJCOG Congestion Management Program. The methodology section states that the SJCOG Travel Demand Model was used in the analysis, but does not specify which version of the model was used. We cannot determine if it was consistent with the adopted Regional Transportation Plan at the time of the NOP or release of the DEIR/DEIS, or RDEIR/SDEIS. This limits our ability to determine if the document properly assesses the impacts to the County's roadways over the 20 year construction period of the plan.

Impacts to the SJCOG CMP roadway network have not been analyzed or mitigated consistent with the most recent SJCOG Congestion Management Plan (CMP).

Traffic Impacts

SR4 - The most severe impacts directly attributable to the proposed project are on SR4 from the San Joaquin County Line to I-5. The three segments analyzed experience only one hour of congestion in the base, and only three hours in the future without the project. With the proposed project, the three segments would experience 39 hours of congestion.

SR12 - It is not possible to determine the proposed project's impact on SR12. The base line indicates 12 hours of congestion. The future shows 13 hours of congestion for both the with and without project scenarios. Since the analysis only covers a 13 hour period from 6AM to 7PM, this is the maximum number of hours. Additional 24-hour analysis will likely also identify additional impacts requiring mitigation to the County transportation network.

I-5 – This is a critical Interstate link for the entire West Coast. It is a major goods movement corridor for the entire West Coast. Two segments that are projected to be deficient are impacted by the project. According to Caltrans data, traffic volumes on these two segments range from 130,000 per day to 149,000 per day.

> **From the CrossTown Freeway to Dr. Martin Luther King Blvd in the Southbound direction:**This analysis shows that this segment currently operates at an acceptable level of service. The future projections without the project are 2 hours per day. The proposed project would increase congestion to 3 hours a day. Even an increase of 1 hour per day on this segment will impact thousands of motorists each day over the next 20 years. A select link analysis of the diversion of traffic should be done on all major roadways to assess the impact to the local circulation system, as well as the appropriate mitigation for such critical impacts.

From Dr, Martin Luther King Blvd to 11th St. in the Northbound Direction: This analysis shows that this segment currently operates at an acceptable level of service. The future projection without the project is 3 hours of congestion per day. With the project, congestion will increase to 4 hours per day. Even an increase of 1 hour per day on this segment will impact thousands of motorists each day over the next 20 years. A select link analysis of the diversion of traffic should be done on all major roadways to assess the impact to the local circulation system.

From Dr, Martin Luther King Blvd to 11th St. in the Southbound Direction: This analysis shows that this segment currently experiences 3 hours of congestion per day. The future projections without the project are 13 hours per day. The "with project" scenario also shows 13 hours per day. Since 13 hours is the maximum time period analyzed, it is not possible to determine the project impacts on this very critical interstate segment.

I-205 is another critical Interstate link that connects the Northern San Joaquin Valley to the San Francisco Bay area. It is also a very high volume route. The entire route from I-5 to I-580 experiences over 100,000 trips per day.

From I-580 to Mountain House Pkwy in the Eastbound Direction: This analysis shows that this segment currently experiences 4 hours of congestion per day. The future projection without the project is 5 hours of congestion per day. With the project, congestion will remain at 5 hours per day.

From I-580 to Mountain House Pkwy in the Eastbound Direction: This analysis shows that this segment currently experiences 2 hours of congestion per day. The future projection without the project is 3 hours of congestion per day. With the project, congestion will remain at 3 hours per day.

From Mountain House Pkwy to 11th St. in the Eastbound Direction: This analysis shows that this segment currently experiences 4 hours of congestion per day. The future projection without the project is 5 hours of congestion per day. With the project, congestion will remain at 5 hours per day.

From Mountain House Pkwy to 11th St. in the Westbound Direction: This analysis shows that this segment currently operates at an acceptable level of service. The future projection without the project is 2 hours of congestion per day. With the project, congestion will increase to 3 hours per day. Even an increase of 1 hour per day on this segment will impact thousands of motorist each day over the next 20 years. A select link analysis of the diversion of traffic should be done on all major roadways to assess the impact to the local circulation system.

Byron Highway - This analysis shows that this segment currently operates at an acceptable level of service. The future projections shows that without the project, it will continue to operate at an acceptable level of service. Due to a typographical error in the analysis, we cannot determine the hours of congestion with the project.

Mitigations Measures: The proposed Mitigations measures are not adequate to mitigate the traffic impacts of the proposed projects

The table below cites specific problems with the RDEIR/SDEIS and notes how that problem is an example of a broader issue.

COMMENTS	TOPIC
GENERAL COMMENTS	
1. **Project Level vs. Program Level:** The project is basically piecemealed because the actual impacts/precise impacts of ECs are not addressed at a project level of analysis and thus one cannot determine the true cumulative impacts of the water conveyance facilities. The impacts of the mitigation measures are not adequately addressed, because many of the ECs refer to broadly defined mitigation measures of the water conveyance facilities. Specific locations of ECs are not clarified; thus, the full project is not truly defined. Because ECs are used as mitigation to offset many of the impacts of the water conveyance facility, the EIR throughout uses program-level mitigation measures to reduce project-level impacts of Alternative 4A to less than significant levels. In order to assure mitigation, the document must specifically show how the program mitigation reduces the project impacts to a less-than-significant level, bridging the analytical gap from program to project level with clear, specific measures. Further, impacts of each of the mitigation measures must be clearly and precisely identified. The RDEIR/SDEIS fails to do that. Please rewrite the EIR to include either detailed explanations showing how the programmatic mitigation measures reduce impact significance to less-than-significant levels, and/or provide project-level mitigation measures that are enforceable and clearly able to be monitored, and reduce impacts to the extent feasible. Numerous examples of this problem are presented in the comments below.	**Incorrect use of Program and Project EIRs** **Piecemealing** **Inadequate project-level mitigation measures** **Programmatic mitigation measures used when project-level required**
2. **Unreadable Document.** At more than 2,200 pages alone for Chapter 4 of the RDEIR/SDEIS, this entire EIR/S is essentially unreadable, not only for the lay person but for an expert or elected official who has not had extensive experience with CEQA/NEPA. The Executive Summary alone is 106 pages long. That alone should be enough proof that this is not "user friendly" or even "User Accessible." The other elements that make it unreadable are: 1) the lack of graphics that add to the text in a location that is useable (e.g., one has to go to one of multiple appendices to find applicable graphics and to search for base information that is not located correctly; 2) the lack of a clear project description for the "Preferred Alternative" that is supposedly evaluated at a project level (instead, one has to search through the appendix to learn of all the components that are part of the Preferred Alternative	**Unreadable document** **Not a user friendly document**
3. The definition of ECs is very unclear. Appendix 3B lists 20 measures, almost all of which are plans and programs that are intended to serve as mitigation measures. The REIR/SEIR cites the Lotus case, implying that these measures are effectively part of the project. Then, Chapter 4.1 addresses completely different ECs that are related to biological mitigation measures such as tidal communities' restoration, channel enhancements, vernal pool restorations and fish barriers. Are they both intended to be ECs? Why does Appendix 3B not include the measures shown on page 4.1-15?	**Inadequate impact analysis** **Applicable to recent "Lotus v. Caltrans" case** **Inadequate mitigation measures**
4. The project as proposed is too big for the proponent to develop and manage, let alone provide for meaningful review and comment as required by law. This	**Project is too big to build with confidence; clearly beyond the**

COMMENTS	TOPIC
is evidenced by major last-minute changes in alignment of the tunnels, and the eleventh-hour decision to abandon all components of BDCP that would protect the Delta as Place and the broader environment. Related to CEQA/NEPA, this attempt to piggy-back the Water Fix on the BDCP analysis, modeling, assessment and documentation fails to provide an adequate project description and analysis such that it can be reviewed.	**competence of the proponents.**
5. The proposed alternative is at full-buildout only, and as such, mitigation and adaptive management can touch only the fringes of impact-causing actions. For comparison, a through-delta conveyance can be done in increments with monitoring, field-testing, and analysis to re-design the project if needed as it progresses. This issue underlies the grave concerns expressed by the DSC Independent Science Board. This characteristic is inherent in such a massive engineering scheme; but as such it requires prior modeling, experimentation, and analysis commensurate with the risks involved. This project, in spite of its massive documentation, has morphed into the area of high uncertainty, and must be seen as "shooting from the hip."	**Project is "All or nothing," thus impossible to apply adaptive management, modify design and correct mistakes as they are experienced.**
SPECIFIC COMMENTS	
Executive Summary	
6. Page ES-8, Lines 18-21: There are no assurances that California EcoRestore actions will occur. That is a separate project and this RDEIR/SDEIS should not mislead readers to thinking that future habitat restoration beyond the mitigation measures in this document will occur. The document does not clearly explain which features are required to mitigate the impacts of previous projects, and which are prospective. In either case, Water Fix should not imply that it need not mitigate because the actions of others may (or may not) lessen the impact.	**Misleading reliance on separate project to mitigate this project.**
7. Page ES-9, Lines 31-32: Again, EcoRestore is mentioned in terms of reducing impacts. You can't have it both ways. You say impacts related to HCP are reduced due to removal of habitat restoration efforts with this new project; and then on the same page, you say biological impacts are reduced due to existence of EcoRestore. This Executive Summary needs to be revised to truthfully separate EcoRestore as a separate project that should NOT be included in this RDEIR/SDEIS.	**Misleading reliance on separate project to mitigate this project.**
8. Page ES-10: Finally, there is an admission that agricultural impacts are still of concern. If this is the case, please explain why there is no clear description of impacts (only 8 pages are devoted to this topic in Chapter 4 of the RDEIR/SDEIS as related to Alternative 4A).	**Inadequate evaluation of agricultural impacts.**
9. Page ES-82: Please explain how there can be no impact of construction on existing land uses. For example, the REIR/SEIR states that there are significant, unavoidable roadway interruptions and LOS exceedances during construction. That congestion will both directly and indirectly affect land uses along those roadways for a considerable length of time. Residences could be impacted by significant air emissions if located near those roadways; commercial enterprises could have limited access due to congestion.	**Insufficient impact analysis False conclusions**
10. Page ES-82: The mitigation for agricultural land loss is development of an Agricultural Lands Stewardship Plan (ALSP). No standards are set. No funding or authority is assured. This constitutes deferral of mitigation. No	**Deferral of mitigation Inadequate mitigation**

COMMENTS	TOPIC
clarification is provided on how much acreage is to be saved.	
11. Page ES-83: Maintaining water supplies where dewatering is required is far from clear. Have groundwater levels been monitored to know how this can possibly happen, and how nearby farmers groundwater levels may be impacted? Please clarify how anyone can maintain water levels when groundwater is being withdrawn. Specify the base condition.	**Inadequate mitigation**
12. Page ES-94: Mitigation Measure TRANS 1c for Impact 6 states "Make good faith effort to enhance capacity of congested roadway segments." Please clarify how this can possibly be monitored. If this were a mitigation for a builder, people would laugh. Please clarify what constitutes a "good faith effort" and whether one phone call to one agency might qualify.	**Inadequate mitigation** **Unenforceable mitigation**
13. Overall comment on Summary Table ES-9: For an RDEIR/SDEIS that has over 8,000 pages of text, the Summary Table takes on even more relevance as compared to a normal RDEIR/SDEIS that is generally less than 400 pages. Five word summaries of mitigation measures are totally inadequate. Many significant impacts show no mitigation measures, thought it appears these might have been corrected with the "Errata" sent out over 3 weeks after the review period began (again adding to the cumbersome review process). Many mitigation measures are repeated over and over and over again. If these were meaningful and enforceable, that might be OK. However, they are generalized and deferred, giving the reader and public no assurance of implementation.	**Vague and meaningless mitigation measures**
Appendix A – Chapter 13 and 14	
14. Page 13-9 appears to shows that temporary construction impacts of converting ag lands to non-ag uses would now be 14 years rather than 9. However, in Chapter 3, construction period is shown as 11. Please explain why 5 years have been added to the construction period. Or is it 3 years now added? Lack of consistency in analysis is very confusing. Please explain why 14 years are considered "temporary." Develop new terminology to clarify and admit to the impact implications of time involved. For example, one or two years' disruption could ruin a business, or cause people to move from their home.	**Lack of consistency in years of "temporary" construction**
15. Page 14-5, Line 15: About 295 more acres of Williamson Act contract lands are shown for temporary removal now; please clarify in which County this occurs.	**Lack of clarity on impacts location**
16. Page 14-16; Line 6: Good to see that ag lands are now to be acquired within both Sacramento and Stockton metropolitan areas (Impact AG-2); it appears that our earlier comments on this may have been addressed. However, we still question the ability to mitigate for conversion of protected prime Delta farmland outside of the Delta. The best thing would be to avoid the conversion and impacts in the first place.	**Changed mitigation**
17. Page 14-19, Line 37: It appears that there may be a new impact related to 5 miles of Staten Island agricultural water delivery canals and ditches to be impacted, primarily due to assumed geotechnical investigation areas. The mitigation measure refers to GW-1 which can be found in Appendix A on page 7-5. However, this mitigation measure ONLY refers to impacts to related to groundwater depletion for ag use. It says nothing about water in	**Inadequate mitigation**

COMMENTS	TOPIC
canals and ditches used on Staten Island.	
18. Page 14-20: Unclear why Mitigation Measure AG-1 is shown for Impact AG-2. Then, there's mention of mitigation measures for Alternative 1A but Alternative 4 also has major ag/water infrastructure impacts in terms of pumping 500 gallons per minute (gpm) at construction sites and interrupting miles of ag drainage ditches. Please clarify why there is no mitigation measure for this.	**Odd numbering of mitigation Inadequate mitigation**
16. In Chapter 14, text seems to be missing from Section 14.3.3.2 to 14.3.3.9. Please clarify if there were changes to that section of the DEIR.	**Missing text**
Chapter 4 – New Alternatives	
19. **Overview:** This chapter was extremely difficult to review as there was no clear breakdown by alternatives or topics. There should have been hyperlinks to topics so that the reader did not have to sift through 2,277 pages to find the topic of concern. This was done in Appendix A and could easily have been done for Chapter 4 of the RDEIR/SDEIS. As stated in Section 15140 of the CEQA Guidelines, "EIRs shall be written in plain language and may use appropriate graphics so that decision makers and the public can rapidly understand the documents." Please note the word "rapidly." This document was so cumbersome, as mentioned in our introduction above, that one gets lost trying to find the relevant section dealing with the revised project.	**EIR written and presented with no clarity or appropriate hyperlinks, making it quite cumbersome to find relevant sections. Ignores Section 15140 of CEQA Guidelines.**
20. **Issue of Environmental Commitments**: The idea that the project now includes "Environmental Commitments" (EVs) which were originally referred to as "Conservation Measures" (and fewer now apply to revised project) seems to directly apply to the Lotus v. Caltrans case. Please clarify why you assume that these EVs do not have to be adequately evaluated as related to potential specific impacts and why they wouldn't be included in a Mitigation Monitoring and Reporting Program. As stated in the Lotus case, "Caltrans compounds this omission by incorporating the proposed mitigation measures into its description of the project and then concluding that any potential impacts from the project will be less than significant. As the trial court held, the 'avoidance, minimization and/or mitigation measures,' as they are characterized in the EIR, are not 'part of the project.' They are mitigation measures designed to reduce or eliminate the damage to the redwoods anticipated from disturbing the structural root zone of the trees by excavation and placement of impermeable materials over the root zones. By compressing the analysis of impacts and mitigation measures into a single issue, the EIR disregards the requirements of CEQA."	**Lack of adequate mitigation Use of Environmental Commitments to ignore need for mitigation** **Application to Lotus v. Caltrans CEQA case**
Land Use	
21. Page 4.3.9-1: Line 23-24: There is no reference to what mitigation measures apply to identified impact of land use incompatibility. It is amazing in Chapter 4 that there is no description to provide an understanding of what is proposed.	**Lack of mitigation measures**
22. Page 4.3.9-3, Line 31: While about 68,000 fewer acres would now be impacted due to removal of CMs 2, 5, 13, 14, and 17-21, there would still be about 15, 548 acres of habitat restoration. However, please explain why there is absolutely no clarification of where these acres would be located. How can this RDEIR/SDEIS assess and report the impacts of the Environmental	**Lack of adequate impact analysis**

COMMENTS	TOPIC
Commitments without knowing and showing the location of habitat restoration and the current land uses it would replace. It is not always true that habitat restoration is compatible with agricultural operations as stated on page 4.3.9-4, Line 21. Please correct this conclusion.	
23. Page 4.3.9-4: Open space and agricultural designations are NOT the same. Also, habitat restoration does not equal an agricultural use. Please correct.	**Incorrect land use analysis**
24. Page 4.3.9-4, Line 7-8: Comparing this new alternative to other BDCP alternatives is not the appropriate CEQA methodology; the new alternative must be compared to baseline conditions. There is a statement "not anticipated to result in substantial incompatibilities" but without any backup information to justify this conclusion. And the "dispersion" of impacts does not mean reduced impacts, but rather could indicate an increase in effect.	**Failure to compare to baseline conditions** **Lack of information or evidence to support conclusions** **Minimization of impacts by concluding that dispersed impacts are reduced impacts**
Appendix 3B – Environmental Commitments	
25. Page 3B-55, Line 29: States that RTM areas are considered permanent surface impacts for the purpose of the impact analysis. If this is the case, please clarify that the agricultural/land use impacts of using this acreage for RTM have been shown as permanent rather than temporary impacts.	**Clarification on short-term vs. long-term impacts**
Transportation	
26. Page 4.3.15-1, Line 30: Please clarify how the impacts of Alternative 4A can be the same as Alternative 4 when you have significantly more RTM stored at the Clifton Court Forebay area and other new areas were not assessed in the original DEIR. The mitigation measures for construction impacts remain vague, unclear and deferred. Using words such as "make good faith effort" and "limit construction when feasible" illustrate totally ineffective mitigation measures that cannot be monitored. Nowhere is there a discussion of 1) reducing the scale of the project to reduce impacts (per recent San Diego State case), 2) suggesting alternative routes, 3) suggesting alternative means of delivering materials such as rail or water or helicopter to eliminate reliance on construction trucks.	**Lack of adequate mitigation** **Relevance to recent San Diego State case** **Vague and deferred mitigation measures**
27. Table 19-25 in Appendix A: This revised table is showing that LOS exceedances could occur for up to 13 hours per day on some local roads such as SR 4, SR 12, etc. These are main arteries for San Joaquin County and adjoining counties. And these roads could be impacted for more hours, but the RDEIR/SDEIS analysis only covered 6 AM to 7 PM. And such exceedances could occur over the 14 year construction period.	**Lack of full impact analysis and significant very long-term transportation impacts that lack adequate mitigation**
28. Page 19-122 in Appendix A: Line 26: Expanding the study area to "capture all potentially affected roadway segments" is NOT a mitigation measure. Please clarify why this suggestion would serve as mitigation.	**Lack of adequate mitigation "Study" does not equal mitigation**
29. Page 19-123, Lines 1-38: A traffic mitigation plan with the following measures is far from adequate in reducing construction traffic impacts. The following DO NOT constitute traffic mitigation for construction: ▪ Slowing or rerouting traffic (especially in the Delta, where alternative routes are not available)	**San Diego case** **Lack of effective mitigation measures**

COMMENTS	TOPIC
▪ Notices ▪ Outreach ▪ Procedures for evacuation ▪ Describing staging areas ▪ Designating areas of nighttime construction ▪ Relocating school bus stops ▪ Telling haulers to pull over in an emergency ▪ Or ▪ Adding a TDM program for construction workers (their contribution to overall traffic is likely a fraction of the problem) In addition, Mitigation Measure TRANS-1b suggests limiting the hours of construction. Please clarify how the impact of this mitigation measure would be in lengthening the construction period. Instead of 14 years, maybe construction would go on for 20 years. Please provide a simple table that recognizes and reports the direct relationship between hours worked and construction time for the entire project. And please clarify that any construction workers would even be able to abide by this. If they cannot work during nighttime hours, this could have important cost implications. In addition, Mitigation Measure AES-4a suggests limiting construction to daylight hours within 0.25 miles of residents. This would significantly restrict where any nighttime construction could occur. It appears that there are conflicts between mitigation measures. Please clarify. The mitigation measure for traffic is woefully inadequate and needs to be re-analyzed and rewritten to include effective and workable measures that can be monitored. Please revise these measures per the San Diego case rather than just concluding that impacts would be significant and unavoidable, and adding "band aid" mitigation measures that are meaningless. Page 19-125 states in Mitigation Measure TRANS-1c to "make good faith efforts to enter into mitigation agreements to enhance capacity of congested roadway segments." This is the antithesis of Governor Brown's goal of reducing greenhouse gas emissions in the State. And if you increase capacity for 14-15 years of construction, you've basically used this project to expand capacity of all affected roadways. Please identify the impact of such capacity increases in terms of land use, GHG, air quality, noise, growth inducement, cumulative impacts and other issues. The REIR does nothing to address creative solutions to reducing overall construction traffic such as delivery by rail, nighttime deliveries, helicopter deliveries and/or barge deliveries. Please address if these are feasible to reduce vehicular traffic congestion.	**Impacts of mitigation measures not evaluated** **Mitigation measures working at cross purposes.** **"Good faith effort" does not constitute mitigation.**
Groundwater – Alternative 4A	
30. Page 4.3.3-1; Lines 26-29: Text mentions "temporary" effects on groundwater levels and associated well yields but provides no clarification of the true level of the impact. If it's true that "sustainable yield of some wells might temporarily be affected by the lower water levels such that they are not able to support existing land uses" as stated in the text, this could be a significant	**Lack of clarity of impact** **Failure to define "temporary"**

COMMENTS	TOPIC
unavoidable impact and could have far-reaching consequences for farmers affected by such groundwater reductions for an extensive period of time. Elsewhere "temporary" had meant up to 14 years. There has been no discussion of the secondary impacts of this lowered groundwater such as removal of lands from agricultural production, resulting in increased development pressure and the associated impacts of such. The duration of the dewatering activities is not clarified. Please state how many months/years are involved. There is no clarification on the total number of acres impacted which prevents the reader from having a clear idea of the true impact of dewatering activities. Please provide acreage and specific locations.	
31. Mitigation for Impact GW-1: The reviewer must go back to see revisions to Chapter 7 of the original EIR/S to see the recommended mitigation measure for groundwater reductions for Alternative 4A. On page 7-4 of the original EIR/S, one sees that the mitigation measure is extremely vague and not enforceable. If monitoring shows that domestic or agricultural water supplies are reduced due to dewatering, the EIR/S states that BDCP proponents (who is this and who is going to "watchdog" this?) will ensure domestic water supplies provided by wells "are maintained" during construction. This could entail installing sheet piles, deepening wells, or securing potable water from offsite sources. Nowhere is the impact of securing potable water from offsite addressed. Nowhere is one aware of how much water we might be discussing here. For agricultural water losses, the EIR/S states that the mitigation could be compensation to offset crop production losses. Again, the full impact is not addressed. If there are crop losses, please explain what impacts there could be in terms of long-term removal of ag lands from production; what impacts there could be from fallow land without water increasing dust emissions. The new revised Mitigation Measures GW-1 has extensive text added about monitoring, but the mitigation is still not enforceable. New text on line 37 of page 7-5 states "If water level data indicate that dewatering operations are responsible for reductions in well productivity such that water supplies are inadequate to meet existing or planned land use demands, mitigation will be required and implemented." This is not a mitigation measure....this is part of the IMPACT. Clarify who is to determine if dewatering operations are responsible for this impact. Clarify what other reasons there could be for lowered levels such as drought conditions, etc. This is the most circular reasoning that gets nowhere in terms of truly mitigating what could be a very serious impact. No specific standards or triggering points are provided in terms of defining "inadequate water supplies" due to well drawdown. Is that 1% less than prior to construction activities? Is it 15% less? Please clarify how you would define "inadequate" and who makes that determination? There are no established standards identified which results in a type of deferral of the mitigation measure. Please define what baseline would be used and how it would be	**Inadequate mitigation for groundwater reductions, both domestic and agricultural Reference to implementation and enforcement by an agency that does not and may not ever exist**

COMMENTS	TOPIC
established. How can the proponent of the project make the determination when it's not in their best interest to have additional costs such as this? What outside, independent agency such as local County Health Department, or County Public Works staff could oversee this effort (assuming appropriate fees would be paid for their time)? Please clarify.	
32. **General Omission**: There is no discussion of the Sustainable Groundwater Management Act (SGMA) of 2014 in Chapter 4 of the RDEIR/SDEIR or in Appendix A of the RDEIR/SDEIS, Chapter 7.1. One does not find a single mention of SGMA – one of the most critical pieces of legislation in the State of California in years. The only place SGMA is mentioned is in Chapter 5 dealing with cumulative impacts. But this is not just a "cumulative issue." The future Groundwater Management Plans to be developed by local governments may have major ramifications on future water use within the State. If significant overdrafting is identified, the result may be severe curtailments on water use, especially for agricultural operations. Consequently, there may be even higher demands for surface water sources. This entire issue has been blatantly omitted from the RDEIR/SDEIR discussion. Please elaborate on this issue and include information relevant to the impact analysis, including the analysis of future water demand projections.	**Omission of critical SGMA legislation discussion related to future groundwater use**
Water Quality	
33. **General:** A total of 34 impacts related to water quality are addressed in Chapter 4.3.4 of the RDEIR/SDEIS. The impacts address levels of boron, bromide, chloride, dissolved oxygen, electrical conductivity (EC or what should be called "salinity"), mercury, pathogens, pesticides, selenium, nutrients (ammonia, nitrate and phosphorous), trace metals, turbidity, *microcystis*, and total suspended solids (TSS), and dissolved organic carbon (DOC). Many of the conclusions state that increases in these compounds would not degrade water quality; however, there are no tables showing expected levels as compared to standards or objectives related to these compounds. The reader is left just trusting the conclusion without substantiation. There is mention of "objectives" and "criteria" but no tables showing the impacts related to these.	**Lack of criteria by which to assess impacts**
34. Impact WQ-11 re: Electrical Conductivity: Page 4.3.4-23, Lines 25-27 states that "quantitative modeling results presented in this assessment is (sic) not entirely predictive of actual effects under Alternative 4A, and the results should be interpreted with caution." The text goes on to say that no new modeling was done; instead, a sensitivity analysis was completed. However, this leaves the reader wondering how much one can trust the conclusions.	**Alt 4A not modeled, results of analysis "used with caution"** **Example of DSC ISB concerns**
35. Throughout, the report uses various bases for comparison (none, other alternatives, BDCP) but at lines 17-31, 4.3.4-67 for example, the project's impacts are deemed minor in comparison to effects of other projects, sea-level rise, and climate change.	**Shifting baseline to include other project's impacts and effects of sea-level rise**

Adaptive Management & Monitoring Comment

Adaptive management and monitoring is essential for a project as complex and far-reaching as Waterfix. In fact, the WaterFix RDEIR/RDEIS acknowledges this and states that there will be "a robust program of collaborative science, monitoring, and adaptive management" (RDEIR Executive Summary, page 37). Yet, while confirming that monitoring and adaptive management is a critical element of the permitting process under CESA and ESA, specific details of such a monitoring and adaptive management plan are missing from the recirculated documents. Little more than lip service is paid to the need for such elements of WaterFix. Waiting until some unspecified future date to develop a reliable and functional monitoring and adaptive management system deprives the public and decision makers of the opportunity to assess and comment upon such a plan.

In fact, the Delta Independent Science Board (DISB), having reviewed WaterFix, emphatically notes that the recirculated environmental documents repeat the inadequacies of the BDCP environmental documents. The DISB states that the deferral of providing details of the adaptive management process, collaborative science, monitoring, and the resources for these efforts is simply too late for WaterFix to be a successful plan. The DISB also notes that, for WaterFix to meet the consistency requirements of the Delta Plan, a clearly defined adaptive management plan must be an integral part of the plan. Details on how adaptive management and monitoring will be done and resourced must be done now, at the outset, so that the public, as well as decision makers can review and analyze the adequacy of WaterFix at the earliest moment, not some time in the distant future.

The DISB is not alone in expressing concerns about plans which contain only vague promises of adaptive management. Knowledgeable and respected legal scholars have heavily criticized so-called adaptive management plans that contain little more than watered down ad hoc contingency planning and crisis management on the fly. They appropriately deem this "a-m lite" (citation for Minnesota LR article). Such "e-m lite", as with WaterFix, does not live up to either the theoretical promise or the legal demands of substantive and procedural law.

At a minimum, adaptive management must entail the development of a comprehensive conceptual model for evaluating the potential causes of environmental degradation, as noted by the DISB. The WaterFix documents contain little in the way of such modeling.

Moreover, planning and design of an adaptive management program must be developed simultaneously with a plan for monitoring and those plans should be developed before implementation of the project. That is not the case with WaterFix as there is little evidence in the recirculated documents of a specific set of plans for adaptive management and linked monitoring. WaterFix simply provides empty and unclear promises of some plans in the future.

Finally, one of the most critical parts of successful adaptive management and monitoring plans, and perhaps the most important factor influencing a decision to use those plans, is clearly calculated and assured funding before the beginning of any project such as WaterFix. Waterfix provides neither a clearly calculated cost of a successful adaptive management plan and an integrated monitoring program nor any discussion of the assurances of the funding of such costs. Without such delineation of those costs and their assured enforceable funding

from presently identified sources, any purported adaptive management plan and related monitoring plan is simply a sham.

As suggested by the Delta Independent Science Board, assured funding for an adaptive management and monitoring program for DeltaFix should be a budgetary line-item allocation in the range of 10% to 20% of the cost of the WaterFix project. That funding should be treated as a trust fund based on newly dedicated revenues which are not merely transferred from other existing sources. Without such assurances, any WaterFix adaptive management and monitoring program (which presently does not exist within WaterFix) will be a failure.

The public and those decision makers reviewing WaterFix environmental documents absolutely need the details of an adaptive management and monitoring plan, and details of assured finding for such a plan, before this environmental review can be completed so that the true scope and cost of WaterFix is known.

BOARD OF SUPERVISORS

44 N. SAN JOAQUIN STREET, SUITE 627
STOCKTON, CALIFORNIA 95202
TELEPHONE: 209/468-3113
FAX: 209/468-3694

Mimi Duzenski
Clerk of the Board

ROBERT V. ELLIOTT
Chairman
Fifth District

CARLOS VILLAPUDUA
Vice-Chairman
First District

FRANK L. RUHSTALLER
Second District

STEVE J. BESTOLARIDES
Third District

KEN VOGEL
Fourth District

July 25, 2014

E-mail to: BDCP.Comments@noaa.gov

BDCP Comments
Ryan Wulff, National Marine Fisheries Service
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814

San Joaquin County's Comments on the Draft Bay Delta Conservation Plan and Associated Draft Environmental Impact Report and Draft Environmental Impact Statement and Draft Implementing Agreement

Dear Mr. Wulff:

The San Joaquin County Board of Supervisors hereby submits the County's comments on the Draft Bay Delta Conservation Plan (BDCP), the associated draft Environmental Impact Report, Environmental Impact Statement, and Implementing Agreement. These comments are also submitted as joint comments with the Central Delta Water Agency and the South Delta Water Agency. Additionally, San Joaquin County joins in any comments which may be submitted independently by the Central Delta Water Agency and the South Delta Water Agency.

