

Delta Tunnels Consistency Appeal

(Cert. ID: C20185)

October 15, 2018

Introduction

The Delta Counties and Local Agencies of the North Delta (collectively “DCL”) appealed the Department of Water Resources’ (“DWR”) Certification of Consistency for the California WaterFix (“Project” or “Delta Tunnels”) on August 28, 2018. This Supplemental Submission responds to the Delta Stewardship Council’s (“DSC” or “Council”) September 28, 2018 Supplement to the Notice of Public Hearing (“DSC Supplement”) and provides additional information and analysis in support of DCL’s appeal. (See DSC Admin. Proc. Governing Appeals, Part 1, ¶ 11.)

Procedural Matters

Presentation of DCL Appeal

Counsel for DCL has been advised that Appellant Sacramento County Regional Sanitation District (“Regional Sanitation”) has determined not to provide a presentation at the Council’s hearing. DCL respectfully requests that it be permitted to use Regional Sanitation’s time in DCL’s presentation. Should DCL not require the entire additional 30 minutes, DCL shall offer Regional Sanitation’s time to another appellant or the Delta Protection Commission.

On or about October 9, 2018, counsel for DCL confirmed with counsel for the Council that DCL could bring a PowerPoint presentation to the Appeal Hearing, and that it was not necessary to submit the PowerPoint in advance of the Appeal Hearing. Therefore, the PowerPoint presentation summarizing the DCL Appeal is not being submitted today.

Separate Evidentiary Submission

In an abundance of caution, DCL has prepared a separate submission to describe the bases for the Council’s consideration of the materials cited in this Supplemental Submission and DCL’s Appeal. By submitting a Brief in Support of Evidence Offered with Appeal, DCL does not concede or suggest that such a submission is necessary for the Council to consider all information submitted by the various appellants in support of their respective appeals.

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Additional exhibits supporting this Supplemental Submission are being hand-delivered to the Council, according to direction from counsel for the Council. DCL requests that these additional exhibits be posted with DCL's Appeal.

Objection to Participation in Appeals by Council Member Maria Mehranian

DCL objects to the participation of Maria Mehranian in the vote on the consistency appeals. Ms. Mehranian is the Chief Financial Officer of the Cordoba Corporation, a nationally recognized infrastructure development firm that bids on water supply infrastructure projects. Ms. Mehranian appropriately recused herself from participation in this vote on September 19, 2018, because the Cordoba Corporation submitted a bid to work on a portion of the Project.

That recusal was appropriate because Ms. Mehranian and her employer unquestionably support the Delta Tunnels. In January 2018, Ms. Mehranian authored an article "Water and the California Dream" espousing the benefits of the Delta Tunnels Project.¹ According to Ms. Mehranian, "Water Fix has its critics and opponents, but it is designed to make the existing system more effective and efficient to ensure water supplies are imported where the need is greatest." This article is evidence of an "unacceptable probability of actual bias" on the part of Ms. Mehranian that mandates her recusal. (*Nasha v. City of Los Angeles* (2004) 125 Cal.App.4th 470.)

A public agency prejudicially abuses its discretion when it fails to hold a fair hearing or is otherwise procedurally unfair. A fair hearing requires, at minimum, neutral and unbiased decision-makers. (Code Civ. Proc., § 1094.5, subd. (b); *Nasha, supra*, 125 Cal.App.4th 470.) "Procedural due process in the administrative setting requires that the hearing be conducted before a reasonably impartial, noninvolved reviewer." (*Nasha, supra*, 25 Cal.App.4th at 483, citations omitted.) Recognizing the practicality that "administrative decision makers are drawn from the community at large," the court in *Nasha* explained that "[H]olding them to the same standard as judges, without a showing of actual bias or the probability of actual bias, may discourage persons willing to serve and may deprive the administrative process of capable decision makers." (*Id.* [citations omitted].) Consequently, to prevail on a claim of bias, petitioners must establish an "unacceptable probability of actual bias" to be proven with "concrete facts."

The *Nasha* court found an unacceptable probability of actual bias existed where a decisionmaker wrote an article hostile to a project before deciding the appeal of the project's approval. (*Id.* at 483-484.) Here, Ms. Mehranian wrote an article expressly

¹ See DCL-233, available at: <https://www.cordobacorp.com/water-california-dream/>.

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supporting the Delta Tunnels Project, which is the same project over which she would be acting as a decision-maker in these Appeals. There is no principled distinction between her article in support of the Delta Tunnels Project, and the article opposing the challenged project in *Nasha*. Also, Ms. Mehranian’s article cannot be construed as merely “informational” since, as in *Nasha*, “[t]he article clearly advocated a position” on the Delta Tunnels Project. (*Id.* at 484.) Thus, Ms. Mehranian’s recusal is mandated by law.

Yet a second basis for Ms. Mehranian’s recusal exists. As mentioned above, Ms. Mehranian originally recused herself based on her position with the Cordoba Corporation. The reversal of the September 19, 2018 recusal on October 12, 2018 based on the fact that Ms. Mehranian’s employer apparently was not awarded a contract to perform work on the Delta Tunnels Project is incorrect and inconsistent with conflict of interest provisions applicable to the Council. (See Cal. Code Regs., tit. 2, § 18730, subd. (b)(9).) With a projected cost of almost \$20 billion, a proposed construction period up to 15 years and an operating life of 100 years, there will be many more opportunities for the Cordoba Corporation to seek contracts for the Project.

The Council’s decision-making must be free of any taint of pre-decisional bias or conflict of interest. Ms. Mehranian’s recusal is therefore essential to maintain the integrity of the Council’s decision-making, both as a matter of substance and public perception. To allow Ms. Mehranian to participate would promote the very type of *quid pro quo* arrangement that California conflict of interest requirements were designed to prevent. Again, the standard is not actual bias, but rather an “unacceptable probability of actual bias.”

Responses to Council Questions Regarding DCL Appeal

Consistency with G P1 (b)(2) (23 CCR, § 5002) — Mitigation Measures

Delta Plan regulation G P1 (b)(2) requires that covered actions include either the applicable feasible mitigation measures identified in the 2013 Delta Plan Program EIR (“PEIR”) or substitute mitigation measures that are equally or more effective. DWR failed to provide evidence of consistency with G P1 (b)(2) via either of these means of compliance with the regulation. In its G P1 analysis, DWR provided a table with three columns: the first provides the relevant Delta Plan Mitigation Measure; the second simply lists, without explanation, the corresponding California Delta Tunnels Mitigation Measures; and the last supposedly demonstrates consistency between the Project’s mitigation measures and those required by G P1 (b)(2).

