

**Counties of San Joaquin, Contra Costa, Solano and
Yolo, and Local Agencies of the North Delta**

Delta Tunnels Consistency Appeal

**Certification ID: C20185
August 27, 2018**

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Glossary of Terms

Term	Definition
1959 Delta Protection Act	Delta Protection Act (Wat. Code, §§12200 et seq.)
2008 FWS BO or BiOp	2008 National Oceanic and Atmospheric Administration Biological Opinion
2009 Delta Reform Act	Delta Reform Act of 2009 (Wat. Code, §§85001 et seq.)
2009 NOAA BO or BiOp	2009 National Oceanic and Atmospheric Administration Biological Opinion
2017 BA	June 2017 Biological Assessment
2017 FWS BO or BiOp	2017 U.S. Fish and Wildlife Service Biological Opinion
2017 NOAA BO or BiOp	2017 National Oceanic and Atmospheric Administration Biological Opinion
2018 DSEIR/S	Bay Delta Conservation Plan/California Waterfix Draft Supplemental Environmental Impact Report
2018 SEIR/S	Bay Delta Conservation Plan/California Waterfix Final Environmental Impact Report
AIP	Agreement in principal
ALSP	Agricultural Lands Stewardship Plan
AMMs	Avoidance and Mitigation Measures
ANN	Artificial Neural Network
BAS	Best Available Science
BDCP	Bay Delta Conservation Plan
BO	Biological Opinion
Board	State Water Resources Control Board
BOR	Bureau of Reclamation
CALFED	CALFED Bay-Delta Program
CC County	Contra Costa County
CCC Water Agency	Contra Costa County Water Agency
CCF	Clifton Court Forebay
CCWD	Contra Costa Water District
CDFW	California Department of Fish & Wildlife
CDPR	California Department of Parks and Recreation
CDWA	Central Delta Water Agency
CEQA	California Environmental Quality Act
CEQA Findings of Fact	Bay Delta Conservation Plan/California Waterfix CEQA Findings of Fact and Statement of Overriding Considerations
CESA	California Endangered Species Act
cfs	Cubic feet per second

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Term	Definition
COA	Coordinated Operations Agreement
Council	Delta Stewardship Council
CVP	Central Valley Project
CWIN	California Water Impact Network
dBA	decibels
DC	Sacramento-San Joaquin Delta Conservancy
DCC	Delta Cross Channel
DCFA	Delta Conveyance Finance Authority
DEIR/S	Bay Delta Conservation Plan/California Waterfix Draft Environmental Impact Report
Delta	Sacramento-San Joaquin River Delta
Delta Tunnels	California WaterFix/Alternative 4A in 2017 FEIR/S
DFW	California Department of Fish and Wildlife
DISB	Delta Independent Science Board
DPC	Delta Protection Commission
DSC	Delta Stewardship Council
DSP	Delta Science Program
DVF	Delta Vision Foundation
DWR	California Department of Water Resources
EC	Electrical conductivity
EIR/S	Bay Delta Conservation Plan/California Waterfix Environmental Impact Report.
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act (16 U.S.C., §1531 et seq.)
FEIR/S	Bay Delta Conservation Plan/California Waterfix Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
HAB	Harmful Algal Bloom
HCP	Habitat Conservation Plan
HORG	Head of Old River Gate
ITP	Incidental Take Permit
LAND	Local Agencies of the North Delta
LOS	Level of Service
M&I	Municipal and Industrial
MMRP	Mitigation Monitoring and Reporting Plan
MWD	Metropolitan Water District
NAA	No Action Alternative
NAS	National Academy of Sciences
NCCF	North Clifton Court Forebay

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Term	Definition
NCCP	Natural Community Conservation Plan
NCCPA	Natural Community Conservation Planning Act
NDD	North Delta Diversions
NEPA	National Environmental Policy Act of 1969
NOAA Fisheries or NMFS	National Oceanic and Atmospheric Administration Fisheries
PA	Proposed Action
PAMP	Project-wide Adaptive Management Program
PCL	Planning & Conservation League
PEIR	Delta Plan Program Environmental Impact Report
Petition	Petition for Change of Point of Diversion
Project	California WaterFix Alternative 4A
RD	Reclamation District
RDEIR/S	Bay Delta Conservation Plan/California Waterfix Partially Recirculated Draft Environmental Impact Report
Reclamation	United States Bureau of Reclamation
Refuge	Stone Lakes National Wildlife Refuge
Regulations	Regulations adopted to implement Delta Plan (23 C.C.R., §§5001-5014)
RTM	Reusable Tunnel Material
SCCF	South Clifton Court Forebay
SDWA	South Delta Water Agency
SED	Substitute Environmental Document
SGMA	Sustainable Groundwater Management Act
SWP	State Water Project
SWRCB	California State Water Resources Control Board
SWRCB CWF Water Rights Hearing	SWRCB Hearing Proceedings Regarding Petition Fby DWR and BOR Requesting Changes in Water Rights for the California WaterFix Project
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS or FWS	U.S. Fish and Wildlife Service
WIFIA	Water infrastructure Finance and Innovation Act
WQCP	Bay Delta Water Quality Control Plan

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Introduction

This appeal is submitted on behalf of the Counties of San Joaquin, Solano, Contra Costa, and Yolo, Contra Costa County Water Agency, and Local Agencies of the North Delta (“LAND”). LAND is a coalition of reclamation districts in the northern Delta. The Contra Costa County Water Agency is a water agency organized and existing under the Contra Costa County Water Agency Act (Stats. 1957, ch. 518, West’s Wat. Code Append., Ch. 80) (Contra Costa County and Contra Costa County Water Agency are referred to together as “Contra Costa”). For purposes of this Appeal, these entities are collectively referred to as “DCL”. The DCL parties have been extensively involved in the development of the Delta Plan and the 2018 amendments, as well as the process leading up to the DWR submittal of this Consistency Determination for the Delta Tunnels (a.k.a. “California WaterFix”) Project.

The 2009 Delta Reform Act recognizes that the Delta is not a mere conduit in a statewide plumbing system. It aptly describes the Delta as “a critically important natural resource for California and the nation” which “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.) The Delta Plan must advance the “coequal goals” (Wat. Code, § 85300, subd. (a)), which means “the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.” (Wat. Code, § 85054.)

No one has a greater stake in the future of the Delta “as an evolving place” than the families, farmers, business owners, workers, and others located in the Delta portions of San Joaquin, Contra Costa, Yolo, and Solano Counties and LAND. The Delta supports a multi-billion-dollar annual agricultural industry, a substantial and growing tourism industry (including agri-tourism), a large and well-established recreational economy, historically significant “legacy” communities, and parks and wildlife preserves that enable residents and others to experience the Delta’s unique natural treasures. Over a thousand miles of Delta levees maintained at great expense by reclamation districts protect farms, businesses, and communities—many of which are below sea level—from

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the waters of the Delta. The levee system and transportation infrastructure within the Delta are vital to the local and regional economies, as well as to the safety and welfare of many thousands of people living in and near the Delta. Beyond statistics and economics—the unique aesthetic, cultural, and environmental characteristics of the Delta are critical to both the current population living and working in the Delta and to future generations of Californians for whom the Delta must remain a special and “evolving place.”

Because the DCL parties are ground zero for the impacts of the Delta Tunnels, they have reviewed DWR’s “Consistency Determination” carefully, with a focus on DWR’s claims that the Delta Tunnels are consistent with Delta Plan requirements, complies with 2009 Delta Reform Act requirements, and satisfies the mandates of the public trust doctrine. Unfortunately, for the reasons discussed in this Appeal, the Delta Tunnels are seriously deficient in critical areas, including their failure to comply with the requirements of the Delta Plan, the 2009 Delta Reform Act, and the Council’s adopted regulations pertaining to covered actions.

All of the supporting documents cited herein and uploaded with this appeal were available to DWR prior to DWR’s filing of the consistency review. Therefore, this evidence was considered by DWR prior to making its consistency determination, and should be part of the record before the DSC. (See DSC Admin. Proc. Governing Appeals, Part 1, ¶ 10.)

In addition to new exhibits supporting this appeal, which are designated as “DCL-___”, this appeal refers to testimony and evidence submitted in the SWRCB Hearing Proceedings Regarding Petition Filed by the California Department of Water Resources and U.S. Bureau of Reclamation Requesting Changes in Water Rights for the California WaterFix Project (referred to as SWRCB CWF Water Rights Hearing). Though the SWRCB CWF Hearing involves different legal issues pertaining to water rights, the Hearing includes extensive information that pertains to the Council’s review of DWR’s Consistency Determination; DWR has already included extensive information from the SWRCB CWF Hearing in its appeal record. For convenience, the SWRCB CWF Hearing exhibits are referred to using the SWRCB CWF Hearing exhibit identification numbers.¹

¹ DCL reserves the right to submit additional written factual or evidentiary materials as permitted by the Council’s Appeal Procedures, section 11.

Procedural Flaws with DWR’s Consistency Determination

The Consistency Determination Lacks the Necessary Participation of the Bureau of Reclamation

The Delta Tunnels are a joint state/federal project, which is why the Petition for Change in Point of Diversion submitted to the SWRCB in August, 2015 was jointly submitted by the DWR and BOR. As stated in the August 25, 2015 letter from DWR and BOR, “the new water conveyance facilities . . . will be part of the SWP [State Water Project] and operated in coordination with Reclamation and its operation of the CVP [Central Valley Project].” (D.8_DRAFT 022756, SWRCB-1, p. 1.) The August 25 letter goes on to state: “The actions proposed by DWR and BOR in this petition would facilitate fundamental, systemic change to the current system” (D.8_DRAFT 022756, SWRCB-1, p. 2.) Petitioners’ testimony in the Delta Tunnels Hearing confirms that “DWR and Reclamation closely coordinate SWP/CVP operations, respectively, to meet their obligations [under Water Rights Decision 1641].” (D.8_DRAFT 022580, DWR-51, Pierre, p. 4.) “The CVP’s operations are coordinated with the operations of the [SWP] under the terms of the Coordinated Operations Agreement (COA) signed in November 1986.” (D.8_DRAFT 022573, DOI-4, Sahlberg, p. 3.)

The Project also contemplates close coordination between DWR and BOR on the Collaborative Science and Adaptive Management Program, a critical decision-making component of the proposed operations following construction. (D.8_DRAFT 022580, DWR-51, Pierre, p. 14.)

The Project would add new diversion points to four water right permits held by DWR and eleven water right permits held by BOR. The BOR water right permits upon which the Project is predicated are: 11315, 11316, 12721, 12722, 12723, 11967, 11968, 11969, 11971, 1193, and 12364. (See D.8_DRAFT 022756, SWRCB-1, p. 12 of 24 [“Supplemental Information” section]; D.8_DRAFT 022573, DOI-4, Sahlberg, pp. 4-5 [listing the BOR water right permits at issue and information about each]; and SWRCB-2, September 11, 2015 Letter, p. 2.) The Twin Tunnel project also relies on a CVP license. (DCL-4, October 30, 2015 Notice of Petition, p. 9.)

Yet, although the Delta Tunnels are a joint project that depends in large part on BOR’s participation for its success—including its success in satisfying the requirements of the 2009 Delta Reform Act and the Delta Plan—BOR is not a party herein. Nor has BOR separately made a consistency determination for the Delta Tunnels Project. Tellingly, BOR has not even certified the Environmental Impact Statement for the project or issued the required Record of Decision under NEPA.

Not only is BOR conspicuous by its absence in this proceeding, it has clearly stated that it need not comply with State law and the decisions of the SWRCB. In his letter to Thomas Howard, Executive Director of the SWRCB, Richard Woodley, Regional Resources Manager for BOR (Mid-Pacific Regional Office) announced:

[T]he conflicting views of Reclamation and State Board could lead to impasse. Reclamation has neither the legal authority, nor the legal obligation to implement the State Board's Water Quality Control Plan In addition, the Water Quality Control Plan does not apply organically to the permits of the Central Valley Project (CVP).

(SJTA-203, February 15, 2017 Letter, p. 1.)

Ominously, BOR has since threatened to sue the SWRCB over its disagreement with the SWRCB's proposed final San Joaquin River flows and South Delta water quality amendments. (NRDC-204, July 27, 2018 letter, Brenda Burman to Felicia Marcus.) Even more alarming for anyone concerned about the Project's reliance on coordinated operations of the SWP and the CVP, BOR—driven by deep divisions between the federal and state projects—recently reinitiated negotiations under COA. (DCL-222, August 17, 2018 Letter, David Murillo to Karla Nemeth.)

The federal CVP also faces a significant reduction in annual water deliveries south of the Delta if DWR and the State Water Project go ahead with an SWP-only Delta Tunnels Project. As discussed in detail by Dr. Jeffrey Michael in his testimony before the SWRCB during Part 2 Rebuttal (SDWA-321, p. 12), CVP deliveries could drop from 2,115 thousand acre-feet (TAF) for the No Action Alternative (without project) to 1,665 TAF for a SWP-only project.

Estimated Average Annual Water Deliveries South of the Delta Under NAA and 2 WaterFix scenarios under a Master Agreement where MWD finances 3,000 cfs unsubscribed capacity. Derived from MWD March 27, 2018 staff presentation (SDWA 315, slides 9-10), and MWD July 10, 2018 board meeting packet (SDWA-320, p. 6.)

	CVP (acre-ft)	SWP (acre-ft)	Total (acre-ft)
No Action Alternative	2,115,000	2,585,000	4,700,000
CWF (67% SWP/33% CVP)	2,094,000	2,906,000	5,000,000
CWF (67% SWP/33% MWD)	1,665,000	3,056,000	4,721,000

Any Consistency Determination necessarily assumes that Delta Tunnels operations will be subject to and dependent upon closely coordinated and cooperative DWR/BOR efforts. Such coordinated efforts necessarily depend, in turn, upon BOR's agreement that it will be bound by the decisions of the SWRCB which also bind DWR and which will be among the chief conditions underlying any approval of the Project (if it is approved at all). Without BOR being "on board," it is not possible to determine if the Project is "consistent" with the Delta Plan. This determination by DWR is premature.

Perhaps most obviously, meeting ER P1 (23 CCR Section 5005 (Delta Flow Objectives)) depends on compliance with D-1641 flow objectives and any later-developed flow objectives and related orders. That is precisely the obligation BOR has already repudiated. Unless and until BOR certifies a ROD, commits to compliance with the SWRCB decisions that would govern operations, and comes forward with a consistency determination (jointly or in coordination with DWR), no competent consistency determination is possible.

Going beyond Delta Flow Objective, the lack of participation by BOR coupled with BOR's position that it is not bound by D-1641 or other orders of the SWRCB, undermine any assurance that the Delta Tunnels would be operated consistently with the obligation to balance the public trust and protect public trust resources. As a matter of law under the *National Audubon* decision², the *Racanelli* Decision³, and the 2009 Delta Reform Act, among other authorities, the DSC, the SWRCB and all other State agencies must consider the public trust when making decisions the may affect public trust resources. Under these circumstances, the DSC cannot find that WaterFix will be operated in a manner that is consistent with the public trust.

² *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419.

³ *United States v. State Water Resources Control Board* (1986) 182 Cal.App.3d 82.

Furthermore, given the complex and mutually dependent relationship between operations of the SWP and the CVP, it is highly likely that the rift between DWR and BOR, underscored by the fact that BOR is not even a participant in this proceeding, will materially undermine the Project's ability to meet other requirements of the Delta Plan, the 2009 Delta Reform Act, and California law.

DWR's Analysis Does Not Address the Current Project

As explained below, 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 is incomplete, and modeling of water quality and other impacts of various operational scenarios is also conflicting and incomplete.

1. CEQA Review of the Project Is Incomplete

The Delta Reform Act contemplates filing of consistency certifications before "implementation" of a project. (Wat. Code, § 85225.) That can only mean close in time to (and perhaps, only after) project approval. This timing is consistent with the Council's guidance on consistency determinations. For instance, the Council's procedural flow chart that says a consistency certification should be filed "at or around" the time an EIR is certified.⁴ Nothing seems to contemplate a certification filing that covers project changes still under environmental review, and months away from approval.

The Council's Covered Action Checklist⁵ asks:

Has CEQA been completed at the time of filing a Certification of Consistency with the Delta Stewardship Council? Filing the Certification of Consistency with the Delta Stewardship Council should occur at the same time of filing of the Notice of Determination where applicable. Filing a Certification of Consistency too early may result in an originally proposed covered action that is significantly altered through the CEQA process or otherwise. If, after filing a certificate of consistency, the project is significantly changed, a new Certification of Consistency will need to be filed with the Delta Stewardship Council.