With nearly two-thirds of the Delta located within San Joaquin County, we are very concerned about the protection of water quantity and quality available within the Delta. We are equally concerned about the negative effects the BDCP will have on the County's communities, land use, flood protection, infrastructure, agriculture, economy, recreation, wildlife, and our way of life. We assert that the draft BDCP documents inadequately analyze these negative effects, fail to provide real and adequate mitigation for those effects, and fail to consider reasonable and effective alternatives to this massive State water delivery project which is thinly disguised as a conservation project.

San Joaquin County strongly urges that the State take our comments to heart and fully address the outlined concerns and issues.

Sincerely,

Robert V. Elliott, Chairman
San Joaquin County Board of Supervisors

Attachment

cc: San Joaquin County's State and Federal Delegation

San Joaquin County Board of Supervisors
Monica Nino, County Administrator, San Joaquin County
David Wooten, County Counsel, San Joaquin County
Thomas Gau, Director, Public Works, San Joaquin County
Kerry Sullivan, Director, Community Development, San Joaquin County
Gary Caseri, Interim Agricultural Commissioner, San Joaquin County

BOS07-05

BEFORE THE BOARD OF SUPERVISORS
OF THE COUNTY OF SAN JOAQUIN
STATE OF CALIFORNIA

RESOLUTION

R-14- 111

RESOLUTION ADOPTING AND REAFFIRMING SAN JOAQUIN COUNTY'S OPPOSITION TO THE BDCP, APPROVING THE COUNTY'S COMMENTS TO THE BDCP AND THE RELATED EIR/EIS AND IMPLEMENTING AGREEMENT FOR BDCP, AND AUTHORIZING THE SUBMISSION OF THOSE COMMENTS TO THE APPROPRIATE STATE AND FEDERAL AGENCIES

WHEREAS, the Sacramento - San Joaquin Delta (hereinafter Delta) is a unique natural and geographic feature of the State of California, and is the largest estuary on the Pacific Coast of the United States encompassing an area of over 730,000 acres with islands and tracts of rich fertile soil surrounded by miles of sloughs and winding channels protected by levees; and

WHEREAS, the Delta is one of the most productive agricultural regions in the United States, with approximately 80% of the Delta classified as Prime Farmland, as contrasted with 20% for all of California, and Delta agriculture has an economic impact of roughly 9,700 jobs and $1.4 billion in economic output in the five Delta counties, but when value-added manufacturing such as wineries, canneries and dairies are included, has a total Statewide economic impact of approximately 25,000 jobs and $5.372 billion in economic output; and

WHEREAS, the islands and waterways of the Delta provide habitat for many species of plants and animals, including several listed as either threatened or endangered under State and Federal endangered species laws; and

WHEREAS, recreation in the Delta generates roughly 12 million visitor days of use and approximately $250 million in visitor spending each year, with Delta recreation and tourism supporting over 3,000 jobs in the five Delta counties; and

WHEREAS, the Delta is a critical infrastructure and transportation hub for the regional and State economy, with important east-west highway and rail facilities, major electrical transmission lines connecting California to the Pacific Northwest, and gasoline and aviation fuel pipelines crossing the Delta supplying large portions of Northern California and Nevada; and

WHEREAS, two-thirds of the legal Delta is located within San Joaquin County and the Delta comprises one-third of this County's total area, meaning that the health and

vitality of the Delta is critically important to the economic health, culture and social fabric of San Joaquin County and its citizens; and

WHEREAS, the Delta is also the key conveyance point for California's two largest water projects, the Central Valley Project (CVP) and the State Water Project (SWP) with massive pumps in the Southern Delta near Tracy, California which transport water from the Delta primarily to farms in Central California and municipalities in Southern California; and

WHEREAS, because of the failure to complete the ultimate build-out of water supplies for the CVP and SWP, leaving the system approximately 5 million acre-feet short of water per year, coupled with oversubscription by the water contractors and the water system's State and Federal operators of the water that is available, this has resulted in degradation of both the quality and quantity of water in the Delta and harm to the ecology and economy of the Delta, and

WHEREAS, the water contractors and the State and Federal operators of the CVP and SWP have over the years sought to find ways to transport water directly from the Sacramento River to the pumps near Tracy in order to obtain a greater quantity and quality of water than they could pump out of the South Delta, which efforts would result in further degradation and destruction of the Delta and economic and social harm to the citizens of San Joaquin County, and

WHEREAS, those water interests proposed a Peripheral Canal which the voters voted down in 1982, but are now promoting a new twin-tunnels project which is capable of diverting huge quantities of fresh water directly from the Sacramento River to the Tracy pumps, but this time the proponents of the twin-tunnels project have attempted to hide their massive and incredibly expensive water project inside a so-called conservation plan known as the Bay Delta Conservation Plan (BDCP); and

WHEREAS, for the reasons set forth in the documents attached hereto and adopted herein as the County's comments to the draft BDCP and its related EIR/EIS, and to the draft Implementing Agreement (IA), the BDCP fails, among its other legal deficiencies, to meet the legal requirements for a valid Habitat Conservation Plan (HCP) under the Federal Endangered Species Act (ESA) or a Natural Community Conservation Plan (NCCP) under the California Natural Community Conservation Planning Act, and also fails to meet the co-equal goals of water supply reliability for the State and restoration of the health of the Bay-Delta ecosystem as required by the Delta Reform Act of 2009; and

WHEREAS, there are less expensive and more effective ways than the twin tunnels and the BDCP to address the legitimate water needs of the various water interests in the State of California without needlessly sacrificing the Delta and San Joaquin County, or pitting Northern California against Southern California and farmer against farmer;

NOW, THEREFORE, BE IT RESOLVED that this Board of Supervisors:

Does hereby reaffirm its opposition to any isolated water conveyance system in the Delta such as the twin-tunnels project, and further specifically opposes the Bay Delta Conservation Plan; and

Does hereby approve and adopt the documents attached hereto as San Joaquin County's official comments to the draft BDCP and its related Environmental Impact Report (EIR) and Environmental Impact Statement (EIS), and to the Implementing Agreement (IA); and

Does hereby authorize submission of these adopted comments to the appropriate State and Federal agencies, both as comments from San Joaquin County and as joint comments with the Central Delta Water Agency and the South Delta Water Agency: and

Does hereby join in any comments which will be filed by the Central Delta Water Agency and South Delta Water Agency, and further that County staff is authorized to supplement the County's comments between today and July 29, 2014, to the extent that the comments submitted by others or other information comes to light which in staff's discretion should be included in the County's comments; and

Does hereby direct staff to take all necessary and appropriate actions to carry out the direction and intent of this Resolution.

PASSED AND ADOPTED this 8th day of July, 2014, by the following vote of the Board of Supervisors, to wit:

AYES: **Villapudua, Ruhstaller, Vogel, Elliott**

NOES: **None**

ABSENT: **Bestolarides**

ABSTAIN: **None**

Robert V. Elliott 7/9/2014
ROBERT V. ELLIOTT
Chairman of the Board
of Supervisors
State of California

ATTEST: MIMI DUZENSKI
Clerk of the Board of Supervisors
Of the County of San Joaquin,
State of California

By Mimi Duzenski
~~Deputy~~ Clerk

ROSSMANN
AND
MOORE
ATTORNEYS AT LAW
A LIMITED LIABILITY PARTNERSHIP

THE BAY-DELTA CONSERVATION PLAN AND EIR-EIS:

SUMMARY OF FOUNDATIONAL ISSUES

REPORT ON DECEMBER 2013 PUBLIC REVIEW DRAFTS

Roger B. Moore
Antonio Rossmann
Rossmann and Moore, LLP
2014 Shattuck Ave.
Berkeley, CA 94704

June 23, 2014

SYNOPSIS OF KEY PROBLEMS WITH THE BDCP AND EIR-EIS

1. The BDCP is based upon this misrepresentation: that a massive new twin tunnel system, which would greatly reduce the natural flow of water through the Delta, qualifies as a "conservation" project to restore the Delta ecosystem and protect species already verging on extinction.
2. The BDCP conceals this central fallacy with a deceptive portrayal of the proposed program. It bundles the twin tunnel "conservation" project for immediate approval with 21 other vaguely defined conservation concepts. Many of these 21 measures are already required, or part of earlier-approved projects; others will not be capable of approval for years into the future.
3. The BDCP assumes without justification that benefits of the 21 conservation concepts will outweigh the destructive consequences of the twin-tunnel project. But all these concepts still lack crucial details and complete study, which the BDCP improperly seeks to defer until after the twin tunnels are approved and built.
4. The BDCP relies on phantom "paper" water, rather than actual supplies for generations to come, ensuring future conflicts over water rights. As the twin tunnels deprive the Delta of more water, the BDCP unrealistically assumes that miracles of management and engineering can simultaneously improve Delta water quality, protect endangered species, and avoid major damage to Delta farms and communities.
5. The BDCP's draft Implementing Agreement works primarily as an avoidance agreement. The IA leaves major gaps in accountability for project implementation, mitigation and financing. It assigns state and federal water contractors an excessive role in plan governance, consigns Delta counties to a marginal role, and misuses "adaptive management" as little more than a slogan to evade responsibility for the project's major risks.
6. The BDCP reflects a triumph of project advocacy over sound science. Independent experts, including the State of California's own reviewers in the Delta Science Program, have discredited the scientific credibility of the BDCP, and found it unable to meet federal and state requirements for a "conservation" plan.
7. The State of California's Delta Independent Science Board found that the BDCP's EIR-EIS "falls short" of scientific standards. The Board's report compared the EIR-EIS's water analysis to "an orchestra playing music without a conductor and with the sheets of music sometimes shuffled." Instead of merely headaches, the deficient analysis creates potential risks to public health, the environment and the economy.
8. The BDCP's EIR-EIS fails federal and state requirements for environmental review. It relies on a defective baseline for evaluation, fails to properly study direct and cumulative impacts, and lacks an adequate range of alternatives and meaningful mitigation measures.
9. With more than 40,000 pages of poorly organized supporting documents, the BDCP's EIR-EIS is among the least user-friendly environmental reviews in history. It buries essential information in technical appendices, and fails to fully inform the reader about the project's environmental consequences.

I. THE BDCP'S DRAFT IMPLEMENTING AGREEMENT UNDERSCORES MAJOR DEFICIENCIES IN ACCOUNTABILITY FOR PROJECT IMPLEMENTATION, MITIGATION, AND FINANCING.

A. BDCP Cannot Proceed Without a Lawful Implementing Agreement.

On May 30, 2014, several state and federal agencies involved in developing or reviewing the Bay Delta Conservation Plan (including the Department of Water Resources and federal and state fisheries agencies) finally released a draft Implementing Agreement (IA). A "note to reviewers" in the IA's first paragraph indicates that the "level of agency signatory" for this agreement remains to be determined.

The release of the IA more than five months after the final draft BDCP for a perfunctory two-month comment period does not fulfill the state and federal agencies' prior commitment to allow for public review of the IA concurrently with the BDCP public review draft. In October 2006, the same agencies--along with the California Resources Agency and the United States Bureau of Reclamation, among others--executed the *Planning Agreement Regarding the Bay Delta Conservation Plan* (Planning Agreement, or PA). The signatories retained and amended the agreement in 2009. Section 7.8 of this agreement commits to provide "[a]n Implementing Agreement that includes specific procedures for the implementation, monitoring and funding of the BDCP," and provides that "[a] draft of the IA will be made available *for public review and comment with the final public review draft of the BDCP.*" (PA, 18-19 (emphasis added).)

The IA must provide crucial details about the BDCP and its environmental consequences beyond those covered elsewhere in the public review drafts. The Natural Community Conservation Planning Act (NCCPA) expressly requires an approved plan to "include an implementation agreement" that "contains all" of a lengthy list of requirements. (Fish and Game Code, § 2830(b)(listing the required elements of an Implementation Agreement).) The BDCP's Planning Agreement therefore represented that the IA "will contain provisions for" the following:

- Conditions of species coverage;
- Long-term protection of any habitat resources other measures that provide equivalent conservation;
- Implementation of mitigation and conservation measures;
- Adequate funding to implement the plan;
- Terms for suspension or revocation of the proposed Incidental Take Permit;
- Procedures for amendment of the BDCP, the IA, and take authorizations;
- Implementation of monitoring and adaptive management;
- Oversight of BDCP allocations and funding;
- Periodic reporting.

(PA, pp. 18-19.)

As the Planning Agreement anticipated, the IA must provide essential information illuminating the details of project conditions and the assignment of responsibility for project construction, implementation, adequate funding, mitigation, monitoring, and adaptive management. This information is particularly crucial for a project such as the BDCP, which purports to rely heavily on adaptive management, and leaves 21 of its 22 ostensible "conservation" measures (all except for the proposed construction of a new north Delta twin tunnel system) unanalyzed except, and if at all, at the programmatic level. BDCP's public review draft prospectively relies upon its *future* IA when it generically denies that the project will operate in violation of the law. (See, e.g., BDCP, chapter 6 (Plan Implementation), chapter 7 (Implementation Structure) and chapter 8 (Implementation Costs and Funding Sources).)

In addition to being required for NCCPA compliance, the IA is crucial for compliance with the federal Endangered Species Act (ESA), which requires conservation plans to include steps, and available funding, to "monitor, minimize and mitigate" impacts. (40 C.F.R. § 222.307(b)(5)(iii).) Moreover, the IA's content is also closely related to the environmental review provided in the EIR-EIS. Reliance on a faulty IA would also fatally distort environmental review, because the IA provides an indispensable source of information about the project and its environmental consequences. Under CEQA, reviewing agencies are bound to "scrupulously" enforce CEQA's mandates. (*Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435 (quoting *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564).) In CEQA review, "[t]he preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences, and equally important, that the public is assured those consequences have been taken into account." (*Id.* at 449-450.)

For the BDCP, the IA is necessary to understand, and establish accountability for, these environmental consequences. Without the IA, the project's review cannot fully achieve CEQA's mandate for public agencies to "mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so." (Pub. Res. Code, § 21002.1.) In light of its major role within BDCP, the IA must necessarily be considered as part of the "whole" of the action as CEQA requires. (14 Cal. Code Regs., § 15368; see section III, *infra.*)

Similarly, under NEPA, excluding full consideration of the IA would unlawfully piecemeal the project's proposed incidental take permit from essential terms of project implementation (40 C.F.R. § 222.307(b)(5)(3)), and would undermine the EIS's ability to fully address the "environmental impacts of the proposed action . .

. ." (42 U.S.C. § 4332(C)(i).) An EIS "shall provide full and fair discussion of significant environmental impacts and shall inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts . . . ." (40 C.F.R. § 1502.1.)

Careful consideration of the IA is also crucial in light of the extensive role that the BDCP proposes for federal and state water contractors, from project financing to participation in an "Authorized Entity Group" tasked with extensive powers in the management and implementation of the BDCP. (BDCP, pp. 7-8 to 7-12.) Recent reports suggest that in a May 6, 2014 memorandum to its employees, DWR recognized that a "more detailed financing plan" for the BDCP has yet to be developed. Nonetheless, DWR announced that it is already establishing a separate BDCP Office to coordinate project implementation, and a Delta Conveyance Facility Design and Construction Enterprise (DCE) that will include unspecified local water agencies and private consulting firms as well as DWR. (See http://blogs.esanjoaquin.com/san-joaquin-river-delta/files/2014/05/BDCPJPA.pdf) This puts the cart before the horse.

Rather than proceeding as if BDCP implementation were a foregone conclusion, the reviewing agencies should take the time needed to consider the IA's serious deficiencies and their implications for BDCP and the EIR-EIS. The BDCP is widely recognized as "the most complex HCP/NCCP permit application ever attempted." (See https://watershed.ucdavis.edu/files/biblio/FINAL-BDCP-REVIEW-for-TNC-and-AR-Sept-2013.pdf.) Only through an accurate view of the project may the public and interested parties balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, be assured of the feasibility and funding for necessary mitigation measures, and assess the advantages of terminating the proposal and properly weigh other alternatives. (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 672 (2007).)

B. The Implementing Agreement Underscores Major Gaps in Accountability for Project Implementation, Mitigation and Financing

Despite its length, the IA does little more than make undocumented assertions of BDCP's compliance with the NCCPA's mandatory requirements for permitting listed in IA section 4.2.1. Rather than realistically addressing the major challenges BDCP implementation faces and clearly assigning responsibility, the current draft IA relies heavily on a morass of elliptical phrases, vague assurances, and deferrals of responsibility to the future decisions and actions of project proponents. Unfortunately, the IA's liberal use of reassuring phrases such as "regulatory assurances" and "adaptive management" cannot paper over BDCP's major problems establishing accountability for project implementation, mitigation and financing. These problems undermine BDCP's compliance with the related legal requirements noted above under the ESA, CEQA and NEPA, as well the IA's ability to live up to

its own asserted purposes. These purposes include the duties to ensure that terms and conditions are "properly implemented," delineate the implementing entities' "responsibilities, financial or otherwise (including the commitment and management of resources" and "set forth the remedies and recourse" should any party to the IA fail to perform its obligations. (IA, section 2.2, at 4.) Without providing any secure foundation for meeting these objectives, the IA appears to place a far higher premium on offering "assurances and protections" to a select group of "authorized" entities compromising BDCP's major proponents. (*Id.*) Indeed, despite previous criticisms of deficiencies in BDCP governance, the IA confirms that a small group of "authorized" entities--including DWR, the Bureau of Reclamation, and unnamed representatives of the State Water Project (SWP) and Central Valley Project (CVP) contractors—are slated to receive sweeping and unprecedented authority to implement (and in some cases to modify) plan requirements. Several of the IA's central defects are highlighted here.

1. Conclusory and Unscientific Findings

The IA relies prospectively on the still-unmade findings of USFWS and NMFS required for ESA compliance (section 4.1) and the still-unmade findings of the Department of Fish and Wildlife (DFW) required for NCCPA compliance (section 4.2). Although the IA correctly notes that these findings are legally required, it contains only bare assertions of compliance, without any analysis that would support findings of compliance. That analysis cannot be complete until these agencies have the full-benefit of public review and comment. The same is the case with respect to section 4.2.2, in which DFW summarily announces without analysis that BDCP and its EIR comply with the Delta Reform Act. (Wat. Code, § 85320, *et seq.*) Although these agencies have not yet even purported to provide the legally required findings, the IA elsewhere misleadingly asserts that the fish and wildlife agencies "*have found that the BDCP fulfills*" the requirements of the ESA and NCCPA for the issuance of take authorizations. (Section 8.0 (emphasis added).)

As explained in the remaining sections of this summary, BDCP and the EIR have not come close to complying with the NCCPA, ESA, CEQA and NEPA. The asserted findings of "compliance" in these placeholder sections of the IA are markedly at odds with the detailed criticisms of leading scientists charged with reviewing BDCP under the Delta Science Program. These criticisms raise fundamental doubts about the advocacy-driven scientific case for BDCP, and confirm that failure to address these deficiencies may well undermine BDCP's ability to meet key requirements of the Delta Reform Act, including the "coequal" goal of the protection, enhancement and restoration of the Delta ecosystem (See section II, *infra.*)

2. Defective Governance and Implementation Structure

The IA underscores major defects in BDCP's implementation structure, confirming and compounding problems evident earlier in Chapter 7 of the plan. For many of the key decisions involved in implementing BDCP (BDCP, Table 7-1), the IA assigns major decision-making responsibilities to the extremely small "authorized entity group" (AEG), consisting of "the Director of DWR, the Regional Director for Reclamation, a representative of the SWP contractors and a representative of the CVP contractors." (IA, Section 15.3.1, at 58; see also section 3.7, at 5 (defining "authorized entity group").) The AEG provides state and federal water contractors with combined representation equivalent to that of the state and federal lead agency, while providing no representation to others, including the Delta's own counties and communities. (*Id.*)

The IA thus assigns an extraordinarily high level of responsibility to a group dominated by project proponents who have incentives to maximize BDCP's commitment to water supply deliveries, and minimize liability for project costs. Under the IA, the AEG "will engage" in decisions on numerous matters relating to administration, oversight, monitoring and funding, but is not even "limited to" those powers. (IA, section 15.3.1, at 58-59.) In addition, the AEG selects BDCP's program manager (section 15.2.4.1, at 56-57). The AEG-appointed program manager will, in turn, select and supervise BDCP's science manager (section 15.2.4.2, at 57).

That same program manager also makes staffing decisions for the Implementation Office, which "shall be responsible for planning, implementation and design" of BDCP's conservation measures (section 15.2.4.3, at 58). The "authorized entities" retain the "ultimate responsibility" for actions undertaken by the Implementation Office. In addition to DWR and some other state entities, state and federal water contractors will staff the implementation office. (*Id.*) In short, the IA undermines genuine responsibility for implementation of BDCP—a task critically in need of scientific candor and public accountability—with repeated reliance on a self-interested entity group that seems structured to minimize obstacles to BDCP's twin tunnel conveyance system. Missing from the IA, as well as the BDCP and the EIR-EIS, is any meaningful recognition of how the BDCP would centralize and transform key aspects of the SWP and CVP in the Implementation Office, with ultimate responsibility retained by the four-member AEG with two water contractor representatives. None of the BDCP documents come to terms with a major proposed revision in the nature of the projects, made without legislative approval, contract amendments, or approval by the California Water Commission.

Further evidence of the water contractor-friendly AEG's excessive authority over BDCP implementation is evident in the IA's provisions addressing the role of the fish and wildlife agencies' Permit Oversight Group (POG), whose representatives are the USFWS director, the NMFS regional administrator, and the DFW director

(section 15.4.1, at 60). Under the IA, key decisions of the POG must be approved *jointly* with the AEG, including those relating to such crucial matters as adaptive management, mitigation monitoring, funding, operations planning, and approval of progress reports (*Id* at 61).

Moreover, even very basic questions about the nature of AEG's decision-making remain unanswered. The IA assumes that the AEG will express a "single position" on matters under its consideration, without explaining how dissent is addressed. (IA, section 15.3.3, at 60.) It opaquely asserts that "the entity(ies)" (*sic.*) with "vested statutory or regulatory authority over the matter" will make the final determination, without explaining to the reader who possesses that authority in specific situations (*Id.*) It never explains how SWP and CVP contractors, groups whose history is replete with major internal disagreements and who have expressed widely differing opinions on BDCP, will manage to appoint a single "representative" apiece to the AEG. (IA, section 15.3.1, at 58.)

Despite a deluge of prior criticism, the IA improperly marginalizes the role of Delta counties and their constituencies, excluding them from any meaningful role in BDCP governance and decision-making even though they will bear the brunt of BDCP's adverse consequences for decades to come. The IA notes that "representatives of the counties of San Joaquin, Sacramento, Solano, Yolo and Contra Costa" will serve—along with dozens others representing NGOs, professional organizations, and other constituencies—on a Stakeholder Council conspicuously lacking in decision-making responsibilities. (IA, section 15.6.2, at 63-64.)

The Stakeholder Council functions simply as an advisory entity, which meets quarterly to exchange information and provide non-binding "input" to the AEG-selected BDCP program manager on the "current significant issues at hand." (IA, section 15.6.3, at 64.) The IA's exclusion of Delta counties from any more substantive role is especially noteworthy in light of their years of efforts to secure a more consequential role. A cryptic "note to reader" in section 7.2.8 of the BDCP asserts that the Resources Agency is "working with" representatives of Delta counties to involve them in plan implementation, and announces an "intention" to later incorporate unspecified revisions addressing their participation in the plan's final iteration (BDCP, at 7-26).

The IA notably does not incorporate the alternative governance proposal advanced by the Delta Counties Coalition. Unlike the IA, that proposal would secure each Delta county a voting role on any decision-making body having oversight, implementation and approval authority over the BDCP's conservation measures. The proposal, unlike the IA, would provide full funding for the counties' participation, recognizing that the counties lack the effective means to otherwise cover their participation costs from customers or ratepayers. Providing for the counties' effective

participation is necessary to ensure consistency with county planning, as well as six regional conservation plans within the BDCP's plan area that the IA notes are "being implemented or are under development." It would also help ensure fairness to those most directly affected by BDCP, and honor the Delta counties' need to protect their residents' health, safety, and welfare.

3. Avoidance of Conservation Measures

Although the IA is labeled an "implementation" agreement, it also provides opportunities for BDCP decision-makers, using unprecedented loopholes, to *avoid* responsibility for implementing its purported conservation measures. Divorcing "adaptive management" from scientific rigor and institutional accountability, the IA reverses the traditional role of such agreements in NCCPA compliance, allowing decision-makers to reduce, expand, delete or relocate the conservation and mitigation measures specified in BDCP and its EIR-EIS. (IA, section 10.3.1, at 29.) Using this method, the IA enables the AEG to secure removal or change of the plan's Conservation Measures 2-22 (those other than the twin tunnel conveyance system itself), whether or not the plan's Adaptive Management Team (AMT) recommends this change. In the IA's euphemistic language, it provides flexibility to allow the "addition to or elimination of" BDCP's conservation measures and biological objectives. (*Id.*) In other provisions of the IA, the AMT receives extensive authority to make changes in BDCP, couched in such terms as performance measures, effectiveness monitoring, and monitoring results. (See IA, section 3.1, at 5.)

BDCP even confers on the AMT the opportunity to decide whether, or if, science review is to be included in these decisions at all. (BDCP, at 7-15.) Likewise, the IA not only allows decision-makers to change conservation measures and biological objectives under the rubric of adaptive management; it authorizes them to do so *without requiring an amendment to BDCP or its regulatory authorizations.* (IA, section 10.3.6, at 36 (emphasis added).) The IA specifies an unusually protracted process for permit revocation, which add additional leeway for permittees to evade conservation requirements.

Another ominous provision buried within the IA's discussion of adaptive management is section 10.3.7.3 ("The Supplemental Adaptive Management Fund"), which in vague language records the parties' anticipation that the referenced funds could be used "to *acquire water to supplement flows....*" (*Id.* at 38.) If "additional outflow" is found to be necessary, "supplemental water *may be acquired from voluntary sellers.*" (*Id.*) The reader is left to speculate when such additional outflow may be necessary, or the conflicts that may arise if voluntary sellers do not materialize, or if the ostensibly voluntary transactions harm other water users. Between the lines, this language may amount to an implicit recognition that the combined provisions of BDCP may well not meet water exporters' expectations for deliveries, and that BDCP funds should be reserved for water purchases that enable additional exports at the

new BDCP intakes. If BDCP ultimately could involve the public in underwriting the costs of transfers that could deplete existing aquifers, that suggestion should be fully analyzed and debated on the merits, not hidden within the implementation provisions of a "conservation" plan.

Taken together, these provisions render the plan itself a moving target, undermining the certainty accountability required for NCCPA compliance. Moreover, because they turn BDCP's ultimate provisions and protections into a cipher that may remain unknown until years after project decisions are made, they also disable the consistent project definition and commitment to effective mitigation required for compliance with CEQA and NEPA.

4. Failure to Ensure Adequate and Reliable Sources of Funding

As the IA concedes, the NCCPA requires a legally adequate conservation plan to ensure "adequate funding to carry out the conservation actions identified in the BDCP." (IA, section 4.2.1, at 12 (discussing Fish & Game Code, § 2820).) Likewise under the ESA, approval of a legally adequate HCP requires identification of sufficient sources of funding, and specification of the sources relied upon to mitigate impacts to covered species. (16 U.S.C. § 1539(a)(2); see also *Southwest Center for Biological Diversity v. Bartel* (S.D. Cal. 2006) 457 F. Supp.2d 1070, 1105.) Failure to include this required analysis and disclosure in an EIR-EIS also fatally compromises its ability to fully inform the reader of the project's environmental consequences, vitiating compliance with NEPA and CEQA. Nonetheless, the IA, like the BCDP itself and its EIR-EIS, thoroughly fails to ensure that the plan is supported by adequate and reliable sources of funding. Section 8.3 of BDCP purports to provide such sources. Moreover, under the IA, only measures other than the twin tunnel conveyance (CM-1) are to be cut back, beginning with terrestrial species. Sacramento County extensively detailed the speculative and unstable nature of BDCP's funding sources in its May 28, 2014 comments. Unfortunately, the IA does not improve on the paucity of reliable funding addressed in those comments.

II. THE DELTA INDEPENDENT SCIENCE BOARD'S REPORT CONFIRMS THE LACK OF SCIENTIFIC AND LEGAL FOUNDATION FOR BDCP AND ITS EIR-EIS.

A. Overview: The EIR-EIS Failed to Use "Good Enough" Science to Meet the Project's Environmental Review Requirements.

On May 15, 2014, the Delta Independent Science Board submitted a detailed report reviewing the BDCP and the EIR-EIS (Science Board Report) to the Delta Stewardship Council (DSC) and California Department of Fish and Wildlife (DFW), as directed under the 2009 Delta Reform Act (Wat. Code, § 85320(c).) This report

follows a similar one prepared by the Delta Science Program's Independent Science Review Panel (Panel), which analyzed the "Effects Analysis" (BDCP, chapter 5) prepared in connection with requirements of endangered species law. (See sections III and V, *infra.*) Both the Science Board and the Panel were sharply critical of the tendency in BDCP and its review documents to tilt the analysis in favor of the proposed project and avoid sound science.

The Science Board examined "the science in the DEIR/DEIS" and the BDCP, focusing on "how well the statements and conclusions are supported by current scientific information; how science is applied to proposed actions; how completely actions and their potential consequences have been assessed; and how science is communicated." (Science Board Report, p. 4.) Examining whether the BDCP's EIR-EIS used the "best available science" in analyzing project alternatives and their effects, the Science Board answered in the negative, concluding that the EIR-EIS failed to use science that was "good enough, and use it well enough" to meet the requirements of project review. (*Id.*, p. 4.) The Science Board summarized its major concerns:

1. Many of the impact assessments hinge on overly optimistic expectations about the feasibility, effectiveness, or timing of the proposed conservation actions, especially habitat restoration.

2. The project is encumbered by uncertainties that are considered inconsistently and incompletely; modeling has not been used effectively to bracket a range of uncertainties or to explore how uncertainties may propagate.

3. The potential effects of climate change and sea-level rise on the implementation and outcomes of BDCP actions are not adequately evaluated.

4. Insufficient attention is given to linkages and interactions among species, landscapes, and the proposed actions themselves.

5. The analyses largely neglect the influences of downstream effects on San Francisco Bay, levee failures, and environmental effects of increased water availability for agriculture and its environmental impacts in the San Joaquin Valley and downstream.

6. Details of how adaptive management will be implemented are left to a future management team without explicit prior consideration of (a) situations where adaptive management may be inappropriate or impossible to use, (b) contingency plans in case things do not work as planned, or (c) specific thresholds for action.

7. Available tools of risk assessment and decision support have not been used to assess the individual and combined risks associated with BDCP actions.

8. The presentation....makes it difficult to compare alternatives and evaluate the critical underlying assumptions.

(Science Board Report, p. 3.)

