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*Exempt from Filing Fees Under  
Government Code § 6103*

13 SUPERIOR COURT OF THE STATE OF CALIFORNIA

14 COUNTY OF SACRAMENTO

15  
16 **COUNTY OF SACRAMENTO, a**  
17 **California county,**

18 Petitioner and Plaintiff,

19 v.

20 **CALIFORNIA DEPARTMENT OF**  
21 **WATER RESOURCES, a California**  
22 **State Agency,**

23 Respondent and Defendant.

24  
25  
26 **DOES 1 through 50,**

27 Real Parties in Interest.  
28

Case No. 24WM000014

(Related to 24WM000006; 24WM000008;  
24WM000009; 24WM000010; 24WM000011;  
24WM000012; 24WM000017; 24WM000062;  
24WM000076)

**COMPENDIUM OF EVIDENCE IN  
SUPPORT OF CAL. DEPT. OF WATER  
RESOURCES' EX PARTE APPLICATION  
FOR ORDER TO MODIFY OR STAY THE  
PRELIMINARY INJUNCTION – VOLUME  
IV OF IV**

**(CEQA case: California Environmental  
Quality Act, Pub. Resources Code, § 21000 et  
seq.)**

Dept: 36

Judge: Hon. Stephen Acquistio

Action Filed: January 22, 2024

Respondent California Department of Water Resources (DWR) hereby submits the following evidence in support of the DWR’s ex parte application for order to modify or stay the preliminary injunction (Ex Parte Application). For ease of reference, DWR’s Ex Parte Application contains citations to both the declarations themselves (and any exhibits, where relevant), and to the Bates numbered pages referenced in this Compendium of Evidence in Support of DWR’s Ex Parte Application (COE). This is DWR’s second Compendium of Evidence, and the Bates numbered pages continue from DWR’s first Compendium of Evidence in Support of DWR’s Opposition to All Petitioners’ Motions for Preliminary Injunction.

Volume	Declaration	Exhibit	Exhibit Description	Bates Nos.
I	Decl. of Graham Bradner			291-305
I		A	2024 Cost Estimate, titled “Total Project Cost Summary Memorandum”	306-371
I		B	Finch, M. 1985. Earthquake Damage in the Sacramento–San Joaquin Delta, Sacramento and San Joaquin Counties. February. California Geology 38(2):39–44	372-380
I		C	Tsai, Y. 2018. Characterizing Seismic Performance of Levees on Peaty Organic Soils from Case Histories and Simulations. PhD dissertation. University of California, Los Angeles. Los Angeles, CA	381-715
II		D	U.S. Geological Survey. 2016. Earthquake Outlook for the San Francisco Bay Region 2014–2043. Fact Sheet 2016-3020. Version 1. August	716-722
II		E	California Department of Water Resources, October 2018, Supplement C – Water Project Export Disruptions for Multiple-Island Breach Scenarios using the Delta Emergency Response Tool	723-804
II		F	California Department of Water Resources, February 2009, Delta Risk Management Strategy, Phase 1, Executive Summary	805-837
II		G	Sunding, D. and Browne, O. 2024. Benefit-Cost Analysis of the Delta Conveyance Project. Berkeley Research Group	838-913

<b>Volume</b>	<b>Declaration</b>	<b>Exhibit</b>	<b>Exhibit Description</b>	<b>Bates Nos.</b>
III		H	California Department of Water Resources, December 2023, Delta Conveyance Project Final Environmental Impact Report, Chapters 6, 7, 10, 25, 26 and 30	914-1260
III	Decl. of Carolyn Buckman			1261-1267
III		A	Map of 2024-2026 Proposed Geotechnical Activities that are subject to temporary entry permits voluntarily entered by landowners to date or are located on DWR-owned property	1268-1269
III		B	Map of 2024-2026 Proposed Geotechnical Activities that will require court-ordered entry, assuming additional landowners do not enter temporary entry permits	1270-1271
III		C	Delta Conveyance Project - Modernizing California's Water Infrastructure - 2024 Fast Facts	1272-1274
III		D	Facts About the Economic Value of the Delta Conveyance Project	1275-1283
III		E	Sunding, D. and Browne, O. 2024. Benefit-Cost Analysis of the Delta Conveyance Project. Berkeley Research Group	1284-1359
IV	Decl. of Andrew Finney			1360-1364
IV		A	Map of 2024-2026 Proposed Geotechnical Activities that are subject to temporary entry permits voluntarily entered by landowners to date or are located on DWR-owned property	1365-1366
IV		B	Map of 2024-2026 Proposed Geotechnical Activities that will require court-ordered entry, assuming additional landowners do not enter temporary entry permits	1367-1368
IV	Decl. of Jeff Henderson			1369-1371
IV		A	Delta Stewardship Council's "Delta Plan's regulatory policies in PDF format"	1372-1382

<b>Volume</b>	<b>Declaration</b>	<b>Exhibit</b>	<b>Exhibit Description</b>	<b>Bates Nos.</b>
IV		B	“Draft Determination Regarding Appeals of the Certification of Consistency by the California Department of Water Resources for California WaterFix” (November 8, 2018)	1383-1539
IV	Decl. of Katherine Marquez			1540-1557
IV		A	Delta Stewardship Council’s “Administrative Procedures Governing Appeals, Statutory Provisions Requiring Other Consistency Reviews, and Other Forms of Review or Evaluation by the Council”	1558-1581
IV		B	Delta Stewardship Council’s December 16, 2022, comment letter on the Delta Conveyance Project Draft Environmental Impact Report	1582-1620
IV		C	2024-2026 Exploratory Planning and Design Field Investigations - Environmental Compliance, Clearance, and Monitoring Plan	1621-1704
IV		D	Tribal Cultural Resources Management Plan: Phase I (updated July 2024)	1705-1722
IV	Decl. of Demetri Polyzos			1723-1736
IV		A	Facts About the Economic Value of the Delta Conveyance Project	1737-1745
IV		B	Delta Conveyance Project - Modernizing California’s Water Infrastructure - 2024 Fast Facts	1746-1748
IV	Decl. of Craig Wallace			1749-1755
IV		A	Facts About the Economic Value of the Delta Conveyance Project	1756-1764
IV		B	Delta Conveyance Project - Modernizing California’s Water Infrastructure - 2024 Fast Facts	1765-1767



1 Dated: July 24, 2024

Respectfully submitted,

2  
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5 Supervising Deputy Attorneys General

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**SUPERIOR COURT OF THE STATE OF CALIFORNIA  
COUNTY OF SACRAMENTO**

**Department 36**

**Judge: Hon. Stephen P. Acquisto**

Related Case Nos. 24WM000006; 24WM000008; 24WM000009;  
24WM000010; 24WM000011; 24WM000014; 24WM000012;  
24WM000017; 24WM000062; 24WM000076

**DECLARATION OF  
ANDREW FINNEY  
IN SUPPORT OF CALIFORNIA  
DEPARTMENT OF WATER RESOURCES'  
EX PARTE APPLICATION**

1           1.       I, ANDREW FINNEY, make this declaration in support of the California  
2 Department of Water Resources' (DWR) Ex Parte Application for Modification or Stay of  
3 Preliminary Injunction. Except as otherwise stated, I have personal knowledge of the facts set  
4 forth below, and if called to serve as a witness, I would and could testify to the following. The  
5 following statements are based upon my personal knowledge and upon my review of records kept  
6 by the Delta Conveyance Design and Construction Authority (DCA). I have personal knowledge  
7 of the manner in which DCA's records are kept. Each of the records upon which I rely was made  
8 in the ordinary course of business at or near the time of the act, condition, or event. The sources  
9 of information at the time of preparation are such that I believe the records to be trustworthy.

10           2.       I am employed by Jacobs Engineering Group Inc. (Jacobs), and I acted as the Field  
11 Work and Geotechnical Lead for Jacobs in the DCA. I now serve as a Senior Geotechnical  
12 Consultant for the DCA. During my tenure as Field Work and Geotechnical Lead, I oversaw the  
13 DCA's subsurface exploration in support of DWR's review efforts and feasibility studies for the  
14 Delta Conveyance Project (DCP). Currently, I am involved in DCP geotechnical investigations as  
15 explained further in Paragraph 4 below.

16           3.       I received a Bachelor of Science degree with a major in civil engineering from  
17 Bucknell University and a Master of Science degree in civil engineering from the University of  
18 Washington. I am a Civil Engineer and Geotechnical Engineer licensed in good standing with the  
19 State of California with over 30 years of experience with large water infrastructure projects.

20           4.       In my prior and current capacity as Field Work and Geotechnical Lead and a  
21 Senior Geotechnical Consultant, I provide input for proposed subsurface data collection types and  
22 locations for the DCA's geotechnical investigations in support of design and planning for DWR's  
23 DCP. Prior to the Court's issuance of the preliminary injunction, the DCA anticipated  
24 undertaking exploratory geotechnical investigations at DWR's direction. DCA anticipated that  
25 some of these geotechnical activities would take place in Summer 2024 with landowner approval  
26 via voluntary temporary entry permits or on DWR-owned property where entry permits are not  
27 required (the "TEP Program"). For work on properties where access is being sought under a  
28 court-ordered entry process, DCA anticipated that work would commence in Fall 2024 or later

1 (the “Court-Ordered Entry Program”) depending on the timing of issuance of court-ordered entry.

2 5. To support DWR’s Ex Parte Application for Modification or Stay of Preliminary  
3 Injunction, DCA has proposed what will be referred to as the “2024–2026 Proposed Geotechnical  
4 Activities” that DWR may conduct if the court modifies or stays the injunction. The 2024–2026  
5 Proposed Geotechnical Activities consist of the geotechnical work included in both the TEP  
6 Program and the Court-Ordered Entry Program.

7 6. Based on temporary entry permits voluntarily entered by landowners to date, the  
8 TEP Program consists of 37 soil borings, 2 cone penetration tests (CPTs), and 1 water quality test  
9 conducted within a new boring on private property in San Joaquin County, with depths ranging  
10 from 15 to 250 feet below ground surface. The TEP Program is anticipated to include soil  
11 investigations intended for tunnel and shaft studies, roadway planning, and rail spurs and power  
12 substation studies. Work will take place during the workweek, unless otherwise requested by the  
13 landowner, and during daylight hours. Consistent with past field work programs, the drilling  
14 teams would adhere to industry standard protocols for drilling, sampling, and spill prevention in  
15 order to prioritize safety and environmental protection. These are outlined in more detail in my  
16 declaration below.

17 7. Attached as **Exhibit A** hereto and to the Declaration of Carolyn Buckman in  
18 Support of DWR’s Ex Parte Application for Modification or Stay of Preliminary Injunction  
19 (Buckman Decl. for Ex Parte Application) is a map of the geotechnical activities, based on  
20 temporary entry permits voluntarily entered by landowners to date, that DCA proposed to DWR  
21 for inclusion in the TEP Program.

22 8. While DCA anticipates that additional landowners will enter temporary entry  
23 permits in the future, at the time of this writing, the geotechnical activities included in the Court-  
24 Ordered Entry Program for the 2024–2026 Proposed Geotechnical Activities would consist of  
25 193 soil borings, 30 water quality tests conducted within new borings, and 13 CPTs on private  
26 property in Sacramento, San Joaquin, Alameda, and Contra Costa Counties, with depths ranging  
27 from 15 to +/-250 feet below ground surface. The Court-Ordered Entry Program includes soil  
28 investigations intended to provide data to inform levee improvement (e.g., for the “ring levee” at

1 the Twin Cities Complex to protect the site from overland stormwater flows); roadway, bridge,  
2 rail, and power substation planning; as well as pumping plant, tunnel, and shaft studies. Work  
3 would take place during the workweek, unless otherwise requested by the landowner, during  
4 daylight hours, and as allowable by weather and site conditions. Consistent with past field work  
5 programs, the drilling team will adhere to industry standard protocols for drilling, sampling, and  
6 spill prevention in order to prioritize safety and environmental protection.

7 9. Attached as **Exhibit B** hereto and to the Buckman Declaration for Ex Parte  
8 Application is a map of the geotechnical activities, assuming no additional landowners enter  
9 temporary entry permits, that DCA proposed to DWR for inclusion in the Court-Ordered Entry  
10 Program.

11 10. The scope of the boring work for each site would include the same work described  
12 in paragraphs 7 through 11 and 13 through 16 of my declaration in support of DWR's opposition  
13 to all motions for preliminary injunction. These paragraphs in my prior declaration described the  
14 geotechnical activities that were conducted in May and June 2024 before the Court issued the  
15 preliminary injunction. For CPTs, a cone-tipped rod with a diameter of one to two inches is  
16 pushed through the ground to measure various parameters including tip resistance, side friction,  
17 pore pressure, inclination, and shear wave velocity of the soil layers. The depth of the CPTs will  
18 range from approximately 50 feet to 250 feet. Following completion of each of the CPTs, the hole  
19 will be sealed using cement-bentonite grout in accordance with California regulations and  
20 industry standards. Work would occur at the same dates and times as for soil borings.

21 11. The information obtained from the 2024–2026 Proposed Geotechnical Activities  
22 will inform subsequent investigation programs necessary for continued planning and design of  
23 DCP.

24 12. The 2024–2026 Proposed Geotechnical Activities will not include the following  
25 geotechnical activities described in Chapter 3 of the Final Environmental Impact Report for DCP  
26 (DCP EIR): work on levees, overwater activities, activities that involve trenching (i.e., “test  
27 trenches”), activities within the West Tracy Fault or Bethany Fault, pile driving, vibratory testing  
28 of dynamic properties, potholing, monument installation (as described in chp. 3 of the DCP EIR),

1 test fills for settlement studies, 800 foot inclined boreholes, or ground improvement test zones.

2 I declare under the penalty of perjury under the laws of the State of California that the  
3 foregoing is true and correct. Executed at Sacramento, California, this 23<sup>rd</sup> day of July, 2024.

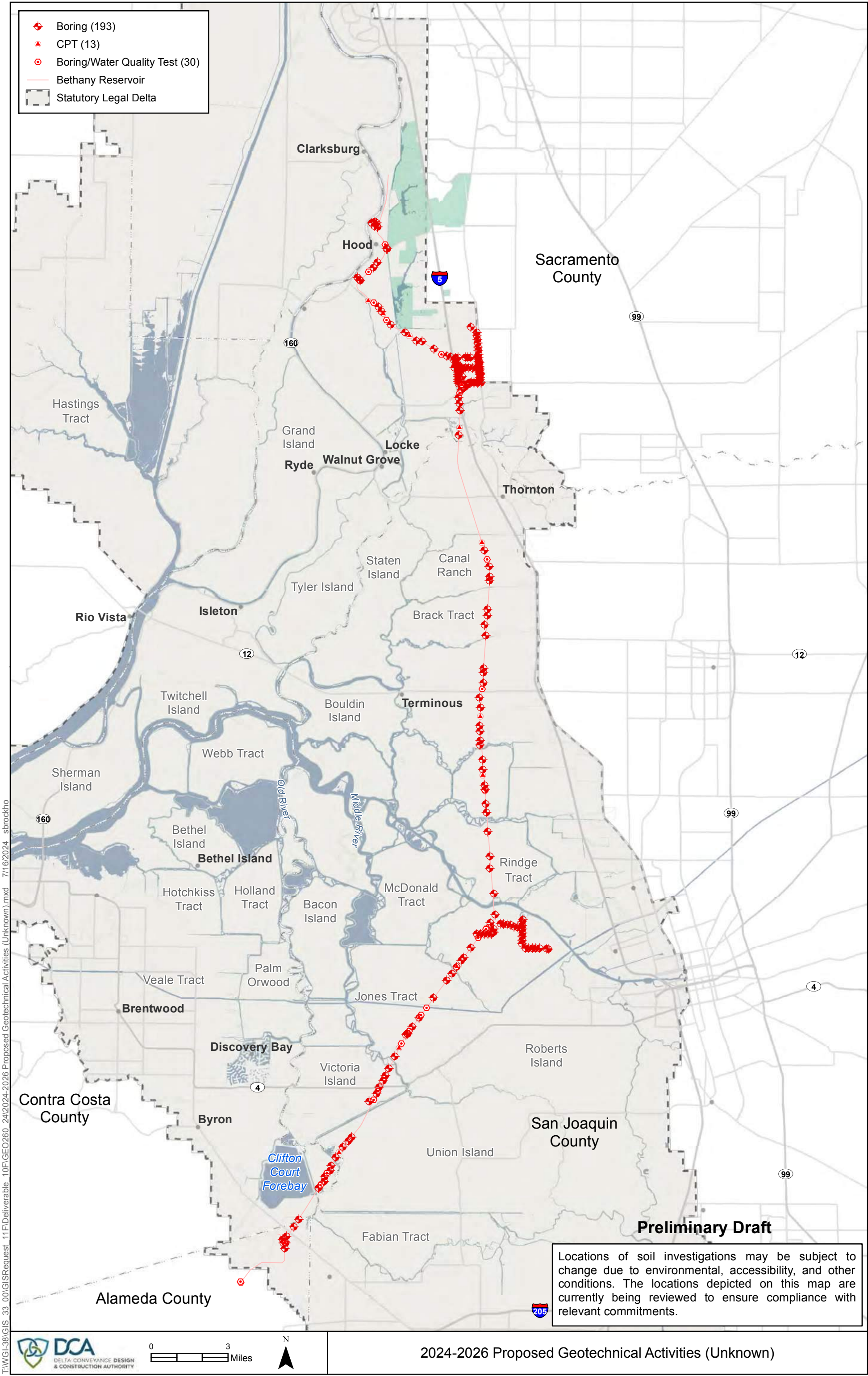
4  
5   
6 ANDREW FINNEY

**EXHIBIT A  
TO FINNEY  
DECLARATION**





**EXHIBIT B  
TO FINNEY  
DECLARATION**



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**SUPERIOR COURT OF THE STATE OF CALIFORNIA  
COUNTY OF SACRAMENTO**

**Department 36**

**Judge: Hon. Stephen P. Acquisto**

Related Case Nos. 24WM000006; 24WM000008; 24WM000009;  
24WM000010; 24WM000011; 24WM000014; 24WM000012;  
24WM000017; 24WM000062; 24WM000076

**DECLARATION OF  
JEFF HENDERSON  
IN SUPPORT OF CALIFORNIA  
DEPARTMENT OF WATER RESOURCES'  
EX PARTE APPLICATION**

1 I, Jeff Henderson, declare:

2 1. I am the Deputy Executive Officer for the Planning and Performance Division of the  
3 Delta Stewardship Council (“Council”). I have been employed as Deputy Executive Officer since  
4 February 2018. I have personal knowledge of the facts set forth in this declaration, and if called  
5 and sworn as a witness, I could and would competently testify thereto.

6 2. The following statements are based upon my personal knowledge and upon my review  
7 of records kept by the Council. I have personal knowledge of the manner in which the Council’s  
8 records are kept. Each of the records upon which I rely was made in the ordinary course of  
9 business at or near the time of the act, condition, or event. The sources of information at the time  
10 of preparation are such that I believe the records to be trustworthy.

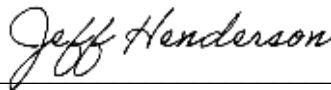
11 3. The Delta Plan policies have been codified as regulations and are set forth in Chapter 2  
12 of Division Six, Title 23, of the California Code of Regulations (CCR). Staff have prepared a  
13 document for the public’s ease of reference titled “Delta Plan Policies” that contains a table with  
14 all Delta Plan regulatory policies and includes: 1) a policy number and citation to the relevant  
15 section of the CCR for each policy; 2) a short title for each policy; and 3) the specific policy  
16 language from the CCR for each policy. Attached as **Exhibit A** is a true and correct copy of the  
17 document titled “Delta Plan Policies” which I downloaded on July 18, 2024, from the Council’s  
18 website at <[https://deltacouncil.ca.gov/pdf/delta-plan/regulations/2024-01-25-delta-plan-policies-](https://deltacouncil.ca.gov/pdf/delta-plan/regulations/2024-01-25-delta-plan-policies-handout.pdf)  
19 [handout.pdf](https://deltacouncil.ca.gov/pdf/delta-plan/regulations/2024-01-25-delta-plan-policies-handout.pdf)> (last visited July 18, 2024). Any member of the public can access this document by  
20 clicking on the relevant hyperlink at this page of the Council’s website:

21 <<https://deltacouncil.ca.gov/delta-plan/regulations>> (last visited July 18, 2024).

22 4. On July 27, 2018, the California Department of Water Resources (Department)  
23 submitted a certification of consistency to the Council for the California WaterFix project  
24 (WaterFix). Nine appeals were timely filed with the Council opposing the certification of  
25 consistency. The Council held a hearing on the appeals from October 24-26, 2018 in West  
26 Sacramento, California. Upon conclusion of the hearing, the Presiding Officer directed Council  
27 staff to prepare draft findings for the appeals based on the record and comments received in the  
28 matter. Accordingly, staff prepared draft findings for the appeals titled “Determination

1 Regarding Appeals of the Certification of Consistency by the California Department of Water  
2 Resources for California WaterFix” that was publicly issued on November 8, 2018. The  
3 Department subsequently withdrew its certification of consistency for the project so that the draft  
4 was never voted on nor adopted by the Council. A true and correct copy of staff’s draft  
5 “Determination Regarding Appeals of the Certification of Consistency by the California  
6 Department of Water Resources for California WaterFix” is attached hereto as **Exhibit B**.

7 I declare under penalty of perjury under the laws of the State of California that the  
8 foregoing is true and correct. Executed on July 19, 2024, in Sacramento County, California.

9 

10 \_\_\_\_\_  
JEFF HENDERSON

**EXHIBIT A  
TO  
HENDERSON  
DECLARATION**

# Delta Plan Policies

As last amended in 2024.<sup>1</sup>

The Delta Plan contains a set of regulatory policies that will be enforced by the Delta Stewardship Council's appellate authority and oversight, described in Chapter 2.

POLICY NUMBER	SHORT TITLE	POLICY LANGUAGE
<b>G P1</b> (Cal. Code Regs., tit. 23, § 5002)	Detailed Findings to Establish Consistency with the Delta Plan	<p>(a) This policy specifies what must be addressed in a certification of consistency filed by a State or local public agency with regard to a covered action. This policy only applies after a “proposed action” has been determined by a State or local public agency to be a covered action because it is covered by one or more of the regulatory policies contained in Article 3. Inconsistency with this policy may be the basis for an appeal.</p> <p>(b) Certifications of consistency must include detailed findings that address each of the following requirements:</p> <ol style="list-style-type: none"> <li>(1) Covered actions, in order to be consistent with the Delta Plan, must be consistent with this regulatory policy and with each of the regulatory policies contained in Article 3 implicated by the covered action. The Delta Stewardship Council acknowledges that in some cases, based upon the nature of the covered action, full consistency with all relevant regulatory policies may not be feasible. In those cases, the agency that files the certification of consistency may nevertheless determine that the covered action is consistent with the Delta Plan because, on whole, that action is consistent with the coequal goals. That determination must include 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. That determination is subject to review by the Delta Stewardship Council on appeal;</li> <li>(2) Covered actions not exempt from CEQA must include all applicable feasible mitigation measures adopted and incorporated into the Delta Plan as amended April 26, 2018, which is here by incorporated by reference, (unless the measure(s)</li> </ol>

<sup>1</sup> Amendment of Cal. Code Regs., tit. 23, § 5001, 5012.



POLICY NUMBER	SHORT TITLE	POLICY LANGUAGE
		<p>are within the exclusive jurisdiction of an agency other than the agency that files the certification of consistency), or substitute mitigation measures that the agency that files the certification of consistency finds are equally or more effective;</p> <p>(3) As relevant to the purpose and nature of the project, all covered actions must document use of best available science;</p> <p>(4) Ecosystem restoration and water management covered actions must include adequate provisions, appropriate to the scope of the covered action, to assure continued implementation of adaptive management. This requirement shall be satisfied through both of the following:</p> <p style="padding-left: 40px;">(A) An adaptive management plan that describes the approach to be taken consistent with the adaptive management framework in <a href="#">Appendix 1B</a>; and</p> <p style="padding-left: 40px;">(B) Documentation of access to adequate resources and delineated authority by the entity responsible for the implementation of the proposed adaptive management process.</p> <p>(c) A conservation measure proposed to be implemented pursuant to a natural community conservation plan or a habitat conservation plan that was:</p> <p style="padding-left: 40px;">(1) Developed by a local government in the Delta; and</p> <p style="padding-left: 40px;">(2) Approved and permitted by the California Department of Fish and Wildlife prior to May 16, 2013 is deemed to be consistent with sections 5005 through 5009 of this Chapter if the certification of consistency filed with regard to the conservation measure includes a statement confirming the nature of the conservation measure from the California Department of Fish and Wildlife.</p>
<b>WR P1</b> (Cal. Code Regs., tit. 23, § 5003)	Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance	<p>(a) Water shall not be exported from, transferred through, or used in the Delta if all of the following apply:</p> <p style="padding-left: 40px;">(1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);</p>



POLICY NUMBER	SHORT TITLE	POLICY LANGUAGE
		<ul style="list-style-type: none"> <li>(2) That failure has significantly caused the need for the export, transfer, or use; and</li> <li>(3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.</li> <li>(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action to export water from, transfer water through, or use water in the Delta, but does not cover any such action unless one or more water suppliers would receive water as a result of the proposed action.</li> <li>(c) <ul style="list-style-type: none"> <li>(1) Water suppliers that have done all of the following are contributing to reduced reliance on the Delta and improved regional self-reliance and are therefore consistent with this policy: <ul style="list-style-type: none"> <li>(A) Completed a current Urban or Agricultural Water Management Plan (Plan) which has been reviewed by the California Department of Water Resources for compliance with the applicable requirements of Water Code Division 6, Parts 2.55, 2.6, and 2.8;</li> <li>(B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta; and</li> <li>(C) Included in the Plan, commencing in 2015, the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance. The expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance shall be reported in the Plan as the reduction in the amount of water used, or in the percentage of water used, from the Delta watershed. For the purposes of reporting, water efficiency is considered a new source of water supply, consistent with Water Code section 1011(a).</li> </ul> </li> <li>(2) Programs and projects that reduce reliance could include, but are not limited to, improvements in</li> </ul> </li> </ul>

POLICY NUMBER	SHORT TITLE	POLICY LANGUAGE
		water use efficiency, water recycling, stormwater capture and use, advanced water technologies, conjunctive use projects, local and regional water supply and storage projects, and improved regional coordination of local and regional water supply efforts.
<b>WR P2</b> (Cal. Code Regs., tit. 23, § 5004)	Transparency in Water Contracting	<p>(a) The contracting process for water from the State Water Project and/or the Central Valley Project must be done in a publicly transparent manner consistent with applicable policies of the California Department of Water Resources and the Bureau of Reclamation referenced below.</p> <p>(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers the following:</p> <ol style="list-style-type: none"> <li>(1) With regard to water from the State Water Project, a proposed action to enter into or amend a water supply or water transfer contract subject to California Department of Water Resources Guidelines 03-09 and/or 03-10 (each dated July 3, 2003), which are attached as <a href="#">Appendix 2A</a>; and</li> <li>(2) With regard to water from the Central Valley Project, a proposed action to enter into or amend a water supply or water transfer contract subject to section 226 of P.L. 97-293, as amended or section 3405(a)(2)(B) of the Central Valley Project Improvement Act, Title XXXIV of Public Law 102-575, as amended, which are attached as <a href="#">Appendix 2B</a>, and Rules and Regulations promulgated by the Secretary of the Interior to implement these laws.</li> </ol>
<b>ER P1</b> (Cal. Code Regs., tit. 23, § 5005)	Delta Flow Objectives	<p>(a) The State Water Resources Control Board's Bay Delta Water Quality Control Plan flow objectives shall be used to determine consistency with the Delta Plan. If and when the flow objectives are revised by the State Water Resources Control Board, the revised flow objectives shall be used to determine consistency with the Delta Plan.</p> <p>(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, the policy set forth in subsection (a) covers a proposed action that could significantly affect flow in the Delta.</p>
<b>ER P2</b> (Cal. Code Regs., tit. 23, § 5006)	Restore Habitats at Appropriate Elevations	<p>(a) Habitat restoration must be carried out consistent with <a href="#">Appendix 3</a>, which is Section II of the Draft Conservation Strategy for Restoration of the Sacramento-San Joaquin Delta Ecological Management Zone and the Sacramento</p>

POLICY NUMBER	SHORT TITLE	POLICY LANGUAGE
		<p>and San Joaquin Valley Regions (California Department of Fish and Wildlife 2011). The elevation map attached as <a href="#">Appendix 4</a> should be used as a guide for determining appropriate habitat restoration actions based on an area's elevation. If a proposed habitat restoration action is not consistent with <a href="#">Appendix 4</a>, the proposal shall provide rationale for the deviation based on best available science.</p> <p>(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action that includes habitat restoration.</p>
<b>ER P3</b> (Cal. Code Regs., tit. 23, § 5007)	Protect Opportunities to Restore Habitat	<p>(a) Within the priority habitat restoration areas depicted in <a href="#">Appendix 5</a>, significant adverse impacts to the opportunity to restore habitat as described in section 5006, must be avoided or mitigated.</p> <p>(b) Impacts referenced in subsection (a) will be deemed to be avoided or mitigated if the project is designed and implemented so that it will not preclude or otherwise interfere with the ability to restore habitat as described in section 5006.</p> <p>(c) Impacts referenced in subsection (a) shall be mitigated to a point where the impacts have no significant effect on the opportunity to restore habitat as described in section 5006. Mitigation shall be determined, in consultation with the California Department of Fish and Wildlife, considering the size of the area impacted by the covered action and the type and value of habitat that could be restored on that area, taking into account existing and proposed restoration plans, landscape attributes, the elevation map shown in <a href="#">Appendix 4</a>, and other relevant information about habitat restoration opportunities of the area.</p> <p>(d) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers proposed actions in the priority habitat restoration areas depicted in <a href="#">Appendix 5</a>. It does not cover proposed actions outside those areas.</p>
<b>ER P4</b> (Cal. Code Regs., tit. 23, § 5008)	Expand Floodplains and Riparian Habitats in Levee Projects	<p>(a) Levee projects must evaluate and where feasible incorporate alternatives, including the use of setback levees, to increase floodplains and riparian habitats. Evaluation of setback levees in the Delta shall be required only in the following areas (shown in <a href="#">Appendix 8</a>):</p> <ol style="list-style-type: none"> <li>(1) The Sacramento River between Freeport and Walnut Grove, the San Joaquin River from the Delta boundary to Mossdale, Paradise Cut, Steamboat</li> </ol>

POLICY NUMBER	SHORT TITLE	POLICY LANGUAGE
		<p>Slough, Sutter Slough; and the North and South Forks of the Mokelumne River, and</p> <p>(2) Urban levee improvement projects in the cities of West Sacramento and Sacramento.</p> <p>(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action to construct new levees or substantially rehabilitate or reconstruct existing levees.</p>
<b>ER P5</b> (Cal. Code Regs., tit. 23, § 5009)	Avoid Introductions of and Habitat Improvements for Invasive Nonnative Species	<p>(a) The potential for new introductions of or improved habitat conditions for nonnative invasive species, striped bass, or bass must be fully considered and avoided or mitigated in a way that appropriately protects the ecosystem.</p> <p>(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(e) of this Chapter, this policy covers a proposed action that has the reasonable probability of introducing or improving habitat conditions for nonnative invasive species.</p>
<b>DP P1</b> (Cal. Code Regs., tit. 23, § 5010)	Locate New Urban Development Wisely	<p>(a) New residential, commercial, and industrial development must be limited to the following areas, as shown in <a href="#">Appendix 6</a> and <a href="#">Appendix 7</a>:</p> <ol style="list-style-type: none"> <li>(1) Areas that city or county general plans, as of May 16, 2013, designate for residential, commercial, and industrial development in cities or their spheres of influence;</li> <li>(2) Areas within Contra Costa County's 2006 voter-approved urban limit line, except no new residential, commercial, and industrial development may occur on Bethel Island unless it is consistent with the Contra Costa County general plan effective as of May 16, 2013;</li> <li>(3) Areas within the Mountain House General Plan Community Boundary in San Joaquin County; or</li> <li>(4) The unincorporated Delta towns of Clarksburg, Courtland, Hood, Locke, Ryde, and Walnut Grove.</li> </ol> <p>(b) Notwithstanding subsection (a), new residential, commercial, and industrial development is permitted outside the areas described in subsection (a) if it is consistent with the land uses designated in county general plans as of May 16, 2013, and is otherwise consistent with this Chapter.</p> <p>(c) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers proposed actions that involve new residential, commercial, and industrial development that is not located within the</p>

POLICY NUMBER	SHORT TITLE	POLICY LANGUAGE
		<p>areas described in subsection (a). In addition, this policy covers any such action on Bethel Island that is inconsistent with the Contra Costa County general plan effective as of May 16, 2013. This policy does not cover commercial recreational visitor-serving uses or facilities for processing of local crops or that provide essential services to local farms, which are otherwise consistent with this Chapter.</p> <p>(d) This policy is not intended in any way to alter the concurrent authority of the Delta Protection Commission to separately regulate development in the Delta's Primary Zone.</p>
<b>DP P2</b> (Cal. Code Regs., tit. 23, § 5011)	Respect Local Land Use when Siting Water or Flood Facilities or Restoring Habitats	<p>(a) Water management facilities, ecosystem restoration, and flood management infrastructure must be sited to avoid or reduce conflicts with existing uses or those uses described or depicted in city and county general plans for their jurisdictions or spheres of influence when feasible, considering comments from local agencies and the Delta Protection Commission. Plans for ecosystem restoration must consider sites on existing public lands, when feasible and consistent with a project's purpose, before privately owned sites are purchased. Measures to mitigate conflicts with adjacent uses may include, but are not limited to, buffers to prevent adverse effects on adjacent farmland.</p> <p>(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers proposed actions that involve the siting of water management facilities, ecosystem restoration, and flood management infrastructure.</p>
<b>RR P1</b> (Cal. Code Regs., tit. 23, § 5012)	Prioritization of State Investments in Delta Levees and Risk Reduction	<p><b>(a) Fund levee operation and maintenance.</b> For the purposes of Water Code Section 85306, State investments in levee operation and maintenance of Delta project levees and nonproject levees shall be prioritized as follows:</p> <p>(1) For project levees, funding should be prioritized to ensure levees are operated and maintained in accordance with Code of Federal Regulations, Title 33, Part 208.10 and applicable federal Operation and Maintenance manuals, active in federal Public Law 84-99 Rehabilitation Program, and consistent with Central Valley Flood Protection Board Resolution No. 2018-06 for Acceptable Operation and Maintenance of the State Plan of Flood Control.</p> <p>(2) For nonproject levees, funding should be prioritized to ensure levees are operated and maintained to protect the Delta's physical characteristics.</p>

POLICY NUMBER	SHORT TITLE	POLICY LANGUAGE
		<p>(b) <b>Delta levees investment strategy.</b> The priorities listed in Table 1 and depicted in <a href="#">Delta Plan Appendix P</a> dated August 2021, which is incorporated by reference, shall guide State discretionary investments in the improvement of Delta levees. The California Department of Water Resources' funding decisions are subject to its consideration of the benefits, costs, engineering considerations, and other factors. As the California Department of Water Resources selects levee improvement projects for funding through its levee funding programs, it should fund projects at the Very-High priority islands or tracts, before funding projects at High Priority or Other Priority islands or tracts. If available funds are sufficient to fully fund levee improvement projects at the Very-High Priority islands or tracts, then funds for levee improvement projects on High Priority islands or tracts should be funded and after those projects have been fully funded, then levee improvement projects at Other Priority islands or tracts may be funded.</p> <p>(c) <b>Annual Report</b></p> <p>(1) The California Department of Water Resources shall submit a written annual report, as described in paragraph (2), to the Council, as well as present the report to Council, on State funds distributed or provided by the California Department of Water Resources within the legal Delta. At least 45 days prior to the oral presentation before the Council, and no later than March 1 of each calendar year, the California Department of Water Resources shall submit the written annual report to the Council and make the report publicly available.</p> <p>(2) The report shall include:</p> <p>(A) A description of all discretionary State funding for levees awarded by the California Department of Water Resources, during the reporting year; including both of the following:</p> <p>(i) Levee improvement.</p> <p>(ii) Levee operation and maintenance.</p> <p>(B) A list of each levee improvement project proposal submitted to the California Department of Water Resources for funding, regardless of whether the California Department of Water Resources awarded funding to the project;</p> <p>(C) A list of the improvement projects awarded funding, the funding level awarded, the local cost share, and the applicable priority of the island or tract from Table 1 in subsection (b), where the levee improvement project is located;</p> <p>(D) A description, for each awarded project, of changes (when completed) to levee geometry, the specific locations of those changes, and expected changes in the level of flood protection provided or standard achieved;</p>

POLICY NUMBER	SHORT TITLE	POLICY LANGUAGE
		<p>(E) If the California Department of Water Resources awards funds for any levee improvement project that is inconsistent with the priorities identified in subsection (b), the annual report shall identify for each project: how the funding is inconsistent with the priorities, describe why variation from the priorities is necessary, and explain how the funding nevertheless protects lives, property, or other State interests, such as infrastructure, agriculture, water supply reliability, Delta ecosystem, or Delta communities;</p> <p>(F) A summary of the California Department of Water Resources' rationale for levee improvement project proposals submitted, but not awarded funding during the reporting year; and</p> <p>(G) A summary of all previous California Department of Water Resources funded levee improvement project activities completed during the reporting year and location of those activities.</p> <p>(d) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action that involves discretionary State investments in Delta flood risk management, including levee operations, maintenance, and improvements. Nothing in this policy establishes or otherwise changes existing levee standards.</p> <p>Note: Authority cited: Sections 85210 and 85306, Water Code.</p> <p>Reference: Sections 85020, 85022, 85054, 85057.5, 85300, 85305, 85306, 85307, and 85309, Water Code.</p>
<b>RR P2</b> (Cal. Code Regs., tit. 23, § 5013)	Require Flood Protection for Residential Development in Rural Areas	<p>(a) New residential development of five or more parcels shall be protected through floodproofing to a level 12 inches above the 100-year base flood elevation, plus sufficient additional elevation to protect against a 55-inch rise in sea level at the Golden Gate, unless the development is located within:</p> <ol style="list-style-type: none"> <li>(1) Areas that city or county general plans, as of May 16, 2013, designate for development in cities or their spheres of influence;</li> <li>(2) Areas within Contra Costa County's 2006 voter-approved urban limit line, except Bethel Island;</li> <li>(3) Areas within the Mountain House General Plan Community Boundary in San Joaquin County; or</li> <li>(4) The unincorporated Delta towns of Clarksburg, Courtland, Hood, Locke, Ryde, and Walnut Grove, as shown in <a href="#">Appendix 7</a>.</li> </ol> <p>(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action that involves new residential development of five or more parcels that is not located within the areas described in subsection (a).</p>



POLICY NUMBER	SHORT TITLE	POLICY LANGUAGE
<b>RR P3</b> (Cal. Code Regs., tit. 23, § 5014)	Protect Floodways	(a) No encroachment shall be allowed or constructed in a floodway, unless it can be demonstrated by appropriate analysis that the encroachment will not unduly impede the free flow of water in the floodway or jeopardize public safety. (b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action that would encroach in a floodway that is not either a designated floodway or regulated stream.
<b>RR P4</b> (Cal. Code Regs., tit. 23, § 5015)	Floodplain Protection	(a) No encroachment shall be allowed or constructed in any of the following floodplains unless it can be demonstrated by appropriate analysis that the encroachment will not have a significant adverse impact on floodplain values and functions: <ol style="list-style-type: none"> <li>(1) The Yolo Bypass within the Delta;</li> <li>(2) The Cosumnes River-Mokelumne River Confluence, as defined by the North Delta Flood Control and Ecosystem Restoration Project (McCormack-Williamson), or as modified in the future by the California Department of Water Resources or the U.S. Army Corps of Engineers (California Department of Water Resources 2010); and</li> <li>(3) The Lower San Joaquin River Floodplain Bypass area, located on the Lower San Joaquin River upstream of Stockton immediately southwest of Paradise Cut on lands both upstream and downstream of the Interstate 5 crossing. This area is described in the Lower San Joaquin River Floodplain Bypass Proposal, submitted to the California Department of Water Resources by the partnership of the South Delta Water Agency, the River Islands Development Company, Reclamation District 2062, San Joaquin Resource Conservation District, American Rivers, the American Lands Conservancy, and the Natural Resources Defense Council, March 2011. This area may be modified in the future through the completion of this project.</li> </ol> (b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action that would encroach in any of the floodplain areas described in subsection (a). (c) This policy is not intended to exempt any activities in any of the areas described in subsection (a) from applicable regulations and requirements of the Central Valley Flood Protection Board.



**EXHIBIT B**  
**TO**  
**HENDERSON**  
**DECLARATION**



# DELTA STEWARDSHIP COUNCIL

A California State Agency

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## Determination Regarding Appeals of the Certification of Consistency

### by the California Department of Water Resources for

### California WaterFix

#### Appealed by:

Appellant Group	Defined Term
North Coast Rivers Alliance, Institute for Fisheries Resources, Pacific Coast Federation of Fishermen's Associations, San Francisco Crab Boat Owners Association, Winnemem Wintu Tribe	NCRA
Save the California Delta Alliance	SCDA
Friends of the River, California Sportfishing Protection Alliance, California Water Impact Network, Planning and Conservation League, AquAlliance, Environmental Water Caucus, Sierra Club California, Restore the Delta	FOR
North Delta CARES Action Committee	North Delta Cares
City of Stockton	Stockton
Sacramento Regional County Sanitation District	Regional San
San Joaquin County, Contra Costa County, Solano County, Yolo County, Local Agencies of the North Delta	San Joaquin County
Central Delta Water Agency, South Delta Water Agency	CDWA
County of Sacramento, Sacramento County Water Agency	Sacramento County

In this Determination Regarding Appeals of the Certification of Consistency by the California Department of Water Resources for California WaterFix (Determination), the Delta Stewardship Council (Council) finds that substantial evidence *does not* exist in the record before us to support the Department of Water Resources' (Department's or DWR's) finding that California WaterFix is consistent with the Delta Plan. Because the Department's certification of consistency for California WaterFix (Certification or Certification of Consistency) *is not* supported by substantial evidence in the record, we *remand* the matter to the Department for reconsideration, pursuant to Water Code section 85225.25.

## I. BACKGROUND

### A. Brief Description of Project

The Delta Reform Act of 2009 charges the Council with implementing the Delta Plan. (Wat. Code, § 85204.) As part of this charge, we must ensure that agency actions in the Delta are consistent with the Delta Plan's policies. (Wat. Code, § 85225.) An agency undertaking a qualifying action in the Delta—called a covered action—must certify to the Council that its action is consistent with the Delta Plan. (*Ibid.*)

California WaterFix is a covered action. On July 27, 2018, the Department filed a Certification of Consistency for the California WaterFix covered action. (See Certification Record.)

California WaterFix proposes large physical and operational improvements to the State Water Project in the Delta: new intake facilities in the north Delta, expanded south Delta intake facilities, and underground tunnels to connect the two. (*Supra* at pp. 1-2; California WaterFix Final EIR/EIS (Final EIR/EIS), pp. 1-6; see also Department's map below, in its Certification, [Project Description](#), p. 9.)



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1 The new north Delta intake facilities will consist of three separate intakes along the east  
2 bank of the Sacramento River between Clarksburg and Courtland. (Final EIR/EIS, p. 3-111.)  
3 These fish-screened intakes will divert water through a complex sedimentation system before  
4 conveying it to two large tunnels. (*Ibid.*) Once complete, these tunnels, up to 40 feet in  
5 diameter, will have the capacity to convey up to 9,000 cubic feet per second. (*Id.* at p. 3-91.)  
6 The water will travel by gravity through these tunnels to expanded south Delta intake facilities.  
7 (*Id.* at p. 3-111.) These facilities will undergo physical improvements to isolate water flowing  
8 from the north Delta and manage the relative quantities diverted from the north and south.  
9 (*Ibid.*) Diversions from existing south Delta facilities will also continue. (*Ibid.*)

10 California WaterFix would enable the State Water Project to operate using a dual-  
11 conveyance system: water would primarily be diverted from the north Delta, with the option of  
12 diverting water from the south Delta based on conditions. (Certification, Project Description, p.  
13 2.) California WaterFix would also include mitigation measures, such as fish screens, habitat  
14 restoration, and management activities. (*Id.* at p. 4.) The Department maintains that, through  
15 construction and mitigation, California WaterFix could reduce the State Water Project's ongoing  
16 reliance on diversions from the south Delta, increase the flexibility of operations in order to  
17 protect fish, and capture more water during times of high flow. (*Id.* at pp. 1, 3.)

### 18 B. Brief Description of Appeals & Procedural History

19 Any person who claims that a proposed covered action is inconsistent with the Delta  
20 Plan may file an appeal of the certification of consistency. (Wat. Code, § 85225.10, subd. (a).)  
21 An appeal must identify with specificity how the certification of consistency is not supported by  
22 substantial evidence in the record certified by the project proponent, and provide necessary  
23 factual support. (Wat. Code, § 85225.10, subd. (c); see also Appeals Procedures § 6 and subd.  
24 (e) and (f).) The Council may dismiss claims that fail to provide this specificity. (*Ibid.*) Parties  
25 have 30 days from the submission of the certification of consistency to file an appeal with the  
26 Council. (Wat. Code, § 85225.15.)

27 We received nine timely appeals from the following entities (Appellants or Appellant  
28 Groups):

- 29 1. North Coast Rivers Alliance, Pacific Coast Federation of Fishermen's Associations,  
30 Institute for Fisheries Resources, San Francisco Crab Boat Owners Association, and the  
31 Winnemem Wintu Tribe (NCRA);
- 32 2. Save the California Delta Alliance (SCDA);
- 33 3. Friends of the River, California Sportfishing Protection Alliance, California Water Impact  
34 Network, Planning and Conservation League, AquAlliance, Environmental Water  
35 Caucus, Sierra Club California, and Restore the Delta (FOR);
- 36 4. North Delta CARES Action Committee (North Delta Cares);
- 37 5. City of Stockton (Stockton);
- 38 6. Sacramento Regional County Sanitation District (Regional San);
- 39 7. Counties of San Joaquin, Contra Costa, Solano and Yolo, and Local Agencies of the  
40 North Delta (San Joaquin County);
- 41 8. Central Delta Water Agency and South Delta Water Agency (CDWA); and
- 42 9. County of Sacramento and Sacramento County Water Agency (Sacramento County).

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1 The Department certified the administrative record in this matter on September 7, 2018.<sup>1</sup>  
2 We held a hearing on the appeals on October 24-26, 2018, in West Sacramento, California,  
3 where: the Department and Appellants offered written and oral testimony; the Delta Protection  
4 Commission (Commission) provided written and oral comments and recommendations pursuant  
5 to Public Resources Code section 29773; and we received public comment on the Certification  
6 and Appeals.

7 Upon conclusion of the hearing, the Presiding Officer directed Council staff to prepare  
8 draft findings regarding the appeals based on the record and comments received in the matter,  
9 and to schedule a public workshop to receive input on the draft findings. Staff's proposed draft  
10 findings for consideration at the public workshop were issued on November 8, 2018.

## 11 II. BRIEF SUMMARY OF FINDINGS

12  
13 Appellants substantively challenged the Certification's findings of consistency with nine  
14 Delta Plan policies, one of which (G P1 (23 CCR § 5002)), has four subdivisions under which  
15 Appellants challenged the Department's Certification. For clarity of analysis in this  
16 Determination, we treat the challenges under the four G P1 subdivisions as individual Delta Plan  
17 policy challenges (i.e., a total of twelve, rather than nine, Delta Plan policies are implicated).  
18

19 In Section VI of this Determination (Analysis & Findings), the Council finds that:

- 20  
21 1. The Department's Certification of Consistency with respect to the following five Delta  
22 Plan policies is *not supported* by substantial evidence in the record:  
23  
24     ▪ G P1, subd. (b)(1) (23 CCR § 5002, subd. (b)(1)) ("G P1(b)(1)": Full consistency  
25       infeasible, but on the whole the covered action is consistent with the coequal  
26       goals  
27  
28     ▪ G P1, subd. (b)(3) (23 CCR § 5002, subd. (b)(3)) ("G P1(b)(3)": Best Available  
29       Science  
30  
31     ▪ WR P1 (23 CCR § 5003) ("WR P1"): Reduce Reliance on the Delta Through  
32       Improved Regional Water Self Reliance  
33  
34     ▪ ER P1 (23 CCR § 5005) ("ER P1"): Delta Flow Objectives  
35  
36     ▪ DP P2 (23 CCR § 5011) ("DP P2"): Respect Local Land Use When Siting Water  
37       or Flood Facilities or Restoration Habitats  
38  
39 2. Appellants failed to show that there is not substantial evidence in the record to support  
40 the Department's Certification of Consistency with respect to the following four Delta  
41 Plan policies, and we therefore *deny* the portions of the appeals that challenge the  
42 Certification on these grounds:  
43  
44     ▪ G P1, subd. (b)(2) (23 CCR § 5002, subd. (b)(2)) ("G P1(b)(2)": Detailed  
45       Findings to Establish Consistency with the Delta Plan Mitigation Measures  
46

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<sup>1</sup> The record in this matter is voluminous. For ease of reference, when citing documents in the record, our Determination also links to the record posted on our webpage.

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- G P1, subd. (b)(4) (23 CCR § 5002, subd. (b)(4)) (“G P1(b)(4)”): Adaptive Management
  - ER P3 (23 CCR § 5007) (“ER P3”): Protect Opportunities to Restore Habitat
  - ER P5 (23 CCR § 5009) (“ER P5”): Avoid Introductions of and Habitat Improvements for Invasive Nonnative Species
3. The following three policies do not apply to the Certification, and we therefore *deny* the portions of the Appeals that challenge the Certification on these grounds:
- WR P2 (23 CCR § 5004) (“WR P2”): Transparency in Water Contracting
  - ER P2 (23 CCR § 5006) (“ER P2”): Restore Habitats at Appropriate Elevations
  - RR P1 (23 CCR § 5012) (“RR P1”): Prioritization of State Investments in Delta Levees and Risk Reduction

Because the Council finds the Department's Certification of Consistency with the five Delta Plan policies identified in Section II.1. above is *not supported* by substantial evidence in the record, we are *remanding* the matter to the Department for reconsideration, pursuant to Water Code section 85225.25.<sup>2</sup>

### III. STANDARD OF REVIEW

In a covered action appeal, the question before us is whether an Appellant has shown that the certification of consistency is not supported by substantial evidence in the record. (Wat. Code, § 85225.25.)

Substantial evidence means evidence that is “reasonable in nature, credible, and of solid value.” (*Desmond v. County of Contra Costa* (1993) 21 Cal.App.4th 330, 335.) It includes “facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.” (Cal. Code Regs. tit. 14, § 15384.) Speculation or conjecture alone is not substantial evidence. (*California Assn. of Medical Products Suppliers v. Maxwell-Jolly* (2011) 199 Cal.App.4th 286, 308.)

Under the substantial evidence standard of review, we must decide whether there is enough relevant information and reasonable inferences so that a fair argument can be made to support the Department's conclusions, even though other conclusions may also be reached. (See Cal. Code Regs. tit. 14, § 15384.)

At the time a project proponent submits a certification of consistency, it must also submit the record upon which that certification of consistency is based. (Council's Administrative

<sup>2</sup> CDWA contends that “[t]he [Council] can condition its approval of the WaterFix on the grounds that exports cannot increase beyond current levels.” (CDWA Appeal Letter, p. 9.) Under the Delta Reform Act, following a hearing on an appeal, the Council shall “make specific written findings either denying the appeal or remanding the matter to the state or local public agency for reconsideration of the covered action based on the finding that the certification of consistency is not supported by substantial evidence in the record.” (Wat. Code, § 85225.25.) Thus, we must either deny an appeal or remand a matter. (*Ibid.*) We do not have the authority to conditionally deny an appeal. (*Ibid.*)

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1 Procedures Governing Appeals, Part I [Administrative Procedures], section 4, subd. (a).) We  
2 may supplement the agency's record submission with any information we conclude was before  
3 the agency but nevertheless was not included in the submission to us. (Administrative  
4 Procedures section 10.) We may also take official notice of any accepted technical or scientific  
5 fact, as well as any fact that may be judicially noticed. (*Id.*, section 29.)  
6

7 We review a certification of consistency to determine whether it is supported by the  
8 administrative record, rather than simply reviewing it for error. (*Sierra Club v. California Coastal*  
9 *Comm.* (1993) 19 Cal.App.4th 547, 557.) The entire record will be reviewed, including evidence  
10 detracting from the decision. (*Utility Reform Network v. Public Utilities Commission* (2014) 223  
11 Cal.App.4th 945, 959.) However, the Council does not substitute its own findings or inferences  
12 for the Department's. (See *Sierra Club v. California Coastal Comm.* (1993) 19 Cal.App.4th 547,  
13 557.) In some instances, evaluating the Certification requires the interpretation of the Delta  
14 Plan and documents incorporated therein. The Council, as drafter and administrator of the Delta  
15 Plan, will interpret the Plan pursuant to its expertise. We will consider interpretations that the  
16 parties offer but will ultimately arrive at an independent determination reflecting our expertise.  
17 (See *Manriquez v. Gourley* (2003) 105 Cal.App.4th 1227, 1234.)  
18

19 In arguing that certain findings are not based upon substantial evidence, Appellants  
20 carry the burden of demonstrating that the administrative record does not contain sufficient  
21 evidence to support the Department's findings. (*State Water Res. Control Bd. Cases* (2006)  
22 136 Cal.App.4th 674, 749.) "A recitation of only the part of the evidence that supports the  
23 Appellant's position is not the demonstration contemplated under the above rule." (*Ibid.* [internal  
24 citation and quotation marks omitted].) Thus, if an appellant fails to set forth specific facts  
25 showing that a finding is not supported by the evidence, it has failed to raise an appealable  
26 issue, and its claim must be dismissed. (Administrative Procedures, sections 6, subds. (e), (f),  
27 and 15, subd. (c); *Salas v. Cal. Dept. of Transportation* (2011) 198 Cal.App.4th 1058, 1074 [the  
28 Council is not required to search the record to ascertain whether it contains support for the  
29 Appellants' contentions].)  
30

31 We may grant the appeal and remand the matter to the agency if, after examining the  
32 entirety of the record, a reasonable person could not have reached the agency's conclusion(s)  
33 in its consistency determination. (See *Patterson Flying Serv. v. California Dept. of Pesticide*  
34 *Regulation* (2008) 161 Cal.App.4th 411, 426.)  
35

## 36 IV. DELTA PROTECTION COMMISSION

37 The Commission has a unique and important role in representing the interests of Delta  
38 communities. (Commission Letter, p. 1; see also Wat. Code, §§ 85085, subd. (a), 85200, subd.  
39 (b)(1), and 85301.) The architecture of the Delta Reform Act reflects this role and establishes a  
40 process for the Commission to provide recommendations to the Council on various issues.  
41 (Pub. Res. Code, § 29773.) That process requires us to adopt a recommendation if, in our  
42 discretion, we determine it to be feasible. (*Id.*, § 29773, subd. (b).)  
43

44 Out of respect for both the Commission and the spirit of the Delta Reform Act, our  
45 Administrative Procedures expressly encourage the Commission to provide testimony and  
46 comment "regarding an appeal." (Appeals Procedures, § 11.) On September 14, 2018, we  
47 issued a Notice of Public Hearing that incorporated language from our Appeals Procedures and  
48 invited the Commission to provide comments on the California WaterFix appeals. On October  
49 16, 2018, the Commission submitted written comments asserting three policies – DP P1, DP

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1 P2, and GP 1. On October 24 and 25, 2018, multiple Commission representatives provided oral  
2 testimony.

3  
4 Per the Appeals Procedures and the hearing notice, we may only consider comments  
5 and testimony from the Commission “regarding an appeal.” Certain of the appeals filed against  
6 California WaterFix raise DP P2 and G P1; thus, we consider the Commission’s DP P2 and GP  
7 1 arguments in the sections below addressing those policies. No appeals raised DP P1,  
8 however. Consequently, we must refrain from considering arguments related to that policy.<sup>3</sup>

### 9 V. ADMINISTRATIVE RECORD

10 On October 30, 2018, Executive Officer Jessica Pearson admitted the State Water  
11 Resources Control Board (SWRCB) docket regarding the change of point of diversion  
12 proceedings for the WaterFix Project (SWRCB hearing docket) through July 27, 2018 (the date  
13 that the Department filed its Certification). (See Appeals Procedures, § 10.)

14 Appellants and the Commission requested that additional documents be added to the  
15 record before us. They assert that such documents are either: (a) part of the record before the  
16 Department, but were not included in the Department’s submission to the Council (see Appeals  
17 Procedures, § 10); or, (b) generally accepted technical or scientific matter within the Council’s  
18 jurisdiction (see Appeals Procedures, § 29). The Department objected to certain of those  
19 requests for admissions. Our rulings on these admissions requests are as follows: documents  
20 admitted pursuant to section 10 are listed in Exhibit A attached hereto; documents admitted  
21 pursuant to section 29 are listed in Exhibit B attached hereto; documents that we decline to  
22 admit into the record are listed in Exhibit C attached hereto.

23 Because they may be judicially noticed by the courts of this State and/or are generally  
24 accepted technical or scientific matter within our jurisdiction, pursuant to section 29 of our  
25 Appeals Procedures, we hereby take official notice of the following facts:

- 26 1) The existence of the pending updates to the SWRCB Water Quality Control Plan for the  
27 San Francisco Bay-Sacramento-San Joaquin Delta Estuary (Bay-Delta WQCP) (see our  
28 Analysis in Section VI.H. below).  
29  
30 2) That following a major levee failure, saltwater would move farther into the Delta, harming  
31 water quality. In the present system, the Delta itself is a part of the conveyance facilities,  
32 so the Department would need to mitigate water quality there in order to protect the  
33 quality of the water it is exporting south (see our Analysis in Section VI.H. below).  
34  
35

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<sup>3</sup> The Commission requests that we add 19 documents to the record pursuant to Section 10 of our Appeals Procedures. But the Commission offers no argument or evidence that any of these documents were before the Department at the time it certified. We note, however, that the documents are all government records and susceptible to notice under Section 29 of our Appeals Procedures. We therefore convert the request to supplement pursuant to Section 10 into a request for official notice pursuant to Section 29, and grant the request for 18 of the 19 documents. (See Exhibit B.) The sole document for which we deny the request is described by the Commission as “10-11-18 email inquiry from the Commission (Erik Vink) to DWR (Greg Farley) and DWR’s 10-12-18 reply.” The document postdates the filing of the Certification and is not relevant to a determination of whether the Department had substantial evidence to support its Certification (see Exhibit C).



VI. ANALYSIS & FINDINGS

Our analysis is organized by general legal issues raised by Appellants, and then by Delta Plan policy.

A. General Legal Issues

1. Validity of the Current Delta Plan

At least two Appellants assert that the 2013 Delta Plan is invalid. (NCRA Appeal Letter, pp. 1-2; FOR Appeal Letter, pp. 3-4.) They base their assertions on the fact that Sacramento Superior Court Judge Michael Kenny entered judgments directing issuance of traditional writs of mandate ordering us to set aside our approval of the Delta Plan until we had added certain specified provisions to the plan.<sup>4</sup> (*Ibid.*) We filed notices of appeal of those judgments between November and December 2016 and, as the Department observes, “[t]hose notices automatically stayed the effect of Judge Kenny’s ruling, leaving the Delta Plan in place pending the outcome of the appeals in the cases on appeal.” (Department, October 15, 2018 Supplement, § 2.)

The Department is correct. By law, our appeals automatically stayed the judgments and related matters. The Rutter-Group California Practice Guide summarizes the law as follows:

Civil writ of mandate: An appeal automatically stays proceedings on a judgment directing issuance of a writ of mandate. (*Hayworth v. City of Oakland* (1982) 129 CA3d 723, 727, 181 CR 214, 217; *Johnston v. Jones* (1927) 74 CA 272, 273, 239 P 862.) However, both the trial and appellate court have discretion to lift the stay if a stay would cause irreparable damage to petitioner’s business or profession. (CCP § 1110b; *Hayworth v. City of Oakland*, *supra*, 129 CA3d at 728, 181 CR at 217.)

(Rutter Group-California Practice Guide: Civil Appeals & Writs, Cal. Prac. Guide Civ. App. & Writs Ch. 7-B [7:79].) No party has sought to lift the automatic stay. The Delta Plan is therefore valid and remains in effect. Any agency wishing to implement a covered action must submit a certification of consistency that demonstrates consistency with the Delta Plan based upon a substantial evidence standard. (Wat. Code, § 85225.)

2. Delta Plan Recommendations

The Delta Plan describes its “working parts” as “recommendations” and “policies.” (Delta Plan, ES-4.) “Recommendations call attention to tasks being done or to be done by others.” (*Ibid.*) “Policies are legal requirements that anyone undertaking a significant project in the Delta must meet.” (*Ibid.*)

At varying points in the present proceedings, the Department and Appellants have invoked certain recommendations. (See, e.g., Certification of Consistency: WR P1, p. 3-31; FOR Appeal Letter, p. 7; October 24, 2018 Transcript, p. 119, line 24, and p. 124, line 3.) Certain Appellants have faulted California WaterFix for allegedly failing to comply with these

<sup>4</sup> Judgments were entered on October 21, 2016, in *North Coast Rivers Alliance, et al., v. Delta Stewardship Council, et al.*; on November 23, 2016, in *Central Delta Water Agency, et al. v. Delta Stewardship Council* and *California Water Impact Network, et al. v. Delta Stewardship Council*, and on November 28, 2016, in *Save the California Delta Alliance v. Delta Stewardship Council*.

1 recommendations. (FOR Appeal Letter, p. 7.) Others have recognized that the  
2 recommendations do not have regulatory effect. (October 24, 2018 Transcript, p. 124, line 3.)  
3 We wish to make it clear that we have not and will not use recommendations to assess the  
4 consistency of California WaterFix or any other covered action with the Delta Plan. To do  
5 otherwise would be to improperly convert the recommendations into underground regulations.  
6 (See *Center for Biological Diversity v. Dept. of Fish and Wildlife* (2015) 234 Cal.App.4th 214,  
7 259.)

### 8 **3. Delta Plan's Regulatory History**

9  
10 A court may consider regulatory history when construing an ambiguous regulation.  
11 (See, e.g., *De La Torre v. California Horse Racing Bd.* (2017) 7 Cal.App.5th 1058, pp. 1069  
12 [citing “response to pre-enactment comments”] and 1070 [citing “Statement of Reasons”  
13 submitted to Office of Administrative Law]; *Butts v. Bd. of Trustees of California State University*  
14 (2014) 225 Cal.App.4th 825, 839 [observing that legislative history rules also apply to  
15 regulations], and *Superior Dispatch, Inc. v. Insurance Corp. of New York* (2010) 181  
16 Cal.App.4th 175, 189 [citing initial statement of reasons and taking judicial notice of rulemaking  
17 file].)

18 The regulatory history for the Delta Plan regulations is found in the rulemaking file that  
19 we submitted to the Office of Administrative Law in support of those regulations in 2013. It  
20 includes, among other documents, the narrative Delta Plan, the associated environmental  
21 impact report, and an initial statement of reasons. In the present proceeding, as we consider the  
22 proper interpretation of certain Delta Plan regulations, we will look to that file and the documents  
23 in it for guidance as appropriate.

### 24 **4. Prematurity**

25  
26  
27 Many Appellants argue that, because certain project features of California WaterFix are  
28 still unresolved, the Department's filing of its Certification—and the Council's attendant review—  
29 are premature. (NCRA Appeal Letter, p. 2; Stockton Appeal Letter, p. 4; Regional San Appeal  
30 Letter, p. 4; San Joaquin County Appeal Letter, p. 3; CDWA Appeal Letter, p. 1.) As support,  
31 Appellants raise three discrete but related issues to show that WaterFix could change based on  
32 future actions.<sup>5</sup> The Council concludes that review of the certification at this time is *not*  
33 *premature*.<sup>6</sup>

#### 34 **a. Draft Supplemental Environmental Impact Report**

35 First, many Appellants argue that California Environmental Quality Act (CEQA) review of  
36 the project is incomplete because the Department has not yet completed the CEQA process for  
37 changes to the project that are analyzed in the draft supplemental environmental impact report

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<sup>5</sup> San Joaquin County also raises a fourth issue, arguing that the incomplete U.S. Army Corps of Engineers permitting process is another source of uncertainty. (San Joaquin County Appeal Letter, p. 10.) The Delta Reform Act does not require the Department to wait until all permits are issued before it may submit the certification. However, the Department has promised that “any potential significant change would be evaluated to ensure...continued compliance with ...the Delta Reform Act.” (Department October 23, 2018 Submittal - San Joaquin County, p. 15, no. 10.) The Council expects the Department to pursue an early and robust consultation in the event that changes to the project are approved.

<sup>6</sup> To the extent that the Appellants' prematurity arguments relate to specific policies, they will be addressed in the analyses for those policies, below.

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(DSEIR). (San Joaquin County Appeal Letter, p. 6; CDWA Appeal Letter, p. 1; NCRA Appeal Letter, p. 2; Stockton Appeal Letter, p. 4; Regional San Appeal Letter, p. 2.) According to Appellants, these proposed changes may result in environmental impacts that the current project does not address, and thus too much uncertainty exists to determine whether the project is consistent with the Delta Plan. (*Ibid.*)

The Department does not rely on the DSEIR in its Certification. It admits that the covered action “does not include the proposed design refinements...as those project changes are not yet approved.” (Department October 15, 2018 Letter, p. 9.) Consequently, these project changes are “not presented to form any part of the substantial evidence supporting [the Department’s] certification for WaterFix.” (*Ibid.*; see also Department October 15, 2018 Letter, p. 6.) Speculative impacts due to a proposed change that has not yet been approved are not part of the project for which the Department submitted a Certification of Consistency. Therefore, the DSEIR and any proposed project changes analyzed in that document are not relevant in the instant appeal proceedings.

The Department acknowledges, however, that these project changes “may or may not cause the need for additional CEQA compliance as well as the need for compliance with the Delta Reform Act.” (Department October 15, 2018 Letter, p. 5.) Once these project changes are final, the Department has committed to “coordinate with the Council through early consultation and determine how the change affects the WaterFix certification” and “what compliance is necessary for the Delta Reform Act.” (Department October 15, 2018 Letter, p. 5.) Should the Department approve these design changes after this Certification, the Council expects the Department to pursue an early and robust consultation.

### **b. Central Valley Project Operations**

Many Appellants also point to uncertainty surrounding the United States Bureau of Reclamation’s (Reclamation or USBR) future participation in California WaterFix, which could undermine the current conclusions regarding the extent of environmental impacts and consistency with the Delta Plan. (San Joaquin County Appeal Letter, p. 3; NCRA Appeal Letter, p. 2; Stockton Appeal Letter, p. 6; Regional San Appeal Letter, p. 6.) They allege that Reclamation’s lack of participation in the Certification of Consistency, its upcoming renegotiation of the Coordinated Operation Agreement, and Reclamation’s stated intent to operate the Central Valley Project in a manner not evaluated in the Final EIR/EIS all create uncertainty around how California WaterFix will operate. (*Ibid.*) Uncertainty in California WaterFix’s operations, according to these Appellants, renders the Council’s current review premature.

The Department has stated on the record that, should “Reclamation’s participation in WaterFix change[] in a way that results in a change in WaterFix, [the Department] will coordinate with the Council through early consultation and determine how the change affects the WaterFix certification” as well as “what compliance is necessary for the Delta Reform Act.” (Department October 15, 2018 Letter, pp. 8, 13.) Again, the Council strongly encourages the Department to pursue an early and robust consultation.

### **c. State Water Resources Control Board Proceedings**

Some Appellants further point to the ongoing SWRCB hearing as another source of uncertainty. (San Joaquin County Appeal Letter, p. 9; CDWA Appeal Letter, p. 1.) As with the DSEIR and Reclamation’s future actions, any outcome of the SWRCB proceeding and any resulting project changes are speculative at this time.

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1 The Department has committed on the record to “coordinate with the Council through  
2 early consultation and determine how the change affects the WaterFix certification” and “what  
3 compliance is necessary for the Delta Reform Act” should “the State Water Resources Control  
4 Board’s final decision on [the Department’s] and Reclamation’s petition or a change in the point  
5 of diversion results in a change in WaterFix.” (Department October 15, 2018 Letter, p. 10.) The  
6 Council reiterates that it strongly encourages the Department to pursue an early and robust  
7 consultation.

8 For the foregoing reasons, we conclude that the timing to hear the Certification is *not*  
9 *premature*. We proceed to the substance of the Certification for the project the Department  
10 adopted on July 21, 2017, and described in the Final EIR/EIS.