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DWR's "Crosswalk Table" fails to demonstrate how the undescriptive list of mitigation measures from the Delta Tunnels 2017 Final Environmental Impact Report/Statement ("FEIR/S") meets the G P1 (b)(2) requirements. Specifically, DWR's consistency determination lacks an explanation of which Project mitigation measures correspond with each Delta Plan PEIR mitigation measure. DWR's failure to explain how the Project's mitigation measures either match, or are equivalent to the effectiveness of Delta Plan EIR mitigation measures, means there is no substantial evidence of consistency with G P1 (b)(2).

In its Supplement, the Council asked DCL to identify evidence in the record demonstrating that DWR has not met the requirements of G P1 (b)(2) with respect to PEIR Mitigation Measure 3-1. (DSC Supplement, p. 2.) The premise of the Council's question, citing evidence demonstrating a lack of substantial evidence, is not possible, because DWR failed to include substantial evidence to support consistency with Mitigation Measure 3-1 in its Consistency Determination. The CWF MMRP does not include mitigation required by Mitigation Measure 3-1 that is enforceable and measurable. **Mitigation measures must include specific, enforceable, and feasible criteria; descriptions of processes to be completed in the future do not satisfy Delta Plan PEIR mitigation requirements.**

In its Crosswalk Table, DWR lists several Project mitigation measures that supposedly meet the requirements of Delta Plan PEIR Mitigation Measure 3-1, without providing any specific explanation of how those measures are equivalent to Mitigation Measure 3-1 requirements. (GP 1 (b)(2) Attachment 1, p. 1-1.) Appellants do not have the burden of explaining how Project mitigation measures are as or more effective than the actions listed in Mitigation Measure 3-1. DWR does. As explained below, the Project mitigation measures either do not include the specific details of mitigation required by Delta Plan PEIR Mitigation Measure 3-1, or the measures offered are inadequate.

For example, the Delta Tunnels FEIR/S Mitigation Measure SOILS-2a requires the future development of Stormwater Pollution Prevention Plans that would include a BMP specifying the preservation of existing vegetation. (MMRP, p. 2-16.) The plans are not yet developed, and there is no mechanism to ensure the inclusion of this BMP in those plans. Additionally, SOILS-2a calls for only a vague minimization of soil disturbance. (See DWR MMRP, p. 2-16.) It is unclear what aspect of PEIR Mitigation Measure 3-1 DWR intended SOILS-2a to address, and the measure is not adequate because it is not enforceable.

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DWR's explanation of the Project's plan to prevent the violation of water quality standards is also inadequate. For instance, DWR lists CWF Mitigation Measure WQ-11e as part of its compliance with Delta Plan PEIR Mitigation Measure 3-1. CWF Mitigation Measure WQ-11e relies on future real-time operations to reduce or eliminate water quality degradation. (DWR MMRP, p. 15.) This approach defers the development of actual mitigation measures with a promise that relevant impacts would be reduced to less than significant by unspecified means at some unspecified later date. Deferring development of mitigation is inconsistent with G P1 (b)(2).

The Council's Supplement also asked DCL to explain why Mitigation Measure 21-2 is applicable to the Project. (DSC Supplement, p. 3.) DWR claimed that the sustainable groundwater management plan required by PEIR Mitigation Measure 21-2 is not applicable to the Project because the Project does not rely on groundwater. (G P1 (b)(2), p. 1-66.) As explained below, this assertion is incorrect based on the text of Mitigation Measure 21-2. Furthermore, the Project will have significant impacts on groundwater resources, so compliance with Mitigation Measure 21-2 is necessary.

DWR incorrectly asserts that PEIR Mitigation Measure 21-2 applies only to projects that directly rely on groundwater. (See G P1 (b)(2), p. 1-66.) The sustainable groundwater management portion of Mitigation Measure 21-2 does not limit its applicability to any specific type of project. For example, the text of Mitigation Measure 21-2 specifically states that "intakes/diversions and outfalls" must be designed "to be operated at multiple surface water elevations[.]" The Delta Tunnels project requires the construction of intakes and diversions from surface water. Operation of those diversions, as documented in the DWR FEIR/S, as well as the materials cited in the DCL Appeal, does lower groundwater levels.

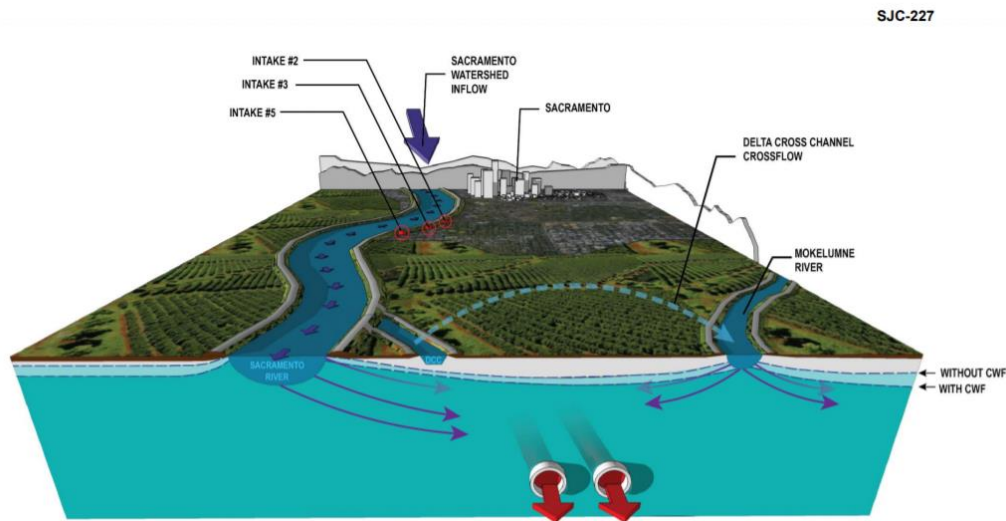
Thus, the fact that the Project would not directly rely on groundwater is irrelevant to the applicability of MM 21-2. Further, Mitigation Measure 21-2 does not restrict its applicability to projects with significant impacts. The Project will impact groundwater, and therefore the sustainable groundwater management portion of Mitigation Measure 21-2 is applicable to the Project.