The Science Board warned that leaving its concerns unaddressed "may undermine the contributions of BDCP to meeting the co-equal goals for the Delta." (Science Board Report cover letter, p. 1; see Wat. Code, §85054 (defining the Delta Reform Act's "coequal goals" as "providing a more reliable water supply for California" and "protecting, restoring, and enhancing the Delta ecosystem").) To comply with the Delta Reform Act enacted in 2009 (Delta Reform Act), 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." (Water Code, § 85054; see also Wat. Code, § 85900, listing other specific goals for the Delta inherent in these goals, including restoration of the Delta ecosystem).)

The BDCP "shall not" be incorporated into the Delta Stewardship Council's Delta Plan, and make its public benefits qualify for state funding, unless the BDCP complies with the NCCPA and CEQA. (Wat. Code, § 85320(b).) In addition to these general requirements, the Legislature has noted that CEQA compliance for the BDCP requires "*comprehensive review and analysis*" of all the following:

(A) A reasonable range of flow criteria, rates of diversion, and other operational criteria required to satisfy the criteria for approval of a natural community conservation plan as provided in subdivision (a) of Section 2820 of the Fish and Game Code, and other operational requirements and flows necessary for recovering the Delta ecosystem and restoring fisheries under a reasonable range of hydrologic conditions, which will identify the remaining water available for export and other beneficial uses.

(B) A reasonable range of Delta conveyance alternatives, including through-Delta, dual conveyance, and isolated conveyance alternatives and including further capacity and design options of a lined canal, an unlined canal, and pipelines.

(C) The potential effects of climate change, possible sea level rise up to 55 inches, and possible changes in total precipitation and runoff patterns on the conveyance alternatives and habitat restoration activities considered in the environmental impact report.

(D) The potential effects on migratory fish and aquatic resources.

(E) The potential effects on Sacramento River and San Joaquin River flood management.

(F) The resilience and recovery of Delta conveyance alternatives in the event of catastrophic loss caused by earthquake or flood or other natural disaster.

(G) The potential effects of each Delta conveyance alternative on Delta water quality.

(*Id.*)

The EIR-EIS makes perfunctory claims in an appendix to have covered these BDCP-related environmental review issues (EIR-EIS, Table 3I-1.) However, as detailed further, the Science Board Report demolishes the scientific basis for that analysis and undermines the current BDCP and EIR-EIS's ability to meet the environmental review requirements of CEQA and the Delta Reform Act. Unless these errors are corrected before the Final EIR-EIS, the review's major "mass of flaws" will fatally undermine the EIR-EIS's ability to inform decision-making as CEQA requires, and require recirculation after the major shortcomings of the EIR-EIS are corrected. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 741-742.) If left uncorrected, these errors would preclude informed decision-making and informed public participation, thereby thwarting the statutory goals of the EIR-EIS process. (*Berkeley Keep Jets Over the Bay Com. v. Board of Port Cmrs.* (2001) 91 Cal.App.4th 1344, 1355.)

B. Expectations for the Effectiveness of BDCP's Conservation Actions are Too Optimistic.

The Science Board found that "the DEIR/DEIS, the BDCP actions, as supplemented by Avoidance and Minimization Measures and Mitigation Measures, are assumed to produce the anticipated benefits when they are needed to offset any impacts of BDCP actions. In essence, it is often argued that Conservation Measures (CM) 2–22 will have sufficient positive benefits for covered species to counterbalance any negative impacts of water diversions and changes in flow caused by proposed alternatives (CM1). This is an implausible standard of perfection for such a complex problem and plan, as noted in our reviews of Chapters 11 and 12 (Appendix B). It would be better to begin with more realistic expectations that include contingency or back-up plans." (Science Board Report, at 5.)

C. Uncertainties are Inconsistently and Incompletely Addressed.

The Science Board found that the Draft EIR-EIS's (DEIR/DEIS's)

conclusions or comparisons among alternatives or the impacts of the Conservation Measures were often "encumbered by unaddressed uncertainties. Uncertainties accompany every action and consequence discussed in the DEIR/DEIS, ranging from the designations of habitats for individual species, to projections of entrainment, to modeling results used in the analyses. When combined, these uncertainties will be compounded and propagate. Although the Draft BDCP discusses some of these uncertainties, they are treated inconsistently in the DEIR/DEIS and are largely ignored in the Executive Summary." (Science Board Report, p. 5.)

Notably, the Science Board sharply criticized the tendency in the EIR-EIS to overuse the mantle of avoiding "speculation" to avoid addressing key uncertainties relating to the success of BDCP's proposed conservation measures. Criticizing the misunderstandings stemming from this tendency, the Science Board noted that "avoiding clear articulation of uncertainties is not the same as avoiding speculation. By inadequately addressing uncertainties, the documents may fail to prepare those charged with implementing the Plan to deal with surprises. Unaddressed, uncertainties can pose major and significant risks to the project as a whole and lead to false expectations from managers and stakeholders." (Science Board Report, p.6.) By contrast, if uncertainties are acknowledged, "expectations of the outcomes and benefits of BDCP actions will be more realistic, enabling a more reasoned assessment of how the actions align with NEPA and CEQA standards." (*Id.*)

Criticizing the frequent assumption in the EIR-EIS that the uncertain benefits Conservation Measures 2-22 will somehow counterbalance the "more certain impacts" of the proposed conveyance (Conservation Measure 1), the Science Board found it "important to recognize that Conservation Measures 2-22 are likely to have values in their own rights and are worth implementing regardless of which alternative (if any) is eventually selected." (Science Board Report, p.6.) However, the adequacy of CM 2-22 "to offset the negative impacts of Conservation Measure 1, as assumed in the DEIR/DEIS, is uncertain, in part because they are given only program rather than project-level analysis....*these measures are hypotheses to be tested, or perhaps broadly defined adaptive-management experiments. They need to be treated as such.*" (*Id.* (emphasis added); see also pp. B-37-45 (applying problem to analysis of fish and aquatic resources).)

D. The Potential Effects of Climate Change and Sea-Level Rise are Underestimated.

The Science Board described future climate change and sea-level rise as "perhaps the greatest sources of uncertainty affecting BDCP." (Science Board Report, p. 6.) The Science Board criticized the EIR-EIS's failure to account for how "the speed, magnitude, and intermittent nature of these changes may alter the

outcomes of BDCP actions from what is planned. The potential direct effects of climate change and sea-level rise on the effectiveness of actions, including operations involving new water conveyance facilities, are not adequately considered." (Science Board Report, p.6; see also pp. B-52-54, B-82-88 (addressing EIR-EIS chapters 12 and 29.) Moreover, the Science Board found that similar exclusion of analysis also casts doubt upon conclusions drawn elsewhere in the EIR about "other disrupting factors, such as floods, levee failures, earthquakes, or invasive species, *any of which could profoundly alter the desired outcomes of BDCP actions.*" (Science Board Report, p.6 (emphasis added).)

In light of this defective analysis, the Science Board singled out for criticism an evasive response of DWR to the panel's earlier criticism of the EIR-EIS's inconsistent and incomplete climate change analysis, which avoided analysis based on the inapposite premise that "the scope of an EIR/EIS is to consider the effects of the project on the environment, and not the environment on the project." (Science Board Report, p.6.) Describing DWR's response as "*dangerously unrealistic*," the Science Board observed that CEQA requires impacts to be assessed "in order to provide decision makers enough information to make a reasoned choice about the project and its alternatives. *Surely this choice should also include consideration of factors that may substantially alter the outcomes of the project.*" (*Id.* (emphasis added); see also pp. B-82 ("because of the changing conditions, the Draft BDCP actions may not develop as anticipated. Uncertainties in the effectiveness of conservation measures due to the effects of climate change and sea-level rise must be given greater consideration), B-86-88 (criticizing the EIR-EIS's avoidance of analysis based upon a false dichotomy between climate change and the project).)

E. Interactions Among Species, Landscapes, and the Proposed Actions are Insufficiently Considered.

The Science Board noted that because the Delta is a "complex, interacting system," failure to meet the expectations for BDCP actions "will have cascading effects. If the competitive or predatory effects of one species on another or the effects of habitat restoration in one place on upstream or downstream restoration projects are not fully considered, the effectiveness of actions may be compromised." (Science Board Report, p. 7.) By contrast, the EIR-EIS often focuses on individual species, particular places, or specific actions that are "considered in isolation from other species, places, or actions. In particular, potential predator-prey interactions and competition between covered and non-covered fish species are not fully recognized." (*Id.*) The EIR-EIS's failure to "treat the Delta as a fully functioning and integrated ecosystem" resulted in its overlooking "interactions that may enhance or undermine the effectiveness" of BDCP actions. (*Id.*)

F. Important Effects of BDCP are Ignored.

The Science Board's report provided several examples in which the EIR-EIS deficiently analyzes BDCP's impacts, which resulted in some crucial exclusions from the scope of project review. (Science Board Report, Appendix A (listing examples).) For instance:

- The EIR-EIS defined the project's geographic scope "to exclude San Pablo Bay and San Francisco Bay. The consequences of BDCP actions undertaken within the Plan Area, however, will extend downstream to affect these bays. Changes in sedimentation in the Delta associated with BDCP actions, for example, will not be confined to the Delta. Likewise, changes within the bays (e.g., tidal wetland restorations) will affect tidal fluxes and salinity intrusion into the Delta. Many fish species also migrate into or through these areas." (Science Board Report, p. 7.)
- The discussion of levees in BDCP and the EIR-EIS, while extensive, is "disconnected and incomplete. In particular, neither the consequences of levee failures on the effectiveness of BDCP actions nor the financial implications of demands for levee maintenance receives adequate attention. The assumption that most levee breaches will be repaired seems unrealistic." (*Id.*)
- The EIR-EIS lacks analysis of the environmental consequences of water reliability produced by BDCP (if successful). While the document mentions economic benefits, "there is no parallel discussion of possible environmental impacts that might arise as increased reliability affects which crops are planted, how fertilizers and pesticides are used, or how these changes might affect agricultural runoff and water quality." This all relates to the "whole" of the action. (*Id.*)
- The Science Board criticized the incorrect assumption of "speculation" used to exclude analysis of environmental impacts from the EIR-EIS and to limit the boundaries used for EIR study. The Science Board concluded: "We do not believe that the processes used to determine these boundaries have been made explicit, nor are the boundaries scientifically justified. We know that there is a high likelihood of future levee breaches and that farmers will adjust their crops and management in response to changing water availability. Although we may not be able to anticipate these changes in detail, to ignore them is to pretend that they won't happen. Sufficient information exists to construct and evaluate future scenarios. These potential effects merit more careful consideration." (*Id.*, p. 8.)
- The Science Board found major deficiencies in the EIR-EIS's assessment of water quality. The report decried the "general lack of knowledge" displayed in the analysis of water quality constituents, particularly in the analysis of dioxins and contaminants of emerging concern (CECs). (*Id.*, pp. B-22-23.) Among other criticisms, the authors criticized the EIR-EIS's overreliance on model outputs and "cavalier" treatment of detection limits for analytes. (*Id.*, p. B-24.)
- The Science Board also criticized serious deficiencies in the EIR-EIS's analysis of BDCP's public health consequences. (Science Board Report, p. B-73-77.) The analysis evaded potentially serious problems with mosquito abatement, mercury accumulation, bioaccumulation of toxic compounds, and fish contamination. (*Id.*)

G. The Adaptive Management Process is Not Fully Developed.

The Science Board provided a detailed and devastating critique of the misuse of adaptive management in BDCP and the EIR-EIS (Appendix A). Although the Science Board described adaptive management as "*the* key to the success of the BDCP project over its 50-year duration" (Science Board Report, B-55 (emphasis in original)), the report identified major problems with its use within BDCP and the EIR-EIS:

- "[A]lthough adaptive management is mentioned frequently in the DEIR/DEIS, details about how it will be designed and done are left to a future Adaptive Management Team. As a result, it is unclear how adaptive management will be integrated into the implementation of BDCP, whether the scientific skills needed to plan and oversee adaptive management will exist in the Implementation Office and on the Adaptive Management Team, and whether the capacity to conduct the monitoring and analysis needed for adaptive management will be available." (Science Board Report, p. 8.)
- "Because conditions in the Delta and responses to BDCP actions may change quickly, the adaptive-management process must be nimble and flexible, yet the organizational structure may delay rather than expedite needed adjustments. Although the Draft BDCP has an extensive listing of performance measures linked to its Biological Goals and Objectives, the measures needed to evaluate actions and make adjustments are not addressed substantively in the DEIR/DEIS. Neither are there any indications of the criteria that might be used to establish "trigger points" at which adaptive management procedures would be initiated. This becomes particularly problematic if certain species are benefitting from actions and others are doing worse." (*Id.*)
- "Because BDCP actions will not likely play out as planned, it may be useful to view them as planned experiments or hypotheses to be tested. Consequently, it would be prudent to have contingency plans generally outlined *before* discovering that actions are not working as expected. Yet contingency plans are rarely mentioned in the documents we reviewed. We are not yet convinced that the process of actually doing adaptive management (rather than creating an organizational infrastructure for it) has received the thoughtful development it requires, given its central role in implementing BDCP and ensuring that impacts and benefits balance. Consequently, we have substantial misgivings about how well the proposed adaptive management process, as proposed, will actually function as a key component of BDCP." (*Id.*)
- The BDCP's decision-making structure—including the delegation of extensive authority to the "Authorized Entity Group" drawn from DWR, the Bureau of Reclamation and water contractors—"does not seem to bring enough authority and resources for adaptive management to be implemented in a decisive and timely way." (*Id.*, p. A-19.)
- The BDCP lacks funding specifically earmarked for adaptive management, and the total budget for monitoring and research is "small" relative to BDCP's total cost.

(*Id.*, p. A-21.)

H. Risks are Not Modeled or Fully Evaluated.

The Science Board suggested that available risk-management tools could assist in fully evaluating BDCP's vulnerability to "high-consequence risks," and aid in preparing contingency plans. However, the Science Board found "no indications that the available scientific approaches to risk assessment were used to any great extent in the development of BDCP. Given the concerns over uncertainty and the proposed adaptive-management plan, it would be worthwhile to consider incorporating structured decision-making into the process." (Science Board Report, p. 9; see also Appendix A (listing proposed tools to assist in decision-making).)

I. Descriptions of the Alternative Conveyance Structures, Operations, and Environmental Impacts Do Not Facilitate Informative Comparisons.

The Science Board pointed out that "a central purpose of an EIR/EIS is to clearly describe the alternative options—in this case, water-conveyance operations—and their relative impacts." (Science Board Report, p. 9.) In the BDCP's EIR-EIS, "because no overall framework is provided to draw together the specifics of the alternatives in a clear way, it is difficult to compare alternatives. Consequently, it is challenging to develop a rigorous assessment of the relative strengths and weaknesses of the alternatives...." (*Id.*; see also Appendix A (discussing "clarity").) Treating all alternatives in exactly the same way "ignores the reality that these factors affect the alternatives and conclusions about their impacts in different ways, further confounding comparisons." (Science Board Report, p. 9.)

III. The BDCP AND THE EIR-EIS RELY ON A SHIFTING, INCONSISTENT AND INACCURATE PROJECT DEFINITION.

A. Legal Requirements for Environmental Review

Under CEQA, the project must include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment..." (14 Cal. Code Regs., § 15368; see also *Nelson v. County of Kern* (2010) 190 Cal.App.4th 252, 271.) The project description must address "not only the immediate environmental consequences of going forward with the project, but also all 'reasonably foreseeable consequence[s] of the initial project'." (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 82.)

CEQA cases have long established that "[a]n accurate, stable and finite project description" is "the *sine qua non* of an informative and legally sufficient EIR." (*County of Inyo v. City of Los Angeles* (*Inyo III*) (1977) 71 Cal.App.3d 185, 199.) Reliance on a "curtailed, enigmatic or unstable definition of the project" stands as the paradigm of legal error under CEQA, because it "draws a red herring across the path of public input." (*Id.* at 199.)

NEPA requires federal agencies to articulate the "purpose and need" for a proposed action for which environmental review is required. (40 C.F.R. §1502.13.) That articulation is crucial for the "heart" of NEPA, the alternatives analysis, which enables the EIS to provide "a clear basis for choice among options by the decision-maker and the public." (40 C.F.R. §1502.14.) NEPA prohibits the use of a truncated "purpose and need" statement, in which the articulation of objectives is defined in a manner that curtails full assessment of the project and alternatives. (*City of Carmel-by-the-Sea v. United States Department of Transportation* (9th Cir. 1997) 123 F.3d 1147, 1155; *Friends of Southeast's Future v. Morrison* (9th Cir. 1998) 153 F.3d 1059, 1066.)

B. Foundational Project Definition Problems in BDCP and EIR-EIS

1. Faulty Definition of CM-1 as a "Conservation" Measure

The EIR-EIS is fundamentally misleading in portraying the BDCP as a "comprehensive conservation strategy for the Sacramento-San Joaquin Delta (Delta) to advance the planning goal" of "restoring" the Delta's ecological functions. (EIR-EIS, ES-1.). Conservation measure CM-1 (Table ES-3) provides "for the construction and operation of a new north Delta water conveyance facility to bring water from the Sacramento River in the north Delta to the existing water export pumping plants in the south Delta, as well as for the operation of existing south Delta export facilities." This "conservation" measure serves as a euphemism for the twin tunnel system, whose specific physical facilities are buried in the descriptions.

The EIR-EIS offers no credible analysis of why CM-1 qualifies as a conservation measure addressing ESA and NCCPA compliance. Far from contributing to the protection or restoration of ecosystem health in the Delta, this measure would take large quantities of additional water out of the Delta and compound ecological risks. Indeed, facilitating additional exports can in no sense be considered a conservation strategy. Overwhelming critiques vitiate the notion that CM-1 is a conservation measure, and point to the failure to meaningfully analyze BDCP's speculation that the remaining measures can overcome the damage from implementation of CM-1. For example:

- In March 2014, the Independent Scientific Review Panel studied the Effects Analysis (EA) in the BDCP (Chapter 5). The Panel's report (ISRP-3) identified four broad themes emerging from its review. First, the panel found the EA

riddled with fragmented analysis and inconsistencies that made it "difficult to review and comprehend." Second, the Panel identified an "apparent disconnect" between the treatment of uncertainty in BDCP Chapter 5 and in the EA's technical appendices. Third, the Panel noted the continued absence of an integrated or quantitative assessment of net effects. Finally, the Panel concluded that the EA underplayed major uncertainties in the achievement of beneficial effects attributed to the BDCP's conservation measures, slanting the "net effects" analysis in the BDCP's favor. (ISRP-3, pp.1-2.)

- In March 2014, the Pacific Fishery Management Council submitted comments concluding that the BDCP will "negatively impact essential fish habitat" for Council-managed species, including all varieties of Chinook salmon, and noted it is "highly concerned" that the project's water withdrawals will unreasonably constrain the flow of fresh water through the Delta.

- In February 2014, the California Advisory Committee on Salmon and Steelhead Trout (Advisory Committee) submitted its required recommendations to the Department of Fish and Wildlife regarding the BDCP under Fish and Game Code section 6920. Concluding that the BDCP "promotes the unproven scientific hypothesis that habitat restoration can substitute for flow," the Advisory Committee recommended that DFW deny an incidental take permit (ITP) for the BDCP project (Alternative 4) as a Natural Communities Conservation Plan (NCCP). The Advisory Committee also concluded that the BDCP "does not meet the requirements of Fish and Game Code section 2820 for an NCCP and cannot legally be approved because it will contribute to the further decline of Sacramento River Winter Run and Spring Run Chinook Salmon." (*Id.*, p. 1.).

- As the Advisory Committee pointed out, the effects analysis in BDCP Chapter 5 concedes that project operation using CM-1's proposed conveyance will *reduce* winter run and spring Chinook salmon smolt survival. (*Id.*) Under these circumstances, the BDCP is incapable of meeting key requirements of the NCCP Act or CESA. (*Id.*, p. 4; see, e.g., Fish & Game Code, §§ 2081(c)(lack of contribution to recovery, continued jeopardy), 2081(b)(2)(c); 220(e).)

- These comments follow still-unheeded concerns of the State Water Resources Control Board that Delta outflows and inflows are already insufficient to help listed species recover, even without the huge quantities of additional water the project would take out of the Delta. They also follow still-unheeded "red flag" comments of the federal fisheries agencies (NMFS and USFWS), as well as major concerns of EPA and the Bureau of Reclamation about the project's unmitigated environmental consequences.

In short, the integration of CM-1 with the other measures depends upon the strained and discredited premise that aggressive re-engineering of the Delta can

somehow outweigh the extensively documented importance of flow to species already nearing extinction. That sleight of hand distorts the project's potential impacts on existing and senior water users, and species (including humans) depending on flows through the Delta. It also sidesteps the protection of areas of origin rights and beneficial uses in the Delta region.

2. Unequal Status of Non-Conveyance Project Components

The EIR-EIS's division of project and program components creates a major obstacle to ensuring timely consideration of the "whole" of the project in accordance with CEQA and NEPA. Only the non-conserving "conservation" measure CM-1 is slated for project-level analysis, while the remaining measures (CM 2-22) are consigned to program-level review, with the caveat that further environmental review may be needed prior to implementation. This creates an untenable imbalance in which approval of the conveyance based on project-specific review may well go forward while essential details of the remaining conservation measures, as well as their funding and implementation status, remain unstudied and unknown. Under these circumstances, it is clear that conservation is far from "coequal" with conveyance. The project-specific review of conveyance and highly opaque program review of conservation also amount to unlawful segmentation and piecemealing, undermining the ability of the EIR-EIS to serve as decision-making documents under CEQA and NEPA.

3. "Paper Water" Assumption in Project Objectives

The BDCP provides the basis for regulatory compliance with the ESA and the NCCPA for a range of activities related to the operation of the SWP and CVP, including the diversion and export of water from the Delta and its tributaries. (BDCP, p. 1-6.) But BDCP's statement of project objectives and project purpose rely upon the legally erroneous direction to "restore and protect" the SWP and CVP's nonexistent ability to deliver "up to full contract amounts." The BDCP cannot credibly base a conservation plan on institutionalizing the same "aura of unreality" on contract deliveries evaluated and discredited in *PCL v. DWR*. (*Planning and Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 915.) Moreover, neither the BDCP nor the EIR-EIS seriously address expectations stemming from overreliance on "interruptible" sources of water referenced in the project contracts.

In *San Luis & Delta-Mendota Water Authority v. Jewell*, (2014) 747 F.3d 581, 44 ELR 20056 (9th Cir. 2014) (*San Luis v. Jewell*) a Ninth Circuit majority held that the U.S. Fish and Wildlife Service (USFWS) and Bureau of Reclamation (BOR) acted within their discretion in approving a 2008 biological opinion (2008 BiOp), and that nothing in the CVP contracts or other federal law creates an "inconsistency" with

ESA compliance. (*Id.* at fn. 45.) *Jewell* serves as an important reminder that expectations of deliveries in project contracts cannot be counted on to justify an end-run around ESA requirements. Respondents' recent decision to seek rehearing of the Ninth Circuit's decision will not change the need, under state and federal law, to avoid facilitating reliance on paper water sources. But it hardly inspires confidence that those responsible for implementing BDCP can be counted on to pursue ecosystem restoration in the Delta with the same zeal applied to "restoring and protecting" delivery of the amounts referenced in water supply contracts.

4. Rote Assumption of Regulatory Compliance

The description of project operation improperly assumes the protection of beneficial uses and meeting of other regulatory requirements, without consistently analyzing hydrologic constraints over the project term. (See, e.g., ES-7.) The project assessment improperly seeks to insulate permit holders from further responsibility to meet federal and state environmental laws, as well as other legal standards and permit requirements. (See Chapter 6.4.2 and following).

That disconnect is also evident in the EIR-EIS's statements suggesting the need to "strike a reasonable balance" addressing both water supply and endangered species objectives. (EIR-EIS, p. 2-1.) Although the discussion is vague, it appears to contemplate precisely the sort of balancing rejected by Congress in the ESA. (See *Tennessee Valley Authority v. Hill* (1978) 437 U.S. 153, 174.) Moreover, even if Congress had permitted the general approach to balancing described in the BDCP, it would fail in light of the overwhelming scientific evidence that the twin tunnel-driven project will not meaningfully protect endangered and threatened species, and will likely harm them instead.

IV. BDCP AND THE EIR-EIS RELY UPON A DEFECTIVE ANALYSIS OF THE PROJECT BASELINE.

A. Legal Requirements for Environmental Review

Baseline selection is a foundational requirement under CEQA serving the EIR's "fundamental goal" to "inform decision makers and the public of any significant adverse effects a project is likely to have on the physical environment." (*Neighbors for Smart Rail v. Exposition Metro Line Const. Authority* (2013) 57 Cal.4th 439, 505 (citing *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 428).) Reliance on a faulty baseline distorts an agency's ability to assess project impacts and benefits, and provide effective mitigation. (See *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1217.) CEQA analysis must employ a realistic baseline that will give the public and

decision makers the most accurate picture practically possible of the project's likely impacts." (*Neighbors for Smart Rail*, 57 Cal.4th at 507; see also *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 322, 325, 328.)

NEPA regulations require an EIS to describe the "affected environment" of a proposed action and alternatives, placing a premium on brevity and clarity. The EIS "shall succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration." (40 C.F.R. §1502.15.) NEPA also incorporates baseline review by requiring analysis of "the alternative of no action." (40 C.F.R. §1502.14(d).) The no-action analysis "provides a benchmark, enabling decision-makers to compare the magnitude of environmental effects of the action alternatives." (CEQ, *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 Fed. Reg. 18026 (March 23, 1981).)

B. Baseline Problems in The BDCP and The EIR-EIS

1. Failure to Fully Account for Existing Conditions

The EIR-EIS discusses *Neighbors for Smart Rail*, noting its holding that "any sole reliance on a future baseline is only permissible where a CEQA lead agency can show, based upon substantial evidence, that an existing conditions analysis would be 'misleading without informational value'." (BDCP EIR-EIS, 3D-2 (quoting *Neighbors*, 57 Cal..4th at 457).) But none of the baselines either fully accounts for existing conditions or meets the Supreme Court's standards for refusing to analyze existing conditions.

2. Reliance Upon Multiple Inconsistent Baselines

- The ***existing conditions baseline*** "has been developed to assess the significance of impacts of the BDCP alternatives in relation to existing conditions at the time of the most recent NOP and notice of intent to prepare an EIS (NOI) (February 13, 2009) "that could affect or be affected by" implementation of the BDCP and alternatives. (BDCP EIR-EIS, 3D-2.) Yet in "some instances", the EIR-EIS concedes, "certain assumptions were updated", including some (but not all) of the standards noted in NMFS's June 2009 biological opinion for salmonids (notably, it did not include the "Fall X2" salinity standard challenged in water users' litigation). Many of the most important details are buried in an appendix disclosing assumptions for State Water Project and Central Valley Project. (See BDCP EIR-EIS, Table 3D-1 and Appendix 5A.) Other still-pending events or judicially challenged events -- for example, renewal of the FERC license for the Oroville project, or operation of the SWP under the Monterey Amendments -- are simply assumed as

part of existing conditions. (See, e.g., BDCP EIR-EIS, 3D-6 and Appendix 5.A, B-68, B-138.)

- *The* ***no-action baseline*** includes the existing conditions baseline's programs, actions and policies, including many of the same assumptions relating to continued operation of the SWP and CVP. Unlike the existing conditions baseline, the no-action baseline does include implementation of the Fall X2 salinity standard in the 2008 USFWS Biological Opinion, "as well as changes due to climate change that would occur with or without the proposed action or alternative." (BDCP EIR-EIS, 4-5.) It also includes facilities under construction at the time of the NOP/NOI, and programs, projects and policies with "clearly defined management and/or operational plans" deemed *likely to occur by 2060.* (BDCP EIR-EIS 4-6.) Although the no-action baseline was developed for NEPA purposes, the EIR-EIS concedes that it is also used to explain many of the CEQA conclusions. (*Id.*)

- The ***existing biological condition baseline*** used for the BDCP's effects analysis reflects the environmental conditions of the Study Area at the time of BDCP approval (BDCP, chapter 2) as well as the anticipated ecological effects of implementing most (but not all) of the actions in the BiOps developed by USFWS for delta smelt (2008) and NMFS (2009) for salmonids and green sturgeon for the long-term operations of the SWP/CVP facilities. (BDCP, Table 5.2-2.) These actions were added to the regional water operations objectives (i.e., rules) previously required under D-1641 provisions of the State Water Resources Control Board (1999), including the Vernalis Adaptive Management Program. This baseline does not include future effects that may result from climate change, or the effects of water operation agreements that are currently being negotiated. Nor does it explain why it does not reference numerous other obligations outside of D-1641.

- The ***existing conveyance scenario*** is part of the BDCP's August 2013 statewide economic report. It was introduced to bolster the purported economic analysis claiming significant benefits to BDCP (BDCP, chapter 9). This baseline assumes that water deliveries from the Delta will be dramatically lower without the BDCP, far lower (by approximately 1 million acre-feet) than assumed in the EIR-EIS. Although this scenario would appear to reduce environmental damage of north Delta intakes while placing environmentally beneficial restrictions on south Delta plumbing, neither the BDCP nor the EIR-EIS provide environmental analysis for this scenario. Notably, when an MWD director asked David Sunding, the BDCP economic report's author, whether the project would be cost-effective using the baseline in the EIR-EIS, his answer was an unequivocal "no". http://mavensnotebook.com/2013/07/29/dr-sunding-makes-his-case-for-the-bdcp-to-metropolitans-special-committee-on-the-bay-delta/

Overall, these internally inconsistent and confusing scenarios reinforce a continuing concern that, as the National Research Council concluded of an earlier

iteration, "much of the BDCP appears to be a post-hoc rationalization of the water supply elements of the BDCP." (2011 report, p. 13.) They underscore the need for a genuine existing conditions analysis to supplement the efforts to project future conditions. As the Bay Institute aptly noted in a February 29, 2012 briefing paper that remains unheeded, "[c]omparing the BDCP to recent actual conditions (conditions that are already driving the collapse of the Delta ecosystem) would reveal that the BDCP would substantially increase water exported from the Delta while severely degrading environmental conditions." That genuine comparison has still not been made in the BDCP and its EIR-EIS.

3. Reliance Upon Speculative "No Action" Alternative

The no-action alternative strays well beyond the boundaries of reasonably foreseeable future conditions appropriate for inclusion in NEPA's "no action" alternative or CEQA's "no project" alternative. The EIR-EIS purports to make "informed" judgments about future conditions consistent with existing planning that are half a century away. (See BDCP EIR-EIS, 3D-3, 4.; ES-25.) However, the EIR-EIS provides no foundation for the predicted judgments. A similar problem affects the cumulative impacts analysis. Moreover, the EIR-EIS errs in projecting operation under "dead pool" conditions in around 10 percent of water years, without considering foreseeable efforts of water managers to take steps attempting to avoid levels of depletion approaching a dead pool.