⁴ Available at: <https://coveredactions.deltacouncil.ca.gov/assets/pdf/CertificationFlow.pdf>

⁵ Available at: <http://deltacouncil.ca.gov/sites/default/files/2014/11/2014-11-25-Covered-Actions-Checklist.pdf>

DWR's filing of a consistency determination prior to completion of CEQA review puts other parties in the position of having to make arguments regarding consistency that contemplate proposed changes that may never be approved, and based on an environmental document reviewing those changes that is still in draft form. DWR's Consistency Determination repeatedly refers to the environmental analysis of the Delta Tunnels as supporting its consistency analysis (see, e.g., WR P2, p. 1, fn.1 [DWR claims consistency of the Project with the coequal goals "demonstrated" in Final EIR/S]). Yet that analysis remains incomplete.

DWR does not analyze, discuss or even disclose the changes to the Project proposed in the 2018 DSEIR/S that was made available July 18, 2018.⁶ (See "Subsequent CEQA" portion of DWR's Index.) These changes were known since at least March 28, 2018, when DWR first provided a "fact sheet" describing them to the SWRCB CWF Hearing parties. (SJC-328.) The proposed changes to the Project have a fundamental impact on the footprint of the Project, and DWR contemplated these changes *well prior* submitting its consistency determination. While DWR provided the 2018 DSEIR/S documents in the consistency review record ("Subsequent CEQA" portion of DWR Index), DWR inexcusably urges a consistency finding for a version of the Project that is no longer being pursued.

For instance, the maps DWR provides in support of its DP P2 Consistency Determination (Attachment 2) no longer reflect the proposed footprint of the Project. (*Cf.* DSEIR/S Excerpts at SJC-329.) Considerable changes have been made to tunnel muck (a.k.a. Reusable Tunnel Material) storage, tunnel alignment, and Clifton Court. While the Fact Sheet produced by DWR characterizes these changes as intended to lessen Project impacts, that conclusion is not supported. (See, e.g., SJC-328.) For instance, impacts on Stone Lakes National Wildlife Refuge are more severe under the revised version of the Project reflected in the DSEIR/S. (See, e.g., SOSC-80, SOSC-81, SJC-327.)

2. *Water Quality Information Is Incomplete and Conflicting*

In addition to the problems caused by attempting to proceed with a consistency determination prior to completion of CEQA review, DWR's attempt to show the consistency of the Project with the Council's Policies is also fraught with inconsistent information regarding water quality modeling results. While DWR's consistency determination purports to be based on the initial operating criteria defined as CWF H3+ (see ER P1, pp. 25-27), many of the attachments refer to modeling applicable to the

⁶ An Administrative Draft version of the 2018 DSEIR/S was provided to the SWRCB CWF Hearing parties on June 12, 2018.

Proposed Action (“PA”) in the Biological Assessment, which is BA H3+, and which is very different than CWF H3+.

3. *The Project Described in the Consistency Determination Is NOT the Project DWR Plans to Build and Operate*

The most recent modeling study of the proposed Project released to the SWRCB and the public, CWF H3+, does not represent the current version of the Project. On July 10, 2018, the Metropolitan Water District of Southern California (“MWD”) Board of Directors voted to pay for the entire second tunnel and a share of the first tunnel, or 64.6% of the project cost. (Exhibit CCC-SC-67.) It now appears that the Project would only be funded by SWP contractors and not the CVP.

The CWF H3+ version of the Project assumes that the CVP would have a 45% share of total south-of-Delta exports and the CWF H3+ modeling suggests the average CVP share of the twin tunnels’ diversions would be 40%. (CCC-SC-52.) Because the SWP contractors propose to fund most if not all of the cost of the Project, the CVP share of the actual Project would be much less than assumed in CWF H3+, possibly even zero. This means that the analysis and disclosure of upstream SWP and CVP reservoir operations and the environmental impacts on key fish species downstream of those reservoirs in CWF H3+ do not represent the Project that DWR’s Consistency Determination indicates would be built and operated.

The CWF H3+ modeling also assumed a Rio Vista minimum flow requirement from January through August. However, DWR does not intend to operate the Project to meet those January–August minimum flow requirements. (DWR-1143, p. 7.)

The CWF H3+ modeling also uses a redefined export/inflow (“E/I”) ratio that allows more water to be exported from the Delta than allowed under D-1641. This redefined E/I ratio does not apply to or limit exports through the proposed north Delta diversions, which means the E/I ratio’s original biological purpose, to protect against entrainment of fish, eggs and larvae, is not achieved. DWR’s fishery expert, Dr. Marin Greenwood, testified in Part 2 of the current Change Petition hearing that eggs and larvae are present above the north Delta intakes and therefore would be susceptible to entrainment. (See also FEIR/S, p. 11A-3 to 5.)

DWR is also proposing that Project operating criteria be modified in the future through adaptive management within a range bounded by the Boundary 1 and Boundary 2 scenarios. However, the Boundary 1 alternative does nothing to provide additional protection for fish and the Delta ecosystem. Boundary 1 does not include a Fall X2 requirement or enhanced spring outflows. If the Project was operated to Boundary 1

operating criteria, Delta outflows would be dangerously low, especially in the fall, resulting in even greater adverse impacts on water quality in the Delta than disclosed for CWF H3+.

For these and other reasons, it is apparent that the Project that DWR has incorrectly determined is consistent with the Delta Plan is not the Project DWR intends to build and operate. The Council should therefore reject DWR's Consistency Determination.

4. *Other Regulatory and Permitting Processes are Likely to Result in Further Changes to the Project*

a. Critical SWRCB CWF Hearing Is Incomplete

The SWRCB is still hearing testimony on the CWF Change Petition and will likely include new terms in any water rights permit that would further change the Project. According to Council staff report from February 2017, it was "anticipated that DWR will file a certification of consistency for WaterFix with the Council once the Water Board has ruled on the change in point of diversion petition." (DCL-3, p. 5, DSC Update on CWF, Feb. 23-24, 2017, Item 11.)

b. SWRCB's Water Quality Control Plan Update Is Incomplete and the BOR May Ignore It

In addition, when the SWRCB completes Phase 1 and Phase 2 of the Bay-Delta WQCP update and sets new Delta inflow and outflow objectives based on percentages of unimpaired flow, the Delta Tunnels may need to operate to something more like Boundary 2 in the operational range proposed by DWR, rather than CWF H3+. While DWR claims in the ER P1 Consistency Determination that the Delta Tunnels "will be operated *to continue SWP compliance with D-1641 flow objectives* (ER P1, p. 1, italics added), no statement is made with respect to the CVP operating to meet D-1641 flow objectives. Indeed, BOR has a long history of NOT agreeing to operate the CVP according to the WQCP. For instance, in 2017, BOR's Mid-Pacific Regional Director claimed that BOR "has neither the legal authority, nor the legal obligation to implement the State Board's Water Quality Control Plan." (SJTA-203, Woodley Letter, February 15, 2017.)

An additional source of uncertainty about how the Project might be operated is the Trump Administration's threats to do aside with state law requirements for water quality and other critical environmental protections. For instance, it has been proposed in

Congress that the Delta Tunnels would be immune from any judicial challenges in state and federal court.⁷

c. U.S. Army Corps of Engineers Permitting Incomplete

The USACE is also considering whether to issue a permit to construct the Project, for portions which would occur in waters of the United States, and involve activities triggering the Corps' regulatory authority under Section 404 and 408 of the Clean Water Act, as well as Section 10 of the Rivers and Harbors Act of 1899. In coordination with this application, DWR and BOR are also requesting approval from the Corps under Section 14 of the Rivers and Harbors Act for elements of the project that may affect federal levees or other federal projects. Considering all the changes to the proposed project since then, that August 26, 2015 application was very premature. DWR's 2015 application to the Army Corps was based on the 2015 Draft EIR/S that only had sensitivity runs and no full CALSIM and DSM2 model runs and those model runs failed to meet the Army Corps limits on inflow to Clifton Court. (Contra Costa County comments to the U.S. Army Corps on November 9, 2015 regarding the Department of Water Resources' 2015 California WaterFix Section 404/10 Application, Public Notice SPK-2008-00861.)

The Project Is Not Consistent with the Coequal Goals

DWR claims that the Project is a product of over a decade of expert design and analysis, and based on these analyses, represents the best available plan for a sustainable Delta. (DWR's Coequal Goals, p. 5.) This is incorrect. Numerous alternatives to the Delta Tunnels have been requested, but DWR has never carefully considered these alternatives. For instance, Contra Costa County recommended that DWR pursue a joint storage-conveyance project integrated with other actions that would achieve rather than fail the coequal goals. (See e.g., DCL-5, Contra Costa County's October 30, 2015 letter [detailing how proposed changes to the BDCP/CWF continue to threaten the Delta and that is time for Plan B].) The Council should not accept DWR's determination of consistency of the current project with the Delta Plan and the 2009 Delta Reform Act, but should instead encourage developments of available alternatives that would better achieve the coequal goals.

According to the co-equal goals adopted by the California Legislature in 2009, the basic goals of the state for the Delta are to:

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<https://www.indybay.org/newsitems/2018/07/19/18816523.php>

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- (a) Achieve the two coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.
- (b) Protect, maintain, and, where possible, enhance and restore the overall quality of the Delta environment, including, but not limited to, agriculture, wildlife habitat, and recreational activities.
- (c) Ensure orderly, balanced conservation and development of Delta land resources.
- (d) Improve flood protection by structural and nonstructural means to ensure an increased level of public health and safety.

(Pub. Resources Code, § 29702; see also Wat. Code, § 85054.) The following objectives are 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.

(Wat. Code, § 85020.)

With respect to achievement of the coequal goals, DWR claims that the Project can be:

[F]ound to be consistent with the Delta Plan pursuant to subdivision (b)(1) of section 5002 of title 23 of the California Code of Regulations. That provision states that, where full consistency with all relevant regulatory policies may not be feasible, an agency proposing a covered action may nevertheless certify that the action is consistent with the overall Delta Plan by certifying that the action is consistent with the coequal goals themselves.

(See fn. 1 of each DWR Consistency Determination.)

DWR fails to mention the additional requirement in section 5002, subdivision (b)(1) that requires “a clear identification of areas where consistency with relevant regulatory policies is not feasible, an explanation of the reasons why it is not feasible, and an explanation of how the covered action nevertheless, on whole, is consistent with the coequal goals.” Further, DWR also claims that consistency of the Project with the coequal goals has been already “demonstrated” in the Final EIR/S. (WR P2, p. 1, fn. 1.) The Final EIR/S was prepared pursuant to the California Environmental Quality Act (Pub. Resources Code, §§ 21000 et seq. [“CEQA”]), not the 2009 Delta Reform Act or the policies adopted by the Council that are the subject of DWR’s Consistency Determination.

DWR’s Consistency Determination also fails to address the three primary statutory elements of the coequal goals with respect to the Project, as described below.

The Project Does Not Provide Water Reliability for California

The Project fails to comply with the co-equal goal of “providing a more reliable water supply for California.” (Water Code, §85054.)

1. The Reliability of Water Supplies within the Delta would Be Harmed by the Project

The Delta Tunnels Project would imperil (and injure) water users in the Delta in a variety of ways. This is unsurprising, since the operation of the Delta Tunnels project would fundamentally change the hydrology of the Delta. Some of the ways in which the Delta Tunnels would reduce water supply reliability in the Delta include:

2. Municipal Water Supply Water Quality Reductions

- Operation of northern Delta diversions under the Delta Tunnels project would significantly reduce the portion of water at the City of Stockton’s intake originating from the Sacramento River, significantly increasing the presence of

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saltier San Joaquin River water at the City's intake. This would degrade the quality of Stockton's drinking water supply and increase drinking water treatment costs for the City and its residents. (STKN-47, Testimony of Paulsen.)

- The City of Antioch's drinking water would also be adversely affected. While Antioch currently has a contract with DWR to assist in meeting local water quality requirements, that contract would expire around the same time the proposed northern Delta Diversions could be completed. (Antioch-300, Antioch-500, Testimony of Paulsen.)
- At the Freeport Facility, a joint project of EBMUD and Sacramento County, operation of northern Delta Diversions would increase the frequency of significant reverse flow events, requiring more frequent shutdowns of Freeport diversions. This would happen when the new intake divert water at the same time as there are low tides or low flows. (EBMUD-152, Testimony of Bray.)
- The North Delta Water Agency contract for reliable water supply would be violated more often under the Project. (NDWA-500, Kienlen, NDWA-502 [modeling results indicate that CWF H3+ results in an increase of up to 5-7 percent in violations of the 1981 Contract during the period from 1976 through 1991].) Operations with higher exports, such as operation under Boundary 1, would likely increase the number of times the Project would be expected to violate the NDWA Contract.

3. *Residential and Agricultural Water Supplies Would Be Threatened*

- Agricultural surface water diversions downstream of northern Delta Diversions would be subject to worsened water quality and lower water levels. Effects on river stage is important because maintaining the stage of the river allows existing irrigation infrastructure to function. The majority of irrigators in the Delta divert water from the river using either a pump or a siphon; to function properly, a minimum depth of water above the intake to the pump or siphon is required.
- Delta farmlands are currently very productive. But in many areas of the Delta with high water tables, increased salinity in irrigation water—even small increases—would negatively affect agricultural productivity. While outside the Delta it may be possible to apply more water to leach out salts, soil and drainage conditions in the Delta make leaching out salts in the soils very difficult.

4. *Interference with Groundwater Uses and Compliance with SGMA*

- In addition to interfering with hundreds of groundwater wells along the 35-mile Tunnels route, DWR and BOR have disclosed that the removal of fresh water from the river would also cause groundwater levels in the vicinity of the Sacramento River to drop up to 5 to 40 feet, as compared to the no action alternative.

(D.1_DRAFT 000713, Developments after Publication of the Proposed FEIR/S; SCWA-200, Mehl.) Such a reduction in groundwater levels would interfere with the ability of Groundwater Sustainability Agencies in the region to reach sustainability. (See SCWA-300, Testimony of Kerry Schmitz; SJC-223, Lambie.)

5. *The Reliability of Water for Export from the Delta Would Not Be Increased*

The Project proponents have presented the results of a model study, CWF H3+, that essentially assumes the Project will operate to existing Delta standards (D-1641). The exports for CWF H3+ are only marginally better than the No Action Alternative (NAA). (See D.1_DRAFT 000713, Developments after Publication of the Proposed FEIR/S, p. 138, Figure 9.)

However, the SWRCB is in the process of updating its Bay-Delta Water Quality Control Plan to incorporate enhanced minimum Delta outflow and San Joaquin inflow at Vernalis objectives and new minimum Sacramento inflow at Freeport objectives, all expressed as percentages of unimpaired flow. The modeling study that most closely approximates these new Delta inflow and outflow objectives is Boundary 2. This modeling study was developed by DWR with input from SWRCB Bay-Delta staff.

The Boundary 2 study shows much lower total south-of-Delta exports than for the No Action alternative. (CCC-SC-59, Figure 3.) Because the Project does not include any addition south-of-Delta export-area storage, it is unable to consistently capture and export enough water in wetter periods to meet both wetter and drier period water demands.

Title 23 CCR 5001, subdivision (h)(1)(C) states that:

(1) “Achieving the coequal goal of providing a more reliable water supply for California” means all of the following:

(A);

(B); and

(C) Water exported from the Delta will more closely match water supplies available to be exported, based on water year type and consistent with the coequal goal of protecting, restoring, and enhancing the Delta ecosystem. This will be done by improving conveyance in the Delta and expanding groundwater and surface storage both north and south of the Delta to optimize diversions in wet years when more water is available and conflicts with the ecosystem are less likely, and limit diversions in dry years when conflicts with the ecosystem are more likely. Delta water that is stored in wet years will be available for water users during dry years, when the limited amount of available water must remain in the Delta, making water deliveries more predictable and reliable. In addition, these

improvements will decrease the vulnerability of Delta water supplies to disruption by natural disasters, such as, earthquakes, floods, and levee failures.

Conveyance-only projects fail to contribute to achievement of the co-equal goals and is not consistent with State law and the Delta Plan.

Possible annual Project exports are those shown for the Boundary 2 operating criteria, which are much less than have been reported by the Project proponents to the Boards of the SWP water contractors. (CCC-SC-67, Figure 3.) The Project fails to provide a more reliable water supply for California.