DWR's own analysis admits that construction of the Project would deplete groundwater supplies and interfere with recharge during construction. (DWR FEIR/S, pp. 7-118 to 7-119.) DWR claims that these groundwater impacts would be mitigated to less than significant levels but relies on unproven mitigation to support that claim. While slurry cutoff walls, if installed effectively, could prevent groundwater drawdowns from dewatering prior to construction, the continued presence of the cutoff walls may also cause separate groundwater impacts. As slurry cutoff walls are intended to prevent the flow of groundwater, the use of these walls would obstruct the flow of groundwater to

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surrounding areas. (See LAND-35, Tootle, pp. 4-5.) Therefore, the use of slurry cutoff walls could interfere with nearby groundwater related uses, such as agricultural drainage and groundwater wells. (*Id.* at 4.) However, DWR has deferred analysis of the actual geologic conditions where it plans to construct facilities, and it conducted no site-specific analysis of potential hydrogeological effects of slurry walls.

Operation of the Project would negatively impact groundwater resources in the South American and San Joaquin subbasins (collectively “subbasins”). Changes in Sacramento River surface water elevations change the rate of surface water exfiltration to groundwater basins. (SJC-223, Lambie, p. 5.) Lowered surface water elevations reduce the surface area through which water exfiltrates to groundwater. (*Id.* at 6.) Therefore, reducing the surface water elevation of a river, such as by diverting water, decreases the rate of exfiltration to groundwater and reduces groundwater recharge for subbasins relying on that exfiltration.



HYDROLOGIC CONCEPTUAL MODEL OF IMPACTS TO GROUNDWATER RECHARGE
FROM THE SACRAMENTO-RIVER TO THE SOUTH-AMERICAN GROUNDWATER SUBBASIN
AND FROM THE MOKELUMNE-RIVER TO THE EASTERN-SAN-JOQUIN GROUNDWATER SUBBASIN BELOW THE DELTA CROSS CHANNEL
BY THE CWF-PROJECT PROPOSED DIVERSIONS AND INTAKE LOCATIONS (POINTS OF DIVERSION)
PREPARED BY JOHN LAMBIE FOR COMMUNICATION PURPOSES (NOT TO SCALE)

(SJC-227.)

As shown in the above conceptual model, the adjacent subbasins rely on the Sacramento River for recharge. (SJC-223, Lambie, pp. 6-7.) The Project would reduce the surface water levels in the Sacramento River 1-2 feet at times. This reduction would, in turn, reduce the quantity of surface water exfiltration to the subbasins to a substantial

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degree. (*Id.* at 7.) Thus, operation of the Project would have long term impacts on groundwater levels along the Sacramento River.

The subbasins that would suffer significant impacts are both categorized by DWR as high priority, signifying they are heavily relied upon as a means of water supply. (See LAND-124 [CASGEM Basin Prioritization – North Central Region].) Furthermore, a high priority designation means that all requirements of the Sustainable Groundwater Management Act (Wat. Code, §§ 5200 et seq.) (“SGMA”) apply to groundwater management plans of these subbasins. (See Wat. Code, § 10720.7.) The Eastern San Joaquin Groundwater Subbasin is critically overdrafted, and both subbasins are below river stage and sea level. (See SJC-225 and SJC-226 [depicts groundwater elevations for South American and Eastern San Joaquin subbasins, respectively].) The Project is subject to all aspects of Mitigation Measure 21-2.

Since DWR relies on the inapplicability of the sustainable groundwater management aspect of PEIR Mitigation Measure 21-2, DWR provided no evidence to support compliance with that measure. Additionally, DWR has not demonstrated consistency with the remainder of PEIR Mitigation Measure 21-2. DWR’s explanation does not specify that the Project would include drainage or hydrology studies assessing flood protection designs, nor that subsequent mitigation was designed in accordance with such studies. (G P1 (b)(3), p. 1-66.) And, as described above, the use of slurry cutoff walls, which DWR cites for compliance with Mitigation Measure 21-2, poses potential significant impacts on its own. (See LAND-35, Tootle, pp. 4-5.)

Mitigation Measure GW-5, also cited for compliance with 21-2, is impermissibly deferred mitigation. (MMRP, pp. 2-7 to 2-9.) GW-5 does not include any actionable requirements; instead, “potentially feasible additional mitigation measures will be developed in consultation with affected landowners.” (MMRP, p. 2-7.) In its Consistency Determination, DWR references, for apparently the first time, a “Community Benefits Fund, or its equivalent.” (DP P2, pp. 21-22.) No details are provided as to how such a fund would “avoid negative impacts on agricultural lands, residents and business by providing a mechanism for communication with local government and community members and disburse funds to protect and enhance the Delta as an evolving place” as alleged by DWR. (*Ibid.*) In sum, DWR has failed to provide substantial evidence that the Project is consistent with PEIR Mitigation Measure 21-2.

Inconsistency with ER P1 Delta Flow Objectives

ER P1 requires that the SWRCB Water Quality Control Plan flow objectives be used to determine the consistency of a covered action that significantly affects flow in the Delta. (Cal. Code Regs., tit. 23, § 5005.) DWR's Water Rights Change Petition currently being considered by the SWRCB and DWR's Consistency Certification submitted to the Council rely on proposed operations and water quality modeling that is not representative of how DWR intends to actually operate the Project. As explained below, this is inconsistent with ER P1. In addition, as explained in the DCL Appeal (pp. 32–41) and below, DWR's approach to water quality modeling does not meet the Best Available Science ("BAS") requirements of G P1 (b)(3).

The current operations and water quality modeling for the Project (CWF H3+) do not represent how the project is required to be operated under D-1641 and the Project's Biological Opinions and Incidental Take Statement. As explained in DCL's Appeal and below, DWR proposes to operate the Project relying on different modeling criteria than were used in environmental review and earlier modeling of the Project. Further, the scenario presented in the FEIR/S prepared for the Project differs from Project modeling presented in the SWRCB water rights hearing process. The details of how SWP and CVP would jointly use the new diversion facilities are also not clearly defined. Therefore, the Certification of Consistency by DWR is premature and not based on relevant scientific analysis of the proposed project.

Fatal flaws in the Delta Tunnel's compliance with ER P1 and G P1 (b)(3) include, but are not limited to, the following:

- (a) DWR's supporting information is focused on just one operational scenario (CWF H3+) and no information is provided in support of the full range of proposed operations.
- (b) The D-1641 Export/Inflow ratio was modeled by excluding the exports by the Project through the new north Delta intakes.
- (c) DWR's most recent modeling for the CWF H3+ initial operations scenario included a Rio Vista minimum outflow of 3,000 cfs from January-August, but this is not included in the currently proposed Project;
- (d) DWR's modeling assumed closures of the Delta Cross Channel ("DCC") based on the Sacramento River flow just upstream of the DCC, but the Project's Incidental Take Permit requires that DCC operations be based on the Sacramento River flow at Freeport, which is upstream of the proposed North Delta Diversions;

(DWR-1143, second revision, pp. 2, 7.)