4. Inconsistent and Arbitrary Assumptions About Compliance With Laws and Regulations

The baseline scenarios make inconsistent and arbitrary assumptions about which existing laws and regulatory requirements will be met in the absence of the project. Cherry-picking these in advance, without analyzing the physical conditions relating to compliance, is a particularly glaring error in light of critiques from the State Board, Science Board, and federal agencies expressing concern that compliance is already heavily challenged without the additional pumping anticipated by "conservation" measure CM-1.

This manipulation and inconsistency underscore the legal inadequacies of the BDCP as a conservation plan. Under the ESA, "[a]n agency may not take action that will tip a species from a state of precarious survival to a state of likely extinction. Likewise, even where baseline conditions already jeopardize a species, an agency may not take action that deepens the jeopardy by causing additional harm." (*National Wildlife Federation v. National Marine Fisheries Service* (9th Cir. 2007) 524 F. 3d 917, 930.)

The EIR-EIS has failed so far to establish the foundation for compliance with requirements of the Delta Reform Act that are mandatory for BDCP to proceed and receive state funding. (See, e.g., Wat. Code, § 85320 (including NCCPA compliance,

reasonable range of flow criteria, reasonable range of Delta conveyance alternatives, and potential effects of climate change and effects on migratory fish and aquatic resources).)

5. Failure to Analyze Potential Water Rights Conflicts

Although the BDCP and the EIR-EIS simply assume that the project will be benign for holders of water rights, the State Board's comments on the administrative draft EIR-EIS reveal a problem persisting in the latest draft: "implementation of the BDCP project will require changes to water rights and water right requirements. Further, the proposed project may affect other legal users of water through changes in salinity and flows."

Moreover, the EIR-EIS fails to illuminate major potential conflicts with water rights users that may well arise if "no surprises" benefits become available to permittees in return for the BDCP's highly uncertain and tenuous "conservation" benefits. (See BDCP, p. 6-29 (discussing the "no surprises" rule).) Assurances to permittees must be proportional to the certainty that the BDCP's conservation measures will succeed (See Fish & Game Code, §2820(f)(1).) Here, the independent scientific critique of BDCP casts major doubt on the BDCP's ability to live up to the conservation benefits attributed to the EIR-EIS. Unfortunately, the existing analysis fails to illuminate the likely "Plan B" if these benefits fail to materialize, who may lose water, money, or both, and the resulting ecological and economic consequences. The BDCP and its EIR-EIS conceal the risk of major conflicts with existing holders of water rights, existing water users, and areas of origin protected under California law.

6. Fundamentally Flawed Cost-Benefit Analysis

The BDCP bases purported project benefits on a fundamentally flawed cost-benefit analysis that distorts the project baseline and undermines the integrity of the environmental review. Ignoring a deluge of earlier criticism, the analysis retains errors that repeatedly result in exaggeration of the BDCP's benefits and understatement of the BDCP's costs. Without these distortions, the BDCP's costs are highly likely to outweigh benefits. Dr. Jeffrey Michael's detailed assessments of BDCP's costs and benefits (including the socioeconomic analysis appended to as Exhibit I to Sacramento County's comments) identify severe errors, as did the Legislative Analyst in an earlier review.

Baseline errors cast major doubt upon the required assessment of mitigation and project alternatives, and leave accountability for major costs and risks mired in doubt. Fatal errors in the cost-benefit analysis also undermine the BDCP's ability to comply with the required assessment of the project and alternatives to "take" under

the ESA. The full measure of BDCP's costs remains unknown and potentially severe, while all its proposed funding sources remain speculative and uncertain.

V. BDCP AND THE EIR-EIS DEFICIENTLY ADDRESS PROJECT ALTERNATIVES AND MITIGATION.

A. Legal Requirements for Environmental Review

To comply with CEQA, an EIR must examine a range of reasonable alternatives that would feasibly obtain most of the project objectives, but avoid or substantially lessen any significant adverse effects of the project. (14 Cal. Code Regs. §15126.6.) In its screening and review of alternatives, the EIR must provide more than "cursory" analysis. (*PCL v. DWR*, 83 Cal. App. 4th at 919.) It should not construe project objectives so tautologically that only the proposed project could conceivably be capable of achieving them.

The NEPA process is intended to help public officials make decisions that are based on an informed understanding of environmental consequences (40 CFR §1500.1(c)). This requires a clear comparison of the impacts of the project alternatives.

CEQA Guideline section 15126.4(a) requires lead agencies to consider feasible mitigation measures to avoid or substantially reduce a project's significant environmental impacts. As illustrated in a recent appellate ruling, general statements about the adequacy of mitigation incorporated into a project cannot substitute for rigorous project-specific analysis. (*Lotus v Department of Transportation* (2014) 233 Cal.App.4th 645.)

B. BDCP Problems With Assessment of Alternatives and Mitigation

The EIR-EIS does not come close to providing a legally adequate assessment of mitigation or alternatives. It erroneously assumes that amendment or revision of project contracts are beyond the authority of DWR and the federal lead agencies, even though project contracts are presently being renegotiated. As just one illustration, the BDCP fails to consider the effects of reasonable modification of or repeal of the Monterey Amendments.

ESA requires a review of "alternative courses of action," which is defined to mean all alternatives and is not limited to the original project objectives and Agency jurisdiction. The BDCP fails to review the full range of alternatives for survival and recovery of affected species. Remarkably, despite years of scientific evidence documenting the importance of water flow through the Delta to species recovery, the BDCP's EIR-EIS fail to explore alternative approaches that would not rely on the ability to increase Delta exports. As proposed, the BDCP's extraordinarily narrow,

conveyance-dependent approach to water supply reliability is fundamentally at odds with the broader outlook that California has taken in other settings, including the recent California Water Action Plan and its evolving attempts to harmonize water policy with climate change adaptation.

The EIR-EIS renders complete analysis of alternatives and mitigation impossible by confining project-specific assessment to the conveyance portion of the project (CM-1), while providing only nebulous "programmatic" review of all the remaining conservation measures (CM 2-22.) All of the alternatives screening described in Section 3.2.1 focused entirely on water conveyance alternatives (CM-1). Further, the "Proposed Project" described in Section 3.2.3 only addresses water conveyance. As stated on p. 3-21 of the EIR-EIS, "A total of 65,000 acres of tidal habitat would be restored under all action alternatives except Alternative 5 (25,000 acres). There is no indication that any of the alternatives were designed to reduce impacts of the project associated with CMs 2-22.

Even if it could be shown that CMs 2-22 adequately reduce impacts, as required by CEQA, their implementation is fundamentally uncertain, because their funding source would be separate from that of CM-1 (conveyance). CMs 2-22 would be funded by the State, with some federal contributions. The State would need to pass a bond measure to provide funding for CMs 2-22, which is far from assured.

As detailed in section I, *infra*, the BDCP implementation structure described in Chapter 7 reveals numerous deficiencies in governance that make the effectiveness of mitigation measures even more uncertain and remote, empowering water contractors to exercise numerous opportunities to thwart the Delta protection component of the coequal goals. The BDCP's governance structure slights the essential role of San Joaquin and other Delta counties, while involving a large and vaguely-defined council of stakeholders. Moreover, both BDCP and the EIR-EIS fail to effectively analyze the role of the Bureau of Reclamation. Mitigation is also thwarted by the BDCP's heavy reliance upon the assumed future actions of third parties rather than the project's permittees, and improper deferral of mitigation to future decision-making.

Finally, the EIR-EIS fails to sharply distinguish between alternatives and evaluate their comparative merits, as required under 40 CFR 1502.14(b). A central deficiency in the alternatives analysis is that BDCP and the EIR-EIS rely upon a narrow and outmoded conception of water supply reliability, which presumes in favor of using water exports to meet the contract amounts referenced in the SWP and CVP contracts. Indeed, the alternatives heavily focus on meeting this narrow conception of reliability, while avoiding the other 21 of 22 conservation measures. However, a far wider range of options can be utilized to meet supply needs in the future, including water conservation, reoperation, water markets, alternative conveyance, wastewater reuse, water storage, desalination, and efforts toward achieving regional self-sufficiency. Reports of the National Research Council, the Delta Plan (2013), and the

California Water Action Plan (2013), among others, discuss a far broader range of available options.

C. Independent Science Review Confirms Foundational Errors in the "Effects Analysis" Discrediting the Assessment of Alternatives and Mitigation.

The March 2014 report of the Independent Science Review Panel (ISRP-3) identifies major deficiencies in the "effects analysis" required for ESA compliance. Problems identified there also thoroughly undermine the basis for the EIR-EIS's conclusions about alternatives and mitigation. In essence, the BDCP leaves so much undefined and unanalyzed about conservation measures that its implementation hinges centrally on adaptive management. But what the BDCP and the EIR-EIS label "adaptive management" fails to meet scientific standards, and largely serves as a euphemism for unlawfully deferred mitigation.

The EA's analysis of the project's effects must provide "the best scientific assessment of the likely effects of the BDCP actions on the species of concern and ecological processes of the Bay-Delta system." (ISRP-3, p. 11.) The EA therefore serves as a as a "critical component" of the BDCP. (*Id.*) The Delta Reform Act requires science-based adaptive management for all of the Delta's ecosystem and water management programs. (Wat. Code, §85308(f).) Under other requirements as well, adaptive management efforts must incorporate sound science and institutional accountability, rather than opaque commitment. (See, e.g., USFWS/ NMFS five-point policy on adaptive management, 65 Fed. Reg. 35241-35257; NCCPA requirements for monitoring and adaptive management programs (Fish & Game Code, §2820(a)(7).)

Noting that "the foundation of the BDCP is weak in many respects," the Panel's Phase Three review observed that "default burden" to ensure that covered species benefit, if not recover, "depends on adaptive management." (ISRP-3, p. 6.) However, instead of rigorously applying adaptive management, the BDCP uses it "as a silver bullet but without clear articulation about how key assumptions will be vetted or uncertainties resolved to the point that the BDCP goals and objectives are more assured." (*Id.*, p. 9.) Because of the "extensive uncertainties" surrounding the BDCP's assumptions and predictions, the Panel "strongly emphasizes institutionalizing an exceedingly rigorous adaptive management process. This is critical in order to avoid the high risk associated with ecological surprises that will be difficult or impossible to reverse once they have occurred. BDCP must make a commitment to the fundamental process, and specifically the required monitoring and independent science review, not just the concept of adaptive management." (ISRP-3, p. 9.)

The Panel's new assessment of the BDCP's approach to adaptive management

suggests that criticisms of the BDCP offered several years ago by the NAS's National Research Council (NAS-NRC) still have not been heeded. For example:

- "If there is one area of general scientific consensus among the Panel about the implementation of the Bay Delta Conservation Plan is that its outcomes remain highly uncertain. As such, one would expect that the Effects Analysis would reflect this general conclusion by stressing a high level of uncertainty around all of its conclusions. There is also general consensus among stakeholders that the high level of uncertainty should not be an impediment to any action in the restoration of the Bay Delta ecosystem. The only way to address the highly uncertain outcomes of BDCP implementation is through rigorous monitoring and adaptive management."
(ISRP-3, pp. 18-19.)

- "Approximately 72% of the objectives for covered fish could not be fully evaluated at this time due to insufficient information. The overall net effects conclusion for each species seemed to be based on the judgment of the authors, rather than a systematic ranking of attribute importance, change in response to the BDCP, and uncertainty in the rankings."
(ISRP-3, p. 21.)

VI. The BDCP FAILS TO ADDRESS OTHER SIGNIFICANT PROBLEMS WITH THE REVIEW AND USES OF THE EIR-EIS.

The latest iteration of the BDCP fails to heed overwhelming scientific and agency criticism that followed prior iterations. Although superficially addressing climate change in a discrete chapter, the EIR-EIS also fails to account for cumulative impacts compounded by climate change. The BDCP's ability to live up to its conservation promises is greatly compromised by its failure to ensure the preparation of biological assessments and opinions before framing a draft plan highly focused upon the proposed conveyance. (See, e.g., *Western Watersheds Project v. Kraayenbrink* (9th Cir. 2010) 620 F.3d 1187, 1210 ("any possible effect" triggers consultation requirement).) Under the ESA, regulations require that "Each Federal agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat. If such a determination is made, formal consultation is required. . . ." (50 C.F.R. § 402.14(a).) As explained by EPA in its recent letter to the SWRCB, "The State Board. . . has recognized that increasing freshwater flows is essential for protecting resident and migratory fish populations." (EPA letter to SWRCB re: EPA's comments on the Bay-Delta Water Quality Control Plan; Phase 1; SED, pp. 1-2, March 28, 2013.)

The environmental review of the BDCP is also compromised by the assumption that project alternatives must increase flow out of the Delta, without requiring consideration of the State Board's flow analysis. The Delta Reform Act

requires that "[f]or the purpose of informing planning decisions for the Delta Plan and the Bay Delta Conservation Plan, the board shall, pursuant to its public trust obligations, develop flow criteria for the Delta ecosystem necessary to protect public trust resources. In carrying out this section, the board shall review existing water quality objectives and use the best available scientific information. The flow criteria for the Delta ecosystem shall include the volume, quality, and timing of water necessary for the Delta ecosystem under different conditions." (Water Code § 85086 (c)(1).)

The State Board's flow analysis is related to water quality standards, which EPA reviews for Clean Water Act compliance. The BDCP would pre-commit to develop major new conveyance infrastructure without first considering, in light of the State Board's flow analysis, whether the additional pumping it contemplates would be consistent with regulatory requirements. In doing so, it undermined the EIR-EIS's ability to meaningfully consider the projects consequences for water supply and water quality. (See, e.g., *Vineyard Area Citizens*, 40 Cal.4th at 430-441.)

Numerous other problems also severely compromise the EIR-EIS:

- The BDCP prioritizes and elevates the goal of water reliability over the co-equal goal of protection and enhancement of the Delta and related Delta activities in violation of the requirements of the Delta Reform Act.
- The BDCP inconsistently and evasively applies hydrologic projections, failing to consistently incorporate the consequences of foreseeable climate change. The EIR-EIS fails to take into account and analyze the effects of the California Water Action Plan.
- The BDCP fails to incorporate the requirements of law preventing Delta diversion unless adequate supplies are first provided for in-Delta use. The BDCP and the EIR-EIS fail to analyze the effects of incorporating these legal requirements into the plan.
- The BDCP fails to analyze the effects of water transfers and diversions on groundwater basins within the area of impact of the BDCP.
- The BDCP's modeling is poorly explained, and assumes levels of water exports that are both historically unjustified and unsustainable.
- The BDCP, with its complex morass of over 40,000 pages of supporting documents and inadequate summaries, thus far fundamentally fails the duty of environmental review to meaningfully inform the reader of the project's environmental consequences.

EXHIBIT A

AMY SKEWES-COX

June 22, 2014

TO: Tom Gau, Brandon Nakagawa, BDCP Working Group

The attached comments focus on land use, agriculture, recreation, transportation, hazards, services, growth inducement and socio-economics.

While comments do not always reference the County directly, they all affect the County's interests.

We stand ready to elaborate on key points as requested to do so, based upon your advice and that of the Working Group.

While many detailed comments address the same issue, they cumulatively point to critical failures to meet CEQA/NEPA requirements, and also give specific examples of major problem areas.

Sincerely,

Amy Skewes Cox, AICP

Robert H. Twiss, PhD

[illegible]
[illegible]

[illegible]
[illegible]

COMMENTS on the BDCP EIR/EIS PREPARED BY AMY SKEWES-COX AND ROBERT TWISS

Prepared for San Joaquin County Department of Public Works

June 22, 2014

These comments focus upon the degree to which EIR/EIS adequately addresses impacts of critical interest to San Joaquin County. Below, we make specific line-by-line references to errors, failures, misleading statements, and omissions which cause the document to fall short of NEPA and CEQA requirements. Prior to the detailed comments, we note the following six basic issues which undermine the document's adequacy:

1. A full and fair assessment of impacts is impossible given the EIR/EIS's treatment of water delivery at the project-specific level and the environmental mitigation measures at the vague, programmatic level.
2. Proposed mitigation measures are projects in and of themselves which would have enormous impacts on the land use and economy of the County; but the extent, magnitude, location, and implications of these actions (described only at the programmatic level) can only be speculative.
3. What little can be gleaned from the EIR/EIS in the way of solid information still cannot be taken as given. Both the BDCP Plan and EIR/EIS reference and rely upon the just-released Draft Implementing Agreement (IA) for specification of funding, responsibility, and accountability for the project and the integrity of promised mitigation measures. Neither the Plan, the EIR/EIS, nor the IA can be taken as a stand-along document; each must be considered in concert to comprehend the likelihood and magnitude of environmental impacts and the likelihood that they will in fact be mitigated. The Draft IA clearly undermines the viability of the EIR/EIS as an operative response to NEPA/CEQA requirements.
4. The IA, which should specify how mitigation measures are to be assured, sets forth responsibilities and voting/decision structures which remove assurances altogether. It would permit mitigation measures to be reduced, expanded, relocated, or deleted at will. (BDCP Draft IA052814, pg. 29)
5. Under the rubric of adaptive management, water managers who hold a voting majority in all sub-entities may alter any promised mitigation measures. Conservation Measures 2-22 can be dropped or changed by the BDCP Authorized Entity Group (AEG) as recommended (or not) by the Adaptive Management Team (AMT). "The adaptive management program will afford the flexibility to allow for changes to be made to Conservation Measures and biological objectives, including the addition to or elimination of such measures or objectives, to improve the effectiveness of the Plan over time. (BDCP Draft IA052814, pg. 29). The IA authorizes the AMT to: create performance measures (BDCP 7.1.6, pg. 7-15 line 36), perform effectiveness monitoring (BDCP 7.1.6, pg. 7-15 line 36), and perform analysis, synthesis, and communication of monitoring results" (BDCP 7.1.6, pg. 7-15 line 37); (BDCP Draft IA052814, pg. 5). The AMT is given the power to decide if and when and under what terms to involve science review (BDCP 7-15, line 33). All of this means that environmental mitigation can be directed by agency expediency; not science.
6. No plan amendments would be required. The EIR/EIS is ephemeral and transitory in that mitigation measures can be changed or deleted without a plan amendment or further environmental disclosure and review. "Changes to a Conservation Measure or Biological Objective shall not require an amendment to the BDCP." (BDCP Draft IA052814, pg. 36).

The table below cites specific problems with the EIR/EIS and notes how that problem is an example of a broader issue.

COMMENTS	TOPIC
General Comments	
1. **Project Level vs. Program Level:** The project is basically piecemealed because the actual impacts/precise impacts of CM 2-22 are not addressed at a project level of analysis and thus one cannot determine the true cumulative impacts of the water conveyance facilities. The impacts of the mitigation measures are basically not addressed, because much of CM2-22 refers to basic mitigation measures of the water conveyance facilities (CM1). Specific locations of CM2-2 are not clarified (as stated on page 14-26, Line 5); thus, the full project is not truly defined. Because CM2-22 are used as mitigation to offset many of the impacts of CM1, the EIR throughout uses program-level mitigation measures to reduce project-level impacts of CM-1 to less than significant levels. In order to assure mitigation, the document must specifically show how the program mitigation reduces the project impacts to a less-than-significant level, bridging the analytical gap from program to project level with clear, specific measures. Further, impacts of each of the mitigation measures for CM-1 must be clearly and precisely identified. It fails to do that. Re-write the EIR to include either detailed explanations showing how the programmatic mitigation measures reduce impact significance to less-than-significant levels, and/or provide project-level mitigation measures that are enforceable and clearly monitorable, and reduce impacts to the extent feasible. Numerous examples of this problem are presented in the Recreation and other comments below.	**Incorrect use of Program and Project EIRs** **Piecemealing** **Inadequate project-level mitigation measures** **Programmatic mitigation measures used when project-level required**
2. **Project Components:** In addition to the tunnels, the water conveyance facilities include a variety of ancillary elements such as transmission lines, reusable tunnel material, borrow/spoils areas, concrete batch plants, siphons, new fire stations, dredging areas, barge unloading facilities and other elements. The impact analysis needs to address each of these components at a project and site-specific level and this has not been done.	**Incomplete impact analysis** **Incomplete project information and mapping**
3. **General:** The overall title of the EIR/EIS is very misleading. To call this project a "Bay Delta Conservation Plan" is misleading to the reader who needs to know that this project is actually primarily the proposed construction of major water conveyance structures, which will largely be undertaken within the boundaries of San Joaquin County. It would be much clearer if the entire project had been entitled "Peripheral Canal Revised with Conservation Components" or "Peripheral Canal II and BDCP" or "Water Conveyance Facility with Ecological Enhancement Program." The entire populace of the State is being misled by spin throughout the document and in the "word framing" that has been so consistently used to bury and obfuscate the true project. Why is CM-1 referred to as a conservation measure? Its' main purpose is water supply/conveyance with some but not all alternatives having benefits for fish; but it is not primarily a conservation project. This nomenclature misleads the public and decision makers. The EIR-S must replace the nomenclature for "CM-1".	**Misleading title** **Inappropriately defined project** **Use of "wordframing" to misconstrue project as a "mitigation project"; obfuscation of main project which is permission for the water conveyance facility**
4. **Unreadable Document.** At more than 30,000 pages, this entire EIR/S is totally unreadable, and especially for the lay person who has not had extensive experience with CEQA/NEPA. The Table of Contents alone is 235	**Unreadable document** **Not a user friendly document**

COMMENTS	TOPIC
pages long! That alone should be enough proof that this is not "user friendly" or even "User Accessible." The other elements that make it unreadable are: 1) the number of alternatives and the "sub-alternatives" within each alternative (none of which are specifically aimed at meeting CEQA's requirements that alternatives mitigate project impacts) 2) the lack of a concrete set of project objectives which would help to define the need for the project or the "Environmentally Superior" Alternative; 3) the lack of graphics that add to the text in a location that is useable (e.g. one has to go to one of multiple appendices to find applicable graphics and to search endlessly for base information that is not located correctly; 4) the lack of a clear project description for the "Preferred Alternative" that is supposedly evaluated at a project level (instead, one has to search through Appendix 3C to learn of all the components that are part of the Preferred Alternative. Any document that is 30,000 plus pages long is not user friendly. This is almost twice the length of the Keystone Pipeline EIS and the project is far smaller in geographic extent than the Keystone Pipeline.	
5. The EIR-S applies general "Environmental Commitments" (ECs) and CMs 2-22 to reduce the impacts of CM-1 to a less than significant level. However, it fails to show how those program-level ECs and CMs reduce the impacts to less than significant. Equally significant, the assumption of ECs and CMs as mitigation eliminates the rigorous review of impacts and mitigation possibilities required under the recent (January 20, 2014) Trisha Lee Lotus v. Department of Transportation appellate court decision, which expressly prohibits the approach used in this document. This is especially egregious in this case because the project-level impacts of up to 65,000 acres of new wetland construction, which is claimed as mitigation for many of the project impacts, are not analyzed. This document must be re-written to clearly identify the impacts, evaluate a range of mitigation measures, and select the most effective feasible measures. Numerous examples of this problem are presented in the Recreation comments below.	**Inadequate impact analysis** **Applicable to recent "Lotus v. Caltrans" case** **Inadequate mitigation measures**
6. **No Action Alternative and Cumulative Analysis:** The EIR/S is flawed in assuming that the cumulative analysis considers the project alternatives as compared to the No Action Alternative in 2060. First of all, the time horizon is so far into the future that any impact analysis is rendered meaningless. While the ITP may extend to 2060, there is no reason that the CEQA/NEPA analysis cannot have a "mid-point" year of 2030 or 2035. CEQA is very clear on how cumulative analyses should be done and this can be by either using a General Plan or other planning document, or using a list of identified proposed, approved or pending projects. This EIR/S has done neither. Instead, the No Action Alternative conditions for 2060 are "predicted" without any justification as to how such future conditions were determined. How the Year 2060 was chosen has not been explained. The EIR/S needs to explain how only 2060 was chosen as the "future baseline" year; why was no intervening year selected in addition to 2060? How can effectiveness of mitigation measures be evaluated when such a future baseline is being used. 2060 as a future baseline is meaningless and highly speculative. This is 46	**Inappropriate use of "future baseline" year of 2060** **Inappropriate methodology for cumulative analysis; not meeting CEQA requirements** **Lack of foreseeable future per CEQA requirements** **Lack of reasonable time horizon**

COMMENTS	TOPIC
years from today! In perspective, if one goes back 46 years....this is what you'd find. It was 1968. In 1968, there was no NEPA, no CEQA, no discussion of sea level rise, no discussion of toxics in the environment, no knowledge of what climate change would do to the environment. How can we possible predict what conditions will be in 2060? The Califomia Dept. of Finance does not project population for that year? Why would the EIR/S assume to predict environmental conditions in that year?	
7. **Inadequate Funding for Project Level Mitigation Measures:** Even if it could be shown that CMs 2-22 adequately reduce impacts, as required by CEQA, there is no certainty that they would actually be implemented because their funding source would be separate from that of CM-1. CM-1 would be funded by the state and federal water contractors, while CMs 2-22 would be funded by the State, with some federal contributions. The State would need to pass a bond measure to provide funding for CMs 2-22, which is far from assured. Absent this funding, the mitigation effects of CM2-22 cannot be assumed for CM-1. See: http://blog.aklandlaw.com/2006/05/articles/ceqa/impact-fee-programs-as-effective-tools-for-ceqa-mitigation-an-update/	**Inadequate funding of mitigation measures** **Lack of assurance of mitigation for project level impacts**
8. **Whole of action not considered.** CEQA defines a project as "the whole of an action..." For CM-1, a major part of the construction action is storage/disposal/reuse of the spoils from 70+ total miles of approximately 42-foot tunnel bores, yet the impacts of transporting, storing, and disposal disposing of upwards of 25 million cubic yards of tunnel and other construction spoils are not adequately analyzed at a project level. The EIR cites the volume of spoils to be generated – but then provides open-ended flexibility alter the amount and timing stating merely: *"In the course of constructing project features, substantial quantities of material may be removed from their existing locations based on their properties or the need for excavation of particular features. These materials will require handling, storage, and disposal, as well as chemical characterization, prior to any reuse. It is anticipated that one or more of the disposal and reuse methods could be implemented on any individual spoil, reusable tunnel material (RTM), or dredged material site. Depending on which combination of these approaches is selected, implementation of material reuse plans could create environmental impacts related to ground disturbance, noise, release of hazardous materials, traffic, air quality, water quality, and Important Farmland or farmland with habitat value for covered species." (DEIS/EIR p. 31-20)* Apparently, some or all of this earth is intended for use in implementing wetlands restoration under CMs 2-22, however, as there is no project-level analysis of impacts of these CMs, and no specific permanent locations identified for the "reusable materials"., The EIR fails to assess the project-level impacts of this essential component of CM-1 (CM-1 cannot be constructed without storage/disposal/reuse of the tunnel spoils). Section 31.5.1.4 provides general EC's that are entirely unenforceable and whose effectiveness cannot be determined due to the lack of specifics. Mitigation measures are equally vague and deferring of any actual analysis. For	**Inadequate project description** **Piecemealing** **Lack of analysis for whole of the project**

COMMENTS	TOPIC
example, in Section 31.5.2.1, the portion of the MM Soils 2b discussion regarding air quality for handling and storing the massive spoils quantities states: *Air Quality* *Increased GHGs and criteria pollutant emissions would result from the operation of excavation equipment, both at the excavation site and the application site, and haul trucks. These effects are expected to be further evaluated and identified in subsequent project-level environmental analysis. Mitigation Measure AQ-2 through AQ-4, AQ-15 and AQ-18, as well as related AMMs and environmental commitments, as described in Section 31.5.1.2, would be available to address criteria pollutant and GHG emissions.*	
9. The "Project" and the associated range of alternatives do not meet CEQA's requirement that the alternatives be designed to reduce or eliminate one or more project impacts. In fact, many have greater impacts on a wide range of resources than the "preferred project", Alternative 4. Alternatives seem to have been selected based on engineering possibilities, resulting in the EIR's function being relegated to that of a constraints analysis of a group of options rather than the requisite investigation into feasible alternatives that would reduce project impacts while still achieving most of the project objectives.	**Inadequate Alternatives analysis** **Alternatives do not reduce impacts of preferred project**
10. The alternatives are further deficient because they address only EC-1, and not ECs 2-22. In fact, all of the alternatives screening described in Section 3.2.1 focused entirely on water conveyance alternatives (CM-1). Further, the "Proposed Project" described in Section 3.2.3 only addresses water conveyance. As stated on p. 3-21 of the DEIS/EIR, "A total of 65,000 acres of tidal habitat would be restored under all action alternatives except Alternative 5 (25,000 acres). There is no indication that any of the alternatives were designed to reduce impacts of the project associated with CMs 2-22, despite CEQA's requirement that alternatives be designed to reduce project impacts. It is imperative to revise the project alternatives to reduce impacts associated with implementation of CMs 2-22, including, but not limited to, reducing the loss of agricultural lands, reducing construction-related impacts of the wetland restoration projects, and reducing loss of upland foraging habitat. Further, the EIR/S should be revised to include and assess two sets of alternatives, one set for the program (CMs 1-22) and the other a project-specific set for the conveyance facility (CM-1). A project-specific EIR/S that does not include project-specific alternatives is inadequate, and the same is true for a program EIR. The current hybrid approach is doubly inadequate.	**No alternatives for CM2-22** **Inadequate Alternatives analysis** **Inappropriate use of project and program analysis in one document**
11. Under the description of alternatives, the diversions are always characterized in terms of maximum cubic feet per second (cfs). That description would only be important if the project were premised on maximum diversion. Otherwise, acre-foot diversions/month plus cfs limits are a more important metric from which to determine impacts. In fact, many of the impacts of the project are far more dependent on low flow commitments than high-flow diversions. The document must revise the alternatives to clearly describe a range of water management options that would reduce impacts of the proposed project in addition to maximum diversion capacities.	**Inadequate alternatives description** **Inappropriate characterization of alternatives' components**
Executive Summary	