Total South-of-Delta Exports for the No Action Alternative, the Current Version of the Delta Tunnels Project (CWF H3+) and the Modeling Study that Most Closely Represents the SWRCB's Proposed New Minimum Delta Inflow and Outflow Objectives (Boundary 2)

Modeling Study	Total Water Year SOD Exports (TAF)	Increase in Total WY SOD Exports (TAF)	Percentage Change in Total WY SOD Exports
NAA	4,672		
CWF H3+	4,894	222	4.8
Boundary 2	3,558	-1,114	-23.9

Total south-of-Delta exports assuming the Project would operate to D-6141 conditions (CWF H3+) are estimated to increase by only 5%. If, as is more likely, the Project would operate according to enhanced Delta inflow and outflow requirements identified by the SWRCB (Boundary 2/Alternative 8), total CVP and SWP exports south of the Delta would decrease by 24%.

This conveyance-only Project would likely become a stranded asset if the SWRCB implements its revised Delta inflow and outflow standards because a different configuration, location and capacity of intakes and tunnels, as well as additional storage, may be required to optimize Delta export operations for these new flow standards. Because additional storage in the south-of-Delta export areas is not part of the Project (or even underway in a separate process⁸), the Project fails to contribute to the co-equal goal

⁸ Notably, no major south-of-Delta export-area storage projects were submitted to the California Water Commission as part of its Water Storage Investment Program.

of “providing a more reliable water supply for California.” (Wat. Code, § 85054.) The Project is not consistent with the Delta Plan or in the interests of California.

The Project does not Protect, Restore, or Enhance the Delta Ecosystem

The Tunnels Project is fundamentally incompatible with the goal of restoring the Delta because of the widespread ecological damage that would be caused during both construction and operation of any large new diversion facility. (See, e.g., C_DRAFT 1, CEQA Findings [disclosing numerous significant and unavoidable impacts].) In addition, the Delta Tunnels Project is not a habitat conservation plan and does not include any restoration beyond required mitigation for the Project’s habitat and wetland destruction. DWR’s Consistency Determination documents are replete with references to restoration, but the Delta Tunnels include no restoration other than what is required to minimally mitigate Project effects. Thus, the Project does not protect, restore, or enhance the Delta ecosystem.

The Project Does Not Protect the Delta as an Evolving Place

The Delta Tunnels Project fails to “protect[] and enhance[] the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place” (Wat. Code, § 85054) as required by the coequal goals. A major infrastructure project that does nothing but harm the Delta environment also has only negative impacts on the Delta as a place. Other sections of this Appeal, such as DP P2 and RR P1 discuss specific instances of the Project’s negative effects on the Delta as a place.

The scale and location of the Project, is obvious in its inability to Protect the Delta as a place:

The three Delta Tunnel intakes . . . would be situated in a rural area of Sacramento County near three small unincorporated Legacy communities. Each intake would occupy approximately 90 acres by themselves. (SWRCB-102, FEIR/S, p. 3-91 [Table 3-17 summary of physical characteristics of intake facilities].) Even worse, these three huge intakes facilities would all be situated along the east side of the Sacramento River within a 5-mile stretch.

(LAND-205, Stirling, citing Final EIR/S, p. 3-15.) Accordingly, Delta residents and others, “simply cannot accept that the three huge unsightly concrete infrastructure facilities along the scenic land and waterscapes of State Highway 160 can be considered “protect[ing] and enhance[ing] the Delta as an evolving place.” (LAND-205, Stirling.)

DWR's interpretation of California Code of Regulations, title 14, section 5002, subdivision (b)(1) is erroneous and would eviscerate the requirements of the Delta Plan and its policies. In addition, DWR fails to provide the necessary details to allow the Council to rely on consistency with the coequal goals referenced in title 14 of the California Code of Regulations, section 5002, subdivision (b)(1) as an alternative to comply with the Council's regulatory policies. Remarkably, DWR never even attempts to provide "a clear identification of areas where consistency with relevant regulatory policies is not feasible, an explanation of the reasons why it is not feasible, and an explanation of how the covered action nevertheless, on whole, is consistent with the coequal goals" as required by title 23 of the California Code of Regulations, section 5002, subdivision (b)(1). As described above, DWR's reliance on the Project's alleged consistency with the coequal goals as an alternative basis for compliance for each of the Council's 14 regulatory policies addressed in its Consistency Determination fails.

The Project Would Not Take More Water in Wet Years and Less Water in Dry Years

The 2018 Delta Plan promoted conveyance that would "move more water during wetter periods when supplies are available for both environmental and consumptive uses such that water can be [ex]ported less from the Delta in dryer periods when native fish are more vulnerable." (2018 Delta Plan, p. 99.) DWR attempts to promote the Project as consistent with the co-equal goals, alleging it would captures more water in wetter periods and reduces exports in drier periods when the Delta ecosystem is most vulnerable, the so-called "Big Gulp, Little Sip" concept. (See, e.g., WR P1, p. 3-2.)

In fact, the Delta Tunnels Project does not provide more likelihood of the SWP CVP actually taking "Big Gulps" when there is more water in the system, and "Little Sips" when there is less water. Moreover, there are no operational requirements associated with the Project that would require "Big Gulp, Little Sip" operations, and there are insufficient south of Delta water storage facilities (currently and in the foreseeable future) to hold water that might otherwise be exported from the Delta during wet periods. As a result, DWR's promises that the Project would export more in wet period and less in dry periods is nothing more than a slogan.

The Delta Plan recognizes that:

System capacity and operational flexibility are needed to create more natural, variable flows and improve temperature conditions to support ecosystem health, maintain water quality for in-Delta uses, and move more water during wetter periods when supplies are available for both environmental and consumptive uses such that water can be exported less from the Delta in dryer [sic] periods when native fish are more vulnerable.

(See DWR’s Coequal Goals, p. 2, quoting 2018 Delta Plan, Ch. 3, p. 99, emphasis added.) DWR’s discussion of WR P1 claims that:

. . . California WaterFix is designed to improve water supply reliability by improving the ability to capture water under existing water rights during wet years and store it for use during dry years, protecting against water supply disruptions associated with catastrophic system failures caused by earthquakes or failed levees, and protecting against water supply disruptions associated with sea level rise caused by climate change.

(WR P1, p. 3-2, emphasis added.)

“The ‘Coequal goals’ means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.” (Wat. Code, § 85054.) In addition, “achievement” for the purpose of determining whether a plan, program, or project meets the definition of a “covered action” under section 5001(j) is further defined as follows:

(1) “Achieving the coequal goal of providing a more reliable water supply for California” means all of the following:

(A) Better matching the state's demands for reasonable and beneficial uses of water to the available water supply. This will be done by promoting, improving, investing in, and implementing projects and programs that improve the resiliency of the state's water systems, increase water efficiency and conservation, increase water recycling and use of advanced water technologies, improve groundwater management, expand storage, and improve Delta conveyance and operations. The evaluation of progress toward improving reliability will take into account the inherent variability in water demands and supplies across California;

(B); and

(C) Water exported from the Delta will more closely match water supplies available to be exported, based on water year type and consistent with the coequal

goal of protecting, restoring, and enhancing the Delta ecosystem. This will be done by improving conveyance in the Delta and expanding groundwater and surface storage both north and south of the Delta to optimize diversions in wet years when more water is available and conflicts with the ecosystem are less likely, and limit diversions in dry years when conflicts with the ecosystem are more likely. Delta water that is stored in wet years will be available for water users during dry years, when the limited amount of available water must remain in the Delta, making water deliveries more predictable and reliable. In addition, these improvements will decrease the vulnerability of Delta water supplies to disruption by natural disasters, such as, earthquakes, floods, and levee failures.

(23 CCR, § 5001, subd. (h)(1)-(3).)

This “Big Gulp, Little Sip” concept is also spelled out in the Council’s “*19 Principles for Water Conveyance in the Delta, Storage Systems, and for the Operation of Both to Achieve the Coequal Goals*” (March 2016). Principle 12 states that:

12. Storage and conveyance should be operated by storing water in wet periods and reducing diversions in dry periods to (a) protect water quality in the Delta, (b) provide more natural, functional flows, and (c) enhance Delta inflows and outflows, consistent with the needs of the Delta ecosystem and water users.

However, a detailed review of the Delta Tunnels modeling data shows that the Project fails to comply with the “Big Gulp, Little Sip” concept.

The Delta Tunnels Fail to Facilitate “Big Gulps” When There Is More Water

The current SWP and CVP system in the Central Valley and Delta has insufficient south-of-Delta export-area storage to capture and store large quantities of “new” (additional) exported water during wet periods. During the very wet winter of 2017, for example, San Luis Reservoir filled relatively quickly during this wet period and there is then nowhere to quickly store water. At this time there was also reduced demand for water south of the Delta because agricultural fields and urban lawns were already saturated. (See 2018 Delta Plan, Chapter 3, p. 72.)⁹ As a result, the diversion of water at the south Delta export pumps then dropped well below capacity. (See CCC-SC-10.)

⁹ In wet years, due to plentiful local rainfall, agricultural and urban landscape irrigation water demands are generally lower.

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The computer modeling of Project operations shows similar reductions in exports once San Luis Reservoir is full, ending the opportunity to take a “Big Gulp.” (CCC-SC-11.) The available aqueduct and canal capacity south of the Delta is also a factor limiting how much water can be exported during wet periods. This problem would not be solved by merely adding new diversions in the northern Delta.

The Delta Tunnels Fail to Limit Diversions to “Little Sips” When There Is Less Water

Project modeling performed by DWR of proposed initial operating criteria CWF H3+ suggests that in many dry months when Delta outflows are very low and the Delta ecosystem is stressed, the Project would increase south-of-Delta exports above the existing typical combined permitted capacity of 11,280 cfs. In some cases, dry-period total exports would be increased by as much as 30 percent (to the Delta export capacity of 14,900 cfs). The Project, CWF H3+, therefore, fails to comply with the “Little Sip” concept and threatens the already vulnerable Delta ecosystem. (See CCC-SC-63.)

The increase of exports in dry and critically-dry periods under the proposed Project is apparent from DWR’s bar charts of south-of-Delta exports. (D.1_DRAFT 000713, Developments after Publication of the Proposed FEIR/S, p. 138, Fig. 9.) DWR’s Figure 9 reproduced below shows south of Delta exports increase in dry and critical years, which conflicts with DWR’s claim that the Project would reduce exports in drier periods.

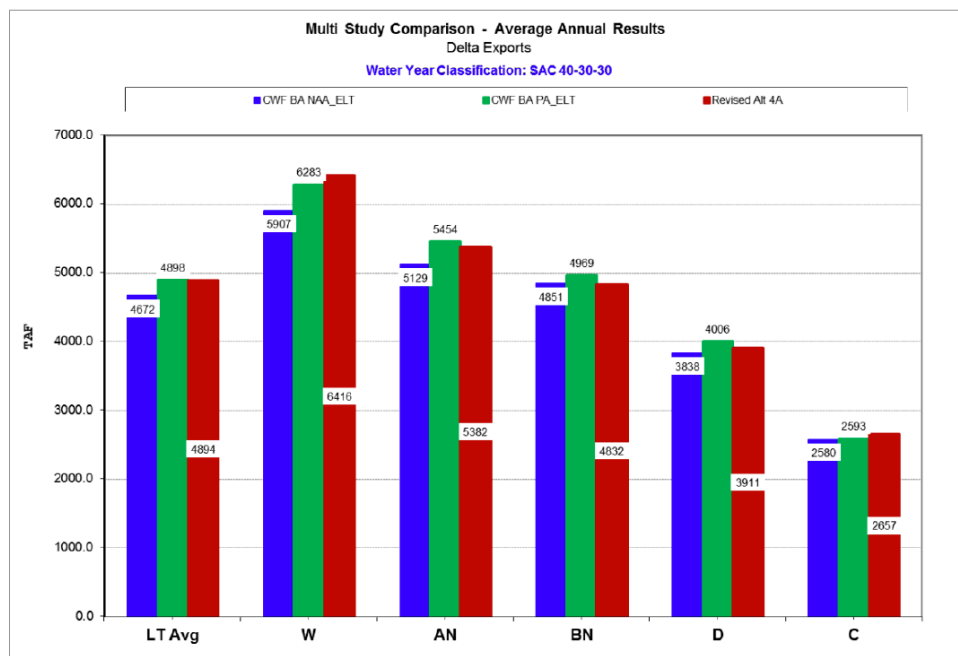


Figure 9. Annual (Oct-Sep) Delta Exports by WYT [WYT per current climate]

**Annual (Oct-Sep) Delta Exports by Water Year Type in Thousand Acre-Feet (TAF)
[WYT per current climate]**

Water Year Type	NAA	CWF H3+	Increase
Wet	5,907	6,416	509
Above Normal	5,129	5,382	253
Below Normal	4,851	4,832	-19
Dry	3,838	3,911	73
Critical	2,580	2,657	77
All	4,672	4,894	222

(D.1_DRAFT 000713, Developments after Publication of the Proposed FEIR/S, p. 139; see also DWR-1292, Reyes Technical memo, p. 1.)

Similar data were presented by DWR in Part 2 of the CWF Change Petition Hearing. Figure 1 in DWR-1292 shows the same south-of-Delta export data by water year type. Exports increase with CWF H3+ in dry and critical years. Figure 2 shows the corresponding Delta outflow data for CWF H3+. The Project would decrease Delta outflows in dry and critical years, which would increase the risk to key fish species and adversely impact an already stressed Delta ecosystem. This is not consistent with the Delta Plan.

The intent of the “Big Gulp, Little Sip” concept is to capture more water during wetter months and save it in south-of-Delta storage so that exports can be reduced, and Delta outflows increased during drier months, (e.g., in dry and critical water years) to help restore and sustain the Delta ecosystem. Relying on exports from the Delta during the driest periods is also in direct conflict with WR P1 (23 CCR, § 5003) Reduce Reliance on the Delta.

As part of the current water rights change petition before the SWRCB, the SWRCB could add a permit term to the SWP and CVP water rights that ensures the proposed Project does not rely on exports from the Delta during dry periods. A limit on exports based on Delta outflow would limit and reduce exports during drier periods (i.e., achieve the “Little Sip” concept) and help improve, restore and sustain the Delta ecosystem. But until the SWRCB makes a decision on permit terms and amends CVP and SWP water rights, this consistency determination is premature, as recognized by the

Council's prior plan to consider the Project's consistency only after the SWRCB Hearing was concluded.

Conclusion

The Delta Tunnels Project is still in flux and not ripe for consistency review. The Project as currently defined is inconsistent with the Council's adopted regulatory policies, which is demonstrated in the remainder of this Appeal. DWR's attempt to rely on consistency with the coequal goals as an alternative to compliance with the Council's regulatory policies also fails. Though the Delta Tunnels Project is not consistent with the Delta Plan and 2009 Delta Reform Act, there are better alternatives that could achieve the coequal goals. Only by granting this Appeal (along with any others filed)¹⁰ and remanding the action to DWR, can the Council encourage alternatives that do implement the 2009 Delta Reform Act and carry out its statutory consistency review duties. The following sections of this Appeal detail additional specific bases for the Project's inconsistency with the Council's regulatory policies and other applicable requirements.

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¹⁰ DCL joins in the appeals filed by Sacramento County, South/Central Delta Water Agency, Friends of the River et al. and North Coast Rivers Alliance et al.

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Increased Exports During Dry Periods, CCC-SC-63

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The Delta Plan Programmatic EIR (“PEIR”) includes extensive mitigation measures that apply to covered actions through G P1(b)(2) (23 CCR, § 5002). These mitigation measures are meant to ensure covered actions conform to the coequal goals and the Delta Plan. DWR, rather than abide by the PEIR mitigation measures, has failed to integrate these necessary protections into the Project.

The Project’s Mitigation Measures are Inadequate and are Not Consistent with G P1(b)(2) Requirements

DWR claims that the Project is consistent with G P1(b)(2), Mitigation Measures. (G P1(b)(2), p. 1.) DWR further claims all of the mitigation measures proposed in the Final EIR/S have been adopted and incorporated into the enforceable MMRP for the Project. (See Pub. Resources Code, § 21081.6, subds. (a)(1) and (b).)

The Project would cause numerous significant and unavoidable impacts on the Delta and its residents. To achieve compliance with the Delta Plan, DWR must demonstrate that the Project includes each applicable mitigation measure from the PEIR. (23 CCR, § 5002, subd. (b)(2).) Rather than actually show that the Project’s mitigation measures are substantially similar to the PEIR measures, DWR makes blanket statements that the “California WaterFix project description and mitigation measures are the same as, equal to or more effective than the Delta Plan mitigation measures” (G P1(b)(2), Attachment 1, p. 1-2) or claims that “there are numerous regulatory programs that provide a framework for regulating [impact area] and in some cases, there is a significant overlap among programs” (G P1(b)(2), pp. 1-1, 1-3, 1-5). When a required PEIR mitigation measure overlaps with a significant and unavoidable impact, rather than commit to applying the mitigation measure, DWR merely quotes the FEIR/S. (See G P1(b)(2), Attachment 1, p. 1-2 [citing FEIR/S, p. 7-121].) But the quoted sections of the FEIR/S do not demonstrate compliance with G P1(b)(2).