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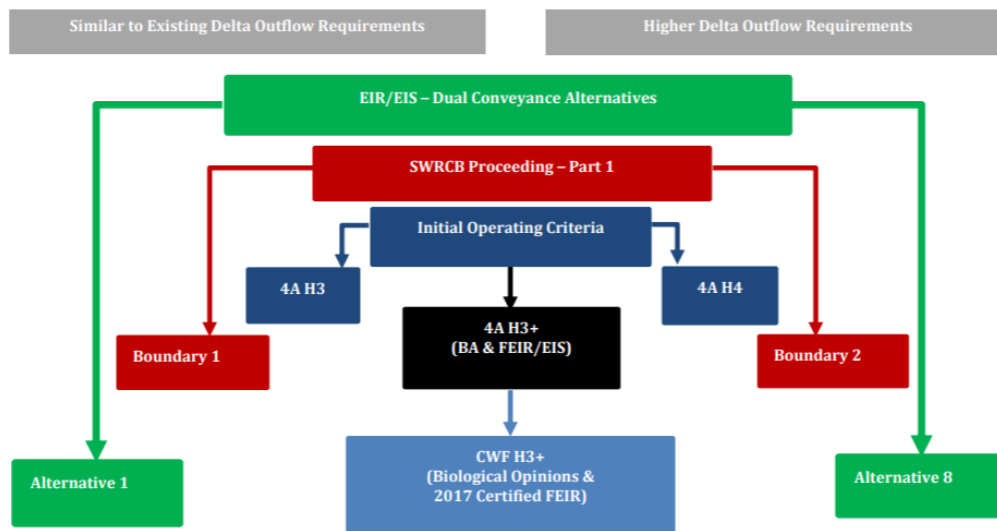
The Council posed several questions to DCL with respect to DCL’s ER P1 consistency appeal. (DSC Supplement, p. 8.) These questions request that DCL show why DWR’s conclusions are not supported by substantial evidence. However, because of the shifting definition of the Project in relation to the modeling offered to support the Project, DWR has not offered any substantial evidence of consistency. Additional specific information is provided below regarding the Project’s compliance with the WQCP, as well as the Council’s questions in the Supplement.

1. Water Quality Effects for the Full Range of Operations Were Not Provided

While DWR has proposed initial operating criteria, known as CWF H3+, once the Project is approved, DWR proposes to operate the Project within a broad range as shown by this figure presented by DWR in the SWRCB water rights hearing:

DWR-1031

Figure 2 Range of Alternatives



(DWR-1021; X.2_DRAFT 000034.) DWR’s analysis relies on an initial operations scenario, CWF H3+, but DWR plans on utilizing the full range of operation scenarios through “real-time operations.” (See DWR-1010, DWR-1021, CCC-SC-59.) As shown in the figure above, DWR is requesting permission from the SWRCB, and proposes to operate, within the full range of B1 to B2. Boundary 1 does not include the D-1641 Fall x-2 requirement, and has the highest levels of exports. (DWR-515.)

DWR’s request to operate within this broad range means the actual operations and the amount of water exports, and corresponding impacts, remain highly uncertain.

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DWR's evidence focuses solely on the CWF H3+ initial proposed operating criteria and DWR has not sought to demonstrate that the entire range of proposed Project operations is consistent with ER P1, or other Delta Plan policies. DWR has not even attempted to offer substantial evidence to support a consistency determination for future real-time operation of the Project. Therefore, CWF H3+ is not consistent with ER P1, nor are operations under the full range of proposed operating scenarios (Boundary 1 to Boundary 2).

2. Proposed North Delta Diversions Ignore D-1641 Inflow-to-Export Ratio

The CWF H3+ modeling also arbitrarily assumed a re-definition of the export/inflow ratio in Water Right Decision 1641 (D-1641) to allow more water to be exported (WQCP, SWRCB-21, pp. 184-187.) The current definition of the export/inflow ratio in D-1641 is (total exports) divided by (total Delta inflow), where all the exports currently come from the south Delta. DWR redefined the export/inflow ratio as (south Delta exports) divided by (total Delta inflow, minus North Delta exports). (2016 FEIR/S, p. 3-38.) This redefinition would allow DWR to export more water than D-1641 allows, especially in June. A detailed analysis of the CWF H3+ modeling data shows that the total south-of-Delta exports for CWF H3+ exceeded the exports that would have been allowed if the Project had been modeled using the SWRCB D-1641 definition of the E/I ratio in 57 months out of the total $82 \times 12 = 984$ months, October 1921 through September 2003. (CCC-SC-61.)

DWR's redefinition of the export/inflow ratio means that exports through the north Delta intakes would be unconstrained by the export/inflow standard. There would be no limit on total exports due to the export/inflow standard during periods when exports were being made only through the north Delta intakes. If south Delta exports are zero, the export/inflow ratio as defined by the Petitioners is also zero. This eliminates the D-1641 protection against entrainment of eggs and larvae at the Delta export pumps and intakes, in this case, at the proposed north Delta intakes. This is also contrary to the co-equal goal of policy of protecting, restoring, and enhancing the Delta ecosystem (Wat. Code, § 85054) and the State policy of restoring the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem. (Wat. Code, § 85020 (c).)

The original biological objective for the export/inflow ratio was to reduce entrainment of fish, egg, and larvae entrainment. The November 3, 1994 "Biological Explanation of the Joint Water Users Proposed Bay-Delta Standards" formed the basis for development of the December 1994 Bay-Delta Accord and the new Bay-Delta standards in D-1641. (See CCC-SC-62 [key excerpts].) The Biological Explanation document makes clear that the goal of the export/inflow limits was to reduce fish, egg and larvae entrainment and mortality at the pumps.

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The Biological Explanation document states that the Biological Objective of the Export/Inflow ratio is to:

Reduce fish, egg, and larvae entrainment and mortality at the pumps through export restrictions and intensive real-time monitoring/response designed to detect presence of fish in areas adjacent to the pumps.

(CCC-SC-62, p. 2-19.)

Intended Benefits of the Export/Inflow ratio include that:

[E]xports should decrease during those years when fresh water inflow to the Delta is decreased and a larger percentage of fish and other aquatic organisms are geographically distributed further upstream where their susceptibility to export losses is increased.

(CCC-SC-62, p. 2-19.)