11 **B. Policy G P1(b)(1) (23 CCR Section 5002(b)(1)): Full Consistency Infeasible, but on**  
12 **the Whole the Covered Action is Consistent with the Coequal Goals**

13  
14 G P1, subdivision (b)(1), requires that a covered action be consistent with each Delta  
15 Plan policy that it implicates. Subdivision (b)(1) recognizes, however, that “in some cases,  
16 based upon the nature of the covered action, full consistency with all relevant regulatory policies  
17 may not be feasible.” In those cases, “the agency that files the certification of consistency may  
18 nevertheless determine that the covered action is consistent with the Delta Plan because on  
19 whole, that action is consistent with the coequal goals.” The Delta Plan defines “feasible” to  
20 mean “capable of being accomplished in a successful manner within a reasonable period of  
21 time, taking into account economic, environmental, legal, social, and technological factors.”  
22 (Cal. Code Reg., tit. 23, § 5001, subd. (p).)

23 The Department asserts infeasibility under GP 1(b)(1) as an alternative theory for  
24 consistency with numerous policies. (E.g., Certification of Consistency: ER P1, p. 1, fn. 1  
25 [“Nevertheless, California WaterFix should still be found to be consistent with the Delta Plan  
26 pursuant to subdivision (b)(1) of section 5002 of title 23 of the California Code of Regulations”];  
27 Certification of Consistency, DP P2, p. 2, fn. 1 [“If it is determined by the DSC Delta Council [*sic*]  
28 that a Delta Plan policy DWR finds to be not applicable to California WaterFix, in fact does apply  
29 to portions of California WaterFix, and/or full consistency with the policy as interpreted by the  
30 Council is not feasible”].) But with limited exception, the Department provides little analysis or  
31 argument in support of these assertions.

32  
33 At the October 25, 2018 hearing, the Department clarified that it wishes to invoke the  
34 subdivision for only two policies – DP P1 and WR P1. (October 25, 2018 Transcript, p. 64, line  
35 7.) No appeal has asserted inconsistency with DP P1. Consequently, under the Reform Act,  
36 we must presume that California WaterFix is consistent with DP P1 for the reasons set forth in  
37 the Certification of Consistency, and we need not consider the applicability of subdivision (b)(1).  
38 (Wat. Code, § 85225.15; Appeals Procedures, § 6, subd. (e) [mandating that an appeal set forth  
39 “[t]he specific grounds for appeal”].) We consider the applicability of the subdivision to WR P1  
40 in the section on that policy below.

41  
42 **C. Policy G P1(b)(2) (23 CCR Section 5002(b)(2)): Detailed Findings to Establish**  
43 **Consistency with the Delta Plan Mitigation Measures**

44  
45 The Department certifies that California WaterFix is consistent with G P1(b)(2). Six  
46 Appellants – NCRA, SCDA, FOR, North Delta Cares, Stockton, and San Joaquin County – raise  
47 substantive arguments that it is not. In its October 16, 2018, written statement, the Commission  
48 comments on mitigation, both with regard to the mitigation requirements of DP P2 (which are

discussed in Section VI.L. of this Determination) and as to California WaterFix’s consistency with G P1(b)(2). This analysis considers Appellants’ arguments that certain California WaterFix measures are not equally or more effective than the applicable Delta Plan measures. For the reasons discussed below, the Council finds that Appellants failed to show that the Certification of Consistency with G P1(b)(2) is not supported by substantial evidence in the record. We therefore *deny* the appeals on these grounds.

## 1. Policy Requirements

G P1(b)(2) states:

(b) Certifications of consistency must include detailed findings that address each of the following requirements:

(2) Covered actions not exempt from CEQA must include applicable feasible mitigation measures identified in the Delta Plan’s Program EIR (unless the measure(s) are within the exclusive jurisdiction of an agency other than the agency that files the certification of consistency), or substitute mitigation measures that the agency that files the certification of consistency finds are equally or more effective; ....”

Because California WaterFix is a covered action subject to CEQA, it must comply with this requirement. The Department has not included measures identified in the Delta Plan’s Program EIR (“Delta Plan Measures”). Instead, California WaterFix includes measures<sup>7</sup> that the Department claims are equally or more effective than the applicable Delta Plan Measures.

## 2. Department’s Certification

In its Certification, the Department provided a “mitigation crosswalk” table, which identified each applicable Delta Plan Measure, identified for each such measure the California WaterFix Measures that the Department found to be equally or more effective, and provided a brief narrative explanation of that finding. ([Certification G P1\(b\)\(2\) Findings pp. 1-1 through 1-68.](#)) The mitigation crosswalk identifies the substantial evidence the Department claims supports its G P1(b)(2) finding. The substance of the California WaterFix Measures is in the Final EIR/EIS Mitigation Monitoring and Reporting Program (“MMRP”) (Document code: [X.3 000116](#)).

## 3. Appeals and Analysis

Appellants frequently challenge the efficacy or sufficiency of California WaterFix Measures under CEQA’s standards for mitigation. These arguments are not properly before the Council, which may consider only whether California WaterFix is consistent with the Delta Plan—in the immediate context, whether substantial evidence supports the Department’s findings that each challenged California WaterFix Measure is equally or more effective than the applicable Delta Plan Measure.

---

<sup>7</sup> California WaterFix includes “mitigation measures,” “environmental commitments,” and “avoidance and minimization measures.” The parties do not distinguish among them: all three categories are considered to be measures that could demonstrate consistency with G P1(b)(2). This analysis refers to any measure in one of the three categories as a “California WaterFix Measure,” but uses specific measures’ full titles, such as “Environmental Commitment 7” or “Mitigation Measure TRANS-1.”

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Appellants also frequently make arguments challenging the consistency of broad categories of California WaterFix Measures, then provide examples of the alleged flaw. This analysis only considers the consistency of California WaterFix Measures that Appellants specifically identified.

### a. GP 1(b)(2) Issue 1: Measures are Vague and Unenforceable

Appellants contend that because many of California WaterFix Measures are too vague, they are inconsistent with GP 1(b)(2). Furthermore, they argue California WaterFix Measures lack enforceable commitments described in Delta Plan Measures.

Appellants provide three examples of this contention:

- 1) Environmental Commitment 3 (EC 3, Natural Communities Protection and Restoration) does not identify what measures will be utilized to protect natural communities. ([NCRA Appeal Letter](#), p. 3)
- 2) Environmental Commitment 7 (EC 7, Riparian Natural Community Restoration) provides no information on how it would restore 251 acres of riparian natural community habitat. ([NCRA Appeal Letter](#), p. 3)
- 3) The project fails to include enforceable mitigation measures because Reclamation is not party to the Certification of Consistency and the federal government is claiming the right to maximize water export deliveries. ([FOR Appeal Letter](#), p. 6).

#### i. Environmental Commitment 3

California WaterFix Environmental Commitment 3 (“EC 3”) provides for the acquisition and restoration of natural communities and habitat for special-status species. Because the Department has not identified what measures will be utilized to protect natural communities under EC 3, NCRA argues, EC 3 “does not qualify as enforceable mitigation measures that would satisfy CEQA,” and is therefore inconsistent with G P1(b)(2). (NCRA Appeal Letter, pp. 3-4.)

In the mitigation crosswalk table, the Department identifies EC 3, along with other California WaterFix Measures, as equally or more effective than Delta Plan Measures 4-1, 4-2, 4-3, 4-4, 4-5, 6-2, all of which concern the protection of natural communities, special-status species, and habitat.

NCRA does not identify any Delta Plan Measure for which EC 3 falls short of the “equally or more effective” standard, nor does it argue that EC 3 is otherwise inconsistent with the Delta Plan. NCRA therefore has not raised any issue within the scope of the Council’s review as to EC 3, and we *deny* its appeal as to this issue.

#### ii. Environmental Commitment 7

California WaterFix Environmental Commitment 7 (“EC 7”) would restore 251 acres of riparian natural communities to mitigate for an equivalent area impacted by project construction. Because the Department has provided no information in the record describing how EC 7 would do so, NCRA argues, EC 7 “does not qualify as enforceable mitigation measures that would satisfy CEQA,” and is therefore inconsistent with G P1(b)(2). (NCRA Appeal Letter, pp. 3-4.)

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1 In the mitigation crosswalk table, the Department identifies EC 7 (along with other  
2 California WaterFix Measures) as equally or more effective than Delta Plan Measures 4-1, 4-2,  
3 4-3, 4-4, 4-5, and 6-2.

4 NCRA does not identify any Delta Plan Measure for which EC 7 falls short of the “equally  
5 or more effective” standard, nor does it argue that EC 7 is otherwise inconsistent with the Delta  
6 Plan. NCRA therefore has not raised any issue within the scope of the Council’s review as to  
7 EC 7, and we *deny* its appeal as to this issue.

### 8 **iii. Mitigation Measures and Reclamation**

9  
10 Appellant FOR argues that California WaterFix fails to include applicable enforceable  
11 mitigation measures because Reclamation, a subdivision of the federal Department of the  
12 Interior, is not party to the Certification. (FOR Appeal Letter, p. 5-6.) The Certification states that  
13 the Department, along with Reclamation, jointly prepared the Final EIR/EIS and are lead  
14 agencies on the project. ([Final Project Description](#), p. 4.) The Council has no authority over  
15 federal agencies. Federal agencies are not required to be party to any certification of  
16 consistency.

17 Appellant FOR asserts that the federal government is claiming the right to maximize  
18 water export deliveries, and that the “mitigation measures are meaningless” given recent  
19 statements from Secretary of the Interior Ryan Zinke ([FOR Appeal Letter](#), p.6). In support of this  
20 claim assertion, FOR cites two articles from the Sacramento Bee newspaper from August 20  
21 and August 21, 2018 ([FOR Appeal Letter](#), p. 5). These articles describe a memo issued by  
22 Secretary Zinke, which is attached to FOR’s Appeal Letter. The memo from Secretary Zinke in  
23 turn was issued on August 17, 2018. All of these documents were issued after the Department’s  
24 Certification and were therefore not “before” the Department at the time of certification. We  
25 decline FOR’s request to admit them into the record submitted to the Council by the  
26 Department. (See Wat. Code, § 85225.25.; [Exhibit C](#) attached hereto.)

27 FOR does not identify any Delta Plan Measure for which the corresponding California  
28 WaterFix Measure falls short of the “equally or more effective” standard because of  
29 Reclamation’s position, nor does it argue that California WaterFix is otherwise inconsistent with  
30 G P1(b)(2) for that reason. FOR therefore has not raised any issue within the scope of the  
31 Council’s review as to Reclamation’s position, and we *deny* its appeal as to this issue.

### 32 **b. Measures are Improperly Deferred**

33  
34 Appellants NCRA and SCDA assert that the mitigation measures identified in the Final  
35 EIR/EIS are improperly deferred and are therefore inconsistent with GP 1(b)(2). The appeals  
36 illustrate this contention as follows:  
37

- 38 1) WaterFix Avoidance and Minimization Measure AMM 27 (Selenium Management) is  
39 improperly deferred mitigation. (NCRA Appeal Letter, p. 3)
- 40  
41 2) WaterFix Avoidance and Minimization Measure AMM 31 (Noise Abatement) is  
42 improperly deferred mitigation. (NCRA Appeal Letter, p. 3)
- 43  
44 3) WaterFix Avoidance and Minimization Measure AMM 32 (Hazardous Material  
45 Management) is improperly deferred mitigation. (NCRA Appeal Letter, p. 3)
- 46



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- 1 4) All measures identified in the Final EIR/EIS Master Response 22 are inadequate  
2 because they are improperly deferred. (SCDA Appeal Form, p. 4)  
3

4 AMM 27 (Selenium Management) (MMRP 3-76), AMM 31 (Noise Abatement) (MMRP 3-  
5 34), and AMM 32 (Hazardous Materials Management) (MMRP 3-39) all provide for mitigation  
6 plans to be developed at a future date. NCRA argues that each fails to “qualify as enforceable  
7 mitigation measures that would satisfy CEQA and is therefore inconsistent with G P1(b)(2).  
8 (NCRA Appeal Letter, pp. 3-4).

9 NCRA does not identify any Delta Plan Measures for which the identified “deferred”  
10 California WaterFix measures fall short of the “equally or more effective” standard, nor does it  
11 argue that these measures are otherwise inconsistent with the Delta Plan. NCRA therefore has  
12 not raised any issue within the scope of the Council’s review as to these measures, and we  
13 *deny* its appeal as to this issue.

14 NCRA additionally asserts that this argument applies to “all of the ECs identified in the  
15 FEIR.” (NCRA Appeal Letter, p. 3.) NCRA does not make any specific argument or direct the  
16 Council to any evidence regarding these other ECs. We will consider the consistency only of the  
17 measures that Appellants identify and discuss specifically, and we *deny* its appeal as to this  
18 issue.

### 19 **c. Stockton Water Quality Impacts**

20  
21 Stockton contends that California WaterFix does not include any mitigation measures  
22 that would mitigate water quality impacts to Stockton. According to Stockton, California  
23 WaterFix would decrease the volume of higher quality Sacramento River water at Stockton’s  
24 intake in the north Delta, while increasing the volume of more saline and lower quality San  
25 Joaquin River water. (Stockton Appeal Letter, p. 6). This change would substantially degrade  
26 the water quality at Stockton’s drinking water intake and wastewater discharge locations by  
27 increasing concentrations of chloride and other water quality constituents to levels that render  
28 the water unusable for Stockton’s Municipal & Industrial uses under its existing treatment  
29 technology. Chloride concentrations that exceed 110 mg/L in the City’s source water increase  
30 chlorides in its wastewater discharge, presenting a risk of non-compliance with its National  
31 Pollutant Discharge Elimination System. (Stockton Appeal Letter, p.7)

32 Stockton argues that the Department has adopted no mitigation measures to address  
33 unmitigated impacts of California WaterFix that would substantially degrade the water quality at  
34 Stockton’s drinking water intake and wastewater discharge locations. No Delta Plan Measure,  
35 however, mitigates these impacts. Therefore, there is no “applicable” measure for which G  
36 P1(b)(2) requires California WaterFix to adopt an equally or more effective measure. Stockton  
37 therefore has not raised any issue within the scope of the Council’s review as to water quality  
38 mitigation, and we *deny* its appeal as to this issue.

### 39 **d. Measures are not Equally or More Effective**

40  
41 Appellant San Joaquin County argues that the Department has failed “to demonstrate  
42 that any of the [California WaterFix Measures] are consistent or comparable to the [Delta Plan]  
43 Measures.” (San Joaquin County Appeal Letter, p. 27.) San Joaquin County provides the  
44 following examples of this failure:

- 45 1) California WaterFix Mitigation Measure WQ-11e fails to provide equally or more effective  
46 mitigation than Delta Plan Measure 3-1 to avoid violation of water quality standards,



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1 because it is inadequate and does not include a firm commitment to fully offset salinity  
2 increases. (San Joaquin Appeal Letter, p. 28.)  
3

- 4 2) California WaterFix Mitigation Measure GW-1 fails to provide equally or more effective  
5 mitigation than Delta Plan Measure 3-2 to avoid groundwater recharge impacts because  
6 it does not include any enforceable requirements and represents improperly deferred  
7 mitigation. (San Joaquin County Appeal Letter, p. 29.)  
8
- 9 3) California WaterFix fails to provide equally or more effective mitigation for potential  
10 impacts to groundwater than Delta Plan Measure 21-2, which provides measures to  
11 reduce or avoid impacts on project operations caused by climate change. Appellant  
12 argues that the Department incorrectly claims that Mitigation Measure 21-2 does not  
13 apply to WaterFix. (San Joaquin County Appeal Letter, p. 29.)  
14
- 15 4) California WaterFix fails to provide equally or more effective mitigation than Delta Plan  
16 Measure 4-1, which requires advanced mitigation planning for ecosystem restoration  
17 prior to construction, because the Department has not identified specific locations for  
18 ecosystem restoration, nor conducted any of the necessary subsequent environmental  
19 review. (San Joaquin County Appeal Letter, p. 30.)  
20
- 21 5) California WaterFix fails to provide equally or more effective mitigation than Delta Plan  
22 Measure 4-2, which requires restoration or preservation of in-kind suitable habitat to  
23 offset take of special-status species, because the substitute measures fail to  
24 demonstrate that the Department can and will restore or preserve in-kind suitable habitat  
25 for Greater Sandhill Crane. (San Joaquin County Appeal Letter, p. 30.)  
26
- 27 6) California WaterFix fails to provide equally or more effective mitigation than Delta Plan  
28 Measure 4-4, which requires the expansion of existing wildlife refuges for migratory  
29 birds, because the substitute measures lack enforceable requirements and constitute  
30 improperly deferred mitigation. (San Joaquin County Appeal Letter, p. 30.)  
31
- 32 7) California WaterFix fails to provide equally or more effective mitigation than Delta Plan  
33 Measure 7-1 to avoid impacts to agricultural land. Measure 7-1 requires compensatory  
34 preservation of agricultural land, but WaterFix Mitigation Measure AG-1 allows for  
35 consideration of an "Optional Agricultural Land Stewardship Approach." (San Joaquin  
36 County Appeal Letter, pp 30-31.)  
37

38 SCDA similarly argues that California WaterFix fails to provide equally or more effective  
39 mitigation than Delta Plan Measure 19-1, which provides for various measures to reduce or  
40 avoid impacts to marine and roadway traffic. (SCDA October 15, 2018 Letter., pp. 9-10).<sup>8</sup>  
41  
42  
43

---

8 Additionally, the Commission comments that California WaterFix fails to provide mitigation equally or more effective than Delta Plan Measures 18-2 (to reduce or avoid impacts to recreation facilities caused by users displaced from facilities subject to "substantial temporary or permanent impairment, degradation, or elimination"), 19-1 (requiring a waterway traffic control plan), 17-1 (regarding land and water emergency response routes), and 7-1 (providing for 1:1 compensatory preservation for agricultural land converted to other uses). (Delta Protection Commission October 16, 2018 Letter, pp. 8-13.)

1                   **i. Delta Plan Measure 3-1**

2  
3           Appellant San Joaquin County asserts that California WaterFix Mitigation Measure WQ-  
4 11e is not equally or more effective mitigation than Delta Plan Measure 3-1 because WQ-11e  
5 would not reduce or avoid salinity increases at various locations including the south Delta. (San  
6 Joaquin County Appeal Letter, p. 28.)

7           Delta Plan Measure 3-1 includes several different measures to reduce or avoid the  
8 violation of water quality standards during the construction of projects pursuant to the Delta  
9 Plan. Measure 3-1 does not address the impacts of project operation and does not require the  
10 reduction or avoidance of salinity increases. Any alleged shortcoming in California WaterFix  
11 measure WQ-1 related to salinity is not inconsistent with policy G P1(b)(2). San Joaquin County  
12 therefore has not raised any issue within the scope of the Council's review as to salinity  
13 mitigation, and we *deny* its appeal as to this issue.

14                   **ii. Delta Plan Measure 3-2**

15  
16           Delta Plan Measure 3-2 would reduce or avoid construction impacts to groundwater  
17 availability by requiring pre-construction surveys, monitoring wells during dewatering operations,  
18 and various remedial measures if adjacent wells are affected. Appellant San Joaquin County  
19 asserts that California WaterFix Mitigation Measure GW-1 fails to propose equally or more  
20 effective mitigation than Mitigation Measure 3-2 because Mitigation Measure GW-1 requires  
21 monitoring for only five years and only within a corridor approximately two miles on either side of  
22 the California WaterFix project. (San Joaquin County Appeal Letter, p. 29). "Project impacts  
23 may take years to reveal themselves," San Joaquin County argues, "and would continue  
24 indefinitely as long as the Project was operated." (*Id.*). Moreover, Appellant argues, GW-1 "does  
25 not describe the method for identifying potentially impacted wells, and it does not account for  
26 the possibility that Project operations would result in reduced well yields." (*Id.*).

27           Delta Plan Measure 3-2 applies only to the construction period. Appellant identifies no  
28 evidence that construction impacts may continue beyond the construction period or outside of  
29 the specified corridor. For construction impacts, GW-1, consistent with Measure 3-2, describes  
30 the monitoring protocol and lists potential responses if wells are affected. ([MMRP 2-4 to 2-7.](#))  
31 Because Delta Plan Measure 3-2 does not apply to project operations, the operations-related  
32 provisions of GW-1 are not inconsistent with Policy G P1(b)(2). San Joaquin County has failed  
33 to show that there is not substantial evidence in the record to support the Department's finding  
34 of consistency with G P1(b)(2) as to Delta Plan Measure 3-2, and we *deny* San Joaquin  
35 County's appeal as to this issue.

36                   **iii. Delta Plan Measure 21-2**

37  
38           Delta Plan Measure 21-2 would reduce or avoid impacts to project operations due to  
39 climate change or sea-level rise. San Joaquin County claims that the Department has failed to  
40 identify measures that are equally or more effective than two of the provisions within Measure  
41 21-2. Appellant notes that the measure requires that intakes and diversions are designed for  
42 operation "at multiple surface water elevations," but makes no argument that California WaterFix  
43 fails to provide equally or more effective mitigation as compared to this requirement. Appellant  
44 instead argues that the Department has failed to meet the requirement in Measure 21-2 for a  
45 hydrogeologic study to assess long-term groundwater recharge and safe yield of wells under a  
46 sustainable groundwater management plan.

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1 The Department asserts that California WaterFix “does not rely on groundwater and  
2 therefore the mitigation measure related to a sustainable groundwater plan is not applicable.”  
3 (Certification G P1(b)(2) Finding, p. 1-66.) With reference to evidence from the SWRCB hearing,  
4 Appellants argue that the operation of California WaterFix will have impacts on the South  
5 American and Eastern San Joaquin groundwater sub-basins, and that the project therefore must  
6 provide a measure equally or more effective than the hydrogeologic study required under Delta  
7 Plan Measure 21-2. ([San Joaquin County Appeal Letter, p.29](#)). Appellants cite testimony from  
8 John Lambie during the SWRCB hearing, which states that “the depletion of the groundwater  
9 stored in these Subbasins by the proposed diversions would be substantial on an annual basis  
10 in terms of acre-feet per year removed from each Subbasin’s water budget. It also indicates the  
11 depletions will be substantial in terms of the acre-feet of water stored in the groundwater aquifer  
12 beneath each Subbasin over both the 20-year implementation horizon and a 50-year planning  
13 horizon described the SGMA.” (San Joaquin County October 15, 2018 Letter, pp. 5-6, citing  
14 [SJC 223 Lambie, p.7](#)).<sup>9</sup>

15 San Joaquin County further argues that the mitigation measure to reduce groundwater  
16 dewatering impacts is unproven and could have permanent impacts on surrounding areas (San  
17 Joaquin County October 15, 2018 Letter, pp. 5-6). Appellants cite evidence from SWRCB  
18 hearing testimony by Josef Tootle which states, “There exists a substantial possibility that  
19 adjacent property owners that rely on drainage of shallow groundwater for agriculture production  
20 and/or use of shallow groundwater aquifers for irrigation water will be significantly adversely  
21 impacted by this introduction of nearly impermeable barriers to groundwater flow, i.e., by the  
22 proposed slurry cutoff walls” (*Id.*, citing LAND-35, Tootle, pp.4-5).

23 The Department acknowledges that the detailed hydrogeological studies were not  
24 completed for the Final EIR/EIS. ([D.8 Draft 022888](#), pp. 2-12). However, the Department states  
25 that it will conduct such studies during further project design, prior to construction, and that  
26 mitigation measures would be implemented if groundwater elevations declined due to the  
27 project (*Ibid.*, p. 3). The Department goes on to cite evidence that groundwater levels would not  
28 be affected near or to the east of Interstate 5, due to the project (*Ibid.*, pp. 3-4). The Department  
29 also cites SWRCB hearing testimony by Parviz Nader-Tehrani ([D.8 DRAFT 022590](#), p. 3)  
30 showing changes of 0.5 to 1.2 feet in Sacramento River water surface level near the intakes  
31 (*Id.*).

32 In the Delta Plan Final PEIR, Delta Plan Measure 21-2 would reduce the effects  
33 described as Impacts 21-3a, 21-3c, and 21-3e: “Conflict with Operations of Proposed Facilities  
34 Due to Climate Change and Sea Level Rise.” (Delta Plan FPEIR, p. 21-32.) Those impacts  
35 concern the effects of climate change and sea-level rise on the proposed project, not the  
36 proposed project’s impacts on others. For example, Impact 21-3a, considering such impacts for  
37 water supply projects encouraged by the Delta Plan, states that “[i]f the intakes/diversions were  
38 not constructed for variable surface water elevations, there could be periods of time when the  
39 facilities would not be operable.” (Delta Plan FPEIR, p. 21-14; *see also id.*, p. 21-18 (“If future  
40 projects to protect and enhance the unique resources and values of the California Delta as an  
41 evolving place are located at elevations below the highest projected surface water elevation, the  
42 facilities may not be operable due to local flooding conditions.”). San Joaquin County has not  
43 identified any impact to California WaterFix that a hydrogeologic study would reduce or avoid.  
44 The requirement of a hydrogeologic study in Delta Plan Measure 21-2 does not apply to

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<sup>9</sup> SJC 223 was withdrawn from Water Board testimony but remains a part of the record of this proceeding pursuant to Executive Officer Jessica Pearson’s October 30, 2018, email order re WaterFix C20185 SWRCB hearing docket.

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California WaterFix. Moreover, California WaterFix Measure GW-1 commits the Department to monitoring and, as needed, mitigation of construction-related impacts to groundwater levels in the vicinity of the construction site. The Appellant has therefore failed to show that there is not substantial evidence in the record to support the Department's Certification of Consistency with G P1(b)(2) as to this aspect of Delta Plan Measure 21-2, and we *deny* the appeal as to this issue.

### iv. Delta Plan Measure 4-1

San Joaquin County argues that California WaterFix fails to propose equally or more effective mitigation than Delta Plan Measure 4-1, which requires advanced mitigation planning for ecosystem restoration prior to construction. Specifically, San Joaquin County argues that the Department concedes that it has not identified specific locations for ecosystem restoration, nor conducted any of the necessary subsequent environmental review and that this failure to implement advanced mitigation planning is inconsistent with Delta Plan Measure 4-1. (San Joaquin County Appeal Letter p. 30.)

Delta Plan Measure 4-1 requires, in part, that a project "[i]mplement advanced mitigation planning for ecosystem restoration prior to construction." San Joaquin County asserts that the Department has failed to carry out the necessary planning. (San Joaquin County Appeal Letter, p. 30.) However, Delta Plan Measure 4-1 requires such planning only prior to construction, not at the time of project approval or certification of consistency with the Delta Plan. The Council finds that Appellant has failed to show that there is not substantial evidence in the record to support the Department's Certification of Consistency with G P1(b)(2) as to Delta Plan Measure 4-1.

### v. Delta Plan Measure 4-2

Delta Plan Measure 4-2 provides for the avoidance of impacts to special-status species (including Greater Sandhill Crane) and, if such impact is unavoidable, for the restoration or preservation of compensatory habitat for the affected species. San Joaquin County argues that California WaterFix fails to comply with this measure because it concedes the project will impact Greater Sandhill Cranes but does not include any measure requiring compensatory habitat. (San Joaquin County Appeal Letter, p. 30.)

San Joaquin County asserts that the Department acknowledges that California WaterFix will "take"<sup>10</sup> Greater Sandhill Crane, because the Department's mitigation for Greater Sandhill Crane impacts includes fitting new transmission line "with bird diverters, which have been shown to reduce avian mortality by 60%." ([WaterFix Final EIR/EIS](#), p. 12-3542.) The Department, however, goes on to state that these diverters and other transmission line measures, along with a suite of measures focused on Greater Sandhill Cranes, would result in "no take of greater sandhill crane from the project and . . . a less-than-significant impact on greater sandhill crane." (*Id.*) San Joaquin County identifies no evidence showing that this conclusion lacks the support of substantial evidence. Because California WaterFix measures avoid impacts to Greater Sandhill Cranes, they are equally or more effective than Delta Plan Measure 4-2. The Council finds that Appellant has failed to show that there is not substantial

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<sup>10</sup> "Take," under the California and federal Endangered Species Acts, means to harm a protected species in the manner forbidden under the acts. For purposes of this analysis, "take" is equivalent to significant impact under CEQA.

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evidence in the record to support the Department's Certification of Consistency with G P1(b)(2) as to Delta Plan Measure 4-2.

### vi. Delta Plan Measure 4-4

San Joaquin County argues that the Department has failed to demonstrate consistency with Delta Plan Measure 4-4, which in part provides for expanding existing wildlife refuges for migratory birds ([San Joaquin County Appeal Letter](#), p. 30). Appellant argues that California WaterFix measures fail to set out a timeframe for and standards for grassland community sites for such expansion. (*Id.*)

Measure 4-4 does not specify a timeframe for expanding refuges. California WaterFix's lack of a timeframe therefore does not prevent it from being equally effective as Measure 4-4.

As to the standards for expansion sites, the Department's crosswalk identifies a number of California WaterFix measures as equally or more effective than Measure 4-4 including Environmental Commitment 8: Grassland Natural Community Restoration (EC 8). EC 8 would "meet the commitments set out in Tables 5-1 and 5-2" of the MMRP. ([MMRP](#), pp. 5-1, 5-3, 5-6.) Table 5-2, in turn, provides a list of principles for grassland restoration. ([MMRP](#), p. 5-3.) These principles are equally or more effective than Delta Plan Measure 4-4, which does not include any specific standards for such land. The Council finds that Appellant has failed to show that there is not substantial evidence in the record to support the Department's Certification of Consistency with G P1(b)(2) as to Delta Plan Measure 4-4.

### vii. Delta Plan Measure 7-1

San Joaquin County asserts that the Department fails to propose mitigation equally or more effectively than Delta Plan Measure 7-1, which would reduce or avoid impacts related to the conversion of agricultural land to other uses. Among other measures, 7-1 provides that projects resulting in permanent conversion shall preserve agricultural land "at a target ratio of 1:1," either by acquiring conservation easements or by monetary contributions to a preservation entity. In its mitigation crosswalk, the Department describes preservation at the 1:1 ratio "as the basis for mitigation" pursuant to that California WaterFix Mitigation Measure AG-1 (MM AG-1). (Certification G P1(b)(2) Findings, p. 1-18.). The Department supports its certification by describing how the project will implement an Agricultural Land Stewardship Program (ALSP) to "reduce agricultural land impacts from construction of the Project. (*Id.*, p. 16). The ALSP could include a variety of strategies "to help maintain farming in the Delta." (Department MMRP, Document Code: [C DRAFT 000002](#), p. 2-47.) If the ALSP is not implemented, the MM AG-1 requires the acquisition of Agricultural Conservation Easements (ACEs) at a "target ratio" of 1:1 ratio. (Certification G P1(b)(2) Findings, p. 1-18.)

San Joaquin County specifically argues that MM AG-1 is not "consistent" with Measure 7-1 because AG-1, by directing the Department to undertake (or attempt) the ALSP approach, does not mandate compensatory preservation for converted lands. (San Joaquin County Appeal Letter, p. 30.)<sup>11</sup>

Initially, the Department states that it would pursue compensatory preservation through Agricultural Conservation Easements "[f]or the loss of farmland that cannot be avoided."

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<sup>11</sup> Sacramento County makes a similar argument, but in the context of arguing that California WaterFix is inconsistent with DP P2. (Sacramento County October 14, 2018 Letter, pp. 3-4). This claim is discussed below under DP P2.



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(Department Supplemental Responses, p. 16; see also *id.* (“[ALSP] remains an optional strategy in place of and in addition to conservation easements “).) The MMRP, however, directs the use of such easements “where necessary and feasible,” only if “DWR, despite a good faith effort, cannot succeed in achieving the consensus necessary to carry out a feasible Optional Agricultural Land Stewardship Approach.” (DWR MMRP, p. 2-49.) We therefore must determine whether substantial evidence supports the conclusion that the ALSP, plus compensatory preservation only when there is lack of consensus on the ALSP, is equally or more effective than the strict requirement of 1:1 compensation pursuant to Delta Plan Measure 7-1.

As explained by the Department, the ALSP approach is driven by the lack of land in the Delta available for conventional mitigation. (Department October 15, 2015 Letter, p. 16.) Further, the Department notes that ACEs are not as valuable to farmers within the primary zone of the Delta, because development is already restricted in this area, and thus would be difficult to acquire. (*Id.*)

The ALSP approach would include “measures to promote agricultural productivity through early planning, site specific avoidance and mitigation, onsite mitigation, and landowner participation.” (*Id.*, citing the MMRP, pp. 2-44 to 2-48.) Importantly, the Department notes that the ALSP approach will require consensus of the affected land owner or owners, as well as local and regulatory agencies (and consultation with the Council). The affected land owners have incentive to ensure that the ALSP is effective at preserving agriculture in the Delta. The consensus requirement gives them an effective veto over any ALSP that fails to effectively mitigate the agricultural impacts of California WaterFix. If landowners exercise this veto and the ALSP approach fails, then MM AG-1 requires compensatory preservation through easements, in accordance with Delta Plan Measure 7-1.

In summary, the Department has provided substantial evidence that the optional Agricultural Land Stewardship Plan approach, in combination with the commitment to preservation of agricultural land in the event that the ALSP does not achieve consensus among the affected parties, is equally or more effective than the mandatory compensatory preservation in Delta Plan Measure 7-1. Therefore, the Council finds that Appellant has failed to show that there is not substantial evidence in the record to support the Department’s Certification of Consistency with G P1(b)(2) as to Delta Plan Measure 7-1, and we *deny* San Joaquin County’s appeal as to this issue.

### **viii. Delta Plan Measure 19-1**

SCDA challenges the efficacy of two California WaterFix measures, arguing that neither AMM 7 nor Mitigation Measure Trans-1 provides mitigation that is equally or more effective than Delta Plan Measure 19-1, which would reduce or avoid traffic impacts.

Appellant states that Avoidance and Minimization Measure: Barge Operations Plan (AMM 7) has no enforceable protective or mitigating components and therefore is not equally or more effective than Delta Plan Measure 9-1. (SCDA October 25, 2018 Letter, pp. 9-10.) AMM 7, however, is not a measure for reducing impacts to marine or roadway traffic). It is, rather, a plan to avoid or reduce “aquatic habitat and species from barge and tugboat operations.” (MMRP, p. 3-23. The Department determines that it, along with other measures, is equally or more effective than Delta Plan Measures that would reduce or avoid such impacts. (Certification G P1(b)(2) Findings, pp. 1-3 to 1-11.) No Appellant challenges that determination.

SCDA further argues that California WaterFix Measures Trans-1 and AMM 7 are not equally or more effective than Delta Plan Measure 19-1 because they do not include measures

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that 19-1 requires for reducing or avoiding impacts to marine traffic, including a temporary channel closure plan, identification of alternate detours for boats, vessel congestion minimization plans, and safe access to boat launch and dock facilities. (SCDA October 15, 2018 Letter, p. 10.) The California WaterFix Final EIR/EIS concludes that the project would have less than significant impacts to marine traffic and that no mitigation is required. (California WaterFix Final EIR/EIS, p. 19-233.) For purposes of consistency with G P1(b)(2), because California WaterFix would not cause a potentially significant marine-traffic impact there is no applicable Delta Plan measure for which the covered action must provide equally or more effective mitigation. SCDA does not identify any failure of the evidence supporting the Department's conclusion that impacts to marine traffic would be less than significant. The only potential marine-traffic problems SCDA describes involve access to Bullfrog Marina and Clarksburg fishing access area. As to Bullfrog Marina, SCDA identifies no marine traffic impact, but an economic impact to the Marina ("access to Bullfrog Marina will be blocked by channel closure and construction activity, likely driving this mainstay of Delta recreation out of business.") (SCDA October 15, 2018 Letter, p. 10.) As to Clarksburg, SCDA asserts that access will be "effectively blocked" by California WaterFix construction noise. SCDA has not explained how this construction noise relates to any failure of California WaterFix to provide mitigation equally or more effectively than the Delta Plan's. SCDA identifies no provision of Delta Plan Measure 19-1 (or any other Delta Plan measure) that would mitigate these noise impacts, including either their direct noise effects or their asserted effects on traffic. SCDA thus has not explained any way in which the record lacks substantial evidence to support the Department's finding that no mitigation is required for marine traffic impacts.

SCDA raises extensive concerns about the California WaterFix Final EIR/EIS's analysis impacts on traffic on Highway 4, particularly as to an error in the Department's analysis regarding the height of the Rio Vista Bridge and the frequency with which it will need to be opened to accommodate barge traffic, and as to the condition of Highway 4. (*Id.*) SCDA does not identify any Delta Plan Measure that would mitigate impacts related to the height of the bridge, and thus does not identify any failure of California WaterFix to provide equal or more effective mitigation. As to road conditions, SCDA notes that Delta Plan Measure 19-1 lists a variety of roadway improvements as potential mitigation measures, while the California WaterFix Measure Trans-1a includes only one such improvement (a right turn lane on Hood Franklin Road). SCDA does not identify any additional roadway improvement, or other measure, that California WaterFix would need to include in order to provide mitigation equally or more effectively than Delta Plan measure 19-1. SCDA further does not explain how any flaws in the California WaterFix Final EIR/EIS's traffic analysis would lead to the conclusion that substantial evidence does not support the Department's Certification of Consistency with G P1(b)(2).

Therefore, the Council finds that Appellant has failed to show that there is not substantial evidence in the record to support the Department's Certification of Consistency with G P1(b)(2) as to traffic mitigation. We *deny* the appeal as to this issue.

### **e. San Joaquin County's Late Claims**

In its October 15, 2018 submittal, San Joaquin County discusses several further points of inconsistency with G P1(b)(2). Although these claims are not properly before the Council, as they were not raised in the appeal filing, we address them here for the benefit of the parties. San Joaquin County challenges the consistency of California WaterFix Measures SOILS-1 and WQ-11e. (San Joaquin County October 15, 2018 Letter, pp. 4-5.) The Department identified each as part of its overall provision of measures equally or more effective than Delta Plan Measure 3-1, which would reduce or avoid construction-related water-quality impacts.

(Certification G P1(b)(2) Finding, p. 1-1.) San Joaquin County additionally challenges California WaterFix Measure GW-5 (San Joaquin County October 15, 2018, p. 7), which the Department identifies as applicable to Delta Plan Measure 21-2, concerning climate change and sea-level rise impacts to the project (Certification G P1(b)(2) Finding, p. 1-66.). San Joaquin County argues that these measures cannot be consistent with G P1(b)(2) because they defer development of a mitigation plan and/or are unenforceable. San Joaquin County, however, does not identify any relevant aspect of Delta Plan Measure 3-1 or 21-2 for which California WaterFix fails to provide an equally or more effective substitute measure. San Joaquin County has not shown that there is not substantial evidence in the record to support the Department's Certification of Consistency with G P1(b)(2) on this basis.

**D. Policy G P1(b)(3) (23 CCR 5002(b)(3)): Best Available Science**

The Department certifies that California WaterFix is consistent with G P1(b)(3). Six Appellants – NCRA; SCDA; FOR; Stockton; San Joaquin County; and, Sacramento County – raise substantive arguments that it is not. For the reasons discussed below, the Council concludes that the Department's Certification of Consistency with G P1(b)(3) is not supported by substantial evidence.

**1. Policy Requirements**

G P1(b)(3) requires “as relevant to the purpose and nature of the project, all covered actions must document use of best available science.” Best available science is defined in the Delta Plan as the best scientific information and data for informing management and policy decisions. Best available science shall be consistent with the guidelines and criteria found in Appendix 1A, which lists six criteria for best available science: relevance, inclusiveness, objectivity, transparency and openness, timeliness, and peer review. (Cal. Code Regs, tit. 23, § 5001, subd. (f).) Best available science is further described in Delta Plan Appendix 1A, as follows:

“The Delta Reform Act requires the Council to make use of best available science in implementing the Delta Plan. Best available science is specific to the decision being made at the time frame available for making that decision. 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. Sources of data used are cited and analytical tools used in analyses and syntheses are defined. Best available science changes over time and decisions may need to be revisited as new scientific information becomes available. Ultimately, best available science requires scientists to use the best information and data to assist management and policy decisions. The process used should be clearly documented and effectively communicated to foster improved understanding and decision making.”

**2. Department's Certification**

The Department's Certification states that development of California WaterFix and analysis of its environmental impacts utilized a wide range of relevant data, literature, and tools, including some specific to the Delta. The Department certifies that it used the best available scientific information to produce analyses of the effects of the project, drawing on a number of scientific and engineering disciplines that include geology, hydrology, biology, ecology, chemistry, engineering, and climatology. The data, models and literature are publicly available and the methodologies used to apply these tools and information are described in the analyses.



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(Certification, *Final\_G P1 (b)(3) (23 CCR Sec 5002) Best Available Science\_7\_27\_18.pdf*, hereafter Certification BAS, p. 5)

The Department certifies that the data, models, literature, and analyses have been subjected to review either as part of the customary practices of scientific publication or as part of legal and regulatory processes. The findings state that the impact analyses produced for California WaterFix were subject to review and comment by the general public (e.g., the California Environmental Quality Act (CEQA)), experts in relevant scientific disciplines (e.g., the Delta Independent Science Board (Delta ISB)), and expert staff from regulatory agencies having jurisdiction over one or more aspects of the project or its permitting (e.g., National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), California Department of Fish & Wildlife (CDFW), and the United States Army Corps of Engineers (USACE). ([Certification BAS](#), p. 5)

The Department also states:

“The California WaterFix certification of consistency is based on DWR’s interpretation of the Delta Plan policies, which was developed with support from DSC staff through the early consultation process. 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 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. As demonstrated in the Final EIR/EIS and described in California WaterFix and the Coequal Goals of this certification, California WaterFix is consistent with the coequal goals themselves.” ([Certification BAS](#), p. ii)

The BAS Certification provides a table of contents, description of Delta Plan best available science criteria (each criterion is presented as a chapter), and detailed findings supporting consistency with each of the six criteria for best available science provided in Delta Plan Appendix 1A. It also includes an accompanying appendix (Attachment 1) describing technical modeling completed in support of California WaterFix. A brief summary of the Department’s finding for each of the six criterion is provided below.

### **a. Relevance**

The Department certifies California WaterFix consistent with G P1(b)(3), best available science criterion for Relevance, stating it used directly applicable information when available or conservative assumptions based on similar species or similar regions. The Department cites the reference list for the Final EIR/EIS and the Biological Assessment as substantial evidence. It also states that it has committed to an Adaptive Management Program that it states will provide a mechanism for identifying uncertainties, implementing research actions to reduce those uncertainties, and making adjustments based on that new information. ([Certification BAS](#), pp. 1-12.)

**b. Inclusiveness**

The Department certifies California WaterFix consistent with G P1(b)(3), best available science criterion for Inclusiveness, stating that information from 26 different disciplines were considered during the design and analysis of the project. It states that “peer-reviewed publications about the resource within the project location were generally preferred, although peer-reviewed documents outside the project location, as well as appropriately vetted, non-peer-reviewed reports and data from agencies and other reliable sources, were incorporated when necessary.” Regarding the selection of modeling tools, the Department states that the “lead agencies selected widely accepted and frequently utilized tools that provide reliable and pertinent outputs regarding the environmental effects of the proposed action alternatives and the extent to which future conditions would differ as between various alternatives.” The Department states that, “although some analytical tools used in the Final EIR/EIS may have been updated since the time these analyses began, lead agencies’ expert staff and consultants deemed the models chosen the best available at the time they were utilized” and cites Attachment 1. ([Certification BAS](#), pp. 2-1-2.)

**c. Objectivity**

The Department certifies California WaterFix consistent with G P1(b)(3), best available science criterion for Objectivity, stating it collected data and performed analyses “that meet the standards of the scientific method and are void of nonscientific influences to make decisions.” The Department cites the “Methods for Analysis” and “Determination of Effects” sections in its Final EIR/EIS. It further states that with the Bay Delta Conservation Plan (BDCP) Analytical Tools Team in 2008, there was regular agency, scientific community, general public, and independent peer review of analytical tools used. Also several analytical tools and analyses were used at the suggestion of the agencies and independent peer review panels, which were vetted prior to their use. ([Certification BAS](#), p. 3-1.)

**d. Transparency and Openness**

The Department certifies California WaterFix consistent with Policy G P1(b)(3), best available science criterion for Transparency and Openness, stating that “all sources and methods (including modeling) used in the scientific analyses, have been clearly identified throughout the California WaterFix documents.” The Department states that uncertainty or limitations in the research were disclosed extensively in the documents. The Department states it made unprecedented efforts for transparency and openness with the release of administrative drafts to the public, extending public comment periods, and holding multiple public meetings. Specific events and outreach activities were described as substantiation of this claim. ([Certification BAS](#), p. 4-1.)

**e. Timeliness**

The Department certifies California WaterFix consistent with Policy G P1(b)(3), best available science criterion for Timeliness, stating it collected data, performed analyses, and took into account new and updated information and data as it became available to dynamically inform management decisions. The Department states that it reviewed and updated as appropriate the “Environmental Setting/Affected Environment” sections of its 2015 RDEIR/SDEIS and the 2016 Final EIR/EIS, and considered and addressed all comments in response to the final document. The Department also states, “[a]s 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

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into account and will release a supplemental or subsequent environmental document if needed to address this information.” ([Certification BAS](#), p. 5-1-2.)

### f. Peer Review

The Department certifies California WaterFix consistent with Policy G P1(b)(3), best available science criterion for Peer Review, stating independent peer reviews occurred at multiple points during the process of project development. The Department states it engaged independent scientific advice through the planning process and enlisted well-recognized experts, and independent scientific peer review was formally applied at several steps during the project development. The Department cites several publications that provide timelines and information about the science reviews, input processes, and additional information about scientific review panels and their members. ([Certification BAS](#), p. 6-1-8.)

### 3. Appeals

The Council received appeals regarding Department’s Certification of Consistency with GP 1(b)(3) from the following parties:

- North Coast Rivers Alliance, et.al. (NCRA)
- Save the California Delta Alliance (SCDA)
- Friends of the River, et.al. (Friends of the River)
- City of Stockton (Stockton)
- San Joaquin County, et.al. (San Joaquin County)
- County of Sacramento (Sacramento County)

Each of the issues raised in these appeals is briefly described below, with an analysis of the issue related to consistency of the California WaterFix project with GP 1(b)(3). The appeal issues are grouped by topic area.

#### a. Sea-Level Rise

NCRA states that the Department’s Final EIR/EIS used outdated assumptions about climate change and sea-level rise projections, which it claims do not constitute the use of best available science. ([NCRA Letter Attached to Appeal of Certification](#), p. 5.) NCRA does not cite the specific best available science criterion in Appendix 1A that it asserts that the Department is not consistent with, but it appears to be related to the criterion of Timeliness (Delta Plan, Appendix 1A, Table 1A-1), which requires that data collection shall occur in a manner sufficient for adequate analyses before a management decision is needed, and scientific information used shall be applicable to the current situation. Further, the Council’s regulations (Cal. Code Regs., tit. 23, § 5001, subd. (f)) state that, “Best available science changes over time and decisions may need to be revisited as new scientific information becomes available.”

NCRA cites the Department’s Certification ([Certification BAS](#), Attachment 1, p. 9-2), where the Department states that the information used for climate change assumptions, while several years old as of the Final EIR/EIS issuance “remains reasonably current.” ([NCRA Appeal Letter](#), p. 5.) In its supplemental submission, NCRA cites as further evidence the comments of Deirdre Des Jardins of California Water Research on the Final EIR/EIS, dated January 2017, and the Department’s response to those comments ([D.1 DRAFT 000716](#), pp. 2-3). ([NCRA October 15, 2018 Letter](#), p. 2-3.) NCRA states that the Final EIR/EIS improperly “focuses on 2025 and 2060 as the relevant time-frame, and not 2100 or 2135 (the end of the project’s anticipated 100-year life).” (*Id.* p. 3.)

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1 The comments of Deirdre Des Jardins cited by NCRA state “[f]or the National Climate  
2 Assessment in 2012, the Climate Change Program Office of the National Oceanic and  
3 Atmospheric Association (NOAA) derived a high estimate of 2 meters by 2100. The U.S. Army  
4 Corps of Engineers estimated that sea-level rise could reach 1.6 meters by 2100.” ([D.1 DRAFT](#)  
5 [000716](#), p. 2.) Des Jardins further states, “NOAA recommended that the highest levels be used  
6 where there is little tolerance for risk, such as in a new infrastructure process. Unfortunately, the  
7 highest estimate of sea-level rise estimated by DWR’s modelling for the Draft EIR/EIS was  
8 about 94 cm (3.1 feet or 37 inches) by 2100, about 50% of NOAA’s 2012 empirical estimate.  
9 DWR’s 95% confidence projection of 3.9 feet or 46 inches by 2100 was about 60% of NOAA’s  
10 empirical estimate. These values were used to derive the estimate of 15 cm (0.5 ft or 6 inches)  
11 of sea-level rise by 2025, and 45 cm (1.5 ft or 18 inches) by 2060 used in the RDEIR/SDEIS.”  
12 ([D.1 DRAFT 000716](#), p. 3.)

13 The Department responded to the comments of Deirdre Des Jardins in the Final  
14 EIR/EIS, stating that “the sea-level rise assumptions for the CVP-SWP [Central Valley Project-  
15 State Water Project] operations modeling for CWF are within the range of projections and  
16 appropriate values selected based on the best available science.” ([D.1 DRAFT 000716](#), p. 3.)  
17 The Department’s supplemental submissions further state, “[t]he changes to climate and sea-  
18 level rise are well documented. [ ] Appendix 5A, BDCP/California WaterFix FEIR/FEIS Modeling  
19 Technical Appendix, for example, describes the scientific basis for the EIR/EIS’s use of an 18-  
20 inch sea-level rise projection by 2060 for the alternatives analysis ([D.1 DRAFT 000037](#), p. 5A-  
21 A69). The projection was based on an evaluation of the best available science at the time of the  
22 analysis. Current and well-supported research shows the projected sea-level rise for 2060 is  
23 approximately 12 inches to 24 inches (hence the 18-inch mid-point). This sea-level rise estimate  
24 was found to be consistent with those outlined by the U.S. Army Corps of Engineers 2009  
25 guidance for incorporating sea level changes in civil works programs.” ([Department October 15,](#)  
26 [2018 Letter](#) pp. 32-33; [Department Oct. Hearing Submittal - NCRA](#), pp. 9-10.) The Department  
27 also cites the testimony of Armin Munevar at the SWRCB hearing as evidence that its  
28 assumptions reflect the best available science, and states that its projections are consistent with  
29 the “likely range” for years 2030 and 2060 in the latest guidance on sea-level rise for planning  
30 from the California Ocean Protection Council.<sup>12</sup> (*Ibid.*)

31 NCRA’s claim, however, is that based on current best available science, the Department  
32 should have utilized the U.S. Army Corps of Engineers’ “high” sea-level rise estimate of 1.6  
33 meters (5.22 feet) by 2100, based a project anticipated 100-year lifetime. ([NCRA October 15,](#)  
34 [2018](#), p. 3.) The NOAA report cited by Deirdre Des Jardins also focuses on estimates for global  
35 sea-level rise by 2100, based on four different scenarios that reflect different degrees of ocean  
36 warming and ice sheet loss. ([D.8 DRAFT 022450](#).) The NOAA report states “[t]he Highest  
37 Scenario should be considered in situations where there is little tolerance for risk (e.g. new  
38 infrastructure with a long anticipated life cycle such as a power plant).” ([D.8 DRAFT 022450](#), p.  
39 2.)

40 While the sea level projections selected by the Department are within the recommended  
41 “mid-range” projections for the years 2025 and 2060 in the U.S. Army Corps of Engineers’  
42 online calculator (Exhibit PCFFA-64, Appendix, [D.8 DRAFT 022452](#)) cited by NCRA, there is  
43 no evidence that the Department considered the higher estimates for year 2100 as

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<sup>12</sup> The Department cites and relies upon this document not included in the record submitted with the Certification: Ocean Protection Council, [State of California Sea-Level Rise Guidance](#), 2018 Update. We admit this document as a technical and scientific matter within our jurisdiction per our Appeals Procedures, § 29, in [Exhibit B](#).



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recommended by NOAA for projects with a long anticipated life cycle. The modeling technical Appendix 5A explains the Department's selection of those narrower timeframes stating, "[c]orresponding to the long-term timelines of the BDCP analysis, in which climate change is likely to be relevant, future climate periods are identified as approximately 2025 (2011-2040) [early long-term] and 2060 (2046-2075) [late long-term]." ([D.1 DRAFT 000037](#), p. 5A-A64.) It then explains that it used "the mid-range of the estimates for each BDCP timeline: 15 cm (6 inches) by 2025, and 45 cm (18 inches) by 2060." ([D.1 DRAFT 000037](#), p. 5A-A69.)

The Department stated in its Certification that as new information became available it incorporated it into the relevant analyses to dynamically inform management decisions. (Certification BAS, p. 5-1.) However, the Department itself acknowledges in its Certification section specific to sea-level rise that it did not use more currently available information, stating its information was the best available at the time of the analysis, but that the information remains sufficient for CEQA and NEPA purposes. ([Certification BAS](#), Attachment 1, p. 9-2.) The SWRCB hearing testimony of Armin Munevar, which the Department cites to support that its assumptions still reflect the best available science, focuses only on the more limited timeframes selected for the modeling as described in Appendix 5A, and does not address why the Department need not address a long-term time horizon or higher risk scenarios as recommended in the NOAA report for new infrastructure with a long anticipated life cycle. Furthermore, the Department's reference to the UnTRIM modeling (Final EIR/EIS-Appendix 5A-UnTRIM (D.1. \_Draft 000045) is similarly not helpful, because, while that report examined several other higher sea-level rise scenarios, there is no evidence in the record that the Department incorporated those higher scenarios into its modeling.

Finally, the Department stated its assumptions still reflect the use of best available science because they are consistent with the recommended estimates for the sea-level rise under the "likely range" reported for years 2030 and 2060 in the latest guidance from the California Ocean Protection Council for sea-level rise planning. The California Ocean Protection Council, however, recommends the "likely range" for use in low risk aversion decisions, such as a coastal unpaved trail. (Ocean Protection Council, 2018 Update, p. 25.) Whereas, it recommends use of the H++ scenario, which is extreme risk aversion, for projects with a lifespan beyond 2050. (*Ibid.*) The California Ocean Protection Council report recommendations, which provide science-based guidance to help state and local governments analyze the risk associated with sea-level rise and incorporate sea-level rise into planning, permitting and investment decisions, are consistent with the NOAA recommendations cited by NCRA. In response to further questioning from the Council at the October hearing, the Department reiterated these points and stated that it conducted a "sensitivity analysis" based on a range of projections, which showed that no changes to its modeling were required, and cited to Appendix 5A. (October 25 Hearing Transcript, pp. 59-60.) However, the only reference to sensitivity scenarios the Council found in Appendix 5A states, "sensitivity scenarios will be prepared to consider sea-level rise of up to 60 cm by 2060." ([D.1 DRAFT 000037](#), p. 5A-A69.) This does not support that the Department considered the higher risk scenarios for a long-term time horizon as recommended by NOAA and the California Ocean Protection Council. The Department has not cited to, and the Council could not find, evidence in the record that the Department conducted modeling and sensitivity analyses that considered higher risk scenarios beyond 2060 (e.g., for 2100 or beyond), as recommended by NOAA and the California Ocean Protection Council for new infrastructure with a long anticipated life cycle, such as the Project, where there is little tolerance for risk. Therefore, the Council finds the Department's Certification that its sea-level rise modeling reflects the best available science is *not supported* by substantial evidence in the record.

**b. Modeling**

**i. Adequacy of modeling approach (NCRA)**

NCRA states the Department failed to use the best available science for modeling impacts to water quality stating, “[t]he model used must be representative of the actual process in order to understand the impacts. Without an accurate model, DWR fails to use the best available science.” ([NCRA Appeal Letter](#), p. 5.) NCRA does not cite the specific best available science criterion with which the modeling is allegedly inconsistent. It appears to be related to the criterion of Relevance (Delta Plan, Appendix 1A, Table 1A-1), which requires that scientific information used should be germane to the Delta ecosystem and/or biological and physical components (and/or processes) affected by the proposed decisions.

To substantiate its claim, NCRA cites pages 14-125 of the Final EIR/EIS, which is in a section that discusses the effects on agriculture as a result of changes in salinity. (Final EIR/EIS, [D.1 DRAFT 000106](#), at p. 14-125). ([NCRA Appeal Letter](#), p. 5.) The Department uses the CALSIM II model to evaluate these effects. The Department points out some limitations of CALSIM II, noting that “many [ ] modeled exceedances are a result of modeling artifacts or a result of operating rules used by the CALSIM II model under extreme hydrologic and operational conditions where there is not enough water supply to meet all requirements. In these cases, CALSIM II uses a series of operating rules to reach a solution that is a simplified version of the very complex decision processes that SWP and CVP operators would use in actual extreme conditions.” (Final EIR/EIS, [D.1 DRAFT 000106](#), at p. 14-125). The Certification explains the use of hydrologic and hydraulic modeling tools, including CALSIM II, which the Department explains has been subject to peer review, that it responded to those reviews, and that “there is no alternative model that could be considered for this application.” ([Certification BAS](#), Attachment 1, pp. 1-1 – 1-5.)

NCRA does not address this evidence supporting the Department’s use of CALSIM II as consistent with the best available science criteria for Relevance, nor does NCRA provide evidence of an alternative model that the Department could or should have used instead of CALSIM II. Therefore, NCRA has failed to demonstrate that the Department’s use of CALSIM II as the best available science is not supported by substantial evidence in the record, and we deny its appeal as to this issue.

**ii. Adequacy of CALSIM modeling (Sacramento County)**

Sacramento County broadly states that the expert reports of MBK Engineers on the DEIR/EIS and RDEIR/EIS are evidence of the Department’s failure to document the use of best available science. ([Sacramento County Letter Attached to Appeal of Certification](#), p. 3.) In its supplemental submission, Sacramento County cites exhibits from the SWRCB hearing, which include CALSIM II model runs and reviews by MBK Engineers. ([Sacramento County October 14, 2018 Letter](#), p. 7.) Sacramento County states MBK used the “best available information” to select operational assumptions for its runs of CALSIM II that it determined would reflect how the Project would be operated. It asserts the Department ignored this information, and thus did not utilize best available science for its CALSIM II modeling. (*Id.* at pp. 10-11.) Sacramento County does not cite the specific best available science criterion it asserts that Department is not consistent with. This issue appears to be related to the criterion of Inclusiveness (Delta Plan, Appendix 1A, Table 1A-1), which requires that scientific information used shall incorporate a thorough review of relevant information and analyses across relevant disciplines.

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1 The Department responded to the comments related to the modeling by the MBK  
2 Engineers in the Final EIR/EIS, stating that MBK's independent modeling relied on different  
3 assumptions than used by the Department. (Final EIR/EIS Volume II, [D.1 DRAFT 000188](#), p. 1-  
4 271.) The Department explained that its modeling assumptions were based on "DWR and  
5 Reclamation's vast experience in developing the underlying modeling" and "their understanding  
6 of the nuances of operational modeling," and that the "modeling provides the appropriate  
7 assessment for supporting the EIR/EIS, because the operating criteria are consistent across the  
8 No Action Alternative and project alternatives, allowing for an 'apples-to apples' comparison to  
9 estimate potential project effects." (*Id.* at p. 1-272.) In the 2017 NOD *Developments after*  
10 *Publication of the Proposed Final EIR*, the Department further responded to the comments of  
11 MBK, stating: "The consulting firm MBK developed its own scenarios with different assumptions  
12 than utilized by DWR experts and ran CALSIM II to produce results, which other parties to the  
13 water rights hearing presented. These scenarios, although not thoroughly documented, were  
14 discussed at length by MBK and addressed by DWR through the course of cross-examination  
15 and within the materials submitted by DWR and Reclamation for rebuttal. Based on this, MBK's  
16 use of the CALSIM II model was shown to have violated many common modeling practices. [ ...  
17 ] Despite MBK's difference of opinion on certain assumptions used in the CALSIM II modeling,  
18 the modeling and assumptions within the modeling relied upon by DWR and Reclamation reflect  
19 their own expertise, as supported by the record, and is considered appropriate to support the  
20 analysis of environmental impacts associated with the Proposed Project." (DWR and USBR  
21 2017, [X.3 000127](#), p.97-98.) In its supplemental materials, the Department again cites  
22 testimony from the SWRCB hearing rebutting the MBK modeling information cited by  
23 Sacramento County. ([Department October 23, 2018 Submittal-Sac.County](#), p. 4.) Sacramento  
24 County does not address this evidence supporting the Department's CALSIM II modeling, and  
25 has failed to show why the Department's modeling assumptions are not supported by the  
26 record. Therefore, Sacramento County has failed to demonstrate that the Department's  
27 documentation of its use of best available science for its CALSIM II modeling is not supported  
28 by substantial evidence, and we *deny* its appeal as to this issue.

### 29 iii. Comparative vs. predictive capabilities of models (SCDA)

30 SCDA states the Department fails to document that its use of CALSIM II for modeling  
31 hydrodynamic effects is valid for comparative purposes, citing as evidence the report "A  
32 Strategic Review of CALSIM II and its Use for Water Planning, Management, and Operations in  
33 Central California" (2003 Strategic Review, Close et al 2003, [D.8 DRAFT 005048](#)) and  
34 Department statements at the SWRCB hearing. ([SCDA Appeal Form](#), p. 5.) In its supplemental  
35 submission, SCDA further states the Department has not documented the validity of its model to  
36 predict accurately in absolute terms, as it states was pointed out in the Strategic Review. ([SCDA](#)  
37 [October 15, 2018 Letter](#), pp.1-2.) SCDA further states the Strategic Review modeling critique  
38 remains uncontradicted, and therefore, there is no evidence to support the Department's  
39 modeling of California WaterFix's ability to meet D-1641, or to accurately analyze water quality,  
40 water supply, and aquatic species impacts. (*Ibid.*) SCDA does not cite the specific best available  
41 science criterion it asserts that the modeling is not consistent with. It appears to be related to  
42 the criterion of Relevance (Delta Plan, Appendix 1A, Table 1A-1), which requires that scientific  
43 information used should be germane to the Delta ecosystem and/or biological and physical  
44 components (and/or processes) affected by the proposed decisions.

45 The Department's Certification cites the 2003 Strategic Review and also the peer review  
46 response in 2004 (DWR and USBR 2004, [D.8 DRAFT 021050](#)), a quasi-validation study by the  
47 Department in 2003 (DWR 2003, [X.3 0000162](#)), and a *San Joaquin Valley CALSIM II External*  
48 *Review* (DWR 2006, [D.8 DRAFT 005069](#)). ([Certification BAS](#), Attachment 1, p.1-1 to 1-2.) The

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1 Department states these reports all conclude that, despite some concerns, the CALSIM II model  
2 is the best available planning model for the State Water Project and Central Valley Project  
3 system operations for flow-routing optimization and that there is no alternative model that could  
4 be considered for the environmental analysis, also citing CALFED 1994, [X.3 000158](#); DWR and  
5 USBR 2004, [D.8 DRAFT 021050](#); USBR 2008a, [X.3 000240](#). (*Ibid.*) In its supplemental  
6 submission, the Department reiterated that CAISIM II and DSM2 “are the best available tools for  
7 such an analysis, which allow simulating the with- and without- project over a large range of  
8 hydrologic conditions,” citing the expert testimony of Parviz Nader-Tehrani as the SWRCB  
9 hearing ([D.8 DRAFT 022884](#), p. 30). ([Department October 23, 2018 Submittal - SCDA](#), pp. 6-  
10 7.)

11 SCDA does not address the evidence in the reports cited in the Certification BAS,  
12 including the Department’s responses to the 2003 Strategic Review, and other cited CALSIM II  
13 reports, or the expert testimony cited, which all support the Department’s use of CALSIM II as  
14 the best available model, despite its limitations. SCDA fails to explain why this evidence is  
15 lacking. Therefore, SCDA has failed to demonstrate that the Department’s use of CALSIM II as  
16 best available science is not supported by substantial evidence in the record, and we *deny* its  
17 appeal as to this issue.

### 18 iv. Salinity modeling (San Joaquin County)

19 San Joaquin County states that the evaluation of salinity impacts is not consistent with G  
20 P1(b)(3) best available science criteria for Relevance and Inclusiveness because the  
21 Department did not use predictive models (only comparative), failed to apply operational  
22 impacts, and employed poor data selection. ([San Joaquin County Appeal Letter](#), p. 34.) The  
23 Relevance criterion (Delta Plan, Appendix 1A, Table 1A-1) requires that scientific information  
24 used should be germane to the Delta ecosystem and/or biological and physical components  
25 (and/or processes) affected by the proposed decisions. The Inclusiveness criterion (Delta Plan,  
26 Appendix 1A, Table 1A-1) requires that scientific information used shall incorporate a thorough  
27 review of relevant information and analyses across relevant disciplines.

28 San Joaquin County cites the SWRCB hearing testimony of Erik Ringelberg, which  
29 asserts that the project impacts on salinity are difficult to determine because the model is  
30 comparative (vs. operational or predictive), and that the Department could have completed  
31 modeling that would demonstrate predictive impacts to the North Delta but failed to do so. (II-24  
32 revised, Ringelberg, [D.8 DRAFT 023145](#)). However, Mr. Ringelberg proposed no alternative  
33 models and does not substantiate his assertions. Mr. Ringelberg’s testimony also asserts that  
34 for agriculture and the ecosystem, the highest (not average), instantaneous concentration of  
35 salinity and the net salinity load are most important to consider. (*Id.*, p.3). He also asserts that  
36 reducing flow from the Sacramento River would reduce the capacity to flush the Delta of  
37 accumulated salts from irrigation, wetlands, and wildlife management. (*Id.*, p. 6). He cites a  
38 USGS fact sheet from 2016, which he says draws the “same conclusions,” however the quote  
39 from the fact sheet merely states that tunnels would alter transport and reduce the tides. The  
40 USGS fact sheet does not say anything about effects on salinity control.

41 In its supplemental submission, the Department states that DSM2 is the most  
42 appropriate model to assess salinity changes in the Delta and represents the best available  
43 science, citing the testimony of Parviz Nader-Tehrani and others as supporting evidence.  
44 ([Department October 15, 2018 Letter](#), pp. 39-40). The SWRCB decision, D-1641, controls how  
45 salinity intrusion is managed by setting compliance levels for salinity at several points within the  
46 Delta. (SWRCB and US EPA, 2000, [D.8 DRAFT 001391](#)) The Department states that the  
47 Project will continue to meet D-1641 water quality standards established for various beneficial



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1 uses in the Delta, consistent with the No Action Alternative. ([Department October 23, 2018](#)  
2 [Submittal-San Joaquin](#), p. 62.) The Department further rebuts San Joaquin County's claim by  
3 citing the testimony of Joel Kimmelshue from the SWRCB hearing, which describes why San  
4 Joaquin County's assertions are unfounded and critiques the studies its concerns are premised  
5 upon. ([Department October 23, 2018 Submittal-San Joaquin](#), p. 23.)

6 In its supplemental submission, San Joaquin County cites a document developed by the  
7 Department during early consultation with the Council, which includes Council staff comments  
8 on the Department's salinity modeling. ([San Joaquin County October 15, 2018 Letter](#), p. 20.)  
9 San Joaquin County asserted in their letter, and reiterated in testimony at the hearing, that the  
10 Department has failed to give adequate responses to concerns raised by Council staff during  
11 early consultation. However, San Joaquin County does not provide any specific discussion of  
12 the Department's failure to meet the criteria of the policy, so we cannot evaluate the potential  
13 validity of this issue.

14 The Council finds that the evidence relied upon by San Joaquin County does not  
15 demonstrate how the salinity model or data used for salinity modeling is not germane to the  
16 physical processes as required by the Relevance criterion, nor does it demonstrate a specific  
17 failure to incorporate thorough review of information, as required by the Inclusiveness criterion.  
18 Therefore, San Joaquin County has failed to demonstrate that the Department's salinity  
19 modeling as best available science is not supported by substantial evidence in the record, and  
20 we *deny* its appeal as to this issue.

### 21 v. Water quality modeling at Stockton (Stockton)

22 Stockton states the Department failed to appropriately evaluate impacts at Stockton's  
23 intakes, for example by failing to represent day-to-day changes in water quality. Specifically,  
24 Stockton asserts the Department's use of flawed scientific methodology (such as long-term  
25 averages) resulted in underestimates of project impacts on water quality at the intakes.  
26 ([Stockton Appeal Letter](#), pp. 10-11.) Stockton does not cite the specific best available science  
27 criteria in Appendix 1A that it asserts that the Department is not consistent with for this issue. It  
28 appears to be related to the criteria of Relevance and Inclusiveness. The Relevance criterion  
29 (Delta Plan, Appendix 1A, Table 1A-1) requires that scientific information used should be  
30 germane to the Delta ecosystem and/or biological and physical components (and/or processes)  
31 affected by the proposed decisions. The Inclusiveness criterion (Delta Plan, Appendix 1A, Table  
32 1A-1) requires that scientific information used shall incorporate a thorough review of relevant  
33 information and analyses across relevant disciplines.