DWR’s approach to the G P1(b)(2) consistency determination is inadequate. DWR fails to demonstrate any of the Project’s mitigation measures are consistent or comparable to the PEIR mitigation measures. Below are specific examples that demonstrate the inadequacy of the Project’s mitigation measures in light of G P1(b)(2).

Water Quality Mitigation Measures

Delta Plan Mitigation Measure 3-1 includes mitigation to avoid violation of water quality standards. (G P1(b)(2), p. 1-1.) Mitigation measures proposed by DWR for the significant adverse impacts on water quality in the Delta are inadequate and do not include a firm commitment to fully offset the increase in salinity that would be caused by the Project. For instance, DWR proposes Mitigation Measure WQ-11e: *Implement Real-time Operations, Including Adaptively Managing Diversions at the North and South Delta Intakes, to Reduce or Eliminate Water Quality Degradation in the Western Delta.* (C_DRAFT 1, CEQA Findings, p. 27.)

DWR acknowledges that modeling results for the Project (at that time, Alternative 4A) indicates water quality degradation for electrical conductivity (“EC”) in the Sacramento River at Emmaton in the months of July through September of below normal, dry and critical water year types, relative to the No Action Alternative. To address EC degradation at Emmaton, DWR proposes to manage upstream reservoir releases on a daily basis and adaptively manage the split between north and south Delta diversions of below normal, dry and critical water years. Allowing sufficient flow in the Sacramento River at Emmaton, through real-time operations, would contribute to reduced EC levels at this location, relative to that modeled for the project alternative, and would reduce EC degradation at Emmaton in late August and September to less-than-significant levels.

Avoiding, minimizing or offsetting, as feasible, reduced water quality conditions (WQ-11) only for water quality degradation at Emmaton in the western Delta does not address the significant adverse salinity impacts at other Delta locations, such Prisoners Point, Old River at Bacon Island and in the south Delta. In addition, the assumption that WQ-11e would actually reduce otherwise significant salinity impacts to less than significant is unfounded.

It is State policy that the Bay-Delta should be managed to achieve the inherent objective of improving water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta. (Wat. Code, § 85020, subd. (e).) DWR’s proposed Project CWF H3+ significantly degrades water quality in the Delta without providing any meaningful or adequate mitigation for that salinity degradation, among other water quality effects.

Groundwater Mitigation Measures

Delta Plan Mitigation Measure 3-2 (“MM 3-2”) requires surveys for wells adjacent to construction sites, and continuous monitoring of those wells if dewatering is

necessary. If dewatering would result in adverse declines in groundwater, then sheet piles must be installed, additional water supplies must be trucked in, or wells must be deepened. (PEIR, Appendix B, p. B-1.)

DWR concedes that the Project would interfere with groundwater recharge due to dewatering. (FEIR/S, p. 7-118 to 119.) Some areas would see dewatering lower groundwater levels up to 20 feet and interrupt the sustainable yield of some wells. (FEIR/S, p. 7-50.) Mitigation measure GW-1 is intended to address this impact, and DWR purports that will reduce the impact to less than significant levels. (FEIR/S, p. 7-119.) However, GW-1 does not meet the criteria of MM 3-2. GW-1 only requires monitoring for up to five years into operation. (C_DRAFT 2, MMRP, pp. 2-4 to 2-5.) Project impacts on groundwater recharge may take years to reveal themselves, and would continue indefinitely as long as the Project was operated. GW-1 would also only monitor wells within 2 miles on either side of the Project. (*Ibid.*) GW-1 does not describe the method for identifying potentially impacted wells, and it does not account for the possibility that Project operations would result in reduced well yields. (*Id.* at 2-6.) GW-1 does not include any enforceable requirements consistent with MM 3-2, and this impermissible deferment violates G P1(b)(2).

PEIR Mitigation Measure 21-2 (“MM 21-2”) requires intakes and diversions to operate in a manner that accounts for future surface water rises due to climate change. (PEIR, Appendix B, p. B-32.) MM 21-2 also requires preparation of hydrogeologic studies to assess long-term groundwater recharge. (*Ibid.*) DWR flatly rejects the applicability of these MM 21-2 requirements. (G P1(b)(2), Attachment 1, p. 1-66.) That the Project “does not rely on groundwater” is irrelevant for the applicability of MM 21-2. The text of MM 21-2 does not qualify applicability for covered actions that rely on groundwater, and DWR offers no explanation for this interpretation. Moreover, the fact that the Project would reduce storage in the South American and Eastern San Joaquin subbasins supports applying MM 21-2. (See SJC-223, Lambie, p. 7.) Due to the Project’s north Delta diversions, the overall quantity and rate of groundwater recharge for these basins would be chronically reduced. (*Id.* at pp. 15, 22.) DWR’s formulation of mitigation does not fully account for the Project’s deleterious effects on groundwater caused by reductions in the wetted area of the Sacramento River that would be caused by the proposed northern Delta diversions. Because of this approach, DWR failed to show consistency with MM 21-1.

Biological Resources Mitigation Measures

PEIR Mitigation Measures 4-1 (“MM 4-1”) and 4-2 (“MM 4-2”) require extensive efforts to avoid harmful impacts to natural communities and special-status species, respectively. (PEIR, Appendix B, pp. B-2 to B-4.) The fact that the Project would

significantly and negatively impact natural communities and special status species (see C_DRAFT 1, CEQA Findings, pp. 148-185 [over 30 significant impacts to terrestrial biological resources alone]) indicates an inconsistency with MMs 4-1 and 4-2.

DWR has failed to implement advanced mitigation planning for ecosystem restoration prior to construction as required by MM 4-1. DWR concedes that specific locations for ecosystem restoration have not been determined nor has any of the necessary subsequent environmental review been conducted. (G P1(b)(2), p. 1-3.) Each ecosystem restoration environmental commitment states that DWR “will prepare and implement a plan[.]” (See C_DRAFT 2, MMRP, pp. 5-6 through 5-13.) DWR’s failure to implement advanced mitigation planning violates MM 4-1 and G P1(b)(2).

DWR relies on a legally unprecedented “no net take” approach to its evaluation of impacts to special-status species. DWR does not argue that the Project will not result in the take of special-status species such as the Greater Sandhill Crane, a Fully Protected species under state law. (FEIR/S, p. 12-3552 [planned mitigation would only reduce Greater Sandhill Crane power line impacts by 60%].) Despite the fact the Project would result in take of Greater Sandhill Crane, DWR fails to demonstrate that it can and will restore or preserve in-kind suitable habitat as required by MM 4-2. DWR’s reliance on ineffective mitigation for take of special-status species violates MM 4-2.

DWR has also failed to demonstrate consistency with PEIR mitigation measure 4-4 (“MM 4-4”), which requires the expansion of existing wildlife refuges for migratory birds. Again, DWR’s deferral of mitigation prevents consistency with G P1(b)(2). Given that the Project’s environmental commitments and AMMs applicable to MM 4-4 lack enforceable requirements, compliance with MM 4-4 and others is practically infeasible. (See C_DRAFT 2, MMRP, p. 5-11 [no timeframe established for when grassland community sites need to be selected or surveyed, no articulable standards given for potential sites].) In addition, the Project would negatively impact habitat values on Stone Lakes National Wildlife Refuge, which is also inconsistent with MM 4-4.

Agricultural Mitigation Measures

DWR entirely failed to design the Project in a manner consistent with PEIR mitigation measure 7-1 (“MM 7-1”). The first requirement of MM 7-1 is to “[d]esign proposed projects to minimize . . . the loss of the highest valued agricultural land.” However, the Project would result in the permanent conversion of 3,909 acres of prime farmland and temporary conversion of 1,495 acres of prime farmland. (FEIR/S, p. 14-36, Table 14-8.) Mitigation measure AG-1, intended to address the permanent and temporary conversion of important farmland, only requires the consideration of an “Optional Agricultural Land Stewardship Approach[.]” (C_DRAFT 2, MMRP, p. 2-45.) MM 7-1

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explicitly requires the development of agricultural conservation easements or contributions of funds to a land trust. (PEIR, Appendix B, p. B-8.) The noncommittal nature of AG-1 is inconsistent with MM 7-1 and G P1(b)(2).

AG-1 does not include any of the other requirements of MM 7-1 (see C_DRAFT 2, MMRP, pp. 2-41 to 2-48), nor do any of the other mitigation measures cited by DWR (see C_DRAFT 2, MMRP, pp. 2-4 [GW-1], 2-7 [GW-5], and 2-13 [WQ-11]). DWR has failed to demonstrate any consistency with MM 7-1.

Conclusion

DWR's total failure to provide consistency analysis for G P1(b)(2) results in an oblique document that reveals little about the Project or its mitigation measures. Boilerplate citations to mitigation measures without context are insufficient to demonstrate consistency with G P1(b)(2). Moreover, as described above with respect to a few key mitigation measures, the Project's mitigation measures are inconsistent with the requirements of the PEIR. DWR has failed to mitigate against some of the Project's worst impacts on water quality, groundwater and biological resources and the Project is inconsistent with both G P1(b)(2) and the coequal goals.

References

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Introduction

Project proponents have allowed the export water contractors to develop a flawed Project and valuable input from Delta interests and environmental organizations, and even other State Agencies (e.g., Delta Independent Science Board) has gone unanswered. The Delta Independent Science Board's September 30, 2015 letter indicates in no uncertain terms that the BDCP/CWF is "*sufficiently incomplete and opaque to deter its evaluation and use by decision makers, resource managers, scientists and the broader public.*" (CCC-SC-20.)

When an agency applies scientifically inadequate or incorrect modeling, ignores relevant data, fails to develop appropriate conceptual models, or relies on non-experts to the exclusion of experts, the agency undermines the legitimacy of its project and its own environmental review. Agencies must use the BAS to ensure the effectiveness of a project and necessary mitigation, and to protect the public trust. (Wat. Code, §§ 85302, subd. (g), 85308, subd. (a).) DWR failed to use the Council's BAS requirements (23 CCR, § 5002, subd. (b)(3)) in forming the Project, evaluating its impacts, and in forming mitigation for those impacts DWR did identify.

Inconsistency with G P1 (b) (3) Best Available Science

Use of BAS provides a firm foundation using contemporary science to conceive the best project, and demonstrate evidence that a project has transparently taken all of the steps to inform itself about the adequacy of its analysis and conclusions. The Project is required to use "best information and data to assist management and policy decisions." (Delta Plan, Appendix 1A, p. 1A-1.) The Council settled on six criteria, defined by a National Research Council committee, to evaluate the underlying scientific information used to form and analyze a project:

- Relevance* goes towards the information's applicability to the conditions of Delta.
- Inclusiveness* requires a "thorough review of relevant information and analyses across relevant disciplines."
- The *objectivity* criterion requires adherence to recognized standards of the scientific method.
- Transparency* and *Openness* apply to sources of information and methods of

application, which must be appropriately divulged.

-*Timeliness* requires both data collection prior to decision-making and the applicability of scientific information to current circumstances.

-*Peer Review* “ensures scientific objectivity and validity” by coordinating with external entities not involved with the proposed project.

(See Delta Plan, Appendix 1A, p. 1A-2.)

DWR Failed to Follow BAS Criteria and the Scientific Method

“Best available science is developed and presented in a transparent manner consistent with the scientific process (Sullivan et al. 2006), including clear statements of assumptions, the use of conceptual models, description of methods used, and presentation of summary conclusions.” (Delta Plan, Appendix 1A, p. 1A-1.) DWR addresses each of the six criteria to evaluate the Project’s underlying scientific information in only a cursory manner. Though “best available science requires scientists to use the best information and data to assist management and policy decisions” (Delta Plan, Appendix 1A, p. 1A-1), it is clear that the Project was determined first on a policy basis and science was shoehorned in later.

The lack of BAS is evidenced not only by the paucity of supporting material for DWR’s claims of consistency with the Council’s BAS policy, along with DWR’s numerous caveats to BAS consistency. DWR fails to demonstrate that it meets the six criteria for BAS, fails to show how its application of the co-equal goals to the relevant policy was achieved, and it fails to show how the scientific method was applied. Ironically, in DWR’s claims of consistency with BAS are simply assertions with no reference to scientific method.

A striking illustration of the failure of DWR to apply the Council’s BAS requirements using the six BAS criteria is the lack of disclosure and analysis of the likelihood that the Project will increase HABs. The Project would impact the ecological drivers of HAB formation, and DWR fails to offer scientific explanation proving otherwise. (D.8_DRAFT 023506, SJC-4, Ringelberg, p. 2.) The Project would reduce flows at Freeport to levels mirroring critically dry years and increase water residence times, two effects that are clearly shown to influence HAB growth and proliferation. (*Id.* at p. 5; see also SJC-200, Brett, p. 2.) The acute toxicity, human and animal health dangers presented by HAB warranted specific investigation and DWR abdicated that responsibility. (*Id.* at p. 4, 6-8.) Doing so is inexcusable, as similar and Delta specific models are available for analyzing HAB formation. (*Id.* at p. 3; see D.8_DRAFT

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023532, SJC-46, Durand, 2008; D.8_DRAFT 023534, SJC-47, Tango, 2009.) DWR failed to follow the BAS process for HABs.

The basic scientific process described in Appendix 1A to identify the scientific question of Project's HABs impacts as a hypothesis, aggregate and synthesize the available information from this and similar watersheds, use or develop a relevant conceptual model, and finally consult and apply external expertise, was not followed. Instead, the Final EIR/S analysis of HABs provides a few literature citations and a conclusion that HABs impact was not significant without any scientific basis. Furthermore, there is no mechanism proposed to monitor when a threshold for HABs has been exceeded and there is no scientifically founded mitigation for this Project impact. The impacts, monitoring, and adaptive management for Project-influenced HABs should have been developed using the Council's BAS approach.

The Project's diversions from the Sacramento River in the northernmost portion of the Delta would reduce inflows of freshwater that help control salinity downstream of the proposed diversions. (D.8_DRAFT 023145, II-24, Ringelberg, p. 6.) DWR failed to recognize salinity impacts due to several scientific errors: failing to use predictive modeling (the Project only used comparative models, and in some cases using superseded project parameters); failing to apply the model to operational impacts; and, poor data selection and gathering. (*Id.* at 7.) These conceptual and modeling errors violate both the *relevance* and *inclusivity* criteria of BAS.

DWR also entirely ignored the effects of salinity increases on agricultural resources, even though methods exist to quantify the Project's impacts. (D.8_DRAFT 023725, LAND-78, Leinfelder-Miles Testimony, pp. 2-3; see D.8_DRAFT 023726, LAND-79, Leinfelder-Miles Testimony, 2016.) Increased salinity in irrigation water creates present and future problems for agricultural uses of land, because it harms existing crops and increases salt accumulation in soil over time. (*Id.* at 4.) Very small increases in long term salinity levels can have detrimental impacts on agricultural yields. (*Id.* at 4-5; D.8_DRAFT 002235, II-15, Ayers and Westcot, 1985.)

DWR's analysis of salinity impacts on agriculture fails to rely on a soil expert or an agronomist to analyze how increases in soil salinity could have detrimental impacts on agricultural yields. Instead, DWR relied solely on modeling and discussed salinity in terms of D-1641 compliance. (D.8_DRAFT 022590, DWR-66, Nader-Tehrani Testimony, pp. 1, 4.) DWR's failure to fully disclose and consider salinity impacts, along with reliance on nonexpert opinion to justify conclusions regarding salinity impacts on water quality in the Delta, violate the *relevance* and *inclusivity* criteria of BAS.

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DWR's refusal to address effects of long-term incremental increases in salinity is also a failure to apply BAS.

DWR also failed to include any discussion of the science used to evaluate terrestrial biological resource impacts or mitigation measures in its BAS consistency analysis. Thus, DWR does not disclose the inadequacy of mitigation for the Project's impacts on Greater Sandhill Cranes, which are fully protected under California law. (Fish & G. Code, § 3511.) The Project would cause impermissible take of Greater Sandhill Cranes in the Delta by increasing power line impacts (FSL-21, Ivey, pp. 4-8) and flushing the birds from their habitat during construction (SOSC-80, Wirth Testimony, pp. 2-3; SOSC-21, Pandolfino Testimony, p. 4). With respect to mitigation from the Project's power line impacts, DWR proposes to install flight diverters. (MMRP, p. 4-33, C_DRAFT-2.)