COMMENTS	TOPIC
12. **Page ES-1**, Line 23.: The Executive Summary states "The BDCP is a comprehensive conservation strategy for the Sacramento-San Joaquin Delta (Delta) to advance the planning goal of restoring ecological functions of the Delta and improving water supply reliability in the state of California." Instead of immediately following this statement with a statement that the project also includes the development of major water conveyance facilities, the paragraph continues to focus on the "conservation strategy" component of the project. It is not until line 33 on this page that we even see mention of "water conveyance facilities" and even then, there is no description of what this means, no description of tunnels, intake structures and other water conveyance elements. Where is the first mention and full description of the water conveyance facilities, including clear mapping of such facilities?	**Mischaracterization of project** **Lack of adequate project description in Executive Summary**
13. **Page ES-3, Line 35**: There is a statement that the goal of the EIR/EIS is to provide sufficient evaluation of alternatives so that project-level assessment of the potential effects of selected modified and/or new conveyance facilities is possible. Then, Line 37 mentions that for BDCP Conservation Measures (CM) 2-22, the EIR/EIS intends to present a program level analysis, and that further environmental review may be needed prior to implementing conservation measures. Thus, it appears that the EIR/EIS is both a project level and program level EIR/EIS as partly defined in CEQA Sections 15161 and 15168. It appears that the EIR/EIS might be specific about the conveyance facilities and then not specific about the conservation measures. This raises an immediate concern that if the conservation measures (which are assumed to help mitigate some of the impacts of the project) are addressed at a programmatic level, how can there be certain assurances of their implementation? And it raises the additional concern that if water conveyance facilities are addressed at a project level, no opportunities for future CEQA review may occur as related to those components of the project that may have the greatest impact. See Comment 1 above.	**Misuse of program-level analysis** **Confusion of mitigation measures with program-level project** **Inadequate evaluation of mitigation measures** **Lack of assurance that CM2-22 can be approved in future**
14. **On page 3.-24** (Line 15), the EIR/EIS states that the water conveyance facility components are analyzed at a project level in the EIR/EIS. It would seem that the EIR/EIS should clearly list which components are addressed at a project level and which are addressed at a programmatic level, and this should occur very early in the Executive Summary as the reader has no idea what components are to be covered in the overall document.	**Lack of adequate project description**
15. **Page ES-4**, Line 36: Mention is made of how the EIR/EIS is intended to provide sufficient detail to allow USFWS and NMFS to make an informed decision on action of considering issuance of an Incidental Take Permit (ITP) under Section 10 of the Endangered Species Act. And the second main project component is identified as the Natural Community Conservation Plan (NCCP). Finally, Line 40 of this same page mentions the intent of the EIR/EIS to provide project-level assessment of the potential effects of modified and/or new water conveyance facilities, water supply contract amendments and/or funding agreements. And CM 1 is also intended to be addressed at a project level. Nowhere is there mention of which agency will take responsibility for permitting the water conveyance facilities, whether they be new and/or modified. However, the title of this section is "Intended Uses of the BDCP EIR/EIS and Agency Roles and Responsibilities". The document must clarify any agency associated with	**No clarification on permitting agencies**

COMMENTS	TOPIC
permitting the project elements that are addressed at a project level.	
16. **Page ES-6, Line 1** shows the responsible and lead agencies for both CEQA and NEPA. However, the main project is defined as the ITP and the NCCP. If the NCCP is a main component requiring the action of the California Dept. of Fish and Wildlife, (CDFW), why is CDFW not the lead agency? As stated in Section 15051 (b) of the CEQA Guidelines, "the Lead Agency shall be the public agency with the greatest responsibility for supervising or approving the project as a whole." If DWR is shown as the lead agency, the EIR/EIS has been very unclear up to this point of the document why DWR has the greatest responsibility. DWR has no responsibility over the NCCP, which is the EIR's stated State "Project". One could infer by the fact that DWR is the lead agency that the water conveyance facilities are truly the most significant element of the proposed project. This fact contradicts all the statements on page ES-1 emphasizing that the major components of the project include the ITP and NCCP. The EIR/EIS needs to clarify why DWR is identified as the lead agency. From Section 15051(c) of the CEQA Guidelines, it would appear that DWR was selected because it was going to act first on the project (vs. CDFW), and that the water conveyance facilities approval will be the first approvals far before the ITP and NCCP. Again, there is obfuscation of the true project and the true order of priorities.	**Inappropriate lead agency**
17. **Page ES-6**, Line 8 states that CDFW is "considering whether to approve the BDCP as an NCCP...." What does this mean by the use of the word "considering"? Is an NCCP to be adopted or is the NCCP itself only being considered? Also, Section ES1.1.1.1 mentions DWR responsibilities but never mentions DWR responsibilities as to water conveyance facilities. It is not clear whether DWR has any discretionary approvals related to water conveyance, and there is no explanatory text as there is for Reclamation per text on page ES-7, Line 8-13.	**Inadequate description of agency responsibilities**
18. **Page ES-7**, Lines 8-13 finally explain the conveyance facilities in very shaded terminology using the words "*provide for diversion, storage, and conveyance of CVP water consistent with applicable law and contractual obligations.*" It is as if there were no choice but to allow for the massive new conveyance facilities (which still have not been explained in the document to this point) because it's merely compliance with legal obligations.	**Inadequate project description**
19. **Page ES-10,** Lines 17-22 includes the text "*It is not intended to imply that increased quantities of water will be delivered under the BDCP. As indicated by the "up to full contract amounts" phrase, alternatives need not be capable of delivering full contract amounts on average in order to meet the project purposes. Alternatives that depict design capacities or operational parameters that would result in deliveries of less than full contract amounts are consistent with this purpose.*" This text fails to explain that the EIR/EIS must look at the "full project" and if the water conveyance facilities are designed/planned for conveying up to a certain amount of water, that full conveyance must be addressed. For an analogy, an environmental document on a new college facility must address full occupancy based on the capacity of the school; a water treatment facility must be addressed based on the full capacity of the system. Our future comments will address whether this has been done appropriately for the BDCP. Explain where in the EIR/EIS the full capacity of the water conveyance system has been adequately addressed.	**Inadequate analysis of full capacity of water conveyance facilities**

COMMENTS	TOPIC
20. **Page ES-13**, Lines 16-24: In two summary paragraphs, the BDCP is defined. First, the text says the "*BDCP is a joint HCP/NCCP*" and then later, the text states that the "*BDCP is also proposed to provide for the conservation and management of covered species....through a conservation strategy that includes....conservation measures, including the construction and operation of new Delta water conveyance facilities...*". What are the conservation measures contained in construction and operation of water conveyance facilities?	**Inadequate project description**
21. **Page ES-19 Table ES-3**: What a twist in terminology to refer to the water conveyance facility as a "conservation measure". The document must explain why this term would apply to this element of the project.	**Deceptive terminology defining the project**
22. **Page ES-19: Lines 3-6**: It would seem from this section that it's assumed that the water conveyance facilities would be constructed over a 10-year period. From Years 11 to 15, the "early long-term" implementation measures would be undertaken and from Years 16 through 50, the "late long-term" implementation measures would undertaken. The document must clarify that this is correct in terms of phasing as this issue may arise later in the EIR/EIS. (Note: In the analyses that follow, by topic, these 3 phases are not always addressed separately. The construction [10-year] phase is addressed and then the operation phase is addressed).	**Lack of clarity on phasing of project**
23. **Page ES-25, Lines 16-35: Issue of No Action Alternative and Environmentally Superior Alternative and Baseline**. The issue of "No Project" is not correctly explained. The statement that "Under CEQA, the No Project Alternative is not the baseline for assessing the significance of impacts of the Proposed Project." Is taken out of context and not fully correct. Section 15126.6 (e)(1) of the CEQA Guidelines state that "The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (see Section 15125)." (Emphasis added) While it is true, as stated, that the "No Project conditions may include some reasonably foreseeable changes in Existing Conditions and changes that would be reasonably expected to occur in the foreseeable future if the project were not approved", the EIR/S fails to mention that Section 15126.6 (e)(2) that this "future scenario" must be discussed in addition to existing conditions at the time of the notice of preparation. It is critical to note that the words "foreseeable future" and "reasonably expected" to occur are used in the CEQA Guidelines. Using 2060 as the year of assessing the No Project Alternative would not be considered the "foreseeable future" or a time in which anyone could determine what would be "reasonably expected". For example, the Agricultural section addresses in Section 14.3.3.1 the Cumulative Effects of the No Action Alternative, and in this section states that projects assumed to be constructed by 2060 are included in the analysis. The use of 2060 as a "future baseline" seems to fly in the face of the recent CEQA lawsuits that have clearly stated that present (time of NOP) conditions	**Incorrect use of "No Project" Alternative** **Inappropriate baseline** **Confusion of "cumulative" with future baseline** **Inappropriate use of 2060 as future baseline year**

COMMENTS	TOPIC
must also be addressed if a future baseline is to be considered. And how can anyone know 2060 conditions? That is 46 years from now. That would not be defined as the "foreseeable future" as we know the term. Just as an example, no one was discussing sea level rise and climate change 46 years ago (Year 1968). And in 1968, all the Best Management Practices to prevent soil erosion and sedimentation weren't known. These are just a couple of examples to point out the 2060 is not the foreseeable future. A Merriam Webster definition of "foreseeable" is "lying within the range for which forecasts are possible". Forecasts have to be made based on current knowledge, current technologies, and known elements. Forecasts are not just conjecture. Section 3D.2.3 of the EIR/S states that the future No Project condition is allowed by NEPA; however, CEQA requires, as stated in 3D.2.3, that if a future baseline is assessed, then the "existing conditions" baseline must also be assessed. The EIR/S appears to consistently violate this by addressing Cumulative conditions as the "No Project 2060" condition, and foregoing a comparison of the project to cumulative conditions that are present day. By doing this, the project's impacts can be woefully understated. See Discussion under "Appendix 3D" elsewhere in these comments.	
24. **Pages ES-27 through 31**: Project components are diverse and require being addressed throughout the EIR/EIR. From the brief project description, it appears that the following elements could have associated environmental impacts: ▪ Intakes ▪ Pumping plants (which include sedimentation basins, substations, access roads) ▪ Pipelines ▪ Tunnels ▪ Canals (unlined or lined with concrete which means transport of concrete needs to be addressed) ▪ Forebays: possible expansion of Clifton Court Forebay and division of this forebay ▪ Fixed and operable barriers ▪ New levees or levee modifications (these alone have issues related to import of soil materials, etc. ▪ Culvert siphons ▪ Gates or similar structures ▪ Concrete batch plants (requires source of clean water; location not shown; acreage not shown) ▪ Temporary barge unloading facilities ▪ Other facilities: Bridges, road, utilities, local drainage systems Locations and acreage of each of the above components need to be identified and mapped.	**Lack of adequate project description** **Lack of impact analysis for all project components being addressed at project level of detail (vs. program)**
25. **Page ES-34**: There are 16 alternatives evaluated in the EIR/EIS and then this page addressed 15 operational scenarios. 16x15 results in 240 variations that one has to track. The "project" becomes convoluted to the point of indecipherable as the multiple variations are explained. There is no way that	**Unclear and onerous project description**

COMMENTS	TOPIC
a reader can make sense and track all the components of this many variations on a project. And this doesn't even account for the variations in Conservation Components addressed on page ES-37!	
26. **Page ES-40, Section ES.6.2.4**: This addresses environmental justice; however, nowhere is there an explanation of how the entire BDCP EIR/EIS has been made "workable" for minority populations. For example, has there been a translation into Spanish? Almost 40% of the population of San Joaquin County alone is Hispanic.	**Issue of translation into Spanish given demographic makeup of counties impacted**
27. **Page ES-41: Lines 1-11**: The text does not clarify that the Notice of Determination (NOD) is filed AFTER approval of the project. DWR must certify the EIR portion as meeting the requirements of CEQA. This can happen completely separately from the filing of the NOD. The NOD just sets the time period during which a challenge can be made. The text needs to clarify this.	**Lack of clarification on NOD**
28. **Page ES-48, Section ES.8.3.2, Lines 29-38:** Mitigation measure responsibilities are addressed and it is clarified that a number of parties will be responsible for ensuring implementation of mitigation measures. Nowhere is it clarified who will have overall responsibility. For example, if DWR is relying on CDFW to implement a measure, who will have the power to ensure that happens? These agencies operate quite independently and the Mitigation Monitoring and Reporting Program (not included to our knowledge in the EIR/EIS and required prior to approval of project) should identify how the ultimate decisions about effective mitigation will be made. The document must clarify who the entity will be to ensure effective mitigation measures.	**Inadequate clarification on agency overseeing implementation of mitigation measures** **Lack of Mitigation Monitoring and Reporting Program**
29. **Table ES-11**: This table has a variety of alternatives that do not match those shown on page ES-24. The document must explain this.	**Inconsistent listing of alternatives**
30. **Table ES-9:** This table summarizes impacts and mitigation measures. However, it comes AFTER Table ES-11 on page ES-61 of the EIR/EIS. None of the topics are identified and there is no legend to explain the topic. For example, the rows should be labeled as to whether the topic is Agriculture; Hydrology; Geology; etc. The legend does not explain what SW, WS, or other initials stand for. The table shows a total of 628 impacts. Of these, 6 are related to Land Use and 4 are related to Agriculture, while 217 are related to aquatic species. This alone exemplifies how the EIR/S is unbalanced in its evaluation of the true impacts associated with the water conveyance facilities which are the ONLY element addressed at a project level. It appears that there are at least 89 significant unavoidable (SU) impacts as identified for CEQA. It is very unclear how there can be significant impacts after mitigation. If this is the case, the impact is normally significant and unavoidable. This matter must be fully explained and justified. Of the 89 SU impacts, many of these are related to the CM1 element which is the water conveyance facilities, either as related to construction or operation. The water conveyance facilities are evaluated at a project level, and not a programmatic level. Therefore, it is imperative that mitigation measures be clear and concise and that they not be deferred to a future time or a future discretionary approval time. Simply making the impacts SU because the	**Inadequate Summary** **Unbalanced evaluation of topics** **Inadequate mitigation measures, even for those impacts determined to be significant and unavoidable**

COMMENTS	TOPIC
mitigation measure cannot be guaranteed or is outside the control of the lead agency does not mean that the analysis is adequate.	
Chapter 2, Description of Alternatives	
31. **Page 2-3** of the EIR/EIS lists the objectives for the project. The elements of the physical developments associated with the project (e.g., the Tunnels) are not even mentioned until the end of the list of objectives as highlighted below. All the emphasis from the very beginning of the EIR/EIS is upon use of the words "improve", "conservation", "recovery of the species", "protecting", "enhancing certain aquatic, riparian and associated terrestrial natural communities and ecosystems". As stated in **Section 15124 of the CEQA Guidelines**, "The statement of objectives should include the underlying purpose of the project." It is very clear that the "underlying purpose" of the project is to construct water conveyance structures to move water from northern California to southern California. The protection of species and restoration of habitat is not the underlying purpose; rather, these are the associated actions to be taken to mitigate/offset the impacts of the underlying water conveyance structures. At a minimum, the list of objectives should be reordered to highlight the conveyance facilities as the main objectives, followed by the restoration activities. Even when physical development is listed, it's referred to as "physical improvements" as highlighted below. The actual main component of the proposed tunnels (and the word "tunnels" isn't even used) occurs as the very last objective as "*To identify new operations and a new configuration for conveyance of water entering the Delta from the Sacramento River watershed to the existing SWP and CVP pumping plants in the southern Delta.....*" Use of obfuscating language such a "new configuration for conveyance of water" entirely misleads the public who are reviewing the EIR. What is the true project? And what is the underlying purpose of the project as required by Section 15124 of the CEQA Guidelines? List of objectives as per page 2-3 of the EIR/EIS (underlining added to emphasize physical changes)..... • *Respond to the applications for incidental take permits[2] for the covered species that authorize take related to:* 1. *The operation of existing SWP Delta facilities and construction and operation of facilities for the movement of water entering the Delta from the Sacramento Valley watershed to the existing State Water Project (SWP) and Central Valley Project (CVP) pumping plants located in the southern Delta;* 2. *The implementation of any conservation actions that have the potential to result in take of species that are or may become listed under the ESA, pursuant to the ESA at §10(a)(1)(B) and its implementing regulations and policies;* 3. *The diversion and discharge of water by Mirant LLC for power generation in the Western Delta[3]*	**Inadequate objectives** **Inadequate definition of purpose of project**

COMMENTS	TOPIC
• *To improve the ecosystem of the Delta by:* 1. *Providing for the conservation and management of covered species through actions within the BDCP Planning Area that will contribute to the recovery of the species; and* 2. *Protecting, restoring, and enhancing certain aquatic, riparian, and associated terrestrial natural communities and ecosystems.* 3. *Reducing the adverse effects to certain listed species of diverting water by relocating the intakes of the SWP and CVP;*[4] • *Restore and protect the ability of the SWP and CVP to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of State and federal law and the terms and conditions of water delivery contracts and other existing applicable agreements.* • *To ensure that the BDCP meets the standards for an NCCP by, among other things, protecting, restoring, and enhancing aquatic and terrestrial natural communities and ecosystems that support covered species within the Plan Area.* • *To make physical improvements to the conveyance system in anticipation of rising sea levels and other reasonably foreseeable consequences of climate change.* • *To make physical improvements to the conveyance system that will minimize the potential for public health and safety impacts resulting from a major earthquake that causes breaching of Delta levees and the inundation of brackish water into the areas in which the SWP and CVP pumping plants operate in the southern Delta.* • *To develop projects that restore and protect water supply and ecosystem health and reduce other stressors on the ecological functions of the Delta in a manner that creates a stable regulatory framework under the ESA and NCCPA.* 1. *To identify new operations and a new configuration for conveyance of water entering the Delta from the Sacramento River watershed to the existing SWP and CVP pumping plants in the southern Delta by considering conveyance options in the north Delta that can reliably deliver water at costs that are not so high as to preclude, and in amounts that are sufficient to support, the financing of the investments necessary to fund construction and operation of facilities and/or improvements.*	
32. The Purpose Statement found in **Section 2.4 on page 2-4** is slightly better in that "construction and operation of facilities…for the movement of water" is mentioned as number 1b. However, again, there is no description of the type of facility being discussed.	**Lack of adequate project description**
33. **Section 2.5, Project Need:** Again, the actual underlying project is hidden behind the" habitat protection veil". The section states, "There is an urgent	**Lack of adequate project description**

COMMENTS	TOPIC
need to improve the conditions for threatened and endangered fish species within the Delta. Improvements to the conveyance system are needed to respond to increased demands upon and risks to water supply reliability, water quality and the aquatic ecosystem."	
Chapter 3, Description of Alternatives	
34. **Page 3-2, Lines 1-5:** This chapter describes the Alternatives to the Project. However, CEQA (**Section 15126.6**) is very clear that an EIR shall describe a "range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the project objectives of the project but would avoid or substantially lessen any of the significant effects of the project". It is not until the 3rd page of Chapter 3 that one finds the Preferred Alternative (which for the purposes of CEQA would be the "proposed project") and then it is difficult to see how the 15 alternatives would be considered a "range of reasonable" alternatives, and how the alternatives would compare to the Preferred Alternative. While NEPA does not necessarily require alternatives to offer some environmental benefit (as stated on page 3-5, line 33), it is very clear that CEQA does require this. At a minimum, the EIR/EIS needs to state which alternatives to Alternative 4 would offer environmental benefits, or reduced impacts.	**Alternatives fail to reduce project impacts** **Failure to identify how alternatives relate to "Preferred Project"**
35. **Page 3-3, Section 3.1.1** clearly states that the Preferred Alternative is Alternative 4 as defined in the BDCP. However, nowhere is that Alternative described or mapped for the reader in this section of Chapter 3. One long paragraph is provided for Section 3.1.1, totally not meeting the requirements of the CEQA Guidelines, **Section 15124**, which describe the Project Description requirements. The following elements are not included in Section 3.1.1: ▪ Location and boundaries of the project; ▪ Description of project's technical, economic and environmental characteristics; ▪ Statement of the intended uses of the EIR; ▪ List of permits/approvals required; ▪ All the future decisions subject to CEQA such as state, regional, or local permits. CEQA does not have a concept or term of a "Preferred Alternative". That is NEPA parlance and concept. CEQA requires that an EIR evaluate the impacts of a "Proposed Project" and alternatives to that project that would reduce one or more impacts while achieving most of the project's goals. This section instead states that Alternative 4 is a tentative Preferred Project. What does this mean in a CEQA context? This does not provide the reader with essential CEQA information. The document must revise this discussion to; 1) identify the proposed project, and 2) identify the environmentally superior alternative, as mandated by CEQA. **Section 31-3 on the Environmentally Superior Alternative.** This section fails to identify an environmentally superior alternative. This is because the alternatives were not designed to mitigate impacts, as required by CEQA. The document must develop a true environmentally superior alternative that reduces impacts compared to Alternative 4, which appears to be the	**Failure to meet CEQA requirements as related to Project Description and Alternatives** **"Environmentally Superior" Alternative required by CEQA has not been identified**

COMMENTS	TOPIC
Proposed Project for CEQA review.	
36. **Page 3-6 to 3-8**: The reader is referred at the top of the page to three appendices that describe how alternatives were selected. The appendices are cumbersome and should only be used to supplement the main document. Again, the readability of the document is compromised. Section 3.2.1.3 describes how 15 conveyance alternatives were narrowed down to seven. The EIR/EIS does not refer to any specific maps that would define the location of the alternatives; nor are the conveyance alternative described in detail. Instead, each conveyance alternative is described with one or two sentences.	**Cumbersome reading** **Lack of clear project description** **Information hidden in appendices that should be in main text**
37. **Pages 3-8-3-10, Section 3.1.2.4.** The operation alternatives are not described in terms comprehensible to the layperson in this EIR, but rather are characterized as different locations of the mysterious X2, and the cryptic 2008 BiOps. This does not serve to inform the public. The document must provide a simple description of the actual operations alternatives.	**Inadequate description of alternatives** **Incomprehensible to lay reader**
38. Finally, on **page 3-12**, we are told more specifically what the project is! And then, it is not until page 3-27 that we get any idea of what the proposed tunnels would look like. Finally, we understand that the preferred alternative in 2012 was framed to include water intake facilities with a total capacity of 9,000 cubic feet per second (cfs), phased operations, and gravity flow conveyance system. However, again, we are left without any clear maps to show where these might occur and the ancillary facilities that would go along with the conveyance facilities. And just when we get our arms around the preferred project, Table 3-1 comes along to show a complex web of 15 variations on the theme, again with no accompanying maps. No description is provided about the length of the tunnels or pipelines, what is meant by "intakes", etc. It is not until page 3-24 that the reader is then referred to Section 3.6.1 where the project is expected to be described in more detail.	**Unclear project description**
39. **Page 3-12, Section 3.2.3**. This section discusses development of DWR's "Proposed Project", and implies that the CEQA Project is, in fact, Alternative 4A. It states, "The proposed project, as embodied in the draft BDCP document published together with the EIR/EIS, will form a major portion of the HCP and NCCP...." This is puzzling because the HCP/NCCP is the stated subject of the EIR/EIS. Therefore, the entire HCP/NCCP should be the subject of the EIR, not just "a major portion of it". The document must revise this discussion to tell the reader which parts of the HCP/NCCP are addressed in this EIR/EIS and which are not.	**Inadequate project description**
40. **Page 3.-24 (Line 15)**, the EIR/EIS states that the water conveyance facility components are analyzed at a project level in the EIR/EIS. Does this include the proposed forebays, or only the canals and/or tunnels? Does this include the proposed concrete batch plants, which could range in size from 2 acres to 40 acres (page 3-29, line 38). CEQA Guidelines, Section 15161 clearly defines a Project EIR to be one that examines all phases of the project, including planning, construction and operation. This is very different from a Program EIR (Section 15168) that address a series of actions early in the process so that an agency can get an overview of cumulative impacts associated with a series of action. Given the very obvious lack of detailed information on the water conveyance systems, and the fact that the EIR/EIS in Chapter 3 clearly states that Alternative 4 may be revised, it is very unclear	**Misconstrued project level definition** **Program level vs. project level** **Inadequate project definition**

COMMENTS	TOPIC
why this EIR/EIS is addressing the water conveyance systems at a project, vs. programmatic level. The document must define why the entire EIR/EIS is not a Program EIR. **Pages 3-24 through 3-37.** The entire description of the water conveyance alternatives is at a program level, and not a project level. You must revise to include specific designs for each of the project facilities including, but not limited to, pumping plants, diversion facilities, wharfs, forebays, barriers, roads (temporary and permanent), temporary spoils storage areas, permanent spoils disposal areas, concrete plants, bridges, laydown areas, etc. The document must also describe all construction activities including months and hours of construction operations for each type of construction activity, number of construction workers for each site and activity, construction haul routes for each phase/type/location of activity, number of trucks associated with each phase/location/type of activity, number of barges associated with various construction activities, throughput and other operational considerations for each batch plant and spoils storage facility, locations and volumes of borrow areas, etc. Absent this information, it is impossible to either conduct the impact assessment at a project level or evaluate the adequacy of that assessment.	
41. **Page 3-40 Lines 15-41, Section 3.5.** The document should include in its description of action alternatives their relative capacity to be accomplished using adaptive management and the best available science. The EIR/S' consideration of adaptive management as applying solely to conservation measures is not sufficient.	**Failure to disclose each Action Alternative's potential for Adaptive Management**
42. **Page 3-40, Section 3.5** should provide or point to a comparison of all Action Alternatives' effects. The EIR/S contends that environmental effects can be found under each factor heading (e.g.: agriculture, water quality) but those chapters do not uniformly permit comparison across all alternatives. For example, they may compare one alternative to existing conditions or to no-project, but not to all other alternatives. Chapter 31 provides a brief discussion of each alternative's pros and cons but the EIR/S does not give a succinct comparison.	**Failure to compare environmental effects of the Action Alternatives**
43. **Page 3-40, Section 3.5** the EIR/S should give a good-faith summary of how the 15 action alternatives compare against important CEQA and NEPA criteria. Chapter 31 tries to explain why no environmentally superior alternative has been identified; but this does not relieve the lead agency of the responsibility to do so.	**Failure to determine and disclose the environmentally superior alternative**
44. **Page 3-40, Section 3.5** should but does not disclose the relative capacity of each action alternative to be accomplished in phases, so as to permit reasonable and scientifically defensible projections and assurances. Phasing is an essential component of adaptive management and science-based management under high uncertainty.	**Phasing of action alternatives: Phasing vs. all-or-nothing**
45. **Page 3-40, Section 3.5** should disclose and compare the time required to: 1) begin to see effects of the action alternatives, and 2) to reach completion. For example, no results of Alternative 4 would be realized for a decade or more, while Alternative 9 could result in improvements starting immediately with incremental improvements over the short, middle, and long run. The EIR/S comments only on the Conservation Measures, but not on the action	**Failure to disclose the time required to gain results.**

COMMENTS	TOPIC
alternatives.	
46. **Page 3-14, Table 3-1** is in error in its implication that Alt. 9 per se would require a 50-year Incidental Take Permit (ITP). In fact, unlike the other 14 action alternatives, Alternative 9 could be phased and monitored, and the ITP given in more predictable and scientifically defensible shorter, say 10- or 15-year increments. The EIR/S should explain that Alternative 9 could be phased, and the action alternative itself (not just the conservation measures) subject to adaptive management.	**Failure to disclose that a 50 yr. ITP may not be required for one of the alternatives**
47. **Page 3-79, Line 10, Section 3.5.16.** The EIR/S should explain that Alternative 9 is the only conveyance alternative that taken as a complete system can be done using Adaptive Management (AM) and the application of best available science. All other alternatives require "Yes/No" full-scale implementation, with adaptive management and best science applied only to small portions of the system's operations, or applied only to the mitigation measures and stressor reductions. Unlike the other all-or-nothing action alternatives, Alternative 9 can be phased, tested, altered, refined, and perfected as management experiments yield answers, science progresses, and the extraordinarily high level of uncertainties surrounding management actions and environmental responses can be reduced. Failure to so comment gives a false picture of the advantages of Alternative 9.	**Failure to treat the action alternatives even-handedly**
48. **Page 3-80, Lines 1-31** should disclose that the 13 separate parts of the Alternative 9 system that can be operated flexibly in response to the system's environmental and water-conveyance performance, and altered as monitoring shows the degree to which promises and modeled targets are actually being achieved.	**Failure to explain the inflexibility of all alternatives except Alt. 9**
49. **Page 3-80, Lines 2-4** [as a component of Alternative 9]. "Operable barriers on the Mokelumne River..... to provide a path for fish migration ..." The key word here is "operable" which provides for changing the extent and timing of interruption of flows, and the option of simply leaving the barrier open if it does not perform as planned. The EIR/S should disclose the importance of this aspect in meeting BDCP's responsibility to use adaptive management and the best available science.	**Failure to develop and propose action alternatives that can utilize adaptive management and best science**
50. **Page 3-80, Lines 9-11** [as a component of Alternative 9]. "An operable barrier at Three Mile Slough to reduce salinity in the San Joaquin River during low delta outflow .... and reduce fish movement into the San Joaquin River...." The EIR/S should disclose the importance of this aspect in meeting BDCP's responsibility to use adaptive management and the best available science. It should note this as an advantage to Alternative 9 and a serious disadvantage to the preferred and other alternatives.	**Failure to treat inflexibility as an environmental impact in comparing alternatives(no-adaptive = non science-based)**
51. **Section 3.5.16** the EIR/S should declare Alternative 9 as the "environmentally superior" alternative; given that it is the only Action Alternative that can be implemented and managed so as to utilize Adaptive Management and the best available science; and to respond positively to the admonitions of independent science reviews.	**Alt. 9 is the environmentally superior alternative**
52. **Chapter 3 General Comment.** The EIR/S has missing parts. It fails to adequately analyze and disclose the impacts of Conservation Measures 2 through 21.	**Project vs. Program**
53. **Chapter 3 General Comment.** The EIR/S lists and describes CMs 2-21, and	**Project vs. Program**

COMMENTS	TOPIC
lists magnitudes and general locations. But given that these measures create substantial impacts, they deserve adequate analysis. These comments serve as place holders for now.	
54. **Chapter 3 General Comment.** CMs 2-21 should be presented individually or as alternative packages and analyzed for cost/effectiveness as per comments from independent science boards (including that of the Delta Stewardship Council Independent Science Board "Review of the Draft BDCP EIR/EIS and Draft BDCP", May 15, 2014).	**The effectiveness of conservation measures is un-supported by science**
55. **Chapter 3 General Comment.** CMs 2-21 individually or as packages should be developed so as to evaluate and minimize their impacts on affected parties, such as the individual local governments including San Joaquin County.	**Negative effects of conservation Measures should be analyzed, reported, and minimized (not just listed)**
56. **Chapter 3 General Comment.** The magnitude of CM 3, 4, 5, & 10's land alterations purported to be required should be justified by adequate models and science-based documentation.	**Lack of science support for conclusions**
57. **Chapter 3 General Comment.** CM 3, 4, 5, & 10 should be evaluated at the same level of detail as CM-1.	**Project vs. Program**
58. **Chapter 3 General Comment.** It is stated that CM 3, 4, 5, & 10 will be sized differently for different alternatives. The EIR/S should compute and disclose the minimum needed for each action alternative; so as to minimize the impacts on affected sectors such as the agricultural economy of San Joaquin County.	**Conservation measure's impacts should be the minimum necessary**
59. **Chapter 3 and EIR/S as a whole.** The document fails to explain why CM-1's sub-parts are treated as Action Alternatives and sub-parts of CM-2-21 are simply listed as components. If BDCP is really intended to be an ITP/NCCP/HCP, all components should be treated equally.	**Project vs. Program**
60. It appears that with Alternative 4, a 40-acre concrete batch plant would be constructed (along with a 2-acre fuel station) near Twin Cities Road and Interstate 5 and this same location would be used to store reusable tunnel material, which is a by-product of tunnel excavation. Another 40-acre concrete batch plant would be located between Byron Highway and Italian Slough for Alternative 4. Have traffic impacts of using Byron Highway, which flows right through the middle of the Mountain House Community, been evaluated in the EIR/EIS? Have impacts (noise, traffic, air quality, etc.) upon the Consumnes River Preserve, located just south of Twin Cities Road and I-5 been addressed? If so, The document must clarify where in the EIR/S.	**Unclear impact analysis for all relevant project components**
Chapter 13. Land Use	
61. These comments are directed at Alts. 1B, 2B, & 6B. All of the three East Side alternatives have the same implications for San Joaquin County. Issues are treated most fully under Alt. 1B; but some are embedded under 6B. Alt. 4 has much less of a direct impact on land use designations and uses, but the comments on the East Side alternatives apply to Alt. 4 as well but to a lesser degree. The EIR/S gives separate treatment to: 1) incompatibilities with County designations and policies, and 2) impacts on current land uses. The EIR/S admits that the water conveyance facilities will cause numerous incompatibilities with County policies and designations, and impacts on	**Lack of adequate mitigation measures** **Deferral of mitigation measures** **Lack of project-specific impact analysis for all project components, especially for San Joaquin County**

COMMENTS	TOPIC
existing land uses. BDCP's proposed water conveyance facilities will receive no further environmental review because they would be covered at the Project Level in this EIR/S. However, critical measures that would avoid or mitigate these impacts and incompatibilities are not disclosed because they are covered only at the Programmatic Level. They are deferred, and will not be disclosed until possible environmental review at some time after BDCP approval. **Page 13-71, Lines 18-21** admits to an array of incompatibilities. "Table 13-6 displays the temporary and permanent structures associated with the water conveyance facility, the local land designations on which they would occur, and the number of acres that would be affected. Mapbook Figure M 13-2 displays relevant generalized land use designations where they could overlap with proposed water conveyance structures and temporary work areas. Note that not all of these structures would be built under any individual alternative. For further description of the locations of various structures, refer to Chapter 3, *Description of Alternatives*." Specifically relating to incompatibility with County designations and policies, the EIR/S admits to an array of serous impacts to San Joaquin County, but does so only at very gross scale. Serious impacts would arise from projects, each of which taken alone would normally be subject to a full environmental review: **Page 13-72 Table 13-6** (abbreviated here)	**Inadequate land use impact analysis**

Permanent Feature	Agriculture / General: Acres	Open Space / Conservation: Acres
Bridge	136	
Canal	4,892	73
Borrow & Spoil areas	7,400	55
Spoil disposal areas	131	2
Pumping plant (intermediate)	68	
Siphon	131	
Transmission line	13	
Tunnel material	437	11
Total (includes omitted minor permanent features and "temporary" features)	14,340	505

In the text of Ch. 13, the majority of impacts referenced above are treated only by mention and listing of the impact. However, the accompanying maps shown in Mapbook M13 are highly specific. Fuel stations, pumping plants, concrete batch plants, bridges, siphons, and disposal areas, all of which are direct impacts of the East Alignment are clearly sited in specific locations.