DWR's fishery expert in Part 2 of the SWRCB Change Petition hearing, Dr. Marin Greenwood, provided testimony that eggs and larvae would be present above the north Delta intakes and therefore susceptible to entrainment at that location:

CWF H3 + NDD are outside the main range of Delta Smelt and Longfin Smelt and therefore are limited in their potential to cause adverse effects such as entrainment of larvae. However, there is a potential for restricted access of smelts to shallow water habitat upstream of the NDD and this potential effect will be mitigated with 1,750 acres of restoration.

(DWR-1012, p. 4.) Furthermore, DWR claimed that there would be general protection of other unlisted species, claiming that:

- *Striped Bass and American Shad egg/larval entrainment at NDD*
- *Most spawning upstream of NDD*
 - *Striped Bass eggs/larvae drift downstream to Delta*
 - *Many American Shad rear upstream*
- *Some protection from spring flow criteria (less exports)*

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(DWR-1029, Slide 34.) DWR's fish witness further explained that:

BDCP-covered fishes in my testimony (White Sturgeon, Sacramento Splittail, Pacific and River Lamprey) spawn upstream of the Delta and generally move downstream into the Delta and adjacent areas as larvae or juveniles, as do Striped Bass and American Shad.

(DWR-1012.)

Entrainment of Striped Bass and American Shad early life stages (eggs and larvae) was found to be a significant and unavoidable impact in the FEIR/S. Striped Bass spawn in and upstream of the Delta. Eggs and larvae move downstream at small sizes that could make them susceptible to entrainment at the NDD. The FEIR/S (Exhibit SWRCB-102, Section 11.3.5.2, Impact AQUA-201, p. 11-3537) found that the entrainment of Striped Bass at the NDD would constitute a significant and unavoidable impact of the CWF H3+, based primarily on assessment of ten spring (March, April, May, or June) simulated monthly periods of DSM2 particle tracking modeling results for the H3 operational scenario.

(DWR-1012, p. 52, citing FEIR/S, Section 11.3.4.2, Table 11-1A-96, p. 11-679.)

Thus, DWR acknowledges the presence of eggs and larvae in the vicinity of the proposed North Delta Diversions, confirming the need for the continued applicability of the D-1641 export/inflow ratio. (See WQCP, SWRCB-21, pp. 184-187.) To be consistent with D-1641 requirements, the Project must operate to the export/inflow ratio to help reduce the entrainment of eggs and larvae at the north Delta intakes.

3. Rio Vista Flow Assumptions

In its Supplement, the Council asked DCL to identify how the Project's failure to meet January through August minimum flow requirements at Rio Vista, and the discrepancy between DWR's Consistency Determination and its representations during the SWRCB Change Petition Hearing, demonstrate that the consistency analysis for ER P1 is not supported by substantial evidence in the record. (DSC Supplement, p. 8, questions 2a and 2c.)

ER P1 Delta Flow Objectives require that SWRCB Water Quality Control Plan flow objectives be used to determine consistency with the Delta Plan. D-1641 provides minimum flow standards for the September through December time period. (D-1641,

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Table 3, available at [SWRCB-21](#).) Modeling for the CWF H3+ scenario included a minimum 3,000 cfs flow requirement at Rio Vista from January to August. While not required by D-1641, this parameter helped ensure maintenance of water quality for in-Delta uses.

DWR's modeling included a Rio Vista minimum outflow of 3,000 cfs from January through August (DWR-1143, second revision, pages 2 and 7; see also **Table 3.3-1** of the Revised Biological Assessment for the California WaterFix, July 2016 (DWR-1142), p. 3-97), but this is not part of the current Project. According to DWR's modeling, removal of the Rio Vista minimum flow of 3,000 cfs from January through August would result in Rio Vista flows of less than 3,000 cfs in some months. In the worst case, July 1995, the monthly-averaged Rio Vista flow in the modeling was only 1,860 cfs.

Yet the earlier modeling, which included the 3,000 cfs Rio Vista flow standard from January through August, CWF H3+, is the basis for DWR's Consistency Determination. This is not representative of the Project DWR has now indicated it intends to implement, which does not include the Rio Vista flow standard from January through August. (See DWR-1143 second revision, pdf pp. 2, 7.) Thus, any determination based on that earlier modeling is not valid. Because DWR's modeling does not properly represent how the Project is intended to actually operate, DWR's finding of consistency with ER P1 is not supported by the current modeling analysis or any evidence in the record.

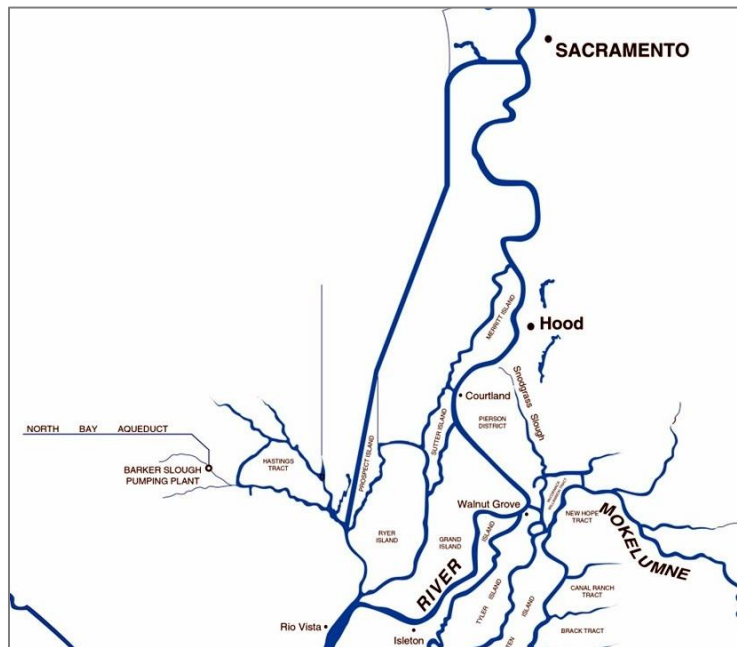
4. Delta Cross Channel Assumptions are Inconsistent with WQCP

In its Supplement, the Council asked DCL to identify specifically how the discrepancy between the Delta Cross Channel ("DCC") closures required to be based on the Sacramento flow at Freeport, and the CALSIM II operations model's assumption that closures would be based on the much smaller flow just upstream of the DCC of the CALSIM II model, leads to the conclusion that the consistency analysis ER P1 is not supported by substantial evidence in the record. (DSC Supplement, p. 8, questions 2b) and 8d)

DWR's Consistency Determination is based on a modeling study, CWF H3+ (DWR-1077), that does not accurately represent operations of the DCC with the proposed Project. DWR's modeling assumed closures of the DCC based on the Sacramento River flow just upstream of the DCC, but the Project's Incidental Take Permit requires that DCC operations be based on the Sacramento River flow at Freeport. (See DWR-1143, second revision, p. 7; ITP [SWRCB-107], pp. 71-72; see also DWR-1142, Table 3.3-1, p. 3-95.) Currently, the flow in the Sacramento River just upstream of the DCC is less than

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the Sacramento River flow at Freeport because of the flows entering Sutter and Steamboat Sloughs (near Courtland), which flow back into the Sacramento downstream of the DCC. The flow in the Sacramento upstream of the DCC would also be significantly less in the future if proposed exports occur via the three north Delta Diversions, which are all upstream of the DCC (just north of Walnut Grove).