The science relied upon to determine Project impacts on Cranes underestimates impacts and overestimates the benefits of diverters as mitigation. DWR's analysis of impacts and use of the flight diverters, unacknowledged in GP 1(b)(3), is irrelevant, untimely and otherwise not BAS. DWR relies primarily on a 1995 study of flight diverters in the San Luis Valley in Colorado. (SOSC-80, Wirth Testimony, p. 5, citing D.8_DRAFT 001613, SOSC-35, Brown and Drewien, 1995.) Yet fog patterns in the San Luis Valley and the Delta "vary dramatically." (*Ibid*; see also SOSC-21, Pandolfino, p. 3.) Fog plays an important role in bird power line impacts and lessens the positive impact of diverters. (*Ibid*.) Multiple studies suggest that biases in historical studies of power line impacts underestimate crane collisions. (*Id.* at p. 6; SOSC-21, Pandolfino, p. 2.) The one study undertaken in the Delta confirmed that biases in fatality estimates due to predation of birds killed by powerlines leads to underreporting. (SOSC-80, Wirth, p. 6, citing D.8_DRAFT 020938, SOSC-59, Yee, pp. 16, 41.) DWR's failure to fully consider these available studies when forming avoidance measures to prevent take of Greater Sandhill Cranes, shows that DWR was *underinclusive* and did not use BAS.

As to Project construction impacts to Greater Sandhill Cranes, DWR used a 60 dBA noise threshold of significance for birds and wildlife. (FEIR/S, p. 12-3555.) This threshold has two problems: first, scientific evidence indicates a 50 dBA is appropriate (LAND-148, Dooling and Popper, 2007); second, the specific character of the noise, its frequency, can be as disruptive as absolute noise levels, a factor for which DWR fails to account because DWR made no attempt to apply BAS (LAND-135, Shilling, p. 3). DWR's method for calculating construction noise in general is scientifically dubious, further casting doubt on the FEIR/S conclusions relating to noise impacts. Averaging noise levels over time periods necessarily masks peak noise levels, providing an

incomplete assessment and underestimation of noise impacts. (LAND-135, Shilling, p. 5.)

DWR also underestimates air quality impacts due to an incorrect modeling approach. Air pollutants can be transported from their basin of origin to another basin due to weather patterns. (ECOS-11, Lamare Testimony, p. 4.) DWR does not account for interbasin transport, and only analyzes air quality in each basin on an individual basis. (*Ibid.*) Doing so means that basins impacted by pollutants originating elsewhere will not receive necessary mitigation. (*Ibid.*) Further, such an approach leads to accounting errors, including indirect emissions that are not accounted. (*Id.* at 5.) Application of BAS would have shown that ignoring air impacts from the Project due to arbitrary political boundaries does not adequately characterize impacts to human health and the environment.

These practical examples of DWR's illustrate failure to follow BAS and the potential consequences to the environment from that failure. The Project, if it was following BAS in its most simple version, would have identified the question of potential impacts, collected and weighed the relevant contemporary scientific information; and would not be surprised by the nature and the extent of the potential impacts, be aware of countervailing studies, and would have scientific responses to its critics. Instead, DWR claims BAS is a general concept that really does not apply.

DWR's Analysis of BAS Criteria Is Flawed

Globally, DWR does not discuss those environmental and ecological implications or even identify the questions that should have been the foundation of the actual application of BAS. Instead DWR simply says the Project's general approach followed BAS. A few examples of this flawed approach are discussed below.

With respect to *Inclusiveness*, DWR States: "The Final EIR/EIS incorporated all references, and DWR testimony, from the Biological Assessment and Part 1 of the Water Board hearings. Electronic copies of these reference documents are available upon request to DWR as well. We have not included the titles of the references here due to the volume." (GP1(b)(3), p. 2-1.) The BAS perspective of *Inclusiveness* by definition would include peer reviewed and other scientific analyses by outside experts, including experts appearing in the SWRCB Hearings, not just DWR's own paid expert testimony.

With respect to *Objectivity*, DWR claims that: "The California WaterFix project collected data and performed analyses that meet the standards of the scientific method and are void of nonscientific influences to make decisions. Analyses informing decisions

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were improved and more robust as a consequence of several external reviews and the use of analytical tools.” (GP1(b)(3), p. 3-1.) This is another unsupported assertion. Webster’s Dictionary defines the scientific method as: “principles and procedures for the systematic pursuit of knowledge involving the recognition and formulation of a problem, the collection of data through observation and experiment, and the formulation and testing of hypotheses.”¹ DWR provides no evidence of any formulation and testing of hypotheses, or of consistent use of any other part of the scientific method.

While DWR addressed public and technical comments in a generic and unscientific manner during the environmental review process, the GP 1(b)(3) document does not discuss evidence submitted by others during the SWRCB Hearings bearing specifically on the underlying science relied on by DWR. The rejection of external scientific analysis and citations in generic CEQA responses, and the exclusive ‘cherry picking’ of its own experts’ submittals to the SWRCB Hearings, while ignoring all other experts’ submittals is a direct contradiction of the intent and the specifics of the *Objectivity* BAS Criteria. DWR provides an incomplete assessment of the science behind the Project and fails to demonstrate consistency with GP 1(b)(3) and Appendix 1A.

Since DWR asserts, but does not supply evidence, that it followed the scientific method, it cannot be consistent on that basis. That only leaves the Council’s 6 criteria, or its political position that it does not actually need to be consistent with GP 1(b)(3) and Appendix 1A. (Coequal Goals, p. 1.) Since DWR identifies it is selectively ignoring contrary expert opinion, it is not consistent with the BAS *Inclusive, Transparency and Openness, Objective* and *Timely* criteria.

With respect to *Timeliness*, DWR asserts “As additional information has come to DWR’s attention through stakeholder comments, State Water Board change petition process proceedings, or as a result of CEQA litigation, DWR has been taking this information into account and will release a supplemental or subsequent environmental document if needed to address this information.” (GP 1(b)(3), p. 5-1.) The BAS objective of *Timeliness* is not met by an incomplete, erroneous, or biased analysis by the Project proponent being called into question in a legal proceeding, and then being forced to take that information into account. Quite the contrary, the approach taken by DWR has been to ignore each of the BAS criteria, including *Relevance, Inclusiveness, Objectivity*. To claim that litigation spurred it to be *Timely* is facetious. It appears that DWR takes the position that at some future time it will meet BAS, maybe.

¹ <https://www.merriam-webster.com/dictionary/scientific%20method>

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The Council should not accept DWR's utter failure to demonstrate consistency by any objective measure of consistency with the Council's own requirements, the scientific method, or even the coequal goals. The Council has been provided statements by DWR that it does, may or may not meet consistency. DWR is definitive in its statement that sufficient information has been provided to the Project by outside experts that it is considering new analysis. (GP 1(b)(3), p. 5-1.) The Council should either reject the Project's consistency with BAS or wait until the Project provides additional analysis that shows it now meets BAS.

Alleged Compliance with the Coequal Goals Does Not Excuse Failure to Apply BAS

DWR asserts in a footnote 1 of the GP 1(b)(3) consistency determination that the Project may not be consistent with the Appendix A1 specific BAS requirements:

If it is determined by the DSC Delta Council that a Delta Plan policy DWR finds to be not applicable to California WaterFix, in fact does apply to portions of California WaterFix, and/or full consistency with the policy as interpreted by the Council is not feasible, California WaterFix should still be found to be consistent with the Delta Plan

(GP1(b)(3), p. ii, fn. 1.) But DWR's consistency analysis does not describe how the Project meets the coequal goals in their form or substance, in lieu of meeting Appendix 1A BAS criteria. Instead, DWR recasts the specified criteria for consistency in a series of simplified assertions of consistency, relying on the fact that the Project description has been challenged legally and that the litigation is some form of *Timeliness* or *Peer-Review*, and that summary public comments were sufficient responses to complex technical and scientific rebuttals.

DWR's approach to demonstrating consistency lacks scientific merit. Instead it is a recapitulation of the same statements that defined the original analysis. In any case, there was insufficient, or in most cases simply no analysis, of the coequal goals as they relate to the BAS requirements.

In its Certification of Consistency for the coequal goals, however, DWR goes on to claim that:

Not every covered action must meet statutory objectives under the Act independent of the coequal goals. (See California Water Code, § 85020, subd. (b).) Thus, California WaterFix, by itself, may not sufficiently protect and enhance the unique cultural, recreational, and agricultural

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values of the Delta as an evolving place (although as the Final EIR/EIS and record of outreach and engagement with Delta stakeholders demonstrates, DWR has done its best to minimize and mitigate adverse effects on cultural, recreational, and agricultural values.

(DWR Coequal Goals, p. 4.) So, instead of meeting the BAS consistency requirements, DWR claims reliance on consistency with the broadest policy of the Delta Reform Act, except that DWR further states that it might not meet those legal fundamental requirements *either*, without any further analysis.

Conclusion

Instead of applying BAS, DWR ignores relevant data, or relies on faulty modeling, resulting in underestimated or entirely overlooked Project impacts. It appears that rather than applying BAS, DWR simply sought out information that would reinforce its predetermined course of action to pursue the Project. DWR's approach violates the Council's adopted BAS criteria.

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Introduction

For effective adaptive management, an adaptive management plan must be structured and comprehensive, utilize scientific method in management, be free of political pressure while including stakeholders, be adequately funded, and include firm triggers to ensure timely management actions. Adaptive management is meant to provide a range of management options for operational flexibility. Adaptive management is not intended to be “used in place of developing good up-front conservation measures or to postpone difficult issues[.]” (LAND-243, Murphy and Weiland, p. 3.) DWR’s adaptive management plan does not adhere to these principles and is inherently flawed.

Inconsistency with G P1(b)(4) Adaptive Management Program

Adaptive management, as defined in Water Code section 85052, is a decision-making framework and process that accounts for changes in circumstances and is intended to foster improved planning and implementation of a project. Water Code section 85308, subdivision (f) mandates covered actions include adaptive management programs consistent with the Delta Plan. DWR found the PAMP consistent with G P1(b)(4), the Delta Plan adaptive management process. DWR’s conclusion is incorrect and the PAMP is not consistent with G P1(b)(4).

The PAMP is an action plan to implement legally required “mitigation measures, environmental commitments, AMMs of the MMRP and permit conditions” but nothing more. (G P1(b)(4), Attachment 1, p. 1.) The PAMP purportedly would account for environmental changes in the Delta, apply modeling, and monitor the effectiveness of implemented management measures. (*Ibid.*) Each of these actions is meant to hedge against uncertainty in the future management actions. (*Ibid.*) However, the process by which the PAMP was developed has resulted in entrenched flaws that undermine its potential.

It is important to note that under the PAMP, operations under Boundary 1 represents the lower (worst case) range of Adaptive Management, and comes with serious water quality impacts and fish impacts due to no Fall X2 requirements and no enhanced spring outflows. (CCC-SC-51, Denton, p. 4; see also Antioch-600, Paulsen, pp. 12-13; D.8_DRAFT 022580, DWR-51, Pierre, p. 13.)

According to DWR, “Due to adaptive management, the CWF H3+ operations could be refined in the future” and “the modified operations would only be an outcome of the adaptive management process if the many agencies participating in that process determined that the changes would be protective of fish and wildlife; and any outcome is anticipated to be within the range of alternatives analyzed in the EIR/EIS and within Boundary 1 and Boundary 2, as presented in Part 1 of the State Water Board hearings.” (DWR-1010, Buchholz, p. 9; see also Antioch-601, slide 11.)

The PAMP is insufficiently detailed, fails to account for a prolonged construction phase, lacks meaningful triggers that would result in management changes, focuses only on four listed species, and does not commit to adequate funding. (See LAND-240, Shilling and the supporting references LAND-242 through 247 and LAND-250 through 260; see also LAND-266, Stokely, and supporting references LAND-269 through 275 and LAND-277 through 281.) These core failures of the PAMP undermine its effectiveness and prevent the adaptive management framework described in Delta Plan Appendix 1B from serving its intended purpose.

Whether the PAMP is consistent with the Delta Plan is not only a question of consistency with the Appendix 1B Framework, but also a question of effectiveness. “To be effective, governance to support and implement adaptive management in the Delta must be flexible and have the capacity to make timely changes to policies and practices in response to what is learned over time.” (Delta Plan, Appendix 1B, p. 1B-1.) However, DWR’s consistency analysis addresses only the PAMP framework’s similarities to the G P1(b)(4) framework, and it fails to show that PAMP would lead to the substantive results required by the Delta Plan. (See Delta Plan, Appendix 1B, p. 1B-2.)

From its outset, the PAMP is a flawed adaptive management approach that flouts the required process of Appendix 1B. Effective adaptive management begins with identifying or defining the problem and establishing goals and objectives, all prior to considering or deciding preferred actions. (Delta Plan, Appendix 1B, pp. 1B-2 to 1B-3.) Dr. Shilling and the literature on adaptive management agree. (LAND-240, Shilling, p. 18-19.) Dr. Shilling shows that the PAMP actually began with a preferred action before identifying the goals, thereby narrowing the scope and hamstringing the effectiveness of the PAMP. (*Ibid.*) By reordering the adaptive management process and starting from the decision that the Project must be a dual conveyance tunnel project, DWR has ensured that many Delta issues would be left unmanaged.

Moreover, the PAMP’s scope is far too narrow to address the problems the Project must confront. The PAMP narrowly focuses on only a few native species, while excluding numerous interests that will be negatively impacted by the Project. (LAND-240, Shilling, p. 18.) The PAMP also entirely ignores the potentially most disruptive

aspect of the Project, the minimum 15-year construction period. (LAND-240, Shilling, p. 19.) Therefore, the PAMP fails to account for “ecosystem restoration and water management” to the degree required by the Delta Plan. (Delta Plan, Appen. 1B, p. 1B-2.)

Dr. Shilling provides numerous other examples of decisions that will hamstring the PAMP and prevent its effectiveness in achieving the co-equal goals. For instance, the only adaptive management options are confined to pre-determined operational boundaries. (LAND-240, Shilling, p. 20.) Doing so came at the expense of addressing impacts to Delta communities, unlisted species and other resources. (LAND-240, Shilling, p. 21.)

The lack of enforceable triggers is also inconsistent with the Delta Plan. (Delta Plan, Appendix 1B, p. 1B-2 to 1B-3.) In the PAMP, the triggers simply restate the requirements of the Project’s permits to take certain endangered fish. (See FEIR/S, p. ES-3 [the Project only includes “habitat restoration measures needed to provide mitigation for specific regulatory compliance purposes”] and G P1(b)(4), Attachment 1, [PAMP only implementing MMRP required actions].) There is a total disconnect between the PAMP “triggers” and management actions. (LAND-240, Shilling, p. 24.) One of the meaningless triggers is the limit on Delta Smelt entrainment mortality associated with the Project’s south Delta facilities to less than 5% of the total population. Since recent trawling has not been successful in finding any smelt, there is likely to be no data to assess compliance with this so-called trigger. (LAND-240, Shilling, pp. 24-25.) Many other triggers are so vague as to be unenforceable. (LAND-240, Shilling, p. 25.)

A similar constraint in the PAMP creating inconsistency with the Delta Plan is the commitment to continue water deliveries. The PAMP does not consider the possibility of nonoperation of the Project in the event of threats to species, habitats, or Delta communities. (LAND-240, Shilling, p. 21.) This serious constraint on decision-making under the PAMP conflicts with the coequal goals.

While DWR purports that funding sources do exist, it fails to note in its consistency determination that there are no mandatory funding requirements in the PAMP. (G P1(b)(4), pp. 5-1 to 5-3.) The PAMP fails to include binding commitments to funding, nor does it address the issue of cost allocations. (LAND-240, Shilling, p. 23; LAND-266, Stokely, pp. 13-16.) Funding issues typically plague adaptive management plans, and the PAMP would be no exception, given the high degree of uncertainty in its funding structure.

Adaptive management plans are meant to be coordinated, with effective communication between decision makers. (See Delta Plan, Appendix 1B, pp. 1B-3, 1B-5, 1B-6.) The development of effective adaptive management plans also requires the

involvement of stakeholders. (Delta Plan, Appendix 1B, p. 1B-6.) However, the PAMP has been crafted to exclude community stakeholders and responsible agencies such as the DSC and SWRCB, providing them with no role in the management process. (LAND-240, Shilling, pp. 30-31 to 31; LAND-266, Stokely, p. 13.) Moreover, the PAMP fails to establish a cohesive structure with its five controlling agencies. (LAND-266, Stokely, pp. 11-13.) For this reason, too, the PAMP fails to account for the Project's harmful impacts on a broad range of Delta resources and conflicts with the coequal goals.