34 The Department responded to comments on the time-step of the model in the Final  
35 EIR/EIS Response to comments (Final EIR/EIS, Response to Comments, Vol II Part 1,  
36 [D.1 DRAFT 000188](#), p. 1-123 to 1-124), acknowledging that daily time steps could not be used  
37 due to modeling limitations. It stated, that "[d]ue to the assumptions involved in the input data  
38 sets and model logic, care must be taken to select the most appropriate time-step for the  
39 reporting of model results. Sub-monthly (e.g. weekly or daily) reporting of model results is  
40 inappropriate for all models and the results should be presented on a monthly basis [...] While  
41 there would be days within a month in which parameter concentrations/levels at a given location  
42 would be higher than the monthly average at that location (just as there would be days when it  
43 is lower), given the modeling limitations, comparing alternatives and baselines based on the  
44 monthly average at those locations is considered appropriate for the purposes of NEPA and  
45 CEQA." (*Ibid.*)

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1 The Department also responded to Stockton's appeal by citing that potential water  
2 quality changes at the City of Stockton's intake were analyzed in a report presented during the  
3 SWRCB hearing (DWR-652, [D.8 DRAFT 022804](#), pp. i-66). ([Department October 23, 2018](#)  
4 [Submittal -Stockton](#), p.15.) The Department cites information specific to Stockton's intake  
5 location and claims that modeling at that location did not differ substantially from the results that  
6 were presented in the Final EIR/EIS upstream and downstream of the City of Stockton. (*Ibid.*)

7 At the October hearing, Stockton elaborated that chloride levels at their intakes would  
8 exceed acceptable levels (>110 mg/L) on an additional 364 days in their 16-year model  
9 simulation, as a result of the project compared to the No Action Alternative (citing the SWRCB  
10 hearing testimony of Susan Paulsen). (Oct. 24 Hearing Transcript, p. 114, ll. 1-18.) The  
11 Department refuted this point, saying that Paulsen "uses a comparison of a model run without  
12 climate change to a model run that includes climate change, thus attributing impacts from  
13 climate change to WaterFix" (citing DWR-86 errata, Testimony of Armin Munevar, [D.8 DRAFT](#)  
14 [022911](#), p. 47-48). ([Department October 23, 2018 Submittal -Stockton](#), p.19.) In the  
15 Department's closing statements at the hearing, as well as in its written responses to Stockton,  
16 it states that the chloride conversion formula used by Stockton was incorrect and overestimated  
17 impacts, pointing to the Nader-Tehrani testimony as supporting evidence (Exhibit DWR-932,  
18 Testimony of Parviz Nader-Tehrani, [D.8 DRAFT 022953](#), pp. 8-13). (Oct. 25 Hearing  
19 Transcript, p. 24, ll. 8-19; [Department October 23, 2018 Submittal -Stockton](#), p.19.) In its closing  
20 statements, Stockton mentioned a work product developed by its expert Dr. Paulsen that it  
21 asserts validates her choice of chloride conversion formula. (Oct. 25 Hearing Transcript, p. 85-  
22 86) That evidence, however, is not part the record because it was submitted to the SWRCB  
23 hearing after the Certification was submitted to the Council.<sup>13</sup> The Department also contends in  
24 its closing statements that modeled exceedances overestimate impacts because the model  
25 cannot be reflective of real-time operations, which they assert would be used to control  
26 compliance with water quality standards (citing Exhibit DWR-932, Testimony of Parviz Nader-  
27 Tehrani, [D.8 DRAFT 022953](#)). (Oct. 25 Hearing Transcript, p. 24, ll. 8-19)

28 The Council's review of Chapter 8, Water Quality, of the Final EIR/EIS ([D.1 DRAFT](#)  
29 [000062](#)) found that it did specifically analyze the implications of the project with regards to the  
30 potential impacts to Stockton's water supply with regards to water quality. The more recent  
31 Department report presented during the SWRCB hearing (DWR-652, WQ report Sktn,  
32 [D.8 DRAFT 022804](#), pp. i-66) address issues specific to the source waters of the City of  
33 Stockton. The Department has also provided in the record specific analyses of water quality at  
34 Stockton's intakes, and substantiated its model choices and calculations. Therefore, the Council  
35 finds that Stockton has not demonstrated that the Department failed to use best available  
36 science to evaluate water quality impacts at the Stockton intake, and we *deny* its appeal as to  
37 this issue.

### 38 **vi. The Department's response to independent review of models (SCDA)**

39 SCDA alleges the Department's modeling is not best available S=science, citing the  
40 2016 California WaterFix Aquatic Science Peer Review (2016 IRP Report, Simenstad et al.  
41 2016, [X.3 000118](#)). ([SCDA Appeal Form](#), p. 5.) SCDA does not cite the specific best available  
42 science criterion it asserts that the modeling is not consistent with. It appears to be related to  
43 the criterion of Relevance (Delta Plan, Appendix 1A, Table 1A-1), which requires that scientific

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<sup>13</sup> We decline to admit this document for this reason (see [Exhibit C](#)).

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information used should be germane to the Delta ecosystem and/or biological and physical components (and/or processes) affected by the proposed decisions.

The Department responded to the 2016 IRP Report in the *2017 NOD Developments after Publication of the Proposed Final EIR*. (DWR and USBR 2017, [X.3 000127](#), pp. 187-190.) The Department's Certification also addresses this report and the Department's responses to it. (Certification BAS, pp. 6-7- 6-8.) Exhibits cited in that section of the Certification include Response Panel Comments on California WaterFix Adaptive Management ([X.3 000135](#), pp. 1-2) and Response to Independent Review Panel Request for Information Regarding Longfin Smelt Analysis Changes ([X.3 000137](#), pp. 1-2). The Department also provided specific responses to the IRP regarding changes to fish models in a November 4, 2016 memorandum (ICF 2016c, [X.3 000136](#)). This document describes several updates and modifications to the models and the data used. Further, in its supplemental submission, the Department notes that on page 12 of the IRP Report it states "The BA [Biological Assessment] models represent the 'best science available' for predictive purposes." ([Department October 23, 2018 Submittal - SCDA](#), p.8.)

SCDA does not address this evidence cited in the Certification BAS, including the Department's responses to the IRP report, the updates or modification made to the models in response, and the IRP's statement that the model represent the best available science. SCDA fails to explain how this evidence is lacking. Therefore, SCDA has failed to demonstrate that the Department's use of the BA models and its response to independent science peer review of the models is not supported by substantial evidence in the record, and we *deny* its appeal as to this issue.

### **c. Appeal issues alleging broad categories of content missing or general failure to use BAS**

#### **i. Delta ISB reviews regarding missing content (Sacramento County, Stockton)**

Sacramento County alleges the Department failed to document use of best available science, citing Delta Independent Science Board (Delta ISB) reviews in 2014 of the BDCP Draft EIR/EIS (Delta Independent Science Board, 2014, [X.3 000130](#)) and in 2015 of the Recirculated Draft EIR/ Supplemental Draft EIS (Delta Independent Science Board, 2015, [X.3 000131](#)), stating that the reviews "are highly critical of the data and methodologies supporting the Project and its environmental studies." ([Sacramento County Appeal Letter](#), p. 2.) Sacramento County states the Delta ISB's "detailed comments lament the RDEIR/SDEIR's 'missing content,' including key information about adaptive management and collaborative science, how levee failures would affect operation of dual conveyance systems, the effect of climate change on expected water exports from the Delta and system operations, and effects of changes in operations of the State Water Project and Central Valley Project or other changes in water availability, on agricultural practices in the San Joaquin Valley." (*Id.* at pp. 2-3.) Stockton similarly alleges the Department failed to resolve flaws identified by the Delta ISB's 2015 review of the RDEIR/SDEIS and the Delta ISB's 2017 review of the Final EIR/EIS (Delta Independent Science Board, 2017, [X.3 000132](#)). ([Stockton Appeal Letter](#), p. 10.) Stockton states the Delta ISB concluded that "broad categories of content were missing from the Final EIR/EIS, such as the necessary 'evaluation of environmental effects of water use south of the Delta.'" (*Ibid.*)

The Department responded to the 2014 and 2015 Delta ISB Comments in Volume II of the Final EIR/EIS as part of its response to comments. (Comment Letter 1448 in DEIR/DEIS; Vol II, Responses to Comments, DEIRS Comment Response Letters 1400-1499 at pp. 80-180

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[D.1 DRAFT 000205] and Comment Letter 2546 in RDEIR/RDEIS; Vol II Responses to Comments, RECIRC Comment Response Letters 2500-2549 at pp. 175-201 [D.1 DRAFT 000258]). The Department responded to the six main topics (adaptive management, informative summaries and comparisons, levee and earthquake analysis, potential uncertainties including the Sustainable Groundwater Management Act (SGMA), San Joaquin water reliability, and restoration and mitigation) raised in the 2017 Delta ISB review of the Final EIR/EIS (Independent Science Board, 2017, X.3 000132) in the 2017 NOD *Developments after Publication of the Proposed Final EIR* (DWR and USBR 2017, X.3 000127, p. 89-91) and also provided those responses in its Certification ([Certification BAS](#), p. 6-4 to 6-6). The Department's overall response to the Delta ISB's 2017 review is that "much of the review focused on perceived missing content that is outside the scope of the CEQA/NEPA process." The Department points this out specifically when addressing San Joaquin water reliability: "The Delta ISB requested a discussion of the environmental effects of water use south of the Delta. Such an analysis is outside the scope of the Final EIR/EIS and is too speculative as to analyze under CEQA/NEPA." (DWR and USBR 2017, X.3 000127, p. 91).

In its supplemental submission, Sacramento County points out that the Delta ISB still found that the Department's treatment of its comments in the Final EIR was inadequate (Delta Independent Science Board, 2017, X.3 000132, p. 3). ([Sacramento County October 14 Letter](#), p. 6.) Stockton states in its supplemental submission that the Department's justification that the Delta ISB's requests relate to analyses outside the scope of CEQA and NEPA is inadequate because it ignores the requirements of the Delta Plan. ([Stockton October 15, 2018 Letter](#), p. 4.)

The Council agrees that the Delta Plan best available science policy requirements are not limited to what is required by CEQA and NEPA. Nonetheless, the allegations by Sacramento County and Stockton related to the Delta ISB reviews fail to specify what missing content identified by the Delta ISB show inconsistency with the requirements of GP 1(b)(3) and the criteria in Appendix 1A. Therefore, the Council cannot evaluate the potential validity of these issues. The Council finds that Sacramento County and Stockton have not raised a valid appealable issue regarding the Department's consistency with the best available science policy, and their appeals as to this issue are *denied*.

### ii. Citation to outside experts (San Joaquin County)

San Joaquin County states that to meet the criteria of Inclusiveness and Objectivity the Department should have cited analyses by outside experts, including experts appearing at the SWRCB hearing, and that the Department failed to show evidence of use of the scientific method. ([San Joaquin County Appeal Letter](#), pp. 36-37.) The Inclusiveness criterion requires that scientific information used shall incorporate a thorough review of relevant information and analyses across relevant disciplines. The Objectivity criterion requires that data collection and analyses considered shall meet the standards of the scientific method and be void of nonscientific influences and considerations. (Delta Plan, Appendix 1A, Table 1A-1.) San Joaquin County allegations are not supported by specific examples or citation to specific failures, and therefore, the Council cannot evaluate the potential validity of this issue. Further, the Department's response to San Joaquin County's appeal states that the relevant points from the SWRCB testimony are addressed in the rebuttal testimony provided in the record by the Department. ([Department October 23, 2018 Submittal- San Joaquin County](#), p. 69). The Council finds that San Joaquin County has not raised a valid appealable issue regarding the Department's consistency with the best available science policy; its appeal as to this issue is *denied*.



1                   iii.    **Discussion of invasive species, effects on watersheds, salmon and**  
2                               **other species (NCRA)**  
3

4               NCRA alleges the Department failed to fully discuss invasive species, ignored potential  
5 effects on the Delta's source watersheds, salmon, and other species that depend on salmon.  
6 ([NCRA Appeal Letter](#), p. 4.) NCRA's allegations are not supported by specific examples or  
7 citation to specific failures, and therefore, the Council cannot evaluate the potential validity of  
8 this issue. Therefore, NCRA has not raised a valid appealable issue regarding the Department's  
9 consistency with the best available science policy, and we *deny* its appeal as to this issue.

10                   iv.    **Incorporating additional information (San Joaquin County)**  
11

12               San Joaquin County states that the Department fails to meet the criterion of Timeliness  
13 by deferring the incorporation of additional information into "a supplemental or subsequent  
14 environmental document." ([San Joaquin County Appeal Letter](#), pp. 36-37.) The Timeliness  
15 criterion (Delta Plan, Appendix 1A, Table 1A-1) requires that data collection shall occur in a  
16 manner sufficient for adequate analyses before a management decision is needed, and  
17 scientific information used shall be applicable to the current situation. Further, the Council's  
18 regulations (Cal. Code Regs., tit. 23, § 5001, subd. (f)) state that, "Best available science  
19 changes over time and decisions may need to be revisited as new scientific information  
20 becomes available." The Department responded to San Joaquin County's appeal, stating that "it  
21 is important to reiterate that uncertainties in potential project effects are to be addressed  
22 through the work of several technical teams being informed by pre- and post-construction  
23 studies to aid final planning, design, and implementation (see, for example, the DFW Incidental  
24 Take Permit, [X.1 DRAFT 000003](#), p.163-172); these are important to address issues for which  
25 there may not be sufficient information to address effects at the current planning stage."  
26 ([Department Oct. Hearing Submission -San Joaquin County](#), p. 69.) San Joaquin County's  
27 allegations are not supported by specific examples or citation to specific failures, and therefore,  
28 the Council cannot evaluate the potential validity of this issue. Therefore, San Joaquin County  
29 has not raised a valid appealable issue regarding the Department's consistency with the best  
30 available science policy, and the Council denies its appeal as to this issue.

31                   d.    **Adequacy of Impact Analysis**  
32

33                               i.    ***Microcystis* and Harmful Algal Blooms (HABs) (Stockton)**

34               Stockton states the Department failed to adequately address potential for increases in  
35 *Microcystis* blooms. Specifically, Stockton asserts the Department used an inappropriate  
36 approach for estimating residence time (average length of time water is at a given location  
37 before being flushed out either by tides or by river flow), and therefore, it underestimated the  
38 potential for *Microcystis* blooms. ([Stockton Appeal Letter](#), p. 11. [citing the expert testimony of  
39 Susan Paulsen at the SWRCB hearing (Water Right Change Proceeding, Part Two Rebuttal  
40 Testimony of Susan Paulsen, Ph.D., P.E., Stockton 18, pp. 4-5)].) In a related claim, San  
41 Joaquin County states that the Department failed to discuss the project's effects on ecological  
42 drivers of harmful algal bloom (HAB) formation, and failed to analyze the acute toxicity, human  
43 and animal health dangers presented by harmful algal blooms. ([San Joaquin County Appeal](#)  
44 [Letter](#), pp. 33-34.)

45               Stockton and San Joaquin County do not cite the specific best available science criterion  
46 they assert the Department is not consistent with. This issue appears to be related to the criteria  
47 of: Inclusiveness (Delta Plan, Appendix 1A, Table 1A-1), which requires that scientific

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information used shall incorporate a thorough review of relevant information and analyses across relevant disciplines; Timeliness (Delta Plan, Appendix 1A, Table 1A-1), which requires that data collection shall occur in a manner sufficient for adequate analyses before a management decision is needed, and scientific information used shall be applicable to the current situation; and Relevance (Delta Plan, Appendix 1A, Table 1A-1), which requires that scientific information used should be germane to the Delta ecosystem and/or biological and physical components (and/or processes) affected by the proposed decisions.

The Department notes in the NOD *Developments after Publication of the Proposed Final EIR* (DWR and USBR 2017, [X.3 000127](#), p. 100-101) that “[c]oncerns raised by other parties in the water rights hearing focused primarily on the residence time aspects related to creating potential conditions for *Microcystis* issues. However, as shown in the DWR and Reclamation testimony, it is only a portion of the information understood to influence cyanobacteria life history. The testimony and exhibits of Dr. Michael Bryan (DWR-81 [D.8 DRAFT 022898](#)) and exhibits reference within) and the oral testimony of Dr. Ellen Preece (DWR-83, [D.8 DRAFT 022900](#)) describe the known thresholds of water velocity tolerance for *Microcystis* and demonstrate that the California WaterFix will not create circumstances that increase the frequency of *Microcystis* blooms.”

San Joaquin County suggested alternative modeling tools that could have been used for analyzing HAB formation, based on testimony of Mr. Ringelberg (Ringelberg, [D.8 DRAFT 023506](#), p. 2 and p. 5). The Tango (2009) model (SJC-47, Tango, 2009, [D.8 DRAFT 023533](#)) was developed for *Microcystis* in the Potomac River (Maryland) in 2009 and demonstrates that analysis is possible but was not performed. Also cited in the Ringelberg testimony (SJC-4, Ringelberg, [D.8 DRAFT 023506](#), p. 2 and p. 5) is the Lake Erie model, which has been predicting HAB formation since 2009. Based on the Relevance criterion, a Delta-specific model would be most appropriate and preferable to one from another system, if such a model is available. The Durand model (SJC-46, Durand, 2008, [D.8 DRAFT 023532](#)) is Delta specific but it is a conceptual model, not numerical, so cannot be used to estimate impacts for a CEQA/NEPA analysis.

The Department has previously been made aware of these limitations and responded by explaining the limitations of the modeling approaches; specifically, how integrating across different models limits choice of alternative models for specific constituents (such as *Microcystis*) or ability to change the time step of specific models. The Department’s response to Stockton cites a report on the Effects of WaterFix on Harmful Algal Blooms in the Delta (DWR-653, [D.8 DRAFT 022805](#)) to substantiate that the “small differences in water temperature between the WaterFix and No Action Alternative (NAA) scenarios modeled for various locations across the Delta would not substantially increase the frequency or magnitude of cyanobacteria blooms within the Delta.” ([Department October 23, 2018 Submittal -Stockton](#), p. 13) They further cite the report to substantiate that “the WaterFix will not create hydrodynamic conditions that would be substantially more conducive to the occurrence of *Microcystis* blooms in the Delta relative to the NAA.” (*Ibid.*) The Council’s review of the report confirmed that there is no Delta-specific model for modeling *Microcystis* (DWR-653, [D.8 DRAFT 022805](#)). The Department also cites Master Response 14 of the Final EIR/EIS ([D.1 DRAFT 000188](#), pp.1-135 through 1-137), which discusses additional analyses performed in response to comments on *Microcystis*. Based on this information in the record, the Council finds that Stockton and San Joaquin County have not demonstrated that the Department failed to use best available science to evaluate *Microcystis* blooms and HAB formation, and therefore, their appeals as to this issue are *denied*.

ii. Salinity effects on agriculture (San Joaquin County)

San Joaquin County alleges inconsistency with the Relevance and Inclusiveness criteria of Appendix 1A of the Delta Plan, stating the Department ignored the effects of salinity increases on agricultural resources and cites existing methodologies that it asserts could have been used. (LAND-78, Leinfelder-Miles Testimony, [D.8 DRAFT 023725](#), pp. 2-3; LAND-79, Leinfelder-Miles Testimony, 2016, [D.8 DRAFT 023726](#)). San Joaquin County also claims that the Department did not consider (from an agronomist or soil expert perspective) the detrimental impacts of soil salinity on agricultural yields. ([San Joaquin County Appeal Letter](#), p. 34.) The Relevance criterion (Delta Plan, Appendix 1A, Table 1A-1) requires that scientific information used should be germane to the Delta ecosystem and/or biological and physical components (and/or processes) affected by the proposed decisions. The Inclusiveness criterion (Delta Plan, Appendix 1A, Table 1A-1) requires that scientific information used shall incorporate a thorough review of relevant information and analyses across relevant disciplines.

The cited testimony of Leinfelder-Miles (LAND-79, Leinfelder-Miles Testimony, 2016, [D.8 DRAFT 023726](#)) argues that the salinity of surface waterways is not an accurate representation of what the crop actually uses, nor are monthly averages an accurate representation (LAND-78, [D.8 DRAFT 023725](#), p.3-4). Therefore, Leinfelder-Miles asserts, the analysis is inadequate to conclude no injury to Delta agricultural water users. On p. 2-3 of the testimony, Leinfelder-Miles provided an alternate method of analyzing potential salinity impacts to soil salinity and crop yield. The methods involve analyzing effects to individual water right holders (sampling of irrigation water focused on sensitive, widely planted, and/or high-value crops). The Department cites the rebuttal testimony of Joel Kimmelshue ([D.8 DRAFT 022954](#)), which concludes that the methodologies proposed have not yet meet the standards of peer-reviewed science and therefore cannot be evaluated as more appropriate than the methods employed by the Department. ([Department October 15, 2018 Letter](#), pp. 41-42.)

The Department is required to comply with State Water Board Revised Decision 1641 (D-1641) for the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Bay-Delta Estuary. These standards are in place to protect “beneficial uses,” which includes agriculture (SWRCB and US EPA, 2000, [D.8 DRAFT 001391](#)). The Department also states that economic effects on agricultural production are beyond the scope of environmental analysis: “To the extent that these potential effects are solely economic effects on agricultural production, they do not fall within the customary examination of impacts to the environment that is the primary purpose of the Final EIR/EIS. To the extent that there are physical changes to land and waters associated with seepage and water quality, they are examined in the Final EIR/EIS. But effects such as seepage and reduced water quality are either addressed as impacts in other resource sections or considered to be temporary or transient effects, and their economic cost identified. These effects do not appear to impair the long-term quality or capability of Delta soils, and therefore they are not environmental impacts to the Important Farmland resources. Impact AG-2 in Chapter 14, Agricultural Resources, addresses seepage and water quality.” (Final EIR/EIS, Response to Comments, Vol II Part 1, [D.1 DRAFT 000188](#), p. 1-166.)

The Supplemental Notice includes a question to the Department asking what specific substantial evidence in the record shows that the Department used best available science to analyze potential impacts to agriculture related to salinity. The Department responded that “[t]he Bay-Delta Water Quality Control Plan objectives for Electrical Conductivity were created for the protection of agricultural beneficial uses and therefore the water quality assessment relied in part on evaluation of compliance with those objectives for making impact determinations. Those objectives were developed with consideration of salinity effects on soils and agriculture productivity.” Salinity compliance standards fall within the jurisdiction of the SWRCB’s Bay Delta

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Water Quality Control Plan and ER P1 (23 CCR Section 5005) states that flow objectives therein shall be used to determine consistency with the Delta Plan. The Council finds it would be inappropriate to hold the Department to a standard other than D-1641 for evaluating salinity standards. Therefore, San Joaquin County has not raised a valid appealable issue regarding the Department's consistency with the best available science policy as it relates to salinity effects on agriculture, and we *deny* its appeal as to this issue.

### iii. Impacts to Greater Sandhill Cranes (San Joaquin County)

San Joaquin County states the Department's analysis of impacts and mitigation measures for Greater Sandhill Cranes is under-inclusive and did not use best available science. ([San Joaquin County Appeal Letter](#), p. 35.) San Joaquin County cites testimony from the SWRCB hearing that critiques the assumptions used in the Final EIR/EIS about powerline impacts and effectiveness of flight diverters. (*Ibid.*) The applicable best available science criterion for this issue is Inclusiveness (Delta Plan, Appendix 1A, Table 1A-1), which requires that scientific information used shall incorporate a thorough review of relevant information and analyses across relevant disciplines. In the Final EIR/EIS, the Department explains that the California WaterFix project's avoidance and minimization measures, which includes performance standards, ensures no take of Greater Sandhill Cranes, as defined by Section 86 of the California Fish and Game Code, and the minimization of noise and other construction impacts. (Final EIR/EIS, Master Response 17, Volume II., [D.1 DRAFT 000188](#), pp. 1-148 - 1-149.) Appendix 3B of the Final EIR/EIS provides more detailed information about the performance standard for bird strike hazards, stating "[t]he most effective and appropriate diverter for minimizing strikes with Greater Sandhill Crane on the market according to best available science will be selected." (Final EIR/EIS Vol I, Appendix 3B, [D.1 DRAFT 000023](#), p. 3B-136.) It further states "the best available science will be used to estimate bird strike reduction associated with powerline diverters installed on existing lines in highest risk zones for the species and to design and implement roost site surveys." (*Id.* at p. 3B-137.) In its supplemental submission, the Department explains that the analysis of potential impacts to Greater Sandhill Cranes in the Final EIR/EIS is based on the initial BDCP analysis developed in cooperation with California Department of Fish and Wildlife, U.S. Fish and Wildlife and Friends of Stone Lakes, and was based on a highly conservative analysis of powerline collision risk developed by Dr. Ivey. ([Department October 23, 2018 Submittal- San Joaquin County](#) p. 67.) The Department cites the testimony of Dr. Christopher Earle at the SWRCB hearing to rebut the testimony relied upon by San Joaquin County regarding risk of transmission line collision and effectiveness of diverters. (*Id.* at p. 67-68; [X.2 DRAFT 000170](#), p. 15-19.) Based on this information in the record, the Council finds that San Joaquin County has not demonstrated that the Department failed to use best available science to evaluate impacts to Greater Sandhill Cranes, and therefore, its appeal as to this issue is *denied*.

San Joaquin County also alleges the Department used an inappropriate noise threshold for calculating construction noise impacts, citing the testimony of Dr. Fraser Shilling at the SWRCB hearing and a 2007 study cited in his testimony (Dooling and Popper, 2007). (San Joaquin County Appeal Letter, p. 35.) San Joaquin County does not cite the relevant criterion for this issue, and the Council finds this issue is more related to the effectiveness of the Department's mitigation measures under GP 1(b)(2) than an issue related to best available science under GP 1(b)(1). However, San Joaquin County did not raise this issue under that policy. Nonetheless, the 2007 study relied upon by Dr. Shilling does not support San Joaquin County's claims. The study appears to focus on traffic and road construction noise impacts to bird communication more generally, and is not evidence of best available science related to Greater Sandhill Cranes, and the Department's use of 60 dB is within the guideline range of 50-



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60dB cited in the study. Therefore, San Joaquin County has not raised a valid appealable issue regarding the Department's consistency with the best available science policy, and we *deny* its appeal as to this issue.

### iv. Air quality modeling approach (San Joaquin County)

San Joaquin County states that the Department used an "incorrect modeling approach" that underestimates air quality impacts because of failure to consider interbasin transport. It cites testimony from the SWRCB hearing submitted with its letter that is not yet in the record (ECOS-11, Lamare Testimony, p. 4-5). ([San Joaquin County Appeal Letter](#), p., 36.) San Joaquin County does not cite the specific best available science criterion it asserts the Department is not consistent with for its air quality modeling, and the Council cannot discern which criteria is implicated. Analysis of interbasin transport is not a required practice in NEPA/CEQA analyses, and not part of the standard methodology used for such analyses. The Department's response to San Joaquin County discusses how the air district thresholds and mitigation requirements apply, and point to the application of that guidance in the Final EIR/EIS. ([Department October 23, 2018 Submittal- San Joaquin County](#), p. 68.) San Joaquin County has not provided evidence that the Department deviated from the best practices for air quality modeling. Therefore, San Joaquin County has not raised a valid appealable issue regarding the Department's consistency with the best available science policy as it relates to air quality modeling, and we *deny* its appeal as to this issue.

### e. Addressing the 2010 Flow Criteria Report (SCDA, FOR)

SCDA, under its best available science appeal section, states that California WaterFix runs counter to the 2010 SWRCB Flow Criteria Report, the Public Trust Doctrine, and the Delta Reform Act's Public Trust requirements. ([SCDA Appeal Form](#), p. 5.) Similarly, FOR states the Department's Certification fails to address the 2010 SWRCB Flow Criteria Report. ([FOR Appeal Letter](#), p. 6.)

SCDA and FOR do not cite the specific best available science criterion they assert the Department is not consistent with for this issue related to 2010 Flow Criteria Report, and it is not clear to the Council how this issue is relevant to G P1(b)(3). The 2010 Flow Criteria Report "suggests the flows that would be needed in the Delta ecosystem if fishery protection was the sole purpose for which its waters were put to beneficial use." (2010 Flow Criteria Report, [D.8 DRAFT 018632](#), p. "Note to Readers".) In response to SCDA and FOR's appeals, the Department explains that, while the criteria are intended to inform the Delta Plan, the BDCP, and the WQCP, it does have any binding regulatory effect. ([Department October 23, 2018 Submittal - SCDA](#), pp. 9-10.) Therefore, SCDA and FOR have not raised an appealable issue regarding the Department's consistency with the best available science policy related to the 2010 SWRCB Flow Criteria Report, and we *deny* their appeals as to this issue.

### E. Policy G P1(b)(4) (23 CCR Section 5002(b)(4)): Adaptive Management

The Department certifies that California WaterFix is consistent with G P1(b)(4). Five Appellants – NCRA, SCDA, FOR, San Joaquin County, and Sacramento County – raise substantive arguments that it is not. For the reasons discussed below, the Council finds that Appellants have failed to demonstrate that the Department's Certification is inconsistent with G P1(b)(4), and we *deny* the appeals as to this policy.

## 1. Policy Requirement

G P1(b)(4) requires that ecosystem restoration and water management covered actions include “adequate provisions, appropriate to the scope of the covered action...,” which includes both (a) an adaptive management plan that describes the approach to be taken consistent with the framework in Appendix 1B and (b) “documentation of access to adequate resources and delineated authority...” to implement the proposed adaptive management process.

Delta Plan Appendix 1B, referenced in Policy G P1(b)(4), describes the three-phase, nine-step Adaptive Management Framework used by the Council for reviewing proposed covered actions involving ecosystem restoration and water management. Figure 1B-1 (p. 1B-2) shows a graphic depiction of the framework. Proposed ecosystem and water management covered actions should include an adaptive management plan that considers all nine steps of the framework, but the steps need not be rigidly included or implemented in the order described in the framework. (Appendix 1 B, p. 1B-1.)

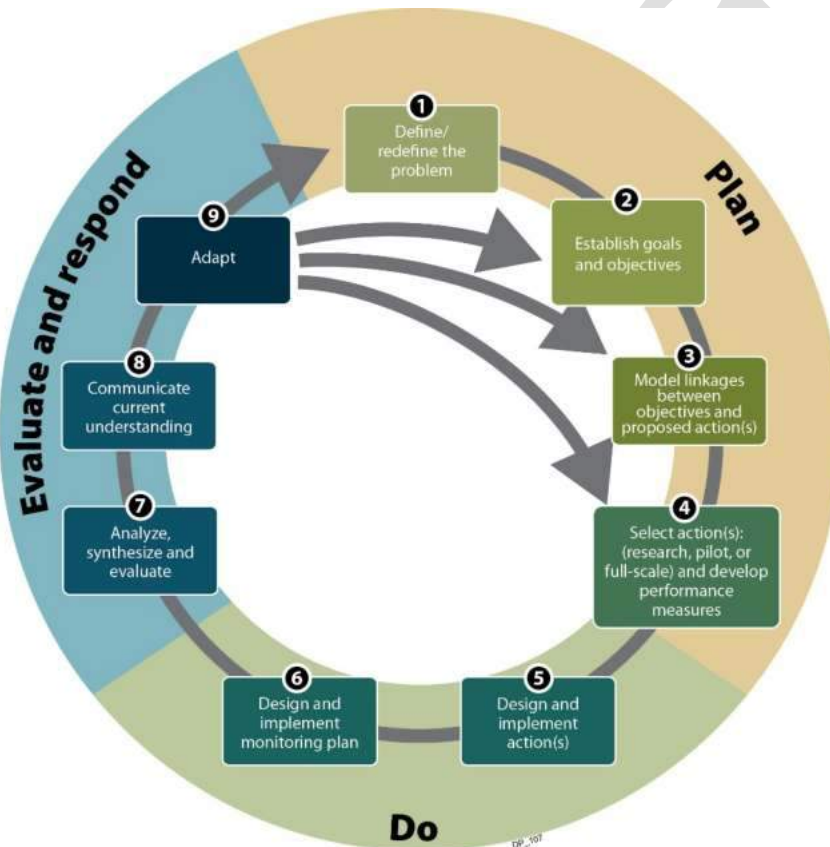


Figure 1B-1. A Nine-step Adaptive Management Framework. (Delta Plan Appendix 1B, p. 1B-2.)

## 2. Department's Certification

The Department states the Project is consistent with G P1(b)(4). The Department submitted as its detailed findings a proposed “Project-wide Adaptive Management Program” (PAMP) describing the approach to be taken, which the Department states is consistent with the adaptive management framework in Appendix 1B and documents access to adequate resources and delineated authority. (California WaterFix Project-Wide Adaptive Management Program (Certification AM, [X.6 000010](#).)

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The Department documents its findings for both (a) the adaptive management plan approach, and (b) adequate resources and delineated authority in the PAMP as follows:

### a. Adaptive Management Plan Approach

The PAMP provides a summary of adaptive management, which includes the Delta Reform Act definition and attributes of adaptive management drawn from scientific literature cited in the “Supporting Documents” section of the PAMP. Among those attributes is reducing uncertainty. (Certification AM, p. 1-5.) The Department describes the key area of uncertainty addressed by the PAMP as follows: “Considerable scientific uncertainty exists regarding the adequacy of existing regulatory standards and processes, and the effectiveness of prescribed measures.” To address this uncertainty, the Department proposes the PAMP as a robust program of collaborative science, monitoring, and adaptive management. (Certification AM, p. 1-5.)

The PAMP includes the “Adaptive Management Program for the California Water Fix and Current Biological Opinions on the Coordinated Operations of the Central Valley and State Water Projects” (BiOp AMP; [X.3 000269](#)). The BiOp AMP was developed in conjunction with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) Biological Opinions and California Department of Fish and Wildlife (CDFW) Incidental Take Permit (ITP). The BiOp AMP was prepared by the “Five Agencies” (the Department, Reclamation, CDFW, NMFS, and USFWS) concurrently with the Biological Opinions and the CDFW ITP for Longfin Smelt ([X.3 000267](#)). In addition to the BiOp AMP, the PAMP includes adaptive management to address uncertainties associated with implementation of mitigation measures, environmental commitments, and avoidance and minimization measures (AMMs) of the “California WaterFix Final EIR/EIS Mitigation Monitoring and Reporting Plan” (WaterFix MMRP; [X.3 000268](#); Certification AM, p. 1-4).

The PAMP is divided into four phases (Plan, Assess, Integrate, Adapt), which the Department states correspond with the Appendix 1B three-phase, nine-step framework as follows:

California WaterFix Phase 1: The “Plan” phase corresponds to the following four steps of *Delta Plan (DP) Phase 1 (Plan)*:

- Step 1: Define/redefine the problem
- Step 2: Establish goals and objectives
- Step 3: Model linkages between objectives and proposed action(s)
- Step 4: Select action(s): (research, pilot or full-scale) and develop performance measures

(Certification AM, p. 3-1)

California WaterFix Phase 2: The “Assess” phase corresponds to the following two steps of *DP Phase 2 (Do)*:

- Step 5: Design and implement actions
- Step 6: Design and implement monitoring plan

(Certification AM, pp. 3-1 – 3-2)

California WaterFix Phase 3: The “Integrate” phase corresponds to the following two steps of *DP Phase 3 (Evaluate and respond)*:

- Step 7: Analyze, synthesize and evaluate
- Step 8: Communicate current understanding

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(Certification AM, p. 3-2)

California WaterFix Phase 4: The “Adapt” phase corresponds to the following final step of *DP Phase 3 (Evaluate and respond)*:

- Step 9: Adapt

(Certification AM, p. 3-3)

### **b. Documentation of Adequate Resources and Delineated Authority**

The PAMP describes decision-making under the BiOp AMP as follows:

“Under the BiOp adaptive management program, new information gained during implementation will inform operational decisions within the ranges of criteria and effects analyzed in applicable BiOps and CESA authorizations. The entities involved commit to working through the collaborative process outlined in the Agreement for Implementation of an Adaptive Management Program for Project Operations (MOA; AMP pages 72-86) to reach consensus on operational decisions and other management actions to the extent possible and to elevate any disputes over decisions to appropriate levels of officials for each agency. Each agency retains discretion to make decisions as appropriate within its authority after considering the available information and taking into account the input of relevant groups described in this document. If any operational decisions are not within the ranges of criteria and effects analyzed in applicable BiOps or CESA authorizations, Reclamation will reinstitute formal consultation under ESA section 7 and implementing regulations (50 CFR 402.16), if necessary, and/or DWR will commence a permit amendment process under California law, if necessary.” (Certification, AM, p. 4-1)

The PAMP describes decision-making under the PAMP as follows:

“The Department of Water Resources (DWR) entered into a Joint Exercise of Powers Agreement with the Delta Conveyance Design and Construction Joint Powers Authority (DCA), forming a partnership for the design and construction of California WaterFix. The DCA is a public agency composed of local public water agencies who are investing in California WaterFix. Through the [Delta Conveyance Office (DCO)], the State of California will retain authority and oversight of WaterFix regulatory obligations, environmental mitigation and quality assurance. The DCO will oversee the work of the DCA. The DCO will be committed to transparency. The DCO will lead implementation of this PAMP acknowledging that technical support from the DCA may be necessary to develop the PAMP Annual Status Report and corresponding Decision Memo.” (Certification, AM, p. 4-3)

For Funding, the PAMP states:

“Payment of the costs of constructing and operating the State Water Project, including associated mitigation projects, is assured by DWR’s long term water supply contracts and applicable state law. DWR is a party to a long-term water supply contract with each of its 29 water supply customers, who are generally referred to as ‘Contractors.’ These contracts are the foundation of the State Water Project’s fiscal strength. The Department has not experienced payment delinquencies or defaults by Contractors that have had a materially adverse effect

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on the operation or maintenance of the State Water Project, or the ability of the Department to pay its obligations when due.” (Certification, AM, p. 5-1.)

“The proposed water conveyance facilities will be owned by the state. All construction costs of the proposed project including the costs of mitigation and monitoring activities described in the MMRP, USFWS and NMFS BiOps, CDFW ITP, and other permits as applicable, will be paid by DWR and charged to participating PWAs. DWR and/or one or more of the SWP contractors will likely issue revenue bonds, as generally described above, to fund the portion of the construction [and property acquisition] costs accruing to SWP contractors. The contracts between DWR and the participating state water contractors will be amended to provide for the payment debt service and ongoing operation and maintenance costs, including all mitigation and monitoring costs incurred during construction, operation, maintenance and monitoring associated with the project. Funding for the long-term management and monitoring of the mitigation sites will be paid by DWR and charged to the participating PWAs.

The participating PWAs will comply with the requirements of Water Code section 85089 with respect to the costs of the environmental review, planning, design, construction, and mitigation as a condition precedent to the commencement of any construction activities associated with the proposed project.” (Certification, AM, pp. 5-2 - 5-3.)

The Agreement for Implementation of an Adaptive Management Program for Project Operations (MOA; BiOp AMP, [X.3 000269](#), pp. 72-86) identifies the Interagency Implementation Coordination Group (IICG) as having “primary responsibility for support, coordination and implementation of the [BiOp] Adaptive Management Program,” including identifying and securing “needed infrastructure and resources to support scientific activities/monitoring.” The MOA includes sections 5.4.1.1 Staff Resources and 7.9 Availability of Funds.

### 3. Appeals

Five Appellants challenged the Department’s Certification of Consistency with GP 1(b)(4): NCRA, SCDA, FOR, San Joaquin County, and Sacramento County.

Each of the issues raised in these appeals is briefly described below, with an analysis of the issues related to consistency with GP 1(b)(4). The issues are organized under the two primary components of the policy: (1) adaptive management plan approach consistent with Appendix 1B and (2) adequate resources and delineated authority. The organization of the issues is based on the Council’s interpretation of the Appellants’ claims where Appellants have not stated which aspect of the policy their allegation relates to.

#### a. Consistency with Adaptive Management Framework in Appendix 1B

Several appeals raised issues that appear primarily related to the Department’s adaptive management plan approach, which must be consistent with the framework in Appendix 1B. Each of the issues is organized and addressed below by sub-issues and Appellant.



1                   i.     Requirements for overall plan development

2                           (a) SCDA

3             SCDA alleges the Department's adaptive management plan approach is inconsistent  
4 with G P1(b)(4) because it is "only a promise to develop an effective adaptive management plan  
5 at a future date," and that the plan "must be fully developed and reviewed prior to a finding of  
6 consistency with the Act." ([SCDA Appeal Form](#), p. 6.) SCDA points to and incorporates its  
7 comments on the 2015 Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS), its July  
8 2014 comments on the Draft EIR/EIS, and all comments responded to in the Department's Final  
9 EIR/EIS Master Response 33. (*Ibid.*)

10            SCDA does not state specifically with which aspects of G P1(b)(4) and the adaptive  
11 management framework in Appendix 1B it alleges the Department's Certification is not  
12 consistent. SCDA cites its and others' comments on older Bay Delta Conservation Plan (BDCP)  
13 or WaterFix adaptive management plan materials, and does not address the PAMP submitted  
14 by the Department in its Certification. Because SCDA does not address the components of the  
15 Department's PAMP relative to the adaptive management framework in Appendix 1B, it fails to  
16 demonstrate the Department's Certification is not supported by substantial evidence in the  
17 record, and we *deny* SCDA's appeal on this issue.

18                           (b) San Joaquin County

19            San Joaquin County alleges several issues related the Department's adaptive  
20 management plan approach, including: the Department improperly started with a preferred  
21 action before identifying the goals; its plan is insufficiently detailed by failing to show that it  
22 would lead to substantive results or account for a prolonged construction phase; the plan too  
23 narrowly focuses on only four listed species; and, it does not consider the possibility of  
24 nonoperation of the project if certain events occur. ([San Joaquin County Appeal Letter](#), pp. 43-  
25 44.) The appeal also alleges the plan lacks meaningful triggers, which is addressed below with  
26 other appeals that raised a similar issue. As support for its allegations, San Joaquin County  
27 relies on the testimony of Dr. Shilling and Mr. Stokely at the SWRCB hearing.

28            San Joaquin County does not specify which of the three-phases/nine-steps of the  
29 Appendix 1B framework its allegations relate to. San Joaquin County cites the testimony of Dr.  
30 Shilling for its assertion that the Department improperly started with a preferred action before  
31 identifying the goals. Dr. Shilling's statement, however, appears unsubstantiated because it is  
32 not supported by any facts or other evidence. Further, the G P1(b)(4) requires covered actions  
33 to include an adaptive management plan that considers all nine steps of the Appendix 1B  
34 framework, but the steps need not be rigidly included and implemented in the order described  
35 "and should not be used as a means to prevent action, but rather as a tool to enhance decision  
36 making." (Delta Plan Appendix 1B, p. 1B-1.) San Joaquin County also does not provide specific  
37 examples, with citation to evidence in the record to support its claim that the Department's plan  
38 is "insufficiently detailed" and wouldn't "lead to the substantive results required by the Delta  
39 Plan." (San Joaquin County Appeal Letter, p. 43.)

40            As to the assertion that the Department's plan fails to account for the prolonged  
41 construction phase, the PAMP addresses "implementation of mitigation measures,  
42 environmental commitments, AMMs of the MMRP and permit conditions," and therefore, covers  
43 the construction phase. (Certification AM, pp. 3-1 to 3-3.) The PAMP also addresses a broader  
44 suite of issues, and not just the few listed species as Appellant alleges. (Certification AM,  
45 Attachment 1.) Further G P1(b)(4) does not prescribe the range of management actions or

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responses to be part of an adaptive management plan, including scope of species addressed or possibility of non-operation. Rather, project proponents are responsible for developing clear goals and objectives that link to the problem statement and to make adaptive revisions during the “Adapt” step when current understanding suggests doing so. (Appendix 1B.) Therefore, San Joaquin County has failed to demonstrate that the Department’s Certification is not supported by substantial evidence in the record, and we *deny* its appeal on this issue.

### (c) Sacramento County

Sacramento County alleges the Department’s overall plan development was inadequate, citing the Delta Independent Science Board (Delta ISB) 2015 review of the RDEIR/SDEIS (Delta Independent Science Board 2015, [X.3 000131](#), pp.5-6). ([Sacramento County Appeal Letter](#), p.3.) The 2015 Delta ISB Review, however, did not address the PAMP submitted by the Department for its Certification. Sacramento County also points to the written testimony of Thomas Stokely from the SWRCB hearing. In its supplemental submission, Sacramento County cites specific pages of Thomas Stokely’s testimony to elaborate on its initial claim. (Sacramento County October 14, 2018 Letter, pp. 7-8.) The Council’s review of that testimony, however, finds that Thomas Stokely addresses only best practices for adaptive management more generally based on his experience with the Trinity River Restoration Program’s Adaptive Environmental Assessment and Management Program, and does not discuss the requirements of the Appendix 1B framework, which the Council uses to assess consistency with G P1(b)(4). Therefore, this testimony, and the allegations of Sacramento County related to adaptive management more generally, fail to demonstrate that the Department’s Certification is not supported by substantial evidence, and we *deny* its appeal on this issue.

### b. Requirement for decision points, performance measures, or “triggers”

#### i. SCDA, San Joaquin County, Sacramento County

SCDA asserts the Department’s “Adaptive Management Plan”<sup>14</sup> must contain a complete suite of specific triggers for action and specific actions to be taken in response to each trigger. (SCDA Appeal Form, p. 6.) It provides some specific examples of triggers and responses, including salinity measurements at particular locations. (*Ibid.*) Similarly, San Joaquin County asserts that the PAMP’s lack of enforceable triggers is inconsistent with the Delta Plan, citing the testimony of Dr. Shilling at the SWRCB hearing. (San Joaquin County Appeal Letter, p. 44.) Sacramento County asserts that the Department’s Final EIR does not meet Appendix 1B’s requirement for performance measures because it relies on vague and undefined processes to quantify and mitigate the project’s impacts. Sacramento County cites SWRCB July 2014 comments on the BDCP, BDCP DEIR/DEIS and Implementing Agreement ([D.1 DRAFT 000414](#)). (Sacramento County Appeal Letter, p. 3.)

Appendix 1B discusses the need to have clear objectives and to adapt in response to new understanding and/or conditions. It also calls for “decision points” and “performance measures.” (Appendix 1B, pp. 1B-1, 1B-3-4.) Appendix 1B states that “[p]erformance measures must be designed to capture important trends and to address whether specific actions are producing expected results.” (Appendix 1B, 1B-4.) Performance measures could include triggers or thresholds, but Appendix 1B does not require triggers or legally enforceable actions in response to a given measurement. Therefore, SCDA and San Joaquin County’s assertions that

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<sup>14</sup> SCDA uses the phrase “Adaptive Management Plan” in their appeal form and does not reference the PAMP or the BiOp AMP.



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the Department's adaptive management plan is inconsistent with G P1(b)(4) because it does not include specific or enforceable triggers does not raise a valid appeal issue because the Council's policy does not specifically require triggers or legally enforceable responses, and Appellants have not explained how their assertion relates to what Appendix 1B does require.

Appendix 1B does call for performance measures, as Sacramento County notes. However, G P1(b)(4)(A) requires an "adaptive management plan that describes the *approach* [emphasis added] to be taken consistent with the adaptive management framework in Appendix 1B." The Department identifies the approach it will take on p. 4-2 of the PAMP, for example, describing the responsibilities of the Interagency Implementation and Coordination Group: "Establish mechanisms for developing and implementing adaptive management changes (e.g., identifying performance measures/triggers to assess progress/outcomes, providing venues for synthesis and evaluation of available information, peer review, and developing recommendations in the face of new/refined understanding)." Sacramento County fails to show that the Department's adaptive management plan lacks an approach that includes development of performance measures as required by Appendix 1B. Sacramento County states, but with no citation to record evidence, that the Department's Final EIR/EIS relies on a vague and undefined process. Sacramento County also cites 2014 SWRCB comments on the BDCP, which are not relevant to the Department's PAMP submitted for California WaterFix. Therefore, Appellants have failed to demonstrate that the Department's Certification is not supported by substantial evidence, and we *deny* their appeals on this issue.

### **c. Requirement for Documentation of Adequate Resources and Delineated Authority**

#### **i. Requirement for documentation of adequate resources**

##### **(a) NCRA and FOR**

NCRA alleges that federal agencies, including NMFS, USFWS, and Reclamation, "have testified about their significantly limited resources in appearances before the SWRCB [at the SWRCB hearing]," and that "it is unclear whether federal policies will support the goals of the Delta Reform Act. Therefore, any real time management that requires federal analysis, personnel or infrastructure cannot be depended upon for real time decisionmaking." ([NCRA Appeal Letter](#), p. 5-6.) In its supplemental submission, NCRA cites as supporting evidence March 15, 2017 written comments from Donald Ratliff, USFWS, and January 3, 2017 testimony from Donald Ratliff and Jeff McLain, NMFS, to the SWRCB regarding Amendment to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: San Joaquin River Flows and Southern Delta Water Quality and on the Adequacy of the Supporting Recirculated Draft Substitute Environmental Document (SED)<sup>15</sup>. (NCRA October 15, 2018 Letter, p. 4.) Similarly, FOR states the Department's Plan lacks adequate provisions to ensure continued implementation because there is nothing binding Reclamation to comply with the plan and the federal government is "now claiming the authority to maximize water export deliveries." ([FOR Appeal Letter](#), p. 6.) In its supplemental materials, FOR further states that because Reclamation did not sign the Consistency determination provided to the Council, nor has it "submitted to the jurisdiction" of the Council, "there is no basis to assume or conclude the Bureau will comply with adaptive management." (FOR October 15, 2018 Letter, p. 6.)

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<sup>15</sup> These are comments presented to SWRCB as part of its public process on a different project and there is no evidence that these comments were considered by the Department.

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1 The testimony relied upon by NCRA is not in the record and is not about WaterFix or the  
2 Department's PAMP. Rather it is about the SWRCB Bay-Delta WQCP update for San Joaquin  
3 River Flows and Southern Delta Water Quality SED. NCRA fails to show how that testimony is  
4 relevant to the PAMP or how it demonstrates the PAMP is inconsistent with G P1(b)(4).

5 As to FOR's allegations, federal agencies are not required to be party to any certification  
6 of consistency, and the Council has no authority over federal agencies, so there is no  
7 inconsistency issue related to Reclamation not signing the Department's Certification or it not  
8 being subject to the Council's jurisdiction. Nonetheless, in its supplemental submissions, the  
9 Department states that Reclamation has made commitments to implement adaptive  
10 management. (Department October 15, 2018 Letter, p. 44; Department October 23, 2018  
11 Submittal-FOR, pp.8-9.) The Department states that adaptive management is required pursuant  
12 to the terms and conditions of the Biological Opinions (BiOps) issued by NMFS and USFWS to  
13 Reclamation as the lead federal action agency for Section 7 of the Endangered Species Act  
14 ([X.1 DRAFT 000001](#) pp. 1192-1194; [X.1 DRAFT 000002](#) pp. 13-14); failure to implement the  
15 terms and conditions would be ground for revoking the BiOp authorization for incidental take.  
16 (*Ibid.*) The Department explains, "that to utilize these authorizations DWR and Reclamation  
17 have no alternative but to comply with the terms and conditions of the BiOps, including those  
18 addressing adaptive management, or risk revocation or prosecution for unauthorized incidental  
19 take." (Department October 23, 2018 Submittal-FOR, pp.8-9.)

20 Therefore, NCRA and FOR have failed to demonstrate the Department's Certification is  
21 not supported by substantial evidence, and we *deny* their appeals on this issue.

### 22 (b) San Joaquin County

23 San Joaquin County states the PAMP fails to note there are no mandatory funding  
24 requirements, fails to include binding commitments to funding, and does not address cost  
25 allocation. (San Joaquin County Appeal Letter, p. 44.) San Joaquin County cites the testimony  
26 of Dr. Shilling and Mr. Stokely at the SWRCB hearing.

27 G P1(b)(4)(B) requires project proponents to document access to "adequate resources,"  
28 but it does not require mandatory funding requirements or binding commitments to funding. The  
29 PAMP states "[a]ll construction costs of the proposed project including the costs of mitigation  
30 and monitoring activities described in the MMRP, USFWS and NMFS BiOps, CDFW ITP, and  
31 other permits as applicable, will be paid by DWR and charged to participating PWAs [ Public  
32 Water Agencies]." (Certification AM, p. 5-2.) The PAMP further states "[f]unding for the long-  
33 term management and monitoring of the mitigation sites will be paid by DWR and charged to the  
34 participating PWAs," and "participating PWAs will comply with the requirements of Water Code  
35 section 85089 with respect to the costs of the environmental review, planning, design,  
36 construction, and mitigation as a condition precedent to the commencement of any construction  
37 activities associated with the proposed project." (Certification AM, p. 5-3.) In its supplemental  
38 submission, the Department states that adaptive management for fish is required pursuant to  
39 the terms and conditions of the BiOps issued by NMFS ([X.1 DRAFT 000001](#), p. 1192-1194) and  
40 USFWS ([X.1 DRAFT 000002](#), p. 13-14), as well as by CDFW for the incidental take permit ([X.1](#)  
41 [DRAFT 000003](#), p. 1, 175-176, 225-227), which creates a requirement for providing the needed  
42 funding. (Department October 15, 2018 Letter, p. 44.) Therefore, San Joaquin County has failed  
43 to demonstrate the Department's Certification is not supported by substantial evidence, and we  
44 *deny* its appeal as to this issue.

ii. Requirement for documentation of delineated authority

(a) NCRA

NCRA states that the Department's adaptive management plan does not further the coequal goal of protecting and enhancing the Delta ecosystem because "any adaptive management that relies upon a super majority or consensus of multiple stakeholders, including stakeholders with competing and conflicting priorities will be left unable to approve vital decisions to protect vulnerable species in real time." (NCRA Appeal Letter, p. 6.) It is unclear to which group or groups NCRA is referring to, and NCRA provides no supporting evidence or further explanation to substantiate its claim. Therefore, NCRA fails to raise a valid appeal issue related to G P1(b)(4), and we *deny* its appeal as to this issue.

(b) San Joaquin County

San Joaquin County states the PAMP conflicts with the coequal goals because it excludes community stakeholders and responsible agencies from having a role in the management process and fails to establish a cohesive structure with its five controlling agencies. (San Joaquin County Appeal Letter, p. 45 [generally citing the testimony of Dr. Shilling and Mr. Stokely at the SWRCB hearing].)

The Council's Adaptive Management Framework states "[d]ecisions made within the adaptive management process for ecosystem restoration and water management actions should be made by decision makers for the entity responsible for implementing adaptive management." (Appendix 1B, p. 1B-6.) It also states, "[g]overnance for adaptive management should provide a decision-making structure that fosters communication among scientific experts, independent scientific reviewers, the relevant decision making authorities (e.g., state and federal fisheries agencies on issues related to aquatic ecosystem restoration) and a balanced approach to the involvement of interested stakeholders." (Appendix 1B, p. 1B-1.) The testimony of Mr. Stokely and Dr. Shilling address only the BiOp AMP and not the entire PAMP that supports the Department's Certification. Further, the testimony of Mr. Stokely discusses observations related to Trinity River and does not directly support San Joaquin County's allegations related to G P1(b)(4) and the Appendix 1B framework requirements. Further, San Joaquin County's allegations are not supported by specific examples or citation to specific failures, and therefore, the Council cannot evaluate the potential validity of this issue. Therefore, the Council finds San Joaquin County has not raised a valid appealable issue regarding the Department's consistency with G P1(b)(4)(B), and we *deny* its appeal as to this issue.

**F. Policy WR P1 (23 CCR Section 5003): Reduce Reliance on the Delta Through Improved Regional Water Self Reliance**

The Department certifies that California WaterFix is consistent with WR P1, Reduce Reliance on the Delta through Improved Regional Water Self-Reliance ("WR P1"). Seven Appellants – NCRA, SCDA, FOR, Stockton, San Joaquin County, CDWA, and Sacramento County – raise substantive arguments that it is not. For the reasons discussed below, the Council finds that the Appellants have shown that the Department's Certification of Consistency with WR P1 is not supported by substantial evidence.

**1. Applicability of WR P1 to a Change in Point of Diversion**

The Department certifies that "WR P1 can be interpreted as applying only to a new water export, water transfer, or in-Delta water use projects that qualify as covered actions and not to a

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change in a point of diversion with no expansion of the water right associated with the total existing export.” (Certification, p. 5.) The Department further contends that it is not applying for new or expanded water rights for California WaterFix but is merely “seeking an amendment to its existing water rights to add the three new points of diversion.” (*Ibid.*) Consequently, it concludes, WR P1 should not apply to the project.

Multiple Appellants dispute this interpretation. (NCRA Appeal Letter, p. 6; San Joaquin County Appeal Letter, WR-P1 p. 1; Stockton Appeal Letter, p. 12; Sacramento County Appeal Letter, p. 6.) These Appellants argue, in short, that interpreting WR P1 in the manner put forward by the Department would not reduce the current reliance of water suppliers on the Delta. (*Ibid.*) Based upon the plain meaning, the statutory context, and the regulatory history, we agree with these Appellants that WR P1 applies to California WaterFix.

### a. Plain Meaning of WR P1

Whether WR P1 would apply to a change in point of diversion raises a question of regulatory interpretation. In answering it, we are guided by the same standards that a court would apply when interpreting a statute. (See, e.g., *Consumer Cause, Inc., v. Weider Nutrition Int'l, Inc.* (2001) 92 Cal.App.4th 363, 368.)

When a court construes a statute, it must begin by considering the plain meaning of the statutory language. (See *California School Employees Assn. v. Governing Bd.* (1994) 8 Cal.4th 333, 338 [observing that the legislature’s chosen language is the most reliable indicator of its intent because “it is the language of the statute itself that has successfully braved the legislative gauntlet”].) Thus, by extension, in construing WR P1, we must begin by considering the plain meaning of the regulatory language.

WR P1, subdivision (a), provides that “[w]ater shall not be exported from, transferred through, or used in the Delta” if three factors – set forth in subdivisions (a)(1), (a)(2), and (a)(3) – apply. Subdivision (b) further clarifies: “For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action to export water from, transfer water through, or use water in the Delta.”

Nothing in the express language of subdivisions (a) or (b) suggests that the terms “export,” “transfer” or “use” should be limited to a new or expanded water right. The plain meaning of those terms would encompass new points of diversion and new infrastructure projects such as California WaterFix. (See *Di-Campoli-Mintz v. County of Santa Clara* (2012) 55 Cal.4th 983, 992 [“A court may not, under the guise of construction, rewrite the law or give the words an effect different from the plain and direct import of the terms used”].)

### b. Context of WR P1

To the extent that WR P1, subdivision (a) is ambiguous, we may look to its statutory and regulatory context. (See *Coalition of Concerned Communities, Inc. v. City of Los Angeles* (2004) 34 Cal.4th 733, 737.) The Delta Reform Act directs the Council to develop a Delta Plan “that furthers the coequal goals.” (Wat. Code, § 85300, subd. (a).) It declares that “existing Delta policies are not sustainable.” (Wat. Code, § 85001, subd. (a).) It goes on to declare a new policy: “reduced reliance.” (Wat. Code, § 85021.) Moreover, the Legislature created the Council so that it would have “authority” to “promote statewide water conservation, water use efficiency, and sustainable water use.” (Wat. Code, § 85020, subd. (d) and (h).) Thus, the Legislature expected that the Council would adopt regulations affecting any water export that fit

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the criteria for a covered action, regardless of whether that export were connected with a water right existing at the time it enacted the Delta Reform Act.

### i. Regulatory History of WR P1

To the extent WR P1 remains ambiguous, we may look to the history of the regulation. (See section VI.A.3. of this Determination.)

The Initial Statement of Reasons filed with the Office of Administrative Law on behalf of the Delta Plan regulations states that WR P1 is aimed at reducing reliance on the Delta and improving regional self-reliance “by requiring a *significant* reduction in the amount of water used, or in the percentage of water used, from the Delta Watershed.” (Initial Statement of Reasons, p. 4 [emphasis added].) Such a “significant” reduction could not be achieved if the phrase “new water export, water transfer, or in-Delta water use projects” in WR P1 were interpreted to apply only to new or expanded water rights. (Compare WR P1, subd. (a), and Certification, p. 5.)

### 2. Consistency with WR P1

WR P1, subdivision (a), states that “water shall not be exported from, transferred through, or used in the Delta” if three factors apply:

- (1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);
- (2) That failure has significantly caused the need for the export, transfer, or use; and
- (3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.

As the Department explains: “In other words, if one or more of these three conditions are not applicable, the project is consistent with WR P1 because the prohibition in subdivision (a) would not apply.” (Certification, p. 5.)

#### a. Compliance with WR P1, subdivision (a)(1)

In considering the applicability of subdivision (a)(1) to California WaterFix, we address the following issues raised by the Department and Appellants: (i) the relationship between subdivisions (a)(1) and (c)(1); the water suppliers that must comply with subdivision (c)(1); (iii) the degree of compliance required; and (iv) infeasibility as a justification for noncompliance.<sup>16</sup>

#### i. Relationship Between Subdivisions (a)(1) and (c)(1)

For WR P1, subdivision (a)(1) to apply, “[o]ne or more water suppliers that would receive water as a result of the export, transfer, or use must have failed to adequately contribute to

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<sup>16</sup> For a fuller discussion of the parties’ views, please see: Certification of Consistency: WR P1; Certification of Consistency, p. 5-7; October 15, 2018, Written Statement, pp. 49-59; NCRA Letter, pp. 5-9; SCDA Appeal Form, p. 7, SCDA Opening Brief, pp. 2-9, 34-38; FOR, pp. 6-8; Stockton Letter, pp. 12-14; San Joaquin County, pp. 50-52; CDWA pp. 8-13; and Sacramento County pp. 4-7.)

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1 reduced reliance on the Delta and improved regional self-reliance consistent with all of the  
2 requirements listed in paragraph (1) of subsection (c).” Paragraph (1) of subsection (c), in turn,  
3 states:

4 Water suppliers that have done all of the following are contributing to reduced  
5 reliance on the Delta and improved regional self-reliance are therefore consistent  
6 with this policy:

7 (A) Completed a current Urban or Agricultural Water Management Plan (Plan)  
8 which has been reviewed by the California Department of Water Resources  
9 for compliance with the applicable requirements of Water Code Division 6,  
10 Parts 2.55, 2.6, and 2.8;

11  
12 (B) Identified, evaluated, and commenced implementation, consistent with the  
13 implementation schedule set forth in the Plan, of all programs and projects  
14 included in the Plan that are locally cost effective and technically feasible  
15 which reduce reliance on the Delta; and

16  
17 (C) Included in the Plan, commencing in 2015, the expected outcome for  
18 measurable reduction in Delta reliance and improvement in regional self-  
19 reliance. The expected outcome for measurable reduction in Delta reliance  
20 and improvement in regional self-reliance shall be reported in the Plan as  
21 the reduction in the amount of water used, or in the percentage of water  
22 used, from the Delta watershed. For the purposes of reporting, water  
23 efficiency is considered a new source of water supply, consistent with Water  
24 Code section 1011(a).

25  
26 The Department states that “the plain language of the provision does not prescribe that  
27 including a separate Reduced Reliance element in 2015 UWMPs or AWMPs is the only way to  
28 demonstrate reduced reliance.” (Department October 23, 2018, Submittal SCDA, pp. 11-12, no.  
29 8.) Inherent in this statement are two contentions – first, that subdivision (a)(1) requires  
30 compliance with subdivision (c)(1), and second, that this compliance must take the form of a  
31 “Reduced Reliance element.” (See also WR P1 Attachment, p. 3-50 [“WR P1(c)(1) provides  
32 one way for water suppliers to demonstrate reduced reliance, but as state[d] in the policy, this is  
33 not the exclusive means to do so”] [emphasis added].)

### 34 35 (a) Required Information

36  
37 SCDA argues that (c)(1)(A), (c)(1)(B), and (c)(1)(C) are “three core compliance  
38 requirements in WR P1.” (SCDA Opening Brief, p. 5.) We agree. By its terms, subdivision  
39 (a)(1) applies if “[o]ne or more water suppliers that would receive water as a result of the export,  
40 transfer, or use have failed to adequately contribute to reduced reliance on the Delta and  
41 improved regional self-reliance *consistent with all of the requirements listed in paragraph (1) of*  
42 *subsection (c).*” (Emphasis added.) We find that this language mandates that a certification of  
43 consistency must comply with the reduced reliance requirement in subdivision (a)(1) by  
44 satisfying subdivision (c)(1). It does not provide any alternative pathway for demonstrating  
45 reduced reliance. To interpret it as providing such a pathway would leave the word “all” out of  
46 the subdivision and would effectively rewrite the regulation.

47 To the extent that the text of the regulation leaves any doubt, however, SCDA quotes  
48 extensively from Delta Plan Appendix G, which it characterizes as “the Council’s longstanding

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1 interpretation of its own regulation.” (SCDA Opening Brief, p. 6 [quoting Delta Plan, Appendix  
2 G, p. G-4].) As discussed above, we agree that the narrative Delta Plan reflects our  
3 understanding of the implementing regulation. And as further discussed above, we submitted  
4 the full Delta Plan to the Office of Administrative Law as part of the rulemaking package for the  
5 Delta Plan regulations. Thus, we may properly consult Delta Plan Appendix G when interpreting  
6 our intention in adopting WR P1.

7 Appendix G, as SCDA notes, leaves “no doubt that core compliance requirements (A),  
8 (B) & (C) must be achieved within the Water Management Plan of each water supplier.” (SCDA  
9 Opening Brief, p. 6.) It explains that water suppliers “must” have current and compliant water  
10 management plans, “must” have evaluated in those plans feasible programs to reduce reliance,  
11 and “must” have reported on the expected outcomes of those programs. (*Id.*, p. 5 [quoting Delta  
12 Plan Appendix G, p. G-4].) And in describing how WR P1 would apply to a proposed water  
13 transfer, it further explains that the water suppliers that would receive water as a result of the  
14 water transfer would have to satisfy these “three compliance requirements.” (*Id.*, p. 6 [quoting  
15 Delta Plan Appendix G, p. G-3].)

### 16 (b) Reduced Reliance Element

17 We agree with the Department that the text of WR P1 does not refer to a reduced  
18 reliance “element” and that the regulation does not require an “element.” (See WR P1, subd.  
19 (c)(1).) What it does require is certain information. (*Ibid.*) Whether water suppliers choose to  
20 package such information in the form of an “element” is immaterial.

### 21 ii. Water Suppliers That Must Comply

22 The Department and Appellants debate exactly which water suppliers must comply with  
23 the requirements of WR P1 in order for the Department to demonstrate consistency with the  
24 policy. Subdivision (a)(1) provides that a project may not proceed if “one or more” water  
25 suppliers that would receive water as a result of the project have failed to satisfy “all” of the  
26 requirements of subdivision (c)(1). Appellants interpret this language as literally requiring “all”  
27 water suppliers to comply. (See, e.g. San Joaquin County Appeal Letter, p. 52; SCDA Appeal  
28 Form, p. 7; NCRA Appeal Letter, pp. 7-8.) The Department interprets it more loosely. (See  
29 Department, October 15, 2018 Written Statement, p. 57 [“If the Council takes the position that  
30 showing consistency with subdivision (a)(1) requires every water supplier,” then compliance is  
31 not feasible] [emphasis added].)

32 In resolving this issue, we must consider two categories of water suppliers – those that  
33 are associated with the State Water Project and have committed to receive deliveries from  
34 California WaterFix and those that are associated with the Central Valley Project and have not  
35 yet committed to receive deliveries from California WaterFix. We will address each in turn.  
36 (NCRA Appeal Letter, pp. 7-8.)

### 37 (a) State Water Project Water Suppliers

38 The Department explains California WaterFix is “a project to modernize the State Water  
39 Project,” and it attempts to show consistency with WR P1 by demonstrating that the State Water  
40 Project suppliers have complied with the policy’s planning requirements. (Certification, p. 5.)  
41 Like the water management planning laws upon which WR P1 builds, the Department  
42 distinguishes between urban and agricultural water suppliers and provides separate analyses of  
43 each. (See WR P1, subd. (c)(1)(A).)



**(i) Urban Water Suppliers**

The Department is inconsistent on the point of whether it has identified all water suppliers that may receive water deliveries as a result of the California WaterFix. On one hand, it states that “[t]he specific urban water suppliers that may receive water supply reliability benefits from California WaterFix are listed in Table WR P1-1.” (Department, October 15, 2018 Written Statement, p. 49.) On the other hand, the Department states that it is “difficult to ascertain” and only “theoretically possible” to determine which suppliers “may receive water from the project.” (*Id.*, pp. 49-50 [underline in original].)

What we understand the Department to mean, in light of its other statements on the record on this issue, is that it has identified the State Water Project contractors but not the full universe of water suppliers that may ultimately receive deliveries. (See *id.*) But as Appellants point out, WR P1 requires a showing of consistency for *all* water suppliers. (San Joaquin County Appeal Letter, p. 52; SCDA Appeal Letter, p. 7.)

The Department claims that certain obstacles would complicate its ability to identify the water suppliers who may receive deliveries as a result of California WaterFix. (Department, October 15, 2018 Written Statement, pp. 49-50.) The Department states, for instance, that “it would likely require months” to review each water supplier’s management plan “to determine if and under what circumstances they receive water from other suppliers up to the level of an SWP or CVP contractor that will receive water supply reliability benefits of California WaterFix.” (*Id.*, p. 49.) We recognize that demonstrating consistency with WR P1 may require resources and effort, but that does not give us the authority to overlook the plain meaning of the regulation.