The DWR operations modeling study CWF H3+ therefore misrepresents the timing and frequency of closing of the DCC when flows are high (greater than 25,000 cfs) and therefore misrepresents the impacts on fish, Delta water quality and the Delta ecosystem. Also, the CALSIM II model does not include Sutter and Steamboat Sloughs. As a result, the simulated flow in the Sacramento River just above the DCC (C400) is artificially high because it incorrectly includes the flows that would be in Sutter and Steamboat Sloughs. By relying on operations modeling that does not represent the currently proposed Project, DWR lacks the scientific or legal basis to make a Consistency Determination for ER P1.

In its Supplement, the Council asked DCL to identify specifically how the differences between scenarios relied upon by DWR to define the project and its effects on water quality lead to the conclusion that the consistency analysis for ER P1 is not supported by substantial evidence in the record. (DSC Supplement, p. 8, question 2e.)

The FEIR/S released to the public in December 2016 was based on modeling study BA H3+ that included minimum Old and River flow (“OMR”) limits of -5,000 cfs in October and November. The public, including the DCL Appellants and others, based

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their comments on this version of the proposed Project. DWR subsequently did a “bait and switch” when certifying the FEIR, and adopted a very different version of the Project based on initial operating scenario CWF H3+. DWR justified this substantial change to the Project, including eliminating the October and November OMR limits, by claiming that operations and water quality under CWF H3+ were similar to BA H3+, and if not, similar to the No Action Alternative. For example, as discussed in detail in Exhibits CCC-SC-51 and CCC-SC-59, the 82-year averaged SWP and CVP exports from the Delta for a number of months of the year are very different for CWF H3+ as compared to BA H3+ and Alternative 4A, scenarios H3 and H4.

DWR claimed in Part 2 of the SWRCB water rights hearing that CWF H3+ was within the operational range of Alternative 4A, Scenarios H3 to H4. (Exhibit DWR-1008, Slide 5 [X.2_DRAFT 000010]; Exhibit DWR-1010, Page 8, Line 26 [X.2_DRAFT 000012].) In Exhibit DWR-1028, Slide 16 (X.2_DRAFT 000010), the Petitioners stated:

- Sensitivity analysis performed to assess operational effects of the changes between BA and NOD.
- The implications to water supply, surface water, water quality and fisheries resources were found to remain similar to the FEIRS Alternative 4A.

These statements are incorrect. Many of the graphs in DWR-1028 compared flows and exports for the different versions of the Project as long-term averages for different water year types. However, the changes from BA H3+ to CWF H3+ are significant when categorized in terms of month of the year (seasonal changes). The problems with reliance on averages for this Consistency Determination was also identified in Council staff’s early consultation with DWR for its Consistency Determination with respect to the BAS requirements of GP P1 (b)(3) (see DCL-230, pp. 13-14), but DWR never resolved this problem.

To illustrate problems with reliance on averages, Table 2 on page 4 of Exhibit CCC-SC-59 (reproduced below), presents the 82-year average of total south-of-Delta exports by month for the No Action Alternative (NAA), the proposed Delta Tunnels Project (CWF H3+), the Biological Assessment modeling (BA H3+), and Alternative 4A (scenarios H3 and H4). The averaging period is October 1, 1921 through September 30, 2003. As can be seen from the table below, exports for CWF H3+ are much greater than for BA H3+ and Scenarios H3 and H4 in October, and they differ from exports under the NAA. Total exports for Scenarios H3 and H4 are much larger than CWF H3+ and BA H3+ in April and May. Both CWF H3+ and BA H3+ exports in July are much larger than for Scenarios H3 and H4 and the NAA in July and even August. These changes in exports necessarily mean corresponding increased significant adverse impacts of CWF

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H3+ on Delta water quality and compliance with D-1641. (DWR-1015, pages 21, 22 and 24 [X.2_DRAFT 000018].)

	NAA	Alt 4A H3	BA H3+	CWF H3+	Alt 4A H4	Boundary 2
Month	Total Exports (TAF)	Total Exports (TAF)	Total Exports (TAF)	Total Exports (TAF)	Total Exports (TAF)	Total Exports (TAF)
Oct	373	298	303	364	293	220
Nov	419	352	359	365	354	272
Dec	526	569	590	579	573	382
Jan	426	482	479	474	483	313
Feb	390	493	501	481	490	338
Mar	408	500	482	390	383	293
Apr	130	351	133	177	261	196
May	140	326	141	159	235	176
Jun	269	417	378	385	269	224
Jul	557	552	612	605	516	449
Aug	523	500	536	535	485	379
Sep	511	360	384	381	364	316
Annual	4,672	5,200	4,898	4,894	4,705	3,558

In summary, DWR failed to carry out and disclose a detailed analysis of the water quality and other effects of CWF H3+ and relied instead on modeling of very different earlier versions of the Project. Then, DWR argues that the modeling versions are not that much different. Comparing one flawed model to another is not substantial evidence of anything, including compliance with ER P1.

Until a detailed analysis of CWF H3+, or whatever is the actual version of the project DWR intends to implement (including a SWP-only project currently under discussion) is performed and disclosed, there is insufficient evidence upon which to make a Consistency Determination with ER P1, relating to compliance with the WQCP, or any other Council Policy/Regulation. In addition, DWR failed to meet its burden to show that the full range of operations proposed (Boundary 1 to boundary 2) would be consistent with WR P1 and other applicable requirements,

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Additional Examples of Insufficient Mitigation Measures under G P1(b)(2)

1. Mitigation for Take of Greater Sandhill Crane Is Ineffective

DWR relies on Avoidance and Minimization Measure 20 – Greater Sandhill Crane (“AMM20”) in support of the Project’s consistency with PEIR Mitigation Measure 4-2. (See G P1 (b)(2), p. 1-5.) Mitigation Measure 4-2 provides mitigation for substantial adverse effects on special-status species. AMM 20 is inadequate to protect Greater Sandhill Cranes (a fully protected species under state law) and does not include enforceable measures to satisfy Mitigation Measure 4-2 criteria.