Conclusion

In all, DWR crafted an adaptive management plan that is set up to fail. The PAMP begins with a flawed premise, that the planned action (construction of the tunnels and related infrastructure and operation of the project to effectuate water exports) can come before, and take precedence over, the goals and objectives of that action. DWR failed to establish such fundamental necessities such as a coherent decision-making structure and mandatory funding sources. Most importantly, however, the PAMP is a weak adaptive management plan, lacking mandatory triggers and narrowly focusing on a few species instead of the Delta as a whole. For each of these reasons, the PAMP is inconsistent with G P1(b)(4).

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Introduction

DWR's representation that three massive diversions on the Sacramento River would reduce reliance on the Delta and thereby comply with the statutory directives in the 2009 Delta Reform Act and the regulations adopted by the Council strains incredulity. Building and operating new diversions in the Delta to create the capacity to export more water is the opposite of reducing reliance on the Delta.

Inconsistency with WR P1 Reduced Reliance

WR P1 Applies to the Project

DWR advances erroneous statutory interpretations and unfounded legal assumptions in an attempt to identify loopholes that avoid a real consistency analysis under WR P1 for a Project that does not result in reduced reliance on Delta water. DWR begins its WR P1 consistency argument with an unprecedented interpretation of WR P1 that would render the regulation ineffective. DWR suggests that WR P1 applies only to projects that would create new exports or transfers, and not to changes in points of diversion. (WR P1, p. 2-1.) DWR cannot point to statutory language or legislative history to support this reading of WR P1, which appears to have been spun from whole cloth. The actual text of WR P1 supports applying WR P1 to all conveyance projects in the Delta. "Water shall not be exported from, transferred through or used in the Delta . . ." does not contain any qualifiers regarding new or changed diversions. (23 CCR, § 5003, subd. (a).) Further, "[WR P1] covers a proposed action to export water from, transfer water through, or use water in the Delta[.]" (23 CCR, § 5003, subd. (b).) DWR's interpretation of WR P1 is unsupported and conflicts with the text of the regulation.

DWR's second erroneous and self-serving legal interpretation relates to the application of WR P1 subdivision (a). DWR suggests that the water suppliers who would receive water from the Project needed to *cause* the ecological conditions that led to the Project in order for WR P1 to apply. (WR P1, p. 2-2.) DWR's legal analysis conflicts with the text of the regulation. DWR places the blame for current conditions in the Delta on environmental regulations protecting endangered species. (WR P1, p. 2-2, 3-27.) DWR's explanation concedes the role Delta exports played in creating these conditions;

regulations on SWP and CVP pumps in the south Delta were created “to protect those species[.]” (WR P1, p. 2-2; see also WR P1, pp. 3-30 through 3-31.)

DWR also concedes that the Project is needed “in view of well recognized threats to reliable SWP/CVP exports[.]” (*Ibid.*) Implicit in DWR’s analysis is that the continued *reliance* on the Delta by water suppliers created the need for the Project. And contrary to DWR’s claim that water suppliers have reduced reliance on Delta water exports, a closer review of DWR’s own data reveals the water suppliers will only increase their reliance.

DWR argues that compliance with WR P1, subdivisions (c)(1)(B) and (c)(1)(C) is not necessary, again ignoring the regulatory text. (WR P1, p. 3-51.) WR P1, subdivision (c)(1) requires water suppliers to “have done all of the following” reliance reduction measures to demonstrate reduced reliance. The text of WR P1 is clear, and DWR fails to support its interpretation. That DWR “lacks the legal authority to require . . . water suppliers to include a Delta-specific Reduced Reliance element[s]” does not excuse these water suppliers from compliance with all of the subdivision (c)(1) requirements.

DWR’s strained effort to avoid actual consistency analysis with respect to reducing reliance on Delta water is telling. That effort merely highlights the fact that DWR cannot successfully make a case for consistency with WR P1.

No Actual Reduced Reliance

DWR relies on mathematic manipulation to show that the water suppliers receiving water from the Project are reducing their reliance. (WR P1, Attachment 1.) DWR provided both total estimated water demand and the percent of total water supply. (*Ibid.*) The results are telling: only four water suppliers would reduce their reliance on Delta water in net AF by 2040 for a total reduction of 3,044 AF.¹ In comparison, six water suppliers are increasing their demand for Delta water by a combined total of 33,225 AF,² and the remainder have no reductions. (See WR P1, Attachment 1, pp. 6-36.) The

¹ Alameda County Water District would reduce by 1,200 AF (Attachment 1, p. 7); Castaic Lake Water Agency by 700 AF (Attachment 1, p. 17); Central Coast Water Authority-Santa Barbara County Flood Control and Water Conservation District by 944 AF (Attachment 1, p. 14); and Palmdale Water District by 200 AF (Attachment 1, p. 30).

² Alameda County flood Control District by 8,000 AF (WR P1, Attachment 1, p. 6); Santa Clara Valley Water District by 4,300 AF (WR P1, Attachment 1, p. 8); Coachella Valley Water District by 7,400 AF (WR P1, Attachment 1, p. 18); Crestline Village Water District – Crestline/Lake Arrowhead Water Agency by 45 AF (WR P1, Attachment 1, p. 20); MWD by 11,000 AF (WR P1, Attachment 1, p. 26); and Mojave Water Agency by 2,480 AF (WR P1, Attachment 1, p. 28).

only meaningful “reductions” in reliance come in the form of decreases in Delta water as a percent of total supply. The fact that overall net reliance on the Delta is increasing by over 30,000 AF per year is a clear indication that the Project as whole does not reduce reliance on the Delta.

WR P1, subdivisions (a)(1) and (c)(1) require *all* water suppliers receiving water from the Project to contribute to reduced reliance on the Delta, and DWR’s own information shows some of the water suppliers have failed to do so. DWR attempts to explain away this notable increase in reliance by using MWD’s development of local water supply and conservation measures. (WR P1, Attachment 1, p. 5.) While it appears that MWD is projected to increase local water supply and conservation, DWR ignores that MWD is increasing its net reliance on the Delta by 11,000 AF over that same time span. (WR P1, Attachment 1, p. 26.) A project that allows an overall increase in reliance on the Delta is plainly inconsistent with WR P1, the coequal goals, and the Delta Plan. DWR has failed to meet its burden under WR P1.

Conclusion

Construction of costly and enormous new conveyance facilities to export significant quantities of freshwater flows, before rather than after, those flows can go through the Delta would be the opposite of reducing reliance on the Delta. DWR’s attempt to evade the requirement to reduce reliance on the Delta is unsupported. The Project is also inconsistent with the coequal goals. Responsible scientists are calling for increasing through-Delta flows and reducing exports to protect and restore the Delta Ecosystem. Creation of a new conveyance system that would significantly reduce through-Delta flows is entirely inconsistent with the requirement to reduce reliance on the Delta.

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Introduction

DWR’s consistency analysis fails to show that the Project is consistent with Water Code section 85057.5, subdivision (a) (3) and 23 CCR section 500(j)(1)(E). DWR’s consistency is both procedurally and substantively flawed for failing to accurately reflect both existing and necessary state and federal contracts required for the Project operations, SWP and CVP operations and how these contracting processes for water from the SWP and/or federal CVP projects are and/or will be conducted in a transparent manner with respect to the Delta Tunnels.

DWR’s Analysis Does Not Address the Current Project

DWR’s consistency analysis suggests with regard to water from the State Water Project the contracts to “*amend a water supply or water transfer contract*” meet specified guidelines for transparency and public participation. (WR P2, p. 1.) This assertion is not true, because the various SWP water contracts for the Project have not been completed. Further, existing SWP water contract constraints do not include the Project. (See DCL-221, SWP Contract, pp. 32-33 [Article 1(hh) limiting water facilities to those that existed prior to January 1, 1987].) BOR has challenged the contract to operate the Project consistent with the state and federal coordinated operations agreement. (See DCL-222, Notice of Negotiation of Coordinated Operation Agreement.) DWR’s analysis is silent on a critical contract necessary for the operation of the Project water diversion and power generation. Federal contracts and a license for power generation pursuant to the Federal Power Act have expired, putting operation of the Project for power generation in question.¹ Further there has been little to no transparency with regard to agreements that are essential to the Project, including the “Master Agreement” (SDWA-315, MWD Presentation, slides 20-21) between MWD and DWR for roughly 33% of the Project capacity (DCL-221) or the negotiation of the agreement necessary for the participation of CVP contractors in the Project (DCL-1, WIFIA Letter of Interest, p. 23).

¹ See, e.g., FERC filings and letters for DWR’s Oroville License 2100 <https://www.ferc.gov/industries/hydropower/safety/projects/oroville.asp> & Oroville Chamber of Commerce license challenge <https://www.orovillechamber.com/wp-content/uploads/2017/07/FERC-Letter-FINAL-6.27.17.pdf>.

DWR Incorrectly Argues That If Transparency and Public Participation Requirements Cannot Be Met, It Can Proceed in Any Case

Without analysis, DWR simply asserts that if it fails to show consistency with WR P2, or finds consistency with the regulation infeasible, then the Project is consistent with the “coequal goals themselves” in lieu of any consistency analysis specific to WR P2. (WR P2, p. 1 fn. 1.)

DWR’s argument that there is a path to circumvent state and federal public participation and transparency policies rules and regulations by asserting they do not apply by bureaucratic fiat is not persuasive. DWR failed to actually provide any analysis or evidence to establish the infeasibility of adhering to the “publicly transparent manner” that section 23 CCR section 5004, subdivision (a) requires of the contracting process. Section 5002, subdivision (b)(1) requires “a clear identification of areas where consistency with relevant regulatory policies is not feasible, an explanation of the reasons why it is not feasible, and an explanation of how the covered action nevertheless, on whole, is consistent with the coequal goals.” Further, DWR claims that consistency of the Project with the coequal goals has been already “demonstrated” in the Final EIR/S. (WR P2, p. 1 fn. 1.) This assertion lacks merit, and the Project, DWR’s tunnel-driven end run around existing SWP water contract limitations, is inconsistent with the coequal goals. Environmental review of the SWP contract amendments is not completed (see DCL-223, PCL Comment Letter, p. 2)² and DWR failed to analyze the environmental, fiscal and policy risks to the SWP as a whole from any SWP contract changes in the FEIR of the Project (DCL-224, CWIN Letter to Senator Jackson, p. 2).³

² As explained in the comment letter, “DWR incorrectly asserts that the “proposed project is separate and independent from the California WaterFix project,” DEIR at 6-3, which causes DWR to impermissibly piecemeal the impacts of extending the contracts from the impacts of California WaterFix (“WaterFix”). Third, DWR and the SWP Contractors have recognized that multiple additional modifications to the SWP contracts will be necessary in order to implement WaterFix, whose modifications have been impermissibly excluded from this project and its impact analysis.” (DCL-223, PCL Comment Letter, p. 2.)

³ The letter explains that “Despite reaching a non-binding ‘agreement in principle’ (AIP) with most, but not all, of the SWP contractors in 2014, and releasing a 2016 Draft EIR, DWR has neither reached consensus on binding contract terms nor completed environmental review DWR has not released a Final EIR or responses to comments, despite major criticisms before DWR closed public comment on the Draft EIR in October 2016, and lacks consensus on complete and final amendment Piecemealing of Proposed Contract Terms: Oversight of the proposed contract extension must include integrated consideration of all DWR’s proposed SWP amendments, including additional

The Project Requires Amendments to the CVP Contract

DWR incorrectly argues no CVP contract amendments are part of the Project, and that WR P2 is therefore not applicable. (WR P2, p. 3.) DWR provides no evidence or analysis to support this assertion. DWR and the BOR operate the SWP and CVP projects pursuant to the Coordinated Operations Agreement (see Public Law 99-546) pursuant to the Long-Term CVP and SWP Operations Criteria and Plan (see 2004 Long Term CVP and SWP Operations Criteria and Plan Biological Assessment and 2008 Biological Assessment on the Continued Long-term Operations of the CVP and SWP).

Further, recent developments indicate the federal-state contract would have undisclosed consequences on the operation of the Project. Both BOR and some federal contractors have urged revisions. On July 27, 2018, the Delta Finance Authority in a letter to EPA outlined the problem with this federal state contract:

Currently there is only one contractual arrangement that might affect operation of WaterFix. Several agreements have been under negotiation during the planning phase to address issues raised by entities that are not participating in WaterFix, and it is likely some lawsuits will be resolved through settlement agreements...The Coordinated Operations Agreement (COA) (Attachment 28) was executed in November 1986 between DWR and the United States of America through Reclamation for the coordinated operation of the SWP and CVP... By its terms, the COA allows for the reanalysis of the obligations of the SWP and the CVP and that reanalysis could positively or negatively affect operations of Water Fix.

(DCL-1, WIFIA Letter, p. 23.) On August 17, 2018, the BOR Regional Director David Murillo served notice to DWR regarding the need to revise this contract. (See DCL-222, BOR Letter to DWR.) In a March 1, 2016 letter, Contra Costa Water District, joined by 13 other federal contractors, raised objections as to how the Project would impact the coordinated operations contract agreement, existing CVP contractors, and the future operations of the CVP.

As the WaterFix project has been developed over the years, we have consistently requested that Reclamation commit to a fundamental premise that the project will not result in unmitigated redirected impacts to the water supplies or water quality of CVP contractors who do not benefit from the project. Furthermore, an Operations Plan for the WaterFix is necessary to

pending WaterFix SWP amendments lacking an EIR.” (DCL-224, CWIN Letter to Senator Jackson, p. 2.)

define how CVP and SWP will coordinate operations and share available capacity of the new facilities, which will determine the relative water supply benefits between the CVP and SWP. The Operations Plan should also clarify operational criteria for the WaterFix facilities as well as for existing facilities.

(DCL-225, CCWD Letter to BOR, pp. 1-2.)

On March 27, 2018, in a Board Workshop Metropolitan Water District's General Manager, Mr. Kightlinger also highlighted impacts as to how the Project would be integrated with the existing COA contract obligations:

We foresee a world of trouble trying to make a coordinated operations agreement. If one set of contractors are entirely pumping from the South Delta and one set of contractors are having dual conveyance both south and north, and making the COA, the Consolidated Operating Agreement, effective and working, we think, we think we'd just be, it become a real nightmare.

(See SDWA-316, MWD Workshop Transcript, p. (March27, 2018).)

Conclusion

DWR's assertion of transparency in water contracting suggests that WR P2 is not applicable to the Project because contract amendments are a separate process outside the scope of the Project is a convenient and misleading excuse for avoiding consistency analysis. In fact, amendments to both federal and state water contracts are integral to the Project and its operation. Merely citing to statutes and regulations, without providing analysis, is no substitute for legally required consistency determinations. Further, conducting contract negotiations and administrative actions without public disclosure or transparency prevents the public from effectively participating in the WR P2-mandated public participation processes. These impacts are not idle speculation and include fiscal, water supply and biological impacts. DWR has failed to show that WR P2 does not apply, or that consistency under WR P2 is not feasible. Moreover, DWR has not been transparent in its contracting process for the Project. Therefore, the Project is inconsistent with WR P2.

References

Delta Conveyance Finance Authority, Letter of Solicitation to Water Infrastructure Finance and Innovation Act Program (July 27, 2018), DCL-1

Contract between the Metropolitan Water District of Southern California and the State of California Department of Water Resources for a Water Supply and Selected Related Agreements (as of January 1, 2005), DCL-221

Bureau of Reclamation, Notice of Negotiation for the Coordinated Operation Agreement (August 17, 2018), DCL-222

Planning and Conservation League, Comment Letter on Draft EIR for the Water supply Contract Extension Project (October 17, 2016), DCL-223

California Water Impact Network, Letter to State Senator Hannah-Beth Jackson (July 1, 2018), DCL- 224

Contra Costa Water District, et al., Letter to Bureau of Reclamation (March 1, 2016), DCL-225

Metropolitan Water District of Southern California WaterFix Workshop, Presentation, (March 27, 2018), SDWA-315
(https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CDWA%20et%20al/sdwa_315.pdf.)

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Delta Tunnels Consistency Appeal
(Cert. ID: C20185)
August 27, 2018

Introduction

ER P1 requires that the SWRCB Water Quality Control Plan flow objectives be used to determine consistency with the Delta Plan. (23 CCR, § 5005.) But the Project does not comply with D-1641. Moreover, recent developments indicate that the BOR is very unlikely to operate the CVP portion of the Project in compliance with D-1641.

The Project Would Not Implement Existing Delta Flow Objectives

DWR claims that the Project “will be operated to continue SWP compliance with D-1641 flow objectives.” (ER P1, p. 1.) Conspicuously absent from this statement is any mention of operation of the CVP in compliance with D-1641. Given recent communications from BOR and the nonparticipation of BOR in this Consistency Determination, DWR cannot make any representations as to the BOR on the subject of CVP compliance with SWRCB standards. (See SJTA-203, February 15, 2017 Letter, p. 1; DCL-222, August 17, 2018 Letter, David Murillo to Karla Nemeth.) Without such a commitment, the Project fails on its face to comply with ER P1.