**(ii) Agricultural Water Suppliers**

As with the urban water suppliers, the Department takes an inconsistent position. On one hand, it states that “[t]he specific agricultural water suppliers that may receive water supply reliability benefits from California WaterFix are listed in Table WR P1-3.” (Department, October 15, 2018 Written Statement, p. 51.) On the other hand, the Department states that it is “difficult to ascertain with certainty” which agricultural water suppliers may receive benefits. (*Ibid.*) The Department explains that “[t]his exercise is straight-forward” for certain agricultural water suppliers that “are also water contractors and directly serve water to landowners in their service areas,” but it is less so for situations in which “the relationships between the water contractor and land-owners is not as clear.” (*Ibid.*) We interpret these statements as meaning that the Department has not identified all of the agricultural water suppliers that would receive water as a result of the California WaterFix.

For the agricultural water suppliers that it has identified, the Department recognizes that they do not comply with the requirements of (c)(1)(C). (Department, October 15, 2018 Written Statement, p. 53 [“None of the agricultural water suppliers identified above have provided the data in the format specified in WR P1, subdivision (c)(1)(C) to the Department”].) Appellant NCRA faults the Department for this. (NCRA Appeal Letter, pp. 7-8.) As discussed above, we interpret the phrase “[o]ne or more water suppliers” in subdivision (a)(1) as expecting compliance from each and every water supplier that “would receive water as a result” of the California WaterFix. We do not have the authority to read a new meaning into the regulation or otherwise relax its terms. While the Department may not have full control over what documents or information individual water suppliers give it, it is still, as the certifying agency for California WaterFix, responsible for demonstrating consistency with WR P1.

**(b) Central Valley Project Water Suppliers**

Appellants raise numerous arguments about the proper role of Reclamation in the current proceedings. (E.g., San Joaquin County Appeal Letter, p. 3; FOR Appeal Letter, pp. 7-8.) These arguments have generally focused on the ripeness of California WaterFix for our review and on the potential implications for consistency with ER P2. They are relevant to WR P1, however, in that the policy requires certain showings for water suppliers that will receive deliveries as the result of a covered action, and, as Appellants NCRA and CDWA point out, certain Central Valley Project water suppliers may receive deliveries as result of the California WaterFix. (NCRA Appeal Letter, pp. 7-8; CDWA Appeal Letter, pp. 9-10.)<sup>17</sup>

The Department puts forward two theories about the Central Valley Project water suppliers. The first is that they have satisfied the requirements of WR P1. The second is that they need not satisfy the requirements of WR P1. We find both arguments unavailing.

**(i) Adequacy of Compliance**

The Certification states: “While it is unknown which, if any, other CVP suppliers, will opt in to receive water supply reliability benefits from WaterFix, DWR has, in fact, presented substantial evidence that those other CVP contractors have invested in projects and programs that improve regional self-reliance.” (Department, October 15, 2018, Written Statement, p. 56.) In support of this statement, the Department cites section 3.2.5 of its Certification of Consistency: WR P1. We have reviewed that section. It describes various statutory schemes and programs concerning water management, but does not name the specific Central Valley Project water suppliers who would potentially receive deliveries from California WaterFix. (Certification of Consistency: WR P1, pp. 3-48 and 3-49.) It does not present evidence or analysis attempting to show that the specific water suppliers have complied with WR P1. (*Ibid.*)

**(ii) Need for Compliance**

The Department argues at greater length that it need not show the Central Valley Project water suppliers have complied with WR P1 because, with the exception of the Santa Clara Valley Water District, none of the Central Valley Project water suppliers have committed “100 percent” to either receiving or not receiving deliveries from the California WaterFix. (Draft October 25, 2018 Transcript p. 62, line 15 to p. 63, line 19.)

At the same time, however, the Department states that: (1) “California WaterFix is designed to improve the reliability of State Water Project *and* Central Valley Project (CVP) water supplies, with the ultimate goal of enabling the SWP *and* CVP to more reliably deliver up to full water contract amounts;” (2) the Department has analyzed the project “*assuming* the participation of CVP contractors”; (3) it has performed its operational modeling “with CVP contractors as part of the operations for WaterFix”; (4) the Central Valley Project water suppliers “continue to have communications” about receiving deliveries from California WaterFix; (5) Reclamation is acting as a co-petitioner in the SWRCB change petition proceeding “with the understanding” that Central Valley Project will have “connectivity” to the California WaterFix; and (6) Central Valley Project water suppliers may “opt in to receive water supply reliability benefits from WaterFix.” (Certification, p. 5 [emphasis added]; Draft October 25, 2018 Transcript p. 62, line 15 to p. 63, line 19; Department, October 15, 2018, Written Statement, p.

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<sup>17</sup> The Appellants have offered no evidence that would support the conclusion that Reclamation itself – as the manager of the Central Valley Project, as opposed to a recipient of Central Valley Project deliveries – would be relevant to an analysis of the specific provisions of WR P1.

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56; see also *id.*, p. 49 [envisioning water suppliers receiving deliveries “up to the level of an SWP or CVP water contractor”].)

The Department cannot both include Central Valley Project water suppliers in the California WaterFix for the purpose of receiving benefits, but exclude them for the purpose of demonstrating compliance with WR P1. If the Department wishes to leave the door open for Central Valley Project water suppliers to “opt in to receive water supply reliability benefits from WaterFix,” it must demonstrate their compliance. (Department, October 15, 2018 Written Statement, p. 56.) If the Department wishes not to demonstrate their compliance, it must define the California WaterFix covered action in a manner that does not give them an opportunity to “opt in.” (*Ibid.*)

### iii. Degree of Compliance Required by Subdivision (a)(1)

Subdivision (c)(1)(A) requires the Department to have reviewed water management plans for the water suppliers for completeness under Water Code Division 6, Parts 2.55, 2.6, and 2.8. Subdivision (c)(1)(B) requires that the plans include an implementation schedule for programs and projects capable of reducing reliance on the Delta. And subdivision (c)(1)(C) requires that the plans include “the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance.”

The Department recognizes that California WaterFix does not fully comply with these requirements. (Certification WR P1 Attachment, p. 2-1, fn. 1, pp. 3-50 to 3-51.) Nonetheless, the Department provides extensive information regarding efforts that certain water suppliers have undertaken to reduce their reliance on the Delta.<sup>18</sup> (See *id.*, pp. 3-35 to 3-49; Certification, p. 6.) In addition, the Department proposes that it may demonstrate consistency with WR P1 by presenting, outside the context of water management plans, the type of information that subdivisions (c)(1)(B) and (c)(1)(C) require to be in those plans. (E.g., Department, October 15, 2018, Written Statement, p. 50 [“Thus, projections of future reliance on Delta supplies and improvements in regional self-reliance for the urban water agencies listed in Table WR P1-1 reflect the cumulative plans of all of the retail agencies below them”], p. 52 [“WR P1(c)(1) does not state that if water suppliers have failed to include information in the specific format set forth in subdivisions (c)(1)(B) and (c)(1)(C), then they have not or cannot otherwise demonstrate reduced reliance”]; see also Certification of Consistency: WR P1, p. 3-51.)

The Appellants maintain that water suppliers must satisfy the specific requirements of subdivision (a)(1), as set forth in subdivision (c)(1), in order for the California WaterFix to be consistent with WR P1. (San Joaquin County Appeal Letter, p. 51; SCDA Opening Brief, pp. 4-

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<sup>18</sup> The Department and Appellants disagree about whether the water suppliers that would receive water from California WaterFix actually have reduced their reliance on the Delta. (See, e.g., NCRA Appeal Letter, p. 7 [“the data that [the Department] cites show that urban water contractors are forecasting increases in Delta supplies to meet future water needs”]; FOR Appeal Letter, p. 7 [“Spending billions of dollars and 20 years to construct enormous new conveyance facilities to export significant quantities of freshwater flows before rather than after flowing through the Delta would increase rather than reduce reliance on the Delta”]; CDWA Appeal Letter, p. 9 [“A project that is designed to bring about an average increase of 1.3 million acre feet of exports cannot by any stretch of the imagination be deemed consistent with the state policy to reduce current levels of exports”].) But as discussed above, subdivision (a)(1) offers a precise formulation of what is required to reduce reliance on the Delta and improve regional self-reliance – compliance with subdivision (c)(1). Inasmuch as contentions about reduced reliance made by either the Department or the Appellants do not address compliance with subdivision (c)(1), they are not relevant.

7; CDWA Appeal Letter, p. 10; Sacramento County Appeal Letter, p. 5.) SCDA argues that “[t]he import of WR P1 is to require urban and agricultural water suppliers who receive Delta water to adopt Urban and Agricultural Water Management Plans and to include specified precisions in those plans.” (SCDA Opening Brief, p. 2.) It maintains that “[t]he object of the regulation is the water management planning process” and that “[i]t would frustrate the intent of the regulation to allow DWR to propound its own, alternative means outside the water management planning process to purportedly demonstrate reduced reliance.” (*Id.*, pp. 2, 4.)

We agree that subdivision (c)(1) establishes requirements for the planning process. We further agree that text of subdivision (c)(1) does not offer an alternative means of satisfying those requirements outside of the planning process.

#### iv. Infeasibility as a Justification for Noncompliance

The Delta Plan, through G P1, subdivision (b)(1), recognizes that, “in some cases, based upon the nature of the covered action, full consistency with all relevant regulatory policies may not be feasible.” In those instances, the project proponent may determine that the “covered action is consistent with the Delta Plan because, on whole, that action is consistent with the coequal goals.” Such a determination “must include 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.” (G P1, subd. (b)(1).) “Feasible” is defined to mean “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” (Cal. Code Reg., tit.23, § 5001, subd. (p).)

The Department does not contend that reducing actual reliance is infeasible but rather that demonstrating reduced reliance in the manner required by subdivision (a)(1) is infeasible. It states:

If it is determined by the DSC Delta Council [*sic*] that a covered action must demonstrate full consistency with (a)(1), and thereby (c)(1), then full consistency with this policy is not feasible because (c)(1)(C) of WR P1 would require all water suppliers that would receive water, as a result of the export, to report in their 2015 Urban or Agricultural Management Plans a measurable reduction in Delta reliance and improvement in regional self-reliance.

(Certification of Consistency: WR P1, p. 2-1, fn. 1.) G P1, subdivision (b)(1), calls for a two-step analysis. First, we must consider whether the Department has shown feasibility. Second, if it has, we must consider whether California WaterFix is nonetheless consistent with the coequal goals.

#### (a) Analysis of Infeasibility

The Department certifies that compliance with subdivision (c)(1) is not feasible for three reasons. The first regards water management planning statutory requirements. The second regards an assertion related to the limits of the Department’s authority. The third regards the difficulty in either creating or assembling certain data. We find that none of these reasons supports a determination of infeasibility.

**(i) Water Management Planning Statutory Requirements**

The Department states that the Urban Water Management Planning Act and Agricultural Water Management Planning Act do not require water suppliers to include WR P1-compliant reduced reliance elements in their water plans. (Certification, WR P1 Attachment, fn. 1.) That may be, but we agree with CDWA's reasoning that "[t]he fact that those two acts may not require the specific information the Delta Plan is requiring does not mean that such information cannot be added to those water management plans." (CDWA Appeal Letter, p. 11.) The lack of a requirement is not the same thing as prohibition. Consequently, the mere lack of a requirement in the water management planning statutes does not mean that compliance would not be "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (Cal. Code Reg., tit. 23, § 5001, subd. (p).) The Department has not offered any reason to conclude that the requirements in the planning statutes may not coexist with the requirements in WR P1. (See *Pacific Lumber Co. v. State Water Resources Control Bd.* (2006) 37 Cal.4th 921 [explaining that "a system of overlapping jurisdiction [is] an uncontroversial concept under our law" and holding that both the SWRCB and the Department of Forestry could regulate the water quality impacts of a proposed timber harvest; *Sonoma Cnty. Water Coal. v. Sonoma Cnty. Water Agency* (2010) 189 Cal. App. 4th 33, 37, fn. 4 [referring to "overlapping regulatory environments"].)

**(ii) Limits of the Department's Authority**

The Department claims that it "lacks the legal authority to require any urban or agricultural water supplier to include a Delta-specific Reduced Reliance element in its UWMP or AWMP, or to undertake the specific planning, tracking, and reporting requirements described in WR P1(c)(1)(B)-(C)."

As to the first point about the authority to require a "Delta-specific Reduced Reliance element" we reiterate here that WR P1 requires the information described in subdivisions (c)(1)(B)-(C); whether a water supplier frames that information as part of a distinct element or not is immaterial.

As to the second point about the authority to require compliance with subdivisions (c)(1)(B)-(C), the Department never explains why it needs such authority. WR P1, subdivision (a)(1), is triggered if one or more water suppliers that would receive water as a result of the covered action have failed to adequately contribute to reduced reliance. Put simply, if a water supplier wishes to receive Delta water from a covered action, it must comply with the planning requirements of WR P1. As stated in the San Joaquin County Appeal Letter: "That [the Department] '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." (San Joaquin County Appeal Letter, WR-P1 p. 2) This is true whether a water supplier undertakes the covered action itself or whether a separate entity such as the Department undertakes the covered action for the water supplier's ultimate benefit.

In sum, WR P1 requires compliance with its terms. The Department does not need the "legal authority" to require the compliance that WR P1 already requires. By claiming infeasibility based solely on the alleged lack of such authority, the Department has failed to show by substantial evidence that compliance would not be "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (See Cal. Code Reg., tit. 23, § 5001, subd. (p).)

1 (iii) Nonexistent Data

2 In a similar vein, the Department states that water management planning acts “did not  
3 require that the type of data referenced in WR P1 (c)(1)(C) be included in the 2015 Plans.  
4 Therefore, the information does not exist in the format required by the policy and it would [be]  
5 infeasible to demonstrate full [sic] consistency with this section.” (Certification, WR P1  
6 Attachment, p. 2-1, fn. 1.) CDWA counters that, “[w]hile it may indeed take time for all of the  
7 water suppliers within the SWP and CVP to fully comply with the requirements in regulation  
8 5003 (i.e., complete and/or update their water management plans), the fact that it requires time  
9 and effort to comply with new regulations, such as these, is by no means a basis to bypass  
10 them.” (CDWA Appeal Letter, p. 11)

11 SCDA points that we adopted WR P1 in 2013 – that is, *before* the current round of water  
12 management plans. (SCDA Opening Brief, p. 8.) Indeed, SCDA explains that “DWR  
13 participated in the development of the Delta Plan and knew well ahead of the Delta Plan’s  
14 adoption in May of 2013 . . . that water suppliers’ 2015 Urban and Agricultural Water  
15 Management Plans were required to contain the core compliance requirements of WR P1.”  
16 (*Ibid.*) But, SCDA continues, “[i]n its extensive engagement with water suppliers throughout the  
17 state with regard to their 2015 Water Management Plans, DWR acted as if the Delta Reform  
18 Act, the Council, the Delta Plan, and WR P1 did not exist.”<sup>19</sup> (*Ibid.*) In support of this  
19 contention, SCDA submits as an attachment the Department’s 2015 Urban Water Management  
20 Plan Guidebook. (*Ibid.*)

21 Because the guidebook was prepared and distributed by the Department, it was in the  
22 Department’s possession at the time of Certification; we therefore add it to the record under  
23 Section 10 of our Appeals Procedures. We have reviewed the guidebook and agree that it  
24 provides no mention of WR P1 and no direction on how to comply with it. We agree with SCDA  
25 that the infeasibility that the Department alleges is in part a problem of its own making. We see  
26 no reason, however, that the water suppliers that will receive deliveries from the California  
27 WaterFix could not supplement their water management plans to comply with subdivision (a)(1).

28 (b) Consistency with Coequal Goals

29 Because the Department has failed to clearly identify where consistency with WR P1  
30 was not feasible, the Council need not consider the Department’s alternative contention that WR  
31 P1 is consistent overall with the coequal goals. (See, e.g., *People v. Thomas* (1977) 19 Cal.3d  
32 630, 644 fn. 12.)

33  
34 b. Compliance with WR P1, subdivision (a)(2)

35 WR P1, subdivision (a)(1), applies if “one or more water suppliers that would receive  
36 water . . . have failed to adequately contribute to reduced reliance.” (WR P1, subd. (a)(1).)  
37 Subdivision (a)(2), in turn, applies if – assuming that one or more water suppliers has indeed  
38 failed to adequately contribute to reduced reliance – that “failure has significantly caused the  
39 need for the export, transfer, or use.” (*Id.*, subd. (a)(2).)

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<sup>19</sup> SCDA also argues that “DWR participated in the development of the Delta Plan and provided written comments during the development process. DWR did not raise any questions with regard to the feasibility of implementing WR P1.” (SCDA Opening Brief, p. 7.) But SCDA does not cite any evidence in support of these contentions. Thus we must disregard them as unsupported factual allegations.



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1 The Department states that the need for California WaterFix was not significantly caused  
2 by a failure to adequately reduce reliance. (Certification, p. 6.) Rather, according to the  
3 Department:

4 [T]he need for California WaterFix was caused by factors that pre-date and exist  
5 independently of the reduced reliance policy. The need arose and was  
6 recognized decades ago as sensitive fish species populations declined in the  
7 Delta, which led to increasingly stringent environmental regulations on the  
8 coordinated operations of the SWP and CVP pumps in the south Delta to protect  
9 those species, which, in turn, reduced the reliability of the SWP and CVP  
10 supplies. In addition, the need arose in view of well recognized threats to reliable  
11 SWP/CVP exports, including seismic risks to Delta levees on subsiding lands,  
12 and the middle-and long-term threat of salinity intrusion from sea-level rise.

13 (*Ibid.*) Appellants dispute this conclusion on essentially two grounds. The first regards the  
14 alleged causes of the need for California WaterFix. The second regards the sufficiency of  
15 evidence on which the Department bases its conclusions.

### 16 i. Causes of Need for California WaterFix

17 Appellants raise certain arguments about what did or did not cause the need for the  
18 California WaterFix. (See, e.g., NCRA Letter, pp. 6-7; FOR Letter, p. 7; San Joaquin County  
19 Appeal Letter, p. 50; Sacramento County Appeal Letter, p. 5; CDWA Appeal, p. 10.) Often,  
20 however, they do so without any citation to factual evidence; thus, we need not consider their  
21 assertions. (*Ibid.*) To the extent that the Appellants do cite evidence, they generally fail to  
22 connect their allegations about what caused the need for California WaterFix with what is or is  
23 not in the water management plans of the water suppliers that may receive water deliveries.  
24 (*Ibid.*) Subdivision (a)(2) focuses its inquiry on whether the need for a covered action was  
25 “significantly caused” by the failure to comply with the water planning requirements set forth in  
26 subdivision (a)(2). (See SCDA Opening Brief, p. 2 “[t]he object of [WR P1] is the water  
27 management planning process”) [emphasis in the original].)

28 Only one Appellant examines an actual water management plan – SCDA, which finds  
29 fault with a plan adopted by the Metropolitan Water District of Southern California (“Met”).  
30 (SCDA Opening Brief, pp. 36-38.) It argues that the plan fails “to include in its projections all  
31 technically feasible, cost-effective local and regional projects” and that this failure “substantially  
32 caused it to overestimate its need for imported Delta Water and significantly caused the impetus  
33 for WaterFix.” (*Id.*, p. 37.) In support of its argument, SCDA cites an excerpt from the Delta  
34 Plan and testimony given by Mr. Doug Obegi at the SWRCB hearing.<sup>20</sup> (SCDA Opening Brief,  
35 pp. 36-37.) But these sources do not address what Met has or has not included in its urban  
36 water management plan.

37 Regarding the Delta Plan, SCDA states that it “estimates an available supply of new  
38 water from agricultural water use efficiency, recycled municipal water, and urban water use  
39 efficiency at up to 7.4 million acre feet per year.” (SCDA Opening Brief, p. 37.) SCDA  
40 concludes that “a substantial portion of these savings would accrue to water suppliers receiving  
41 Delta Water through California WaterFix, obviating the need for WaterFix.” (*Ibid.*) But the

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<sup>20</sup> In addition, SCDA attempts to cite a report from the Natural Resources Defense Council. (SCDA Opening Brief, p. 36.) But SCDA provides no argument or evidence that would support the conclusion that the report was before the Department at the time of certification or would be amenable to judicial notice.

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1 estimate in the Delta Plan is for savings that could be achieved statewide; it is not for savings  
2 that could be achieved by Met or any other specific water supplier that has been identified as  
3 potential recipient of WaterFix deliveries. Thus, the estimate is not relevant to an analysis under  
4 subdivision (a)(2).

5 Regarding Mr. Obegi's testimony, the quoted portion contends that water supply  
6 savings could be achieved "within the service areas of contractors of the State Water  
7 Project (SWP) and Central Valley Project." (SCDA Opening Brief, p. 36.) It does not  
8 discuss what savings could be achieved specifically by Met or otherwise attempt to show  
9 that Met's urban water management plan falls short of the WR P1 criteria. (*Ibid.*)

### 10 ii. Sufficiency of Evidence

11 Subdivision (a)(2) inquires whether, if a project proponent fails to demonstrate reduced  
12 reliance as required under subdivision (a)(1), "[t]hat failure has *significantly caused* the need for  
13 the export, transfer, or use." (WR P1, subd. (a)(2) [emphasis added].) Appellant NCRA argues  
14 that the Department failed to provide complete and quantitative information as required under  
15 subdivision (a)(1) and, as a result, it cannot show that that failure did not "significantly cause"  
16 the need for the California WaterFix. We agree.

#### 17 (a) Lack of Complete Information

18 The Department has not provided all of the information required under subdivision (a)(1).  
19 Notably, it has not required *any* of the information for State Water Project agricultural water  
20 suppliers or Central Valley Project suppliers. Without that information, the Department cannot  
21 reasonably show that the failure to comply with subdivision (a)(1) did not cause the need for  
22 California WaterFix or that it was not a significant cause.

#### 23 (b) Lack of Quantitative Information

24 NCRA argues that the subdivision (a)(1) requires quantitative information:

25 [The Department] evaluated whether some of these agricultural water suppliers –  
26 SWP contractors – are measuring the water they deliver, whether they are using  
27 volume-based pricing, and whether they have implemented any of the  
28 conditionally required efficient water management practices. Reduced Reliance  
29 Analysis 3-45 to 3-48. But none of these factors show any *reduced* reliance on  
30 the Delta without a quantitative measurement . . . And for CVP contractors, [the  
31 Department] provides even less information, and instead relies on Reclamation's  
32 compliance with the SECURE Water Act without any data demonstrating how  
33 such compliance reduces reliance on the Delta.

34 (NCRA Appeal Letter, p. 8; see also San Joaquin County Appeal Letter, p. 51.) NCRA implies  
35 that the lack of such information would prevent the Department from showing that a failure to  
36 reduce reliance did not significantly cause the need for California WaterFix. (*Ibid.*)

37 We agree. Subdivision (c)(1)(C) requires that water management plans include the  
38 expected outcome for "*measurable* reduction" in Delta reliance and improvement and regional  
39 self-reliance." (Emphasis added.) Additionally, it requires that the expected outcome be  
40 reported in "the *amount* of water used" or "in the *percentage* of water used." (Emphasis added.)  
41 Thus, the regulation recognizes that there is no way to reasonably weigh the relative  
42 significance of the various potential causes without metrics. Narrative alone cannot establish a  
43 lack of "significant" causation regarding a matter for which subdivision (c)(1)(C) – and by

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extension subdivision (a)(1) – seeks a “measurable reduction” expressed in an “amount” or in a “percentage.”

### **d. Compliance with Subdivision (a)(3)**

WR P1, subdivision (a)(3), applies if “[t]he export, transfer, or use would have a significant adverse environmental impact in the Delta.” Initially, in its Certification, the Department stated that California WaterFix would not have “a significant adverse environmental impact.” (Certification, p. 6.) Subsequently, however, the Department has stated that California WaterFix would have a significant adverse environmental impact for the purpose of subdivision (a)(3).

On October 15, 2018, the Department stated: “DWR is not arguing that the criterion in subdivision (a)(3) has not been met.” (Department, October 15, 2018, Written Statement, p. 58.) On October 23, 2018, the Department stated: “If the Delta Stewardship Council understands ‘export’ to mean ‘diversion,’ then, as DWR has acknowledged, the criterion in (a)(3) has been satisfied.” On October 25, 2018, the Department stated that WR P1 “prohibits export projects if all three of the conditions” are met and that, for the California Water Fix, only “two of the three are not met. (Draft October 25, 2018 Transcript, p. 25, line 25, to page 26, line 2.)

To the extent that the Department stands by its original position in the Certification, we address it here. The Certification raises two arguments. The first regards the volume of exports. The second regards the types of environmental impacts subdivision (a)(3) encompasses. The Appellants dispute these arguments. As set forth below, the Council finds that the Department fails to show based upon substantial evidence that California WaterFix will not have a significant adverse environmental impact in the Delta.

### **i. Volume of Exports**

The Department states:

As demonstrated in Chapter 5, Water Supply in the Final EIR, total long-term average annual Delta exports under Alternative 4A (California WaterFix) would remain about the same or decrease slightly as compared to exports under existing conditions, reflecting both changes in operations due to the north Delta diversion, less negative Old and Middle River (OMR) flows, implementation of Fall X2 and modified spring outflows, as well as the anticipated effects of sea level rise and climate change. Thus, there is no significant change in amount of water exported that could cause a significant adverse environmental impact in the Delta. (Certification, p. 6.)

Appellants raise essentially two counter-arguments. First, they take issue with the volume of exports projected by the Department. (See, e.g., Stockton Appeal Letter, pp. 12-13; NCRA Appeal Letter, pp. 8-9.) Second, they challenge the Department’s assumption that having “no significant change in the amount of water exported” will necessarily ensure that the project will not have a significant adverse environmental impact in the Delta. (Sacramento County Appeal Letter, p. 6; see also CDWA Appeal Letter, p. 9; Stockton Appeal, p. 13.)<sup>21</sup>

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<sup>21</sup> In the context of their appeals of other policies, Appellants present other allegations about the environmental impacts of the California WaterFix. For its analysis of WR P1, we consider only the

1 We have reviewed the only evidence cited by the Department in support of its conclusion  
2 – Chapter 5 of the Final EIR. (Final EIR/EIS, Ch. 5.) While Chapter 5 does discuss exports, it  
3 does not discuss the environmental consequences of those exports. Thus, it does not provide  
4 evidentiary support for the conclusion for which the Department cites it. We therefore find that  
5 the assertion in the Certification about the relationship between exports and environmental  
6 impacts does not demonstrate consistency with the requirements of WR P1, subdivision (a)(3).

7 **ii. Types of Impacts**

8 The Department and the Appellants disagree as to the sort of “environmental impact[s]”  
9 subdivision (a)(3) encompasses. The Department states:

10 the only significant adverse environmental impact that is arguably relevant to  
11 subdivision (a)(3) is the impact from operating the new points of diversion on the  
12 earliest life stages of the American shad and striped bass, two nonnative species  
13 introduced decades ago for sportfishing (WR P1 Certification at p. 2-3) because  
14 subdivision (a)(3) asks whether “[t]he export [of water] . . . would have a  
15 significant adverse environmental impact in the[;] not whether the project  
16 enabling the export would have such an impact.

17 (Department, October 15, 2018 Written Statement, pp. 58-59 [underlining in original].) Appellant  
18 SCDA argues, in turn, that “[f]or the purposes of WR P1, adverse environmental impacts include  
19 *all* adverse environmental impacts in the Delta and are in no way limited to impacts on water  
20 quality or on any other particular category of impact.” (SCDA Opening Brief, p. 34; see also  
21 (Sacramento County Appeal Letter, p. 6.)

22 We agree with Appellants. Subdivision (a)(3) refers to “export, transfer, or use.” The  
23 Department suggests that we read the words “transfer” and “use” out of this phrase and  
24 interpret it simply to mean “export.” (Department, October 15, 2018 Written Statement, pp. 58-  
25 59.) The Department further suggests that we distinguish between the “export” and the “project  
26 enabling export.” (*Ibid.*) And finally, on that basis, it suggests that we construe subdivision  
27 (a)(3) so as to exclude the environmental impacts associated with the “project enabling export.”  
28 (*Ibid.*) This construction fails for two reasons.

29 First, as discussed above, the Department would read the words “transfer” and “use” out  
30 of the regulation, in violation of one of the cardinal rules of statutory construction. (See *White v.*  
31 *County of Sacramento* (1982) 31 Cal.3d 676, 681 [“[E]very word, phrase and provision  
32 employed in a statute is intended to have meaning and to perform a useful function”].) And  
33 doing so would be particularly problematic here because the two terms that the Department  
34 seeks to read out of the regulation – “transfer” and “use” – could capture types of environmental  
35 impacts that a narrow definition of “export” would not.

36 Second, the Department has not offered any basis for distinguishing between an “export”  
37 and a “project enabling export.” Throughout this proceeding, the Department has regularly  
38 used the term “project” to refer to the California WaterFix. (E.g., Certification of Consistency, p.  
39 6 [“project is consistent with WR P1”], *ibid.* [“one or more water suppliers that will receive water  
40 from the project”]; October 15, 2018 Written Statement, p. 49 [“receive water from the project”],  
41 p. 50 [“receive water from the project”], p. 51 [“the project has been analyzed”].) Thus, the  
42 Department seems to be suggesting a construction of subdivision (a)(3) that would have us

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allegations raised within the context of the WR P1 appeals; we do not import arguments made in the  
context of other policies into a WR P1 analysis.

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disregard the impact of the “project” for which we are assessing consistency and, for reasons that are never explained, look only at one aspect of that “project.” (Department, October 15, 2018 Written Statement, pp. 58-59.)

The Appellants have pointed to numerous significant and unavoidable impacts identified in the Final EIR/EIS. The Department, meanwhile, has offered no evidence that would support the conclusion that we should not consider those impacts to be proximately caused by the “export, transfer, or use” of water. (SCDA Opening Brief, pp. 34-35; Sacramento County Appeal Letter, p. 6.)<sup>22</sup> Thus, the Council finds that the Appellants have shown that the Department has failed to demonstrate consistency with WR P1, subdivision (a)(3).

### 3. Conclusion

For the foregoing reasons, we conclude that WR P1, subdivisions (a)(1), (a)(2), and (a)(3) apply to the California WaterFix as that project is described in the Certification now before us. Based upon that conclusion and the analysis set forth above, the Council finds that the Department’s Certification of Consistency with WR P1 is *not supported* by substantial evidence in the record.

#### G. Policy WR P2 (23 CCR Section 5004): Transparency in Water Contracting

The Department contends that the State Water Supply Contract Amendments (Contract Amendments) are not part of California WaterFix, and so WR P2 does not apply. We agree. Thus, there is no need to assess California WaterFix’s consistency with WR P2.

#### 1. Policy Requirements

Under WR P2, contracts for water from the State Water Project or the Central Valley Project must comply with transparency requirements established by the Department and Reclamation. And so, in order for WR P2 to apply, the scope of any covered action must include the contracting process for water from either the State Water Project or the Central Valley Project.

#### 2. Department’s Consistency Certification

Here, the Department certifies that WR P2 does not apply because the Contract Amendments are a separate process outside the scope of the California WaterFix. (Certification, pp. 6-7.) In its Certification, the Department defines the scope of the California WaterFix as “physical and operational improvements to the State Water Project,” incorporating by reference the Final Project Description from the Final EIR/EIS. (*Id.* at 3; *see also* Certification: Project Description.)

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<sup>22</sup> NCRA raises factual contentions regarding the impacts on aquatic species but fails to cite supporting evidence. (NCRA Appeal, p. 7.) Thus, the Council does not consider those contentions here.

1           **3. Appeal**

2  
3           **a. Applicability of WR P2**

4           Appellants FOR and San Joaquin County contend that WR P2 does apply, and so the  
5 Department must certify consistency with WR P2. (FOR Appeal Letter, p. 8; San Joaquin  
6 County Appeal Form, WR P2, p. 1.)

7           The Final Project Description submitted by the Department does not include the Contract  
8 Amendments. In fact, the Contract Amendments are currently undergoing a separate  
9 environmental review.<sup>23</sup> It is not within the Council's purview to assess the adequacy of the  
10 project description in the Final EIR/EIS. Thus, we take the project description in the EIR as  
11 given. Because the covered action as presented does not include the Contract Amendments,  
12 WR P2 does not apply here. (See section I.A. of this Determination.)

13           The Department has committed, however, prior to implementing the California WaterFix  
14 contract amendments, to "coordinate with the Council through early consultation and determine  
15 what compliance is necessary for the Delta Reform Act." (Department October 23, 2018  
16 Submission – San Joaquin County, pp. 81-82, no. 60.) The Council expects the Department to  
17 pursue an early and robust consultation with respect to the Contract Amendments.

18           Appellants FOR and San Joaquin County argue that Contract Amendments are part of  
19 the covered action because they would have "undisclosed consequences" on the Project. (FOR  
20 Appeal Form, p. 11; San Joaquin County Appeal Form, WR P2 p. 3.) Appellants have cited  
21 numerous officials who are concerned with the effect the Contract Amendments may have on  
22 California WaterFix. (FOR Appeal Form, p. 10-11; San Joaquin County Appeal Form, WR P2 p.  
23 3-4.) Because the Council takes the covered action as presented, we may not consider the  
24 Contract Amendments as part of the California WaterFix.

25           **b. Consistency with WR P2**

26           Because the Contract Amendments are not now before the Council, the Council may not  
27 consider Appellants' arguments concerning whether the Contract Amendments are consistent  
28 with WR P2, or whether consistency is feasible.  
29

30 **H. Policy ER P1 (23 CCR Section 5005) ("ER P1"): Delta Flow Objectives**

31  
32           The Department certifies that California WaterFix is consistent with ER P1. Six  
33 appellants – NCRA, SCDA, FOR, Stockton, San Joaquin, and CDWA – raise substantive  
34 arguments that it is not. For the reasons discussed below, we find that the Department has  
35 failed to demonstrate substantial evidence in the record that California WaterFix is consistent  
36 with ER P1.  
37

38           **1. Policy Requirements**

39  
40           ER P1 requires that a covered action demonstrate consistency with the State Water  
41 Resources Control Board's (Water Board) current flow objectives. It states:

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<sup>23</sup> The Department is currently undergoing two CEQA processes for the contracts that are separate and independent from California WaterFix: one to extend the current contracts, and another to amend the contracts in order to address the cost allocation of California WaterFix. (Department October 23, 2018 Letter, no. 60.)



(a) The State Water Resources Control Board's Bay Delta Water Quality Control Plan flow objectives shall be used to determine consistency with the Delta Plan. If and when the flow objectives are revised by the State Water Resources Control Board, the revised flow objectives shall be used to determine consistency with the Delta Plan.

(b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, the policy set forth in subsection (a) covers a proposed action that could significantly affect flow in the Delta.

Current Water Board flow objectives are described in Decision-1641 (D-1641, Document Code: [D.8 DRAFT 001391](#))<sup>24</sup>. In order to demonstrate consistency with ER P1 a certification of consistency must be supported by substantial evidence that demonstrates that the project will comply with D-1641.

Any ruling by the Council as to the consistency of a project with ER P1 does not preclude a decision by the SWRCB at a later date that the project does or does not meet D-1641. In addition, if and when D-1641 is updated, ER P1 will refer to the subsequent flow objectives as soon as they gain regulatory force. As part of its hearing on a change of point in diversion for California WaterFix, the SWRCB will consider project-specific flow objectives. If and when these objectives take effect, California WaterFix would need to meet such revised flow objectives.<sup>25</sup>

Updates to the Bay-Delta WQCP are currently underway.<sup>26</sup> This update could alter the flow objectives in D-1641. However, a covered action must be certified as consistent with the Delta Plan, as the Plan exists at the time of certification. Potential future changes to D-1641, though they would be incorporated into ER P1, are not relevant to the Certification or to the Council's determinations on appeal of the Certification.

## 2. Department's Certification

The Department finds that the California WaterFix project is consistent with ER P1 because California WaterFix will be operated to comply with D-1641. The Department offers two lines of evidence to support its claim that California WaterFix's proposed operations will comply with D-1641: First, it describes the historic performance of the State Water Project (SWP) in complying with SWRCB water rights decisions D-1641 and its predecessor D-1485. Second, it projects the flow and water-quality effects of California WaterFix using computer models which show that the project, operated as proposed, will comply with D-1641, with a small number of exceedances. The Department states that with California WaterFix "[t]he CVP/SWP would continue to be operated based on real-time data to avoid exceedances and meet all applicable operational criteria. Thus, modeled exceedances do not reflect actual outcomes." (Certification ER P1 Finding, p. 12.) The Department thus asserts that exceedances suggested by the models

<sup>24</sup> D-1641 was first approved in 1995 and revised in March 2000. The latest March 2000 version is the current version considered here: Document Code: [D.8 DRAFT 001391](#).

<sup>25</sup> "The flow criteria imposed as a condition of any approval would be an interim requirement until Phases 2 and 3 of the Bay-Delta WQCP update and subsequent implementation processes are complete, at which point the flow criteria would be revisited." (SWRCB [February 11, 2016 Ruling](#), p. 4.)

<sup>26</sup> Because no party has provided evidence in the record, we take official notice of the existence of the pending updates pursuant to paragraph 29 of our Appeals Procedures.

would be reduced in actuality by using real-time operations that are beyond the models' capability to fully replicate. (Ibid.)

#### a. Historical Operations

The Department states that historically the SWP and CVP operators have met water quality objectives 98.9% of the time between 1978 and 2015 ([Certification ER P1 Finding](#), p. 7-9). Evidence from the SWRCB hearing is provided as support to this statement (DWR-401/Document Code: [X.3 000046](#) and DWR-402/Document Code: [X.3 000047](#)).

As noted in DWR-401, the exceedance metrics reported are only for standards "for which both projects (SWP and CVP) are jointly responsible. It does not include those standards for which only one Project [meaning the CVP] is operationally responsible, e.g. Vernalis standards" (Document Code: [X.3 000046](#)). For D-1485 these joint responsible locations had exceedances of 0.5%. For D-1641, the Department reports exceedances of 1.5% for the period 1995 (when D-1641 came into effect) to 2015. Together, the Department reports a combined exceedance rate of 1.1% for jointly responsible objectives for the period 1978 to 2015.

#### b. Modeling

The Department also supports its Certification of Consistency for ER P1 with a physically based, comparative modeling approach (Certification ER P1 Findings, pp. 9-24). The Department describes how models CalSIM II, DSM2, and an Artificial Neural Network (ANN) were used and linked together to analyze compliance with specific requirements of D-1641. The Department also describes the general methodology and assumptions underlying portions of these models, including sea-level rise projections for a period centered on the year 2025 and assuming 15 cm (5.9 in) of sea-level rise at the Golden Gate by 2030 ([Certification ER P1 Finding](#), p. 10).

The Department certifies that the models demonstrate that California WaterFix will comply with current D-1641 water quality and flow standards, except under certain conditions at specific locations, especially in the South Delta ([Certification ER P1 Finding](#), p. 8). It further certifies that the model results are intended to be used comparatively, not predictively ([Certification ER P1 Finding](#), p. 10). The Department states that this means the model results can appropriately be used as "comparative tools" to assess relative changes in effects, such as comparing the no action alternative (NAA) to California WaterFix. It states this comparative nature is necessary because the models are generalized and cannot accurately reflect what a system operator would do in real time, nor account for changes in the system such as the 2009 NMFS Biological Opinion and 2008 USFWS Biological Opinion ([Certification ER P1 Finding](#), p. 10-12). Where the model results project exceedance, the Department asserts, real-time operations may be adjusted to keep conditions in compliance with D-1641. In support of its ability to make such adjustments, the Department presents historical data showing, the Department claims, that actual exceedances have been minimal.

The Department presents the following modeling results in support of its Certification of Consistency with ER P1:

- "...in general all scenarios including the NAA [No Action Alternative] meet D-1641 water quality objectives most of the time. The data shows a similar or an increased ability for

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all operational scenarios (compared to the NAA) to meet D-1641 water quality objectives at all locations except Emmaton.” ([Certification ER P1 Finding](#), p. 24.)

- “The fish and wildlife beneficial use objectives for the Suisun Marsh locations were mostly met under all the scenarios. The small percentage of exceedances (less than 5%) that occurred for a few locations under the [California WaterFix as certified] scenario was in line with the percentage that occurred for the NAA.” ([Certification ER P1 Finding](#), p. 3.1)
- “For the fish and wildlife beneficial use objectives for the San Joaquin River reach between Prisoners Point and Jersey Point, the objective was exceeded for approximately 10% of the time under California WaterFix . . . relative to [the No Action Alternative], due to the presence of a greater proportion of higher [salinity] San Joaquin water at this location.” ([Certification ER P1 Finding](#), p. 31.)
- “The fish and wildlife beneficial use objectives for the Suisun Marsh locations were mostly met under all the scenarios. The small percentage of exceedances (less than 5%) that occurred for a few locations under the California WaterFix . . . scenario was in line with the percentage that occurred for the NAA.” ([Certification ER P1 Finding](#), p. 31.)
- “For the fish and wildlife beneficial use objectives for the San Joaquin River reach between Prisoners Point and Jersey Point, the objective was fully met at Jersey Point and San Andreas Landing for all alternatives. At Prisoners Point, the objective was exceeded for approximately 10% of the time under California WaterFix . . . relative to NAA, due to the presence of a greater proportion of higher [salinity] San Joaquin water at this location.” ([Certification ER P1 Finding](#), p. 31.)
- “California WaterFix . . . fully complies with the Delta Outflow requirements in D-1641.” ([Certification ER P1 Finding](#), p. 32.)
- “...DWR has consistently met Delta flow objectives in the past....” and “...show general compliance at three objective locations on Old River and the San Joaquin River.” ([Certification ER P1 Finding](#), p. 35.)

### c. Other Considerations

The Department also states that climate and sea level are considered the boundary constraints on analysis of consistency with D-1641, but that these constraints are outside the influence of California WaterFix and are therefore considered external factors. It states that the effects of these external factors are incorporated into some models used to analyze the No Action Alternative and California WaterFix. Sea-level rise methodology is centered on projections for the year 2025 and is considered representative of the 2011-2040 period. This also assumes sea-level rise of 15 cm (5.9 in) at the Golden Gate Bridge from 1990 to 2025. ([Certification ER P1 Finding](#), p. 10.)

The Department also states that California WaterFix does not propose or anticipate using the Temporary Urgency Change Petition (TUCP) process. Under Water Code sections 1435 et seq., the SWRCB may, pursuant to a TUCP, allow a user with “urgent needs” to change its operations, diverging from its usual water quality and flow standards, in order to meet applicable Delta flow objectives. ([Certification ER P1 Finding](#), p. 2-3.)

1           **3. Appeals**

2  
3           NCRA, SCDA, FOR, Stockton, CDWA, and San Joaquin County appealed the  
4 Department's Certification of Consistency with ER P1 as follows:

5           **a. Modeling and Model Results**

6  
7           Appellants make a series of arguments about the quality of the modeling.

- 8  
9           • SCDA ([Appeal](#), p. 8), FOR ([Appeal Letter](#), p. 12), Stockton ([Appeal Letter](#), p. 14) and  
10 San Joaquin County ([Appeal Letter](#), pp. 60-61) argue that the Department's modeling  
11 incorrectly concludes that California WaterFix will comply with the export/inflow ratio  
12 requirement of D-1641, because it models the inflow side of that ratio at a site other than  
13 the one specified in D-1641 and excludes exports through California WaterFix from the  
14 export side of the ratio.  
15  
16           • San Joaquin County argues that the modeling assumes a flow level at Rio Vista that is  
17 not required by D-1641 and that the Department has not committed to meeting in the  
18 California WaterFix operational criteria. (San Joaquin County [Appeal Letter](#), p. 58.)  
19 Therefore, San Joaquin County argues, this modeling assumption is unsupported.  
20  
21           • San Joaquin County argues that the Department incorrectly specifies Delta Cross  
22 Channel (DCC) operations in the CalSim II model. (*Id.*, p. 60.)  
23  
24           • San Joaquin County argues that the modeling shows an exceedance of the applicable  
25 standard for municipal and industrial (M&I) water quality near the intake for the Contra  
26 Costa Canal. (*Id.*, p. pp. 59-60.)  
27  
28           • San Joaquin County argues that the Department's modeling shows that California  
29 WaterFix will cause exceedances of water quality standards in D-1641 intended to  
30 protect municipal and industrial (M&I) users. (*Id.*)  
31

32           **b. Historical Operations**

33           NCRA argues that the Department's reported 98.9% historical compliance rate with D-  
34 1641 does not support the consistency finding, because that calculation counts as compliance  
35 periods when the SWP and CVP were complying not with D-1641 but with different standards  
36 during periods of drought, temporary urgency change petitions, and other orders, and because it  
37 overstates the time in which water quality met all of the D-1641 standards. ([NCRA Appeal](#)  
38 [Letter](#), p. 9.)

39           **c. Role of Reclamation**

40           Appellants FOR ([Appeal Letter](#), pp. 14-15), NCRA ([Appeal Letter](#), p. 9), CDWA ([appeal](#)  
41 [Letter](#), pp. 2-3.) and San Joaquin County ([Appeal Letter](#), p. 58) all argue that evidence shows  
42 that Reclamation does not intend to comply with, or cooperate with the Department in complying  
43 with, D-1641. Thus, they assert, the conclusion that California WaterFix can so comply lacks the  
44 support of substantial evidence.

**d. Bay-Delta WQCP Updates**

NCRA (Appeal Letter, p. 9) and FOR (Appeal Letter, pp. 13-14) argue that the Department cannot demonstrate consistency with ER P1 because SWRCB is in the process of updating the Bay-Delta WQCP.

**e. Flow and Operations Criteria**

Multiple Appellants raised issues with the variability or lack of specificity regarding flow criteria, or other operational criteria, for the future project. San Joaquin County states that "... the Project includes adaptive management with the range of the Boundary 1 and Boundary 2 scenarios. (See DWR-1143 Second Revision.) Additionally, the Boundary 1 scenario has no Fall X2 requirement." (San Joaquin County Appeal Letter, p. 59.) Stockton makes the same argument: Boundary 1, that "...does not include additional spring Delta outflow, additional OMR [Old and Middle River] flows, existing I/E ratio, and the existing Fall X2 flow requirement imposed in the existing BiOp [federal Biological Opinion] for Delta Smelt." (Stockton Appeal Letter, p. 14.)

FOR also argues that operations criteria were not set, but rather "will be defined through further discussion," and that "[a]ctual operations will be based on real-time monitoring of hydrologic conditions and fish presence/movement" (FOR Appeal Letter, p. 12).

San Joaquin County additionally argues that "The Delta Independent Science Board in a September 30, 2015 letter stated in no uncertain terms that [California WaterFix] is 'sufficiently incomplete and opaque to deter its evaluation and use by decision makers, resource managers, scientists and the broader public.'" (San Joaquin County Appeal Letter, p. 59, citing (CCC-SC-20).)

**f. Operations After Levee Failure**

CDWA argues that the Department has not provided substantial evidence that California WaterFix is consistent with ER P1 because the Department will not operate WaterFix to comply with D-1641 in the event of future levee failures. ([CDWA Appeal Letter](#), pp. 3-5). Following a major levee failure, saltwater would move farther into the Delta, harming water quality. In the present system, the Delta itself is a part of the conveyance facilities, so the Department would need to mitigate water quality there in order to protect the quality of the water it is exporting south.<sup>27</sup> CDWA claims California WaterFix, by conveying water in a facility beyond the reach of salinity intrusion, removes that incentive and gives the Department "the option of walking away from resorting that water quality." (*Id.*, p.4.) CDWA, moreover, asserts that the Department *will* do so and thus will not comply with D-1641 following a levee failure.

**g. Stockton Water Quality**

The City of Stockton argues that California WaterFix will degrade water quality at Stockton's intakes. (Stockton Appeal Letter, p. 14).

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<sup>27</sup> Because no party has provided citations to the record, we take official notice of these generally accepted scientific facts pursuant to Paragraph 29 of our Appeals Procedures.



4. Analysis

a. Modeling and Model Results

i. Compliance with D-1641 Export-Inflow Ratio

D-1641 requires a specific ratio between inflows into the Delta and exports through the SWP and CVP, and specifies where inflow and export must be measured. As defined in D-1641, the Delta inflow variable is calculated based on the inflows of the Sacramento River, Sacramento Regional Treatment Plant, Yolo Bypass, Eastside Streams, combined flows of Bear Creek and other streams, and the San Joaquin River at Vernalis.<sup>28</sup> For the Sacramento River, inflow is calculated at Freeport (D-1641, Table 3, p. 190), which is upstream of the proposed North Delta Diversion and the point used in the model. The export rate is the combination of Clifton Court Forebay inflows (which would include water delivered from the North Delta Diversion to Clifton Court Forebay (Certification Project Description, p. 2)) and exports from the Tracy pumping plant. (D-1641, Table 3, p. 185, 190) Appellants SCDA, FOR, and San Joaquin argued that the Department has not demonstrated consistency with the D-1641 export-inflow ratio standard because the Department has modeled compliance at a compliance point different than the one required by D-1641 and excluded California WaterFix exports. (SCDA Appeal Form, p. 8; FOR Appeal Letter, p. 12; San Joaquin County Appeal Letter, p. 61).

D-1641 requires that the export/inflow ratio must not exceed 35% for March to June and 65% from July to January. For February, the requirement varies between 35% and 45% (D-1641, p. 184). In its Certification, the Department finds that the modeling shows that California WaterFix as proposed “complies with the Export/Inflow” ratio requirements in D-1641 (DWR ER P1 Detailed Findings, p. 27, citing Exhibit DWR-1069, Figure 26, 27).

Appellants argue that this conclusion is unsupported because the Department’s model calculates the inflow component of the calculation at a different point, downstream of the North Delta Diversion intakes, rather than at Freeport and omits North Delta Diversion exports.

The Department justifies its choice of a compliance point and export calculation by referring to the purpose of the E/I ratio standard: “[T]he existing D-1641 export/inflow ratio is a requirement to protect against potential entrainment at the existing south Delta intakes...” (DWR Written Statement, p. 62). This, the Department argues, means that the proposed North Delta Diversion intakes should not contribute to the ratio: “For [California WaterFix], Reclamation and [the Department] propose that the [North Delta Diversion] be excluded from the E/I ratio calculation. In other words, Sacramento River inflow is defined as flows downstream of the [North Delta Diversion] and only south Delta exports are included for the export component of the criteria.” (Certification ER P1 Findings, p. 7.) Evidence in the record supports this interpretation of the original purpose of the E/I ratio standard in D-1641. (Final EIR-EIS Appendix 5A - Additional Modeling - Section D (D.1 DRAFT 000042 p. 5A-D148; CCC-SC-62, p. 2-18, 2-23, 2-26, 2-30).

When assessing consistency with ER P1, however, we must consider California WaterFix’s compliance with D-1641 in its current form. While the intent of the D-1641 E/I ratio is to minimize entrainment in the south Delta export facilities, D-1641 clearly defines the point of measurement for compliance with the E/I ratio and the components of the export rate. Updates

<sup>28</sup> The inflow measurements are based on mean flows and use different mean time periods at different locations. See D-1641, Table 3, p. 190, for a full description of the Delta inflow and export terms.

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to the Bay-Delta WQCP may shift that compliance point and export calculation for a variety of reasons. There is no evidence in the record as to where a new compliance point might be, or where it would need to be to provide the protection that is the purpose of the present point. There is similarly no evidence in the record as to where a compliance point might appropriately be placed to provide *other* water-quality or biological-resource protection – for example, to protect against entrainment at the North Delta Diversion, as San Joaquin County suggests. (San Joaquin County October 15, 2018 Letter, pp. 11-12.) The same holds true for the export calculation: there is no evidence in the record pointing to a substitute for the current requirement in D-1641. The Department invites us to speculate that, in light of the proposed project's alterations to the system, a new compliance point would be at its chosen location and a new export rate would exclude California WaterFix. In the absence of evidence, we *cannot* do so. Pursuant to ER P1, we must apply D-1641 in its present form, including the Freeport compliance point for the Sacramento River component of the E/I ratio, and all Clifton Court Forebay inflows included in the export rate.

The Department also provides a sensitivity analysis of different scenarios measuring Sacramento River inflow both upstream and downstream of the North Delta Diversion. ([D.1 DRAFT 000042](#) p. 5A-D149). A summary states:

“In summary, the results from the sensitivity run for A4\_ESO\_ELТ [a WaterFix scenario with certain climate and operation assumptions] with E/I ratio approach recommended by NMFS [using Sacramento River flows measured at Freeport, above the North Delta Diversion] showed that on a long-term average, there are minor changes in the flow and storage operations compared to the A4\_ESO\_ELТ results included in the current effects analysis [with Sacramento River flows measured downstream of the North Delta Diversion]. The north Delta bypass flows and Delta outflow are increasing slightly in June using the NMFS recommended approach.” (Ibid., p. 150)

The evidence provided by the Department also includes figures graphically demonstrating the modeled differences between these multiple operational scenarios. While similar in most cases, the simulation which uses the current X2 standards and therefore most closely adheres to D-1641 shows significant differences. Under this scenario, Figure 3 shows that under the Department's proposed operating criteria, measuring inflow above the North Delta Diversion as required by D-1641 and exports from both south delta and the North Delta Diversion would lead to June E/I ratios exceeding the D-1641 limit nearly 40% of the time in June. (Ibid., p. 152). This same figure also shows that the D-1641 E/I ratio *could* be met under different operating scenarios that are not part of California WaterFix as it is currently proposed.

Because it relies on a compliance point for the required E/I ratio that is different from what D-1641 specifies, and because using the correct compliance point would lead to exceedances of that ratio, substantial evidence *does not* support the Department's certification of the covered action's consistency with ER P1 as to compliance with the E/I ratio standard of D-1641.

### ii. Rio Vista Flow Standards

San Joaquin County argues that the Department's model specifies flows at Rio Vista that are not required in either D-1641's standard or the Department's California WaterFix operational standards, asserting that discrepancies between modeled and planned operational criteria undermine the model's ability to accurately represent real conditions. (San Joaquin County Appeal Letter, p. 58.) The Department explains that the Incidental Take Permit issued by the Department of Fish and Wildlife for California WaterFix requires the 3,000 cfs flow at Rio Vista.



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(Department October 5, 2015 Letter, p. 66, citing X.1\_DRAFT 000003, p. 181.) Because the Incidental Take Permit requires the Rio Vista flow used in the model, Appellants have not shown any failure of substantial evidence in support of the Department's approach to modeling Rio Vista flow, and we *deny* San Joaquin County's appeal as to this issue.

### iii. Delta Cross Channel (DCC)

San Joaquin County argues that the Department incorrectly specifies Delta Cross Channel (DCC) operations in the CalSim II model. San Joaquin County writes, "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." (San Joaquin Appeal Letter, p. 60.)

In Exhibit DWR-1143, the Department plainly states that "DCC closure for downstream flood control will be based on Sacramento River flow at Freeport." (DWR-1143 second revision p. 6). In its filing, the Department states that it uses "monthly average Sacramento River flow upstream of the DCC" in specifying downstream flood closures, which indicates fidelity to real DCC operations. (Certification ER P1 Findings, p. 19.) The Department has reiterated this in its response to supplemental questions ([Department October 15, 2018 Letter](#), p. 61) and cites evidence in the record ([X.2\\_DRAFT 000168](#) pp. 2-6). As described in the testimony of Chandra Chilmakuri at the SWRCB hearing:

- 1) [California WaterFix] does not include any changes to the DCC gate operations criteria compared to the NAA. (DWR-1143.) All the criteria and the real-time decision-making processes that govern DCC operations under the NAA, included in D1641 and 2009 NMFS BiOp, are proposed to continue with CWF; and
- 2) The NMFS BiOp for CWF states that the DCC closure during high Sacramento River flows (>25,000 cfs) should be triggered based on the flows measured at Freeport gage, which is upstream of the proposed intakes.

(DWR-1217, Testimony of Chandra Chimakuri, p.3, citing SWRCB-106 p. 1036.)

This evidence shows that with California WaterFix, the DCC Gate will be operated as required by current authorities. Evidence in the record further shows that CALSIM II bases its model of DCC operations on the assumption that operations will continue in this manner. (DWR 1142, Appx 5.A, p.31.) Appellants have thus failed to show that the Department lacks substantial evidence in support of its representation of DCC operations in modelling the effects of California WaterFix, and we therefore *deny* the appeal as to this issue.

### iv. Municipal and Industrial (M&I) Chloride Concentration

To protect M&I water users, D-1641 includes chloride concentration standards at Contra Costa Canal: year-round, chloride concentration must be below 150 mg/L for at least a specified number of days and may not exceed 250 mg/L. D-1641 (D-1641, Table 3, p. 181.) San Joaquin County argues that "the simulated daily-averaged salinities in Old River at Bacon Island for [California WaterFix] are well in excess of the 250 mg/L chloride standard in D-1641." (San Joaquin County Appeal Letter, p. 60.) The Appellant contends that the station at Old River at Bacon Island informs compliance with Contra Costa Canal water quality standards because it is

“very near the intake to the Contra Costa Canal.” (*Id.*) San Joaquin County relies on SWRCB hearing Exhibit CCC-SC-60 to allege that under California WaterFix operations, chloride concentrations at Old River at Bacon Island in November would frequently exceed the D-1641 standard of 250 mg/L chloride with the highest exceedance being 761 mg/L (San Joaquin County Appeal Letter, p. 60). Appellant argues that “[b]ecause [California WaterFix] 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 the Department 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.” ([San Joaquin](#), p. 60).

The Department’s Certification cites Exhibit DWR-1071, p.16, Figure C13, which “shows the number of days in a year meeting the 150 mg/l mean daily chloride concentration at the Contra Costa Canal Intake.” (Certification ER P1 Findings, p. 24.) That Exhibit, however, does not show the days in a year where the Contra Costa Canal Intake would meet the 150 mg/l mean daily chloride standard, but rather the probability of meeting the 250 mg/L year-round standard at the Contra Costa Canal Intake. The evidence is not contradictory with San Joaquin’s.

Each party’s cited evidence shows that California WaterFix would cause exceedances at the Contra Costa Canal Intake, some of which are substantially above the D-1641 limit. Exhibit DWR-1071, p.16, Figure C13 shows that the standard would be exceeded roughly 5% of the year. Evidence in the record supports the conclusion that these exceedances are likely a result of the model’s limitations, especially related to the interaction between the CalSim II and DSM2 models. (DWR-79, [Testimony of Dr. Parviz Nader-Tehrani](#), pp. 36-42). CalSim II is acknowledged as the best available model for such this analysis. (See section B.3.i of the discussion of G P1(b)(3), above.).

To the extent that San Joaquin County challenges the Department’s modelling on this ground, Appellant has not shown a lack of substantial evidence supporting the Department’s modeling approach. However, to the extent that Appellant is arguing that the modeled exceedances render California WaterFix inconsistent with D-1641 and ER P1, this determination regarding the Department’s modeling is not sufficient to support a determination of consistency with this aspect of D-1641., The Department claims daily operations of California WaterFix will I be able avoid modeled exceedances, including the M&I chloride exceedances. (Certification ER P1 Finding, p. 12.) We therefore must consider the evidence supporting the Department’s claimed ability to successfully operate California WaterFix in this manner.

#### **b. Historical Operations**

Appellants assert that the Department shows that historical operations have achieved a high compliance rate only because “Temporary Urgency Change Petitions (TUCP) and Orders relaxed the standards applicable to the SWP and CVP.” (NCRA, p. 9). The Department states that the “... historical compliance record included compliance with the applicable standards on the day ...the record reflects complying with the modified requirements under TUCPs.” ([Department October 15, 208 Letter](#), p. 67). The Department relies on its historical operations data to support its assertion that it can prevent exceedances through real-time operations. Where the modeling shows potential exceedances, the Department claims, it will be able to alter operations to prevent them. The claimed historical compliance rate of 98.9%, the Department claims, shows that it has the ability to make such adjustments. The Department’s ability to comply with the standards in TUCPs, however, does not necessarily support its ability to comply with the standards of D-1641. Water-quality or flow standards under TUCPs may be less

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1 rigorous than under D-1641, and thus may be attainable through the Department's proposed  
2 operations in circumstances where operations could not avoid exceedances of D-1641. Without  
3 evidence regarding the particular circumstances and standards of the relevant TUCPs, we  
4 cannot determine whether the Department's compliance with such standards supports a finding  
5 that will be able to operate California WaterFix to comply with D-1641. The inclusion of TUCP  
6 compliance in the reported compliance rate thus inflates the compliance rate without actually  
7 supporting the Department's finding of consistency.

8  
9 Moreover, NCRA points out that Department arrived at its 98.9% compliance rate "by  
10 combining all compliance years and locations." (NCRA Appeal Letter, p. 9.) The Department's  
11 approach to calculating days of compliance count as a day in "compliance" any day on which  
12 water quality met one of "the applicable standards on the day." ([Department](#) October 15, 2018  
13 Letter, p. 67, citing DWR-61 Section VI (D.8\_DRAFT 023114), p. 9.) If there were, for example,  
14 ten standards in effect on a given day and water quality met nine of them, then the  
15 Department's calculation would count ten total days and nine days in compliance. That day  
16 would contribute 90% to the calculation of average time in compliance. (See *id.*) The  
17 Department's reported 98.9% compliance rate thus does not mean that water quality met all  
18 applicable standards on 98.9% of all days. Indeed, the Department's data shows that on about  
19 60% of days in 2009, water quality fell short of at least one applicable standard, while under  
20 their metric it only exceeded approximately 3.7% of the time. (See *id.*; DWR-403.)

21  
22 For these reasons, substantial evidence does not support the Department's claim of a  
23 historical 98.9% rate of compliance with D-1641. Because the reported compliance rate is not  
24 reliable, there is a lack of substantial evidence supporting the Department's certification that  
25 daily operations of California WaterFix can prevent modeled exceedances generally or Contra  
26 Costa Canal M&I chloride exceedances specifically. Therefore, substantial evidence *does not*  
27 support the Department's certification that California WaterFix will be consistent with ER P1 as  
28 to its general approach to daily operations or as to its compliance with the Contra Cost Canal  
29 M&I chloride standard.

### 30 31 c. Role of Reclamation

32  
33 Appellants CDWA, FOR, NCRA, and San Joaquin County assert that the Department  
34 has not demonstrated that Reclamation will continue to cooperate with the Department in  
35 operating the CVP and SWP (including California WaterFix) and that without evidence of such  
36 coordination, there is not substantial evidence supporting the Certification of Consistency with  
37 ER P1.

38 As the Department explains, a key to the federal agency's role in the Delta is the federal  
39 Reclamation Act, which requires "Reclamation to 'proceed in conformity' with state laws 'relating  
40 to the control, appropriation, [and] distribution of water used in irrigation.' 43 U.S.C § 383."  
41 (Department October 15, 2018 Letter, p. 11 (quoting July 27, 2018 letter from the Commissioner  
42 of Reclamation to the Chair of the State Water Resources Control Board, which letter is not in  
43 the record here). In some circumstances Reclamation may assert federal interests that would  
44 preempt state law, but absent such a claim, Reclamation must acquire state-law water rights for  
45 the CVP. It must comply with conditions on those rights, and with State requirements such as D-  
46 1641.

47 To this end, the Department and Reclamation have a Coordinated Operation Agreement  
48 (COA) to assist both agencies to address regulation requirements in the Delta, such as D-1641  
49 standards. The Department explains that the COA identifies formulas for sharing joint

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responsibilities for meeting Delta standards as they existed under D-1485. The Department also states that “Requirements set forth under various regulations (e.g., D-1641, BiOps) that were not in D-1485 have been shared by the CVP and SWP per informal agreements.” (Certification, ER P1 Findings, p 14.) Additionally, the Department states, “the [Department] and [Reclamation] have been and will continue to coordinate with SWRCB to find alternative methods to meet salinity objectives in the south Delta” (*Id.*, p 8). Reclamation, moreover, is the NEPA lead agency for the California WaterFix Final EIR/EIS and a co-petitioner with the Department seeking a change in the point of diversion to facilitate the project. (Department October 15, 2018 Letter, pp. 7-8.)

Appellants and the Department have each provided communications from the federal government, including the President, Department of the Interior, and Reclamation, the indicating dissatisfaction with California’s water-quality regulations, including D-1641. These communications are not in the record of this proceeding. (Pursuant to the ruling in Exhibit C of this Determination, we will not add to the record or take official notice of the August 17, 2018 memo from the Secretary of the Interior, the July 27, 2018 and August 17, 2018 letters from the Commissioner of the Bureau of Reclamation, or the October 19, 2018 Presidential Memorandum.) No evidence in the record indicates that Reclamation will abandon its role as proponent of California WaterFix or seek to free itself from California regulation. We note that if any change to the relationship between Reclamation and the Department constitutes or leads to a covered action, that action would be subject to the Delta Reform Act’s consistency requirements.

On this topic, Appellants demonstrate no failure of substantial evidence supporting the certification that the covered action is consistent with ER P1. We therefore *deny* the appeal as to this issue.

### **d. Flow and Operations Criteria**

The Department states that there will be flexibility in their operations, and that this is necessary because “The SWP is conditioned by water rights permits and D-1641 issued to the Department by the State Water Resources Control Board. The Department must also comply with the regulatory requirements contained in the 2008 U.S. Fish and Wildlife biological opinion for the protection of Delta Smelt, the 2009 National Marine Fisheries Service biological opinion for the protection of anadromous fish species, and the 2009 California Department of Fish and Wildlife incidental take permit for the protection of Longfin Smelt.” ([Certification ER P1 Finding](#), p. 2).

Appellants raise issues with the lack of specificity regarding flow criteria, or other operational criteria, for California WaterFix. For example, San Joaquin states, “... 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.” (San Joaquin County Appeal Letter, p. 59.) FOR also argues that operations criteria were not set, but rather “will be defined through further discussion,” and that “[a]ctual operations will be based on real-time monitoring of hydrologic conditions and fish presence/movement.” (FOR Appeal Letter, p. 12.) San Joaquin County additionally states that “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.)” (San Joaquin County Appeal Letter, p. 59.)



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1        These arguments generally claim that because in the future California WaterFix may be  
2        operated differently than currently proposed, the Certification of Consistency with ER P1, which  
3        is based on the currently-proposed operational criteria, lacks the support of substantial  
4        evidence. As the Department points out, however, it is legally bound to operate WaterFix in  
5        compliance with D-1641; the purpose of its certification is to demonstrate that it is possible to do  
6        so with the California WaterFix operating criteria as proposed. Flexibility alone does not prevent  
7        the Department from certifying consistency with ER P1: the policy does not require that project  
8        proponents commit to a specific set of operations in perpetuity. (As described elsewhere in this  
9        determination, other aspects of the record do fail to support the Department's certification.) As a  
10       matter of policy, we support flexibility in operations of infrastructure in order to better meet both  
11       ecosystem and water supply needs, as long as such adjustments are still in compliance with D-  
12       1641 (as it may be modified or replaced). As long as California WaterFix, with its proposed  
13       operating criteria, is capable of complying with D-1641 as it currently stands, then the fact that  
14       the Department may adjust operations in response to future changed regulations is irrelevant.  
15       Appellants have not shown that the flexibility in California WaterFix's operating criteria creates a  
16       failure of substantial evidence in support of the Department's certification that California  
17       WaterFix is consistent with ER P1. We therefore *deny* the appeals as to this issue.

18       San Joaquin County additionally states that "As discussed in detail in CCC-SC-51, the  
19       82-year averaged SWP and CVP exports from the Delta for a number of months of the year are  
20       very different for [California WaterFix] than for BA H3+ and Alternative 4A, scenarios H3 and  
21       H4. In other words, they are not similar to H3 and H4 and are not nearly identical to the NAA  
22       results [as claimed by the Department]." (San Joaquin County Appeal Letter, p. 59, citing CCC-  
23       SC-59, Figure 1.) The cited evidence does show difference between these scenarios for certain  
24       months. However, the Appellant fail to demonstrate that this particular difference between  
25       versions of California WaterFix demonstrates a flaw in the Department's finding that it will  
26       comply with D-1641 or its certification that WaterFix is consistent with ER P1. We therefore  
27       *deny* the appeal as to this issue.

### 28        **e. Updated Delta Flow Objectives**

29  
30       Appellants FOR (Appeal Letter, p. 13), NCRA (Appeal Letter pp. 9), and San Joaquin  
31       County (Appeal Letter, p. 61) argue that the Department does not demonstrate consistency with  
32       ER P1 because of ongoing updates to the Bay-Delta WQCP. ER P1, however, requires  
33       compliance with SWRCB flow objectives as exist at the time of certification (i.e., D-1641). The  
34       potential for future changes to water quality standards does not prevent certification now. (As  
35       discussed elsewhere in this Determination, other failures of substantial evidence do require us  
36       to remand the Certification to the Department.) Appellants have not shown that Bay-Delta  
37       WQCP updates cause a lack of substantial evidence supporting the Department's Certification  
38       of Consistency with ER P1. We *deny* the appeal as to this issue.