COMMENTS	TOPIC
The underlying and adjacent land uses are or can be identified, if not by simple reference to public maps and GoogleEarth ®, then by more rigorous analysis if needed to provide basic information to the public and land owners who should not have to conduct such research. For example: Figure M13-2: Sheet 3 0f 7 clearly shows that the footprint of the canal and a bridge will completely replace and cover the intersection of Walnut Grove Rd. / Blossom Rd. and adjoining land uses. Reference to GoogleEarth® shows that direct impacts will fall on farm structures that are clearly in use, several new and substantial single-family residences, a thriving vineyard and other features that will be obliterated. It should also be noted that the Summary Table, Table ES-9, only identifies 6 land use impacts. And of those, it is shown that there are no land use conflicts with existing land uses (page ES-110). This points to a woefully inadequate land use impact analysis.	
62. **Page 13-72.** The EIR/S fails to analyze and disclose the impacts associated with sub-components of the project (bridges, batch plants, fuel stations, borrow pits etc.) that would normally be required to obtain NEPA or CEQA compliance. This needs to be done not by brief mention or gross acreages, but by substantive discussion with reference to the specific locations and effects of disturbance. THIS IS A PROJECT-LEVEL EIR FOR THESE COMPONENTS. Means for avoiding, reducing, minimizing or mitigating these impacts should be provided. References to other Chapters in the EIR/S are not sufficient unless those cited discussions include analysis of specific sub-projects and components at known locations (which is not the case). Specifically, **Page 13-75, Lines 1-6** admit: *"San Joaquin County* The footprint of water conveyance facilities constructed under Alternative 1B would be incompatible with land designated as Agriculture/General, Residential/Very Low Density, Elementary School, and Open Space/Resource Conservation in San Joaquin County primarily due to borrow and/or spoil areas, canal segments, RTM areas, bridges, siphons, transmission lines, and an intermediate pumping plant." The EIR/S should explain how these incompatibilities with land use designations and policies are to be avoided, minimized, or mitigated. Explain actual actions to be taken, not future studies. **Page 13-75, Lines 11-18** admit: "Conversion of agricultural lands would be incompatible with general plan policies, including Agricultural Land Policy 5, which reserves agricultural areas principally for crop production, ranching and grazing. Conversion of agricultural lands and project conflicts with the Agriculture	**Inadequate land use analysis** **Failure to address specific project components, by location** **Lack of detail in impact analysis and lack of substantial evidence** **Inadequate mitigation measures**

COMMENTS	TOPIC
land use are described in Chapter, *Agricultural Resources*. The placement of canals, where constructed over or adjacent to lands designated under the San Joaquin County General Plan as Open Space/Resource Conservation, would be incompatible with this land use designation and related Open Space Policies 3 and 4 because they would diminish the amount of land dedicated to open space and conservation of natural habitat and resources." 63. **Page 13-75**. The EIR/S should enumerate and account for these losses and deduct them from the acreage claimed to be created by BDCP's conservation measures. The document should explain where and to what extent lost lands can be replaced, and whether like-for-like replacement can be possible. If the San Joaquin County tax base would be affected by transfer to uses shifted to other jurisdictions, this should be disclosed, and mitigation measures ensured. **Page 13-75, Lines 21-32** admit: "Temporary project features in San Joaquin County associated with the construction of water conveyance facilities would include a barge unloading facility, three concrete batch plants, three fuel stations, transmission lines, and various work areas for other water conveyance features. These features would occupy lands designated as Agriculture/General, Residential/Very Low Density, and Open Space/Resource Conservation, as shown in Table 13-6. Many of these temporary features would likely be in place for nine or more years of project implementation (i.e., during the near-term implementation or the nine-year project construction period). During that period, lands designated under agricultural zones would be temporarily converted to non-agricultural use, as described in Chapter 14, *Agricultural Resources*. Construction during this period would be incompatible with Agricultural Lands Policy 5, which reserves agricultural areas principally for crop production, ranching and grazing, and with Open Space Policies 3 and 4, which restrict development in open space resource areas". Their definition of "temporary" fails to disclose the true meaning of the term. First, nine or more years' loss of use can destroy or damage the economic viability of a parcel of land; whether in residential, commercial, or agricultural use. Further the EIR/S' mention of "nine or more" implies that impacts could extend for an undisclosed additional period of time. Further, the nine or more years "clock" would not start until construction were to be commenced. Given BDCP's complexity, enormity, permit requirements, and potential legal and legislative hurdles, construction would not likely start for some years. In the meantime, private lands subject to potential impact would be under a cloud of uncertainty, making land sales, investment, securing of loans, and crop-planting decisions, all virtually impossible. Further still, since the lands potentially subject to expropriation or impact are mapped with such a broad brush, vast acreages that may never be needed will nonetheless be under this cloud. Indeed, the mere threat of BDCP being implemented may well have begun to cloud the economy and future of Delta lands in San Joaquin	**Inadequate impact analysis** **Inadequate mitigation measures** **Conflicts with adopted policies and no mitigation measures proposed** **Inappropriate definition of "temporary"** **Timeframe of construction too vague** **Indirect impacts of "clouding" use of lands due to "unknowns" not addressed, especially related to economic and agricultural losses for San Joaquin County**

COMMENTS	TOPIC
County and the other Delta jurisdictions. The acreages given in Table 13-6 and elsewhere reference a huge impact upon thousands of acres of land which by themselves deserve proper treatment in the EIR/S; but the EIR/S fails to consider or disclose the impacts on parcels adjoining or nearby that will exposed to lack of access, noise, and visual disturbance. Thus, even the large acreage disclosed fails to compute and disclose the true extent of impacts.	
64. **Page 13-75, Lines 21-32.** The EIR/S should address the impact of disruption caused by the placement of a cloud of uncertainty over more than hundreds of parcels of private land subject to impacts of the project or conservation measures. Lands that lie under alternatives that may not be selected may nonetheless be under this cloud for a period of years. The document must compute and report the magnitude of these impacts and explain how these impacts are to be minimized, avoided, or mitigated.	**Lack of adequate impact analysis** **Issue of lands being under a "cloud of unknowns"**
65. **Page 13-75, Lines 21-32** The document should replace the term "temporary" with one which more fairly and accurately describes a period of roughly 9-15 years; for example: "impermanent", which compares to the use of "permanent" for other features. **Page 13-133, Lines 5-14** Admit: *NEPA Effects:* Effects related to incompatibility with applicable land use designations, goals, and policies resulting from implementation of BDCP Conservation Measures 2–21 would be the same under Alternative 6B as those described under Alternative 1B. **Because the locations for the implementation of these conservation measures are unknown at this time, a conclusion about the compatibility of this alternative with local land use regulations cannot be made. These issues would be addressed in detail in site-specific environmental documents for restoration proposals. However, implementation of this alternative may result in substantial incompatibilities with local land use regulations due to the amount of land area targeted for restoration actions.** (Bolding added).	**Incorrect definition of "temporary"** **Deferral of both impact analysis and development of mitigation measures due to lack of specificity regarding areas of known land use changes**
66. **Page 13-133, Lines 5-14.** Explain how the actions that cause impacts can be covered at the Project Level and permitted without further review, yet the means for avoiding, minimizing or mitigating these admitted impacts can be prospective, located in only vague terms, and studied and funded only after the impact-producing actions are permitted? How does the approach used in this EIR/S differ from the following scenario? *Developer asks for a permit to build a hotel on the California Coast and admits that it would block public access, cause traffic problems and noise, conflict with zoning and adopted plans and policies, interfere with the public's use of the public beach, but nonetheless should be approved under CEQA without having to disclose the location of the project.* Explain how this EIR/S is any different from the above case.	**Lack of project-specific impact analysis for component that is specifically being addressed at project level** **Inadequate evaluation of land use impacts** **Summary table (ES-9) does not agree with main EIR/S text**

COMMENTS	TOPIC
The EIR/S admits to conflicts with existing land uses as shown below. However, the Summary Table (ES-9) shows "No Impact" related to conflicts with existing land uses. The document must clarify why this has happened. The following text is from the EIR/S: **Page 13-133, Lines 27-43, and Page 13-134, Lines 1-6.** Impact LU-5: Conflicts with Existing Land Uses as a Result of Implementing the Proposed Conservation Measures 2-21 *NEPA Effects:* Effects related to conflicts with existing land uses under Alternative 6B would be the same as those described for Alternative 1B because the proposed CM2–CM21 would be the same under both alternatives. As with Alternative 1B, implementation of CM2–CM21 could create **temporary or permanent conflicts with existing land uses where they would require the removal of structures or sever critical access routes**. When required, the BDCP proponents would provide compensation to property owners for losses due to implementation of the alternative, which would reduce the severity of economic effects related to this physical impact, but **would not reduce the severity of the physical impact** itself. Implementation of this alternative would be anticipated to result in **substantial conflicts with current land uses** due to the amount of land area targeted for restoration actions. (Bolding added) *CEQA Conclusion*: **Because the locations and types of restoration to be implemented are unknown at this point, no definitive conclusion can be made about the potential for restoration actions to result in the permanent conversion of land uses** (including displacement of existing structures and residences) due to the construction of permanent features of the facility. **Nor can a conclusion be made with regard to the degree of indirect impacts**, which could occur primarily as a result of **incompatibility with adjacent land uses or the loss or increased difficultly of access to parcels**. However, implementation of this alternative would be anticipated to result in substantial conflicts with current land uses due to the amount of land area targeted for restoration actions. Where applicable, the BDCP proponents will provide compensation to property owners for losses due to implementation of the alternative. This would reduce the severity of economic effects related to this physical impact, but would not reduce the severity of the physical impact itself. (Bolding added)	
67. **Page 13-133, Lines 27-43, and Page 13-134, Lines 1-6.** The document must disclose and explain the impacts of interrupting access on the County's agricultural road network essential to viable agricultural use. The EIR/S admits that farm access has not been fully accounted for; so this shortcoming should be corrected.	**Inadequate impact analysis**
68. Disclose and explain the impacts of fragmenting lands available for agricultural use.	**Inadequate impact analysis**
69. Disclose and explain the impacts of reduction of parcel sizes and splitting of	**Inadequate impact analysis**

<table>
<tr><th>COMMENTS</th><th>TOPIC</th></tr>
<tr><td>related uses of essential viable farming by breaking contiguous operations into smaller, separated parcels.</td><td></td></tr>
<tr><td>70. Explain how the actions that are admitted to cause direct and indirect impacts to existing uses can be covered at the Project Level and permitted without further review, yet the means for avoiding, minimizing or mitigating these admitted impacts can be prospective, located in only vague terms, and studied and funded only after the impact-producing actions are permitted? Explain how this can be justified under CEQA.</td><td>Misuse of project-level and program-level analyses</td></tr>
<tr><td>Chapter 14. Agricultural Resources</td><td></td></tr>
<tr><td>71. Page 14-7, Table 14. 2 is misleading in that the totals by County and by crop type are not shown. If San Joaquin County alone were shown with totals it would appear as follows:

Table 1
Crop Acreages for San Joaquin County as Compared to Total Crop Acreages in Plan Area (in acres)
<table><tr><th>Type of Crop</th><th>San Joaquin County</th><th>Percent of Total</th><th>Total for Plan Area</th></tr><tr><td>Farmland and Row Crop</td><td>85,368</td><td>58.5</td><td>145,888</td></tr><tr><td>Field Crops</td><td>133,220</td><td>52.6</td><td>253,202</td></tr><tr><td>Orchards</td><td>15, 150</td><td>34.5</td><td>43,942</td></tr><tr><td>Mixed Ag</td><td>53,840</td><td>34.5</td><td>156,015</td></tr><tr><td>Uncommon Crops</td><td>20,101</td><td>11.5</td><td>174,568</td></tr><tr><td>Pasture and Permanent Annual</td><td>5,363</td><td>10.3</td><td>51,872</td></tr><tr><td>Total</td><td>313,042</td><td>37.9</td><td>825,487</td></tr></table>
By addressing the above percentages, one can see that San Joaquin has a very large share of the acreage in the Plan Area that is farmland and row crops, field crops, orchards and mixed agriculture. Five other counties make up what is not shown for San Joaquin County. Table 14. 2 should be revised to reflect the percentages by County for the various categories of agricultural production. By doing so, the reader would get a clearer picture of how San Joaquin County's agricultural production may be impacted by what is proposed within the Plan Area.</td><td>Inadequate evaluation of agricultural land impacts, especially for San Joaquin County</td></tr>
<tr><td>72. Page 14-10, Section 14.1.1.5 discusses Important Farmland. However, there is no table clarifying acreage of Prime Farmland by County within the overall Plan Area. If 512,000 acres of the total 825,487 acres in agricultural production are considered Prime Farmland, then 62% of the overall agricultural acreage is Prime Farmland. The EIR/S needs to show percentage of Prime Farmland by County in order to more fully assess potential impacts to such Prime Farmland and to identify appropriate mitigation measures for each County. Farmland losses in San Joaquin County should not be mitigated in Sacramento County due to the direct and indirect economic impacts associated with such losses.</td><td>Impacts by County need to be shown to ensure adequate mitigation for farmland loss

Mitigation measures need to be directed to specific counties</td></tr>
<tr><td>73. Page 14-26, Line 14: Text describes that analysis related to groundwater</td><td>Inadequate impact analysis</td></tr>
</table>

COMMENTS	TOPIC
and impacts on agriculture as related to water conveyance facilities is "qualitative in nature". Again, this brings into question, the ability for this EIR/S to be a project-level analysis. The text also states, "location-specific effects cannot be identified."	
74. **Page 14-27, Lines 2-3**: How was it determined that four or fewer years constituted "temporary" construction activities and that between 4 and 10 years constituted "short-term" construction activities? This seems a rather arbitrary and capricious determination of defining construction impacts, and may underestimate the true impacts associated with the project. It would be much clearer if the EIR/S just referred to "construction impacts" vs. "operation impacts". Downplaying impacts because of the timing as "temporary" or "short-term" would not be justified and should be explained. On Page 14-28, Lines 15-17, the text states that "where impacts are temporary or short-term in nature, and the impacted land can be restored to productive agricultural status after the completion of construction, impacts are considered less severe than those that will be permanent in character, and mitigation obligations would be diminished accordingly." The document must explain why this is the case. A farmer cannot necessarily be out of commission for 4-10 years and expect to be financially stable in what the EIR/S defines as "short term". This many years of lost agricultural production could mean financial ruin for some farming establishments.	**Inappropriate definition of "short-term" and "temporary"** **Inadequate evaluation of agricultural impacts and associated economic impacts for counties that rely heavily on agricultural economy**
75. **Page 14-28, Lines 25-29**: This entire paragraph would be better placed in the Mitigation Measures section as it refers to BDCP proponents (undefined) working with agencies on "design features" to benefit agricultural and natural resources. Why is this statement located here?	**Vague mitigation measures**
76. **Page 14-35, Table 14-8**: This table shows that 4,975 acres of important farmland would be permanently lost under Alternative 4, while up to 18,875 acres of such lands could be permanently lost under Alternatives 1B and 6B. Again, the analysis does not break down the impacts by category, which is very important when it comes time to identify mitigation measures. Each county has varying programs for agricultural mitigation and each county may or may not have a land trust who can help to implement and manage agricultural easements.	**Inadequate impact analysis tied to ineffective mitigation measures**
77. **Page 14-59, Lines 6-10:** For Alternative 1B, the text shows that up to 2,144 acres of Important Farmland could be impacted "temporarily" and the permanent conversion would occur for about **18,875 acres of Important Farmland.** Borrow/spoils areas alone would convert more than 10,500 acres under 1B. However, this acreage does not get shown by County or by specific percentage so that it more closely matches Table 13-6 in the Land Use section. Table 13-6 shows that San Joaquin County alone would have 14,340 acres impacted where the proposed use would be incompatible with the County's designation for this acreage as "Agriculture-General". It's hard to imagine that 4,535 acres (18,875 minus 14,340 acres) are designated for the industrial type uses proposed for the project. The document must explain why a table similar to Table 13-6 could not have been prepared in the Agricultural section of the EIR/S to show specific County impacts (San Joaquin, Sacramento, etc.) and for each project component. The reader has no idea how the acreages were identified in terms of Important Farmland without such a table.	**Inconsistent information across topics** **Lack of information on agricultural impacts by specific county** **No information on how conclusions were reached** **Reader forced to review multiple, disparate sections of EIR/S to understand how conclusions reached**

COMMENTS	TOPIC
78. **Page 14-109, Section 14.3.3.9:** This section is the beginning of the impact analyses for Alternative 4 as related to agricultural impacts. Lines 3-13 summarize the types of facilities associated with the water conveyance facilities. However, no mention is made of new bridges, local drainage systems, fixed/operable barriers, canals, culvert siphons, or temporary barge unloading facilities. While some of these project components may not impact agricultural lands, they need to be mentioned as components of the project to be consistent with the Project Description, especially if water conveyance facilities are to be addressed at a project level. The document must identify all project-related facilities and describe what types of physical impacts such facilities may have in terms of general acreage for each or land-related alterations related to each. This paragraph also has an incomplete sentence on Line 13. To just list the types of facilities is not adequate for a project level analysis. The reader has no idea of the physical ramifications of the facilities. The roadway locations/lengths/widths have not been identified; the transmission corridors and pole locations have not been identified; the acreage of spoils/RTM storage have not been identified, etc. Without this information, the conclusions about agricultural acreage impacts are suspect.	**Inadequate impact analysis; no idea of acreage impacts by specific project components**
79. **Page 14-109, Line 21**: The construction impacts to agricultural land are identified as "temporary or short-term conversion". The components with such impacts are identified as follows: ▪ Forebays: 860 acres ▪ RTM areas: 3,160 acres ▪ Intake pumping plant sites: 240 acres ▪ Borrow and spoil areas: 200 acres The total mentioned on page 14-109 is 4,975 acres for Alternative 4. However, the total above is 4,460 acres. What constitutes the undefined acreage? And what about acreage of other facilities such as barge unloading, transmission lines, roads, etc. as listed below. A project level EIR must include a clear table identifying ALL elements of the project in the left column and acreages impacted by the project, by County. It appears that the following elements have not been addressed as compared to project elements identified on page 3-64 of the EIR/EIS: ▪ **Intakes:** Page 3-66 says 90 acres each and 3 total which would be 270 acres (not 240 as stated above on page 14-109); however, it should be noted that Table 3C-1 in Appendix 3C says "Intake facilities including pumping plants....average approximately 60 acres per site" except for Alternative 4 which would be 90 acres; thus the acreage in the Alternative 4 analysis is not correct. ▪ Land area excavated (if any surface disturbance) for pipelines from intakes to intake pumping plants; ▪ **Solids handling facilities**; ▪ **Intake pumping plants associated facilities** (access road; electrical substation with transformers; switching equipment and surge towers); ▪ Land area excavated (if applicable) for **discharge pipelines** (water from intake pumping plants to initial tunnels); ▪ **Vent shafts** (page 3-65 is not clear about size and area needed for	**Lack of project-specific information that leads to inaccurate impact analysis and underestimating of impacts**

COMMENTS	TOPIC
these); Table 3-11 mentions 9 shafts for Tunnel 2 and 4 for Tunnel 1A, and an additional 3 for Tunnel 1B; thus, there are a total of 16 tunnel shafts; page 3C-19 says that each ventilation shaft may have a temporary work area ranging from 10 to 40 acres; ▪ **Valve and flowmeter vaults** (page 3-65 is not clear on size of these); ▪ **Transition structures** (not defined on page 3-65); ▪ **Forebay acreage**: Page 14-109 says 860 acres; Table 3-11 says 245 acres for intermediate forebay and 2,030 acres for dredging are of expanded Clifton Court Forebay;[1] however, page 3c-21 says that surface area of intermediate forebay would be 925 acres; which is true? It appears that the 245 acres applies to Alternative 4. ▪ **Transmission lines**: Table 3-11 identifies the total MW load but does not identify acreage or length associated with new transmission facilities, nor is this explained on page 3-65; ▪ **Intake pumping plants**: Page 14-109 mentions 240 acres for these; Page 3C-7 says 60 acres per intake pumping plant for the modified pipeline/tunnel alignment which applies to Alternative 4; and there are 5 for Alternative 4; that would result in 300 acres (not 240 acres); And then page 3C-10 says that each intake pumping plant would range from 60 acres to 150 acres in terms of general construction area; where is this calculated? ▪ **Clearing and grubbing** is mentioned on page 3C-3 but no acreage is provided; every facility is likely to have an "area of impact" that exceeds the actual footprint of the facility. Page 3-66, Footnote "a" says that acreage estimates refer to permanent surface footprints which may far underestimate the area of impact, and this acreage does NOT account for non-permanent, "temporary" acreage impacts that must be considered in the analysis, especially related to removal of important farmland. ▪ **Tunneling and pipe placement**: Page 3C-6 mentions that open-cut method may be undertaken which would impact agricultural lands to some degree; this has not been addressed. ▪ Page 3C-7 mentions 2,800 cubic yards of **riprap** to be placed around the perimeter of cofferdam/intake foundations; nowhere is the acreage of riprap storage mentioned. ▪ No mention is made of acreage for **sedimentation basins,** which are clearly identified on page 3C-8. The basins alone could be 0.23 acres in size, but this does not include the area of disturbance. ▪ **Solids lagoons**: Page 3C-8 mentions 3 of these at each intake pumping plant, and each would be about 0.32 acres in size, not including the area of disturbance. There should be 9 of these if there are 3 intake pumping plants. That is about 3 acres of impact or more. ▪ **Pumping plant building** would be about 10,200 square feet in size. No mention of this is included in the agricultural land impacts analysis. And there would be pipes outside of the footprint area. ▪ Transition structures would be about 14,700 square feet as mentioned on page 3C-9. Again, no mention of this is made.	

[1] The underlined/bolded text emphasizes critical text that has not been included in the agricultural analysis.

COMMENTS	TOPIC
▪ Page 3C-11 mentions **69 kV substations** with footprints at each intake pumping plant of 22,500 square feet to 122,500 square feet (2.81 acres). And a 69 kV or 230 kV transmission line would be constructed, depending on the alternative. About 500 permanent poles would be constructed for these transmission lines and 509 temporary poles would be constructed. There is no mention of agricultural impacts from this construction. ▪ **Parking areas** have not been mentioned; these would be for temporary construction facilities, temporary staging areas. Clearing and grubbing and surfacing would be done for these; and they may need to be relocated as construction proceeds as stated on page 3C-13. ▪ **Roads:** Nothing is provided in terms of location of roads, widths of roads, or lengths of new roads. As stated on page 3c-58 and 59, both wet weather and dry weather roads are needed. Table 3C-8 in Appendix 3C fails to identify which Alternatives apply to road needs. The only data provided is total acreage of roads, which is meaningless when addressing a project-level EIR that has to be site specific. ▪ **Relocation of Byron Hwy**.: Table 3C-8, page 3C-59 addresses the need to temporarily relocate the Byron Hwy.; no mention of this is made in relation to agricultural land impacts. ▪ **Temporary Barge Unloading Facilities**: Page 3C-60 mentions that anywhere from 30 acres to 180 acres may be needed for such facilities. ▪ **Concrete batch plants**; may vary from 2 acres to 40 acres; up to four could be locate in San Joaquin County. ▪ **Fuel stations**: would be located adjacent to batch plants and may be 2 acres each.	
80. **Page 14-110, Line 21**: An incorrect reference is made to a Table M14-7, which does not describe any of the features as related to important farmland.	**Incorrect reference to table**
81. **Page 14-110, Line 42:** Again, an incorrect reference is made to Table M14-8 which DOES NOT show any acreage by Alternative related to Williamson Act lands or Farmland Security Zones. And, it does not show project features as the text alludes to. This is Table M14-9. But again, project specific features are not addressed. A list of all the above features (see comment above) should be identified and the acreage for each to determine true impacts to agricultural lands.	**Incorrect reference to table**
82. **Page 14-111, Line 40**: Nowhere is there a table showing how this acreage was determined. This is needed for ALL facilities associated with Alternative 4.	**Inadequate impact analysis**
83. **Pages 14-112 to 121:** The mitigation measures for loss of agricultural land are deficient in a number of areas as follows: ▪ Mitigation is deferred to a future date which is not permitted for a project-specific EIR; ▪ No specific standards are identified for the recommended Agricultural Lands Stewardship Plan (ALSP); ▪ The responsibility for preparing and managing ALSPs is not clarified; ▪ Measures to promote agricultural productivity appear aimed at CM2-22; not CM-1, the water conveyance facilities; and because of this, the mitigation is not adequate and especially not adequate for the project level analysis;	**Inadequate mitigation measures for loss of agricultural lands** **"Notification" is not a mitigation measure** **Vague, unenforceable and unworkable mitigation measures**

COMMENTS	TOPIC
▪ All of the bulleted items on page 14-113 should have been done as part of this EIR; for example, there appears to have been no effort to avoid prime agricultural lands and there has been no effort to adequately offset such losses; ▪ Keeping lands in private ownership (see Line 5 on page 14-115) does NOTHING to protect agricultural viability; ▪ Making wetlands "viable living managing wetlands" as stated on page 14-115, Line 21, does NOTHING to offset losses of agricultural lands and there is NO connection between the identified impact and the mitigation measure. ▪ The loss of Important Farmlands and Williamson Act lands is a significant, unavoidable impact and the text should clearly state this. While "SU" is mentioned on page ES-111, there is no mention in the main body of the EIR/S as to why this would remain a significant unavoidable impact. ▪ There is NO mention of purchasing agricultural easements and the indirect impacts of doing this. This needs to be addressed. Case law for CEQA has recently confirmed (*Masonite Corporation v. County of Mendocino (2013)218 Cal. App.4th 230*) that purchase of agricultural easements should be considered as potentially feasible mitigation for loss of agricultural lands. The EIR/S needs to address the feasibility of purchasing easements and where these would be located; then, the EIR/S needs to address the availability within each County where impacts would occur and if easements would be available for "like" lands that are lost (in terms of soils, irrigation, crops able to be grown). Finally, the potential for needed acreage of Ag. Mitigation lands needs to be assessed as related to habitat mitigation lands needed for project, and if there is acreage for both within specific counties. Specifically, impacts in San Joaquin County need to be addressed. ▪ **Nothing** in Mitigation Measure AG-1b would mitigate for the loss of Important Farmland and Williamson Act lands. Every measure uses the word "notify". Notification is not mitigation. ▪ Mitigation Measure AG-1c assumes that setting aside habitat lands for habitat would also mitigate for loss of agricultural lands. This is highly dependent on what types of uses would be allowed on habitat lands. Also, this mitigation measure proposes a lot of communication with multiple entities and references the "Conventional Mitigation Approach" of establishing easements "where necessary and feasible" as stated on line 43 of Page 14-117. This is NOT mitigation. Who determines what is necessary and feasible? ▪ All of the bulleted measures on pages 14-118 and 119 are vague and generalized, using words such as "investigate"," provide technical and financial assistance;" "work with others;" "work with counties." Strategy 11 (not sure where these numbered strategies are from) states, "Provide for Agricultural Conservation Easements". Nowhere does the text explain how, where, and with what specific funding such easements would be created; nor is the acreage of such easements, by County, specified. ▪ Page 14-120: line 13: Only AFTER all other generalized approaches such as consensus for an Operational Agricultural Land Stewardship	