DWR claims that the Project is consistent with ER P1 Delta Flow Objectives because the SWP and DWR have a proven record complying with the SWRCB’s water rights decision D-1641 flow objectives. DWR also claims that modeling results indicating continued compliance with D-1641 document consistency with ER P1. However, as described below, the modeling for the Project is substantially flawed such that it does not inform decision makers such as the Council.

Rio Vista Flow Standards Misstated

Under Specific Regulatory Assumptions, DWR claims that the minimum flow required on the Sacramento River at Rio Vista under the WQCP, SWRCB D-1641 is included consistent with the NAA Assumptions. (ER P1, p. 22.) However, DWR also claims that for January through August, a minimum flow of 3,000 cfs is maintained in all years under the PA. This is not correct; during Part 2 of the SWRCB Change Petition Hearing DWR stated that the January–August minimum Rio Vista flow requirement was not part of the proposed Project.

Fall X2 Requirement May Not Be Met Under Adaptive Management

Under Biological Opinion Requirements, DWR claims that the Project CWF H3+ fully complies with 2008 USFWS BiOp Fall X2 requirements. (ER P1, p. 27.) The 2008 USFWS BiOp requires projects to meet an X2 requirement in the fall months following wet and above normal years. However, in the SWRCB Change Petition Hearing, DWR testified that the Project includes adaptive management with the range of the Boundary 1 and Boundary 2 scenarios. (See DWR-1143 second revised.) Additionally, the Boundary 1 scenario has no Fall X2 requirement. As discussed in detail in CCC-SC-51, the Boundary 1 scenario would result in significant adverse water quality impacts in the Delta due to salinity intrusion. These adverse water quality impacts would be far greater than for what DWR is claiming is the proposed Project, i.e., CWF H3+. (See, e.g., CCC-SC-56, Figure 1 [showing increases in salinity in Old River at Bacon Island due to the Boundary 1 scenario, which does not include any Fall X2 limits].)

South-of-Delta Exports are Different from Earlier Versions of the Project

Under Water Supply, DWR refers to Figures 45 to 54 in Exhibit DWR-1069 and argues that these figures clearly show that CWF H3+ and BA H3+ results for water supply deliveries are similar to H3 and H4 and are nearly identical to the NAA results. (ER P1, p. 27.) However, DWR fails to present similar bar charts showing total CVP and SWP exports to the south-of-Delta exports.

As discussed in detail in CCC-SC-51, 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+ than for BA H3+ and Alternative 4A, scenarios H3 and H4. In other words, they are not similar to H3 and H4 and are not nearly identical to the NAA results. (CCC-SC-59, Figure 1.) This is an example of the problems with DWR's analysis of the proposed Project and DWR's presentation of model data to obscure significant adverse impacts. The Delta Independent Science Board in a September 30, 2015 letter stated in no uncertain terms that the BDCP/CWF is "*sufficiently incomplete and opaque to deter its evaluation and use by decision makers, resource managers, scientists and the broader public.*" (CCC-SC-20.) DWR's claims, on closer inspection, are not substantiated. (CCC-SC-51.)

Water Quality Modeling Fails to Comply with D-1641

Under Delta Water Quality, DWR states that empirically based equations and models are used in the CALSIM II operations model to relate interior salinity conditions with the flow conditions. (ER P1, p. 18.) DWR's ANN is used in CALSIM II to predict and interpret salinity conditions at the Emmaton, Jersey Point, Rock Slough and

Collinsville stations. The Rock Slough standard is for protecting water quality conditions for M&I use for water exported through the Contra Costa Canal. It is a year-round standard that requires a chloride concentration of 250 mg/L or less every day and a certain number of days in a year with chloride concentration less than 150 mg/L.

Under Conclusions, DWR refers only to “general compliance” historically with Delta Flow Objectives and south Delta water quality standards. (ER P1, p. 28.) DWR also only claims “general compliance” with D-1641 Flow Objectives in the CWF H3+ modeling study. DWR claims that in some instances, minor exceedances were observed under the CWF H3+ scenario. However, as shown in CCC-SC-60, the simulated daily-averaged salinities in Old River at Bacon Island for CWF H3+ are well in excess of the 250 mg/L chloride standard in D-1641. This location is very near the intake to the Contra Costa Canal.

Because the CWF H3+ fails to comply with the daily M&I chloride concentration standard in D-1641, the modeling results are useless for decision makers like the Council and SWRCB and fail to accurately analyze and disclose the impacts of the proposed Project. Until DWR carries out model studies that comply with the SWRCB’s D-1641 standards, the Council cannot make an informed decision regarding the consistency of the Project with the Delta Plan.

Criterion for Closing the Delta Cross Channel Is Incorrectly Stated

Under Operations Criteria, DWR claims that the DCC are closed in any month if the monthly average Sacramento River flow upstream of the DCC is greater than 25,000 cfs. (ER P1, p. 19.) However, as stated by DWR in exhibit DWR-1143 second revision (p. 7), this operating criterion is required by NMFS (2009) BiOp Action IV.1 and D-1641, and the DCC closure for downstream flood control would be based on Sacramento River flow at Freeport, upstream of the proposed north Delta diversions. With the Delta Tunnels Project, DCC closures are required to be based on the Sacramento flow at Freeport, but the CALSIM II operations model incorrectly bases closures on the much smaller flow just upstream of the DCC.

DWR’s Redefinition of the Export/Inflow Ratio Fails to Protect against Entrainment of Eggs and Larvae at the North Delta Intakes

DWR incorrectly claims that CWF H3+ fully complies with the Export/Inflow ratio requirements in D-1641. (ER P1, p. 27.) However, as discussed on page 7 of exhibit DWR-1143, second revision, DWR has assumed that the exports at the north Delta intakes are excluded from the Export/Inflow ratio calculation. DWR defines Sacramento River inflow as flows downstream of the north Delta intakes and only south

Delta exports are included for the export component of the E/I ratio. DWR argues that the D-1641 export/inflow ratio standard was largely designed to protect fish from south Delta entrainment. However, in Part 2 of the SWRCB Change Petition hearing, DWR's own fish expert acknowledged that a number of key fish species, including Delta smelt and Longfin smelt, can spawn above the north Delta intakes and their eggs and larvae will, therefore, be susceptible to entrainment at the north Delta intakes. (DWR-1012, pp. 4, 51 and 52; DWR-1029, Slide 34.)

The Project Cannot Be Alternatively Consistent with the Coequal Goals Because Operations are Not Defined

DWR concedes that:

if it is determined by the DSC Delta Council that consistency with ER P1 must be demonstrated based on the final revised flow criteria determined by the Water Board, then full consistency with this policy is not feasible because, while DWR has demonstrated consistency within a range of reasonable flow criteria for the Change in Point of Diversion hearing, the final flow criteria is still speculative at this time. A Final Operations Plan and accompanying flow criteria for CWF will be based on a number of future actions that cannot not be completed at this time, including the SWRCB's issuing its final order related to the Change Petition hearing, the SWRCB's approving and implementing Bay Delta Water Quality Control Plan update, and implementing the CWF's Adaptive Management Plan with USFWS, NMFS, and DFW during construction.

(ER P1, p. 1, fn. 1.) This is yet another reason that the Council's original plan to wait to consider the Project's consistency determination until after the SWRCB permit process was complete made sense. (DCL-3.) In any case, DWR claims that the Project should still be found to be consistent with the coequal goals, providing an alternative to compliance with Delta Flow Objectives. (ER P1, p. 1, fn. 1.)

The Delta Tunnels also cannot be evaluated for consistency with the updated Bay-Delta WQCP. One of the two coequal goals is "protecting, restoring, and enhancing the Delta ecosystem." (Wat. Code, § 85054.) That coequal goal might be met by complying with the flow criteria developed by the SWRCB in August 2010, which is not proposed. In the alternative, the Council must await the updating of the Bay-Delta WQCP. It would be premature to attempt to determine consistency with the flow objectives when the flow objectives are still in the process of being updated to be more stringent in order to protect the Delta.

Conclusion

Even though there is no final operations plan or flow criteria for the Project, DWR still claims the Project could somehow be consistent with ER P1 and/or the coequal goals. The Council cannot approve mere speculation in the place of critical flow criteria needed for the Project. An operations plan with minimum Delta flows must be established prior to any consistency determination. Since the Project does not include flow criteria, the Project is inconsistent with ER P1.

References

Delta Independent Science Board Comment Letter on Recirculated Draft EIR/S for BDCP/CWF (September 30, 2015), CCC-SC-20
(https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/ccc_cccwa/CCC-SC_20.pdf)

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SWRCB Testimony of Marin Greenwood, DWR-1012
(https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/part2/DWR-1012%20Testimony%20Greenwood.pdf)

SWRCB Hearing Presentation of Marin Greenwood, DWR-1029
(https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/part2/DWR-1029%20PPT%20Greenwood.pdf)

Modeling Output Figures, DWR-1069
(https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/part2/DWR-1069%20Testimony%20DWR-1016%20Modeling%20Output%20Figures.pdf)

BOR Letter to SWRCB re Flow Objectives Meeting (February 15, 2017), SJTA-203
(https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/SJTA%20et%20al/SJTA%20203.pdf)

Delta Tunnels Consistency Appeal
(Cert. ID: C20185)
August 27, 2018

Introduction

DWR’s consistency analysis fails to show that the Project is consistent with DP P2 (23 CCR, § 5011). DWR’s DP P2 consistency determination is both procedurally and substantively flawed. The Project’s disruptive and destructive character indicates it was not developed to respect local land uses in the Delta.

DWR’s Analysis Does Not Address the Current Project

DWR’s consistency analysis goes to great lengths to discuss how the Project was refined during the environmental review process (DP P2, pp. 3-4) and the extent the Final EIR/EIS (“FEIR/S”) considers existing uses (DP P2, pp. 6-13). However, the 39-page document does not analyze, discuss or even disclose the changes to the Project proposed in the 2018 DSEIR/S that was made available July 18, 2018. (See DWR “Subsequent CEQA” portion of draft administrative record index.)

The proposed changes to the Project have been available to the public since at least March 28, 2018, when DWR first provided a “fact sheet” describing Project changes to the SWRCB CWF Hearing participants. (SJC-328.) DWR contemplated these changes to the Project footprint *well prior* to submitting its consistency determination. While DWR describes the proposed changes in its “Project Design Refinements” information and provided the 2018 DSEIR/S documents as part of its consistency review record (see DWR “Subsequent CEQA” portion of draft administrative record index), DWR fails to utilize the current iteration of the Project for its consistency analysis.

The maps DWR provides in support of its DP P2 Attachment 2 no longer reflect the proposed footprint of the Project. (*Cf.* DSEIR Excerpts at SJC-329.) Considerable changes have been made to tunnel muck (a.k.a. Reusable Tunnel Material) storage, tunnel alignment, and the entire configuration of modifications at Clifton Court is now different. The Project’s effects on the Refuge provides an example of the problems with attempting to analyze Policy DP P1 using outdated information based on the 2017 FEIR/S. DWR does not disclose that the *new* alignment proposed in the DSEIR/S is actually closer to the Refuge than the prior alignment. (See 2018 DSEIR/S; see also SJC-327, Nakagawa, pp. 5-6 and SJC-329.)

Adjacent land uses are likely different from those that would have been impacted under the analyzed version of the Project. By not addressing the considerable changes to the Project's footprint, DWR's analysis fails to demonstrate that the Project has "been sited to avoid or reduce conflicts with existing uses[.]" (23 CCR, § 5011.) Therefore, DWR has not met its burden of showing the Project is consistent with DP P2.

DWR's Consistency Analysis Simply Repeats the FEIR/S

Beyond DWR's failure to accurately describe the current Project in its DP P2 consistency analysis, DWR failed to actually provide any analysis relevant to 23 CCR section 5011. What DWR has provided is essentially a summary of the FEIR/S, devoid of even baseline discussion of DP P2. However, as DWR itself points out, the analysis required by DP P2 is not required under CEQA or NEPA. (DP P2, p. 23.) DWR fails to discuss whether the sites chosen were feasible in light of DP P2, or conclude that different sites with fewer impacts on local land use were feasible. Merely describing the Project's impacts on Delta communities and the planned mitigation measures is not adequate analysis.

In addition to water management facilities, DP P2 also applies to ecosystem restoration, including the requirement that DWR "must consider sites on existing lands . . . before privately owned sites are purchased." Yet DWR concedes that site locations for ecosystem restorations have not been determined. (DP P2, p. 1.) Instead, DWR restates the DP P2 requirements and promises to follow them. (*Ibid.*) DWR's approach to consistency analysis with respect to DP P2 is lacking, and fails to make a connection between the siting decisions, the mitigation measures, and actual consistency with the Delta Plan.

The Project Is Not Consistent with DP P2

The Project as proposed would irrevocably disrupt the character and nature of the Delta both during through construction and operation. While DP P2 uses a feasibility qualifier, the Project gives little consideration to local land uses in the Delta. As discussed above, DWR failed to provide relevant information or analysis of the Projects actual impacts on land use. Various impacts of construction have not been addressed in the FEIR/S or DWR's consistency review, proposed mitigation measures are infeasible, and DWR has not demonstrated that more respectful siting of Project components was not feasible.

The Project's incompatibility with local land uses and community character will impact nearly every aspect of life for Delta residents and disrupt local land uses, including education, recreation, and commercial activity. Over a decade of construction and a transformation of parts of the Delta under the footprint in particular, would be

devastating. According to one resident, “we simply cannot accept that the three huge unsightly concrete infrastructure facilities along the scenic land and waterscapes of State Highway 160 can be considered “protect[ing] and enhance[ing] the Delta as an evolving place.” (LAND-205, Stirling, p. 10.) For example, construction noise impacts would reduce quality of life for Delta residents across many different land uses. (See LAND-205, Stirling, p. 3-8; LAND-135, Shilling, pp. 4-5.) “The pile drivers noise impacts . . . would hurt restaurants and other businesses in the area . . . [who] would have difficulty conducting operations or even maintaining the presence of their employees because of the severe discomfort[.]” (LAND-205, Stirling, p. 7.) Noise annoyance, which can occur at levels as low as 40 dBA, has a connection to negative health outcomes such as hypertension and heart ailments. (LAND-135, Shilling, p. 5.)

DWR regurgitates the FEIR/S mitigation measures for construction noise impacts (DP P2, p. 15) but fails to disclose that these impacts are still considered significant and unavoidable (C_DRAFT 1, CEQA Findings, p. 103). Construction noise impacts will not just “indirectly” affect Delta residents and businesses (DP P2, p. 9) but would instead transform the entire character of the Delta for more than 10 years.

Construction related noise is only one aspect of the Project that is inconsistent with local land use, yet inadequately mitigated by DWR. The traffic generated by Project construction would create far reaching impacts across Delta communities. “On week days, school buses, commercial delivery trucks, garbage, green waste, and recycling trucks, utility company trucks, and numerous commercial vehicles use the same rural roads and narrow bridges. These [roads] would be seriously impaired and obstructed in their everyday deliveries and services, diminishing quality of life for residents and others in and around the North Delta communities.” (LAND-205, Stirling, p. 9.)

The construction-related traffic is a two-fold issue, which DWR conceded in the FEIR/S. Construction traffic would cause delays throughout the Delta, impacting all facets of daily life for residents and harming important economic interests such as agriculture and recreation. Increased traffic throughout the Delta would particularly impact the agricultural chain of production by disrupting movement of resources, employees, and crops. (See LAND-130, Van Loben Sels, pp. 3-4; see SWDA-141, DPC Economic Sustainability Plan, p. 112 [truck shipped crops account for 59% of crop revenue in the Delta].) For instance, traffic on parts of Twin Cities Road and River Road is expected to increase by 4 to 2.5 times and by 11 to 4.3 times, respectively, depending on the time of day. (FEIR/S, pp. 19-210 [CT24, CT25], 19-215 [SC06, SC07].) Other routes into and out of the North Delta could be overwhelmed by traffic during the construction period. (FEIR/S, pp. 19-215 [SC02, SC03, SC04, SC11, 19-216 [SJ01].) Ten years of truck and other construction related traffic on other road segments throughout the North Delta would make farming in the area impossible. (FEIR/S, pp. 19-

208 – 19-217 [Table 19-25 showing traffic increases throughout Delta communities], Figure 19-2a; see also LAND-123 [Roadway Segments of Concern].)