### 39        **f. Operations After Levee Failure**

40  
41       CDWA asserts that the Department will not operate California WaterFix to comply with  
42       D-1641 in the event of future levee failures. ([CDWA Appeal Letter](#), pp. 3-5). CDWA does not  
43       identify any evidence in the record showing "for WaterFix [the CVP and SWP] have taken the  
44       unwarranted liberty of carving out a major exception to compliance with [D-1641]." (CDWA  
45       Appeal Letter, p. 4.) In response, the Department states that it would be legally bound to  
46       comply with D-1641 following a levee failure:

47       Although there are emergency protocols that may allow for different procedures, it's  
48       important to note that without special dispensation, California WaterFix operations would

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1 still be required to operate under federal and state regulations (e.g. Biological Opinions,  
2 Fish and Game Code Section 2081(b), State Water Resources Control Board Decision  
3 D-1641) and operating criteria in the event of a levee failure situation. Any deviations  
4 from project operating criteria would have to be approved by the applicable regulatory  
5 agencies.

6 (Department October, 2018 Letter, p. 68, quoting Final EIR/EIS, Vol. II, Master Response 16,  
7 [D.1 DRAFT 000188](#), p. 1-142).

8 The Department does not identify evidence in the record showing that California  
9 WaterFix could be operated to comply with D-1641 following major levee failure. Instead the  
10 Department asserts that in addition to the mandate of D-1641, the existing south Delta  
11 diversions would still be operating, giving the Department strong incentive to manage operations  
12 of California WaterFix and the south Delta facilities to mitigate salinity intrusion. (Department  
13 October 15, 2018 Letter, p. 69.) Moreover, the Department states that California WaterFix  
14 “could add to the options available to manage an emergency response to salinity intrusion in the  
15 south and west Delta. It would be speculative however to estimate a specific response to salinity  
16 intrusion as the specific levee failure circumstances would dictate the appropriate response.”  
17 (Department October, 2018 Letter, p. 68, quoting Final EIR/EIS, Vol. II, Master Response 16,  
18 [D.1 DRAFT 000188](#), p. 1-142.)

19 SDWA correctly notes that the Department has not provided substantial evidence of its  
20 ability to comply with D-1641 following major levee failure. The Department, however, is also  
21 correct that D-1641 is “premised on the current configuration of rivers and sloughs in the Delta,  
22 which are bounded by the existing levees,” and does not “contemplate[] flow criteria or  
23 responsibility for meeting flow criteria in the wake of catastrophic levee failure and salinity  
24 intrusion.” (Department October 15, 2018 Letter, p. 68.) There is no way now to provide  
25 evidence of the eventual solution without undue speculation about the circumstances and  
26 results of such a failure. The Department’s task in its certification is to show that California  
27 WaterFix can comply with D-1641 in the conditions in which the decision was designed to  
28 function. Although, as the Department acknowledges, D-1641 would technically still apply, \all  
29 parties, including SWRCB, would need to engage in appropriate processes to solve the dual  
30 problems of protecting Delta water quality and providing water to all users, including those south  
31 of the Delta – in other words, to advance our coequal goals. We therefore find that as to  
32 operations after a levee failure, CDWA has not shown a lack of substantial evidence supporting  
33 the Department’s Certification that California WaterFix is consistent with ER P1, and we *deny*  
34 the appeal as to this issue.

### 35 g. Stockton Water Quality

36  
37 Stockton acknowledges that “there are no D-1641 water quality compliance criteria for  
38 M&I uses that apply at or near Stockton’s intake.” (Stockton Appeal Letter, p. 14.) Stockton  
39 therefore has not raised any issue within the scope of the Council’s review as to the model’s  
40 time steps, and we *deny* its appeal as to this issue.

## 41 5. Conclusion

42  
43 The Department relies on two main sources of evidence: modeling studies and its  
44 historical record of compliance. The historical record is meant to show that the Department is  
45 capable of using daily operations to meet water quality standards at a greater rate than  
46 suggested by monthly models. However, neither the models nor the historical record  
47 demonstrates complete compliance with the D-1641 chloride standard for municipal and

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industrial uses at the Contra costa Canal. In addition, the Department's model does not provide substantial evidence so support the conclusion that California WaterFix can be operated to meet D-1641's export/inflow ratio measured as D-1641 requires. Therefore, the Department's Certification of Consistency with ER P1 is *not supported* by substantial evidence in the record.

### **I. Policy ER P2 (23 CCR Section 5006): Restore Habitats at Appropriate Elevations**

ER P2 requires that habitat restoration projects be carried out in a particular manner. The Department has certified that California WaterFix is consistent with ER P2. Two Appellants – NCRA and FOR – have raised substantive arguments that it is not. We disagree with both the Department and those Appellants and find that the ER P2 does not apply to the covered action now before us.

#### **1. Policy Requirements**

ER P2 establishes a basis for restoration planning in the Delta and Suisun Marsh that considers land elevations, urban development constraints, and sea-level rise. It provides:

- (a) Habitat restoration must be carried out consistent with Appendix 3, which is Section II of the Draft Conservation Strategy for Restoration of the Sacramento-San Joaquin Delta Ecological Management Zone and the Sacramento and San Joaquin Valley Regions (California Department of Fish and Wildlife 2011). The elevation map attached as Appendix 4 should be used as a guide for determining appropriate habitat restoration actions based on an area's elevation. If a proposed habitat restoration action is not consistent with Appendix 4, the proposal shall provide rationale for the deviation based on best available science.
- (b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this Chapter, this policy covers a proposed action that includes habitat restoration.

The policy incorporates two documents by reference. The first – which it attaches as Appendix 3 – is Section II of the Draft Conservation Strategy for Restoration of the Sacramento-San Joaquin Delta Ecological Management Zone and the Sacramento and San Joaquin Valley Regions. It provides guidance for habitat restoration and prioritization and also includes descriptions of broad habitat types. The second document – which the policy attaches as Appendix 4 – is an elevation map showing habit types described in Appendix 3 and setting priorities for restoring them. (See also Delta Plan, p. 149 [describing the operation of ER P2].)

#### **2. Certification and Appeals**

In the Certification, the Department concludes that California WaterFix is consistent with ER P2. Its conclusion is based on the expected implementation of habitat restoration actions described in Environmental Commitments 3, 4, 6, 7, 8, 9, and 10 as presented in the Final EIR/EIS and Mitigation Monitoring Reporting Program. (Certification of Consistency: ER P2, p. 1.)

The Certification does not identify the specific locations for all of the commitments. It explains that the Department has not settled upon the appropriate sites yet, let alone acquired them, and that it is therefore not possible to document the elevation being proposed for each specific site. Nevertheless, the Department describes the process by which it will select sites,



and it certifies that it will carry out its habitat restoration actions consistent with ER P2. (Certification, p. 7.)

### 3. Appellants' Positions

NCRA and FOR claim that California WaterFix is not consistent with ER P2. In support of this claim, the Appellants raise two arguments. The first regards the lack of specific locations in the Certification. The second regards the sufficiency of habitat restoration activities. These arguments do not establish that the Certification lacked substantial evidence to demonstrate consistency with ER P2.

#### a. Lack of Specific Locations in the Certification

NCRA argues: "Until such time that the Department can identify the locations of habitat restoration activities, any consistency determination would be premature." (NCRA Appeal Letter, p. 9.) The text for ER P2 does not expressly require identification. Nor does NCRA cite any authority that would suggest that it would be improper for the Department to submit its Certification of Consistency at this time or for the Council to rule on the Certification. (*Ibid.*)

In detailed findings, the Department asserts that it will use best available science and will consult Appendix 3 and Appendix 4, with particular reference to the elevation map in Appendix 4, as guides when determining appropriate elevations for Environmental Commitments consistent with ER P2" (Certification, p. 2).<sup>29</sup> When the Department selects sites and is prepared to undertake habitat restoration activities, we expect that the Department will submit certifications of consistencies for those activities, assuming they satisfy the criteria for covered actions.

#### b. Habitat Restoration Activities

Both FOR and NCRA raise arguments that broadly address habitat restoration, but that do not directly relate to EP P2. FOR states: "The Delta Plan and Regulations require habitat restoration. (Delta Plan, ch. 4, p. 149; Regulations, Art. 3, § 5006.)" FOR then states:

The very purpose of [California WaterFix] is to reduce the freshwater flows through the lower Sacramento River and Delta by taking those flows away from the river and transporting them through underground tunnels to the pumps in the south Delta. That will do the opposite of restoring the habitat for the fish. That will instead degrade their habitat.

(FOR Appeal Letter, pp. 15-16.) FOR misreads both the Delta Plan and ER P2. The narrative portions of the Delta Plan cited by FOR are self-explanatory. They do not have regulatory effect, and do not "require" anything. ER P2 is a regulation, but does not "require" habitat restoration. Rather, the policy provides that, when habitat restoration is "carried out," it must be

---

<sup>29</sup> Additionally, NCRA states: "the Delta Stewardship Council cannot rely upon the Department's insufficient mitigation measures and environmental commitments." (NCRA Appeal Letter, p. 9.) NCRA provides no further argument or evidence in support of this point. While NCRA does discuss at length its position regarding the adequacy of certain mitigation measures under CEQA, it does not explain the relevance of this position to ER P2, which is separate from CEQA and calls for a separate analysis. Thus, the Council finds that NCRA's argument regarding the adequacy of mitigation measures is irrelevant as to ER P2.

1 carried out in a particular way. (ER P2, subd. (a).) FOR does not address the specific  
2 requirements of ER P2 nor attempt to argue that the habitat restoration activities the  
3 Department has proposed would be inconsistent with them. (FOR Appeal Letter, p. 16.)  
4 Consequently, its allegations are not relevant to an analysis under ER P2.

5 For its part, NCRA states: “[The Department] cannot show that WaterFix’s purported  
6 habitat restoration activities will satisfy the co-equal goal of ‘protecting, restoring, and enhancing  
7 the Delta ecosystem.’” (NCRA Appeal Letter, pp. 9-10 [citing Water Code section 85054].)  
8 NCRA does not cite any evidence in support of its statement. Nor does it explain the relevance  
9 of the statement to analyzing consistency with ER P2. Thus, the Council finds NCRA’s  
10 contention unavailing.

11  
12 **J. Policy ER P3 (23 CCR Section 5007): Protect Opportunities to Restore Habitat**

13  
14 The Department certifies that California WaterFix is consistent with ER P3. Two  
15 Appellants – NCRA and FOR – raise substantive arguments that it is not. For the reasons  
16 discussed below, the Council finds that NCRA and FOR have failed to show that the  
17 Department’s Certification of Consistency with ER P3 is not supported by substantial evidence  
18 in the record. Thus, we *deny* the appeals on these grounds.

19  
20 **1. Policy Requirements**

21  
22 ER P3 states:

23  
24 (a) Within the priority habitat restoration areas depicted in  
25 Appendix 5, significant adverse impacts to the opportunity to restore habitat  
26 as described in section 5006, must be avoided or mitigated.

27  
28 (b) Impacts referenced in subsection (a) will be deemed to be  
29 avoided or mitigated if the project is designed and implemented so that it will  
30 not preclude or otherwise interfere with the ability to restore habitat as  
31 described in section 5006.

32  
33 (c) Impacts referenced in subsection (a) shall be mitigated to a  
34 point where the impacts have no significant effect on the opportunity to  
35 restore habitat as described in section 5006. Mitigation shall be determined,  
36 in consultation with the California Department of Fish and Wildlife,  
37 considering the size of the area impacted by the covered action and the type  
38 and value of habitat that could be restored on that area, taking into account  
39 existing and proposed restoration plans, landscape attributes, the elevation  
40 map shown in Appendix 4, and other relevant information about habitat  
41 restoration opportunities of the area.

42  
43 (d) For purposes of Water Code section 85057.5(a)(3) and  
44 section 5001(j)(1)(E) of this Chapter, this policy covers proposed actions in  
45 the priority habitat restoration areas depicted in Appendix 5. It does not  
46 cover proposed actions outside those areas.

47  
48 The Delta Reform Act defines “restoration” as the “application of ecological principles to  
49 restore a degraded or fragmented ecosystem and return it to a condition in which its biological  
50 and structural components achieve a close approximation of its natural potential, taking into

consideration the physical changes that have occurred in the past and the future impact of climate change and sea level rise.” (Wat. Code, § 85066.)

## 2. Department’s Certification

The Department finds that California WaterFix is consistent with ER P3, because it does not create significant adverse impacts to the opportunity to restore habitat as described in ER P3. (Certification ER P3 Finding, p. 1.)

The detailed findings characterize the project features as described in Final EIR/EIS Chapter 3, Section 3.6.1, that are in Priority Habitat Restoration Areas (PHRAs). The Department states that all temporary project features sited in a PHRA would be returned to previous conditions after construction is complete, and would not result in a significant adverse impact to the opportunity to restore habitat. The findings also state that where permanent features are sited in a PHRA, they: (a) represent a small acreage impact to the opportunity to restore habitat in comparison to the overall size of the PHRA, and (b) do not result in a significant adverse impact to the opportunity to restore habitat.

California WaterFix would have project features in two of the six areas identified as PHRA in the Delta Plan: the Cosumnes River-Mokelumne River confluence and the Lower San Joaquin River floodplain between Stockton and Manteca. (Certification ER P3 Finding, p. 2.)

The total acreage for the Cosumnes-Mokelumne River confluence PHRA is approximately 7,401 acres. Construction of California WaterFix features within this area would require approximately 288 acres (Certification ER P3 Finding, p. 3), which includes the following permanent features located within the PHRA: (1) the intermediate forebay and spillway (approximately 204 acres); and (2) portions of a Reusable Tunnel Material area (approximately 17 acres). The habitat considerations used in selection of the intermediate forebay and spillway location included a reduction of impact on Greater Sandhill Crane foraging habitat. (Certification ER P3 Finding, p. 3.) The detailed findings state that while Reusable Tunnel Material is considered a permanent surface impact, the Final EIR/EIS, Appendix 3B, Section 3B.2.18, describes the process through which it can be reused. The Department states that Reusable Tunnel Material can be used as fill material for habitat restoration projects, and would not cause significant adverse impacts to the opportunity to restore habitat. (Certification ER P3 Finding, p. 4.) Temporary features account for the remaining acreage in the PHRA (approximately 67 acres). Temporary features include safe haven work areas, or small-diameter shafts requiring about 10 acres, which will be backfilled to preexisting conditions after construction, and will not cause a significant adverse impact to the opportunity to restore habitat. (Certification ER P3 Finding, p. 4.)

The total acreage for the Lower San Joaquin River floodplain between Stockton and Manteca PHRA is approximately 61,831 acres. Construction of California WaterFix features within this area would require approximately five acres of land for the operable barrier sited at the head of Old River. Because this feature would occupy 0.0085% of the overall area of the PHRA, is sited on the edge of the PHRA, and is beneficial for aquatic species, the Department finds that it will not cause a significant adverse impact to the opportunity to restore habitat. (Certification ER P3 Finding, p. 3.)

3. Appeals

We received two appeals (from NCRA and FOR) regarding the Department's Certification of Consistency with ER P3. NCRA made the following assertions:

- (a) The concrete batch plant and adjacent fuel station have the potential to contaminate the habitat on which they are constructed and “[b]ulk fuel would be stored at fuel stations and potentially pose the risk of vehicle fueling spills and leakage from above-ground storage tanks at fuel stations” as described in the Final EIR/EIS 24-45. Measures to minimize or avoid spills “do not address the impact of spills on the PHRA.” (NCRA Appeal Letter, p. 10.) NCRA further explained in its letter dated October 15, 2018, at page 5, that this temporary loss is expected to last over a duration of years, from late 2018 to 2031, during which “priority habitat restoration areas will remain occupied by heavy machinery, construction supplies, and other construction-related activities” and that these uses “have the potential to degrade the quality of the habitat and drive away adjacent animal species during this time-period.”
- (b) In addition, NCRA argues that the measures to minimize or avoid spills are dependent on formulation of future plans. (NCRA Appeal Letter, p. 10.) NCRA further explained in its October 15, 2018 letter at page 5 that “DWR failed to provide specific, enforceable mitigation measures that are sufficient to prevent such contamination.”

FOR made the following assertion:

- (c) “The Delta Plan and Regulations require the protection of opportunities to restore habitat (Delta Plan, ch. 4, p. 149; Regulations, Art. 3, 5007). Reducing freshwater flows through the Delta will cause significant adverse impacts to the opportunity to restore habitat. The Covered Action is not consistent with this policy.” (FOR Appeal Letter, p. 6.) In its October 15, 2018 letter, FOR further explained that the evidence supporting this statement includes an August 17, 2018 memorandum from the Secretary of the Interior and the fact that DWR has altered the project to not comply with SWRCB decision D-1641. According to FOR, these actions will “maximize, not avoid or mitigate, potential impacts to freshwater flows.”

We address each of these three contentions in turn below:

- (a) NCRA asserts that the temporary project features, a concrete batch plant and adjacent fuel station, “do not address the impact of spills on the PHRA.” (NCRA Appeal Letter, p.10.) NCRA cites the following evidence presented in the Final EIR/EIS 24-45 and 24-48, Chapter 24 on Hazards and Hazardous Materials ([Final EIR/EIS p.24-45](#)):

In addition to fuel use and bulk fuel storage, oils, lubricants, and other hazardous materials would be stored onsite and used in equipment, such as compressors, generators, pile drivers, cranes, forklifts, excavators, pumps, or soil compactors throughout the study area during construction. Spills and releases could occur during transfer and use of these materials in the field and over water or adjacent to waterways. Hazardous materials, including

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1 paints, solvents, and sealants, would be used in construction of  
2 water conveyance facilities features (e.g., intakes, pumping plants,  
3 conveyance piping). Fueling and transfer of oils, lubricants, and  
4 other materials would be performed on work barges and watercraft  
5 used for building temporary and permanent in-river facilities, such  
6 as intake structures, and could be spilled or otherwise released to  
7 the environment and result in a hazard.... As described in Appendix  
8 3B, Environmental Commitments, AMMs, and CMs, SWPPPs,  
9 HMMPs, and SPCCPs would be developed and implemented by  
10 DWR as part of the construction process for Alternative 1A. *The*  
11 *SPCCPs would minimize effects from spills of oil, oil-containing*  
12 *products, or other hazardous chemicals during construction and*  
13 *operation of the project.* The plan would be comprehensive in that it  
14 would address actions used to prevent spills and specify actions  
15 that would be taken should any spills occur, including emergency  
16 notification procedures”

17  
18 (Final EIR/EIS p. 24-45, emphasis added.)  
19

20 ER P3 requires that significant adverse impacts to the opportunity to restore habitat as  
21 described in section 5006 must be avoided or mitigated. Figure 4-7 of the Delta Plan states that  
22 projects can comply with ER P3 by allowing temporary uses and requiring the removal of  
23 structures and cleanup afterward to protect opportunities for habitat restoration. In its  
24 Certification, the Department acknowledges that a temporary concrete batch plant and fuel  
25 station will be located within the Cosumnes-Mokelumne River confluence PHRA on Glanville  
26 Tract ([Certification ER P3 Finding, p.2](#)). However, the Department finds that “All temporary  
27 project features sited in a PHRA will be returned to previous conditions after construction is  
28 complete and will not result in a significant adverse impact to the opportunity to restore habitat.”  
29 (Certification [ER P3 Finding, p.1.](#)) In addition, the Department identifies numerous measures  
30 incorporated into the project that are aimed at preventing spills and other contamination.  
31 (Department October 15, 2018 Letter, pp. 71-72 [citing Appendix 3B of the Final EIR/EIS].)  
32 While these measures do not specifically mention priority habitat restoration areas, the  
33 Department confirms that these measures “would remain applicable to concrete batch plants  
34 and fuel stations in priority habitat restoration areas.” (*Id.* at p. 71.) In contrast, NCRA fails to  
35 identify any permanent impacts to the opportunity to restore habitat in these areas.  
36

37 Therefore, NCRA has failed to show that there is not substantial evidence in the record  
38 to support the Department’s Certification of Consistency with ER P3 on this basis.  
39

40 (b) NCRA asserts that the measures to minimize or avoid potential impacts from  
41 temporary project features, a concrete batch plant and adjacent fuel station, are  
42 dependent on formulation of future plans. ([NCRA Appeal Letter](#), p. 10.)

43 As discussed above, the Department cites numerous measures incorporated into  
44 California WaterFix that are aimed at preventing spills and other contamination, all of which  
45 would apply to PHRAs. (Department October 15, 2018 Letter, pp. 71-72 [citing Appendix 3B of  
46 the Final EIR/EIS].) A review of these measures shows that while the precise details of the  
47 plans are not in final form, they are supported by detailed performance standards. (See, e.g.,  
48 DEIR/EIS pp. 3B-42 [hazardous materials management plans]; 43-45 [spill prevention,  
49 containment, and countermeasure plans].) By way of analogy, this approach is acceptable  
50 under CEQA. (CEQA Guidelines § 15126.4, subd. (a)(1)(B) [“measures may specify

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1 performance standards which would mitigate the significant effect of the project and which may  
2 be accomplished in more than one specified way.”]; see also *Center for Biological Diversity v.*  
3 *Dep’t of Fish & Wildlife* (2015) 234 Cal.App. 4th 214, 240-241 [future development of aquatic  
4 biodiversity management plans and hatchery genetic management plans did not impermissibly  
5 defer formulation of mitigation measures because they provided sufficient performance  
6 standards for future mitigation to meet].)

7 Therefore, NCRA has failed to show that there is not substantial evidence in the record  
8 to support the Department’s finding of consistency with ER P3 on this basis.

9 (c) FOR asserts that a reduction of freshwater flows through the Delta will cause  
10 significant adverse impacts to the opportunity to restore habitat. (FOR Appeal Letter,  
11 p. 16.)  
12

13 FOR relies on two theories to support its argument: 1) it argues that the “declared policy  
14 of the Department of the Interior, which governs Reclamation, is now to maximize exports  
15 regardless of the environmental consequences.” (FOR October 15, 2018 letter, p. 7); and 2)  
16 “DWR has altered the project to not comply with State Water Board decision D-1641.” (*Ibid.*)  
17

18 As to its first theory, FOR relies upon and seeks official notice of an August 17, 2018  
19 memorandum from the Secretary of the Interior. As referenced in Exhibit C, this document is  
20 dated after the Department’s July 27, 2018 Certification. Therefore, it is not relevant and we  
21 decline to take official notice of this document.<sup>30</sup>  
22

23 As to its second theory, FOR asserts that the Department has “altered the project to not  
24 comply with SWRCB decision D-1641.” (FOR October 15, 2018 letter, p. 7.) FOR cites and  
25 seeks official notice of the July 19, 2018, Exhibit DWR-1143 Second Revision, filed by the  
26 Department in the SWRCB hearing. (*Ibid.*) According to FOR, this change will “maximize, not  
27 avoid or mitigate, potential impacts to freshwater flows.” As discussed in section V, above,  
28 Executive Officer Jessica Pearson has already included the entire SWRCB hearing docket  
29 through July 27, 2018 in the Department’s record pursuant to our Administrative Procedures  
30 section 10. Therefore, it is not necessary for us to also officially notice the document.  
31 Additionally, FOR makes this identical argument as to ER P1, which has been addressed in  
32 section VI.H., above. For purposes of compliance with ER P3, FOR fails to explain how, even if  
33 it were true that the Department has “altered the project to not comply with SWRCB decision D-  
34 1641,” this would preclude, or otherwise interfere with, the ability to restore habitat in Priority  
35 Habitat Restoration Areas. The Council does not consider conclusory or speculative statements  
36 when weighing whether substantial evidence supports the certification. (*California Assn. of*  
37 *Medical Products Suppliers v. Maxwell-Jolly*, *supra*, at p. 308.)  
38

39 Therefore, FOR fails to show that there is not substantial evidence in the record to  
40 support the Department’s finding of consistency on this basis.  
41

---

<sup>30</sup> We note that even if we did take official notice of this document, FOR fails to show how this letter will cause “significant adverse impacts to the opportunity to restore habitat in the Priority Habitat Restoration Areas.” (FOR October 15, 2018 letter, p. 7.) The Council does not consider conclusory or speculative statements when weighing whether substantial evidence supports the certification. (*California Assn. of Medical Products Suppliers v. Maxwell-Jolly*, *supra*, 199 Cal.App.4th at p. 308.)

1 **K. Policy ER P5 (23 CCR Section 5009): Avoid Introductions of and Habitat**  
2 **Improvements for Invasive Nonnative Species**  
3

4 The Department contends that California WaterFix is consistent with ER P5. One  
5 Appellant – NCRA – raises substantive arguments that it is not. For the reasons discussed  
6 below, the Council finds that NCRA has failed to show that the Department’s Certification is not  
7 supported by substantial evidence in the record. Thus, we *deny* the appeal on these grounds.

8  
9 **1. Policy Requirements**

10 ER P5 states:

11 (a) The potential for new introductions of, or improved habitat  
12 conditions for, nonnative invasive species, striped bass, or bass must be fully  
13 considered and avoided or mitigated in a way that appropriately protects the  
14 ecosystem.  
15

16 (b) For purposes of Water Code Section 85057.5(a)(3) and Section  
17 5001(j)(1)(E) of this Chapter, this policy covers a proposed action that has the  
18 reasonable probability of introducing, or improving habitat conditions for,  
19 nonnative invasive species.  
20

21 The Delta Plan defines “nonnative invasive species” for purposes of section 5009 as  
22 “species that establish and reproduce rapidly outside of their native range and may threaten the  
23 diversity or abundance of native species through competition for resources, predation,  
24 parasitism, hybridization with native populations, introduction of pathogens, or physical or  
25 chemical alteration of the invaded habitat.” (23 CCR 5001, subd. (v).)  
26

27  
28 **2. Department’s Certification**

29 While implementation of conveyance facility construction and some of California  
30 WaterFix’s habitat restoration actions ([Environmental Commitments 3, 4, 6, 7, 8, 9, 10](#), see  
31 [Final EIR/EIS, Appendix 3B](#)) could potentially open new habitat to nonnative invasive species  
32 that are already present in the Delta environment, the Department finds that California WaterFix  
33 is consistent with ER P5 because, “California WaterFix Environmental Commitments, Avoidance  
34 and Minimization Measures, Mitigation Measures, permit requirements, habitat restoration  
35 adaptive management actions, and Department-wide invasive species programs demonstrate  
36 that [the Department] has fully considered and avoided new introductions of or improved habitat  
37 conditions for nonnative invasive species occurring from habitat restoration.” ([Certification ER](#)  
38 [P5 Finding](#), p. 1.)  
39

40 With regard to how the project fully considers the potential for new introductions of, or  
41 improved habitat conditions for, nonnative invasive species to occur, the detailed findings  
42 reference analysis within the California WaterFix Final EIR/EIS in Chapter 11, Fish and Aquatic  
43 Resources (Certification Record [\[X.3 000082\]](#), p. 11-165), and Chapter 12, Terrestrial  
44 Biological Resources (Certification Record [\[X.3 000083\]](#), p. 12-112). Specific emphasis is  
45 placed on Impact BIO-186: Adverse Effects on Natural Communities Resulting from the  
46 Introduction and Spread of Invasive Plant Species (Certification Record [\[X.3 000083\]](#), p. 12-  
47 3781). The detailed findings also note that nonnative species impacts and presence in the  
48 project area are also considered in the National Marine Fisheries Service and U.S. Fish and



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Wildlife Service Biological Opinions (Certification Record [\[X.3 000086\]](#)), and the California Department of Fish and Wildlife Incidental Take Permit (Certification Record [\[X.3 000080\]](#)).

With regard to how the project avoids or mitigates the potential for new introductions of, or improved habitat conditions for, nonnative invasive species, the detailed findings summarize a variety of environmental commitments, avoidance and minimization measures, mitigation measures, permit requirements, habitat restoration adaptive management actions, and Department-wide invasive species programs. These include summaries of 13 specifically referenced measures from the California WaterFix Final EIR/EIS (Certification Record [\[X.3 000081\]](#)) and MMRP (Certification Record [\[X.3 000084\]](#)), four specifically referenced requirements from the National Marine Fisheries Service and U.S. Fish and Wildlife Service Biological Opinions (BiOps) (Certification Record [\[X.3 000086\]](#)), and three specifically referenced requirements from the California Department of Fish and Wildlife Incidental Take Permit (Certification Record [\[X.3 000080\]](#)). ([Certification ER P5 Finding](#), pp. 2-7.) These measures are primarily applicable to construction activities and habitat restoration actions.

The Department's findings conclude by summarizing its ongoing policies and participation in interagency programs addressing invasive species. (Certification ER P5 Finding, pp. 7-8.)

### 3. Appeal

We received one appeal (from NCRA) regarding the Department's Certification of Consistency with ER P5. NCRA made the following three assertions:

- (a) WaterFix construction is likely to introduce or disperse invasive aquatic and terrestrial species. ([NCRA Appeal Letter](#), p. 10.) NCRA asserts that this likely introduction or dispersal would be caused by the use of barges and construction equipment in the Delta.
- (b) The Department's post-introduction mitigation to fund the Division of Boating and Waterway's aquatic weed control program is insufficient. ([NCRA Appeal Letter](#), p. 10.)
- (c) The Department's reliance on mitigation measures and environmental commitments made in connection with its CEQA approvals is misplaced. ([NCRA Appeal Letter](#), p. 10.)

We address each of NCRA's three contentions in turn below:

- (d) WaterFix construction is likely to introduce or disperse invasive aquatic and terrestrial species. ([NCRA Appeal Letter](#), p. 10.)

NCRA asserts that this likely introduction or dispersal would be caused by the use of barges and construction equipment in the Delta. The Appellant contends that the Department's Mitigation Monitoring and Reporting Program (MMRP) indicates the Department will prepare a barge operations plan, but the effectiveness of the plan, and whether it would specifically address dispersal of invasive aquatic vegetation such as water hyacinth and Brazilian waterweed, is unknown because it is not yet developed. ([NCRA October 15, 2018 Letter](#), p. 6.)

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1 The Department does acknowledge the potential of California WaterFix construction and  
2 habitat restoration actions opening new habitat to nonnative invasive species already present in  
3 the system. However, the Department contends that through environmental commitments,  
4 avoidance and minimization measures, mitigation measures, permit requirements, habitat  
5 restoration adaptive management actions, and Department-wide invasive species programs the  
6 Department has “fully considered and avoided” new introductions of, or improved habitat  
7 conditions for, nonnative invasive species. ([Certification ER P5 Finding](#), pp. 1-2.) The  
8 Department describes these mitigation measures, environmental commitments, and avoidance  
9 and minimization measures in detail. (Certification [ER P5 Finding](#), pp. 2-5.)

10 Relevant to NCRA’s assertions, the Department cites mitigation measure *AES-1d*:  
11 *Restore Barge Unloading Facility Sites Once Decommissioned* (MMRP p. 2-57), *Environmental*  
12 *Commitment: Develop and Implement a Barge Operations Plan*, and *AMM7: Barge Operations*  
13 *Plan* (MMRP pp. 3-24, 3-25) for evidence of how barge operations will be conducted to minimize  
14 the introduction or spread of invasives. AMM7 describes specific requirements of the barge  
15 operations plan to include consideration of introduction of aquatic invasive species, protection of  
16 aquatic species and habitat (including submerged aquatic vegetation), operating vessels safely,  
17 and following reasonable measures to prevent adverse effects on aquatic resources of the  
18 Delta. (Certification Record [\[X.3 000081\]](#), p. 3-25.) In addition, the plan calls for a Biological  
19 Monitor to conduct visual inspections for invasive aquatic species on in-water equipment, such  
20 as barges and boats. (Certification Record [\[X.3 000081\]](#), p. 3-26.)

21 Therefore, NCRA has failed to show that there is not substantial evidence in the record  
22 to support the Department’s finding of consistency with ER P5 on this basis.

23 (e) NCRA argues that California WaterFix’s post-introduction mitigation through funding  
24 the Division of Boating and Waterway’s aquatic weed control program is insufficient.  
25 ([NCRA Appeal Letter](#), p. 10.)

26 NCRA supports this claim with an argument that post-introduction mitigation activities  
27 typically cannot completely eradicate invasive aquatic vegetation (NCRA response letter, p. 6.)

28 ER P5 requires covered actions to mitigate for potential introductions of, or improved  
29 habitat conditions for, invasive species in the event that avoidance is not feasible. The  
30 Department describes the commitment to fund the Division of Boating and Waterways as one of  
31 a suite of measures to address invasive species and points to the Division of Boating and  
32 Waterways as the entity with legal authority and effective tools to treat invasive aquatic  
33 vegetation in the Delta. (Department October 15, 2018 Letter, p. 75.)

34 The Appellant additionally argues that using herbicides to control invasive aquatic  
35 vegetation exposes “Delta waterways to chemicals that can harm human and environmental  
36 health.” ([NCRA October 15, 2018 Letter](#), p. 7.) However, ER P5 does not prohibit the use of  
37 herbicides.<sup>31</sup>

38 Therefore, NCRA has failed to show that there is not substantial evidence in the record  
39 to support the Department’s finding of consistency with ER P5 on this basis.

---

<sup>31</sup> In support of its argument, NCRA cites and requests that the Council take official notice of an article from the *Sacramento Bee* dated September 24, 2018, by Ryan Sabalow, *A Delta farmer says the state poisoned his crops. Is California’s water supply safe?* This document is dated after the Department’s July 27, 2018, Certification. Therefore, it is not relevant and the Council declines to take official notice of this document (see [Exhibit C](#)).

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- 1 (f) Reliance on mitigation measures and environmental commitments made in  
2 connection with its CEQA approvals is misplaced. ([NCRA Appeal Letter](#), p. 10.)

3 The main argument presented in NCRA's appeal regarding mitigation measures and  
4 environmental commitments is that they are "invalid" due to being "vague and improperly  
5 deferred." However, no specific reference is made in the appeal to any mitigation measure or  
6 environmental commitment with respect to this policy with the exception of those discussed  
7 under section (b) above. The Council is not required to search the record to ascertain whether it  
8 contains support for the Appellants' contentions. (*Salas v. Cal. Dept. of Transportation* (2011)  
9 198 Cal.App.4th 1058, 1074.)

10 Therefore, NCRA has failed to show that there is not substantial evidence in the record  
11 to support the Department's finding of consistency with ER P5 on this basis.

12  
13 **L. Policy DP P2 (23 CCR Section 5011): Respect Local Land Use When Siting Water or**  
14 **Flood Facilities or Restoration Habitats**

15  
16 The Department certifies that California WaterFix is consistent with DP P2. Six parties  
17 appealed the substance of the Department's Certification of Consistency with DP P2: NCRA,  
18 SCDA, North Delta Cares, Regional San, San Joaquin County, and Sacramento County. For the  
19 reasons discussed below, the Council finds that the Department has failed to demonstrate  
20 substantial evidence in the record that California WaterFix is consistent with DP P2.

21  
22 **1. Policy Requirements**

23  
24 DP P2 states:

- 25  
26 (a) Water management facilities, ecosystem restoration, and flood management  
27 infrastructure must be sited to avoid or reduce conflicts with existing uses or those  
28 uses described or depicted in city and county general plans for their jurisdictions or  
29 spheres of influence when feasible, considering comments from local agencies and  
30 the Delta Protection Commission. Plans for ecosystem restoration must consider  
31 sites on existing public lands, when feasible and consistent with a project's purpose,  
32 before privately owned sites are purchased. Measures to mitigate conflicts with  
33 adjacent uses may include, but are not limited to, buffers to prevent adverse effects  
34 on adjacent farmland.

- 35  
36 (b) For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of this  
37 Chapter, this policy covers proposed actions that involve the siting of water  
38 management facilities, ecosystem restoration, and flood management infrastructure.

39  
40 As a threshold matter, the Department asserts that "state and federal agencies involved  
41 with the location or construction of facilities for the production, generation, storage, treatment, or  
42 transmission of water are not subject to local land use regulations and inconsistency with a  
43 specific local land use regulation is not by itself an adverse effect on the environment" for  
44 purposes of CEQA (Certification, [DP P2](#), p.6). However, independent from state law related to  
45 local land use authority and the requirements of CEQA, DP P2 is a directive to state and local  
46 public agency proponents of covered actions, and it specifically requires water management  
47 facilities, ecosystem restoration projects, and flood management infrastructure to "be sited to  
48 avoid or reduce conflicts with existing uses or those uses described or depicted in city and  
49 county general plans for their jurisdictions or spheres of influence when feasible, considering

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1 comments from local agencies and the Delta Protection Commission.” The Department  
2 acknowledged the Council’s unique role in relationship to CEQA at the Council hearing on  
3 October 25, 2018 as follows:

4  
5 “To address community concerns that go beyond CEQA – as I said we have almost 50  
6 CEQA measures, but CEQA talks about physical effects on the environment, and the  
7 Delta as an evolving place goes beyond that, and so we recognize that there’s an  
8 importance that is due to Delta Protection Commission the Delta Stewardship Council  
9 related to those issues. And so we wanted to develop this [the Community Benefits  
10 Fund] collaboratively with the appropriate local entities to try and come up with  
11 something that can best work through community concerns and address them, whether  
12 that’s business related, agricultural, or recreational.” (October 25, 2018 Hearing  
13 Testimony, Ken Bogdan, Transcript p. 50).

14  
15 The Commission also comments that CEQA requirements are different obligations than  
16 what consistency with DP P2 requires (Delta Protection Commission, [October 16, 2018 Written](#)  
17 [Statement](#), p.6). The Commission further comments that the project “will have substantial  
18 impacts on the economics and quality of life of legacy communities, particularly those closest to  
19 the construction and related impacts. The [Department’s] Certification of Consistency should  
20 pursue measures beyond the bounds of CEQA to address the larger socioeconomic impacts of  
21 the project” (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.14).

22  
23 With this in mind, these findings address the issues raised by Appellants, by issue,  
24 below:

### 25 26 **2. Appeals & Certification**

27  
28 The appeals identify 11 issues related to consistency of the project with DP P2. They  
29 are: (a) conflicts with local land use plans; (b) conflicts with existing Delta communities, (c)  
30 existing uses - cultural and historical resources impacts, (d) existing uses - parks and recreation  
31 impacts, (e) existing uses - impacts on visual and aesthetic character, (f) existing uses - public  
32 health and hazards, (g) existing uses - impacts on wastewater discharge facilities, (h) existing  
33 uses - traffic impacts, (i) existing uses - impacts on agriculture, and (j) existing uses – noise  
34 impacts; and (k) consideration of comments from reclamation districts. Each of these issues is  
35 addressed separately, below:

#### 36 37 **a. Conflicts With Local Land Use Plans**

##### 38 39 **i. Appeals & Certification - Conflicts With Local Land Use Plans**

40  
41 Appellants allege that California WaterFix is inconsistent with DP P2 because the project  
42 would not avoid or reduce conflicts with local land use plans. (NCRA Appeal Letter, p. 11; SCDA  
43 Appeal Form, p. 9; North Delta Cares Appeal Letter, pp. 4-5; San Joaquin County Appeal Letter,  
44 pp. 7, 64-69; Sacramento County Appeal Letter, pp. 6-7.) Appellants describe conflicts that  
45 temporary and permanent California WaterFix project structures would create on lands  
46 designated for other uses in general plans adopted by Sacramento, San Joaquin, Contra Costa,  
47 and Alameda Counties (NCRA Appeal Letter, p. 11; SCDA Appeal Form, p. 9; North Delta  
48 Cares Appeal Letter, p. 4; Sacramento County Appeal Letter, p. 7;). Two Appellants,  
49 Sacramento County and SCDA, cite testimony submitted at the SWRCB hearing as evidence of  
50 the project’s conflicts with local land uses.  
51

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Specifically, the appeals allege:

- 1) The project would require placement of temporary and permanent structures on lands designated for other uses by the plans of Sacramento, San Joaquin, Contra Costa, and Alameda Counties. (North Delta Cares, [Appeal Letter](#), pp. 4-5)
- 2) The project conflicts with county general plans, the Commission's Land Use and Resource Management Plan for the Primary Zone of the Delta, and the California State Parks Brannan Island and Franks Tract State Recreation Area General Plan (North Delta Cares, [Appeal Letter](#), p. 5).
- 3) The project is inconsistent with the Sacramento County General Plan (Sacramento County [Appeal Letter](#), pp. 6-7). Pursuant to Section 11 of the Council's Administrative Procedures Governing Appeals, Sacramento County submitted supplemental appeal material providing evidence showing the project's conflicts with land planned for long-term agricultural production (Sacramento County [Letter](#) 10-14-18, pp.1-5).
- 4) The project would create significant, unavoidable conflicts with local land use plans as described in Final EIR/EIS Figure 13-0 (NCRA [Appeal Letter](#), p. 11).
- 5) The project is incompatible with the Commission's Land Use and Resource Management Plan (LURMP) for the Primary Zone of the Delta, and the California State Parks Brannan Island and Franks Tract State Recreation Area General Plan<sup>32</sup> (North Delta Cares [Appeal Letter](#), p.5).

The Department's Certification cites evidence in the record showing that since 2006, a multi-agency public process has incorporated input from various agencies, stakeholders, independent scientists, and the public that included "extensive analysis of potential conflicts with local uses, including input from local and regional entities and local landowners and users of Delta resources. While it is inevitable that any project of the import and magnitude of California WaterFix will have an impact on local land uses, significant changes have been made during the planning process to reduce such impacts." (Certification, [DP P2](#), p.2.) The Certification cites evidence in the record documenting responses to comments from the Commission and Delta counties in Volume II of the Final EIR/EIS (Certification, DP P2, Volume II, Table 2-2, pp. 22-23). The Department's responses to comments made by counties are found in the following locations in the record:

- Contra Costa County: [Final EIR/EIS, Volume II, comment letter 2502](#) (53 pages of individual responses)
- Sacramento County: [Final EIR/EIS, Volume II, comment letter 2511](#) (21 pages of individual responses)
- San Joaquin County: [Final EIR/EIS, Volume II, comment letter 2503](#) (3 pages of individual responses)
- Solano County: [Final EIR/EIS, Volume II, comment letter 2657](#) (13 pages of individual responses)

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<sup>32</sup> Comments by California State Parks on Brannan Island and Franks Tract State Recreation Area General Plan, if any, were not found in the record. However, DP P2 does not require consideration of comments from state agencies such as California State Parks.



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- Yolo County: [Final EIR/EIS, Volume II, comment letter 2573](#) (3 pages of individual responses)

The Department's responses to comments by the Commission are located at [Final EIR/EIS, Volume II, comment letter 2581](#) (13 pages of individual responses).

In addition, the Department cites evidence in the record regarding refinements to the project that were made between 2013-2015, which included changes to a gravity-fed operation at the northern intakes reducing energy, air, and visual impacts; use of earthen-lined bays rather than concrete; reduced visual impacts near Hood; elimination of permanent power lines near Stone Lakes Wildlife Refuge; reduced project features on Staten Island; elimination of large access pads at vent structures; removal of a siphon from Italian Slough; and maximization of state land for RTM and pumping facilities. For a detailed description, see the Project Refinements Table ([Certification, DP P2](#), p. 4).

The Department provides evidence showing consideration of project water intake impacts to "existing structures, businesses, historical interests and current use of the land" ([Final EIR/EIS, Appendix 3F](#), p. 3F-11), including the location of proposed water intakes near Hood, were analyzed by engineers and resource experts as described in Appendix 3F to the Final EIR/FEIS ([DWR DP P2, p.4](#)). Avoiding areas with a "high concentration of cultural and historic resources" was a "general consideration" in refining intake locations within Appendix 3F of the Final EIR/EIS ([Final EIR/EIS, Appendix 3F](#), p. 3F-9). Three intakes were selected for analysis as part of the proposed project (intakes 2,3, and 5) after considering the higher costs of alternatives, impacts to sandhill cranes, proximity to the intermediate forebay, and the opportunity to avoid direct impact to structures in Hood ([Final EIR/EIS, Appendix 3F](#), p. 3F-15).

The Department acknowledges the land use conflicts identified by Appellants, as described in Chapter 13 (Land Use) of the Final EIR/EIS, and describes existing land uses and planned future land uses that could be affected by project construction and operation as described in the general plans for Alameda, Contra Costa, Sacramento San Joaquin, Solano, Sutter, and Yolo counties ([DWR DP P2](#), pp.6-7). In the Certification of Consistency, the Department provides a table listing project "Water Conveyance Incompatibilities With County Land Use Designations" by acreage (Attachment 1, [DWR DP P2](#), p.29).

For the two impacts on land use plans referred to by the Department, and discussed below, the Department has not cited substantial evidence that the impacts would be reduced to the extent feasible; therefore, the Department's certification is *not supported* by substantial evidence in the record:

- ***Impact LU-1: Incompatibility with Applicable Land Use Designations, Goals, and Policies as a Result of Constructing the Proposed Water Conveyance Facility:*** The Department acknowledges incompatibility with land use plans as an impact in Attachment 1 to its detailed findings (Final EIR/EIS, Chapter 13, Table 13-1), which documents, in acres, temporary and permanent project incompatibilities with land use designations by county ([DWR DP P2](#), p.29). In general, the Final EIR/EIS states that "As discussed in Section 13.3.2, Determination of Effects, the physical effects [suggested by land use incompatibilities] are discussed in the respective resource chapters throughout this document. The relationship between plans, policies, and regulations and impacts on the physical environment is discussed in Section 13.3.1, Methods for Analysis." ([Chapter 13, Final EIR/EIS](#), p. 13-164).

No evidence in the record is cited which supports the conclusion that this impact would be reduced to the extent feasible, as required by subdivision (a) of Policy DP P2.

- **Impact LU-4: Incompatibility with Applicable Land Use Designations, Goals, and Policies as a Result of Implementing the Proposed Environmental Commitments 3, 4, 6-12, 15, and 16:** “Although there is uncertainty regarding the specific locations where Environmental Commitments 3, 4, 6-12, 15, and 16 will be implemented, this impact discusses the possible compatibilities and incompatibilities of these Environmental Commitments with the applicable county, local, and regional land use designations, goals, and policies. These issues will also be addressed in the site-specific environmental documents for proposed restoration activities” ([DWR DP P2](#), p.7). This statement is not supported by the evidence in the Final EIR/EIS, which states that for Impact LU-4, “Because specific locations for the implementation of many of these land-intensive actions are unknown at this point, there is some uncertainty about whether new land uses related to these Environmental Commitments would be incompatible with existing land uses. A conclusion about the compatibility of this alternative with local land use regulations cannot be made. However, the restoration associated with these Environmental Commitments would be consistent with open space and would generally be similar to the study area, which predominantly consists of agricultural areas.” ([Chapter 13, Final EIR/EIS](#), p.13-167).

No evidence in the record is cited which supports the conclusion that this impact would be reduced to the extent feasible as required by subdivision (a) of Policy DP P2.

As evidence of how it would address project impacts due to land use conflicts, the Department also states that it “has committed to the implementation of a Community Benefits Fund, or its equivalent. This Fund would incorporate good neighbor policies to avoid negative impacts on agricultural lands, residents and business by providing a mechanism for communication with local government and community members and disburse funds to protect and enhance the Delta as an evolving place” ([DWR DP P2, p.21-22](#)). However, no further evidence is cited that provides additional information about the Fund, including that it constitutes an enforceable commitment.

## ii. Conclusion Regarding Conflicts With Local Land Use Plans

The Certification cites evidence in the record showing the manner in which the Department has acknowledged California WaterFix’s conflicts with planned local land uses, and identifies feasible measures to reduce some, but not all of the conflicts with land use plans identified by Appellants. The Department also cites evidence in the record showing that it responded to comments from Delta counties and the Commission related to land use conflicts. Significant and unavoidable adverse impacts remain, and Appellants North Delta Cares and Sacramento County argue correctly, as described in the following issue sections below, that the Department has not cited evidence in the record demonstrating that mitigation measures or alternatives which would reduce nor avoid conflicts with local land use plans are infeasible or how the Community Benefits Fund would reduce project impacts. Therefore, the Department’s Certification of Consistency with DP P2 on the issue of compatibility with local land use plans is *not supported* by substantial evidence in the record.



**b. Conflicts With Existing Delta Communities**

**i. Appeals & Certification - Conflicts With Existing Delta Communities**

The Appellants state the following:

- 1) Construction of intakes for the project near legacy communities,<sup>33</sup> including Clarksburg, Courtland, and Hood, would cause substantial adverse effects to the community and its surroundings. (North Delta Cares, [Appeal Letter](#), pp. 2, 5.) These impacts would remain significant and unavoidable despite mitigation measures having been adopted (North Delta Cares, [Appeal Letter](#), pp. 5-13; North Delta Cares, [Supplemental Response](#), p.12).
- 2) Appellant North Delta Cares asserts that the project would result in significant and unavoidable socioeconomic impacts. (North Delta Cares, [Appeal Letter](#), p.6)
- 3) The project would irreparably damage the communities of Hood, Clarksburg, and Courtland and substantially degrade the unique scenic qualities, the cultural, historical, and economic values in perpetuity. (Sacramento County [Appeal Letter](#), p.7,9)
- 4) Removal of existing permanent structures would be an adverse effect (North Delta Cares [DSC.3 Consistency w Delta Plan Appeal August 2018](#), p. 4).
- 5) The Certification fails to provide relevant information or analysis of the project's impacts on land use including changes to Reusable Tunnel Material (RTM) storage, tunnel alignment, Clifton Court, and Stone Lakes National Wildlife Refuge (San Joaquin County [Appeal Letter](#), pp. 7, 64.) See Figure M13-4 (Location of Clifton Court and project features) in Impacts on Public Recreation and Nature Areas, below, on page 111.
- 6) The project does not respect local land uses (SCDA [Appeal](#), p. 9 [citing SWRCB Hearing testimony of Frank Morgan, Bill Wells, Chris Kinzel, and Rune Storesund]).

In its appeal, North Delta Cares asserts that the location of the project intakes on the banks/levees of the Sacramento River between the legacy towns of Clarksburg, Courtland and Hood "is inconsistent with the policies of the Delta Plan (North Delta Cares, [Appeal Letter](#), p. 2). Sacramento County asserts the project "will conflict with and irreparably damage the existing Delta communities of Hood, Clarksburg and Courtland by permanently altering the physical landscape, including agricultural and cultural/historic uses, substantially degrading its unique, secure qualities and cultural/historical and economic values in perpetuity" (Sacramento County [Appeal Letter](#), p.7).

North Delta Cares further contends that "impacts on the Delta recreation, aesthetics, land use, socioeconomics, cultural resources etc., and their significant adverse impacts on the Delta Region as a whole, WOULD have a cumulative impact on recreation and tourism in the Delta" (North Delta Cares, [Appeal Letter](#), p. 6 [*emphasis in original*]). Appellant does not cite evidence to support this claim, however, except a quote from Chapter 15 (Recreation) in the

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<sup>33</sup> The legacy communities are defined in Chapter 5 of the Delta Plan as follows: "Bethel Island, Clarksburg, Courtland, Freeport, Hood, Isleton, Knightsen, Rio Vista, Ryde, Locke, and Walnut Grove are the Delta's legacy communities (Public Resources Code section 32301(f))." (Delta Plan, [Chapter 5](#), p. 175.) See figures in this subsection, below.

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Draft SEIR/SEIS, which states that “the level of impact would not be reduced to a less than significant level and would remain significant and unavoidable” (North Delta Cares, [Appeal Letter](#), p. 6, SEIR/S (SEIR/S, p. 15-4, L 19-31)). The quoted language is the same as the conclusion for Impact REC-2 in the Final EIR/EIS, which finds that “the level of impact would not be reduced to a less-than-significant level because it is not certain the mitigation would reduce the level of these impacts to less than significant in all the instances occurring within the entire study area. Therefore, these impacts are considered significant and unavoidable” ([Chapter 15, Final EIR/EIS](#), p. 15-469).

The following testimony submitted in the SWRCB hearing, and cited by Appellants, describes the project’s impacts to Delta communities (Sacramento County [Appeal Letter](#), p.7):

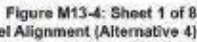
- Testimony by Sacramento County Supervisor Don Nottoli provides a narrative discussion of project impacts on Delta communities (Sac County [DSC CWF appeal with attachments](#), p. 12).
- Testimony by Professor Robert Benedetti that the Final EIR/EIS Chapter 18 does not adequately evaluate impacts on current and future cultural tourism resources including businesses, property values, and the potential designation of the Delta as a National Heritage Area, and that mitigation measures are insufficient (Sac County [DSC CWF appeal with attachments](#), pp. 18-31).
- Testimony by Sacramento County Agricultural Commissioner Julie Jensen cites evidence of project construction impacts on agricultural revenues, jobs, and incomes. Potential permanent impacts could include small and medium agricultural operations from construction traffic related disruption and water quality degradation. In addition, she asserts there could be economic challenges associated with re-entering into Williamson Act contracts (Sac County [DSC CWF appeal with attachments](#), pp. 32-37).
- Testimony by Virginia Hemly Chhabra describes project impacts resulting from placement of three intakes near Greene and Hemly, a grower, packer, and shipper of pears and apples. Intakes would prevent access to Greene and Hemly’s office, facilities, and homes; could negatively water affect supplies and degrade water quality for crops; could have adverse impacts from noise and vibration; could have adverse distribution impacts; could have adverse impacts on recreation; could have adverse impacts on Hood; and gradual economic losses could accumulate permanent economic losses (Sac County [DSC CWF appeal with attachments](#), pp. 38-41).
- Testimony by Chrisandra Flores, Chief Deputy Agricultural Commissioner for Sacramento County, cites additional permanent impacts to agricultural lands and the local economy by proposed project changes in the Draft SEIR/EIS. These impacts include placement of RTM that would impact an additional 44 acres of Important Farmland and 119 acres of land in Williamson Act contracts with resulting losses in agricultural revenues, job losses, and incomes (Sac County [DSC CWF appeal with attachments](#), pp. 42-45).<sup>34</sup>

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<sup>34</sup> Important Farmland for the purpose of the California WaterFix Final EIR/FEIS is defined as land in the United States Department of Agriculture and California Department of Conservation farmland categories Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance ([DWR DP P2](#), p.11).

- Testimony by Dr. Jeffrey Michael, Executive Director of the Center for Business and Policy Research and Professor of Public Policy at the University of the Pacific, acknowledges that the Final EIR/EIS states, "recreation dependent businesses including marinas and recreational supply retailers may not be able to economically weather the effects of multiyear construction activities and may be forced to close as a result (Page 16-168, Final EIR)" (Sac County [DSC CWF appeal with attachments](#), p. 92; [Chapter 16 Final EIR/EIS](#), p. 16-168). As "Delta recreation businesses are predominantly small independent enterprises that typically have limited resources to endure an extended loss in business", Dr. Michael notes that it is not unusual for large infrastructure projects that negatively impact local businesses to receive compensation for those impacts (Sac County [DSC CWF appeal with attachments](#), p. 91). Dr. Michael asserts "At this time, the WaterFix does not include any such fund even though the project will have extended, and likely permanent, negative effects to the region without any offsetting long-run benefit from the infrastructure" (Sac County [DSC CWF appeal with attachments](#), p. 92). As an example of another project that has done this, Los Angeles has provided compensation to local businesses impacted by Metro Rail tunneling through the Business Interruption Fund (BIF), provides \$10 million annually to small businesses affected. The testimony goes on to state, "the Project should provide a similar fund for Delta businesses, although higher compensation thresholds would be appropriate given the length of the construction period, vulnerability of Delta businesses, and the fact that Delta businesses will not receive any long-run benefits from the WaterFix after construction is complete" (Sac County [DSC CWF appeal with attachments](#), p. 93).

The Department's Certification cites evidence in the record regarding project refinements made between 2013-2015, which included the elimination of pumping plants, permanent power lines, sediment basins at the northern intakes, and a reduction of visual impacts near Hood that resulted in fewer acres overall being impacted and fewer acres of private land being used for the project ([DWR DP P2](#), p.3-4); specifically, 1,844 fewer acres for the footprint of the water facility, 722 fewer acres for the intermediate forebay, 1,677 fewer acres of private land with permanent or temporary impacts, and 1,250 fewer acres of agricultural land impacted – or a total reduction of approximately 5,493 acres ([DWR DP P2](#), p. 4).



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With regard to the location of intake sites, the Department states that an initial range of intake sites was developed by a Fish Facilities Technical Team (FFTT) whose members were tasked with evaluating a range of intake locations that would be optimal to avoid effects on sensitive fish species (Department's [October 15, 2018 Written Statement](#), pp. 80). These initial intake locations and designs underwent an iterative vetting process to meet project goals and objectives, including intake diversion capacity, depth and length of the fish screens, sweeping velocities to protect sensitive fish species and allow for debris bypass, approach velocities, and potential impacts to agriculture and other adjacent land uses. ([Final EIR/EIS, Appendix 3F, p. 3F-2](#)). Following the FFTT review, project footprint location considerations, including the location of proposed water intakes near Hood and other legacy Delta communities, were analyzed by engineers and resource experts (EIR and Engineering Teams) as described in Appendix 3F to the Final EIR/FEIS ([DWR DP P2, p.4](#)). Twelve possible intake site locations were identified as potentially suitable locations. The potential sites were then further screened by the Department based on site visits, scoping comments, and land use considerations. In developing proposed sites for the intakes, a set of 11 "general considerations" was used. Among these considerations were the following:

- Minimize visual and noise disturbance, as well as construction-related impacts, to land owners, residents, and commercial areas;
- Avoid/minimize displacing land owners and residents; and
- Avoid known areas with high concentration of cultural and historic resources.

([Final EIR/EIS, Appendix 3F, p. 3F-9](#))

Potential intake sites were then compared using four criteria, one of which was "Impact to existing structures, businesses, historical interests and current use of the land" ([Final EIR/EIS, Appendix 3F, p. 3F-11](#)). Three intakes were selected for analysis as part of the proposed project (intakes 2,3, and 5) after considering the higher costs of alternatives, impacts to sandhill cranes, proximity to the intermediate forebay, and the opportunity to avoid direct impact to structures in Hood ([Final EIR/EIS, Appendix 3F, p. 3F-15](#)).

In its Written Statement submitted October 15, 2018, the Department describes numerous modifications to the originally proposed configuration of intake sites, specifically to avoid the community of Hood, including eliminating the proposed intake located closest to Hood (Intake 4), moving pumping stations out of the remaining intake location nearest Hood, converting previously-proposed concrete sedimentation basins into two earthen bays at each intake site, and relocating electric transmission line alignments to avoid impacts to Hood (Department's [October 15, 2018 Written Statement](#), pp. 83-84).

Deirdre Des Jardins of California Water Research submitted material on behalf of Appellant North Delta Cares on October 15, 2018. In this material, Ms. Des Jardins reviews various parts of the administrative record, including those described above by the Department, and concludes that the record does not show evidence that alternative locations for the intakes are infeasible and that the range of the potential impacts also includes Clarksburg, Courtland, Locke, and Walnut Grove. In considering the initial evaluation by the FFTT and EIR and Engineering Teams, Ms. Des Jardins concludes that the selected sites were chosen not because other sites were infeasible, but because they presented the best trade-offs among the general siting criteria, which included limited consideration of landowner and community impacts. (North Delta Cares October 15, 2018 Written Statement by Deirdre Des Jardins, p. 5) This material also describes additional refinements resulting in the sites considered as part of Alternative 4A, and challenges whether the selected intakes are optimal to reduce impacts to



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1 Delta smelt or salmonids, and whether they represent the best options to adapt to both sea-level  
2 rise and salinity intrusion. (North Delta Cares October 15, 2018 Written Statement by Deirdre  
3 Des Jardins, pp. 7, 15-16). Ms. Des Jardins also presented this material to the Council on behalf  
4 of Appellant North Delta Cares at the hearing conducted on October 24, 2018.

5 The Final EIR/EIS discusses the impacts of seven alternative locations of new intakes in  
6 various configurations as part of the analysis of 18 project alternatives. In its CEQA Findings of  
7 Fact, the Department described the considerations listed above and those referenced by North  
8 Delta Cares during the alternative selection process. The Findings of Fact also describe why all  
9 the other project alternatives (which include various alternative configurations of intake sites)  
10 are infeasible. ([C DRAFT 000001](#), pp. 2-3, 49-83, 106-118.)

11 The Commission also comments that there was a lack of consultation with local land use  
12 agencies in the selection of intake and forebay locations to minimize impacts on the  
13 communities of Hood, Clarksburg and Courtland (Delta Protection Commission, [October 16,](#)  
14 [2018 Written Statement](#), p.16). The Commission cites evidence in the record, Final EIR/EIS  
15 Appendix 3H, that describes the criteria for location of intermediate forebay and notes that the  
16 report lacks “documentation of a single communication with the Hood community or County of  
17 Sacramento staff that detailed any dialogue about the options, and Glanville Tract was  
18 ultimately selected in 2012” (Delta Protection Commission, [October 16, 2018 Written Statement](#),  
19 p.16). However, within Appendix 3H, in analysis of the five different forebay sites, consideration  
20 was given to “Minimizing impacts on the town of Hood during the construction and operation of  
21 the IF [intermediate forebay]- the current location minimizes the need to relocate residences and  
22 businesses,” (Final EIR/EIS [Appendix 3H](#), p.3H-4) and Glannville Tract was selected instead of  
23 the four other options because of “consideration of geological conditions, local drainage  
24 collection system impacts, land use impacts, construction costs and long-term operating costs  
25 . . . In addition to natural community impacts, considerations of impacts to agriculture and  
26 infrastructure were evaluated” (Final EIR/EIS [Appendix 3H](#), p.3H-7). The Department, North  
27 Delta Cares, and the Commission consider similar evidence within the record, reaching different  
28 conclusions regarding the feasibility of alternative intake and intermediate forebay site locations.  
29 Therefore, substantial evidence *supports* the Department’s Certification of Consistency relative  
30 to the issue of the feasibility of alternative intake and intermediate forebay locations.

31 With regard to impacts on Delta communities due to construction, the Department  
32 acknowledges that “Construction activities associated with water conveyance facilities would be  
33 anticipated to result in changes to the rural qualities of these communities during the  
34 construction period (characterized by predominantly agricultural land uses, relatively low  
35 population densities, and low levels of associated noise and vehicular traffic), particularly for  
36 those communities in proximity to water conveyance structures, including Clarksburg, Hood,  
37 and Walnut Grove” ([DWR DP P2](#), pp. 8-9). Specific impacts include changes to community  
38 cohesion, a reduction of opportunities for maintaining face-to-face relationships, or disruptions  
39 to the functions of community organizations or community gathering places (such as schools,  
40 libraries, places of worship, and recreational facilities) as described in Chapter 16  
41 (Socioeconomics) of the Final EIR/EIS. In addition, “Several gathering places that lie in the  
42 vicinity of construction areas could be indirectly affected by noise and traffic associated with  
43 construction activities, including Delta High School, the Clarksburg Library, Clarksburg  
44 Community Church, Resurrection Life Community Church, Citizen Land Alliance, Discovery Bay  
45 Chamber of Commerce, Courtland Fire Department, and several marinas or other recreational  
46 facilities” ([DWR DP P2](#), p. 9).<sup>35</sup>

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<sup>35</sup> The Department also states that “the Final EIR/EIS concludes that construction of the water conveyance facilities could affect community character in the Delta region during the construction time

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1 In its Written Statement submitted October 16, 2018, the Commission also summarizes  
2 the project's impacts on community character and highlights the Department's findings that the  
3 project's construction impacts could include declining property values, blight, and abandonment.  
4 The Commission goes on to comment that none of the mitigation measures or other  
5 commitments are directed at "supporting local communities as they address the impacts to their  
6 community character" (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.6).

7 For evidence that project impacts to existing Delta communities would be reduced, the  
8 Department finds that the specific Avoidance and Minimization Measures, Environmental  
9 Commitments, and Mitigation Measures (AMM/EC/MMs) within the Mitigation Monitoring and  
10 Reporting Program (MMRP) "related to noise, visual effects, transportation, agriculture, and  
11 recreation will reduce the extent of these [social] impacts" ([DWR DP P2](#), p. 9).

12  
13 Of the three impacts that the Department summarizes from Chapter 13 of the Final  
14 EIR/EIS that are related to the project's conflicts with existing land uses raised by Appellants;  
15 there is *no substantial evidence in the record* that the Department reduced impacts to the extent  
16 feasible ([DWR DP P2](#), p.6 -7):

- 17  
18 • **Impact LU-2: Conflicts with Existing Land Uses as a Result of Constructing the**  
19 **Proposed Water Conveyance Facility:** The Department states, "Where applicable, the  
20 Lead Agencies will provide compensation to property owners for losses due to  
21 implementation of the California WaterFix, which will reduce the severity of the economic  
22 effects." ([DWR DP P2](#), p.7.) The Final EIR/EIS states for LU-2, "Where applicable,  
23 project proponents will provide compensation to property owners for losses due to  
24 implementation of Alternative 4A. This compensation would not constitute mitigation for  
25 any related physical impact; however, it would reduce the severity of economic effects."  
26 ([Chapter 13, Final EIR/EIS](#), p.13-165). No further description of this compensation is  
27 provided.

28  
29 No evidence in the record is cited which supports the conclusion that this impact would  
30 be reduced to the extent feasible, as required by subdivision (a) of Policy DP P2.

- 31  
32 • **Impact LU-3: Create Physical Structures Adjacent to and through a Portion of an**  
33 **Existing Community as a Result of Constructing the Proposed Water Conveyance**  
34 **Facility (CM1).** The Final EIR/EIS states that "Implementation of Mitigation Measures  
35 TRANS-1a and TRANS-1b would reduce the severity of this impact by supporting  
36 continued access to and from the community on transportation routes; however,  
37 permanent structures [Intakes 3 and 5] in the community's vicinity would remain, and  
38 the impact would be significant and unavoidable." ([Chapter 13, Final EIR/EIS](#), p.13-  
39 166.)

40  
41 No evidence in the record is cited which supports the conclusion that this impact would  
42 be reduced to the extent feasible, as required by subdivision (a) of Policy DP P2.  
43

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period. Because the impacts are social in nature, rather than physical, they are not considered impacts under CEQA" ([DWR DP P2, p. 9](#)). However, DP P2 specifically requires water management facilities, ecosystem restoration projects, and flood management infrastructure to "be sited to avoid or reduce conflicts with existing uses or those uses described or depicted in city and county general plans for their jurisdictions or spheres of influence when feasible, considering comments from local agencies and the Delta Protection Commission." See Section L.1 (Policy Requirements), above, regarding this issue.

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- **Impact LU-5: Conflicts with Existing Land Uses as a Result of Implementing the Proposed Environmental Commitments 3, 4, 6–12, 15, and 16:** “Where applicable, the Lead Agencies will provide compensation to property owners for losses due to implementation of the California WaterFix Environmental Commitments, which will reduce the severity of the economic effects” ([DWR DP P2](#), p.7). However, this assertion is not supported by the analysis in the Final EIR/EIS, which states that for LU-5, “Because specific locations and types of restoration to be implemented are unknown at this point, there is some uncertainty about whether new land uses related to these Environmental Commitments would conflict with existing land uses or result in the permanent conversion of land uses. A conclusion about the compatibility of this alternative with local land uses cannot be made. However, the restoration associated with these Environmental Commitments would be consistent with open space, and would generally be similar to the study area, which is a predominantly agricultural area.” ([Chapter 13, Final EIR/EIS](#), p.13-168).

No evidence in the record is cited which supports the conclusion that this impact would be reduced to the extent feasible, as required by subdivision (a) of Policy DP P2.

As evidence of how it would address project impacts on Delta communities, the Department also states that it “has committed to the implementation of a Community Benefits Fund, or its equivalent. This Fund would incorporate good neighbor policies to avoid negative impacts on agricultural lands, residents and business by providing a mechanism for communication with local government and community members and disburse funds to protect and enhance the Delta as an evolving place” ([DWR DP P2, p.21-22](#)). However, no further evidence is cited that provides additional information on the Fund, including that it constitutes an enforceable commitment.