COMMENTS	TOPIC
Approach have failed, does the EIR/S mention "Conventional Mitigation Approach" as if this were stale and irrelevant. This conventional approach would be purchase of agricultural easements, an accepted form of mitigation ever since CEQA/NEPA were adopted. ▪ Page 14-120 mentions the need for purchasing agricultural easements but does not identify the availability of known funding sources for such. Line 44 of this page mentions that easements should not be obtained on lands that may be needed for BDCP conservation strategies/habitat purposes up until the Year 2060! How is anyone to know what lands might be needed 46 years into the future? Again, the mitigation measure is worded in such general ways and with so many limiting conditions to make it basically meaningless.	
84. **Page 14-121, Line 16** mentions that if lands to offset agricultural land lost cannot be found within the county where conversion would occur, that agricultural land conservation can take place in another county. However, the text states that preference would be within the greater Sacramento metropolitan area. Explain why and how this has been determined. Explain why ag land losses in San Joaquin County, which has a huge percentage of its income reliant on agricultural production, should be offset by provision of conservation lands near Sacramento.	**Impacts to San Joaquin County suggested to be mitigated in Sacramento metropolitan area**
85. **Page 14-122, Lines 1-7 and previous page:** Impacts of excess, elevated levels of groundwater on crops in the vicinity of the enlarged Clifton Court Forebay are not quantified or mapped.	**Inadequate impact analysis**
86. **Page 14-123, Lines 1-17**: Reference is made to Table 14-6 about crops tolerances of soil and irrigation water salinity. However, Table 14-6 is totally unreadable for the lay person. The measurement used for salinity is not explained. The table mentions dS/m but that abbreviation is not defined. Then, the text on page 14-123 talks about percentage changes in salinity but does not relate to the measurement limits shown in Table 14-6. The EIR/S does not clarify how many acres and what crops, and what locations could be impacted by increased salinity. This results in not allowing any specific mitigation measures that would be applicable.	**Unreadable information** **Inadequate impact analysis and lack of mitigation measures** **Stating that impact is significant and unavoidable does not mean that no mitigation measures should be suggested**
87. **Page 14-125, Lines 1-21:** Conclusions state that impacts would be SIGNIFICANT AND UNAVOIDABLE as associated with water quality, groundwater elevation changes, increased salinity, and disruptions to agricultural drainage facilities. However: ▪ No feasible mitigation measures are identified; ▪ No specific acreage, by County, of affected ag lands is addressed; ▪ No time duration is provided as to how long such impacts could be experienced. It is not adequate to just say the impact is significant and unavoidable without a more precise impact analysis for what is supposed to be a Project level EIR.	
88. **Page 14-126, Lines 12-41**; Again, the EIR is shown as a piecemeal analysis of the project's true impacts. The CM2-22 measures are addressed (or	**CM2-22 are part of CM-1 and as such should be evaluated**

COMMENTS	TOPIC
portions thereof) as related to farmland impacts. However, these are not just mitigation measures. These are integral to the project and the impact of farmland acreage should be addressed as a WHOLE – the conveyance facilities with the associated habitat restoration. The EIR/S does not identify the full acreage, by location and by County of agricultural land impacts. This lack of information makes any mitigation measures useless. Restoring habitat (83,800 acres) as mentioned on page 14-127, is NOT related to the true impact. Establishing new habitat has its own agricultural land impacts and this to be assessed fully.	**for impacts to agricultural lands**
Overall Conclusions re: Alternative 4 Agricultural Land Impacts	
89. The overall CEQA/NEPA analysis of agricultural land impacts is insufficient and does not meet CEQA/NEPA requirements for the following reasons: a) All components of CM-1 are not addressed b) Without addressing all components of CM-1, impacts are understated c) Habitat restoration (CM2-22) is an integral element of CM-1 and by addressing these elements separately, the project analysis is piecemealed and the whole of the action is not addressed; both should be addressed at a project level d) Impacts are not adequately assessed: a) areas and footprints are not defined; b) impacts by County are not defined; c) acreages for some project components are evaluated, but not for all components; e) Impacts are generalized which makes mitigation measures inadequate (e.g., impacts from removal of agricultural drainage canals/irrigation systems that could impact large acreages of cropland) f) Mitigation measures are not specific and are deferred. Mitigation measures cannot be deferred for a project level analysis. If they are deferred, specific standards need to be identified. For example, setting up ALSPs is not an adequate mitigation measure as it is not specific; funding is not identified; standards are not identified. g) Conclusions of significant and unavoidable ignore the need for specificity.	**Summary of insufficient analysis for agricultural impacts**
Chapter 15. Recreation Issues	
90. **Pages 15-20,Table 15-3 (and accompanying text) , page 15-21, Line 20.** Boating and fishing use data are from 1997 and 1997. This 17-18 year old data may be substantially out of date. For a project that could affect the entire Delta and beyond for generations, the EIR must have accurate baseline information. Therefore, the EIR/S authors should have conducted new studies of these recreation activities. The document must be based upon new use studies and be revised to identify baseline conditions.	**Outdated information** **Inappropriate baseline information**
91. **Page 15-59.** The document must add discussion of potential impacts to river recreation to the bullet points on p. 15-59, and add discussion of these potential impacts to the impact analyses.	**Inadequate impact analysis**
92. **Page 15-60, Table 15-12a on p. 15-88 and all associated impact assessments.** The DEIR includes two baselines for recreation – existing conditions and a 2060-without-the-project baseline. Per the Neighbors for Smart Rail v. Exposition Metro Rail Construction Authority (2013) decision, the appropriate baseline for CEQA analyses is existing conditions unless that baseline would be misleading or deprive the reader of important information, in which case dual baselines must be used. The 2060-without the project is	**Inappropriate baseline** **Need full impact for each baseline year assessed** **No Project Alternative must address existing year baseline**

COMMENTS	TOPIC
the CEQA no-project alternative, not the setting. If the EIR uses both baselines, it needs to address impacts under each of the baselines and apply mitigation measures to each situation, as applicable. The document must revise the text accordingly. Further, the analyses also attempt to distinguish which impacts would result from the project and which would result from climate change. These two factors are not separable. For example, the operational criteria for reservoirs and pipelines would be dependent on the climactic and weather conditions, both long-term and in any specific year, but there would just be a single set of these criteria, not separate criteria for climate change and project impacts. In fact, CM1's primary purpose is to provide water supply in response to changing climatic conditions. Therefore, this appears to be a false dichotomy aimed at reducing the appearance of project impacts and reducing the project's mitigation obligations. It is misleading to ascribe certain impacts to changes in climate and others to the project. The EIR, in fact, acknowledges this on p15-66 (among others, i.e. p. 15-87, lines 19-20; p. 15-274, lines 34-37), where it states, *"The CALSIM II modeling results show that, overall, future opportunities for boating-related recreation under the No Action Alternative conditions at these reservoirs would be less than under the Existing Conditions. However, as noted above and discussed in Section 15.3.1, Methods for Analysis, these changes in SWP/CVP reservoir elevations are caused by sea level rise, climate change, and future no action conditions.* ***It is not possible to specifically define the exact extent of the changes due to future no action operations using these model simulation results.*** *" [emphasis added]* You must revise the EIR impact analyses and mitigation measures to address all changes in future conditions with the project.	**(or NOP date baseline)**
93. **Pages 15-62 and 63 – Significance Criteria.** Certain significance criteria are not sufficiently protective of the environment, counter to the purpose of CEQA. Specifically, the first criterion, which considers only permanent displacement of recreational facilities as significant, should be revised to also include long-term (more than one season) temporary displacement of these facilities, and the analyses revised to address this long-term temporary impact. Similarly, what is the supporting documentation for the 8-year change to reservoir or river flow criteria? This seems arbitrary. Why not use a more conservative 4 or 5 years, which would be more protective of the environment? Also, this entire criteria, and associated impact assessment, focuses on reservoir levels. The document must add river flows and impacts to river recreation to the analyses.	**Inadequate significance criteria**
94. **Pages 15-64 and 65.** This discussion focuses on impacts of projects other than the proposed project. It is inappropriate in this section, which is supposed to analyze the project impacts. Rather, it is a cumulative impact discussion that should be moved to that section of the EIR. This discussion should be moved.	**Inappropriate impact analysis**
95. **Page 15-66, Table 15-10a; Page 15-86, Line 32; 15-274, Lines 12-16, and**	**Peak recreation use times not**

COMMENTS	TOPIC
other similar references in impact analyses. The reservoir recreation analyses are based on late September reservoir levels. However, as acknowledged in the EIR, most reservoir use is in the summer months, from June through August. Therefore, the late September analysis does not appear to be the correct metric for assessment of project impacts to reservoir (and river) recreation. The document must add July and/or August analyses of project impacts to lake (and river) levels so that potential impacts at the time of peak recreational activity can be determined.	**evaluated** **Inadequate impact analysis**
96. **Page 15-67, Lines 10-29; page 15-68, Lines 1-2.** Why are Catastrophic Risks described in the impact discussion? This is an existing condition, which should be considered as part of the setting. It should be removed from this section.	**Use of existing conditions in impact discussion; not related to project impacts** **Inadequate impact analysis**
97. **Page 15-68, Lines 7-14, Page 15-76, Lines 32-35, and similar analyses throughout the impact section.** The impact assessment relies on the program-level CM's 3 and 11 as mitigation for the project-specific impacts of CM1. As described in my general comments above, these program-level CMs are neither sufficiently described nor is their funding sufficiently assured for them to serve as reliable mitigation measures for the project-level activities. Further, these analyses fail to provide any actual analyses as to how the program CMs will mitigate the project impacts. They are just listed, followed by a conclusion that they will mitigate the impact the impact to a less-than-significant level. The analytical nexus is absent. In addition, this approach fails to comply with the court's direction in the Trisha Lee Lotus v. Department of Transportation decision.	**Inadequate mitigation measures** **Unfounded conclusions that mitigation measures would be adequate without backup data or substantial evidence** **Lotus v. Caltrans case** **Lack of analytical nexus**
98. **Page 15-77, MM REC-2 (and Rec 2 discussions in other alternatives, i.e., Page 15-255, Lines 37-40; Page 15-263, Lines 20-36).** The mitigation is vague and not at a project level. It states that the project proponents "will enhance nearby formal fishing access sites" and "ensure adequate signage will be placed at informal sites..." but provides no information on which sites will be enhanced or specifics about signs, nor what the enhancements will be. The p. 15-255 discussion relies on programmatic mitigation measures in other resource chapters to mitigate these impacts with no analysis as to what impacts would occur at each site, how those mitigations would be applied to these sites or how effective they would be. Given this absence of information, there is no way to determine what the impacts after mitigation will be. Revise the document to include all of the missing information/analysis listed above.	**Inadequate mitigation** **Program- level mitigation when project-level warranted** **Missing information**
99. **Page 15-79, Lines 31-39, Page 15-80, Lines 27-31, Page 15-83, Lines 20-23, and similar analyses throughout the impact section.** This analysis relies on Mitigation Measure TRANS-1a to reduce impacts to a less than significant level. However, this mitigation measure defers the development of actual mitigations to a future plan. Such deferral may be appropriate for a program-level document, but is inadequate for the project-level evaluation/mitigation for CM1. Identify which specific mitigation actions are proposed for all CM1 impacts.	**Inadequate mitigation for project-level analysis** **Deferral of mitigation**
100. **Page 15-80, Lines 7-10.** This discussion relies on Environmental Commitments to reduce project impacts. However, the discussion includes no analyses as to how and to what extend those ECs will actually reduce these impacts. The document must add that discussion and analyses.	**Inadequate mitigation and lack of substantial evidence that mitigation would be adequate**

COMMENTS	TOPIC
Additionally, per the Trisha Lee Lotus v. Department of Transportation decision, You must evaluate other mitigations as appropriate.	**Lotus v. Caltrans case**
101. **Page 15-82, Lines 10-24; Page 15-269, Lines 21-23.** This analysis relies on Mitigation Measure TRANS-1a to reduce impacts to a less than significant level. However, as discussed above, this mitigation measure defers the development of actual mitigations to a future plan. It further relies on recommendations in the Delta Plan as mitigation. These recommendations have no force of law and cannot be assumed to be implemented; therefore, they do not assure any mitigation. Similarly, it relies on vague ECs, whose applicability and effectiveness to the identified impacts are not discussed. The document must add an analysis of how these mitigations would be applied to the project impacts and to what degree they would be effective in reducing impacts to a less than significant level.	**Deferral of mitigation** **Lack of substantial evidence that mitigation would be adequate**
102. **Page 15-84, Lines 12-15 and 25-40; Page 15-260, Lines 1-11, and similar statements throughout the EIR/EIS.** These impacts discussions state that certain mitigation measures "would be available" (see, for example, line 13). It also relies on some of the programmatic ECs. This is not a commitment to mitigate. You should revise this terminology throughout the EIR to read, "would be implemented". Further this discussion relies on a large number of vague, noncommittal programmatic mitigation measures for visual impacts, noise impacts, and aquatic biology impacts to reduce this impact, but never analyzes the actual effectiveness of these measures at a project level. It just references them and then states, "The effect would not be adverse". (Line 41). This is an inadequate CEQA evaluation. The document must revise to include a detailed evaluation of what the impacts would be, how the measures would reduce impacts, and to what extent.	**Inadequate impact analysis** **Vague mitigation measures** **Lack of substantial evidence**
103. **Page 15-86, Impact REC-5 (and other Impact REC-5 discussions throughout the chapter).** This "analysis" consists of a single sentence under the CEQA conclusion stating, "The potential impact on covered and non-covered sport-fish species...would be considered less than significant because any impacts to fish and, as a result, impacts to recreational fishing, are anticipated to be isolated to certain areas and would not impact the species population of any popular sportfishing species overall." This is a conclusion with no actual impact analysis. The conclusion fails to reference or comport with any of the Recreation section's listed criteria of significance. Further, Chapter 11 focuses on special status fish species and includes mitigation measures to reduce or eliminate non-native predatory fishes, which include several popular species of sport fishes. The document must be revised to include a project-level impact assessment of the impacts of reducing or eliminating certain sport fish populations on popular fishing sites throughout the Delta.	**Inadequate impact analysis** **Unsubstantiated conclusions** **Lack of project-level analysis**
104. **Page 15-253, Line 9.** This line refers to Table 15-15 as providing the reader with a summary of recreation sites that might be affected by Alternative 4; however, the table addresses only construction impacts and not operational impacts. The document must provide a similar table summarizing operation impacts to recreational facilities.	**Lack of impact analysis for operational impacts**
105. **Page 15-255, Line 6.** This line states that recreational access could occur in the future. Will access be restored or not?	**Unsubstantiated conclusions** **Inadequate impact analysis**

COMMENTS	TOPIC
106. **Page 15-255, Lines 16-21.** This discussion is a speculative argument as to why water skiing facilities should not be considered "long term" and therefore the Project's impacts to them aren't significant. The analysis compares the Project impacts to a future baseline where the water skiing no longer exists. Use of this future baseline is impermissible under CEQA. The facilities exist (setting), have existed for a long period of time, and would be affected by the project (impact). Therefore the impact should be considered potentially significant and mitigation should be required. The document must revised as required by CEQA.	**Inappropriate use of future baseline** **Inadequate impact analysis**
107. **Page 15-255, Line 24.** The reliance on program ECs as mitigation for CM1 project impacts is impermissible under the Trisha Lee Lotus decision and also fails to explain how the EC's would mitigate the project's specific impacts.	**Inappropriate use of program-level mitigation measures for project-level analysis** **Lotus v. Caltrans case** **Inadequate mitigation**
108. **Page 15-256, Lines 22-30; page 15-258, Lines 3-16 .** Issue with using generic ECs and program-level CM's 3 and 11 to mitigate for project specific impacts. See previous comments on the problems with this approach – it is impossible to see how they would be applied and how well they would work. Revise to explain how these CMs and ECs will be applied to the project, and provide a project-level analysis of the impacts. Add project-level mitigation measures as needed.	**Inadequate project-level mitigation measures**
109. **Page 15-256, Lines 35-38; page 15-257, Lines 48-53.** These lines provide a general statement that project spoils may be reused, which involves a wide range of uses anywhere in the Delta. Revise to inform the reader how those spoils (which result from the Project-level CM1) are proposed for reuse, and what the impacts of that reuse would be, at a project level.	**Inadequate project description** **Inadequate impact analysis**
110. **Page 15-260, Lines 14-19.** The document must assess the impacts of operating the operable barrier to fisheries upstream and downstream of the barrier, not just at the barrier.	**Inadequate impact analysis**
111. **Page 15-261, Lines 10-46; page 15-262, Lines 1-42.** The references text is a litany of generic mitigation measures, and programmatic ECs and CMs, leading to a conclusion (on p. 15-263). There is no analysis as to how these measures would be applied to project impacts or to what degree they would be effective. In fact, there is no analysis at all. Revise to include the missing analyses and add project-specific mitigation measures as applicable.	**No analysis of mitigation measures** **Lack of project-level mitigation measures**
112. **Page 15-266, Lines 29-32.** Relies on generic ECs to mitigate project specific impacts. Needs nexus and actual analysis.	**Inadequate impact analysis** **Lack of project-specific mitigation measures**
113. **Page 15-267, Lines 30-43.** This "analysis" fails to identify the number of barges to be used, daily barge activity, routes of barges, size of barges, duration of barging, what will be barged, etc. Absent this information, it is not possible to identify impacts of the barges on recreation (or air quality, noise, water quality, biotic resources, etc.). The document must provide the necessary detail to assess the project-level impacts of CM1 and reevaluate all barge-related impacts.	**Inadequate impact analysis**
114. **Impact REC-3, General Comment.** Nowhere in this assessment are the	**Inadequate recreation-related**

COMMENTS	TOPIC
impacts of changes in delta currents, either locally (e.g. associated with intakes or barge terminals) or regionally (e.g. associated with changes in Delta flows, ecological restoration projects that may include levee breeching and/or major changes in tidal prisms) on recreational boating, including marina access, boating safety and overall boating suitability discussed. Impacts of changes in flows and currents on fishing also have not been addressed. The document must add a discussion of all of these issues to this chapter, including impacts to access at all marinas.	**impact analysis**
115. **Page 15-271, Lines 2-3.** The document must describe fishing impacts from changes in flows, salinity, and other hydrologic and water quality effects associated with the Project (CM1) and Program (CM2-22) activities, in addition to barge facilities.	**Inadequate impact analysis**
116. **Page 15-271, Lines 12-14.** What's the significance level of this impact?	**Lack of definition of level of impact**
117. **Page 15-271, Lines 20-22.** Mitigation REC-2 does not address the reduction in fishes, which is the impact stated above. Therefore, this impact is not mitigated. You must revise text accordingly.	**Inadequate mitigation measures**
118. **Page 15-271, Lines 29-46, continuing on p. 15-272.** This mitigation discussion once again relies on program-level CMs and ECs to mitigate project-level impacts without describing the impact at a project level or the nexus between the impacts and mitigation measures. Revise to fully describe the impacts then specify detailed mitigation measures and residual effects.	**Lack of project-level analysis** **Inadequate mitigation**
119. **Page 15-273, Lines 34-35, and 15-274, Lines 1-2.** This impact "analysis" concludes that the project would not result in long-term reductions in fishing opportunities because impacts would be "typically limited to specific rivers and not the population of the species as a whole." First, this conclusion is not consistent with the Recreation section's stated criteria of significance; second, it is unclear why, if an entire river is affected, why fishing impacts would not be significant; third, there's no project-level analysis of the potential impacts on loss of fisheries to the CM1 project. The document must address each of these deficiencies in a revised text.	**Inadequate impact analysis** **Lack of project-specific analysis**
120. **Page 15-275, Lines 9-16 and 38-39.** These conclusions rely on a comparison of the Project impacts with a future (2060) baseline. You must add a comparison of the post-project conditions with the existing baseline and identify appropriate mitigation measures for each of these impacts.	**Inappropriate use of future baseline**
121. **Page 15-275, Line 28.** This impacts discussion states that certain mitigation measures "would be available". It also relies on some of the programmatic ECs. This is not a commitment to mitigate. This terminology must be revised throughout the EIR-S to read, "would be implemented".	**Vague mitigation measures**
122. **Page 15-276, Lines 5-8.** This mitigation states that DWR and Reclamation "will work with DPR....". Working with agencies does not assure mitigation. The document must be revised to describe what actual mitigation will be conducted and how that would/would not mitigate the project's impacts.	**Vague mitigation measures**
123. **Pages 15-277-283, Impact REC-9. Long-Term Reduction in Fishing Opportunities as a Result of Implementing Conservation Measures 2–21:** The document must provide a detailed analysis of how specific SAV removal and turbidity increases resulting from the project may affect sport-fishing species. The document must also discuss the changes in flows and salinity with the project (combined CM1-22) in 2060 may affect these species.	**Inadequate impact analysis** **Lack of substantial evidence for conclusions reached**

COMMENTS	TOPIC
The conclusion that, "In the long term, the impact on fishing opportunities would be considered beneficial because the 35 conservation measures are intended to enhance aquatic habitat and fish abundance", is not supported by the analysis in Chapter 11, which focuses on special-status species and specifically states that one of the goals of the CMs is to adversely affect many of the non-native, predatory sportfishing species.	
124. **Pages 15-285-289, Impact REC-10.** This section fails to address impacts to boating from changes in currents, tidal prism's and flow patterns resulting from CMs2-22. The document must revise the analysis to address these issues. It must include both Delta and upstream rivers that may have altered flows associated with the CMs.	**Inadequate recreation-related impact analysis**
125. **Page 15-291, Lines 5-15.** This discussion fails to describe the degree of increase in inundation in the Yolo Bypass compared to existing conditions. It is impossible to assess the severity of the impacts to recreation absent this information. The document must provide this essential information and reassess as necessary.	**Inadequate recreation-related impact analysis**
126. **Page 15-291, Lines 32-36; page 15-292, Lines 2-3.** This vague discussion states, "Additionally, environmental commitments are available to reduce the effects of inundation on upland recreational opportunities" and "Depending on the acquisition strategy implemented through this measure, recreational access for upland activities could be expanded or diminished". This provides no information as to what the impacts would be or what will be done to mitigate the impacts. The document must be revised to state what assures that monitoring measures will be implemented.	**Inadequate mitigation measures** **Inadequate impact analysis**
127. **Page 15-291, Lines 8-24.** There will be a large-scale transition in habitats, which will result in a large-scale transition in species, affecting hunting. This needs to be assessed in detail to determine what recreation opportunities will be lost and/or gained as a result of the project, not just types of effects that may occur. This section must be revised to inform the reader as to the net benefit or loss of each type of recreation activity associated with the conversion of up to 65,000 acres of upland habitat to wetlands and other associated habitats. We suggest separate discussions for each type of recreation use that may be affected, with specific mitigation for impacts to each use. Issues to be addressed should include, but not be limited to: Would access be provided to wetland areas for recreational use? How would the areas be managed? What would be the tradeoffs in terms of recreation uses?	**Inadequate recreation impact analysis**
128. **Page 15-294, Lines 26-40.** This discussion remarkably concludes that "These impacts [from construction and operation of CMs 2-22] on upland recreation opportunities would be considered less than significant because the BDCP would include environmental commitments that would require the BDCP proponents to consult with CDFW to expand wildlife viewing, angling, and hunting opportunities, as described in Recommendation DP R14 of the Delta Plan." This conclusion is unsupported and possibly in error because: a) DP14 is a recommendation and not a requirement; thus, this mitigation is not assured to occur. b) Consultation with CDFW does not necessarily result in any mitigation; consultation is just talking, not acting. c) The ECs are vague and unenforceable. Further, the EIR provides insufficient information as to how the ECs would be applied to this	**Inadequate mitigation measures**

COMMENTS	TOPIC
program to assure mitigation. Given the potential for large-scale landscape-level impacts to recreation as a result of the project, this discussion provides no evidence that the impacts would be reduced to a less-than-significant level. The document must revised to describe how the mitigations would be implemented, enforced, and monitored. Identify what proportion of each type of impact is expected to be mitigated by each type of mitigation measure.	
Chapter 16. Socioeconomics	
129. **Page 16-39, Lines 23-25:** The EIR states that the cumulative analysis is based on comparing all the "development" alternatives to the "No Action Alternative" for Year 2060. This is an extremely erroneous way of evaluating cumulative analysis for a variety of reasons. First of all, the cumulative analysis needs to evaluate the geographic area for which the cumulative analysis is done; for each topic that may vary such as airsheds, viewsheds, etc. Then, the cumulative analysis under CEQA requirements requires that cumulative conditions identified by relevant General Plans or other similar plans be considered or a "project list" approach can be done (see Section 15130 of CEQA Guidelines). Section 16.3.3 address the No Action Alternative. Rather than project what conditions are likely to exist in 2060 under that No Action Alternative, the text on page 16-50 refers to the reader back to the Environmental Setting section. This section DOES NOT identify conditions that are likely to exist in 2060. Instead, this section addresses conditions as of the time of writing the EIR/S. The cumulative analysis needs to compare future cumulative conditions to the baseline year. This has not been done and is a major inadequacy of the EIR/S. In addition, how can 2060 economic conditions possibly be determined in this Project Level EIR/S for the conveyance facilities? No General Plan of the affected counties covers this great a time period. For example, the update of the San Joaquin County General Plan is currently underway. This General Plan only goes to the year of 2035. One only has to look at the economic conditions of 2008 -10 that so severely affected the Central Valley economy to know that one could not have predicted that phenomenon. Explain how a meaningful cumulative analysis of socio-economic impacts can be done in this manner and how it meets the requirements of CEQA/NEPA?	**Incorrect cumulative analysis** **Incorrect baseline** **Misuse of future baseline** **Future Baseline Year of 2060 highly speculative**
130. Nowhere does this section address the significance criteria used to evaluate impacts related to population and housing. A search was done for all of Chapter 16 for the word "criteria" and it was not found. And the same applies to "criterion". Without identified CEQA/NEPA significance criteria, the analysis does not follow the CEQA/NEPA requirements. For example, CEQA very clearly states that displacement of housing must be addressed. Where has this been done specifically for all the components of CM1 as well as CM2-22? An extremely generalized statement is made on **page 16-177, Lines 34-35**, but there is no specificity as to number of households or business, or where these would be located that would be displaced. The EIR/S needs to provide specificity on this impact.	**Inadequate identification of significance criteria** **Inadequate evaluation of impacts related to potential displacement of housing**

COMMENTS	TOPIC
131. **Page 16-52, Lines 10-12:** The CEQA Conclusion for the No Action Alternative is that ongoing programs and plans would result in crop acreages and crop values similar to those under Existing Conditions. There is no substantial evidence showing that by 2060, 46 years after 2014, that crop values would be the same as in 2014. If one goes back to evaluate the history of crop values, there have been significant changes over time. For example, orchards and vineyards have replaced row crops as more economic value per acre has been found by these conversions. The document must provide substantial evidence to justify this conclusion.	**Lack of substantial evidence**
132. **Page 16-163, Line 53:** Nowhere is there a table identifying where (in terms of communities/counties) the 53,000 units of available housing are to accommodate the projected peak of 3,937 workers during the 8-year construction period. And nowhere is there an explanation of how it was determined that only 1,180 workers would require housing within the 5-county region of the BDCP water conveyance facilities. The EIR/S does not identify the likely wages of these workers as related to local housing costs.	**Inadequate impact analysis and lack of backup data**
133. **Page 16-164, Lines 13-15**: It is explained that a much larger (87%) percentage of agricultural workers are of Hispanic origin, while only 54 percent of construction laborers claim Hispanic origin. The EIR/S does not assess the impact of Hispanic agricultural workers loosing work due to the removal of agricultural lands from production. And because most of these workers are not trained in construction skills, the EIR/S needs to address what happens to these workers who may lose agricultural employment.	**Inadequate impact analysis related to job losses**
134. **Page 16-166:** The EIR/S on Line 30-31 states "Access would be maintained to all existing recreational facilities, including marinas throughout construction." Why is this not addressed in the Project Description? If the water conveyance facilities are to be evaluated at a project level, this kind of information needs to be clearly spelled out and illustrated in the Project Description.	**Inadequate project description**
135. **Page 16-168, Table 16-43** is totally unclear. First, it does not define the columns. Does Column 2 refer to acreage lost? The last column shows minus numbers....are these percentages lost from existing acreage? Finally, the information needs to be shown by County. The table is totally meaningless unless one knows where the economic impacts are occurring. Just above the table, text refers to 5,600 acres of irrigated cropland declining. Then, the table immediately below shows 478,100 total acres but no line item shows the 5,600 acres referred to in the text. The table does not clarify which items refer to irrigated crops.	**Unreadable tables**
136. **Page 16-170, Table 16-44** is very unclear as related to employment impacts. By "Impacts" in the second column, is this referring to jobs lost? Is the "Labor Income" lost and to what counties? The IMPLAN results are extremely generalized and do not assist individual counties in commenting on this EIR/EIS.	**Unreadable tables**
Chapter 19. Transportation	
137. The transportation analysis identifies the following main roads within the jurisdiction of San Joaquin County or cities within the County: Walnut Grove Road; Peltier Road; Tracy Blvd.; Byron Highway; Mountain House Parkway; Eight Mile Road; and Tracy Blvd. These are all the roads within the study	**Missing information**

COMMENTS	TOPIC
area that may be impacted by construction traffic over the 9-year construction period. However, Table 19-7 fails to include Byron Highway for San Joaquin County.	
138. **Page 19-171, Table 19-25:** Bryon Hwy. is shown has having significant construction-related transportation impacts for the analysis period of 6 AM to 7 PM. However, the mitigation measures basically state the following: ▪ Implement a site-specific traffic management plan (TMP) ▪ Limit hours or amount of construction activity on congested roadway segments ▪ Make good faith efforts to enter into mitigation agreements to enhance capacity of congested roadway segments These mitigation measures are woefully inadequate. First of all, Mitigation Measure TRANS-1a addresses this impact but goes into details totally unrelated to the impact such as in-water work areas (this impact is related to road vehicles) and notification of boating organizations and marinas; no-wake zone (again the impact is about road vehicles); coordination with rail providers; coordination with transit providers. The impact states "TRANS-1: Increased Construction Vehicle Trips Resulting in Unacceptable LOS Conditions." Why is this TMP mentioning anything related to boating facilities? The mitigation is also woefully inadequate for the following reasons and the following elements of the suggested mitigation measure: - Signage is not mitigation - Barricades are not mitigation - Use of flag people may be somewhat helpful but not much, and detouring traffic just moves the problem elsewhere - Notification is not mitigation, especially for cycling organizations and marinas as this does nothing to mitigate the congestion - Outreach is not mitigation - Alternative access routes just relocate the problem but don't solve it - Describing construction staging areas does nothing to relieve traffic congestion; - Designating areas where nighttime construction will occur does not provide mitigation (the impact is related to 6 AM to 7 PM time period) - Plans to relocate school bus drop-off zones does nothing and this issue wasn't even addressed in the impact discussion - Directing construction vehicle drivers to pull over in the event of an emergency is not a mitigation measure; this is required by law (CA Vehicle Code 21806) and has nothing to do with relieving construction vehicle traffic congestion - Designating offsite vehicle staging does not mitigate congestion - Posting information for emergency contact does not mitigate congestion - Coordinating with rail providers or transit providers does not mitigate congestion - Posting information on 511.org does not mitigate for congestion. The most egregious item in the list is "Other actions to be identified and developed as may be needed by the construction manager/resident engineer	**Inadequate and inappropriate mitigation measure** **Deferred mitigation** **Vague mitigation**