Traffic delays from large volumes of construction traffic may prevent necessary equipment from arriving to farms on time, delaying the entire harvest process. Traffic and road damage from heavy construction equipment also frustrates the “farm-to-market” process; if getting agriculture out of the Delta becomes too time-consuming (and therefore costly), distribution and processing firms will look outside the Delta for business. Delta crops, such as wine grapes, have specific delivery windows, and if this window is not met, an entire shipment could be lost.

Construction traffic would also endanger the lives of Delta residents by preventing timely responses of local emergency responders. (See LAND-188, Robinson.) Notably, DWR found that traffic increases alone, without accounting for the damage the traffic could cause, would be significant and unavoidable even after implementation of mitigation under CEQA. (C_DRAFT 1, CEQA Findings, pp. 85-86.) This is unsurprising, given DWR’s overall lack of commitment to mitigating traffic impacts. The proposed traffic mitigation is not mandatory, unfunded, and focuses only on the worst road segments rather than a Delta-wide approach. (See LAND-188, Robinson, p. 8; see also FEIR/S, 19-218 through 19-220.) No aspect of daily life in the Delta would escape construction-related traffic.

Construction traffic would also have an impact on the physical conditions of Delta roads, leading to degradation over time due to the higher volume of traffic. This impact would create many of the same problems as increases in traffic because it ultimately would restrict movement throughout the Delta. (See LAND-205, Stirling, p. 8.) Both impacts were underestimated by DWR due to a flawed analysis in the FEIR/S. For instance, DWR focused on LOS, a number reflecting the total number of vehicle trips over an hour, on a segment-by-segment basis. The LOS for each segment was taken from the relevant county guidelines. As a result, some road segments would see severe increases in traffic that are not considered significant, and for which no mitigation is required. (See FEIR/S, pp. 19-208 to 19-217; see also LAND-188, Robinson, pp. 4-5.) Despite nearly tenfold increases in traffic, these impacts are not significant impacts according to DWR.

The Project’s failure to respect local land uses and its devastating impacts on existing Delta infrastructure are further evidenced by analysis from Delta-based traffic experts. DWR’s proposed construction of the Project—planned to continue for well over a decade—was carefully reviewed by Kris Balaji, the Director of Public Works for San Joaquin County and a highly experienced licensed Professional Civil Engineer in California. He observed that the unincorporated area of San Joaquin County alone

includes 1,660 miles of public roads, 265 bridges, another 350 bridges under twenty feet in length, along with roadside ditches, culverts, signs, guardrails, and other associated elements of transportation infrastructure. (SJC-323, Balaji, at p. 4.) Project proponents neglected to identify all of the affected road segments, including some critically important segments, much less analyze the likely adverse impacts of the proposed Project construction activities—an approach that falls well below the applicable standard of care and which again underscores the tunnel proponents’ indifference to the Project’s effects on existing Delta land uses and infrastructure. (*Id.* at pp. 5, 7-10.) Even as to those segments DWR did identify, DWR failed to address many critical aspects of the likely adverse impacts, including, without limitation: trip distribution; quantity of trucks vs. employee vehicles; the need for turn pockets or temporary traffic signals; seasonal increases in traffic during harvest season; seasonal increases in traffic during hunting season and waterfowl migration season; and the critical need for expedited transport of some harvested produce to the processing facilities. (*Id.* at p. 8.)

The Tunnels Project ignores altogether the conflict between the proposed Project construction activities and transportation infrastructure projects in San Joaquin County. For example, San Joaquin County is working jointly with Sacramento County to replace the Walnut Grove Road Bridge, which the Federal Highway Administration has approved for replacement. (SJC-323, Balaji, p. 11.) This 3-year construction project is anticipated to begin in 2025. (*Ibid.*) Work on this bridge project would almost certainly be hampered by construction traffic for the Tunnels Project. (*Ibid.*) Similarly, Tunnels Project proponents failed to analyze the impacts of Project construction on the Woodward Island ferry project, a two-year project which has also been approved by the Federal Highway Administration. (SJC-323, Balaji, p. 11.)

DWR’s failure to respect local transportation infrastructure and related land uses in Sacramento County is equally clear. (SACO-18, Moghissi, pp. 5-13.) This failure is especially apparent with respect to the failure to address adequately (or at all in some cases) the physical conditions of affected country roads and pavement sections in Sacramento County. (*Id.* at pp. 8-13.) DWR’s similarly deficient analysis of the Tunnels Project’s likely adverse impacts on Yolo County transportation infrastructure—including critically important road segments—further demonstrates the Project’s lack of respect for existing local land use and infrastructure. (YOLO-1, Kokkas, pp. 11-25.)

These problems are not corrected in the 2018 DSEIR/S. Two sections of road in Yolo County, YOL 02 and YOL 03 would receive worsened treatment under the Revised Project described in the 2018 DSEIR/S now out for public review until September 17, 2018; these worsened traffic impacts are ignored in DWR’s consistency determination for DP P2. YOL 02 and YOL 03 have LOS thresholds of 680 vehicle trips per hour. (FEIR/S, p. 19-52.) The FEIR/S concluded that these road segments would be

significantly impacted due to an approximate 600 vehicles per hour increase in traffic (FEIR/S, p. 19-217), and have deficient pavement conditions (FEIR/S, p. 19-228). Under the FEIR/S, YOL 2 and YOL 3 would be eligible for mitigation because the Project LOS would exceed Yolo County guidelines and the road segments are in deficient condition. (FEIR/S, p. 19-230.) However, in the DSEIR/S, these segments are no longer considered significantly impacted, despite the fact they will still see an increase of 500 vehicles. (2018 DSEIR/S, p. 19-28.) This example illustrates the problem with conducting the consistency review with an outdated version of the Project, and highlights DWR's disrespectful approach to traffic and roadway mitigation.

Negative effects on agriculture are not limited to the traffic impacts. The footprint of the Project and its inconsistency with agricultural uses create their own set of impacts that disrespect existing agricultural operations. The Project would disrupt irrigation and drainage for local farms, cause fugitive dust to spread, and "temporary" impacts would likely cause permanent damage. (LAND-130, Van Loben Sels, p. 4; see FEIR/S, pp. 14-37, 14-191.) Increases in salinity alone could degrade water quality in the Delta and result in losses from \$20 to \$80 million per year. (SDWA-141, DPC Economic Sustainability Plan, p. 112.)

The Project would also require both temporary and permanent conversion of highly valued farmland. (See FEIR/S, p. 14-36.) This is yet another area where DWR has found the impacts to be significant and unavoidable with mitigation. (C_DRAFT 1, CEQA Findings, pp. 13-34.; see SDWA-141, DPC Economic Sustainability Plan, p. 112 [nearly 80% of all farmland in the Delta is classified as Prime Farmland, the highest designated tier].) The Delta Tunnels Project would result in the permanent conversion of 3,909 acres of prime farmland and temporary conversion of 1,495 acres of prime farmland. (FEIR/S, p. 14-36, Table 14-8.) This is a problem because Delta agriculture is unique and the backbone of the Delta economy. County General Plans value and protect Delta agricultural resources and recognize that agriculture is the foundation of the Delta economy. (SACO-1, Sac. Gen. Plan, Ag. Element, p. 1 [description of the importance of agriculture to Sacramento local economy].) The required "temporary conversion" of farmland could last over a decade. Any temporary conversion of farmland for construction uses would likely cause lasting harm to those parcels. Delta fruit crops take years to bring into production; temporary use of orchards would inevitably delay their productive use far beyond Project construction.

Agriculture is yet another area where DWR has found the impacts to be significant and unavoidable with mitigation. (C_DRAFT 1, CEQA Findings, pp. 13-34.) The Project would not only impact farmers, but their employees, suppliers, tax revenues and create a ripple effect through the entire Delta community. (SDWA-134, Michael, p. 7.) This level of disruption and impairment serves as proof of the Project's inconsistency

with the predominant Delta land use. (See SDWA-141, DPC Economic Sustainability Plan, p. 112 [agriculture in the Delta creates \$2.135B in output for the five Delta counties].)

In the Delta, no existing land use and related infrastructure merits more careful attention than the over 1,000 miles of levees that protect Delta communities, including farming and other Delta businesses, the lives and property of Delta residents, and roads and other transportation infrastructure. Yet, in a remarkable display of indifference towards the Project's adverse impacts on existing Delta levee systems, DWR failed even to coordinate with the Delta reclamation districts charged with responsibility for maintaining and repairing the levees. (See DCL-101, March 15, 2018 Transcript of California WaterFix Water Right Change Petition Hearing, pp. 148-151 [Reclamation District engineer Chris Neudeck testifying on re-direct; see, also SJC-291, Neudeck Testimony, pp. 5-6, 9-14 [outlining deficiencies of the proposed project with respect to assuring that the integrity of the Delta levee system is maintained during the many years of project-related construction in the Delta].)

Recreation in the Delta is another valuable resource and land use potentially harmed by the Project's extensive and pervasive reach. Fishing and nature-watching are popular activities in the Delta that would be harmed by the construction and operation of the Delta. (SOSC-72, Yee, p. 3.) As discussed earlier, the Delta Tunnels component of the Project would be closer to the Refuge than originally planned if the changes in the Draft SEIR/S are adopted, increasing the severity of the Project's impacts on the Refuge. Like agriculture, long-term reduction in recreation opportunities is considered significant and unavoidable with mitigation. (C_DRAFT 1, CEQA Findings, p. 34.) Such impacts clearly provide no respect for local land uses and are inconsistent with policy DP P2.

Conclusion

DWR repeatedly demonstrates a lack of respect for local land use, and inconsistency with DP P2, in its failure to mitigate impacts to levels below significance. That impact areas that greatly effect the community character and economic viability of the Delta were left at significant and unavoidable levels shows a fundamental incompatibility with the surrounding land uses. These facts, in conjunction with DWR's total lack of relevant analysis in its consistency determination for DP P2, show that the Project is inconsistent with DP P2.

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August 27, 2018

Introduction

With finite resources, government agencies must make difficult decisions when allocating state and local funds. Priority structures can provide a template for funding decisions, assuring that important objectives are realized and supported when feasible. DWR hardly acknowledges the Council's levee investment priority structure and attempts to recharacterize the Project's fulfillment of basic mitigation and avoidance requirements as benevolent ecosystem conservation.

Inconsistency with RR P1 Prioritization of State Investments in Delta Levees and Risk Reduction

RR P1 provides a funding priority structure to guide discretionary investments in flood risk management. DWR asserts that the Project is not a flood risk management project, but that it is consistent with RR P1. (RR P1, p. 2.) DWR claims that any levee modifications are flood neutral, that the Project will not affect flood control programs, and that the Project aligns with the RR P1 funding priorities. (RR P1, pp. 3-4.) DWR's arguments with respect to the funding priorities are misleading because they do not appropriately describe the Project's impacts on the Delta as a place and miscast the ecosystem conservation as "net enhancements."

RR P1 Levee Network Goal 3 requires funding allocation to "[p]rotect cultural, historic, aesthetic, and recreational resources" or more simply protect the Delta as a place. (23 CCR, § 5012, subd. (a)(2).) The Project is wholly inconsistent with this goal and instead would degrade the Delta as a place. DWR claims that mitigation would "have the practical effect of protecting" the Delta's unique resources (RR P1, p. 5) but fails to acknowledge the numerous impacts that it deemed significant and unavoidable despite mitigation. DWR found numerous cultural impacts (C_DRAFT-1, CEQA Findings of Fact, pp. 65-83), agricultural impacts (*id.* pp. 13-34), recreation impacts (*id.* pp. 34-58), and aesthetic impacts (*id.* pp. 59-65) to be significant and unavoidable. A project that results in significant and unavoidable impacts to the Delta does not protect the Delta as a place.

Each RR P1 Ecosystem Conservation Goal calls for both the protection of existing habitats and provide for net increases. (23 CCR, § 5012, subd. (a)(2).) These goals apply to channel-margin habitat, floodplain habitat, and wetlands. (*Ibid.*) DWR asserts that the Project would result in net enhancement of these habitats. (RR P1, p. 5.) Notably, DWR does not assert that the Project would protect existing habitat. (*Ibid.*) Despite DWR's claims of "net enhancement," the Project does not provide an enhancement to ecosystem restoration. Instead, the Project merely provides required mitigation for its impacts that affect levees and does not propose to actually enhance any habitat. DWR's own consistency submittal explains that the Project, while initially proposed as a HCP/NCCP, was revised in 2015 to:

[S]eek[] compliance with endangered species laws under different statutory authorizations and for a period less than 50 years, and includes only limited amounts of habitat restoration to reduce and mitigate for significant environmental impacts in compliance with CEQA and other regulatory requirements

(WR P1, p. 3-38.) Thus, what DWR touts as "habitat enhancement" is merely a repackaging of legally mandated actions.

HCPs are planning documents required as part of an application for incidental take permits under section 10, subdivision (a)(1)(B) of the Federal ESA. (See FEIR/S, p. ES-2.) NCCPs are a habitat management and conservation option under the California NCCPA and function as the California counterparts to HCPs. (*Ibid.*) These provisions would have allowed DWR to take listed species for a period of 50 years. (*Ibid.*) As the CDFW explains, NCCPs are intended to be "broader in [their] orientation and objectives than the California and Federal Endangered Species Act[.]" (See CDFW, Natural Community Conservation Planning, <<https://www.wildlife.ca.gov/conservation/planning/nccp>> (as of August 23, 2018).)

Rather than take part in these voluntary programs, the Project proposes to comply only with mandatory legal requirements. Section 7 of the Federal ESA requires consultation between the acting agency and the FWS when the agency determines its action is likely to adversely affect a listed species. FWS will then issue a biological opinion and provide guidelines for the agency's action. The California ESA, section 2081, subdivision (b), allows incidental take pursuant to otherwise lawful activity. DWR is seeking compliance with these provisions, along with the Section 404 Permitting requirements of the Federal Clean Water Act, and these requirements are the sources of the supposed "net enhancement" of habitat.

For instance, DWR states that the Project would “result in a net increase in channel-margin habitat through the enhancement of up to 4.6 levee miles.” (RR P1, p. 5; see also FEIR/S, pp. 11-93.) However, the Project would impact 3.62 miles of channel margin habitat. (FEIR/S, p. 11-12.) Thus, at most, less than one mile of channel margin habitat would be enhanced, if the habitat is successfully implemented.

As to floodplain habitat, DWR concedes that, instead of enhancing habitat, it will restore 295 acres of tidal natural communities. (RR P1, p. 5.) The amount to be restored is consistent with the Project’s permanent impacts to 291 acres of tidal natural communities. (FEIR/S, p. 12-9 [Table 12-ES-1].) That figure does not account for the additional 368 acres of tidal habitat that would be temporarily impacted. (*Ibid.*) At best, DWR proposes restoration equal to the Project’s permanent floodplain habitat impacts; therefore, characterizing this required mitigation as “enhancement” is disingenuous and misleading.

The quote from the MMRP that DWR cites with respect to “Net Enhancement of Wetlands” is not matched by any actual requirements. (See C_DRAFT 2, MMRP, p. 2-39.) The notion that restored wetlands will function at higher levels than existing wetlands is unfounded and unsupported in the FEIR/S. DWR does not provide references or citations supporting this assertion. “No net loss of acreage” does not equate to net enhancement of wetlands, because it necessarily entails destruction of existing habitat.

Conclusion

It is inappropriate for DWR to mischaracterize its permit requirements as enhancements of floodplain habitat and wetlands in RR P1. DWR is simply proposing to follow the NEPA/CEQA, USACE and other requirements. Following existing laws is not the same as providing enhancements of floodplain habitat and wetlands. As conceded by DWR, the Delta Tunnels are not a flood risk management project. (RR P1, p. 2.) The Project neither protects existing habitat nor provides for net enhancement. For these reasons, too, the proposed Delta Tunnels project is inconsistent with RR P1 (23 CCR, § 5012).

* * *

The foregoing sections of this Appeal and the evidence relied upon therein demonstrate that the Delta Tunnels Project is inconsistent with the Council’s regulations, the coequal goals, and the Delta Plan. DWR has offered inadequate analysis and insufficient evidence to support its flawed consistency determination. Therefore, the

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RR P1 Prioritization of State Investments in Delta Levees and Risk Reduction

Council should find that DWR's consistency determination is contrary to law and/or not supported by substantial evidence.

Respectfully submitted,

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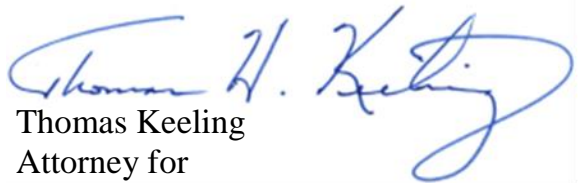
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