The Commission concludes that there is no detail or documentation concerning the Community Benefit Fund (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.6). The Commission recommends to the Department that it reduce economic impacts using strategies such as “investing in public facilities and infrastructure through the Delta Investment Fund (PRC section 29778.5), funding implementation of the Commission’s Delta Community Action Planning project (the Commission has prepared community action plans in Clarksburg, Courtland, Hood, and Walnut Grove, and is currently preparing a plan in Isleton to promote physical and quality of life improvements in legacy communities), and supporting agricultural, cultural, recreational, and tourism programs and projects through the newly created Delta Regional Foundation. The Commission’s Economic Sustainability Plan provides detail on strategies that DWR can use to mitigate built environment impacts” (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.14). In terms of structure, the Commission recommends “a ‘Delta Compensation Fund’, funded by the project proponent and administered by an impartial and independent third party. The Fund would be designed to address damages created by CWF construction. The administrator of the Delta Compensation Fund would act quickly to assess claims of damage caused by CWF construction and make payments directly to affected parties. This would avoid a lengthy and drawn-out public agency claim process that would be especially challenging for many in the Delta’s socioeconomically-challenged rural communities most affected by CWF construction” (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.14).

ii. Conclusion Regarding Conflicts with Existing Delta Communities

The Certification cites evidence in the record showing how and where the Department acknowledges project conflicts with existing Delta communities, and identifies measures to reduce some, but not all, of the impacts to Delta communities identified by Appellants. Significant and unavoidable adverse impacts remain, including socioeconomic impacts, and the Department has not cited evidence in the record demonstrating that mitigation measures or alternatives which would reduce or avoid impacts on existing Delta communities are infeasible, or how the Community Benefits Fund would reduce project impacts. Therefore, the Department's Certification of Consistency with DP P2 on the issue of conflicts with land uses in existing Delta communities is *not supported* by substantial evidence in the record.

c. Conflicts With Existing Uses – Cultural and Historical Resources Impacts

i. Appeals & Certification - Cultural and Historical Resources Impacts

The Appellants state the following:

- 1) The project would not avoid nor reduce conflicts with the existing Locke Historic District and existing historic vernacular landscapes. ([SCDA Appeal](#), p. 9; [SCDA spk-2008-00861 comments Save the California Delta Alliance as submitted](#), p. 12)
- 2) The project would conflict with and irreparably damage Hood, Clarksburg, and Courtland by permanently altering the physical landscape, including agricultural and cultural/historic uses, and substantially degrading unique scenic qualities and cultural/historical and economic values in perpetuity. ([Sac County DSC CWF appeal with attachments](#), pp. 6-7, 8-9)
- 3) Appellant quotes from the Department's Draft SEIR/EIS, which states that direct and indirect effects of construction of the project would result in significant and unavoidable impacts to eligible and potentially eligible historical resources and unique archeological resources; Mitigation Measures CUL-1 and CUL-2 fail to avoid or reduce this impact to a less-than-significant level. (North Delta Cares, [Appeal Letter](#), pp. 8-9)
- 4) The project will have multiple significant and unavoidable impacts on cultural resources in the Delta. Construction would affect 10 identified archeological resources likely to qualify as historical resources or unique archeological resources under CEQA. In addition, 10 identified historic-era built environment resources have potential to be directly or indirectly affected by construction, including the Mosher House and the George Cornish House of Clarksburg, which are eligible for listing on the National Register of Historic Places and California Register of Historic Places. ([Sac County DSC CWF appeal with attachments](#), pp. 8-9)

Appellant SCDA asserts that the project intake structures would destroy the aesthetic and cultural significance of the Locke Historic District and the historic vernacular landscape, and that a Programmatic Agreement under Section 106 would not avoid nor reduce these conflicts ([SCDA, spk-2008-00861 comments, p.11-12](#)).

North Delta Cares asserts that MM CUL-1 and MM CUL-2 fail to avoid or reduce construction impacts on eligible and potentially-eligible historical resources and unique archeological resources to the extent feasible (North Delta Cares, [Appeal Letter](#), pp. 8-9). The



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evidence Appellant cites is from the Draft SEIR/EIS, which states that MM CUL-1 “would not ensure preservation of the physical integrity of the resources or ensure that all of the scientifically important material would be retrieved because feasible archaeological excavation only typically retrieves a sample of the deposit, and the portions of the site containing important information may remain after treatment. The impact on identified archaeological sites would be adverse (NEPA) and significant and unavoidable (CEQA) because construction could damage the remaining portions of the deposit, the same as what would result under the approved project” (SEIR/S, pp. 18-4, L 23-25, 31-38). Regarding the effectiveness of MM CUL-2, North Delta Cares cites evidence from the Draft SEIR/SEIS that states, “Ground-disturbing construction for both the approved project or the proposed project may materially alter the significance of these resources by disrupting the depositional context of the resource and the spatial relationship between the physical constituents of the resource.... Mitigation Measure CUL-2 would address the impacts of both prehistoric and historic resources through conducting inventories, evaluating significance, and proposing treatment of archaeological and historic resources as well as monitoring during the construction phase. For these reasons, the impact would be adverse, significant and unavoidable” (SEIR/S, Pg. 18-4, 5, 6; L 11-12, 14-23, 41-43, 1-9). The Final EIR/EIS Chapter 18 (Cultural Resources) reached the same conclusion as the SEIR/EIS, which is that even with implementation of MM CUL-1 and MM CUL-2, impacts would remain significant and unavoidable ([Final EIR/EIS, Ch. 18, pp.18-99, 18-100](#)).

Appellant Sacramento County cites testimony by Professor Robert Benedetti at the SWRCB hearing as additional evidence regarding the project’s impacts on cultural and historic resources ([Sac County DSC CWF appeal with attachments](#), p.9). Dr. Benedetti cites evidence of the following significant and unavoidable impacts:

- *Prehistoric Cultural Resources, Accessible Properties* (Impacts to the Greene home and about 55 structures of potential historical value)
- *Inaccessible Properties* (12 sites were not evaluated for historical or cultural value)
- *Inadequate Mitigation for Historic Resources* (Relocation could jeopardize future uses; for example, because a substantial part of the value of these residences is based on their location. If the Mosher House, Greene House, or Rosebud Rancho were moved, it could substantially lessen their value and degrade the visitor experience)
- *Historic Communities* (The Final EIR/EIS does not fully discuss the magnitude of temporary construction impacts on community life)
- *Historic Transportation Routes* (Significant and permanent impacts on State Highway 160)
- *Cultural Tourism* (Final EIR/EIS Chapter 18 does not adequately evaluate impacts on current and future resources, businesses, property values, and designation of the Delta as a National Heritage Area that supports cultural tourism, and that mitigation measures are insufficient).

(Sac County [DSC CWF appeal with attachments](#), pp.18-31).

The Commission comments that project impacts could permanently damage designation of the Delta as a National Heritage Area and the emerging heritage tourism industry (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.7). The Commission also

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comments that the cultural resources mitigation measures focus on a limited set of properties or sites, and recommends that the Department consider Delta cultural values in a larger context, as suggested by the cultural landscape approach discussed in the Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for the Treatment of Cultural Landscapes (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.7). More specifically, the Commission comments that Mitigation Measure CUL-5: *Consult with Relevant Parties, Prepare and Implement a Built Environment Treatment Plan* offers "vague assurance that project proponents will consult with relevant parties prior to demolition or ground-disturbing activities" (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.7).

The Department's Certification cites evidence in the record regarding refinements to the project that were made between 2013-2015, which avoided or reduced impacts to local land use. These refinements included eliminating pumping plants, permanent power lines, and sediment basins at the northern intakes, as well as reducing visual impacts near Hood, which is a Delta legacy community ([DWR DP P2, p.3-4](#)).

The Department states that project footprint location considerations, including the location of proposed water intakes near Hood, were analyzed by engineers and resource experts as described in Appendix 3F to the Final EIR/FEIS ([DWR DP P2, p.4](#)). Avoiding areas with a "high concentration of cultural and historic resources" was a "general consideration" in refining intake locations ([Final EIR/EIS, Appendix 3F, p. 3F-9](#)). Intake sites were then compared using four criteria, one of which was "Impact to existing structures, businesses, historical interests and current use of the land" ([Final EIR/EIS, Appendix 3F, p. 3F-11](#)). Three intakes were selected for analysis as part of the proposed project (intakes 2,3, and 5) after considering the higher costs of alternatives, impacts to sandhill cranes, proximity to the intermediate forebay, and the opportunity to avoid direct impact to structures in Hood ([Final EIR/EIS, Appendix 3F, p. 3F-15](#)).

The Department acknowledges project impacts on cultural resources as described in Chapter 18 of the Final EIR/EIS,<sup>36</sup> and that "significant or adverse impacts that will result from California WaterFix. Construction of the water conveyance facilities may require removal or alteration of certain historic built-environment resources, which is considered a significant effect." ([DWR DP P2, p.13](#).)

To reduce or eliminate impacts where feasible, the Department identifies the following Mitigation Measures that relate to cultural resources:

- **MM CUL-1:** *Prepare a Data Recovery Plan and Perform Data Recovery Excavations on the Affected Portion of the Deposits of Identified and Significant Archaeological Sites* ([Final EIR/EIS MMRP p. 2-66](#)).
- **MM CUL-2:** *Conduct Inventory, Evaluation, and Treatment of Archaeological Resources* ([Final EIR/EIS MMRP p. 2-69](#)).
- **MM CUL-3:** *Implement an Archaeological Resources Discovery Plan, Perform Training of Construction Workers, and Conduct Construction Monitoring* ([Final EIR/EIS MMRP p. 2-73](#)).

---

<sup>36</sup> Final EIR/EIS, Chapter 18, defines "cultural resources" as prehistoric and historic archaeological resources, architectural/built-environment resources, places important to Native Americans and other ethnic groups, and human remains ([Final EIR/EIS, Ch. 18, p.18-1](#)).



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- 1
- 2 • **MM CUL-4:** *Follow State and Federal Law Governing Human Remains if Such*
- 3 *Resources Are Discovered during Construction* ([Final EIR/EIS MMRP p. 2-75](#)).
- 4
- 5 • **MM CUL-5:** *Consult with Relevant Parties, Prepare and Implement a Built Environment*
- 6 *Treatment Plan* ([Final EIR/EIS MMRP p. 2-77](#)).
- 7
- 8 • **MM CUL-6:** *Conduct a Survey of Inaccessible Properties to Assess Eligibility, Determine*
- 9 *if These Properties Will Be Adversely Impacted by the Project, and Develop Treatment*
- 10 *to Resolve or Mitigate Adverse Impacts* (Final EIR/EIS [MMRP p. 2-82](#)).
- 11
- 12 • **MM CUL-7:** *Conduct Cultural Resource Studies and Adopt Cultural Resource Mitigation*
- 13 *Measures for Cultural Resource Impacts Associated with Implementation of*
- 14 *Environmental Commitments 3, 4, 6-12, 15, and 16* ([Final EIR/EIS MMRP p. 2-84](#)).
- 15

16 Significant and unavoidable adverse impacts would remain following implementation of these  
17 mitigation measures, and the Department has not cited evidence in the record demonstrating  
18 that additional mitigation measures or alternatives which would reduce or avoid impacts on  
19 cultural and historical resources are infeasible ([Final EIR/EIS, Ch. 18](#), p.18-213 through p.18-  
20 219; p. 18-142).

21  
22 In addition to these mitigation measures, as evidence of how it would address impacts  
23 on cultural resources, the Department states that it “has committed to the implementation of a  
24 Community Benefits Fund, or its equivalent. This Fund would incorporate good neighbor policies  
25 to avoid negative impacts on agricultural lands, residents and business by providing a  
26 mechanism for communication with local government and community members and disburse  
27 funds to protect and enhance the Delta as an evolving place”([DWR DP P2, p.21-22](#)). However,  
28 no further evidence is cited that provides additional information regarding the Fund, including  
29 that it constitutes an enforceable commitment.  
30

### 31 **ii. Conclusion Regarding Cultural and Historical Resources Impacts**

32  
33 Appellants cite evidence in the record showing significant and unavoidable adverse  
34 impacts to cultural and historic resources, including archaeological sites, affecting about 55  
35 structures on accessible properties, and 12 sites on inaccessible properties. The Certification  
36 cites evidence in the record showing the manner in which the Department has acknowledged  
37 the project’s impacts on existing cultural and historical resources, and identifies measures to  
38 reduce impacts. However, appellants cite evidence in the record showing that the mitigation  
39 measures would not address impacts due to relocation of historic structures, which could  
40 jeopardize the future use such structures, and that impacts on archeological sites would  
41 remain significant despite implementation of mitigation measures related to treatment of  
42 archaeological sites. Appellants also cite evidence in the record showing that the Department  
43 did not consider project impacts on cultural tourism in legacy communities and potential  
44 designation of the region as a National Heritage Area. The Department has not cited evidence  
45 in the record identifying mitigation measures that would reduce or avoid impacts on legacy  
46 communities, scenic highways, and cultural tourism. No further evidence is cited that provides  
47 additional information about the Community Benefits Fund, and how it would reduce project  
48 impacts to Delta community life, historic routes, and cultural tourism. Therefore, the  
49 Department’s Certification of Consistency with DP P2 on the issue of conflicts with existing land

uses due to impacts on cultural and historical resources is *not supported* by substantial evidence in the record.

**d. Conflicts With Existing Uses – Parks and Recreation Impacts**

**i. Appeals & Certification**

**(a) Impacts on Marinas and Recreational Boating**

Appellants SCDA, North Delta Cares, and Sacramento County assert that WaterFix will conflict with marinas as an existing land use. In its appeal, SCDA cites testimony originally submitted at the SWRCB hearing regarding a change in point of diversion for WaterFix and to comments on the Final EIR/EIS. SCDA cites testimony from Bill Wells, which includes the following statement on the potential impact on marinas: “In my opinion, at least 20 percent of our Delta marinas will be forced out of business by WaterFix.” ([SCDA-150](#), p. 1). Impacts on marinas as a Delta land use and marina closures are also asserted by SCDA in its references to the following comments on the California WaterFix Project Final EIR/EIS, which are listed in the SCDA Appeal Form (p. 9): Barbara Daly (July 10, 2017; Document Code: [D.1 DRAFT 000418](#)); Bill Wells / Delta Chambers and Visitors Bureau (August 2, 2017; Document Code: [D.1 DRAFT 000198](#)); Bullfrog Marina / Carl Wenske (July 7, 2017; [SCDA Response to Supplemental Questions](#), pp. 380-384); Clarksburg Marina / Don and Kathleen Updegraff (July 6, 2017; Document Code: [D.1 DRAFT 000198](#)); Frank Morgan (July 10, 2017, Document Code: [D.8 DRAFT 023274](#)).

SCDA asserts that the project would impact recreational boaters in the Delta in large numbers (SCDA [Appeal](#), p. 9). SCDA’s appeal cites testimony submitted during Part 2 of the SWRCB hearing on a change in point of diversion for California WaterFix. In this testimony, Frank Morgan provides his opinion as to the likely impacts to in-Delta boat recreation ([SCDA-25](#)). SCDA also asserts that project construction would result in adverse impacts to Delta recreational boating during the summer season by disrupting navigation within the Delta and at an operable gate at Old River that is also part of the project ([SCDA spk-2008-00861 comments](#), pp.11-13). In their testimony, Mr. Wells and Mr. Morgan assert that the new gate and speed limits will inhibit recreational boating by interrupting the unrestricted recreational navigation and that recreational boaters will abandon the Delta in large numbers due to the project’s construction impacts ([SCDA Appeal](#), p. 9; [SCDA Response to Supplemental Questions](#), p. 23). In support of this assertion, Mr. Wells and Mr. Morgan refer to survey research conducted for SCDA, which was submitted to the SWRCB, showing that, at a Delta boating event in 2017, 68 percent of respondents stated “...they would switch some or all of their boating activity away from the Delta in response to CWF construction activities” (SCDA-351, p. 2).

North Delta Cares also asserts that the project would result in significant and unavoidable impacts to recreational navigation opportunities in the Delta (North Delta Cares, [Appeal Letter](#), p. 6). Appellants North Delta Cares and Sacramento County assert that the project’s conflicts with marinas will arise in part due to project construction noise which, as described below in the discussion of Noise impacts, may deter visitors to recreational land uses such as the Clarksburg Marina. (North Delta Cares, [Appeal Letter](#), pp. 5-6; [Sac County](#), pp. 7, 9). SCDA asserts that traffic congestion on roads leading to Delta marinas, including Highway 160 and Highway 4 and local roads, as described below in the discussion of Traffic impacts, will further deter visitors from using the affected marinas ([SCDA Response to Supplemental Questions](#)).

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1 North Delta Cares also asserts that changes in waterside scenery, as described under  
2 Visual and Aesthetic Character, will discourage marina visitors. Appellants assert that three  
3 marinas (Wimpy's Marina, Bullfrog Landing Marina, and Lazy M Marina) and a popular  
4 anchorage at Delta Meadows are within the 1,200 to 1,400-foot indirect impact area of WaterFix  
5 construction. Appellants further assert that proposed mitigation fails to avoid or reduce these  
6 impacts to the extent feasible and, therefore, will conflict with Delta recreation land use (North  
7 Delta Cares, [Appeal Letter](#), pp. 5-6).

8  
9 North Delta Cares asserts that in-water features of project construction will create other  
10 deterrents to recreational boating that will harm use of marinas (North Delta Cares, [Appeal](#)  
11 [Letter](#), p. 6). These deterrents include the new operable gate across Old River and barge traffic  
12 to new landings that will be constructed at the Meadows on Snodgrass Slough east of Locke  
13 and in the south Delta. Appellants assert that estimates of barge traffic used by the Department  
14 are contradictory and unreliable ([SCDA-25](#), p. 11-13).

15  
16 Appellants assert that mitigation measures proposed by the Department will not reduce  
17 these impacts, because the objective of the mitigation measures is protection of wildlife and fish,  
18 not recreational boating. ([SCDA spk-2008-00861 comments](#), p. 11). Appellant SCDA asserts  
19 that barge operations plans are intended to address potential impacts to aquatic habitat and  
20 species from barge and tugboat operations; they do not include specific measures related to  
21 recreation, and do not provide for consultation about the plans with recreation interests. SCDA  
22 also asserts that the Department's proposal to mitigate effects on recreational boating by  
23 funding expanded herbicide treatments to control aquatic weeds that impede boating is  
24 inadequate, because it does not describe the amount or objective of any expanded funding  
25 (SCDA-301). Finally, SCDA cites the SWRCB hearing testimony of Mr. Wells, which urges  
26 consideration of other measures to mitigate the impacts on recreational boating that will harm  
27 marinas, including measures to control noise, relocate reusable tunnel material storage sites out  
28 of the Delta, and place major staging areas away from prime Delta recreation areas (SCDA -  
29 150).

30  
31 The Commission concludes, in the context of comments on policy G P1(b)(2), that  
32 mitigation measures for recreation impacts are insufficient, and states, "No mitigation has been  
33 proposed for the substantial 'temporary' impacts to recreation in the Delta by the project  
34 proponents, other than creation of site-specific 'construction traffic management plans' which  
35 are deferred to the future. There is no analysis in the record of temporary impacts, although  
36 Final EIR/EIS Chapter 15 defines 'temporary' as longer than 2 years, and construction could  
37 take from 5-10 years depending on location and facility" (Delta Protection Commission, [October](#)  
38 [16, 2018 Written Statement](#), p.8).

39  
40 The Commission also comments that barge impacts on recreational boating traffic are  
41 not meaningfully addressed by the mitigation measures, and that the Department "should  
42 ensure dedicated funds for construction of new recreation opportunities, as well as for protection  
43 of existing recreation opportunities as outlined in Recommendation DP R11 of the Delta Plan...  
44 mitigation measures ought to be clearly specified and their linkages to impacts of construction,  
45 operation, and maintenance of the facilities should be plainly identified. Open-ended pledges or  
46 vaguely described commitments to avoid or reduce adverse effects will not satisfy the charge of  
47 the law" (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.9, 11). The  
48 Commission goes on note that the Department could reduce the significant and unavoidable  
49 impacts to recreational boaters if it engages with recreation facility owners, park managers  
50 (California State Parks), and the Commission.

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1 In its Certification, the Department acknowledges impacts to recreational activities from  
2 construction ([DP P2 Certification](#), p. 9-10). The Department cites the following mitigation  
3 measures and Avoidance and Minimization Measures to support its finding of consistency with  
4 DP P2 in this area ([DP P2 Certification](#), p. 9-10):

- 5  
6 • **Mitigation Measure REC-2: Provide alternative bank fishing access sites.** The  
7 Department cites Mitigation Measure REC-2 as evidence of avoiding and reducing  
8 impacts to recreation. This mitigation measure focuses on providing alternative bank  
9 fishing sites ([MMRP, p. 2-49](#)).
- 10  
11 • **Avoidance and Minimization Measures, Environmental Commitments, and Best**  
12 **Management Practices.** The Department states that the adopted MMRP includes a  
13 number of measures to avoid or reduce impacts on recreational resources. Specifically,  
14 the Department states that among these measures are “fugitive dust control measures,  
15 development and operation of erosion and sediment control plans, and development and  
16 implementation of fish rescue and salvage plans” ([DP P2 Certification](#), p. 10). The  
17 Department also commits to implement *Environmental Commitment: Provide Notification*  
18 *of Maintenance Activities in Waterways & AMM36: Notification of Activities in Waterways*  
19 ([MMRP, p. 3-76](#)).
- 20  
21 • **Appendix 3B.** The Department states that Appendix 3B of the Final EIS/EIR includes  
22 other commitments to reduce impacts to recreation, including “Enhance Recreation  
23 Access in the Vicinity of the Proposed Impacts (3B.3.2); Fund Efforts to Carry Out the  
24 Recommendations Adopted in the Delta Plan (3B.3.3); and Fund the California  
25 Department of Boating and Waterways’ Programs for Aquatic Weed Control (3B.3.4)”  
26 ([DP P2 Certification](#), p. 10).
- 27  
28 • **Appendix 15B, Delta Recreation.** The Department states that there are other “plans,  
29 policies, and programs” that focus on enhancement of recreational opportunities in the  
30 Delta, and these are described in Appendix 15B of the Final EIR/EIS.

31  
32 In its Certification, the Department also cites Mitigation Measures REC-6 *Provide a*  
33 *temporary alternative boat launch to ensure access to San Luis Reservoir* and TRANS-1a  
34 *Implement Site-Specific Construction Traffic Management Plan*. Of these two mitigation  
35 measures, only TRANS-1a includes some aspects related to avoiding or reducing impacts to in-  
36 Delta recreation. While the Department identifies several mitigation measures, avoidance and  
37 minimization measures, and environmental commitments that could incidentally affect marinas  
38 and recreational boating, none directly address conflicts with existing recreational boating uses.  
39 In its Written Statement submitted October 15, 2018, the Department states that for project  
40 impacts on recreational boat traffic that “the significant and unavoidable effects are from  
41 construction, and not operation, and thus are temporary” (Department’s [October 15, 2018](#)  
42 [Written Statement](#), p. 18). The Department acknowledges that boaters could experience minor  
43 delays related to construction speed zones, and asserts that mitigation measures will reduce  
44 impacts on navigation by “development and implementation of site-specific construction traffic  
45 management plans [*Mitigation Measure TRANS-1a: Implement site-specific construction traffic*  
46 *management plan*], including specific measures related to management of barges and  
47 stipulations to notify the commercial and leisure boating communities of proposed construction  
48 and barge operations in the waterways [*Environmental Commitment: Provide Notification of*  
49 *Maintenance Activities in Waterways & AMM36*]” (Department’s [October 15, 2018 Written](#)  
50 [Statement](#), p. 18). The Department does not explain how development of barge operations and



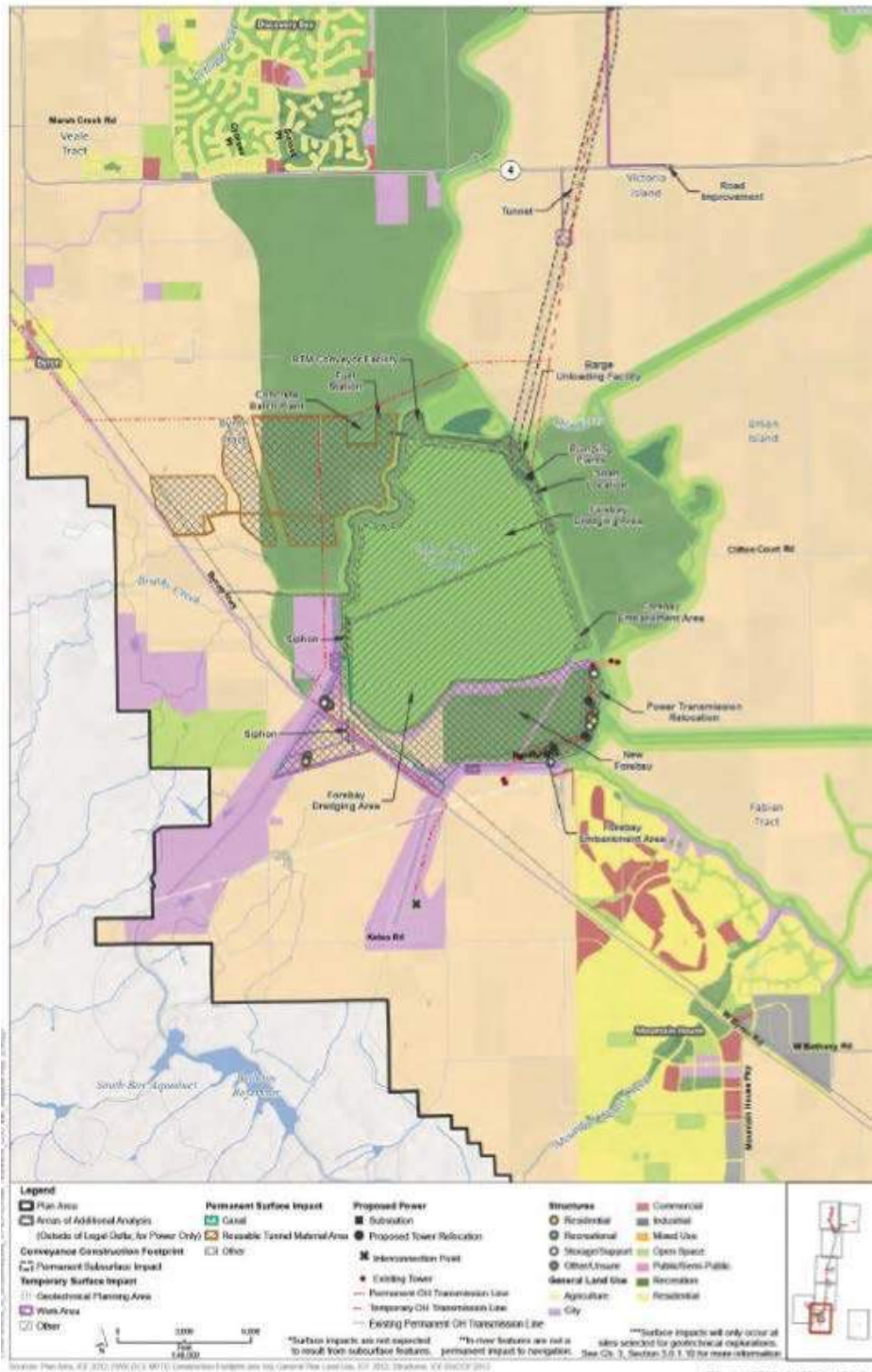
1 traffic management plans address conflicts with recreational boating. The Department does not  
2 cite any other specific mitigation measures, AMMs or Other Commitments that would reduce the  
3 impacts of construction activities on recreational uses, instead stating that “Some of the  
4 Avoidance and Minimization Measures, and Environmental Commitments described above are  
5 designed to address impacts on recreational resources.” ([DP P2 Certification](#), p. 10).

6 **(b) Impacts on Public Recreation and Nature Areas**  
7

8 Appellants assert that the project would result in significant conflicts with public use of  
9 recreation and nature areas (North Delta Cares, [Appeal Letter](#), p. 5). North Delta Cares and  
10 Sacramento County assert that these impacts include reduced access, noise, and visual setting  
11 disruptions that could impair public use of these areas. To support this assertion, North Delta  
12 Cares cites Chapter 15 of the Supplemental EIR, and in particular to impacts REC-1, REC-2,  
13 and REC-3 (North Delta Cares, [Appeal Letter](#), p. 5-6). Although the Draft Supplemental EIR/EIS  
14 does not analyze the approved project for which the Department submitted a Certification of  
15 Consistency on July 27, 2018, this assertion has been considered for its relevance to the Final  
16 EIR, which also describes these impacts and finds for REC-2 and REC-3 that the impacts would  
17 be significant and unavoidable ([Final EIR/EIS, Ch. 15](#), pp.15-467 through 15-472).  
18

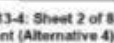
19 Sacramento County asserts that the project will impact recreational opportunities and  
20 cites the Final EIR/EIS, which states that the project would “... result in permanent and long-  
21 term (i.e., lasting over 2 years) impacts on well-established recreation opportunities and  
22 experiences in the study area because of access, noise, and visual setting disruptions that  
23 could result in loss of public use” (Sacramento County [Appeal Letter](#), p. 9).  
24

25 Sacramento County also asserts that two public recreation and nature areas are within  
26 the California WaterFix construction footprint – Clifton Court Forebay, and Cosumnes River  
27 Preserve which includes the Nature Conservancy’s Staten Island (Sacramento County [Appeal](#)  
28 [Letter](#), pp. 7, 9). Other public recreation areas that will be affected by the project include Stone  
29 Lakes National Wildlife Refuge, Clarksburg Boat Launch, and California State Parks property at  
30 Delta Meadows, which are within the 1,200 to 1,400 foot indirect impact area. (Sac County  
31 [Appeal Letter](#), pp. 7, 9). Project construction would locate tunnel shafts, reusable tunnel material  
32 storage areas, other facilities, and new power lines on or near these sites. Appellants assert that  
33 because the value of these areas depends on their quiet and undisturbed auditory and visual  
34 character, project construction will impair recreational use of them (Sac County [Appeal Letter](#), p.  
35 20).  
36  
37



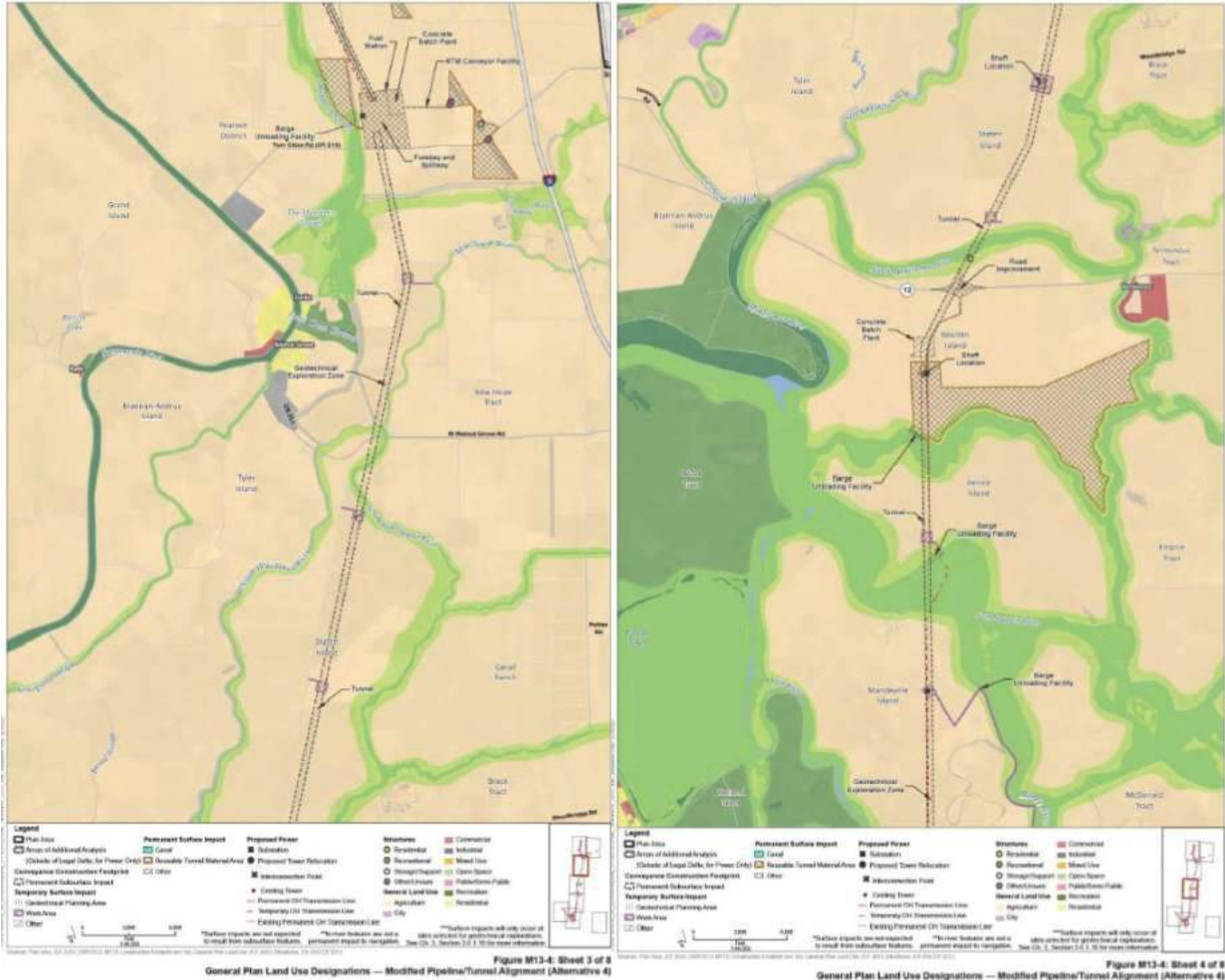
Location of Clifton Court Forebay (DWR DP P2, Figure M13-4 Sheet 6 of 8, p. 37)





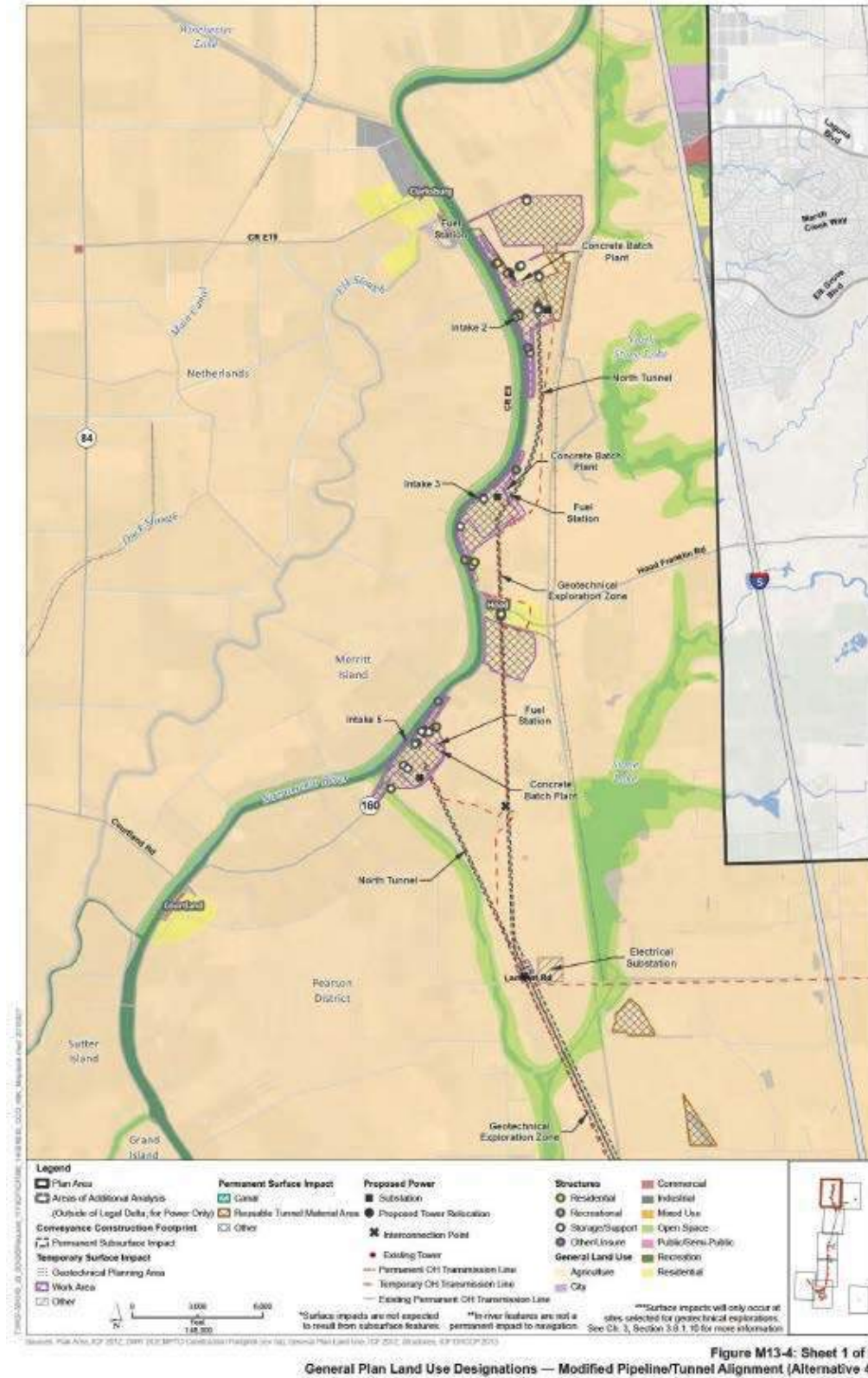
Location of Cosumnes River Preserve (DWR DP P2, Figure M13-4 Sheet 2 of 8, p. 33)

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Location of Staten Island ((DWR DP P2, Figure M13-4 Sheet 2 of 8, pp. 34-35)

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- 1
- 2 Location of Stone Lakes National Wildlife Refuge (DWR DP P2, Figure M13-4 Sheet 1 of 8, p. 32)



Appellants assert that mitigation proposed for these effects is inadequate. The Clarksburg Boat Launch, which the Department proposes to improve to compensate for lost fishing access, will be exposed to loud noises during project construction and so is unlikely to be used by bank fisherpeople displaced from other areas during project construction (SCDA [Appeal](#), testimony of Salter [X.4 000015](#), pp. 5-6). Sacramento County asserts that at sites in Sacramento County proposed to compensate for lost bank fishing areas, the Department has not defined the improvements proposed to the Georgiana Slough Fishing Access and Cliffhouse Fishing Access, and has not proposed to reimburse the County for additional management costs as use of these areas increases (Sacramento County [Appeal Letter](#), testimony of Jeff Leatherman, p. 20).

In its Certification, the Department states that there will be construction impacts on certain aspects of recreation within the Delta, but that “. . . because the Delta is so expansive with 700,000 acres and 500 miles of navigable waterways, recreation would be able to occur throughout the Delta during and after construction.” ([DP P2 Certification](#), p. 10). The Department also states that it has identified feasible mitigation measures for these impacts, but that the impacts will remain significant and unavoidable. (*Ibid.*) The Department does not clearly identify reasons that avoiding or reducing these impacts would be infeasible, however (DWR, [DP P2 Certification](#), p. 17).

#### (c) Impacts of Construction Traffic on Recreational Uses

Appellant Sacramento County asserts that California WaterFix will cause traffic that negatively impacts “Delta lifestyle and economy” from traffic (Sacramento County [Appeal Letter](#), p. 9). Specifically, Sacramento County cites the SWRCB hearing testimony of Reza Moghissi, who asserts that increases in traffic will negatively affect residents and visitors (Sacramento County [Appeal Letter](#), p. SACO-18-1 through SACO-18-13). Although these assertions may be relevant to recreation, Sacramento County has only cited to evidence noting that there will be an impact to Delta residents and visitors, and not clearly explained the impact to recreational land uses (*Ibid.*).

In its appeal, SCDA asserts that there will be significant impacts to a range of recreational uses within the Delta (SCDA [Appeal](#), p. 9) and cites SWRCB hearing testimony of Frank Morgan that describes impacts to traffic and recreation from operation of the Highway 4 bridge at Old River (SCDA [Appeal](#), SCDA-301, p. 9). In SCDA-301, Mr. Morgan asserts that barge traffic will utilize Old River and require raising the Highway 4 bridge and therefore impact traffic throughout the region (SCDA [Appeal](#), SCDA-301, pp. 9-10). To support this, Mr. Morgan cites the Department’s Final EIR/EIS, the SWRCB hearing testimony of the Department’s witness Mr. Bednarski, and Mr. Morgan’s own opinion, stating “In my view, there is too much uncertainty and contradiction regarding barge operations to open the door to frequent openings of the Highway 4 Bridge over Old River (SCDA [Appeal](#), SCDA-301, p. 9). Mr. Morgan also asserts that barge operations are not reasonably protective of recreation and that recreational boating will be affected (SCDA [Appeal](#), SCDA-301, pp. 18-19). Mr. Morgan proposed that to address these asserted impacts to recreation, the Department could have considered an eastern tunnel alignment, which would have feasibly addressed impacts to recreational boating from barge traffic (*Ibid.*). SCDA adds to this assertion in its response to supplemental questions (SCDA Supplemental Questions, p. 11). SCDA asserts that the Department has “failed to recognize impacts on roadway traffic due to WaterFix barge-caused bridge openings”, and asserts that these openings will impact traffic and access to recreation sites (SCDA [Supplemental Questions](#), pp. 10-12).

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In its Certification, the Department cites the project design and formulation, including several different alternatives that used different tunnel alignments (DWR, [DP P2 Certification](#), p. 3-4). The Department has also cited mitigation measures TRANS-1a, TRANS-1b, and TRANS-1c to reduce impacts to traffic in the Delta. These measures include the following:

- **Mitigation Measure TRANS-1a: Implement Site-Specific Construction Traffic Management Plan (MMRP 2-87).** The Department commits to contract with one or more construction management firms to coordinate schedules and ensure development of site-specific traffic management plans, prior to construction. This includes coordination with the California Department of Parks and Recreation (Final EIR/EIS [MMRP](#), p. 2-87).
- **Mitigation Measure TRANS-1b: Limit Hours or Amount of Construction Activity on Congested Roadway Segments (MMRP 2-91).** The Department commits, where feasible, to limit construction activity so that it does not negatively impact roadway level of service. This potentially would be achieved by limiting activity to avoid commute periods (Final EIR/EIS [MMRP](#), p. 2-19).
- **Mitigation Measure TRANS-1c: Make Good Faith Efforts to Enter into Mitigation Agreements to Enhance Capacity of Congested Roadway Segments (MMRP 2-92).** The Department commits, prior to construction, to “make a good faith effort” to put in place mitigation agreements with affected agencies and identify the fair share of costs to reduce traffic congestion on identified roadways (Final EIR/EIS [MMRP](#), p. 2-92).

In the Department’s response to supplemental questions issued by the Council, the Department provides more detail about Mitigation Measure TRANS-1a (Implement Site-Specific Construction Traffic Management Plan) and Avoidance and Minimization Measure AMM7 (Barge Operations Plan) (Department’s [October 15, 2018 Written Statement](#), pp. 17-20). The Department states that both measures include detailed elements and performance measures, and cites the Final EIR/EIS MMRP ([C DRAFT 000002](#), p. 3-24 through 3-30 [barge operations plan]; p. 2-87 through 2-94 [site-specific construction traffic management plan]). The Department further states:

*DWR, in undertaking construction at the construction sites, will develop a barge operations plan that includes the requirements set forth below, unless equally effective strategies are developed.*

- *Bottom scour from propeller wash.*
- *Bank erosion or loss of submerged or emergent vegetation from propeller wash and/or excessive wake.*
- *Accidental material spillage.*
- *Sediment and benthic (bottom-dwelling) community disturbance from accidental or intentional barge grounding or deployment of barge spuds (extendable shafts for temporarily maintaining barge position).*
- *Hazardous materials spills (e.g., fuel, oil, hydraulic fluids).*
- *Introduction of aquatic invasive species.*

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1       *The plan will be developed to limit barge-related effects on aquatic species. The plan will*  
2       *include provisions to minimize or reduce effects on aquatic species. ([C DRAFT 000002](#),*  
3       *p. 3-25)*

4  
5       In its Certification, the Department states that it will:

6  
7       *Develop and Implement a Barge Operations Plan & AMM7: Barge Operations Plan*  
8       *(MMRP 3-23). To address the following potential impacts on aquatic habitat and species*  
9       *from barge and tugboat operations associated with water conveyance facilities*  
10       *construction, DWR will ensure that a barge operations plan is developed and*  
11       *implemented for each project that requires the use of a barge. ([Certification, DP P2](#), p.*  
12       *16).*

13  
14       AMM7 (Barge Operations Plan) is further described in the Final EIR/EIS MMRP (p. 3-24). In the  
15       MMRP, the Department describes the components of such the operations plan, which focus on  
16       a variety of impacts, including that “The plan will be developed to limit barge-related effects on  
17       aquatic species. The plan will include provisions to minimize or reduce effects on aquatic  
18       species.” (MMRP p. 3-25). However, as the Appellants have asserted, this mitigation measure  
19       does not demonstrate avoidance or reduction of impacts to recreational land uses in the Delta.

20  
21       SCDA states that AMM7 “...will contain no measures to mitigate *any* impacts on marine  
22       or road traffic, or on recreation” ([SCDA](#) Supplemental Responses, p. 9). For marine impacts, the  
23       Department states under AMM7 that “The barge operations plan will be part of a comprehensive  
24       traffic control plan coordinated with the Coast Guard for large channels” (WaterFix MMRP,  
25       [C DRAFT 000002](#), pp. 3-24 through pp. 3-25). Given the Coast Guard’s authority over marine  
26       and commercial traffic and the Department’s commitment under Mitigation Measure TRANS-1a  
27       ([WaterFix MMRP](#), pp. 2-86 through 2-90) this addresses the assertion on marine traffic impacts.

28  
29       In its supplemental response to Council questions, SCDA again asserts that AMM7 will  
30       not adequately reduce roadway traffic and cites Final EIR/EIS Appendix 3B, pp. 30 and 107  
31       ([D.1 DRAFT 000024](#)). These sections of the Final EIR/EIS describe the barge operations plan,  
32       and the Department does not list AMM7 as focused on roadway traffic. Instead, the Department  
33       cites transportation mitigation measures that it will implement to reduce impacts to roadway  
34       traffic, including TRANS-1a, TRANS-1b, TRANS-1c, TRANS-2a, TRANS-2b, and TRANS-2c  
35       ([DWR DP P2](#), p. 19). Similarly, for recreation, the Department does not state that AMM7 is  
36       intended to address impacts to recreation, and instead has included mitigation measures such  
37       as TRANS-1a (discussed above) that would include commitments to working with local partners  
38       to avoid or reduce impacts to traffic, including in-water traffic such as boating.

39  
40       SCDA also cites the Final EIR/EIS and states that the Department has incorrectly  
41       characterized the height of the Rio Vista Bridge on State Route 12 ([SCDA](#) Supplemental  
42       Responses, p. 9). SCDA further asserts that the combination of this error with the increase in  
43       barge operations during project construction will result in negative traffic impacts ([SCDA](#)  
44       Response, p. 11). SCDA offers support for this assertion by questioning the evidence submitted  
45       by the Department, and cites the SWRCB hearing testimony of Chris Kinzel ([SCDA-100](#)). In his  
46       testimony, Mr. Kinzel cites a 2012 report on the Highway 12 corridor and states that the height  
47       of the closed Rio Vista Bridge is “18 feet above ordinary high tide” ([SCDA-107](#), p. 50). In the  
48       Final EIR/EIS, the Department states that “There is 135 feet of open air clearance at the Antioch  
49       UPRR bridge and 144 feet at the Rio Vista bridge, and additional raising of draw bridges in the  
50       study area would not be required.” (Final EIR/EIS, p. 19-232.) In its certification the Department  
51       does not cite evidence that addresses this discrepancy or provide evidence that barges can or



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cannot pass under the Rio Vista Bridge without raising the bridge, thereby impacting traffic and access to recreational land uses. Therefore, on the issue of increased bridge openings that create traffic impacts on recreation, the Department has not provided substantial evidence that it has avoided or reduced conflicts with recreation land uses to the degree feasible.

### ii. Conclusion Regarding Parks and Recreation Impacts

Appellants assert that the project will conflict with existing recreational uses, including marinas and recreational boating, parks and recreational areas, and public recreation access (such as bank fishing). The Certification cites evidence in the record showing the manner in which the Department has acknowledged the project's conflicts with existing parks and recreation uses (including marinas, public recreation and nature areas including bank fishing, visitor-serving businesses, and recreational boating areas), and identifies feasible measures to reduce some, but not all, of the conflicts with parks and recreation uses identified by Appellants. Although the Department also cites evidence that construction traffic and barge operations plans will be prepared to minimize disturbance to aquatic species, it does not allege that these measures are intended to reduce impacts on marinas or other recreational boating uses. Therefore, the Department has not provided substantial evidence that mitigation measures which address invasive species control, lost bank fishing access, and a barge operations plan will reduce impacts on recreational boating use or roadway traffic to recreational uses in a manner that will reduce conflicts with recreational uses to the extent feasible. Therefore, the Department's Certification of Consistency with DP P2 related to conflicts with existing Delta parks and recreation land uses *is not supported* by substantial evidence in the record.

### e. Conflicts With Existing Uses – Impacts on Visual and Aesthetic Character

#### i. Appeals & Certification - Impacts on Visual and Aesthetic Character

The Appellants state the following:

- 1) The project would result in significant and unavoidable impacts to scenic highways in the Delta. Project Mitigation Measures AES-1a, AES-1c, and AES-1e fail to avoid or reduce these impacts to the extent feasible. (North Delta Cares, [Appeal Letter](#), p.7)
- 2) The project would result in significant and unavoidable daytime and nighttime light and glare impacts. Project Mitigation Measure AES-4A fails to avoid or reduce this impact to the extent feasible. (North Delta Cares, [Appeal Letter](#), p.7)
- 3) The project would result in unmitigated cumulatively considerable effects on scenic vistas and scenic highways due to temporary and permanent conversion of agricultural land to nonagricultural uses. (North Delta Cares, [Appeal Letter](#), p. 7-8)
- 4) The project would introduce adverse unavoidable aesthetic impacts to boaters, users of scenic Highway 160, the Locke Historic District, and the historic character of the area. (SCDA, p.9; [SCDA spk-2008-00861 comments Save the California Delta Alliance as submitted](#), p. 11-12).

North Delta Cares cites the Draft SEIR/EIS which describes project impacts on Aesthetic and Visual Resources in Chapter 17 (Aesthetics and Visual) of the Final EIR/EIS that are significant and unavoidable (North Delta Cares, [Appeal Letter](#), pp. 6-8). While the Council's

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analysis of the Department's Certification of Consistency does not rely on the Draft SEIR/EIS,<sup>37</sup> Chapter 17 of the Final EIR/EIS contains similar conclusions for *Impact AES-1*, *Impact AES-2*, *Impact AES-3*, *Impact AES-4*, and *Impact AES-6*, which is that the project would result in significant and unavoidable impacts on the existing visual quality, character, and public views in the study area ([Final EIR/EIS, Ch. 17](#), pp. 17-320 through 17-326).

Appellant SCDA asserts that the project would impact aesthetic character and recreation due to placement of Reusable Tunnel Material (RTM) on Bouldin Island and near Potato Slough. In support of this assertion, SCDA cites the Draft SEIR/EIS ([SCDA Response to Supplemental Questions](#), p. 27). In its Written Statement submitted on October 15, 2018, the Department summarizes the potential impacts of the reconfiguration of RTM locations on Bouldin Island, as described in the Draft Supplemental EIR/EIS as not resulting in significantly different impacts than those identified in the 2017 certified Final EIR (Department's [October 15, 2018 Written Statement](#), pp. 77). However, these assertions are based on potential impacts that are not part of the project before the Council as part of the covered action.<sup>38</sup>

The Department cites evidence in the record regarding project refinements made between 2013-2015, which included elimination of pumping plants in the North Delta, elimination of power lines, and changing sediment basins from cement to earthen-lined, among other actions in support of its finding of consistency with DP P2 ([DWR DP P2, p. 3-4](#)).

The Department acknowledges that despite these actions to avoid or reduce impacts, project impacts on aesthetic and visual resources would remain in some areas. These impacts are described in Chapter 17 of the Final EIR/EIS ([DWR DP P2, p. 14](#)). For example, the Final EIR/EIS describes impacts due to project light or glare from construction that could affect daytime or nighttime public views in the area ([Final EIR/EIS, Ch. 17](#), p. 17-324).

The Department identifies specific Avoidance and Minimization Measures, Environmental Commitments, and Mitigation Measures (AMM/EC/MMs) in the Mitigation Monitoring and Reporting Program (MMRP) for the Final EIR/EIS and Other Commitments that would reduce or minimize adverse effects on visual resources ([DWR DP P2, pp. 14, 21](#)). The mitigation measures are AES-1a, AES-1b, AES-1c, AES-1d, AES-1e, AES-1f, AES-1g, AES-4a, AES-4b, AES-4c and AES-4d. ([Final EIR/EIS MMRP](#), pp. 2-52 through 2-66.) These mitigation measures are summarized below.

- **AES-1b: Install Visual Barriers between Construction Work Areas and Sensitive Receptors.** The Department will install temporary visual barriers at construction sites that are visible from sensitive receptors, such as homes, schools, and other locations.

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<sup>37</sup> It should be noted that North Delta CARES relies on the California WaterFix Draft SEIR/SEIS for evidence supporting this assertion. In this instance, to the extent that the Draft SEIR/SEIS describes impacts similar to those identified in the California WaterFix project Final EIR/EIS (i.e., does not modify the Final EIR/EIS conclusions), the Council relies on the Draft SEIR/SEIS to summarize those effects, noting that the Final EIR/EIS provides the substantial evidence in the record to support the Department's conclusion.

<sup>38</sup> Appellants assert that Mitigation Measures AES-1a, AES-1c, AES-1e and AES-1d identified in the Draft SEIR would not fully mitigate the adverse effects from the project including increased lighting impacts, permanent changes to regional landscapes visible from land or by boat, and impacts on scenic highways such as SR 160 ([SCDA Response to Supplemental Questions](#), p. 27). The approved project before the Council is described in the July 2017 Final EIR. Therefore, these assertions are not considered at this time.

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These barriers will be placed so that work areas that would degrade the existing visual quality are not visible. ([Final EIR/EIS MMRP](#), p. 2-54.)

- **RTM Area – AES-1c: Develop and Implement a Spoil/Borrow and Reusable Tunnel Material (RTM) Area Management Plan.** The Department will develop and implement a spoil/borrow and RTM area management plan to reduce impacts to existing visual quality or character. This will be done through remediation of terrain and revegetation. ([Final EIR/EIS MMRP](#), p. 2-55.)
- **Visual Impacts from Intakes – AES-1e: Apply Aesthetic Design Treatments to All Structures to the Extent Feasible.** The Department will use designs, where and to the extent feasible, that minimize the impact on existing visual quality and character in the study area, including at intake facilities, pumping plants, control structures, fish screens, operable barriers, and bridges. ([Final EIR/EIS MMRP](#), p. 2-58.)
- **Roadway and Riverfront Experience –**
  - **AES-1b: Install Visual Barriers between Construction Work Areas and Sensitive Receptors** ([Final EIR/EIS MMRP](#), pp. 2-53 through 2-54) (see above)
  - **AES-1e: Apply Aesthetic Design Treatments to All Structures to the Extent Feasible** ([Final EIR/EIS MMRP](#), p. 2-58) (see above)
  - **AES-1g: Implement Best Management Practices to Implement Project Landscaping Plan.** The Department will implement landscaping and use best management practices to restore and maintain character, reduce visual scale of impacts, and improve aesthetics. ([Final EIR/EIS MMRP](#), p. 2-61.)

The Department finds ([DWR DP P2](#), pp.14. 17-18) that these measures will reduce visual impacts through placement of temporary visual barriers, and use of aesthetic design where and to the extent feasible to minimize the impact on existing visual quality and character in the study area; realignment of SR 160 and landscaping of South River Road in a manner that visually ties the new alignment to the old alignment by implementing roadside landscaping (AES-1g); use of landscape treatments and best management practices as part of implementing the project landscaping plan to restore and maintain local character, quality aesthetics, and reduce the visual scale of the water conveyance elements. ([Final EIR/EIS MMRP](#) pp. 2-53 through 2-62)

- **Light and glare –**
  - **AES-4a: Limit Construction Outside of Daylight Hours within 0.25 Mile of Residents at the Intakes** ([Final EIR/EIS MMRP](#), p. 2-64)
  - **AES-4b: Minimize Fugitive Light from Portable Sources Used for Construction** ([Final EIR/EIS MMRP](#), p. 2-64)
  - **AES-4c: Install Visual Barriers along Access Routes, Where Necessary, to Prevent Light Spill from Truck Headlights toward Residences** ([Final EIR/EIS MMRP](#), p. 2-65)
  - **AES-4d: Avoid the Use of Blue Rich White Light LED Lighting** ([Final EIR/EIS MMRP](#), p. 2-66)

The Department finds that these mitigation measures will minimize the effect of nighttime construction light and glare on residences within 0.25 miles of the intake construction sites by limiting non-tunnel related surface construction past daylight hours, minimize the use of high-

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wattage lighting sources to operate in the dark, and minimize introduction of new nighttime light and glare sources in these areas, among other actions.

- **Boating and recreation -**

- **AES-1c: Develop and Implement a Spoil/Borrow and Reusable Tunnel Material (RTM) Area Management Plan** ([Final EIR/EIS MMRP](#), pp. 2-54 through 2-56). The Department further describes actions related to RTM sites and boating in the Final EIR/EIS (Final EIR/EIS, Document Code: [D.1 DRAFT 000121](#), p. 17-48).
- **AES-1e: Apply Aesthetic Design Treatments to All Structures to the Extent Feasible** ([Final EIR/EIS MMRP](#), pp. 2-57 through 2-59)
- **AES-1f: Locate Concrete Batch Plants and Fuel Stations Away from Sensitive Visual Resources and Receptors and Restore Sites upon Removal of Facilities** ([Final EIR/EIS MMRP](#), pp. 2-60 through 2-62)
- **AES-1g: Implement Best Management Practices to Implement Project Landscaping Plan** ([Final EIR/EIS MMRP](#), p. 2-61).

The Department finds that these mitigation measures and other commitments provide evidence that the Department will reduce or avoid visual impacts to boating and recreation, where applicable. The Department will develop and implement a spoil/borrow and RTM area management plan to reduce the extent of negative visual alteration of existing visual quality from water-based recreation viewers to the extent feasible. In addition, the Department will prepare a Recreation Opportunity Study that will “1) evaluate the effectiveness of mitigation measures at reducing impacts to the environment and if necessary, 2) identify and fund appropriate Recommendations” (3B.3.3., [Final EIR/EIS, APP 3B](#), 3B-79). The Department will also “ensure the posting of information regarding the maintenance of any in-water project facilities (e.g., intakes for the water conveyance facility) at nearby affected Delta marinas and public launch ramps” ([Final EIR/EIS MMRP](#), p.3-76).

### ii. Conclusion Regarding Impacts on Visual and Aesthetic Character

The Certification cites evidence in the record showing the manner in which the Department has acknowledged project conflicts with visual and aesthetic resources and identifies measures to reduce the conflicts identified by Appellants. Although aesthetic impacts will remain, the Department cites mitigation measures that will avoid or reduce impacts on existing visual quality and character in the project area to the extent feasible. Therefore, substantial evidence in the record *supports* the Department’s Certification of Consistency with DP P2 on the issue of conflicts with existing land uses due to impacts on the visual and aesthetic character of the Delta.

### f. Conflicts With Existing Uses – Impacts on Public Health and Hazards

The Appellants state the following:

- 1) The project does not avoid or reduce hazards to sensitive receptors from hazardous materials, natural gas accumulation, release of existing contaminants, and hazardous constituents present in Reusable Tunnel Material. Project Mitigation Measures HAZ-1A, HAZ-1B, UT-6a, UT-6c, and TRANS -1a fail to avoid or reduce this impact to the extent feasible. (North Delta Cares, [Appeal Letter](#), p. 11)



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- 2) The project does not avoid or reduce hazards to sensitive receptors related to a potential gas well or gas field explosion during construction of the conveyance facilities. (North Delta Cares, [Appeal Letter](#), p. 13)

Quoting portions of Chapter 24 (Hazards and Hazardous Materials) in the 2018 Draft SEIR/EIS, Appellant North Delta Cares describes potential hazards of the project including “routine use of hazardous materials (as defined by Title 22 CCR Division 4.5); natural gas accumulation in water conveyance tunnels; the inadvertent release of existing contaminants in soil, sediment, and groundwater, or release of hazardous materials from existing infrastructure; disturbance of electrical transmission lines; and hazardous constituents present in RTM. These impacts are considered significant, because the potential exists for substantial hazard to the public or environment to occur related to conveyance facility construction” (North Delta Cares, [Appeal Letter](#), p. 11). Appellant North Delta Cares also cites a portion of the Draft SEIR/EIS that lists the mitigation measures and environmental commitments identified in the Final EIR/EIS that “would reduce these impacts to a less-than-significant levels” (from Draft SEIR/EIS, Pg. 24-6, L 3-13, North Delta Cares, [Appeal Letter](#), p. 11).

Appellant North Delta Cares states that although the Department has not identified any sensitive receptors within 0.25 miles of the construction site, Hood is located 0.25 miles from Project Intake 3 and 0.5 miles from Intake 5. In addition, Appellant North Delta Cares states that Clarksburg is across the Sacramento River and on the north edge of Intake 2 (North Delta Cares, [Appeal Letter](#), p. 11), asserting that the Department has “not identified sensitive receptors within .25 mile of the construction footprint” according to the Final EIR/EIS (Section 24.3.4.2) and, by extension, no impacts were found on sensitive receptors because, according to the Final EIR/EIS, “there are no schools, parks or hospitals located within 0.25 mile of the water conveyance facilities alignment. Therefore, no sensitive receptors would be exposed to hazardous materials, substances, or waste as a result of construction of the water conveyance facilities under the proposed project.” (North Delta Cares, [Appeal Letter](#), pp. 11-12.) Appellants do not cite any evidence in the record, however, that supports their assertion that the conclusions in the Final EIR/EIS are incorrect.

Appellants further assert that there is a “large number of gas wells and the gas field in the CA Waterfix tunnels alignment” which could introduce gas well and tunneling accidents (North Delta Cares, [Appeal Letter](#), p. 13). Appellants cite evidence described in a letter to Metropolitan Water District of Southern California (July 9, 2018)<sup>39</sup> showing *Gas Wells in the Construction Zone of the Tunnels’ Alignment* in Figure 13-1 in a 2015 Conceptual Engineering Report by the Department ([DWR-212](#)).

The Department’s Certification cites Final EIR/EIS Chapter 25 (Public Health), which “focuses on human health and safety issues that could be affected by implementation of the project, particularly with respect to water quality, waterborne illness, the habitat for disease-carrying vectors, and other issues” ([DWR DP P2, p.15](#)). The Department also cites Final EIR/EIS Chapter 28 (Environmental Justice), which analyzes “the potential for the project to cause disproportionately high and adverse human health or environmental effects on minority and low-income populations” ([DWR DP P2, p.15](#)).

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<sup>39</sup> The July 9, 2018 letter from North Delta Cares to Metropolitan Water District (MWD) was submitted by North Delta Cares as an attachment to its October 15, 2018 letter in response to a question in the Council’s September 28, 2018 Supplemental Notice asking how the MWD letter demonstrates that the project is inconsistent with DP P2 (Council, [Supplement to Notice of Public Hearing](#), pp. 11-12). Therefore, we take official notice of this document pursuant to Appeals Procedures (see [Exhibit B](#)).

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The Department also cites the Avoidance and Minimization Measures, Environmental Commitments, and Mitigation Measures (AMM/EC/MMs) within the Mitigation Monitoring and Reporting Program (MMRP) ([DWR DP P2](#), pp. 16-21). Of the 48 AMM/EC/MMs that the Department summarizes in the document supporting its Certification of Consistency, it identifies the following three mitigation measures and one environmental commitment that would reduce potential hazards and public health impacts raised by Appellants:

- **Mitigation Measure UT-6a:** *Verify locations of utility infrastructure.* “Before beginning construction, DWR will confirm utility/infrastructure locations through consultation with utility service providers, preconstruction field surveys, and services such as Underground Service Alert. The DWR will find the exact location of underground utilities by safe and acceptable means, including use of hand and modern techniques as well as customary types of equipment. Information regarding the size, color, and location of existing utilities must be confirmed before construction activities begin. DWR will confirm the specific location of all high priority utilities (i.e., pipelines carrying petroleum products, oxygen, chlorine, toxic or flammable gases; natural gas in pipelines greater than 6 inches in diameter, or with normal operating measures, greater than 60 pounds per square inch gauge; and underground electric supply lines, conductors, or cables that have a potential to ground more than 300 volts that do not have effectively grounded sheaths) and such locations will be highlighted on all construction drawings” ([Final EIR/EIS MMRP, p.2-98](#)).
- **Mitigation Measure UT-6c:** *Relocate utility infrastructure in a way that avoids or minimizes any effect on worker and public health and safety.* “While any excavation is open, DWR will protect, support, or remove underground utilities as necessary to safeguard employees. DWR and/or construction contractors will notify local fire departments if a gas utility is damaged causing a leak or suspected leak, or if damage to a utility results in a threat to public safety” ([Final EIR/EIS MMRP, p. 2-101](#)).
- **Environmental Commitment:** *Develop and Implement a Fire Prevention and Control Plan (MMRP 3-42).* “DWR will develop and implement a fire prevention and control plan in consultation with the appropriate fire suppression agencies to verify that the necessary fire prevention and response methods are included in the plan. The plan will include fire prevention and suppression measures, and will consider the policies and standards in the affected jurisdictions” ([Final EIR/EIS MMRP, p.3-43](#)).

The Department acknowledges potential hazards from oil and gas production and processing in the project area in Chapter 24 of the Final EIR/EIS, which states that “active oil and gas extraction fields are present throughout the Delta” ([Final EIR/EIS](#), Ch. 24, pp. 24-5). As stated in the Final EIR/EIS, California Occupational Safety and Health Act, “CCR Title 8, Division 1, Chapter 4, Subchapter 20, Sections 8400–8469 “Tunnel Safety Orders,” sets forth safety standards and provisions, intended to protect workers during tunneling operations. Section 8425, “Operation of Gassy and Extrahazardous Tunnels” identifies safety measures to ensure safe work in tunnels classified as “gassy” or “extrahazardous” by Cal-OSHA’s Mining and Tunneling Unit” ([Final EIR/EIS](#), Ch. 24, p. 24-22).

### ii. Conclusion Regarding Public Health and Hazards

The Certification cites evidence in the record showing the manner in which the Department has acknowledged the project’s conflicts with existing land uses due to impacts on public health and hazards, and identifies regulations and mitigation measures to reduce the



impacts identified by Appellants. Therefore, substantial evidence in the record *supports* the Department's Certification of Consistency with DP P2 on the issue of conflicts with existing land uses due to impacts on public health and hazards.

**g. Conflicts With Existing Uses – Impacts on Wastewater Discharge Facilities**

**i. Appeal & Certification - Impacts on Wastewater Discharge Facilities**

The Appellants state the following:

1. Project operations would impact water quality and the number and duration of low-flow and reverse flow periods in the Sacramento River at Freeport and increase operating costs for Regional San. As a result, in order to meet its National Pollution Discharge Elimination System (NPDES) permit obligations, the SRWTP would need to divert effluent to emergency storage basins for longer durations and in larger quantities than under existing conditions or the future No Action scenario described in the Final EIR/EIS for the project. Increased diversions of effluent to storage have significant cost impacts and reduce Regional San's operational flexibility. (Regional San [Appeal](#), pp. 8-11).
2. The North Delta Diversion structures have been characterized by the Department as "drinking water intakes." If this characterization were accepted by the Regional Water Quality Control Board (RWQCB), it could result in substantial additional capital costs and NPDES permit compliance challenges for Regional San. Due to the possible location of intakes within or near the edge of the current SRWTP human health mixing zone for the calculation of trihalomethane (THM) effluent limitations, the RWQCB may disallow the mixing zone, which would require Regional San to meet end-of-pipe THM effluent limitations. Regional San is engaged in an ongoing effort to design and construct capital facilities based on compliance with existing permit conditions. If Regional San's permit conditions were to change based on the effects of locating the proposed intakes near the mixing zone, Regional San would need to construct alternative facilities with additional capital and operational costs to ratepayers. (Regional San [Appeal](#), pp. 9-10). Appellants state there is no evidence in the record that it was infeasible to have sited the intakes in locations that would avoid impacts to Regional San operations after Regional San brought it the Department's attention in comment letters, and no evidence that the impacts to Regional San could be avoided or reduced through mitigation. (Regional San [Appeal](#), pp. 10-11)

Appellants assert that "There is no evidence in DWR's record that it was infeasible to have sited the Project intakes in locations that would avoid impacts to Regional San's operations, and no evidence that the impacts to Regional San from the approved Project locations could be mitigated. Not only did DWR fail to evaluate these impacts after Regional San brought them to DWR's attention in comments on the Project's various draft EIRs, but it also failed to adopt feasible mitigation to avoid or substantially lessen these impacts" ([Regional San, p.10-11](#)).

Appellants cite evidence in SWRCB hearing testimony provided by Ruben Robles, P.E. on how project operation "will alter the conditions of the Sacramento River at Freeport, such that Regional San will need to divert effluent to emergency storage basins for longer durations and in larger quantities than under existing conditions or the future No Action scenario presented by DWR in the Project's EIR... Increased diversions of effluent to storage have significant economic impacts and reduce operational flexibility" ([Regional San, p.9](#)).