PEIR Mitigation Measure 4-2 requires project proponents to “Schedule construction to avoid special-status species’ breeding, spawning, or migration locations during the seasons or active periods that these activities occur.” (See G P1 (b)(2), p. 1-5.) In contrast, AMM 20 limits construction activities with disturbing noise levels outside of crane wintering season only “to the extent practicable.” (MMRP, p. 4-32.) In fact, all avoidance measures need only be applied if it is “practicable in light of project schedule and logistical considerations.” (*Ibid.*) Such noncommittal language does not actually require avoiding disturbing the cranes during the wintering season. This portion of AMM 20 is aspirational at best.

Both the 2015 Conceptual Engineering Report (D.8_DRAFT 015718, Appendix C [Conceptual Construction Schedule]), and the 2018 Conceptual Engineering Report² (Appendix C, Conceptual Construction Schedule) include extensive construction during the crane wintering season. Likewise, AMM 20 assumes that construction will likely occur during the wintering season, requiring such disturbing construction “be started before September 15 or after March 15, such that no new sources of noise or other major disturbances that could affect Cranes will be introduced after [they] arrive at their wintering ground.” (*Ibid.*)

AMM 20 also purports to address impacts to Greater Sandhill Crane foraging habitat. (MMRP, p. 4-34.) Again, this aspect of AMM 20 uses qualifying language, which limits its effectiveness. (*Ibid.*) Artificial noise barriers “may,” but not “must,” be installed to reduce noise impacts on foraging habitat. (*Ibid.*) No evidence is even offered to show that such noise barriers would be effective in limiting harmful noise impacts. AMM 20 is unenforceable, and DWR has not demonstrated the effectiveness of all

² Though the 2018 Conceptual Engineering Report is dated July 2018, DWR failed to include it in its Consistency Determination Record.

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aspects of the measure. Therefore, DWR has failed to offer substantial evidence that the Project is consistent with Mitigation Measure 4-2.

Again, it bears repeating that the Greater Sandhill Crane is a fully-protected (i.e., “no-take”) species under state law.

2. Proposed Fish Screens are Ineffective

DWR would also rely on fish screens at the North Delta intakes as mitigation to comply with PEIR Mitigation Measure 4-2 for substantial adverse effects on special-status species. (See G P1 (b)(2), pp. 1-6 to 1-7.) The effectiveness of these fish screens has not been confirmed for listed fish, or for the broad array of unlisted fish present year-round in the vicinity of the proposed North Delta diversions. (See Fish Presence Table below.)

There are likely fish in the vicinity of the proposed North Delta Diversions throughout the year according to the FEIR/S, which is summarized in the table below.

Potential Presence of Fish in Vicinity of Proposed North Delta Diversions*				
Species	Listing Status	Presence-Adult	Presence-Juvenile	FEIR/S Reference**
Delta Smelt	ESA: Threatened CESA: Endangered	Year round	Sep-Dec	pp. 11A-3-5
Longfin Smelt	CESA: Threatened	Jan-Dec	Jan-Dec	pp. 11A-30-32
Winter Run Chinook	CESA: Endangered ESA: Endangered	Nov-June	Nov-March	p. 11A-50
Spring Run Chinook	ESA: Threatened CESA: Threatened	Nov-Jan	Jan-Aug/Nov-Dec	p. 11A-77
Central Valley Fall- and Late Fall-Run Chinook Salmon	CA: Species of Special Concern	Year round	Dec-June	pp. 11A-103-104
Central Valley Steelhead	ESA: Threatened CA Species of Special Concern	June-March	Feb-May	pp. 11A-129-130

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Potential Presence of Fish in Vicinity of Proposed North Delta Diversions*				
Species	Listing Status	Presence-Adult	Presence-Juvenile	FEIR/S Reference**
Sacramento Splittail	CA: Species of Special Concern	Year round	Apr-June	p. 11A-146
Green Sturgeon	ESA: Threatened (S. distinct population) CA: Species of Special Concern	Jul-Dec	Jan-Dec	p. 11A-162
White Sturgeon	Not listed/not well studied	Year round	Year round	p. 11A-178
Pacific Lamprey	Not listed/not well studied	Likely Year round	Possibly spring/summer months	pp. 11A-191-192
River Lamprey	Not listed/ not well studied	Likely Year round	Possibly spring/summer months	p. 11A-198-199

* Location information limited by locations where presence was sampled/studied; study locations vary.

** Note: Where temporal occurrence tables were provided, months listed in table indicated as high or medium abundance in Delta, Upper Sacramento River (North Delta) and Lower Sacramento River sample locations.

Despite the grave risk to a variety of listed and unlisted fish posed by the new diversions, DWR failed to incorporate available technology to reduce impingement and entrainment. For instance, dynamic baffling could help ensure that approach and sweeping velocities could be continuously maintained as required by the Biological Opinions (2017 USFWS BiOp [e.g., p. 3-35 to 3-37], 2017 NMFS BiOp (e.g., pp. 14, 23, 44), 2017 CDFW Incidental Take Permit (e.g., pp. 16, 68-70, 182) and other project requirements. The Fish Facilities Technical Team for the BDCP assessed and identified the need for a dynamic baffle development and management program. (D.8_DRAFT 022633, DWR-219, pp. 8, 21, 62, 64 and Appendix D. High Definition Approach Velocity Control, Entire Appendix.) These materials identify the steps for dynamic baffle control in response to managing impingement of fish against the screens. These considerations have not been incorporated into the Project, and future promises to do so are speculative.

NMFS juvenile fish screen criteria include uniform flow distribution over the screen surface. (See DCL-232 [Bureau of Reclamation, Fish Protection Diversions (2006) Excerpt].) According to NOAA Fisheries' 2013 Work Plan: Intake Design

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Criteria and Performance Monitoring Development document, dynamic baffling could “automatically regulate flow through discrete portions of the screen.” (PCFFA-206, p. 32.) Dynamic baffling appears to have been recommended by the National Marine Fisheries Service (“NMFS”) to help ensure that applicable standards to prevent impingement and entrainment would be met in all seasons and flow conditions. According to DWR, dynamic baffling was requested by NMFS (DCL-231, CWF Hearing Transcript, August 13, 2018, pp. 225-226.) As explained by DWR’s witness on fish screens, “[w]hile NMFS ideally would love to have dynamic baffles . . . they backed off on that.” (*Ibid.*) Instead of dynamic baffling, the baffles “will be set once, based on diver input, once. And it could be as frequent as they want, but it would require a diver to go in there and measure the flow.” (*Ibid.*) Measurements of flow would likely occur once every three months (*ibid.*) even though tide and flow conditions may change throughout a given day.