COMMENTS	TOPIC
to ensure that temporary impacts on transportation facilities are minimized." The mitigation measures are deferred, ineffective, and not directed to the identified impact. Revise to include measures that are able to be monitored; identify the responsible parties and the timing; and identify how the measures would relieve the construction vehicle traffic congestion that has been identified as the impact where LOS impacts were significant. Additionally, the other two mitigation measures suggest limiting hours of construction on congested roadway segments. Do you really think this would happen? You have a long route; a truck travels through segments that are fine and ones that have been identified as congested. You can be assured that this will not happen. In addition, TRANS-1b starts out with the words "Where feasible"....this is deal killer from the start. The impact analysis has not even identified when congestion is not acceptable because the entire period of 6 AM to 7 PM was assessed. LOS for peak hours for intersections was not assessed as the EIR/S stated that routes cannot be known at this time. Without such an analysis, this so called "project-specific" mitigation measure is totally unworkable. The third and final mitigation measure for construction vehicle congestion is to "Make Good Faith Efforts to Enter into Mitigation Agreements to Enhance Capacity of Congested Roadway Segments". Making a good faith effort is totally unenforceable. If "capacity enhancements" are ever funded, then the growth inducing impacts of such have to be assessed and this has not been done in the EIR/S. The document must address what types of enhancements may occur, where and when. This is only appropriate for a project-specific EIR/S which this is for CM-1. Stating that any traffic models to be used to determine fair share costs shall be mutually agreed upon by BDCP proponents and the affected agencies creates the risk of never having such modelling done. The agency determining the models shall be the appropriate transportation agency and BDCP should have nothing to say about the models. This mitigation measure must be revised.	
139. **Page 19-173, Line 20-21, at beginning of Mitigation Measure TRANS-1a states:** "...environmental commitments identified in this EIR/EIS. This will include potential expansion of the study area identified in this EIR/EIS to capture all potentially significantly affected roadway segments." This statement implies that the impact analysis has not been complete, and that additional analysis is necessary which is not appropriate for the Project level component of the analysis. Clarify what this sentence means and why study area would need to be expanded.	**Admission that impact analysis is not complete**
140. **Page 19-181, Lines 21-17:** The mitigation measure for impacts to paving conditions of roads used for construction are not adequate. Prohibitions again construction traffic using roadway segments with pavement conditions below thresholds is totally unenforceable. Mitigation Measures TRANS-2a and 2b are not workable; Only TRANS-2c might be workable. But again, as stated in Line 10 on page 19-182, making a "good faith effort" is not an enforceable	**Inadequate and unworkable mitigation measure**

COMMENTS	TOPIC
mitigation measure. San Joaquin County could be saddled with the burden of worsened roads and the cost of repaving roads used for the BDCP project.	
141. **Impact TRANS-3:** Mitigation measure TRANS-1c does not solve the problem of interference with emergency routes during construction. As stated above, "making a good faith effort" for anything is not an enforceable mitigation measure. The document must revise this mitigation measure so that it is enforceable and identify who is to do what and when it's to be done.	**Inadequate and unworkable mitigation measure**
142. **Impact TRANS-6:** The mitigation measures related to transit interruptions just refer back to Mitigation Measure TRANS-1a, b, and c. As stated above, these are woefully inadequate and unenforceable.	**Inadequate and unworkable mitigation measures**
143. **Inadequate coverage of CEQA Significance Criteria:** The EIR/S fails to address the following criteria as required by the CEQA Guidelines: ▪ Conflict with applicable plan or policy related to effectiveness of the performance of the circulation system ▪ Conflict with an applicable congestion management program ▪ Increase in hazards due to a design issue ▪ Conflict with adopted plan/policies related to bike use, transit, or pedestrian facilities or decrease the safety of such facilities. This entire section must address the required significance criteria. In addition, it must analyze and disclose increased traffic and congestion on I-5, I-205, I-580, and I-80 that will occur because of admitted heavy construction traffic on Delta highways: SR-12 and SR-4.	**Impact analysis fails to address significance criteria as required by CEQA Guidelines**
144. **Impact TRANS-8:** The EIR/s fails to provide substantial evidence of why traffic generated during project operations would be less than significant. There is no data on number of workers, number of trips, or times/days of trips. The document must provide this important information.	**Inadequate impact analysis; Lack of substantial evidence**
145. **Impact TRANS-10:** This impact analysis fails to provide any information related to traffic impacts associated with CM2-22. Doing a qualitative analysis for project elements that are intricately linked with the success of CM1 is another example of piecemealing the project and failing to adequately assess all project impacts. Restoration efforts; creating wetlands; construction worker vehicles, etc. will have large impacts related to construction vehicles hauling dirt and other materials. The EIR/S needs to identify where such trucks may travel and how many may use local roads. The impacts on LOS and pavement conditions need to be addressed. Just concluding that the impact could possibly be significant and unavoidable does not relieve the authors of the responsibility of doing an adequate impact analysis. And again, the reference to Mitigation Measures TRANS-1a, b and c is woefully inadequate. It is as if the authors were trying to create one "catch-all" mitigation measure that could be used for multiple identified impacts rather than gearing the mitigation measures to the specific impact. The result is that the mitigation measures are far too generalized and vague to make them worth anything.	**Inadequate impact analysis** **Piecemealing of project**
146. **General:** Has the transportation analysis evaluated the transportation impacts of trucking in the water for the concrete batch plants and operations which are estimated to need approximately 47 million gallons of potable water. Many of the locations are not near a source of potable water.	**Incomplete analysis**

COMMENTS	TOPIC
Chapter 20. Public Services and Utilities	
147. **Page 20-35: Lines 31-41:** In terms of the No Action Alternative, the EIR/S states that "*the Lead Agencies have made some informed judgements about what might happen outside the immediate SWP/CVP context during such an extended time period. For example, it is highly improbable that, over the course of nearly five decades, water systems throughout California will not change in numerous relevant ways. Since such changes could affect how the SWP and CVP under the BDCP would operate within a larger water supply framework, the Lead Agencies have attempted to identify the predictable or foreseeable actions of California water suppliers other than DWR and Reclamation under a long-term scenario in which a BDCP is not approved or implemented.*" What defines "informed judgements"? This is about PREDICTIONS, not informed judgements. It is not explained how it is justified to state that under the No Action Alternative, that services and utilities are likely to be maintained at required levels until 2060. The EIR has major flaws related to trying to predict what is likely to occur between now and 2060. That time period is highly unrealistic in terms of meaningful impact analysis. How was this time horizon chosen?	**Inappropriate use of predictions rather than reliance on substantial evidence**
148. **Page 20-115, Lines 25-38**: Nowhere does the EIR/S address the potential change in emergency response times or the adequacy of response times related to provision of fire/police services. While the project may incorporate safety plans to reduce need for emergency response, there are always unexpected emergencies that can arise during construction. Given the isolated nature of the water conveyance alignment alternatives, and the lack of fire/police stations in the area (as shown in Figures 20-1 and 20-2), the EIR/S has failed to identify the impact s related to emergency response times and the potential for new facilities to serve the project. At a minimum, the EIR/S needs to address the emergency response times to all areas of proposed construction, including concrete batch plants, electrical transmission substations, pipeline routes, and other project elements. At a minimum, the most isolated location of construction should be clearly identified to assess the emergency response time to such a location.	**Inadequate impact analysis**
149. **Page 20-120: Lines 20-21**: The EIR/S states that new wastewater treatment facilities would not be required. However, this is in direct contradiction to the statement on page 20-119, Line 40, which states that concrete batch plants would have onsite treatment for wastewater. CEQA does not distinguish between a municipal and a private/State treatment facility. The project DOES require wastewater treatment facilities, the construction of which could result in environmental impacts. Because these are integral to the water conveyance facilities, which are addressed at a project level of analysis, these treatment facilities need to be addressed herein, using the identified significance criteria.	**Inconsistent data/impact analyses** **Conflicting statements**
Chapter 24. Hazardous Materials	
150. **Page 24-4, Lines 15-18:** The EIR/EIS states, "no comprehensive area-wide soil or sediment sampling program is known to have been conducted to evaluate pesticide residues from agricultural use." Given the large-scale	**Missing essential information**

COMMENTS	TOPIC
impacts of both the Project (CM1) and Program (CM2-22) in terms of moving (25 million cy) and wetting (up to 65,000 acres) agricultural soils, which could release pesticides to the water column, a sampling program must be conducted. Absent this data, the EIR cannot adequately determine either the context or intensity of impacts, as required under both CEQA and NEPA. The document must rovide the needed data.	
151. **Page 24-4, Lines 29-38:** This section notes that above-ground and underground storage tanks and other potential hazardous materials facilities may exist in the project area. However, no surveys have been done of the conveyance facility alignment for these potential sources of hazardous materials. While deferral of this analysis may be acceptable at a program level, such a survey is required to identify potential impacts for a project-level EIR on the conveyance facilities. The document must provide the needed information to provide an adequate impact analysis.	**Deferred analysis and mitigation** **Inadequate information on existing conditions**
152. **Page 24-6, Lines 3-7:** States that abandoned oil and gas well may pose hazards as they may act as conduits for natural gas to the surface. The discussion goes on to state, "the locations of many abandoned or shut-in wells may be unknown due to inadequate or missing data or poor record keeping." A project level EIR for the conveyance facilities must identify these hazards and not defer this work to future study. There would be no more future study under CEQA if this EIR were certified as the project-level assessment for the conveyance facilities.	**Deferred analysis and mitigation** **Admission that impact analysis is not complete**
153. **Page 24-7, Lines 12-25:** This discussion acknowledges that information regarding transportation of hazardous materials through the study area was not obtained. At a minimum, this section should address the types of materials that are likely to be transported through the region, and where the transportation routes would be.	**Admission that impact analysis is not complete**
154. **Pages 24-31:** The EIR acknowledges that the Phase 1 Site Assessment was for a different set of conveyance facility alignments than are considered in this EIR/EIS, but fails to tell the reader what the differences are and how that may affect the applicability of that site assessment to the currently proposed conveyance project. The EIR/EIS then defers preparation of a corrected Phase 1 Assessment until after the conveyance project is approved, stating, "The locations of these three alignments under consideration in 2009 differ somewhat from the four alignments being considered in this impact analysis. As such, once a BDCP conveyance alternative is chosen, a conveyance-alignment-specific (i.e., site-specific) Phase 1 ISA will be performed prior to construction." This deferral is impermissible given 1) the uncertainty as to whether the existing Phase 1 study is applicable to the current proposal, and 2) the potential impacts of the project at this massive scale. The EIR notes that the Phase 1 ESA failed to follow standard practice in that it lacks landowner interviews. The EIR also states, "Further, Although the ISA identified Recognized Environmental Conditions (RECs), the limited scope of this ISA allowed only for recognition of "sites of concern" (SOCs). Many of these SOCs constitute RECs for the study area, while others that might be RECs have insufficient information at this time to make that determination".	**Deferred analysis and mitigation** **Admission that impact analysis is not complete**

COMMENTS	TOPIC
This is a fancy way of saying that many potential contaminated sites may have been missed by the ESA prepared for the prior alignments. The analysis needs to be redone for this EIR/EIS.	
155. **Page 24-34, Section 24.3.2, Determination of Effects:** The Determination of Effects discussion is inconsistent with the "Construction Effects" discussion on P. 24-31. The document must clarify which criteria are being used in the impact analysis.	**Inadequate impact analysis; Lack of substantial evidence**
156. **Page 24-36, Lines 24-45; Page. 24-37, Lines 1-10:** This discussion claims that the project would comply with County plans but fails to provide any documentation of such compliance. It lists mitigation measures but fails to connect mitigation measures to the specific impact or evaluate their effectiveness. The mitigation measures are far too generalized and vague to assure mitigation to a less-than-significant level, and the conclusion of policy compliance is unsupported by fact. In addition, the SWPPP, HMMP, and spoils treatment measures are not specific enough to assure adequate treatment of the 25 million cy of tunnel spoils proposed for reuse or disposal. There is no project-level analysis of this issue, despite it being a critical component of the conveyance facility construction.	**Inadequate impact analysis**
The following comments are made with reference to Alternative 1A, but are equally applicable to Alternative 4A, because the text in the two sections is nearly identical.	
157. **Page 24-46, Lines 27-45. The discussion of potential soil contamination begins with,** "The lateral and vertical extent of any historical soil-, sediment- or water-based contamination within or near the construction footprint is unknown. Although, where it exists, soil contamination is likely to be highly localized, while groundwater contamination could have migrated substantial distances and therefore be more widespread than soil contamination. Locations of known oil and gas processing facilities (Figure 24-1) are considered a separate category of SOC due to the potential for spills and leaks at these locations. The lateral and vertical extent of any existing contamination that may be present at these sites is unknown. The number of SOCs may change during right-of-way evaluation, land acquisition and preconstruction site-clearance investigations or during construction. Additional SOCs may be identified during these activities, and currently identified SOCs may be determined innocuous after site-specific field investigation and testing." The text goes on to state, "It is likely that contaminated sediments (e.g., persistent pesticide- and mercury-contaminated sediments) would be resuspended during sediment-disturbing activities related to in-river construction activities (e.g., cofferdam construction at intake sites). However, concentrations of potential contaminants in the sediments where in-river construction activities would be taking place are not known; therefore, the associated risk cannot be identified. " **Page. 24-47, Lines 14-41** list programmatic Environmental Commitments but	**Inadequate setting and impact discussion** **Project-level analysis for CM-1 not complete**

COMMENTS	TOPIC
provide no analysis as to how they would be applied at a project level, how well they would work to reduce impacts, or even if they would be implemented (for example, line 36 starts, "To the extent feasible, action alternative design would minimize the need to acquire or traverse areas where the presence of hazardous materials is suspected..." Who determines what's feasible and on what basis? If it's not feasible, then what?. This is an inadequate setting and impact discussion upon which to base a project-level impact assessment of the conveyance facilities.	
158. **Page 24-48, Lines 6-41.** This section needs to tell the reader which chemical will be used in drilling, how much of each chemical is likely to be used, and which treatment methods for the tunnel spoils (which appears to be euphemistically referred to as Reusable Tunnel Material, whether or not it is actually found to be reusable) would be applied. What constituents may be in the decant liquid (lines 42-44)? Also, this text refers to a very large storage facility, the impacts of which have not been identified. As discussed in comments above, the EIR estimates that about 25 million cubic yards of material will be stored and treated for reuse. This could result in hundreds of acres of land used for storage and treatment of potentially contaminated drilling spoils. For comparison, the proposed Forward Landfill expansion included about 32 million cy of material on nearly 200 acres, and would have formed hills over 170 feet high. Revise to address in detail the potential impacts associated with spoils storage and reuse areas, at a site-specific level, as required for a project-level assessment. Specifically, the following must be addressed: ▪ More clearly define "Reusable". We presume it is non toxic, but can it be used as agricultural soil (not likely), as levee construction material (not too likely either) or simply for filling in subsided islands, and if so, what land uses could such islands support? ▪ Clarify the location of where spoils disposal will or may be placed if it is in fact "Re-used". ▪ Explain whether the areas shown as cross-hatched tan (RTM) on Fig. M3-4 are permanent features or not. ▪ Clarify and provide evidence that there is barge access for all sites: source, temporary storage, and ultimate placement. If trucks will be needed, where in the EIR-S has this been analyzed and reported in regard to transportation and air quality impacts. ▪ Clarify and provide evidence that the barge traffic for spoils (not equipment, which is covered) has been accounted for in terms of marine traffic and air quality. ▪ There's a very large gap in treatment sites from the Potato Slough site to the Clifton Court Forebay site, with diminishing waterways how will materials be transported to the CC Forebay site? Are barges feasible or would material require trucking? Has this distance of trucking or barging been considered in the airn quality and traffic analyses?? ▪ The Clifton Court Forebay spoils treatment facility at southern end of the conveyance facilities is quite distant from the restoration areas, which	**Inadequate setting and impact discussion** **Deferral of mitigation measures**

COMMENTS	TOPIC
are mostly in the north delta/Cache Slough areas. How will the materials be transported there? ▪ Given that spoils disposal is part of the project-level conveyance facility project, The document must provide an evaluation on a project (site-specific) basis of the treatment facility sites to determine their suitability/sensitivity of potentially affected resources? ▪ What percentage of the materials is likely to be contaminated such that they require off-site hauling and disposal? ▪ The document must evaluate the air pollutant and emissions and traffic effects of double hauling materials from the excavation sites to the treatment facilities and then to either reuse sites or disposal facilities. ▪ The document must evaluate the capacity for any contaminated material at suitable landfills. Finally, this section envisions a possible landfill for contaminated materials, stating, "At a minimum, a final clean soil cover would be placed over the dewatered RTM in order to isolate any contaminates in the RTM and then seeded." Potential impacts of this long-term landfill must be assessed in detail. Instead, the analysis is improperly deferred to a future plan (**see p. 24-49, lines 1-17**). The document must provide a detailed description of these facilities and their potential impacts in this EIR. (This discussion also mentions health risks of diesel emissions, which should be assessed now and not deferred.)	
159. **Page 24-51, Lines 26-45.** This discussion mentions possible risks associated with transportation of spoils and other materials, but does not provide any estimate of the number of trips of trucks, barges, trains, etc. that would be required to transport the 25 million cubic yards of tunnel spoils to treatment/storage sites and then re-transport those materials suitable for reuse to the reuse sites. The document must describe – will there be multiple handling of materials? How and where will these spoils be transported? How much will be transported via which mode? Describe how the vague and non-committal programmatic mitigation measure Trans-1 would be applied to the conveyance project to reduce this impact to less-than-significant level, as repeatedly claimed in this impact discussion.	**Inadequate impact discussion**
160. **Page 24-52, Lines 6-19.** This section discussed barge hazards but fails to tell the reader how many barge trips may occur, what the risk of spills or collisions is (i.e. per trip or per mile travelled), and what magnitude of impacts may occur in the event of an accident or spill. The document must add a detailed, project-level assessment of all of these issues as required for assessment of the transport of 25 million cy of tunnel spoils.	**Inadequate impact discussion**
161. **Page 24-53, Lines 21-27, 37-38, 44.** There's no connection between these conclusions and the preceding discussion - just a statement of generic impacts, a statement of generic BMPs, and a conclusion. Provide the analytical nexus from the discussion of impacts through the mitigation measures supporting the conclusion. Revise the conclusion as necessary.	**Unsupported impact significance conclusions**
162. **Page 24-54.** Mitigation Measure HAZ-1a and HAZ-1b improperly defer impacts analysis to future studies.	**Improper deferral of impact assessment and mitigation to future studies**
163. **Page 24-64, Lines 37-38, Impact HAZ-6:** Statement that, "Maintenance	**Inadequate project description**

COMMENTS	TOPIC
requirements for several of the water conveyance facilities features (e.g., tunnels) have not yet been finalized. " indicates that the project description is inadequate to conduct a project-level CEQA and NEPA evaluation. You must add missing information and reassess the impact.	
164. **Page 24-67, Lines 39-43, Page 24-68, Lines 1-45:** CM2 involves tens of thousands of acres of restoration projects with potential to affect gas wells, gas facilities, transport impacts, etc. The "analysis" of the potential impacts of this massive construction is limited to one page of generic statements regarding possible effects, with no assessment of the possible magnitude or intensity of the impacts. Instead, vague mitigation measures are assumed (but not shown) to reduce these impacts to a less than significant level. Provide a detailed discussion of potential impacts for each possible contaminant, considering the overall impact on specific sensitive areas and resources. Note that a simple statement of the type of impact that may occur is not an adequate assessment because CEQA/NEPA require a determination of the context and intensity of impacts, neither of which is provided here.	**Inadequate impact discussion.** **Unsupported impact significance conclusions**
165. **Page 24-69, Lines 27-34, Page 24-70, Lines 26-45:** These discussions, referring to potentially contaminated sites and worker exposure, state." However, because locations within the eleven conservation zones (described in Chapter 3, Description of the Alternatives) for implementing most of the conservation measures have not yet been determined, it is not known if the conservation measures would be implemented on or near "Cortese List" sites. Project design would minimize, to the extent feasible, the need to acquire or traverse areas where the presence of hazardous materials is suspected or has been verified. Implementation of conservation measures could also involve dredging Delta waterways and other activities that could disturb contaminated sediments that hold mercury, pesticides, or other constituents," and "The potential exists for CM2–CM11, CM13, CM14, CM16, and CM18 to result in effects related to the release of or exposure to hazardous materials or other hazards. The potential for these kinds of effects is considered adverse because implementation of these conservation measures would involve extensive use of heavy equipment that could unintentionally result in the release of hazardous substances or that could expose construction workers or members of the public to hazards. Construction of restoration projects on or near existing agricultural and industrial land may result in a conflict or exposure to known hazardous materials."	**Inadequate impact discussion** **Unsupported impact significance conclusions**
166. **Pages 24-70 top 24-71:** There is no connection between these conclusions and the preceding discussion - just a statement of generic impacts, a statement of generic mitigation measures and BMPs, and a conclusion. The document must provide the analytical nexus from the discussion of impacts through the mitigation measures supporting the conclusion. Revise the conclusion as necessary.	**Unsupported impact significance conclusions**
Chapter 30. Growth Inducement	
167. **Page 30-74; Line 6:** 60 percent of the increased water would go to the South Coast Region. This is mainly a point of interest given the environmental impacts that would be experienced by San Joaquin County and adjoining	**Support for Southern California growth**

COMMENTS	TOPIC
counties for the proposed project. The No Action 2060 scenario shows an increase of 2,650,500 people, and Table 30-25 and 30-26 show that the largest percentage of growth due to BDCP would occur in the South Coast Hydrologic Region (of 8 regions addressed in the State).	
168. **Page 30-107 and all of Section 30 on Growth Inducement:** This page of the EIR/S states "The planning horizon for BDCP is 2060. None of the horizon years of the General Plan EIRs reviewed for this analysis extends to 2060." If this is the case, how can this EIR/S justify using the year 2060 for the future baseline analysis? The reason that no General Plans extend to 2060 is that it is totally out of the range of the "foreseeable future". CEQA very clearly uses the term "foreseeable" future; and 46 years into the future is not what one would consider foreseeable. This is "conjecture" more than "foreseeable". If one goes back in time to 1968 to compare what we knew then vs. what is now happening, you would see that at that time, there was no NEPA/CEQA, no Endangered Species Act, no knowledge of toxic waste impacts; no discussion of sea level rise and climate change. How can one presume to really know what conditions will be in 2060? More commonly, General Plans address a 20-year future time horizon, or at most, a 30-year time horizon. Explain how the 2060 year was chosen for future baseline and how it can be justified. This EIR/S took it upon itself to extrapolate population projections using Department of Finance numbers from 2050. Finally, Section 30 of the EIR/S summarizes that many General Plan EIRs show future growth impacts, by topic, as significant and unavoidable. Thus, this EIR/S need to do the same and show growth inducement as significant and unavoidable, requiring that Findings be prepared.	**Misuse of future baseline** **Conjecture by using Year 2060** **Growth inducement fails to clarify why growth inducement would be significant and unavoidable**
169. **Section 30.3.7; Lines 13-16: Conclusions on Growth Inducement:** It is concluded that construction and operation of BDCP facilities would not have any DIRECT growth inducing impacts. In one sentence, it is concluded that construction would not result in the need for new housing or jobs in the study area. There is no substantial evidence to back up this conclusion, no cross reference to the socio-economics section of the EIR/S identifying the expected number of employees, the availability of local housing during the 10+ years of construction. The document should expand on this conclusion and justify why it was determined that no direct growth inducing impacts would result.	**Lack of substantial evidence** **Inadequate analysis of direct growth inducing impacts**
170. **Section 30.3.7; Lines 17 to 41 and Page 30.3.7, Lines 1 to 19:** This section points out that indirect growth inducing impacts would occur as associated with lifting a constraint to growth by the provision of reliable water supplies. Yes! And then, the text goes on to correctly state that "DWR and Reclamation lack the authority to approve or deny development projects or to impose mitigation to address significant environmental impacts associated with development projects; that authority resides with local cities and counties." What the EIR/S fails to say right after this is "Because the development of mitigation measures is outside of the control of the lead	**Growth inducement fails to clarify why growth inducement would be significant and unavoidable**

COMMENTS	TOPIC
agency, growth inducing impacts would be significant and unavoidable and findings would need to be made." Change the text accordingly to clearly identify this as a significant unavoidable impact and make sure that this is shown in the Summary table and in the required CEQA Findings section showing this as a significant, unavoidable impact. Currently, the text does not clarify that the reason for this being significant and unavoidable is that it's outside the control of the lead agency.	
Chapter 31. Other CEQA/NEPA Required Sections	
171. Growth inducement is not shown as a significant unavoidable impact. This impact must be added.	**Growth inducement fails to clarify why growth inducement would be significant and unavoidable**
172. **Pages 31-4 to 31-8 Section 31.3 CEQA Environmentally Superior Alternative.** Explaining that it is just too complex is not sufficient rationale. Discussing the pros and cons of each alternative does not relieve the lead agency from responsibility.	**Failure to identify the Environmentally Superior Alternative.**
173. **Pages 31-4 to 31-8 Section 31.3** The discussion of the pros and cons of each alternative fails to note that for all but Alternative 9, the action alternatives are all-or-nothing, full build-out-or-nothing which eliminates the opportunity for use of adaptive management and best science to guide the action alternative's development under uncertain conditions.	**Failure to treat inflexibility as an impact; in that it precludes best science/adaptive management**
Appendices: Appendix 3D	
174. **Section 3D.2.4:** Cumulative Impact Analysis conditions are assessed. However, nowhere in this section of Appendix 3D does the text address why the cumulative analysis under many topics addresses Year 2060. This section does not address the methodology for identifying other projects; this section does not address how cumulative impacts may have different geographic areas used to determine cumulative impacts. For example, hydrology may assess watershed; air quality may assess projects within airsheds. However, where in the EIR is a list of "cumulative projects" identified that is the basis for all the topics (land use, agriculture, traffic, etc.)? Did the EIR/S rely on adopted General Plans of relevant counties? Did it rely on a list of identified pending/approved projects? This is completely unclear and needs to be explained. It also appears that the EIR/S confuses the No Project Alternative with the Cumulative analysis . These are two distinct items. The No Project/No Action conditions should be evaluating conditions as of the time of the EIR/S. The Cumulative conditions should be addressing potential future projects.	**Inadequate cumulative analysis**
175. **Attachment 3D-A (Page 3D-26),** a list of projects related to three scenarios (Existing Conditions, No Project, Cumulative) are identified. However, this is why the EIR/S is so confusing. These are different issues of CEQA and should not be merged. The High Speed Rail project is mentioned; and then the table shows that this project is not considered in ANY of the three scenarios. Why is that the case? This is a project under construction and that would be for sure operating by 2060. Why was it eliminated from cumulative? The LURMP of the Delta Protection Commission (page 3D-68) is shown as NOT part of Existing Conditions but part of No Action and part of Cumulative. This is an existing document! Explain why this was not part of the Existing	**Inadequate cumulative analysis** **Lack of data on critical land use documents**

COMMENTS	TOPIC
Conditions but that biological opinions that were adopted after the NOP are included in Existing Conditions. The same applies to the Delta Plan of the Delta Stewardship Council. These are critical documents affecting land uses in the Delta. The No Project Conditions, at a minimum, should be updated to address these two critical land use documents.	
176. **Page 3D-73,** the Canada-Northwest California Transmission Project is shown as not considered in the Existing Conditions, No Action/No Project, or Cumulative Conditions. This is a clear example of they these three issues should not be discussed together. This transmission project is a perfect example of a project under consideration that could have large ramifications for the BDCP project area and that SHOULD be considered in the Cumulative analysis.	**Inadequate cumulative analysis**
177. **Page 3D-82, San Joaquin County General Plan,** shows that the San Joaquin County General Plan Update is not being considered for the Existing Conditions, No Project/No Action Conditions, or Cumulative Conditions. This is exactly what SHOULD be considered in the cumulative analysis. While the 2035 General Plan has not been adopted, the County has the 2010 General Plan which WAS adopted in 1992. This plan and identified land use changes should certainly be considered in the Cumulative Analysis of the EIR/S. The adopted General Plan for San Joaquin is not even mentioned in this table.	**Missing information on adopted San Joaquin County General Plan** **Inadequate cumulative analysis**
Appendices: Appendix 19	
178. This appendix provides the backup construction study provided by Fehr & Peers. In the first paragraph of the Introduction (Lines 5-10), the statement is made: "Identifying all the construction related activity for the BDCP with a high degree of certainty is challenging at this stage of project development for such a large and complex project." The text then goes on to say that the impact analysis is a "reasonable 'worst-case-scenario' of construction traffic" and that mitigation measures are "sufficiently broad to provide the BDCP proponents flexibility in the types of strategies that can be implemented to address construction traffic impacts...." This introductory wording does not give the reader confidence that the analysis is at all accurate or that the mitigation measures are geared towards likely impacts. If the entire EIR/S were at a programmatic level, this might be fine. But it's not. CM-1 has specific construction-traffic impacts and specific mitigation measures need to specifically address these. CEQA does not have Guidelines that suggest the need for "flexibility" on a broad scale. The comments below will address specific issues.	**Lack of specificity** **Lack of detail for impact analysis** **Inadequate analysis for project**
179. **Table 1 of Appendix 19:** CT-53 through CT-65 are all roadways within San Joaquin County. In addition, San Joaquin County has segments identified as SJ03 through SJ07, STK 01, and TRA 01. There are multiple roads within San Joaquin County that could be impacted. And many of these roads now operate at LOS C or worse during peak hours. The last two roads are already operating at LOS E as shown in Table 4 of Appendix 19. Tables of Appendix 19 says "Administrative Draft Report, Sept. 2013". Has this been updated and why was final report not included as Appendix 19?	**Need final report**
180. **Page 37 of Appendix 19, Lines 4-22:** This analysis says that "To reflect the change in traffic patterns between baseline conditions and the peak	**Inappropriate baseline analysis**

COMMENTS	TOPIC
construction period, background traffic volumes were developed by factoring up the baseline volumes based on traffic growth rates obtained from the following regional travel demand models...." Per the Neighbors for Smart Rail case, a "future baseline" is only appropriate to use if an analysis of existing conditions would detract from an EIR's effectiveness as an informational document, "either because an analysis based on existing conditions would be uninformative or because it would be misleading to decision makers and the public." Explain why an "existing baseline" condition was not assessed in this EIR/S or why it would be misleading to the decision makers. While it is understood that a "future baseline" would also be appropriate to assess, given the long construction period projected for the BDCP, this does not excuse the EIR authors from addressing the existing baseline. The authors used the term "Baseline Plus Background Growth"; however, doing this can easily result in underestimating impacts from the proposed project, not only for transportation impacts, but also for related air/noise impacts.	
181. **Page 37, Appendix 19:** The text states that "specific project trip routing is unknown at this time". If that is the case, how can a construction traffic impact analysis be adequate? The text states that the analysis assumes use of routes to provide the quickest and most direct access to surrounding major regional highways. However, in the example of spoils disposal, the construction vehicles may not even be accessing regional highways and they may need to rely on a variety of local roadways. This has not been factored into the analysis and needs to be explained.	**Assumptions on trip distribution** **Lack of analysis on local roads** **Inadequate data to allow adequate analysis**
182. **Section 2: Analysis Approach:** This section fails to identify how construction vehicle trips were calculated. There is no table showing number of trips associated with project components such as: spoils disposal; hauling of concrete from the batch plants to the site of the tunnels; construction vehicle workers; forebay construction/expansion; levee modification construction; barge unloading facilities. And these are only related to CM 1. What about trips associated with CM2-22. The EIR/S needs to include a clear identification of all trips generated by the project, both for construction and for operation and the reader needs to be informed of all assumptions related to trip generation.	**Inadequate information on methodology and how construction trips were determined**