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1 The Department's Certification cites evidence in the record consisting of a general  
2 description of a project Footprint Location Considerations analysis, which is documented in  
3 Final EIR/EIS, Appendix 3F, and included input from engineers and resource experts (DWR  
4 [DP P2](#), p. 4). Avoiding intake placement hydraulic conflicts with existing facilities was a "general  
5 consideration" for location refinements within that analysis, and the concluding recommendation  
6 to "locate the furthest upstream intake downstream of where complete mixing is reported to  
7 occur with effluent discharge from the Sacramento Regional Wastewater Treatment Facility"  
8 ([Final EIR/EIS, Appendix 3F, p. 3F-7, 3F-9, 3F-12](#)) further reflects consideration of avoiding  
9 impacts to the SRWTF. The Department states that an initial range of intake sites was  
10 developed by a Fish Facilities Technical Team (FFTT) whose members were tasked with  
11 evaluating a range of intake locations that would be optimal to achieve avoid effects on sensitive  
12 fish species (Department's [October 15, 2018 Written Statement](#), pp. 80). These initial intake  
13 locations and designs underwent an iterative vetting process to meet project goals and  
14 objectives, including intake diversion capacity, depth and length of the fish screens, sweeping  
15 velocities to protect sensitive fish species and allow for debris bypass, approach velocities, and  
16 potential impacts to agriculture and other adjacent land uses. ([Final EIR/EIS, Appendix 3F, p.](#)  
17 [3F-2](#)). Following the FFTT review, project footprint location considerations were analyzed by  
18 engineers and resource experts (EIR and Engineering Teams) as described in Appendix 3F to  
19 the Final EIR/EIS ([DWR DP P2, p.4](#)). Twelve possible intake sites were identified as potentially  
20 suitable locations. The potential sites were then further screened by the Department based on  
21 site visits, scoping comments, and land use considerations. In developing proposed sites for the  
22 intakes, a set of 11 "general considerations" was used. Among these considerations was to  
23 "Avoid placing intakes where hydraulic conflicts with existing facilities could occur." ([Final](#)  
24 [EIR/EIS, Appendix 3F, p. 3F-9](#))

25  
26 Intake sites were then compared using four criteria, one of which was "Impact to existing  
27 structures, businesses, historical interests and current use of the land" ([Final EIR/EIS, Appendix](#)  
28 [3F, p. 3F-11](#)). Three intakes were selected for analysis as part of the proposed project (intakes  
29 2,3, and 5) after considering the higher costs of alternatives, impacts to sandhill cranes,  
30 proximity to the intermediate forebay, and the opportunity to avoid direct impact to structures in  
31 Hood ([Final EIR/EIS, Appendix 3F, p. 3F-15](#)).

32  
33 In its October 15, 2018 Written Statement, the Department describes numerous  
34 modifications to the originally proposed configuration of intake sites specifically to avoid conflicts  
35 with Regional San's treatment facility, including eliminating a proposed intake near Regional  
36 San's facility. (Department's [October 15, 2018 Written Statement](#), p. 81). With regard to  
37 allegations concerning impacts to Regional San's treatment facility, the Department offers  
38 testimony of Dr. Chandra Chilmakuri before the SWRCB with respect to potential for increase in  
39 salinity. Dr. Chilmakuri's testimony challenges testimony of Dr. Susan Paulsen also offered to  
40 the SWRCB regarding potential salinity increases supporting Regional San's appeal. This  
41 testimony indicates that modeling of flow conditions under California WaterFix Operational  
42 Scenario H3+ (CWF H3+) shows that salinity would not change relative to the No Action  
43 Alternative. (DWR-1217 ([X.2 DRAFT 000168](#) pp. 15-16.)

44 Appellant Regional San's Written Statement submitted October 15, 2018 presents a  
45 supplemental expert report by Dr. Susan Paulsen and Dr. Aaron Mead of Exponent, rebutting  
46 the Department's evidence (Regional San [Written Statement October 15, 2018](#), p.3), for which  
47 Regional San has requested official notice. However, the Exponent report is dated October 15,  
48 2018, and thus was not before the Department at the time it made its Certification and,  
49 therefore, is not part of the record. For this reason, the Council does not consider the Exponent  
50 report in these proceedings (see [Exhibit C](#)).

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1 The Final EIR/EIS discusses impacts of seven alternative locations of new intakes in  
2 various configurations across 18 alternatives. In the CEQA Findings of Fact, the Department  
3 described the considerations listed above during the alternative selection process. The Findings  
4 of Fact also describe why all of the other project alternatives (which included various alternative  
5 configurations of intake sites) are infeasible. ([C\\_DRAFT 000001](#) pp. 2-3, 49-83, 106-118.)

6 Therefore, substantial evidence exists within the record to support the Department's  
7 Certification of Consistency for this issue.

8 The Department identifies Avoidance and Minimization Measures, Environmental  
9 Commitments, and Mitigation Measures (AMM/EC/MMs) within the Mitigation Monitoring and  
10 Reporting Program (MMRP), as well as Other Commitments ([Final EIR/EIS, Appendix 3B](#)), that  
11 relate to reducing water quality impacts. One of these actions is *Other Commitment: Assist  
12 Water Purveyors in Developing Methods to Reduce Potential Water Quality Effects*. This Other  
13 Commitment states that "The project proponents commit to assisting in-Delta municipal,  
14 industrial, and agricultural water purveyors that will be subject to significant unavoidable water  
15 quality effects from operation of the water conveyance facilities and effects on dissolved organic  
16 carbon (DOC) due to habitat restoration activities" (DWR DP P2, p. 21). The assistance "is  
17 intended to fully offset any increased treatment or delivery costs attributable to the water  
18 conveyance facilities, or for DOC attributable to habitat restoration activities and may take the  
19 form of financial contributions, technical contributions, or partnerships" ([Final EIR/EIS, APP 3B](#),  
20 3B-76). Regional San is not a water purveyor, however, so this Other Commitment would not  
21 apply to reduce the impacts that Appellants have raised.

### 22 23 **ii. Conclusion Regarding Conflicts With Wastewater Discharge Facilities**

24  
25 The Certification and the Department's October 15, 2018 Written Statement cite  
26 evidence in the record that other intake sites that would have avoided water quality conflicts  
27 were considered and rejected as infeasible. Therefore, substantial evidence in the record  
28 supports the Department's Certification of Consistency with DP P2 on the issue of conflicts with  
29 existing wastewater discharge facilities.

### 30 31 **h. Conflicts With Existing Uses – Traffic Impacts**

#### 32 33 **i. Appeals & Certification - Traffic Impacts**

34  
35 Appellants San Joaquin and SCDA assert that the Department has not provided  
36 substantial evidence demonstrating avoidance, or the infeasibility of avoidance, of traffic  
37 impacts. San Joaquin makes two main assertions: first that traffic will impact daily life and harm  
38 economic interests in the Delta ([San Joaquin Appeal Letter](#), p. 65 [citing [LAND-205](#), p. 9]) and,  
39 second, that increased traffic will impact the physical condition of Delta roads (San Joaquin  
40 Appeal Letter, p. 66). SCDA asserts that WaterFix will result in negative traffic impacts due to  
41 barge-caused bridge openings that are not captured in the Department's analysis ([SCDA  
42 Response](#), p. 11).

43  
44 Specifically, San Joaquin County and SCDA state the following:

- 45  
46 1) The project would result in significant and unavoidable impacts resulting from  
47 construction traffic increases. Proposed mitigation fails to avoid or reduce these impacts  
48 to the extent feasible. Mitigation is not mandatory, is unfunded, and focuses only on the  
49 worst road segments rather than a Delta-wide approach. ([San Joaquin County](#), p. 66)

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- 2) Construction traffic would also have an impact on the physical conditions of Delta roads, leading to degradation over time due to higher traffic volumes, which would ultimately restrict movement throughout the Delta. ([San Joaquin County](#), p. 66)
- 3) The project fails to identify and avoid or reduce construction traffic impacts to all affected San Joaquin County, Sacramento County, and Yolo County road segments, including some critically important segments. The analysis also failed to address many critical aspects of likely adverse impacts. ([San Joaquin County](#), p. 5; Sac County [DSC CWF appeal with attachments](#), p. 9)
- 4) The project fails to identify and avoid or reduce construction traffic impacts to transportation infrastructure projects in San Joaquin County. ([San Joaquin County](#), p. 67)
- 5) Construction traffic is expected to increase on parts of Twin Cities Road (by 2.5 to 4 times) and River Road (by 4.3 to 11 times) depending on the time of day. Other routes into and out of the North Delta could be overwhelmed by traffic during the construction period. Ten years of truck and other construction related traffic on other road segments throughout the North Delta would make farming the area impossible. ([San Joaquin County](#), p. 65)
- 6) Increased traffic throughout the Delta would affect the agricultural chain of production by disrupting movement of resources, employees, and crops. 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, distribution and processing firms will look outside the Delta for business. Delta crops have specific delivery windows; if they are not met, entire shipments could be lost. ([San Joaquin County](#), pp. 65-66)
- 7) The project would endanger the lives of Delta residents by preventing timely responses of local emergency responders. ([San Joaquin County](#), p. 66.)
- 8) The project fails to accurately capture traffic impacts from barge operations and bridge openings, due to an error in representing bridge heights and clearance for barges at bridges at Rio Vista State Route 12 bridge, Mokelumne State Route 12 bridge, and a bridge on State Route 12 across Potato Slough at Terminous. ([SCDA Response](#), p. 11)

The Department cites evidence in the record that describes the effects of the project due to construction traffic ([Detailed Findings for DP P2](#), p. 14; [Final EIR/EIS, Chapter 19](#), section 19.3.3.2, and [Appendix 19A](#)). This evidence describes the Department's analysis of traffic impacts and associated mitigation measures. Specifically, the Department analyzes traffic and concluded that traffic impacts and impacts to roadway surfaces would increase for all alternatives in the Final EIR/EIS including the No Action Alternative ([Final EIR/EIS, Chapter 19](#), p. 19-1). The Department has adopted and incorporated into the project the following mitigation measures relevant to traffic impacts ([DWR DP P2](#), p. 19):

- **TRANS-1a: Implement Site-Specific Construction Traffic Management Plan**
- **TRANS-1b: Limit Hours or Amount of Construction Activity on Congested Roadway Segments**
- **TRANS-1c: Make Good Faith Efforts to Enter into Mitigation Agreements to Enhance Capacity of Congested Roadway Segments**



- 1 • **TRANS-2a: Prohibit Construction Activity on Physically Deficient Roadway**
- 2 **Segments**
- 3 • **TRANS-2b: Limit Construction Cctivity on Physically Deficient Roadway Segments**
- 4 (when TRANS-2a is not feasible)
- 5 • **TRANS-2c: Improve Physical Condition of Affected Roadway Segments as**
- 6 **Stipulated in Mitigation Agreements or Encroachment Permits**
- 7

8 San Joaquin asserts that construction traffic is expected to increase on parts of Twin  
9 Cities Road (by 2.5 to 4 times) and River Road (by 4.3 to 11 times) depending on the time of  
10 day. San Joaquin cites the [Final EIR/EIS](#) (pp. 19-210 and 19-215) in support of this assertion.  
11 This section of the Final EIR/EIS is a table that lists level of service (LOS) and traffic conditions  
12 for various road segments. San Joaquin also asserts that other routes into and out of the North  
13 Delta could be affected by traffic during the construction period and that “Ten years of truck and  
14 other construction related traffic on other road segments throughout the North Delta would make  
15 farming the area impossible.” ([San Joaquin County](#), p.65)

16  
17 San Joaquin also asserts that increased traffic throughout the Delta would affect the  
18 “agricultural chain of production by disrupting movement of resources, employees, and crops.”  
19 (San Joaquin, p. 65 [citing LAND-130, [SDWA-141](#), [DPC Economic Sustainability Plan](#)].)  
20 Appellant also asserts that traffic and road damage from construction equipment affects the  
21 farm-to-market process. ([San Joaquin County](#), pp. 65-66.)

22  
23 In its Certification, the Department cites Final EIR/EIS Chapter 19 (Transportation), and  
24 specifically to section 19.3.3.2. This section of the Final EIR/EIS is a description of traffic  
25 impacts for Alternative 1, however, and not Alternative 4A (WaterFix). Accordingly, the Council  
26 has considered and discussed Section 19.3.4.2, below, which describes the impacts of  
27 WaterFix. In Section 19.3.4.2, the Final EIR/EIS states:

28  
29 *“Alternative 4A would therefore exacerbate an already unacceptable LOS under BPBG*  
30 *[Baseline Plus Background Growth Plus Project (BPBGPP)<sup>40</sup>] conditions on 15 roadway*  
31 *segments (38 minus the 23 that would already be operating at an unacceptable LOS*  
32 *under BPBG conditions). The effect of increased traffic volumes in excess of LOS*  
33 *thresholds would be adverse..... Mitigation Measures TRANS-1a through TRANS-1c are*  
34 *available to reduce this effect, but not necessarily to a level that would not be adverse,*  
35 *as the project proponents are not solely responsible for the timing, nature, or complete*  
36 *funding of required improvements.”* (Final EIR/EIS, p. 19-357)

37  
38 With regard to impacts on the physical condition of roadways, the Final EIR/EIS states:

39  
40 *“Damage to roadway pavement is also expected throughout the study area on various*  
41 *local and state roads, as well as on a few interstates. The effect of roadway damage in*  
42 *excess of PCI [Pavement Condition Index] thresholds would be adverse..... Mitigation*  
43 *Measures TRANS-2a through TRANS-2c are available to reduce this effect, but not*  
44 *necessarily to a level that would not be adverse, as the project proponents cannot*

---

<sup>40</sup> Baseline Plus Background Growth Plus Project (BPBGPP) uses the year 2009 as the baseline, and includes the change in traffic anticipated to occur to occur regardless of WaterFix, plus change in traffic as a result of construction of the project. The methodology assumes a construction period of 14 years, with different activities taking place at different times during this period.

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1        *ensure that the agreements or encroachment permits will be obtained from the relevant*  
2        *transportation agencies.” (Final EIR/EIS, p. 19-358)*  
3

4        In both cases, the Department has provided evidence that mitigation measures identified  
5        in the Final EIR/EIS and adopted and incorporated into the project would reduce the impact  
6        from what it otherwise would be. In addition, the Department commits to “Schedule construction  
7        traffic to minimize impacts to agricultural transportation operations between agricultural areas  
8        and processing or marketing facilities during harvest season.” (Final EIR/EIS, p. 19-220).  
9        However, the impacts to traffic and roadway surfaces would remain significant and unavoidable.

10  
11        The Commission comments that there is no mitigation for indirect project impacts and,  
12        as an example, describes the traffic volume increases that Scribner Bend Vineyards near  
13        Clarksburg and historic houses along State Route 160 between Walnut Grove Bridge and A  
14        Street in Isleton are expected to experience (Delta Protection Commission, [October 16, 2018](#)  
15        [Written Statement](#), p.8).  
16

17        San Joaquin also asserts that the project would endanger the lives of Delta residents by  
18        preventing timely responses of local emergency responders ([San Joaquin County](#), p. 66). This  
19        assertion is based on the testimony of David Robinson before the SWRCB and cited by San  
20        Joaquin ([LAND-188](#)). In his testimony, Mr. Robinson, who is a volunteer firefighter, states that:

21  
22        *“When a roadside incident occurs in the Delta, traveling to the location is difficult for*  
23        *emergency responders. Those involved will like be unable to clear the road, given the*  
24        *lack of shoulders on levee roads to pull off on. The vehicles behind the accident would*  
25        *not be able to pull around the incident because of the narrow width of the roads and*  
26        *oncoming traffic. If the incident blocks both lanes, oncoming traffic would be stuck as*  
27        *well. This creates a gridlock scenario with little room and considerable delays for*  
28        *emergency responders.”* ([LAND-188](#), p. 3)  
29

30        In addition, the Commission comments that Delta Plan PEIR Mitigation Measure 17-1 requires  
31        mitigation for impacts to emergency response routes for both land and water access. The  
32        Commission comments that the Department’s methodology for determining emergency  
33        response impacts does not include potential impacts on water-based emergency response,  
34        including law enforcement and flood emergencies (Delta Protection Commission, [October 16,](#)  
35        [2018 Written Statement](#), p.11). The evidence supporting this comment is in Chapter 19  
36        (Transportation) of the Final EIR/EIS. The impact analysis for emergency services in Chapter 19  
37        includes “Interfere with emergency management and evacuation routes. For the purposes of  
38        this analysis, an increase in the amount of trucks using the transportation system in the study  
39        area is defined as a potential interference with emergency services” ([Final EIR/EIS, Chapter 19,](#)  
40        p.19-39). However, WaterFix Mitigation Measure TRANS-1a, discussed below, involves  
41        development of plans to address such impacts.  
42

43        In its Certification, the Department cites Chapter 20 (Public Services and Utilities) of the  
44        Final EIR/EIS, which “analyzes how public services and utilities will be affected by construction,  
45        operations, and maintenance of the project.” ([DWR DP P2](#), p. 15). In this case, “public services  
46        and utilities” includes such emergency services as fire protection, emergency response, and law  
47        enforcement (*Ibid.*). The Final EIR/EIS also includes the following mitigation measures, which  
48        were adopted and incorporated into the project, to address such impacts:  
49

- 50        • **Mitigation Measure TRANS-1a: Implement Site-Specific Construction Traffic**  
51        **Management Plan.** This mitigation measure will involve contracting with a construction



management firm(s) prior to construction to “assist in ensuring that construction contractors’ crews and schedules are coordinated and that the plans and specifications are being followed.” The plans must also be developed in coordination with relevant transportation stakeholders, including Caltrans, local agencies (including emergency responders), transit providers, rail operators, the U.S. Coast Guard, city and county parks departments, and the California Department of Parks and Recreation) (Final EIR/EIS, p. 19-218; [WaterFix MMRP](#), pp. 2-86 through 2-90).

- **Mitigation Measure TRANS-1c: Make Good Faith Efforts to Enter into Mitigation Agreements to Enhance Capacity of Congested Roadway Segments.** The Department has developed Mitigation Measure TRANS-1c in response to Impact TRANS-3: *Increase in Safety Hazards, Including Interference with Emergency Routes during Construction*. Mitigation Measure TRANS-1c would require the Department to, prior to construction, make a “good faith effort” to develop mitigation agreements with affected state, regional, or local agencies. These mitigation agreements would focus on verification of the location, timing, and extent, and cost share to be paid for reducing congestion for select roadway segments (Final EIR/EIS, p. 19-221).

The Department has cited to evidence of how it would work to avoid or reduce impacts to emergency services prior to construction of the project.

SCDA asserts that the Department made an error when analyzing the impact of barge operations on roadway traffic ([SCDA Response](#), p. 11). SCDA asserts that the Department mischaracterized the height of the Rio Vista Bridge as 144 feet, when in fact it is 18 feet (when in the operable roadway position) and that the frequency that other bridges may be required to be opened along potential barge routes (*Ibid.*). In support of these assertions SCDA cites the SWRCB hearing testimony of Chris Kinzel. ([SCDA-100.](#)) In this testimony, Mr. Kinzel asserts that the Rio Vista Bridge, Mokelumne State Route 12 bridge, and a bridge on State Route 12 across Potato Slough at Terminous will need to be raised more frequently than stated by the Department. In his testimony, Mr. Kinzel sites to a 2012 report on the Highway 12 corridor and states that the height of the closed Rio Vista Bridge is “18 feet above ordinary high tide.” ([SCDA-107](#), p. 50.) The Department provides no evidence in the record that addresses the potential impact, if any, on traffic due to a lower Rio Vista Bridge height. Therefore, on this issue the Department has not provided substantial evidence that it has avoided or reduced traffic impacts to the degree feasible. Therefore, substantial evidence does not support the Department’s Certification of Consistency related to this issue.

## ii. Conclusion Regarding Traffic Impacts

The Department’s certification cites evidence in the record that describes the effects of the project on and due to traffic ([DWR DP P2](#), p. 14; [Final EIR/EIS, Chapter 19](#), section 19.3.3.2 and [Appendix 19A \[Bay Delta Conservation Plan Construction Traffic Impact Analysis\]](#)). The documents cited by the Department show that the project will result in increased traffic and reduced levels of service along several roadway segments. The Department has also cited to mitigation measures that would reduce the traffic impacts of the project. While Appellants cite additional evidence from the Water Board change in point of diversion hearing that illustrate the impacts described. In most cases, however, San Joaquin and SCDA have not specified how the Department has failed to avoid or reduce impacts, or that additional reduction in impacts is feasible, other than by moving the location of the intakes, reusable tunnel material, and other infrastructure sites. An exception is the issue of traffic impacts due to an incorrect representation of the Rio Vista Bridge height when in the operable roadway position. For this

matter, the Department has not cited to evidence in the record that demonstrates that this impact was adequately considered, and therefore whether it would be avoided or reduced to the extent feasible. Therefore, the Department's Certification of Consistency with DP P2 on the issue of conflicts to existing land uses due to traffic impacts is not supported by substantial evidence in the record.

**i. Conflicts With Existing Uses – Impacts on Agriculture**

**i. Appeal & Certification - Impacts on Agriculture**

The Appellants state the following:

- 1) The project would result in significant and unavoidable impacts from temporary conversion of 1,495 acres of Important Farmland, permanent conversion of 3,909 acres of Important Farmland, and permanent conversion of 2,035 acres of land subject to Williamson Act contracts to other uses. Proposed mitigation fails to avoid or reduce these impacts to the extent feasible. ([San Joaquin](#), p. 68)
- 2) The project would create additional indirect but adverse impacts to Important Farmland from disruption of drainage and irrigation facilities during construction, and through changes to groundwater elevation in localized areas. ([Sac County](#), pp. 9-10)
- 3) The project would be inconsistent with county general plans that value and protect Delta agricultural resources and recognize that agriculture is the foundation of the Delta economy. ([San Joaquin](#), p. 68)
- 4) Temporary conversion of farmland would last for more than a decade, causing lasting harm to agricultural parcels. Delta fruit crops take years to bring into production; temporary use of existing orchards for project construction would delay their productive use beyond the project construction period. ([San Joaquin](#), p. 68)
- 5) Construction of intakes for the project near legacy communities in Sacramento County would permanently convert 270 acres of agricultural land. Proposed mitigation fails to avoid or reduce this impact. ([Sac County](#), p. 7)
  - a. Testimony provided by Chrisandra Flores, Chief Deputy Agricultural Commissioner for Sacramento County at the SWRCB hearing cites additional permanent impacts to agricultural lands and the local economy by proposed project changes. These impact changes include placement of Reusable Tunnel Material (RTM) that would impact an additional 44 acres of Important Farmland and 119 acres of land in Williamson Act contracts with resulting losses in agricultural revenues, job losses, and incomes (Sac County [DSC CWF appeal with attachments](#), pp. 42-45).
  - b. Testimony provided by Sacramento County Agricultural Commissioner Julie Jensen at the SWRCB hearing cites additional evidence of project construction impacts on lost agricultural revenues, jobs, and incomes. Potential permanent impacts on small and medium agricultural operations from construction traffic related disruption. Degradation of water quality and potential economic challenges of re-entering into Williamson Act contracts (Sac County [DSC CWF appeal with attachments](#), pp. 32-37).

- 6) 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. ([San Joaquin](#) , p. 66)
- 7) Salinity increases in the regional water supply would affect agricultural production ([San Joaquin](#), p.68).

A number of Appellants note that the loss of agriculture would affect other community land uses (SCDA Responses, p. 16) such as recreation through agri-tourism and off-farm parts of the agricultural production chain ([San Joaquin](#), p. 65). As the Commission commented, “[t]he foundation of the Delta’s agricultural economy is its productive farmland” (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.13). Because of this, agricultural land loss would create land use conflict beyond the farms themselves in the community and under the policy, the Department is required to reduce or avoid those conflicts where feasible. Our determination on community land-use conflicts was treated in a previous section.

Appellants contend that adopted mitigation fails to avoid or reduce these impacts to the extent feasible ([San Joaquin](#), p. 68). Appellants assert that the footprint of the project and its inconsistency with agricultural uses create impacts that conflict with existing agricultural operations ([San Joaquin](#), p. 68, [Sac County](#), p. 9). Appellants contend that while the Department characterizes the loss of some agricultural lands as temporary ([DWR DP P2](#), pp. 11-13), such temporary loss would likely cause permanent damage ([Sac County](#), Jensen testimony, p.14-4 line 26, p.14-5 lines 20-27). Additionally, salinity increases attributable to the project could degrade water quality and result in millions of dollars of economic losses on an annual basis ([San Joaquin](#), p. 68).

The Department cites evidence in the record showing that since 2006, a multi-agency public process has incorporated input from various agencies, stakeholders, independent scientists, and the public that included “extensive analysis of potential conflicts with local uses, including input from local and regional entities and local landowners and users of Delta resources. While it is inevitable that any project of the import and magnitude of California WaterFix will have an impact on local land uses, significant changes have been made during the planning process to reduce such impacts” ([DWR DP P2](#), p.2) In addition, the Department cites evidence in the record regarding refinements to the project made between 2013-2015 that resulted in fewer acres of agricultural land being impacted ([DWR DP P2](#), p. 4). As part of these refinements to the proposed project, the total area of agricultural lands impacted by the project was reduced from 6,105 acres to 4,890 acres as of the 2014 refinements, which is a reduction of 1,215 acres of agricultural impact (Project Refinements Table, [DWR DP P2](#), p. 3-4).

In its Certification of Consistency, the Department acknowledges that the project would have significant impacts to agricultural land in the Delta, as described in Chapter 14 (Agricultural Resources) of the Final EIR/EIS ([DWR DP P2](#), p. 11). The California WaterFix project would result in significant and unavoidable impacts from temporary conversion of 1,495 acres of Important Farmland, permanent conversion of 3,909 acres of Important Farmland, and permanent conversion of 2,035 acres of land subject to Williamson Act contracts to other uses ([DWR DP P2](#), p. 12).

In addition, the Department describes *Mitigation Measure AG-1: Develop an Agricultural Land Stewardship Plan (ALSP) to Maintain Agricultural Productivity and Mitigate for Loss of Important Farmland and Land Subject to Williamson Act Contracts or in Farmland Security Zones*, which will reduce the nature, duration, and permanence of the impacts ([DWR DP P2](#), p. 12). The ALSPs in Mitigation Measure AG-1 are described as voluntary agreements between the project proponents, land owners, counties and local agencies, and federal agencies ([Final EIR/EIS](#), Ch. 14, p. 14-40). The Final EIR/EIS states that the ALSPs will be developed prior to the commencement of any construction activities or other physical activities that would involve impacts on Important Farmland or land subject to Williamson Act contracts or in Farmland Security Zones ([Final EIR/EIS](#), Ch. 14, p. 14-40). As described in the Final EIR/EIS, these ALSPs are a mechanism for addressing site-specific impacts from the project ([Final EIR/EIS, Ch. 14](#)). The Department states that through the ALSPs it “will ensure implementation of such activities as siting project footprints to encourage continued agricultural production; relocating or replacing agricultural infrastructure in support of continued agricultural activities; engaging counties, owners/operators, and other stakeholders in developing optional agricultural stewardship approaches; and preserving agricultural land through off-site easements or other agricultural land conservation interests” ([DWR DP P2](#), p. 12). If voluntary agreements cannot be reached, project proponents will implement conventional agricultural mitigation measures. Additional aspects of the ALSP are described in the following three sub-measures (Final EIR/EIS [MMRP, p. 2-41](#)).

- **AG-1a: Promote agricultural productivity of Important Farmland** – This measure commits project proponents to several specific activities. First, project proponents identify impacted lands through consultation with farmers, local and federal agencies and consider if the project is consistent with land use plans ([Final EIR/EIS, Ch. 14, p. 14-40 to 14-41](#)). Second, project proponents in consultation with local agencies, landowners, and federal agencies, perform analysis to develop site-specific activities to avoid conflicts which include reducing the footprint of the project or identifying parcels for the footprint of the project that would minimize impacts on agricultural resources ([Final EIR/EIS, Ch. 14, p. 14-41 to 14-42](#)). Where project proponents cannot avoid conflicts, the plans include mitigation measures such as ensuring access to land, adjusting construction activities, compensation, top soil restoration, measures for impacted water diversions, and others ([Ibid. at p. 14-42 to 14-43](#)). The ALSPs require project proponents to “[c]onsult with landowners and agricultural operators on what role they can take if they wish to be involved in project development” ([Ibid. at p. 14-43](#)). These plans also require reporting and monitoring “to show that the actions agreed to were being carried out” ([Ibid. at p. 14-44](#)). The Final EIR/EIS identifies 25 mitigation strategies in Chapter 14 ([Ibid. at p. 14-46 to 14-47](#)). These strategies are described in greater detail in the Final EIR/EIS Appendix 14B ([Final EIR/EIS, Appendix 14B](#)).
- **AG-1b: Minimize impacts on land subject to Williamson Act contracts or in Farmland Security Zones** – Project proponents commit to following California Government Code in acquiring land subject to Williamson Act contracts and lay out the steps they will follow ([Final EIR/EIS, Ch. 14, p. 14-44](#)).
- **AG-1c: Consideration of an Optional Agricultural Land Stewardship Approach or Conventional Mitigation Approach** – Where project proponents determine that mitigation under AG-1a and AG-1b are inadequate or an agreement cannot be reached after a good faith effort by the Department, the Department will undertake conventional 1:1 agricultural mitigation where feasible ([Final EIR/EIS, Ch. 14, p. 14-119](#)). Where



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feasible, the agricultural land conservation interests should be acquired in the county in which the agricultural conversion would take place ([Ibid. at p. 14-123](#))

In its October 14, 2018 Supplemental Materials, Sacramento County refers to Sacramento County General Plan Policy AG-5, which states that projects resulting in the conversion of more than 50 acres of farmland shall be mitigated on a 1:1 basis through farmland resource protections such as planning requirements or easements, and asserts that the Department's agricultural mitigation measures are inconsistent with the County's General Plan because it does not assure this level of mitigation (Sacramento County [Supplement Materials](#), pp. 3-4). However, DP P2 does not require the Department to demonstrate consistency with county general plan policies. Instead, it requires that "Water management facilities . . . must be sited to avoid or reduce conflicts with . . . those uses described or depicted in city and county general plans for their jurisdictions or spheres of influence when feasible." DP P2 does not specify that land use conflicts must be avoided or reduced through compliance with methods described in a general plan policy. In this case, there is substantial evidence that the ALSPs, as a preferred option for mitigation, would provide a greater opportunity to avoid conflicts.

In the Department's response to supplemental questions issued by the Council, the Department further describes ALSPs as preferred over conventional agricultural conservation easements (ACEs) because agricultural land in the Delta primary zone already has substantial protections from development (Department's [October 15, 2018 Written Statement](#), p.16). The Department explains that "ACEs in the primary zone will impose relatively few additional restrictions on such farmers other than the perpetual nature of the restriction. Accordingly, prices that can be offered to farmers for new ACEs may be relatively low" (Department's [October 15, 2018 Written Statement](#), p.16). Additionally, ALSPs allow for avoidance of conflicts at the farm scale rather than just the regional/county scale, making them a potentially beneficial option for impacted farmers experiencing land use conflicts. This offers more opportunities to avoid land use conflicts with willing land owners in addition to reducing conflicts through mitigation and, as a result, provides substantial evidence to support the Department's finding that they attempt to avoid conflict with agricultural land use where feasible. This is because Mitigation Measure AG-1a "also includes a number of avoidance and on-site mitigation measures, including implementing activities such as siting project features to minimize fragmenting or isolating farmland, avoiding, relocating or replacing agricultural infrastructure in support of continued agricultural activities, and managing the project to minimize the introduction of invasive species or weeds that may affect agricultural production (Department's [October 15, 2018 Written Statement](#), p.15).

Sacramento County also raises the issue that the Department's approach for circumstances in which ALSPs cannot be agreed upon after a good faith effort, is to offer the option for "enhancements" ([Final EIR/EIS MMRP, p. 2-48](#)) as an alternative to ACEs. Sacramento County argues that this would allow the Department to prefer enhancements over ACEs, which would not adequately reduce or avoid conflicts. The Commission also comments that for agricultural impacts, the Department considers a conventional farmland mitigation program with 1:1 ratios, consistent with the Delta Plan mitigation measures, but the fact that it "may not be feasible because of cost or availability of land" is insufficient (Delta Protection Commission, [October 16, 2018 Written Statement](#), p.13). There is no evidence in the record that an enhancement would be less effective than ACEs in reducing conflicts with agricultural land uses in the Delta, however. As the Department states, "ACEs for farmers operating in the Delta primary zone are not as valuable to the landowner or the farming community as are ACEs in other locations because of the already existent restrictions on development in the primary Delta" (DWR, [Supplemental Statement](#), p. 16). Based on substantial evidence in the record, it would



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1 be possible to conclude that enhancements offer similar or greater community benefit than  
2 ACEs and, therefore, do more to reduce impacts than ACEs.

3  
4 Appellants contend that the permanent agricultural land losses associated with the  
5 project would be inconsistent with county general plans that value and protect Delta agricultural  
6 resources and recognize that agriculture is the foundation of the Delta economy ([San Joaquin](#),  
7 p. 6). For example, Sacramento County identifies 270 acres of agricultural land that would be  
8 lost. In addition, temporary agriculture losses could harm agricultural operations well beyond the  
9 scope of the project, especially in the case of orchards where temporary losses could be felt for  
10 more than a decade ([San Joaquin](#), p. 68). However, the Department acknowledges that the  
11 project “will reduce the total value of agricultural production in the Delta Region” and will, “where  
12 required, provide compensation to property owners for economic losses due to implementation  
13 of the project” ([DWR DP P2, p. 13](#))<sup>41</sup>.

14  
15 In summary, none of the Appellants specifically and clearly describe how these  
16 measures would fail to avoid or reduce project impacts when feasible. For each specific land  
17 use conflict identified by Appellants, measures to avoid or reduce those conflicts when feasible  
18 have been identified in the record.

19  
20 In addition to losing land, Appellants assert that the project would create additional  
21 indirect but adverse impacts to Important Farmland from disruption of drainage and irrigation  
22 facilities during construction, and through changes to groundwater elevation in localized areas  
23 ([Sac County](#), p. 9). In its appeal, San Joaquin contends that the project would also effect  
24 agriculture by increasing salinity in Delta water upon which farmers rely. The Delta Protection  
25 Commission Economic Sustainability Plan, which provides Appellant’s evidence for the  
26 increased salinity and its economic impacts, does not describe how the project would increase  
27 salinity, however ([SDWA 141 DPC Econ Sust Plan](#)). The mechanism identified in the evidence  
28 for this effect is a change in water quality standards ([SDWA 141 DPC Econ Sust Plan](#));  
29 however, any such change by the SWRCB would be outside the scope of the proposed project.

30  
31 In the Detailed Findings for DP P2, the Department cites evidence of measures to  
32 reduce impacts through *Other Commitment: Assist Water Purveyors in Developing Methods to*  
33 *Reduce Potential Water Quality Effects (Final EIR/EIS, APP 3B, 3B-76)*. In this commitment,  
34 “The project proponents commit to assisting in-Delta municipal, industrial, and agricultural water  
35 purveyors that will be subject to significant unavoidable water quality effects from operation of  
36 the water conveyance facilities and effects on dissolved organic carbon (DOC) due to habitat  
37 restoration activities” ([DWR DP P2, p. 21](#)). The Department also refers to hydrological modeling  
38 of the Delta which indicates that the project would avoid salinity increases that affect in-Delta  
39 agriculture. In its Certification of Consistency for ER P1, the Department includes modeling of  
40 California WaterFix project operations using Cal-Sim II and DSM2 ([DWR ER P1](#), p. 9-10).  
41 Based on this modeling, the Department finds that the project could meet or exceed D-1641  
42 water quality standards for agricultural uses when compared to the No Action Alternative ([DWR](#)  
43 [ER P1 p. 26](#)). The Department commits to reducing impacts to in-Delta agriculture water  
44 quality, where feasible, in the MMRP. Mitigation Measure GW-5 requires monitoring of  
45 “groundwater levels and salinity and associated impacts on agricultural field conditions” ([Final](#)  
46 [EIR/EIS MMRP, p. 2-7](#)). Mitigation Measure GW-7 requires the Department to provide an  
47 alternative water source where salinity requirements are exceeded ([Ibid. at p. 2-9](#)). Mitigation

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<sup>41</sup> The project commitments regarding agricultural resources can be found in Final EIR/EIS Chapter 14, pp. 14-42 and 14-47.

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Measures WQ-11 requires the Department to operate the project in a manner that achieves Bay-Delta WQCP EC objectives for in-Delta agricultural water standards where feasible ([Ibid. at pp. 2-13 to 2-14](#)).

According to Sacramento County, the project would disrupt drainage and irrigation facilities during construction, and through changes to groundwater elevation in localized areas ([Sac County](#), p. 9). Mitigation Measures GW-1 ([Final EIR/EIS, Ch. 7, p. 7-51](#)) and GW-5 ([Final EIR/EIS, Ch. 7, pp. 7-55 to 7-56](#)) provide commitments to maintain ground water levels and avoid seepage. Furthermore, the ALSPs provide specific commitments to avoid disrupted drainage and irrigation ([Final EIR/EIS, Ch. 14, p. 14-116](#)).

Appellant San Joaquin County asserts that the project would have an adverse impact on agriculture by increasing traffic on congested roads, thereby slowing market access for agricultural products ([San Joaquin](#), p. 66). The Department has committed to a number of actions to avoid or reduce this conflict. The ALSPs would ensure access to farmland ([Final EIR/EIS, Ch. 14 p. 14-116](#)), and other mitigation measures would create site specific traffic management plans ([Final EIR/EIS MMRP, p. 2-87](#)), limit hours and construction traffic volumes on congested roadways ([Ibid. at p. 2-91](#)), mitigation measures to enhance the capacity of roadways ([Ibid. at p. 2-92](#)), and improve the conditions of affected roadways ([Ibid. at p. 2-96](#)).

In summary, Appellants identify a number of conflicts between the proposed project and agricultural land uses in the Delta. The impacts of the project include loss of agricultural land and obstructions to farm operations by the project. However, the Department has demonstrated efforts to reduce conflicts between the project and agricultural resources to the extent feasible through the following actions:

1. Reducing the overall footprint of the project through refinements.
2. For agricultural conflicts that are unavoidable, the Department will develop ALSPs with land owners and other local/regional interests. ALSPs would include measures to further reduce or avoid conflicts.
3. Where agreements to enter into ALSPs with land owners and other local/regional interests cannot be reached, the Department will engage in traditional 1:1 mitigation through agricultural conservation.
4. For other conflicts, specific measures outside the ALSPs and conventional agricultural mitigation would avoid or reduce conflicts. For example, Mitigation Measures GW-1 and GW-5 would reduce groundwater impacts raised by Appellants.

### ii. Conclusion Regarding Impacts on Agriculture

The Certification cites evidence in the record of mitigation measures and commitments to reduce or avoid conflicts with agricultural land uses. Appellants have failed to demonstrate that the Department's commitments are not substantial evidence of consistency with DP P2 related to conflicts with agricultural land uses. Therefore, substantial evidence in the record *supports* the Department's certification of consistency with DP P2 on the issues of conflicts with agricultural land uses.

j. Conflicts With Existing Uses – Noise Impacts

i. Appeals & Certification - Noise Impacts

The Appellants state the following:

- 1) Noise impacts from pile driving for the intake foundations have not been avoided or reduced, and could cause abandonment of Delta legacy communities. (SCDA [Appeal C20185-A2](#), p. 9)
- 2) Significant and unavoidable construction noise impacts would reduce quality of life for Delta wildlife and residents across many different land uses, pile driver noise would hurt restaurants and other businesses in the area, and noise annoyance would have public health outcomes. (San Joaquin [DCL Appeal](#), pp. 35, 65)
- 3) Averaging noise levels over time periods masks peaks, thereby casting doubt on the conclusions in the Final EIR/EIR concerning noise impacts (San Joaquin County [Appeal Letter](#), p.35).

Appellants contend that construction noise impacts from the project would reduce quality of life for existing and future Delta residents and other land uses, including education, recreation, and commercial activities, for over a decade. The appeals allege a wide range of potential noise impacts resulting from construction and operations of the project that would have detrimental effects to Delta communities. Appeals from SCDA and San Joaquin specifically identify pile driver noise impacts during construction as the primary effect leading to conflicts with existing uses, and offer expert testimony from the SWRCB Petition Hearing as evidence of these claims. Appellants assert that evidence supports the following claims:

- a) The Department underestimated noise levels that would result from pile driving in the California WaterFix project Final EIR/FEIS. (SCDA)
- b) Mitigation measures adopted by the Department to reduce noise impacts are ineffective and result in significant, unavoidable impacts. (SCDA and DCL)
- c) Additional feasible mitigation exists to further reduce noise impacts from pile driving and resultant conflicts with existing uses that the Department did not incorporate within the project. (SCDA)

Appellants also contend that the Department underestimated the noise levels that would result from project construction, and challenge the Department's application of thresholds for acceptable levels of construction noise for residences, businesses, schools, recreation sites, and other sensitive uses within the Delta. SWRCB testimony and other supporting evidence offered by Appellants illustrate this as follows:

- Pile driving "would occur only between dawn and sunrise" over a period of seven years, accounting for up to 30 million pile-driving strikes and disrupt Delta residents' lives. Approximately one-third of the strikes will be done using impact hammers, a louder technique. SWRCB testimony from Stirling and Salter (San Joaquin County [LAND205 Stirling](#), p. 7, lines 8-18; SCDA [X.4 000015](#), p. 3, lines 17-20).

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- 1 • Noise will reach 76-80 dBA at Hood, and 75 to 79 dBA at Clarksburg, including the  
2 Clarksburg school campus, the Clarksburg library, and the Clarksburg Marina. SWRCB  
3 testimony from Salter and Final EIR/EIS Comments from Salter & Associates (SCDA  
4 [X.4 000015](#), p. 2, lines 10-24; p. 5 line 10-13; p. 22).  
5
- 6 • Noise from pile driving would impact Delta High School, Clarksburg Middle School, the  
7 Clarksburg Charter School in Clarksburg, and Bates Elementary School in Courtland.  
8 SWRCB testimony from Stirling (San Joaquin County [LAND205 Stirling](#), p. 7 lines 3 to  
9 18).  
10
- 11 • The Delta communities of “Clarksburg, Hood, and various unincorporated areas in  
12 Sacramento, Yolo, and San Joaquin counties would be subject to night-time and day-  
13 time construction noise levels above 50 dBA, which is above thresholds found to disturb  
14 human health. Furthermore, the methods used to estimate noise propagation do not  
15 account for noise propagation over mixed landscapes and through urban areas, and the  
16 analysis does not account for health impacts at 50 dBA – 55 dBA levels. SWRCB  
17 testimony from Shilling. (San Joaquin County [LAND135 Shilling](#), p. 4, lines 19-25; p. 5,  
18 lines 16-18, 5-7).  
19
- 20 • The 20 dBA increase in noise between estimated baseline levels of 40 dBA and the 60  
21 dBA threshold would be a significant increase that would disturb residents and visitors  
22 (Final EIR/EIS Comments from Salter & Associates (SCDA [X.4 000015](#), pp. 19, 23).  
23
- 24 • At Hood, use of Hood Supply, a restaurant serving Delta visitors, could be impacted by  
25 noise levels reaching 78 dBA from simultaneous pile driving and typical construction  
26 activities. Final EIR/EIS Comments from Salter & Associates. (SCDA [X.4 000015](#), p.23).  
27

28 In Final EIR/EIS, Chapter 23 (Noise), the Department describes the existing ambient  
29 noise conditions in the project area, analyzes potential impacts related to the construction and  
30 operation of the conveyance facilities and conservation measures, and identifies Mitigation  
31 Measures and Environmental Commitments to mitigate significant impacts.  
32

33 Delta towns and rural areas are generally quiet. Current levels of noise range from 40  
34 dBA to 50 dBA ([Final EIR/EIS](#), Ch. 23, p. 23-8). During project construction, noise would be  
35 generated by both construction equipment, such as pile drivers, graders, and air compressors,  
36 and by trucks delivering construction material. In the Final EIR/EIS, the Department uses a  
37 noise threshold for daytime construction activities of 60 dBA Leq (1hr) at noise-sensitive land  
38 uses where the ambient noise level is less than 60 dBA. If the ambient noise level is already  
39 greater than 60 dBA, the applicable noise threshold is an increase of 5 dB or more in the  
40 ambient noise level at residential locations (pursuant to Section 01570 of Department  
41 Specification 05-16). For nighttime construction activities, the noise threshold is 50 dBA at  
42 noise-sensitive land uses where the ambient noise level is less than 50 dBA. If the nighttime  
43 ambient noise level is already greater than 50 dBA, the applicable noise threshold is an  
44 increase of 5 dB or more in the ambient nighttime noise level at residential locations ([Final](#)  
45 [EIR/EIS](#), Ch. 23, p.23-27).  
46

47 The lower noise threshold for nighttime activity is based on the 5 to 10 dB reduction in  
48 noise performance standards that is commonly applied to noise levels during nighttime hours as  
49 used in local noise ordinances in the Plan Area. For example, “Section 01570 of DWR  
50 Specification 05-16 identifies DWR noise thresholds that are reasonably consistent with local



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standards with regard to construction noise. [T]he 60 dBA noise standard in DWR Specification 05-16 has been established by consensus of experts, local and resource agencies, including USFWS, as a threshold for establishing noise impacts” ([Final EIR/EIS](#), Ch. 23, p. 23-27). Noise thresholds established by the Delta counties for various use types are summarized in the Final EIR/EIS in Section 23.2.3, Regional and Local Plans, Policies, and Regulations. ([Final EIR/EIS](#), Ch. 23, p. 23-15) Although some local governments have adopted quieter standards, these local thresholds are generally equivalent to the thresholds used by the Department.<sup>42</sup>

To analyze this appeal issue, the Council has examined evidence in the Department’s record related to construction of the proposed intakes that are described as part of Alternative 4 in the Final EIR/EIS ([Final EIR/EIS](#), Ch. 23, pp. 23-120 – 23-132).<sup>43</sup> WaterFix construction would generate noise that exceeds these levels near construction sites and along roads used to deliver construction materials. Near the north Delta diversion sites, this noise may create conflicts with existing residences and businesses. Areas of noise exceeding both daytime and nighttime thresholds of the EIS/EIR would extend on both sides of the Sacramento River from Hood through Clarksburg and south to Lambert Road. As shown in Table 23-60 ([Final EIR/EIS](#), Ch. 23, p. 23-121), daytime noise levels resulting from combined use of pile drivers and other construction equipment at intake locations would result in a combined noise level of 102 dBA Leq (1hr) at a distance of 50 feet from the intake location, attenuating to a level of 49 dBA Leq (1hr) at a distance of 5,280 feet (1 mile). Similarly, nighttime noise levels resulting from combined use of pile drivers and other construction equipment at intake locations would result in a combined noise level of 96 dBA Leq (1hr) at a distance of 50 feet from the intake location, attenuating to a level of 43 dBA Leq (1hr) at a distance of 5,280 feet (1 mile).

The predicted noise levels shown in Final EIR/EIS Table 23-60 ([Final EIR/EIS](#), Ch. 23, p.23-121) indicate that during periods of pile driving, residences within 2,000 feet of an active intake construction site could be exposed to construction noise in excess of the 60 dBA Leq (1hr) daytime threshold. The nighttime threshold of 50 dBA Lmax would be exceeded at a distance of 2,800 feet. As shown in Final EIR/EIS Table 23-61 ([Final EIR/EIS](#), Ch. 23, p.23-122), 114 residential parcels, 8 natural/recreational parcels, and 249 agricultural parcels would be affected by daytime noise levels in excess of this threshold during construction. Clarksburg Middle School is identified among the affected uses. The nighttime threshold would be exceeded at 177 residential parcels, 10 natural/recreational parcels, and 277 agricultural parcels. In the Final EIR/EIS, DWR found that these factors, among others, contributed to significant impacts requiring mitigation. ([Final EIR/EIS](#), Ch. 23, p.23-132) The affected residential parcels are located predominately in Hood and Clarksburg, and comprise most of the existing uses in those communities. These parcels would be subject to construction noise in excess of established thresholds, both day and night, for the duration of periods of construction involving pile driving. In its Written Statement of October 15, 2018, Appellant SCDA further asserts that it is reasonably foreseeable that pile driving will occur daily over the course of up to six construction seasons (June 1 to October 31). (Written Submission of SCDA, October 15, [SCDA Response to Supplemental Questions](#), 2018, p. 17, lines 1-4). In addition to noise from

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<sup>42</sup> Sacramento County’s general plan contains a standard of 55 dBA for daytime noise and 50 dBA at night in residential areas. The San Joaquin County’s general plan noise standards are 50 dBA for daytime and 45 dBA for nighttime in residential areas. ([Final EIR/EIS](#), Ch. 23, pp. 23-14, 23-16).

<sup>43</sup> The Final EIR/EIS states that “the potential for Alternative 4A to expose noise-sensitive land uses to noise from construction and operation of the water conveyance facilities would be identical to impacts described under Alternative 4” ([Final EIR/EIS](#), Ch. 23, p. 23-193). Therefore, the balance of this discussion focuses on the Final EIR/EIS analysis of Alternative 4.



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1 pile driving and construction activities, transportation-related noise from truck trips and worker  
2 commutes also impacts these communities, as discussed in the Final EIR/EIS. ([Final EIR/EIS](#),  
3 Ch. 23, p.23-123 – 23-128.)  
4

5 While Appellants have offered differing expert accounts of anticipated noise impacts  
6 from pile driving activities that would exceed the estimates provided in the Final EIR/EIS, the  
7 Department has provided substantial evidence disclosing the impacts to residences,  
8 businesses, schools, recreation sites, and other sensitive uses in the Delta. These impacts are  
9 significant and unavoidable for purposes of CEQA, and would substantially degrade the cultural  
10 values of Hood, Clarksburg, and other legacy Delta communities.  
11

12 With regard to noise mitigation, Appellants contend that mitigation measures adopted by  
13 the Department to reduce noise impacts are ineffective and would result in significant,  
14 unavoidable impacts. SWRCB testimony and other evidence offered by Appellants support  
15 these claims as follows:  
16

- 17 • Noise abatement measures proposed to mitigate these impacts are inadequate,  
18 inaccurate, and only partially effective (SCDA -- Shilling p. 4, line 11 to p. 5 line 21;  
19 SCDA -- Decker p. 1 and 4-5).  
20
- 21 • The promise to limit noise depends on placement of barricades around noise sources,  
22 but this is impractical because noise sources are ubiquitous throughout the construction  
23 zone and because barriers could not be installed at in-water pile driving sites, especially  
24 where constant barge access is required. Limiting pile driving to daylight hours provides  
25 no protection for schools, Clarksburg's library, or businesses affected by noise (San  
26 Joaquin County -- Stirling p. 7 lines 13-18).  
27
- 28 • The noise complaint system proposed will not be effective because once construction  
29 begins there will be few ways to reduce noise effects (SCDA -- Brodsky to Murillo p. 2;  
30 SCDA -- Decker p. 4).  
31

32 The project Mitigation Monitoring and Reporting Program (MMRP) describes the  
33 adopted Avoidance and Minimization Measures, Environmental Commitments and Mitigation  
34 Measures that require the Department to reduce noise levels during daytime hours.  
35 Implementation of Mitigation Measures NOI-1a and NOI-1b, set forth below, would reduce the  
36 effects of noise during construction. Pursuant to these measures, the Department and  
37 contractors hired to construct any conveyance components of the project will implement a site-  
38 specific noise abatement plan to avoid or reduce potential construction-, maintenance-, and  
39 operation-related noise impacts.  
40

- 41 • **Mitigation Measure NOI-1a:** Employ noise-reducing construction practices during  
42 construction ([Final EIR/EIS MMRP](#), p.2-127).  
43
- 44 • **Mitigation Measure NOI-1b:** Prior to construction, initiate a complaint/response tracking  
45 program ([Final EIR/EIS MMRP](#), p.2-128).  
46

47 Mitigation Measure NOI-1a requires that, prior to construction activities, the Department  
48 must select and employ site-specific noise reduction strategies "such that construction noise  
49 levels at noise sensitive receptors do not exceed 60 dBA (1hr Leq) during daytime hours ... and  
50 50 dBA (1hr Leq) during nighttime hours measured at sensitive receptors. Some construction

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activities that are required to occur during nighttime hours, such as activities at tunnel boring launch pads and tunnel shaft locations, would not be subject to these construction time limitations.” ([Final EIR/EIS MMRP](#), p.2-127). Pursuant to these measures, the Department and contractors hired to construct any conveyance components of the project will implement a site-specific noise abatement plan to avoid or reduce potential construction-, maintenance-, and operation-related noise impacts. Implementation of Mitigation Measures NOI-1a and NOI-1b would reduce the effects of noise during construction.

The project MMRP contains the following description regarding the effectiveness and feasibility of these measures in the MMRP ([Final EIR/EIS MMRP](#), pp. 2-128):

“Achievable noise reduction varies by measure. Shutting off a piece of equipment would eliminate its contribution to ambient noise. Noise barriers and enclosures would provide noise reduction within the discrete area shielding noise from surrounding noise sensitive receptors. Barriers can provide 5 to 15 dB of noise reduction depending [on] configuration relative to surrounding terrain.”

In the Final EIR/EIS ([Final EIR/EIS](#), Ch. 23, p. 23-132), The Department states that:

“Although implementation of these measures will reduce the impact, it is not anticipated that feasible measures will be available in all situations to reduce construction noise to levels below the applicable thresholds. This impact would therefore be significant and unavoidable.”

Therefore, while Appellants have asserted that proposed mitigation will be ineffective, the Department has provided substantial evidence disclosing the potential effectiveness of proposed mitigation strategies that are tied to performance standards equivalent to the noise thresholds described above. The Department concludes that feasible mitigation may not be available in all situations involving exposure of existing uses to construction noise. These impacts are significant and unavoidable for purposes of CEQA, and would substantially degrade the cultural values of Hood, Clarksburg, and other legacy Delta communities.

In addition to claiming that the proposed mitigation will be ineffective, Appellants contend that additional feasible mitigation exists to further reduce noise impacts from pile driving and resultant conflicts with existing uses, which the Department did not incorporate within the project. Evidence offered by Appellants in support of these claims is as follows:

- Mitigation options to reduce noise should be further explored. Noisy activities could be set back from sensitive land uses. Less noisy construction methods could also be implemented (SCDA -- Salter Decker page 5).
- For example, noise from pile driving can be avoided by using alternative methods of constructing piles. Use of CFA piles (Augercast, Augered Cast in Place Piles, or Auger Pressure Grouted Piles) rather than driven piles as proposed by DWR would diminish noise and can be done at the same or lower cost as use of impact piles (SCDA -- Storesund 1 lines 2-11).

Supporting evidence for Mr. Storesund’s testimony includes correspondence from Peter Faust of Malcolm Drilling Company, recommending use of CFA piles rather than driven piles. Mr. Faust quoted a budget price of \$250 per lineal foot for the installation of CFA piles on California WaterFix. According to Mr. Storesund:

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1 “I believe that DWR should find that price attractive compared to the cost of driven 42-  
2 inch steel piles, without the noise and community disturbance. CFA piles do not require  
3 the use of casing as the concrete is placed in the excavated hole as the auger is  
4 removed after it has reached its target depth. A reinforced rebar cage is then  
5 immediately lowered into the fresh concrete, thus creating a reinforced concrete pier.”  
6

7 The question of setting noisy activities back from sensitive land uses is inherently related  
8 to questions regarding whether the Department considered the feasibility of siting intake  
9 locations away from legacy communities and existing noise-sensitive uses, as described  
10 previously under section (K)(3)(b) *Conflicts with Existing Delta Communities* of this  
11 Determination.  
12

13 Final EIR/EIS Appendix 3C contains the assumptions used by the Department in  
14 analyzing the potential impacts of pile driving as part of intake construction. In Appendix 3C, the  
15 Department acknowledges that the “type, dimensions, and number of piles and installation  
16 methods [are] subject to change based on future site-specific geotechnical data and engineering  
17 design. If CIDH [Cast-In-Drilled-Hole] is chosen for foundation, impact pile driving will not be  
18 required.” (Final EIR/EIS, [Appendix 3C](#), p. 3C-5.) The project MMRP describes the following  
19 mitigation measure adopted to reduce project impacts associated with pile driving:  
20

- 21 • **Mitigation Measure NOI-2: Employ vibration-reducing construction practices**  
22 **during construction of water conveyance features** ([Final EIR/EIS MMRP](#), p.2-129).  
23 Under this mitigation measure, the Department will implement the following measures if  
24 applicable and feasible:
  - 25 ○ Locating equipment as far as practical from vibration-sensitive (and noise-  
26 sensitive) land uses (at least 100 feet)
  - 27 ○ Use of alternative pile driving methods such as vibratory driving, hydraulic press-  
28 in driving, or use of pre-drilled pile holes. ([Final EIR/EIS MMRP](#), pp.2-129 – 2-  
29 130)

30  
31 Mitigation Measure NOI-2 was adopted by the Department primarily to reduce vibration  
32 impacts associated with pile driving, although it also indirectly reduces noise impacts, and the  
33 Department concedes that employing these techniques may not be feasible in all situations to  
34 reduce vibration levels (and any associated groundborne noise) to below applicable thresholds.  
35 The Department concludes that even with implementation of Mitigation Measure NOI-2, impacts  
36 due to pile driving at the intakes would be significant and unavoidable. ([Final EIR/EIS](#), Ch. 23,  
37 p.23-197) It should be noted that the remedies afforded to affected property owners by  
38 Mitigation Measure NOI-2 in the event that alternative pile driving techniques are not feasible  
39 address damage resulting from *vibration* in excess of established performance standards – the  
40 measure does not provide a remedy for *noise* in excess of established performance standards.  
41

42 Appellant SCDA asserts that no information in the record before the Department at the  
43 time of certification identifies the use of CFA piles as an infeasible approach to avoid  
44 construction noise and vibration from pile driving, which would reduce conflicts with existing  
45 Delta land uses. In its Written Submittal of October 15, 2018, Appellant SCDA states that in  
46 estimating the noise resulting from pile driving, the Department did not consider the size of piles  
47 or other factors specific to the proposed pile driving activity ([SCDA Response to Supplemental](#)  
48 [Questions](#), p.17 lines 7-12). A separate analysis prepared by Charles Salter and summarized at  
49 the SWRCB hearing considered pile size, pile type, energy delivered from the impact hammer,  
50 and record data available from measurements of noise generated by similar pile-driving in the  
51 past.” (SCDA [X.4 000015](#), p.19-21.)

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1 With regard to avoiding noise-related land use conflicts associated with pile driving by  
2 using alternative technologies, the expert testimony of Rune Storesund before the SWRCB  
3 submitted by Appellant SCDA states that:

4  
5 “the extensive amount of impact pile driving currently proposed for the California  
6 WaterFix project intake structures is not necessary. Alternative techniques, with  
7 dramatically lower vibration and noise levels, such as drilled piers or CIDH, deep soil  
8 mixing, or jet grouting are all plausible and feasible techniques to provide a suitable  
9 foundation for the proposed intake structures and associated features. No evidence has  
10 been presented that precludes the use of these lower vibration/lower noise techniques  
11 for construction of the California WaterFix inlet structures.” (SCDA-125 SWRCB Hearing  
12 Transcript, [X.4 000025](#), April 23, 2018).  
13

14 As summarized above, the Department disclosed that the proposed mitigation measures  
15 would not be sufficient to reduce pile driving noise levels at the intakes below applicable  
16 significance thresholds, and the Department concluded that the impacts due to pile driving noise  
17 at the intakes would therefore be significant and unavoidable. However, as stated in Appendix  
18 3C and Mitigation Measure NOI-2, the Department has committed to evaluating the potential to  
19 use non-impact pile driving methods once geotechnical investigations are complete, and that  
20 such investigations will occur as part of subsequent phases of project design.  
21

22 At the Council’s hearing on October 24, 2018, Appellant SCDA reiterated and  
23 summarized its claims, as follows:  
24

25 “Let me just comment for a moment on DWR’s argument that even though the project as  
26 described now includes all this impact pile driving, and they admit that it’s a significant  
27 adverse effect after the project is approved, and after the appeals are denied, they’ll  
28 consider using some other method for the piles, such as poured piles or caissons. But  
29 that’s not the project that’s before you, the project before you defines impact pile driving.  
30 And it’s your duty to find that this project with impact pile driving is consistent with the  
31 Delta Plan or not. What DWR represents they might or might not do after you render  
32 your decision is irrelevant.” (October 24, 2018 Hearing Testimony, Mr. Michael Brodsky,  
33 Transcript p. 64)  
34

35 At the continuation of Council’s hearing on the following day (October 25, 2018), the  
36 Department reiterated its commitment to pursue alternative means to pile driving, as follows:  
37

38 “The issue is that DWR is committed to trying to use non-impact driving [...] but without  
39 the further geotechnical work, they can’t commit to it at this point in time because it may  
40 not be feasible. But the mitigation measures that are cited in DWR’s responses directly  
41 deal with that issue.” (October 25, 2018 Hearing Testimony, Ms. Stef Morris, Transcript  
42 p. 62)  
43

44 “We have analyzed impact pile driving because we wanted to disclose the worst case  
45 scenario when it comes to pile installation. [...] We are looking at utilizing drilled piers  
46 that wouldn’t need any pile driving for intake foundations and that’s the method that was  
47 used for Freeport intake construction. And we believe that’s doable for this project, but  
48 because of the lack of technical information at [this] point, we are unable to make that  
49 commitment.” (October 25, 2018 Hearing Testimony, Mr. Praba Pirabarooban,  
50 Transcript p. 65.)  
51

1 The record shows that the project before the Council includes extensive pile driving that  
2 the Department finds would result in significant and unavoidable noise and vibration impacts  
3 that would conflict with existing sensitive uses in Delta communities. The Department has  
4 adopted and incorporated into the project Mitigation Measures NOI-1a, NOI-1b, and NOI-2,  
5 which will be implemented during subsequent project design and during construction to avoid or  
6 reduce these impacts. Mitigation Measure NOI-2 requires the Department to use alternative  
7 techniques to impact pile driving, such as CIDH techniques, if feasible based on geotechnical  
8 conditions. While significant and unavoidable impacts are anticipated if the project is completed  
9 exclusively with impact pile driving, full implementation of these mitigation measures would  
10 reduce or avoid the impact to the extent feasible by maximizing use of alternative, less-impactful  
11 techniques. However, no remedy for exposure to noise in excess of established standards is  
12 provided by Mitigation Measure NOI-2 in the event that alternative pile driving techniques are  
13 not feasible.

## 14 15 **ii. Conclusion Regarding Noise Impacts**

16  
17 The Department's Certification and October 15, 2018 Written Statement cite evidence in  
18 the record that feasible mitigation for exposure of noise sensitive uses to construction noise in  
19 excess of applicable thresholds may not be available in all situations. The project would result in  
20 significant and unavoidable noise impacts that would conflict with existing Delta land uses. Such  
21 a conclusion, together with the Department's CEQA Findings of Fact and Statement of  
22 Overriding Considerations, may be sufficient for purposes of compliance with CEQA, but they  
23 do not address reducing the noise conflicts with existing Delta land uses to the extent feasible  
24 as DP P2 requires.

25  
26 Project noise resulting from pile driving and other construction activities will substantially  
27 degrade the cultural values of Hood, Clarksburg, and other legacy Delta communities. While  
28 Appellants have offered differing expert accounts of anticipated noise impacts from pile driving  
29 activities, the Department has provided substantial evidence disclosing the impacts to noise-  
30 sensitive uses in the Delta. Appellants also discuss evidence in the record concerning  
31 alternative construction approaches that would avoid noise and vibration impacts from pile  
32 driving. While significant and unavoidable impacts are anticipated if the project is completed  
33 exclusively with impact pile driving, full implementation of the adopted mitigation measures  
34 would reduce or avoid this impact to the extent feasible by maximizing use of alternative, less-  
35 impactful techniques.

36  
37 The extent to which alternative techniques are feasible will be determined through  
38 geotechnical evaluations to be completed at a later stage of design. However, there is no  
39 substantial evidence in the record that significant and unavoidable noise impacts from pile  
40 driving can be reduced to the extent feasible, as required by DP P2 section (a), because: a) the  
41 Department lacks the geotechnical information necessary to demonstrate feasibility at this time,  
42 and b) no remedy for noise in excess of established standards is provided by Mitigation  
43 Measure NOI-2 in the event that alternative pile driving techniques are not feasible. Therefore,  
44 the Department's Certification of Consistency with DP P2 on the issue of conflicts with existing  
45 uses due to noise impacts is not supported by substantial evidence in the record.



**k. Consideration of Comments from Reclamation Districts**

**i. Appeals & Certification - Consideration of Comments from Reclamation Districts**

Appellant San Joaquin asserts that the Department failed to consider comments from Delta reclamation districts charged with responsibility for maintaining and repairing levees. Delta levees are critical infrastructure that protect the Delta as a place and its economic, cultural, agricultural, and environmental values. ([San Joaquin County](#), p. 69). Appellant asserts that the Department failed to coordinate with the Delta reclamation districts charged with maintaining over 1,000 miles of levees that protect Delta communities and transportation infrastructure. As evidence, Appellant cites evidence from testimony by Chris Neudeck at the SWRCB hearing which asserts that the Department had little coordination with the reclamation district on levee monitoring during construction, formation of a plan for use on levee roads during construction, and construction on secondary levees (San Joaquin County [DCL-101, SWRCB Hearing Transcript, March 15, 2018](#), pp. 148-151).

In its October 15, 2018 Written Statement, the Department described its commitment to consult with local reclamation districts to ensure that construction activities would not conflict with reclamation district flood protection measures and routine maintenance. As evidence, the Final EIR/EIS, states that the Department “will also seek to enter agreements with local flood control maintenance entities whose flood management activities may be affected by the project” ([D.1 DRAFT 000058](#), pp. 6A-27, line 26-27).

With respect to the assertions by Mr. Neudeck that the Department failed to coordinate with reclamation districts, the Department cites evidence from SWRCB testimony by John Bednarski which responds to Mr. Neudeck’s claims by stating, “Due to the conceptual nature of the CWF engineering plans to date, DWR has not conducted extensive discussions with the Reclamation Districts.” ([X.2 DRAFT 000165](#), pp. 26). Mr. Bednarski provides examples of specific engagement that the Department has undertaken with Reclamation District 756 and Reclamation District 751 as detailed planning has begun for those areas, concluding that the Department “is committed to replicating this proactive approach with other Reclamation Districts in the Delta as work on CWF investigations and designs commence.” ([X.2 DRAFT 000165](#), pp. 27).

The Certification and the Department’s October 15, 2018 Written Statement also cite evidence showing that the Department received and responded to written comments from local and regional Delta interests in preparing the Final EIR/EIS for the project ([DWR DP P2](#), p. 22-23). Below is a list reclamation district comments, and responses when found, indicating that the Department considered reclamation district comment letters ( [Final EIR/EIS, Volume II Index of Commenters](#)).

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RECIRC Letter Number	First_Name	Last Name	Organization Name	Included in DWR Response to Comments	Comment Letter Link in record
2591	Michael	Van Zandt	Reclamation District 501	Yes	<a href="#">2570-2599</a>
2495	Andrea	Clark	Reclamation District 551	Yes	<a href="#">2400-2499</a>
409	Patrick	Markham	Reclamation District 765	No Record Found	<a href="#">400-499</a>
2426	David	Dal Porto	Reclamation District 830	Yes	<a href="#">2400-2499</a>
2640	Dominick	Gulli, PE, PLS	Reclamation District No 2072 Woodward Island	Yes	<a href="#">2600-2649</a>
5	Daniel	McDaniel	Reclamation District No. 2038	No Record Found	<a href="#">1-99</a>
2849	Daniel	McDaniel	Reclamation District No. 2038	Yes	<a href="#">2800-2899</a>
2568	Jeffrey	Conway	Reclamation District No. 800, Byron Tract	Yes	<a href="#">2550-2569</a>
			Reclamation District 813	Yes	<a href="#">D.1 DRAFT 000195</a> , p. 70
			Reclamation District 1004	Yes	<a href="#">D.1 DRAFT 000213</a> , p. 304
			Reclamation District 3,150,551,99	Yes	<a href="#">D.1 DRAFT 000214</a> , p.163-169
			Reclamation District 2068, 2098	Yes	<a href="#">D.1 DRAFT 000224</a> , p.15
			Reclamation District Union Island 1+2	Yes	<a href="#">D.1 DRAFT 000229</a> , p.77-78
			Reclamation District 544	Yes	<a href="#">D.1 DRAFT 000229</a> , p. 79-81
			Reclamation District 2089	Yes	<a href="#">D.1 DRAFT 000229</a> , p. 81-82
			Reclamation District 2107	Yes	<a href="#">D.1 DRAFT 000229</a> , p. 82-83

**ii. Conclusion Regarding Consideration of Comments from Reclamation Districts**

The Certification and October 15, 2018 Written Statement cite evidence in the record that the Department considered and responded to comments from reclamation districts as part

of the CEQA environmental review process and at other project stages, and has committed to seek to enter into agreements with local flood control maintenance entities that could be impacted by the project. Therefore, substantial evidence in the record supports the Department's Certification of Consistency with DP P2 with regard to consideration of comments by local agencies, in this case reclamation districts.