Given the design information provided thus far, the failure to perform studies, and the lack of planned real time monitoring of the face of the screens, it is mere speculation to suggest that screen approach and sweeping velocity requirements would be continuously met in the tidal environment that exists in the vicinity of the proposed North Delta Diversions. This further demonstrates that the Project is not consistent with requirements of Mitigation Measure 4-2.

G P1 (b)(3) Best Available Science

During the early consultation process between DWR and DSC, Council staff offered significant critiques of DWR’s scientific references based on G P1 (b)(3) criteria. (See DCL-230 [DSC Comments on BAS in FEIR/S and DWR Responses].) Across multiple impact areas, including harmful algal blooms (“HABs”) and water quality, the Council identified the inadequate modeling and studies upon which DWR relied. (See DCL-231, pp. 17, 18.) DWR’s response to Council staff’s early consultation relied on a handful of inapplicable excuses. For instance, Council staff noted that the hydrodynamic modeling failed to consider key process interactions and that the modeling did not address changes in subtidal flows that could enhance HABs proliferation. (DCL-231, p. 22.) Council staff also noted that DWR’s modeling also failed to account for potential increases in salinity and offered suggestions to address these issues. (*Ibid.*)

In response to Council staff’s criticisms, DWR argued that the California Environmental Quality Act (“CEQA”) and National Environmental Protection Act (“NEPA”) requires only a comparative analysis, and that the FEIR/S meets the standards of CEQA. (DCL-230, p. 23.) DWR denied that Council staff critiques had any merit, and justified its flawed approach to water quality modeling, alleging it would not be possible to develop the models necessary to address HABs proliferation. (*Ibid.*) DWR

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relies on this same excuse, that CEQA and NEPA require only comparative analysis, to respond to many of Council Staff critiques. (See DCL-230, pp. 25, 35, 39.) This response is improper, because compliance with G P1 (b)(3) has no direct correlation with compliance with CEQA or NEPA. G P1 (b)(3) requires covered actions adhere to BAS criteria of relevance, inclusiveness, objectivity, transparency, timeliness, and peer review, which differ from CEQA or NEPA standards for adequacy of environmental review. In any case, the adequacy of DWR's compliance with CEQA has been challenged in 17 separate lawsuits, the merits of which have not yet been adjudicated.

Failure to Use BAS with Respect to Water Quality

Council staff offered substantial critiques with respect to BAS criteria, and DWR's response was to double down on the outdated and incomplete science upon which it had previously relied and to defer application of BAS to a later date. Even where DWR conceded that Council staff offered relevant literature for consideration, DWR claimed, without analysis, that such literature would not change the basic conclusion from the FEIR/S. (See DCL-230, p. 32.) Examples of some of the ways in which DWR failed to provide substantial evidence in support of its Consistency Determination are provided above in the discussion of the questions posed by in the Council's Supplement with respect to ER P1. Considering the breadth of Council staff's concerns over the scientific underpinnings of the Project and the FEIR/S, and DWR's inadequate responses (see DCL-230), DWR has failed to provide substantial evidence that the Project is consistent with G P1 (b)(3).

Consistency Determination is Premature

As explained in the DCL Appeal, DWR's Consistency Determination is premature and should be rejected as not ripe for consideration by the Council. Environmental review and permitting of the Project remain incomplete, and modeling of water quality and other impacts of various operational scenarios is also conflicting and incomplete. (See DCL Appeal, pp. 6-10.) Council staff's opinion as of May 2016 was in accord, stating:

[I]t would be better to wait until DWR has a full project description and a ruling from the SWRCB on their change in point of diversion before submitting a certification of consistency to the Council.

(DCL-233; see also DCL-3, p. 5.) Instead of heeding this advice, DWR has proceeded to submit its Consistency Determination while the SWRCB hearing is still pending and a Supplemental EIR/S is being circulated for public review. The Council's Covered Action

Checklist and the advice provided to DWR in early consultation are correct and should have been, but were not, heeded by DWR.

Conclusion

The Delta Stewardship Council was established by the 2009 Delta Reform Act, in which the Legislature described the Delta as “a critically important natural resource for California and the nation” that “serves Californians concurrently as both the hub of the California water system and the most valuable estuary and wetland ecosystem on the west coast of North and South America.” (Wat. Code, § 85002.) For these reasons, the Delta Reform Act was clear that reliance on the Delta to meet future water supply needs must be reduced. (Wat. Code, § 85021.) Constructing massive new diversions in the northernmost part of the Delta to divert even more freshwater flows out of the Delta is the opposite of reducing reliance on the Delta.

As “ground zero” for the proposed Tunnels, the Delta Counties and LAND will suffer the devastating consequences of the proposed Project’s failures to advance the co-equal goals, which include protecting the Delta as a place and otherwise comport with specific mandates of the 2009 Delta Reform Act. The prematurity of DWR’s Consistency Determination, issued *before* DWR has a stable Project description, has completed environmental review, and has obtained its major entitlements that define construction and operation, further underline DWR’s overarching failure to comply with the requirements of the Public Trust.

This Council’s legal obligation to render a decision that is free of pre-decisional bias and which is the product of a careful well-informed evaluation of DWR’s Consistency Determination in light of all the evidence from all quarters arises from the 2009 Act itself and other provisions of California law. Its moral obligation to do so is implicit in the term “stewardship.”

Equally important, in deciding whether the proposed Tunnels project comports with the objectives and requirements of the 2009 Delta Reform Act, this Council must maintain the highest level of integrity, as a matter of both substance and public perception. That requires, at a minimum, that the Council’s decision-making be free from any pre-decisional bias. It means, too, that Ms. Mehranian, the Chief Financial Officer of a nationally recognized engineering and construction management firm that has already submitted a bid to work on the Project, must not participate in the consistency determination appeals. Allowing Ms. Mehranian (who already properly recused herself once) to participate would so undermine public trust in the integrity of the Council and its processes that its decisions would henceforth lack any credibility at all.

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For all the reasons stated herein, in the DCL's other submissions, and in the submissions of other Appellants, the Council should conclude and rule that DWR's consistency determination is fatally flawed and must be rejected.

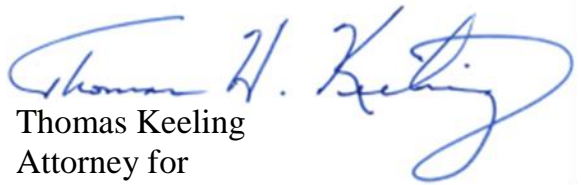
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