**M. Policy RR P1 (23 CCR Section 5012): Prioritization of State Investments in Delta Levees and Risk Reduction**

In the Certification, the Department states both that California WaterFix does not trigger RR P1 and that California WaterFix is consistent with RR P1. (Compare Certification of Consistency, p. 10 ["California WaterFix is not a flood risk management project subject to the interim priorities for discretionary state investments in Delta flood risk management"] and Certification of Consistency: RR P1, p. 6 ["Therefore, the project is consistent with the Delta Plan policy RR P1"].) The Certification does not frame these arguments as being raised in the alternative, but we interpret them as such. (See, e.g., *Eng. v. Brown* (2018) 21 Cal.App.5th 675, 701 [recognizing the "permissible practice of advancing alternative arguments before a final decision is reached"].) Appellant San Joaquin County assumes without explanation that California WaterFix does trigger RR P1 and states that it is inconsistent with the policy. We conclude that RR P1 does not apply; thus, there is no need to assess consistency.

**1. Structure of RR P1**

RR P1 implements Delta Reform Act section 85306, which mandates that "the council, in consultation with the Central Valley Flood Protection Board, shall recommend in the Delta Plan priorities for state investments in levee operation, maintenance, and improvements in the Delta, including both levees that are a part of the State Plan of Flood Control and nonproject levees."

It covers "a proposed action that involves discretionary State investments in Delta flood risk management, including levee operations, maintenance, and improvements." (RR P1, subd. (b).) Thus, in order for RR P1 to apply, two conditions must be met: (1) the covered action must involve "flood risk management" and (2) it must concern "discretionary state investments." (*Ibid.*) If either of those conditions is not met, a covered action may proceed without having to demonstrate consistency with RR P1. If both conditions are met, RR P1 sets forth goals to guide funding decisions. (*Id.*, subd. (a).)

The Delta Plan does not define the terms "flood risk management" or "discretionary State investments," but it does offer context.<sup>44</sup> It describes a "government-sponsored flood control program" as "[a]ny State or federal project, approval, funding, or other effort that is intended to reduce the likelihood and/or consequence of flooding of real property and/or improvements, including risks to people, property, and State interests in the Delta, that is carried out pursuant to applicable law, including but not limited to" certain statutory schemes. (Delta Plan, p. 253.)

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<sup>44</sup> In April 2018, the Council voted to: (1) certify the environmental impact report for a proposed amendment to RR P1; (2) submit the proposed amendment to the Office of Administrative Law ("OAL") for review; and (3) update the corresponding chapter of the Delta Plan. OAL has not yet approved the proposed amendment, however, and the original version of RR P1 remains in effect. Thus, for purposes of this analysis, the Council is considering the relevant Delta Plan chapter as it read at the time that the Council adopted the original version of RR P1 rather than as it reads in the most current version of the Delta Plan.

1  
2 The Delta Plan divides levees into two categories – “project levees” and “nonproject  
3 levees.”<sup>45</sup> (*Id.*, p. 261.) It explains that the “project levees are authorized as part of the federal  
4 flood control project and so are eligible for federal funding” and that the “nonproject levees are  
5 distributed according to guidelines and criteria of the Delta Levees Maintenance Subvention  
6 Program or Delta Levees Special Flood Control Projects.” (*Ibid.*)  
7

## 8 **2. Applicability of RR P1**

9

10 RR P1 applies only if two conditions are met: (1) the covered action must involve “flood  
11 risk management” and (2) it must concern “discretionary state investments.” (RR P1.)  
12

### 13 **a. Flood Risk Management**

14

15 The Department certifies that “California WaterFix is not a flood risk management  
16 project” in that “California WaterFix includes actions such as levee modifications to ensure that  
17 there will be no change in flood risk as a result of the project, but the project objectives do not  
18 include reducing or managing Delta flood risk.” (Certification, p. 10.)  
19

20 Two Appellants invoke RR P1 – San Joaquin County and NCRA.<sup>46</sup> But they do not  
21 dispute the contention that California WaterFix is not a flood risk management project. Quite  
22 the contrary: they agree with it. (San Joaquin County Appeal Letter, p. 74 [“As conceded by the  
23 Department, the Delta Tunnels are not a flood risk management project”]; NCRA Appeal Letter,  
24 p. 11 [“WaterFix, as DWR concedes, is not a flood risk management project”].)  
25

26 In light of the positions taken by the Department and the Appellants, the Council finds  
27 California WaterFix is not a “flood risk management project.” Thus, the Council concludes that  
28 California WaterFix does not meet one of the two conditions required for RR P1 to apply.  
29

### 30 **b. Discretionary State Investments**

31

32 The Department certifies that California WaterFix “will not be funded by programs  
33 designed to improve Delta flood risk management, but instead will be funded by participating  
34 water contractors to fulfill the project objectives described in the Final EIR/EIS, Chapter 2,  
35 Project Objectives and Purpose and Need.”<sup>47</sup> (*Ibid.*) The Appellants do not address funding in  
36 their RR P1 analysis. Thus, we conclude that California WaterFix does not meet the second  
37 condition required for RR P1 to apply.  
38

## 39 **3. Consistency with RR P1**

40

41 The Department argues in the alternative that California WaterFix is consistent with RR  
42 P1. (Certification: RR P1, pp. 4-6.) San Joaquin County argues the opposite – that California

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<sup>45</sup> “Project levees” refer to those that are a part of the State Plan of Flood Control,

<sup>46</sup> NCRA does not cite the policy by name but includes a subheading titled “Prioritization of State Investments in Delta Levees and Risk Reduction.” (NCRA Appeal Letter, p. 11.)

<sup>47</sup> Chapter 2 of the EIR/EIS, in turn, does not mention flood risk. (EIR/EIS, pp. 2-1 through 2-4.) It does not refer to levees other than to explain that seismic risk to levees threatens SWP and CVP water supplies and that WaterFix would serve to minimize this risk. (*Id.*, p. 2-1, 2-3, 2-4.) And it does not refer to discretionary state investments.

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WaterFix is inconsistent with certain of the goals set forth in RR P1 and thus inconsistent with RR P1 as a whole. (San Joaquin Appeal Letter, pp. 72-74.) Because the Council has determined that RR P1 does not apply, these arguments are moot and the Council need not address them. (E.g. *Surrey v. TrueBeginnings* (2008) 168 Cal.App.4th 414, 420 [recognizing the mootness of an alternative argument].)

### VII. DETERMINATION

Based on the Analysis and Findings set forth in Section VI above, the Council concludes that substantial evidence *does not* exist in the record before us to support the Department's finding that California WaterFix is consistent with the Delta Plan. The matter is hereby *remanded* to the Department for reconsideration, pursuant to Water Code section 85225.25.

In addition, we encourage the Department to meaningfully engage with the Commission on the DP P2 matters for which we found for Appellants (i.e., Conflicts with Existing Delta Communities, in particular impacts to community character and further definition of the proposed Community Benefit Fund; Cultural and Historical Resources Impacts; and Parks and Recreation and Traffic Impacts, in particular impacts on recreational boating and on access to recreation due to construction traffic), because in those instances we consider the Commission's recommendations to be feasible for the Department and Commission to pursue, and consistent with the objectives of the Delta Plan (see Public Resources Code section 29773).

The Council's findings on the appeals of the Certification of Consistency for California WaterFix do not constitute a "project" for purposes of CEQA. That is because the Council's action is not a "discretionary project proposed to be carried out or approved" by a public agency. (Pub. Resources Code § 21080(a).) As the Council's role in the appeal process is described in the Delta Reform Act, Water Code sections 85225–85225.25, we do not have the authority to modify or deny a covered action, which is before the Council on appeal regarding consistency with the Delta Plan, for environmental reasons. (See *Friends of Juana Briones House v. City of Palo Alto* (2010) 190 Cal.App.4th 286, 299, 302 (explaining that a project is discretionary only if the agency that is taking an action can deny or modify the project on the basis of environmental consequences); see also, CEQA Guidelines § 15375 ("Discretionary project" means a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity . . .).) The Council does not have the authority to approve or disapprove a covered action on appeal, nor does it have the authority to modify or deny an appealed covered action for environmental reasons. Rather, the Council only has the authority to "den[y] the appeal or remand[] the matter to the state or local public agency for reconsideration of the covered action based on the finding that the Certification of Consistency is not supported by substantial evidence in the record." (Water Code, § 85225.25.) Therefore, the Council's issuance of findings on appeals of certifications of consistency with the Delta Plan are not projects for purposes of CEQA.



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### **Exhibit A**

#### **Documents Admitted pursuant to Appeals Procedures section 10**

The Council hereby admits the documents listed below pursuant to section 10 of our Appeals Procedures.

Paragraph 10 of the Council's Appeals Procedures provides as follows: "10. The council or its executive officer may supplement the record submitted by the state or local agency if the council or its executive officer determines that additional information was part of the record before the agency, but was not included in the agency's submission to the council."

On October 30, 2018, Executive Officer Pearson admitted the SWRCB hearing docket through July 27, 2018 (the date that the Department filed its Certification) pursuant to Appeals Procedures section 10. Due to the voluminous nature, these documents are not listed separately below, but have been uploaded to the Council's website.

Based on the Council's review, we have determined that the documents identified below were part of the record before the Department but were not fully included in the record submission to the Council.

Document
sdwa_316 Meeting Transcript.pdf (Metropolitan Water District of Southern California WaterFix Workshop Transcript (March 27, 2018)) Official Notice request, 10/15/18
sdwa_315 MWD Presentation.pdf (California WaterFix Board Workshop Presentation (March 27, 2018)) Official Notice request, 10/15/18
2015 Urban Water Management Plan Guidebook

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### Exhibit B

#### Documents Admitted pursuant to Appeals Procedures section 29

The Council hereby admits the documents listed below pursuant to section 29 of our Appeals Procedures.

Paragraph 29 of the Council's Appeals Procedures provides as follows: "29. Notwithstanding any provision of these procedures to the contrary, the council may take official notice in any hearing that it conducts, of any generally accepted technical or scientific matter within the council's jurisdiction, and of any fact that may be judicially noticed by the courts of this State."

Based on the Council's review, we have determined that the documents identified below were either generally accepted technical or scientific matter within the Council's jurisdiction, or may be judicially noticed by the courts of this State.

Document
State of California Sea-Level Rise Guidance, 2018 Update, California Ocean Protection Council <a href="http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf">http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf</a>  Included in Department October 15, 2018 Letter and October 23, 2018 Submittal
July 9, 2018 letter from North Delta Cares to Metropolitan Water District of Southern California showing Gas Wells in the Construction Zone of the Tunnels' Alignment in Figure 13-1 in a 2015 Conceptual Engineering Report by the Department
1996 SIS Guidelines for Treatment of Cultural Landscapes
Letter of Sacramento County; 10/28/08; topic of "Implementing Structure/Governance"
Transcript of Public Comment Meeting March 26, 2009 in Clarksburg
HR 6329 To establish the Sacramento-San Joaquin Delta National Heritage Area
S. 3927 To establish the Sacramento-San Joaquin Delta National Heritage Area
S. 29 To establish the Sacramento-San Joaquin Delta National Heritage Area
2012 Feasibility Study for a National Heritage Area
Letter of National Park Service; 6/11/12; topic of "Feasibility Study"

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Letter of Delta Stewardship Council; 7/11/13; topic of “Responsible Agency Comments 2013 Administrative Draft”
Letter of Delta Protection Commission 07/24/14, topic of “Bay Delta Conservation Plan EIR / EIS”
Letter of Delta Protection Commission;10/30/15; topic of “Recirculated Draft EIR”
HR 1738 To establish the Sacramento-San Joaquin Delta National Heritage Area
S. 731 To establish the Sacramento-San Joaquin Delta National Heritage Area
2017 Secretary’s Guidelines for Treatment of Properties
Recreational Boating Use of the Sacramento- San Joaquin Delta by CSU Sacramento, 2017
2015 Inventory of Recreational Facilities
Proposal of Delta Protection Commission; 01/26/12 as presented at Council Meeting held February 9-10, 2012
Reply of Council to Commission on Proposal to Protect the Delta as Evolving Place; 08/07/12
May 18, 2016 Ruling in JCCP 4758

1

2

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**Exhibit C**

**Denied Document Admission Requests (see Appeals Procedures, section 10 and 29)**

<b>Document</b>	<b>Reason for denial</b>
NCRA et al Appeal of WaterFix.pdf (08/24/18 Appeal of California WaterFix Certification of Consistency, Exhibit 1, August 17, 2018 Letter from Reclamation to DWR Notice of Negotiation- Coordinated Operation Agreement (COA))	Post-dates July 27, 2018 certification date
Exhibit 1 – March 15, 2017 Comments of Donald Ratcliff, U.S. Fish and Wildlife Service to State Water Resources Control Board (WaterFix C20185 North Coast Rivers Alliance, et al.'s Written Materials in Support of Appeal, 10/15/18)	These are comments presented to SWRCB on Bay-Delta Plan and Substitute Environmental Document and no evidence document was presented to or considered by the Department as part of California WaterFix
Exhibit 2- Excerpts from January 3, 2017 Transcript of Public Hearing in the Matter of the Amendment to the Water Quality Control Plan for the San Francisco Bay/Sacramento- SanJoaquin Delta Estuary: San Joaquin River Flows and Southern Delta Water Quality and the Adequacy of the Supporting Recirculated Draft Substitute Environmental Document: Testimony of Jeff McLain, Donald Radcliff	These are comments presented to SWRCB on Bay-Delta Plan and Substitute Environmental Document and no evidence document was presented to or considered by the Department as part of California WaterFix
Exhibit 3- Sacramento Bee, Ryan Sabalow, A Delta farmer says the state poisoned his crops. Is California's water supply safe? Sacramento Bee September 24, 2018 (WaterFix C20185 North Coast Rivers Alliance, et al.'s Written Materials in Support of Appeal, 10/15/18)	Post-dates July 27, 2018 certification date
8 17 18 COA ltr.pdf (8/17/18 letter from USBR to K.Nemeth re: Notice of Negotiation –COA)  Requests for Official Notice, 10/15/18 F.O.R. Letter, p.9	Post-dates July 27, 2018 certification date

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Letter from David Murillo to Karla Nemeth.pdf (Notice of Negotiation - Coordinated Operation Agreement (COA) (August 17, 2018))	Post-dates July 27, 2018 certification date
Stockton 3 – Memorandum from Secretary of Interior to Solicitor et al.pdf (California Water Infrastructure Letter (August 17, 2018))	Post-dates July 27, 2018 certification date
Regional San 2 – Memorandum from Secretary of Interior to Solicitor et al.pdf, California Water Infrastructure (August 17, 2018), Letter from Secretary of the Interior	Post-dates July 27, 2018 certification date
DCL-221 Consolidated Contract.pdf (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 (2005))  Official Notice request, 10/15/18	Irrelevant, WR P2 inapplicable
DCL-222 BOR Notice of Neg COA.pdf (Notice of Negotiation-Coordinated Operation Agreement (COA) (2018))  Official Notice request, 10/15/18	Post-dates July 27, 2018 certification date
DCL-223 PCL Comment Letter.pdf (Comments on Draft EIR for the Water Supply Contract Extension Project (October 17, 2016))  Official Notice request, 10/15/18	Irrelevant, WR P2 inapplicable
CL-224 CWIN Letter to Sen Jackson.pdf (letter to Senator Jackson (July 1, 2018))  Official Notice request, 10/15/18	Irrelevant, WR P2 inapplicable
DCL-225 CCWD Letter to BOR.pdf (California WaterFix Cost Repayment Proposal Request	Irrelevant, WR P2 inapplicable



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(March 1, 2016), CCWD et al letter to USBR)  Official Notice request, 10/15/18	
DCL-233, Water and the California Dream, Maria Mehranian, Water and the California Dream (January 29, 2018)  Official Notice request, 10/15/18	Moot
Secretary of Interior's Aug 17 2018 ltr to Federal Officials.pdf (Dept. of Interior, Secretary to Solicitor et al. re California Water Infrastructure)  Official notice request 10/18/18	Post-dates July 27, 2018 certification date
DWR-1415 Stockton's Response to Ruling to Produce Information; Water Right Change Proceeding, Transcript of Hearing Part 2 Rebuttal, Aug. 24, 2018	Post-dates July 27, 2018 certification date
Expert report from Dr. Susan Paulsen and Dr. Aaron Mead of Exponent (October 15, 2018)	Post-dates July 27, 2018 certification date
DCL-1 WIFIA Solic.pdf (July 27, 2018 letter to USEPA from Delta Conveyance Finance Authority re: WIFIA Program)	This letter was presented to SWRCB on Bay-Delta Plan and Substitute Environmental Document and no evidence document was presented to or considered by the Department as part of California WaterFix
July 27 2018 Letter from Commissioner of Reclamation	This letter was presented to SWRCB on Bay-Delta Plan and Substitute Environmental Document and no evidence document was presented to or considered by the Department as part of California WaterFix
October 19, 2018 Presidential memorandum	Post-dates July 27, 2018 certification date
10-11-18 email inquiry from the Commission (Erik Vink) to DWR (Greg Farley) and DWR's 10-12-18 reply	Post-dates July 27, 2018 certification date

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3/27/18 MWD WaterFix Workshop Presentation Outline	No evidence this document was presented to or considered by the Department as part of California WaterFix
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Staff Draft

**SUPERIOR COURT OF THE STATE OF CALIFORNIA  
COUNTY OF SACRAMENTO**

**Department 36**

**Judge: Hon. Stephen P. Acquisto**

Related Case Nos. 24WM000006; 24WM000008; 24WM000009;  
24WM000010; 24WM000011; 24WM000014; 24WM000012;  
24WM000017; 24WM000062; 24WM000076

**DECLARATION OF  
KATHERINE MARQUEZ  
IN SUPPORT OF CALIFORNIA  
DEPARTMENT OF WATER RESOURCES'  
EX PARTE APPLICATION**

1. I, KATHERINE MARQUEZ, make this declaration in support of the California Department of Water Resources' (DWR) Ex Parte Application for Modification or Stay of Preliminary Injunction. I have personal knowledge of the following, and if called as a witness, I would and could testify competently thereto. The following statements are based upon my personal knowledge and upon my review of records kept by DWR in the ordinary course of its business practice. I have personal knowledge of the manner in which DWR's records are kept. Each of the records upon which I rely was made in the ordinary course of business at or near the time of the act, condition, or event. The sources of information at the time of preparation are such that I believe the records to be trustworthy.

## Background

2. I have a Bachelor of Science degree in Animal Biology from the University of California, Davis and a Master of Science in Biological Sciences with a concentration in Biological Conservation from California State University, Sacramento. I have worked approximately 16 years in environmental compliance for DWR.

3. I am currently a Program Manager III and Environmental Resources Manager for Delta Conveyance within DWR's Delta Conveyance Office. I oversee environmental planning efforts including data collection efforts for the Delta Conveyance Project (DCP). This role includes the development of environmental documentation and environmental commitments necessary to support acquisition of required permits and approvals for DCP.

4. I also worked on the environmental planning and data collection efforts for the project known as California WaterFix (WaterFix), a previous Delta conveyance project that DWR approved in 2017, but later rescinded in 2019. I worked on DWR's submission and defense of the administrative appeal of the certification of consistency at the Delta Stewardship Council (DSC) for WaterFix in 2018, which was the first certification of consistency to ever be appealed and undergo administrative appeal proceedings. Including my work on WaterFix, since April 2017, I have attended regular meetings with DSC staff, including the Deputy Executive Officer for Planning & Performance and other staff, for early consultation on WaterFix. Based on my experience with the WaterFix administrative proceedings, I have personal knowledge of the

1 DSC’s process for handling certifications of consistency on behalf of DWR and I know and  
2 understand the type of information that is typically required by DWR before a covered action can  
3 be certified as consistent with the Delta Plan.

4 **Certifications of Consistency and the Appeals Process**

5 5. Attached as **Exhibit A** is a true and correct copy of the Delta Stewardship  
6 Council’s “Administrative Procedures Governing Appeals, Statutory Provisions Requiring Other  
7 Consistency Reviews, and Other Forms of Review or Evaluation by the Council,” which I  
8 downloaded on July 17, 2024, from the Council’s website at  
9 <<https://deltacouncil.ca.gov/pdf/delta-plan/2024-02-29-delta-plan-appendix-d.pdf>> (last visited  
10 July 17, 2024). Any member of the public can access this document by clicking on the relevant  
11 hyperlink for “Appendix D – Administrative Procedures Governing Appeals, Statutory Provisions  
12 Requiring Other Consistency Reviews, and Other Forms of Review or Evaluation by the Council”  
13 at this page of the Delta Stewardship Council’s website: <<https://deltacouncil.ca.gov/delta-plan/>>  
14 (last visited July 17, 2024).

15 6. If a state or local agency determines that a proposed project is a covered action, the  
16 agency will develop a certification of consistency with detailed findings showing consistency  
17 with each applicable Delta Plan policy. Once a certification of consistency is filed with the DSC,  
18 the DSC provides a public notice and accepts appeals for 30 days following submission of a  
19 certification of consistency. (Cal. Code Regs. Tit. 23, § 5022.) During that period, any person,  
20 including a member of the council or its executive officer, or delegee, may file an appeal. (Wat.  
21 Code, §§ 85225.10, subd. (a), 85225.15; Cal. Code Regs. Tit. 23, § 5022.) An appeal is a claim  
22 that a proposed covered action is inconsistent with the Delta Plan and, as a result of that  
23 inconsistency, that action will have a significant adverse impact on the achievement of one or  
24 both of the coequal goals of a reliable water supply for California and a protected, restored and  
25 enhanced Delta ecosystem, or on implementation of government-sponsored flood control  
26 programs. (Wat. Code, § 85225.10, subd. (a).) The Delta Reform Act requires a hearing within 60  
27 days from the notice of appeal for the DSC to hear arguments from the agency that certified the  
28 covered action’s consistency with the Delta Plan policies and from the appellants. (Wat. Code,

§ 85225.20; Cal. Code Regs. Tit. 23, § 5030, subd. (a).) The council may hear an appeal for a certification of consistency outside of 60 calendar days of the effective date if any of the following:

- (1) The parties and the council or executive officer, or delegee, agree to an extension, taking into account the circumstances of the matter subject to appeal, council's hearing schedule, and associated workload;
- (2) Prior to the hearing, the council or its executive officer, or delegee, determines that the issues raised on appeal are not within the council's jurisdiction or do not raise an appealable issue;
- (3) The council or its executive officer, or delegee, determines that all issues raised on appeal are moot;
- (4) The council or its executive officer, or delegee, determines that all issues on appeal should be dismissed or the matter remanded for failure to comply with this article;
- (5) The council or its executive officer, or delegee, remands the matter to the certifying agency for failure to submit the record pursuant to the procedures governing the filing of a certification of consistency.

(Cal. Code Regs. Tit. 23, § 5030, subd. (b).)

7. How long an appeal would take for DWR's DCP certification of consistency can vary, but based on DWR's prior experience with WaterFix, I would expect the process to take 150 days (five months) or more. A decision on the appeal is to be made within 60 days of the hearing, but the parties and the council or the executive officer, or delegee, can agree to an extension. (Cal. Code Regs. Tit. 23, § 5033.)

8. In my experience, to succeed on appeal, an appellant must show that the certification of consistency is not supported by substantial evidence in the record that was before the certifying agency prior to the DSC's receipt of the certification of consistency on any appealed issue. (Wat. Code, § 85225.25; Cal. Code Regs. Tit. 23, § 5029, subd. (d).)

**DWR's Previous Experience with WaterFix Certification of Consistency**

9. Prior to and after the WaterFix administrative proceedings, I attended regular



1 meetings with the DSC's Deputy Executive Officer for Planning & Performance and other DSC  
2 staff. Including meetings relating to DCP, I have attended over 60 meetings with DSC staff  
3 related to certifications of consistency. In those DSC staff meetings, I learned the types of  
4 documents and substantial evidence that support certifications of consistency, including for the  
5 DCP, to minimize the possibility of unnecessary duplicative proceedings before the DSC. I  
6 conveyed this information to DWR management during regular staff meetings and executive  
7 briefings. Based on these meetings that I attended, I know that DWR's experience with the  
8 WaterFix proceedings resulted in a redoubled commitment to robust early consultation to develop  
9 a certification of consistency, and corresponding substantial evidence, for DCP that could  
10 withstand appeals.

11 10. The documentation making up DWR's certification of consistency for WaterFix  
12 totaled approximately 619 pages. Additionally, the record for the DSC's WaterFix administrative  
13 appeals proceeding included approximately 5,424 records, with hundreds of these records being  
14 in addition to the CEQA record. It took DWR 1 year and 3 months to prepare this WaterFix  
15 certification.

16 11. During the WaterFix appeal proceedings the DSC released to DWR and the public,  
17 the "Draft Determination Regarding Appeals of the Certification of Consistency by the California  
18 Department of Water Resources for California WaterFix" (November 8, 2018) ("WaterFix Staff  
19 Draft Determination"). I personally reviewed and carefully read the WaterFix Staff Draft  
20 Determination. A copy of the WaterFix Staff Draft Determination, which is available to the  
21 public at <[https://coveredactions.deltacouncil.ca.gov/services/download.ashx?u=018bccad-02c2-  
22 4b2c-a8bd-6264896014f1](https://coveredactions.deltacouncil.ca.gov/services/download.ashx?u=018bccad-02c2-4b2c-a8bd-6264896014f1)> (last visited July 17, 2024), is attached as Exhibit B to the Declaration  
23 of Jeff Henderson supporting DWR's Ex Parte Application (Henderson Decl.). While the  
24 WaterFix Staff Draft Determination was never adopted by the Council due to DWR's withdrawal  
25 of the certification, it is still instructive to me and to DWR's staff.

26 12. From what I learned from the WaterFix Staff Draft Determination, the DSC staff  
27 recommended remanding the covered action back to DWR for a lack of substantial evidence in  
28 the record to support the certification of consistency. As I understood it, DSC staff found a lack

1 of substantial evidence to support a finding of consistency with Delta Plan policy DP P2, codified  
2 at California Code of Regulations title 23, section 5011, which requires that the agency proponent  
3 respect local use when siting water supply or flood facilities or restoring habitats. My  
4 understanding is that the documents submitted in support of the WaterFix certification of  
5 consistency contained uncertainty regarding the type, dimensions, and number of piles and  
6 installation methods that would be used. DWR explained that the analysis incorporated  
7 conservative estimates but the final details would be based on future site-specific **geotechnical**  
8 **data**. Where final project specifications are unknown at the time CEQA review commences, in  
9 my experience, a lead agency may identify and mitigate project impacts based on conservative  
10 project assumptions. (*San Diego Citizenry Group v. County of San Diego* (2013) 219 Cal.App.4th  
11 1, 25 [finding no flaw in an EIR that “relied on conservative assumptions”].) However, in the  
12 WaterFix Staff Draft Determination, it was explained to me and to DWR that the requirements of  
13 Delta Plan policy DP P2 are, “independent from state law related to local land use authority and  
14 the requirements of CEQA, DP P2 is a directive to state and local public agency proponents of  
15 covered actions” (Henderson Decl., Exh. B [Staff Draft Determination, p. 89]). In consideration  
16 of Delta Plan policy DP P2, it was my understanding that the recommendation was to remand  
17 DWR’s WaterFix certification of consistency for DWR to conduct additional geotechnical  
18 activities identified in the WaterFix Final Environmental Impact Report (FEIR). My  
19 understanding for this recommendation was based on a proposed finding that the consistency  
20 certification was not supported by substantial evidence in the record before the agency.

21 13. While the Delta Reform Act does not prohibit the Department from filing a  
22 certification at any time, in the case of DCP, in my early consultation with Council staff, it  
23 became clear to me that the Council wants certification after other permits have been obtained  
24 and additional data has been collected, or at a minimum at a time when the considerations from  
25 those processes can be incorporated into the analysis for DWR’s certification of consistency. I  
26 have discussed some of the DCP permitting efforts with Council staff, in the context of timing of  
27 submittal of DCP’s certification of consistency, including the Incidental Take Permit for  
28 California Endangered Species Act Compliance and the Petition for a Change in Point of

1 Diversion from the Water Board. Additionally, I received a copy of the December 16, 2022, DSC  
2 comment letter on the DCP Draft EIR, a true and correct copy of which is attached hereto as  
3 **Exhibit B**. In that letter the DSC comments that: “Separate from the FEIR, the Council advises  
4 DWR to submit a petition for and obtain a Change in Point of Diversion from the Water Board  
5 prior to submitting a certification of consistency to the Council. Such documentation would  
6 provide clear documentation describing how DWR would comply with applicable standards”  
7 (**Exh. B** [DSC comment letter on DCP, p. 13].)

8 14. Similar to DCP, the WaterFix FEIR project description included a phased  
9 geotechnical investigation program. However, my understanding of the WaterFix Staff Draft  
10 Determination cited the lack of geotechnical data as a reason for the lack of substantial evidence  
11 in the record to support a certification of consistency with Delta Plan policy DP P2. (Henderson  
12 Decl., Exh. B [Staff Draft Determination, p. 144].) My understanding from the WaterFix Staff  
13 Draft Determination, was that DWR should conduct additional geotechnical investigations  
14 identified in the WaterFix FEIR prior to resubmitting a certification of consistency on remand.  
15 Based on my experience, DWR has good reason to believe substantial geotechnical  
16 investigations, which, as demonstrated in the WaterFix Staff Draft Determination, may include  
17 geotechnical investigations identified in an EIR and this is important to reduce the vulnerability  
18 of a certification of consistency to a successful appeal and remand, which would result in further  
19 expense and delay before construction could begin. Based on this, DWR determined that the  
20 level of DCP design detail and geotechnical data supporting a certification of consistency is  
21 critically important in order for the certification of consistency to withstand appeals.

22 15. Based on my meetings with DSC staff during both the WaterFix and DCP  
23 processes, I do not believe that DWR would be able to use a project EIR as the sole support for a  
24 certification of consistency with the Delta Plan. While the CEQA analysis and its administrative  
25 record will inform any certification of consistency with the Delta Plan, it is my understanding that  
26 several Delta Plan policies consider CEQA-related resources but also require an analysis that is  
27 different from CEQA and/or relies on data and analysis that also must be developed entirely  
28 outside of the CEQA process. For example, Delta Plan Policy G P1(b)(3), codified at California

1 Code of Regulations title 23, section 5002, subdivision (b)(3), states that “as relevant to the  
2 purpose and nature of the project, all covered actions must document use of best available  
3 science.” CEQA requires substantial evidence regarding the identification of significant  
4 environmental effects whereas the Delta Plan requires substantial evidence on the use of best  
5 available science. As the Delta Reform Act does not limit the record supporting a certification of  
6 consistency to the CEQA administrative record (that closes when the lead agency certifies an EIR  
7 and approved a project for purposes of CEQA), substantial evidence supporting a certification of  
8 consistency, including evidence supporting consistency with the Delta Plan’s best available  
9 science policy, may include data that post-dates, and is outside the scope of, the CEQA  
10 administrative record.

11 16. Additionally, in the December 16, 2022 DSC comment letter on the DCP Draft  
12 EIR the DSC comments that: “DP P2 is independent of other state law related to local land use  
13 authority and the requirements of CEQA. DP P2 requirements extend beyond CEQA  
14 requirements and thresholds of significance. While DWR is not required to analyze or provide  
15 mitigation measures for impacts beyond those required by CEQA in the DEIR, the certification of  
16 consistency for DP P2 will need be supported by substantial evidence in the record.” (**Exh. B**  
17 [DSC comment letter on DCP, p. 18].) This statement informed me that DWR cannot rely solely  
18 on its EIR analysis for its consistency certification.

19 17. As an example of the breadth and complexity of a certification of consistency for a  
20 large infrastructure project, when DWR submitted the WaterFix certification of consistency it  
21 consisted of 22 documents developed specifically for the certification that totaled approximately  
22 619 pages. Additionally, the record consisted of hundreds of documents that were separate and in  
23 addition to the CEQA record for that project. Despite the level of detail in the WaterFix  
24 certification of consistency and the breadth of the record, it was my understanding that the DSC  
25 Staff Draft Determination recommended remanding the project WaterFix certification of  
26 consistency back to the Department due to a lack of substantial evidence in the record (Henderson  
27 Decl., Exh. B [Staff Draft Determination, p. 149]).  
28

**DWR's Proposed Geotechnical Activities for DCP Will Inform the Substantial Evidence Needed to Support DWR's Certification of Consistency**

18. To support DWR's Ex Parte Application for Modification or Stay of Preliminary Injunction, DCA has proposed what will be referred to as the "2024-2026 Proposed Geotechnical Activities" that DWR may conduct if the court modifies or stays the injunction. The 2024-2026 Proposed Geotechnical Activities to support planning and design include subsurface exploration and testing consisting of one or more of the following:

- a) Borings with auger and/or mud rotary drill and soil sampling;
- b) Pressuremeter testing within borings using a pressuremeter tool consisting of a thin metal cylinder approximately 2 feet in length with an elastic bladder inside;
- c) P-S logging within borings using P-S log tooling including a transmitter and a receiver; and
- d) Installation and removal of a temporary slotted polyvinyl chloride (PVC) pipe with a small submersible pump and water level transducer inside for water quality testing.

19. The 2024-2026 Proposed Geotechnical Activities include the following activities:

Activity Type	2024-2026 Proposed Geotechnical Activities
Soil borings	230 (~15 to 250 feet in depth)
Cone Penetration Tests (CPTs)	15 (~50 to 250 feet in depth)
Water Quality Testing at Select Soil Boring Sites	31 (~15 to 250 feet in depth)

As set forth in the concurrently-filed Declaration of Carolyn Buckman, if the court modifies or stays the injunction, DWR has approved DCA to proceed with the 2024-2026 Proposed Geotechnical Activities.

20. The 2024-2026 Proposed Geotechnical Activities will not include all of the geotechnical work described in Chapter 3 of the DCP EIR.<sup>1</sup> This proposed 2024-2026

<sup>1</sup> In addition to the 2024-2026 Proposed Geotechnical Activities, DCA has separately proposed non-geotechnical data collection in 2024-2026 to support planning and design of DCP including 10 water quality tests in existing wells consistent with the water quality tests conducted in May and June of 2024 as well as geodetic and magnetic aerial and magnetic walk-over mapping surveys. DWR is still reviewing and considering these non-geotechnical data collection activities. These non-geotechnical data collection activities are not the subject of this declaration.

1 geotechnical work will consist largely of the same type and scope of geotechnical work that DWR  
2 successfully completed in May and June 2024, just in different locations. This proposed 2024-  
3 2026 work **will not include**: work on levees, overwater work, “Test Trenches,” or “Monument  
4 Installations.” In other words, it will be only part of what is described as geotechnical activities in  
5 DCP EIR, section 3.15 titled “Field Investigations.” As set forth in the concurrently-filed  
6 Declaration of Carolyn Buckman, DWR has approved the 2024-2026 Proposed Geotechnical  
7 Activities.

8 21. It is my understanding the information obtained from the 2024-2026 Proposed  
9 Geotechnical Activities will inform subsequent investigation programs necessary for continued  
10 planning and design of the Delta Conveyance Project. The geotechnical data collected from the  
11 2024-2026 Proposed Geotechnical Activities is important to inform the engineering teams about  
12 the hydrogeologic properties of Delta soils and the groundwater quality to inform design of the  
13 above- and below-ground alignment of DCP facilities. (See Decl. of Andrew Finney in Support of  
14 DWR’s Opposition to All PI Motions (Finney Decl.), ¶ 4 [COE, 111–112].) It is my  
15 understanding that DWR must complete the subsurface soil field work before initiating the  
16 implementation of the DCP, particularly because Delta soils are highly variable. (See Bradner  
17 Decl., ¶¶ 13, 15 [COE, 23–26]; Finney Decl., ¶¶ 4–5 [COE, 111–112].)

18 22. Based on my knowledge and experience with the DCP as a whole, one major goal  
19 is to make the DCP as resilient as possible to seismicity effects. As a result, it is my  
20 understanding that it is necessary to collect “good subsurface information” to allow DWR to  
21 “construct the tunnel in more consolidated deposits below the surface.” (Bradner Decl., ¶ 6 [COE,  
22 20–21].) It is my understanding that without this information, DWR will not know required  
23 engineering properties for the soil, a critical component to this tunnel project. (See Finney Decl.,  
24 ¶¶ 5–7 [COE, 112–113]; Bradner Decl., ¶¶ 13–14 [COE, 23–24].) These “gaps in subsurface  
25 information” will limit DWR’s “ability to refine DCP configurations and preliminary designs.”  
26 (Bradner Decl., ¶ 13 [COE, 23–24].)

27 23. Refinements to the DCP configurations and preliminary designs would need to be  
28 considered once they are approved but potential refinements could implicate location specific



1 Delta Plan Policies; this may include Delta Plan policies such as ER P2, ER P3, ER P4, DP P2,  
2 RR P3, RR P4 (Cal. Code Regs., tit. 23, § 5006, § 5007, § 5008, § 5011, § 5014, and § 5015). My  
3 understanding is that one example would be if the modifications reduced the amount of land  
4 needed for a launch shaft or reduced the amount of ground stabilization work required, both  
5 would result in reducing the amount of construction traffic and related land use and associated  
6 impacts which would be important factors to consider in an analysis of Delta Plan policy DP P2:  
7 Respect Local Use When Siting Water or Flood Facilities or Restoring Habitats.

8 24. Additionally, my understanding of Delta Plan policy GP 1(b)(3) is that it requires  
9 “[a]s relevant to the purpose and nature of the project, all covered actions must document use of  
10 best available science.” The data from the 2024-2026 Proposed Geotechnical Activities would  
11 contribute to the documentation of use of the best available science to inform planning and design  
12 for the Delta Conveyance Project. The geotechnical activities themselves are temporary data  
13 collection activities that do not constitute an irreversible commitment of resources and do not  
14 involve constructing (or implementing) any portion of the water infrastructure project. Based on  
15 my knowledge and professional experience, if DWR is allowed to proceed with the 2024-2026  
16 Proposed Geotechnical Activities, they will contribute to the best available science evidence to  
17 support a future DCP certification and promote the intent of the Delta Plan’s best available  
18 science policy.

19 **DWR’s Proposed Geotechnical Activities for DCP Will Not Harm the Environment**

20 25. DWR considered the potential environmental impacts related to the planned  
21 geotechnical activities for the DCP and incorporated applicable environmental commitments and  
22 mitigation measures from the DCP FEIR into the current geotechnical investigation program.  
23 These measures include the “Proposed 2024-2026 Preconstruction Field Investigations -  
24 Environmental Compliance, Clearance, and Monitoring Plan” (DCP FEIR EC-14) (attached  
25 hereto as **Exhibit C**) and the Tribal Cultural Resources Management Plan: Phase I (DCP FEIR  
26 MM TCR-1b, updated July 15, 2024) (attached hereto as **Exhibit D**). The DCP FEIR EC-14 Plan  
27 for the already completed Spring 2024 geotechnical investigations and the DCP FEIR EC-14 Plan  
28 for the proposed 2024-2026 geotechnical investigations cover the same types of activities

(borings, cone penetration tests, and water quality testing) and include the same parameters regarding avoidance of sensitive resources, including avoiding in-water work and work on levees. The Spring 2024 geotechnical investigations (completed in May and June 2024 before the Court issued the injunction) included 13 borings, 1 cone penetration test, and 3 water quality testing at existing wells. In my professional judgment, based on my personal knowledge and years of experience, through the commitments in the DCP MMRP and the EC-14 Plan, this work was able to be completed without harm to the environment. Shown below is an example boring site with pre, during, and after photos (respectively Photos 1-3) and an example CPT site (Photos 4-6) both completed by the DCA in Spring 2024.

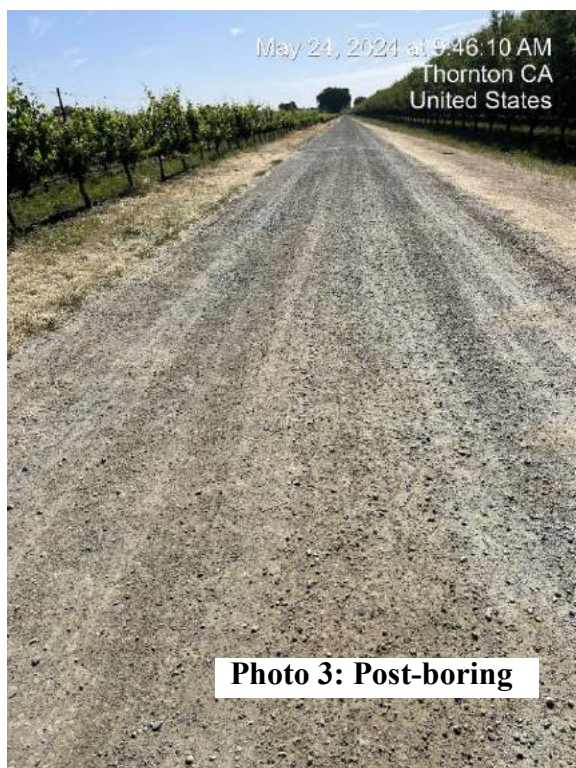


**Photo 1: Pre-boring**



**Photo 2: Active boring**

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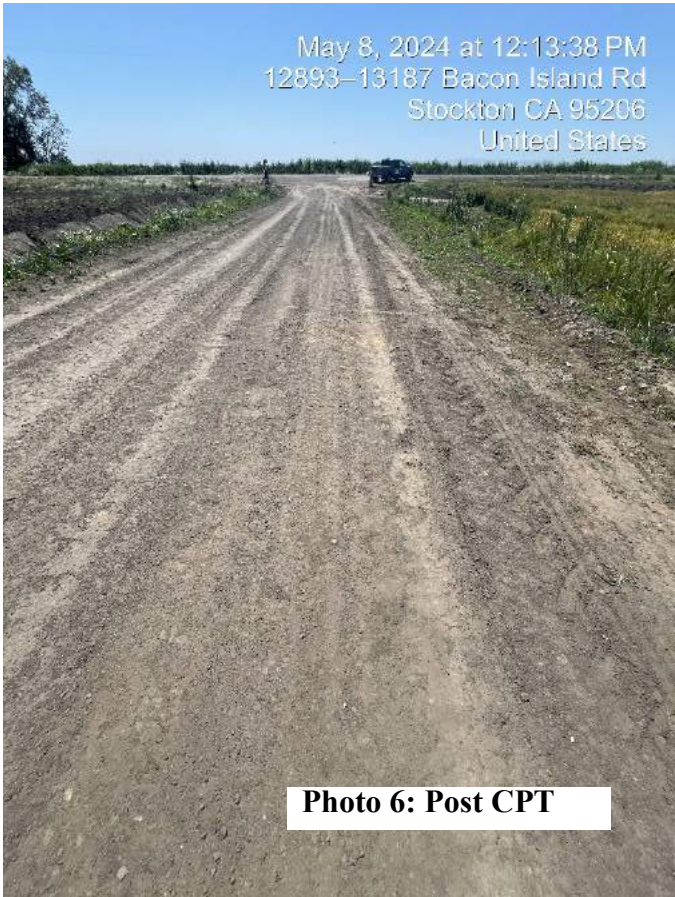
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**Photo 5: Active CPT**

May 7, 2024 at 9:09:24 AM  
12801–12891 Bacon Island Rd  
Stockton CA 95206  
United States



May 8, 2024 at 12:13:38 PM  
12893–13187 Bacon Island Rd  
Stockton CA 95206  
United States



**Photo 6: Post CPT**

**DWR's Proposed Geotechnical Activities for DCP Are Not a Covered Action under the DRA**

26. Based on an analysis performed by DWR staff, that I have been a part of, DWR has concluded that the 2024-2026 Proposed Geotechnical Activities, when considered independently, are not a covered action under the Delta Reform Act because (i) they will not have a significant adverse impact on the achievement of one or both of the coequal goals or on implementation of government-sponsored flood control programs, and (ii) they are not covered by one or more of the regulatory policies in Delta Plan Chapters 3, 4, 5, and 7 (Water Code section 85057.5(a)), Covered Action Checklist Step 2(4) and Step 3(1)). The 2024-2026 Proposed Geotechnical Activities have the potential for minor land disturbance that will be temporary in nature with investigation sites being returned to pre-existing conditions. In my professional judgment, based on personal knowledge and years of professional experience, these activities will not result in an irretrievable commitment of resources or commit the Department to moving forward with implementation of the Delta Conveyance Project. As such, they would not have any significant impacts on the coequal goals or on implementation of government sponsored flood control programs.

27. Attached as Exhibit A to the Declaration of Jeff Henderson supporting DWR's Ex Parte Application is a copy of the Delta Stewardship Council's "Delta Plan's regulatory policies in PDF format," which can be downloaded from the Council's website at <https://deltacouncil.ca.gov/pdf/delta-plan/regulations/2024-01-25-delta-plan-policies-handout.pdf> (last visited July 17, 2024). Any member of the public can access this document by clicking on the relevant hyperlink at this page of the Delta Stewardship Council's website: <https://deltacouncil.ca.gov/delta-plan/regulations> (last visited July 17, 2024).

28. In my professional judgment, based on personal knowledge and years of professional experience, DWR's Proposed Geotechnical Activities are not covered by any of the Delta Plan regulatory policies contained in Chapters 3, 4, 5, and 7. The below chart indicates why that is so, based upon my experience and knowledge:

<b>Delta Plan Policy</b>	<b>Delta Plan Policy Description</b>	<b>Consideration of Impact of 2024-2026 Proposed Geotechnical Activities on Delta Plan Policy</b>
WR P1 (Cal. Code Regs., tit. 23, § 5003)	Reduce Reliance on the Delta through Improved Regional Water Self-Reliance	“[T]his policy covers a proposed action to export water from, transfer water through, or use water in the Delta, but does not cover any such action unless one or more water suppliers would receive water as a result of the proposed action.” (Cal. Code Regs., tit. 23, § 5003(b).) The Proposed Geotechnical Activities are not covered by this policy because the activities would not export water from, transfer water through, or use water in the Delta, where one or more water suppliers would receive water as a result of the proposed action.
WR P2 (Cal. Code Regs., tit. 23, § 5004)	Transparency in Water Contracting	This policy covers “a proposed action to enter into or amend a water supply or water transfer contract subject to California Department of Water Resources Guidelines 03-09 and/or 03-10...” (Cal. Code Regs., tit. 23, § 5004(b)(1).) The Proposed Geotechnical Activities are not covered by this policy because the activities do not involve entering into or amending a water supply or water transfer contract.
ER P1 (Cal. Code Regs., tit. 23, § 5005)	Delta Flow Objectives	This policy “covers a proposed action that could significantly affect flow in the Delta.” (Cal. Code Regs., tit. 23, § 5005(b).) The Proposed Geotechnical Activities are not covered by this policy because the 2024-2026 Proposed Geotechnical Activities do not include any work over-water, in-water, or in Wetlands and Waters of the US, and as such would not significantly affect flow in the Delta.
ER P2 (Cal. Code Regs., tit. 23, § 5006)	Restore Habitats at Appropriate Elevations	“[T]his policy covers a proposed action that includes habitat restoration.” (Cal. Code Regs., tit. 23, § 5006(b).) The Proposed Geotechnical Activities are not covered by this policy because the activities would not include habitat restoration. (Cal. Code Regs., tit. 23, § 5001, subd. (hh).)
ER P3 (Cal. Code Regs., tit. 23, § 5007)	Protect Opportunities to Restore Habitat	“[T]his policy covers proposed actions in the priority habitat restoration areas depicted in Appendix 5 [Cal. Code Regs., tit. 23, div. 6, ch. 2, art. 4, app. 5].” (Cal. Code Regs., tit. 23, § 5007(d).) The Proposed Geotechnical Activities would not include in the identified Priority Habitat Restoration Areas.



Delta Plan Policy	Delta Plan Policy Description	Consideration of Impact of 2024-2026 Proposed Geotechnical Activities on Delta Plan Policy
ER P4 (Cal. Code Regs., tit. 23, § 5008)	Expand Floodplains and Riparian Habitats in Levee Projects	“[T]his policy covers a proposed action to construct new levees or substantially rehabilitate or reconstruct existing levees.” (Cal. Code Regs., tit. 23, § 5008(b).) The Proposed Geotechnical Activities are not covered by this policy because the activities would not involve the construction of new levees or substantial rehabilitation or reconstruction of existing levees.
ER P5 (Cal. Code Regs., tit. 23, § 5009)	Avoid Introductions of and Habitat Improvements for Invasive Nonnative Species	“[T]his policy covers a proposed action that has the reasonable probability of introducing or improving habitat conditions for nonnative invasive species.” (Cal. Code Regs., tit. 23, § 5009(b).) The Proposed Geotechnical Activities are not covered by this policy because the activities include only temporary activities, a limited number of vehicles, and minimal land disturbance and would occur primarily in already disturbed areas (such as agricultural roads and staging areas). As such, they would not have the reasonable probability of introducing or improving habitat conditions above existing conditions for nonnative invasive species.
DP P1 (Cal. Code Regs., tit. 23, § 5010)	Locate New Urban Development Wisely	“[T]his policy covers proposed actions that involve new residential, commercial, and industrial development” located in specified areas within the Delta. (Cal. Code Regs., tit. 23, § 5010(c).) The Proposed Geotechnical Activities are not covered by this policy because the activities would not involve new residential, commercial, and industrial development.
DP P2 (Cal. Code Regs., tit. 23, § 5011)	Respect Local Use When Siting Water or Flood Facilities or Restoring Habitats	“[T]his policy covers proposed actions that involve the siting of water management facilities, ecosystem restoration, and flood management infrastructure.” (Cal. Code Regs., tit. 23, § 5011(b).) The Proposed Geotechnical Activities are not covered by this policy because the activities would only include temporary information collection activities and would not involve the siting of water management facilities, ecosystem restoration, or flood management infrastructure. Geotechnical data would confirm the alignment and design of the project, but while the Proposed Geotechnical Activities would help inform the final siting of water management facilities, the geotechnical data collection does not commit DWR to site in those specific locations.

Delta Plan Policy	Delta Plan Policy Description	Consideration of Impact of 2024-2026 Proposed Geotechnical Activities on Delta Plan Policy
RR P1 (Cal. Code Regs., tit. 23, § 5012)	Prioritization of State Investments in Delta Levees and Risk Reduction	"[T]his policy covers a proposed action that involves discretionary State investments in Delta flood risk management, including levee operations, maintenance, and improvements." (Cal. Code Regs., tit. 23, § 5012(d).) The Proposed Geotechnical Activities are not covered by this policy because the activities would be funded through contributions from Public Water Agencies that may participate in the DCP and would not involve discretionary State investments in Delta flood risk management, including levee operations, maintenance, and improvements.
RR P2 (Cal. Code Regs., tit. 23, § 5013)	Require Flood Protection for Residential Development in Rural Areas	"[T]his policy covers a proposed action that involves new residential development of five or more parcels" located in specified areas of the Delta. (Cal. Code Regs., tit. 23, § 5013(b).) The Proposed Geotechnical Activities are not covered by this policy because the activities would not involve new residential development.
RR P3 (Cal. Code Regs., tit. 23, § 5014)	Protect Floodways	"[T]his policy covers a proposed action that would encroach in a floodway that is not either a designated floodway or regulated stream." (Cal. Code Regs., tit. 23, § 5014(b).) The Proposed Geotechnical Activities are not covered by this policy because the activities would not encroach in a floodway that is not either a designated floodway or regulated stream.
RR P4 (Cal. Code Regs., tit. 23, § 5015)	Floodplain Protection	"[T]his policy covers a proposed action that would encroach in any of the floodplain areas" described in the policy. (Cal. Code Regs., tit. 23, § 5015(b).) The Proposed Geotechnical Activities are not covered by this policy because the activities would not encroach in any of the floodplain areas described in the policy.

I declare under the penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed at Sacramento, California, this 19th day of July, 2024.

  
KATHERINE MARQUEZ

**EXHIBIT A  
TO MARQUEZ  
DECLARATION**

## **Appendix D**

# **Administrative Procedures Governing Appeals, Statutory Provisions Requiring Other Consistency Reviews, and Other Forms of Review or Evaluation by the Council**

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**APPENDIX D – ADMINISTRATIVE PROCEDURES GOVERNING APPEALS,  
STATUTORY PROVISIONS REQUIRING OTHER CONSISTENCY REVIEWS,  
AND OTHER FORMS OF REVIEW OR EVALUATION BY THE COUNCIL**

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*The paragraphs in **bold** are published in the California Code of Regulations, Title 23, Division 6. The section numbers are provided for ease of reference. Remaining (non-bold) paragraphs are retained in the Council's Administrative Procedures Governing Appeals.*

## **DELTA STEWARDSHIP COUNCIL**

- I. ADMINISTRATIVE PROCEDURES GOVERNING APPEALS
- II. STATUTORY PROVISIONS REQUIRING OTHER CONSISTENCY REVIEWS
- III. OTHER FORMS OF REVIEW OR EVALUATION BY THE COUNCIL

### **PART I – ADMINISTRATIVE PROCEDURES GOVERNING APPEALS**

#### **Introduction**

1. Purpose. These informal administrative procedures govern how the Delta Stewardship Council (council) considers appeals with regard to:
  - a) Adequacy of certifications of consistency with the Delta Plan submitted to the council by a state or local public agency pursuant to Water Code sections 85225.10 and 85225.30; and
  - b) Determinations by the Department of Fish and Game that the Bay Delta Conservation Plan has met the requirements of Water Code section 85320 for inclusion in the Delta Plan.

NOTE: Authority cited: Water Code sections 85001, 85020(h), 85022, 85057.5, 85200, 85210, 85212, 85225, 85225.5, 85225.10, 85225.15, 85225.20, 85225.25, 85225.30, 85300, 85320(e).

#### **Review of certifications of consistency with Delta Plan**

2. Any state or local public agency (certifying agency) proposing to undertake a covered action, as defined in Water Code section 85057.5 is encouraged to consult with the council at the earliest possible opportunity, preferably no later than 30 days before submitting its certification to the council pursuant to Water Code section 85225. The council's staff will meet with the agency's staff to review the consistency of the proposed action and to make recommendations, as appropriate. During this early consultation, the agency's staff may also seek clarification on whether the proposed project is a "covered action"; provided that the ultimate determination on whether it is a covered action shall be made by the agency, subject to judicial review.

NOTE: Authority cited: Water Code sections 85212, 85225, 85225.5,



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85225.30.

3. At least 10 days prior to its submission of a certification to the council, a certifying agency that is not subject to open meeting laws (that is, the Bagley-Keene Open Meeting Act [Gov. Code sec.11120 et seq.] or the Brown Act [Gov. Code sec.54950 et seq.]) with regard to its certification, shall post, for public review and comment, its draft certification conspicuously on its website and in its office, mail it to all persons requesting notice, and include any public comments received in the record submitted to the council in the case of an appeal. A certifying agency that is subject to open meeting laws with regard to its certification is encouraged to take those actions.

NOTE: Authority cited: Water Code sections 85225, 85225.30.

- 3.1 If the last day for a submittal or filing to the council required under these procedures is a weekend or a State holiday, that deadline shall be the next business day.

NOTE: Authority cited: Code of Civil Procedure section 12a; Water Code section 85225.30

4.
  - a) Any certification of consistency filed by a certifying agency pursuant to Water Code section 85225 shall set forth detailed findings that the covered action is consistent with the Delta Plan. The council has prepared a checklist, posted on the council's website, that agencies may use to assist them in preparing the certification and making the required findings. Certifications shall be filed on the *council's* covered actions portal (<https://coveredactions.deltacouncil.ca.gov>).
  - b) A certifying agency shall include with the certification of consistency submitted to the council a document listing the materials that constitute the record before the certifying agency at the time of certification.

#### **FILING OF APPEAL & SUBMITTAL OF CERTIFICATION RECORD** **Codified as Cal. Code Reg., tit. 23, § 5022**

**(a) No later than 30 calendar days after the date a certification of consistency is filed with the council, any person, including a member of the council or its executive officer, or delegee, may file an appeal claiming that a proposed covered action is inconsistent with the Delta Plan and, as a result of that inconsistency, that action will have a**

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**significant adverse impact on the achievement of one or both of the coequal goals of the Sacramento-San Joaquin Delta Reform Act of 2009 (Wat. Code, § 85000 et seq.) or implementation of government-sponsored flood control programs to reduce risks to people and property in the Delta.**

**(b) All appeals shall be in writing and filed with any supporting documentation through the council's covered actions portal and shall be public records consistent with the California Public Records Act (Gov. Code § 7920.000 et seq.).**

**(c) An appeal shall be in writing and clearly and specifically set forth the basis for the claim that the covered action is inconsistent with the Delta Plan. It shall contain all of the following:**

**(1) Appellant's name, residence address or mailing address, email address, and telephone number.**

**(2) The project name of the covered action, and identification number issued by the council.**

**(3) The name of the certifying agency.**

**(4) A statement of the factual allegations upon which the appeal is based.**

**(5) A list of the specific Delta Plan policies that the appellant alleges the proposed covered action is inconsistent with, and for each policy identified, both of the following:**

**(A) A concise statement of the authority, evidence, and arguments relied on to support the appellant's claim that the proposed covered action is inconsistent with the Delta Plan policy.**

**(B) How the claimed inconsistency will have a significant adverse impact on one or both of the coequal goals or the implementation of a government-sponsored flood control program to reduce risks to people and property in the Delta.**

**(d)(1) An appeal shall be considered timely when received by the council no later than 5:00 p.m. (PT) on the 30th calendar day following the council's receipt of the certification of consistency.**

**(2) The effective date of a timely appeal shall be the 30th calendar day after the date of receipt of the certification of consistency.**

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**(3) A copy of the appeal shall be stamped "Filed" with the effective date. The effective date of filing shall govern the timeframe established by Water Code section 85225.20.**

**(e)(1) No later than five calendar days after the council has posted a notice of appeal pursuant to section 5023, a certifying agency shall submit to the council the record that was before the certifying agency at the time it made its certification. The record shall be certified by the agency as being "full and complete."**

**(2) Any modifications to the certified record shall be subject to this article.**

**(3) A certifying agency is strongly encouraged to either submit or make the record publicly available at the time it files its certification of consistency and provide information on its location in the certification.**

**(4) The failure by a certifying agency to submit the record to the council on a timely basis as required pursuant to paragraph (1) shall be grounds for the council to remand the matter to the certifying agency on the basis that there was not substantial evidence presented to support the certification of consistency.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Sections 6707 and 11020, Government Code; Sections 85225.10, 85225.15 and 85225.20, Water Code.**

#### **NOTICE OF APPEAL** **Codified as Cal. Code Reg., tit. 23, § 5023**

**(a) Within five business days of the effective date of an appeal, the executive officer, or delegee, shall do all of the following:**

**(1) Post a notice and brief description of the appeal and its effective date in a conspicuous location in the council's office and on its website.**

**(2) Mail to the affected certifying agency and to any third party whose proposal is the subject of the certification a copy of the notice, a brief description, and a copy of the appeal documents filed with the council.**

**(3) Mail copies of the appeal to each member of the council, and to the**

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**Delta Protection Commission for informational purposes consistent with Public Resources Code section 29773.**

**(4) Mail notice to the appellant that the appeal has been filed and stating the effective date of filing.**

**(b) The council or executive officer, or delegee, may issue supplemental notices as necessary.**

**(c) Notices shall be mailed electronically consistent with section 5021.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Section 85210 and 85225.30, Water Code.**

#### **ADDITIONAL INFORMATION FROM APPELLANT** **Codified as Cal. Code Reg., tit. 23, § 5025**

**The council or its executive officer, or delegee, may request from the appellant further information necessary to clarify, amplify, correct, or otherwise supplement the information submitted with the appeal to be provided by the deadlines specified by the council or its executive officer, or delegee. The council or its executive officer, or delegee, may dismiss the appeal for the failure of the appellant to provide information requested by a specified deadline if the information requested is in the possession of or under the control of the appellant.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Sections 85225.10, 85225.20 and 85225.25, Water Code.**

#### **SUPPLEMENTAL RECORD** **Codified as Cal. Code Reg., tit. 23, § 5026**

**(a) The council or its executive officer, or delegee, may supplement the record submitted by the certifying agency if the council or its executive officer, or delegee, determines that additional information was part of the record before the certifying agency at the time of certification but was not included in the certifying agency's record submitted to the council.**

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**(b) Any party to an appeal and the Delta Protection Commission may submit a request to the council to supplement the record with additional documentation or information that was part of the record before the certifying agency but was not included in the certifying agency's submission to the council. That request, including the documentation or information requested for admission, shall be submitted to the council by the deadline specified by the council for that type of submission in the applicable notice. Requests that are not submitted by the specified deadline in the required format or that do not include the required documentation or information shall not be considered for admission.**

**(c) To be considered for admission pursuant to this section, each request shall include for each specific document or information requested to be considered for admission all of the following:**

**(1) Specification that the request is being submitted pursuant to this section.**

**(2) The documentation or information that is the subject of the request. Each document or information that is the subject of a request shall be provided as a separate electronic document or file. Multiple documents or information submitted as one electronic file shall not be considered for admission.**

**(3) Specific evidence that the document or information requested for admission was part of the record before the certifying agency prior to the date of the council's receipt of the certification.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Sections 85225.10, 85225.20 and 85225.25, Water Code.**

## **SCHEDULES AND ORAL PRESENTATIONS**

**Codified as Cal. Code Reg., tit. 23, § 5027**

**(a)(1) All deadlines and scheduling related to an appeal, including, but not limited to, hearings, written submissions, and requests for admission of additional information pursuant to sections 5026 and 5032, shall be specified in a notice issued by the council or executive officer, or delegee, except as already specified by statute or this article.**

*The paragraphs in **bold** are published in the California Code of Regulations, Title 23, Division 6. The section numbers are provided for ease of reference. Remaining (non-bold) paragraphs are retained in the Council's Administrative Procedures Governing Appeals.*

**(2) Requests and submissions provided after the deadlines specified in the applicable notice shall not be considered.**

**(b) The council shall conduct a hearing on an appeal in a manner deemed most suitable to ensure fundamental fairness to all parties concerned and with a view toward securing all relevant information and material necessary to render a decision without unreasonable delay.**

**(c) The hearing shall not be subject to common law, statutory rules of evidence, or technical or formal rules of procedure, except as set forth in in this article. Unduly repetitious or irrelevant evidence may be excluded upon order of the council, chair, or executive officer.**

**(d) Except as provided in sections 5026 and 5032, evidence is limited to the record that was before the certifying agency prior to the council's receipt of the certification of consistency. The record shall not include a transcript of any proceedings before the certifying agency unless provided by a party to the proceedings or requested by the council.**

**(e)(1) The appellant and certifying agency may each make oral presentations regarding the appeal at the time and date of the hearing set forth in the notice issued by the council or executive officer, or delegee pursuant to this section.**

**(2) Presentations shall address the issues and facts raised in the appeal and shall be as brief as possible.**

**(3) The council or executive officer, or delegee, shall have the discretion to set time limits on oral presentations and decide the order of the presenters. The certifying agency shall be afforded the combined amount of presentation time that is afforded to the appellant.**

**(f) Council members may ask questions of the appellant, the certifying agency, the Delta Protection Commission, any third party appearing at the hearing, or council staff. The questioning of speakers at the hearing by other persons shall not be permitted except by permission of the council, chair, or executive officer.**



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**(g) Any person other than the certifying agency or appellant may provide oral comment or written comments to the council concerning an appeal in accordance with the Bagley-Keene Open Meeting Act (Gov. Code, § 11120 et seq.). Written comments may be submitted any time, but to ensure that written comments may be circulated to council members for their review ahead of the applicable meeting concerning an appeal, written comments shall be submitted to the council at least 10 calendar days prior to that meeting. Written comments may be submitted electronically.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Section 11125.7, Government Code; Sections 85225.10, 85225.20 and 85225.25, Water Code.**

**DELTA PROTECTION COMMISSIONS COMMENTS**  
**Codified as Cal. Code Reg., tit. 23, § 5028**

**(a)(1) The Delta Protection Commission may submit written comments on issues raised by an appellant in an appeal and whether the certification of consistency for the proposed covered action is supported by substantial evidence in the record before the certifying agency.**

**(2) The Delta Protection Commission may further make an oral presentation to the council regarding issues raised by an appellant in an appeal at the time and date of the hearing on the appeal.**

**(b) The council shall consider the comments and presentation submitted by the Delta Protection Commission regarding issues raised by an appellant as those of an expert in matters that may affect the unique cultural, recreational, and agricultural values of the Delta when preparing, considering, and adopting its findings.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Sections 85210 and 85225.30, Water Code.**

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**DOCUMENTATION AND WRITTEN SUBMISSIONS**  
**Codified as Cal. Code Reg., tit. 23, § 5029**

**(a) The council shall hear appeals of certifications of consistency filed pursuant to Water Code section 85225 within 60 calendar days of the effective date.**

**(b) Notwithstanding subsection (a), the council may hear an appeal for a certification of consistency outside of 60 calendar days of the effective date if any of the following:**

**(1) The parties and the council or executive officer, or delegee, agree to an extension, taking into account the circumstances of the matter subject to appeal, council's hearing schedule, and associated workload.**

**(2) Prior to the hearing, the council or its executive officer, or delegee, determines that the issues raised on appeal are not within the council's jurisdiction or do not raise an appealable issue.**

**(3) The council or its executive officer, or delegee, determines that all issues raised on appeal are moot.**

**(4) The council or its executive officer, or delegee, determines that all issues on appeal should be dismissed or the matter remanded for failure to comply with this article.**

**(5) The council or its executive officer, or delegee, remands the matter to the certifying agency for failure to submit the record pursuant to the procedures governing the filing of a certification of consistency.**

**(c) The council may hold additional hearings or workshops at its discretion and as it deems necessary.**

**(d) The council, upon a determination of good cause, may continue the hearing.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Sections 85225, 85225.10 and 85225.20, Water Code.**

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## **HEARING**

**Codified as Cal. Code Reg., tit. 23, § 5030**

**(a) The council shall hear appeals of certifications of consistency filed pursuant to Water Code section 85225 within 60 calendar days of the effective date.**

**(b) Notwithstanding subsection (a), the council may hear an appeal for a certification of consistency outside of 60 calendar days of the effective date if any of the following:**

**(1) The parties and the council or executive officer, or delegee, agree to an extension, taking into account the circumstances of the matter subject to appeal, council's hearing schedule, and associated workload.**

**(2) Prior to the hearing, the council or its executive officer, or delegee, determines that the issues raised on appeal are not within the council's jurisdiction or do not raise an appealable issue.**

**(3) The council or its executive officer, or delegee, determines that all issues raised on appeal are moot.**

**(4) The council or its executive officer, or delegee, determines that all issues on appeal should be dismissed or the matter remanded for failure to comply with this article.**

**(5) The council or its executive officer, or delegee, remands the matter to the certifying agency for failure to submit the record pursuant to the procedures governing the filing of a certification of consistency.**

**(c) The council may hold additional hearings or workshops at its discretion and as it deems necessary.**

**(d) The council, upon a determination of good cause, may continue the hearing.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Sections 85225, 85225.10 and 85225.20, Water Code.**

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**ISSUANCE OF DECISION**  
Codified as Cal. Code Reg., tit. 23, § 5033

- (a) The council shall make a decision on the appeal with specific written findings within 60 calendar days of hearing the appeal.**
- (b) The parties and the council or the executive officer, or delegee, may agree to an extension of the time for the council's decision considering the circumstances of the matter subject to appeal, council's hearing schedule, and associated workload.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Sections 85210.5, 85225.20 and 85225.25, Water Code.**

**IMPLEMENTATION OF COVERED ACTION**  
Codified as Cal. Code Reg., tit. 23, § 5034

**A covered action that is the subject of an appeal shall not be implemented unless at least one of the following conditions has been met:**

- (a) The council has found that no appellant has shown that the certification of consistency is not supported by substantial evidence in the record on any appealed issue.**
- (b) After remand, all of the following have occurred:**
  - (1) The certifying agency has decided to proceed with the action as proposed or modified.**
  - (2) The certifying agency has filed with the council a revised certification of consistency addressing each of the findings made by the council and any changes made to the proposed action.**
  - (3) Thirty calendar days has elapsed, and no person has appealed the revised certification.**
- (c) The appellant has withdrawn the appeal.**
- (d) The council or its executive officer, or delegee, has dismissed the appeal pursuant to this article.**

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**(e) If, after hearing an appeal, the council has not adopted findings that the appellant has shown that the certification of consistency is not supported by substantial evidence in the record.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Sections 85225.20 and 85225.25, Water Code.**

**APPEAL FOLLOWING A REMAND**  
**Codified as Cal. Code Reg., tit. 23, § 5035**

**(a) An appeal of a revised certification of consistency following a remand shall be limited to either of the following:**

**(1) An alleged failure to address each of the council's findings on the remanded issues.**

**(2) Issues resulting from material changes to the covered action.**

**(b) Except as provided in subsection (a)(2), a person shall not raise new grounds for appeal that were not raised in a prior appeal or reassert grounds that were raised or were rejected by the council. Those grounds may be considered non-appealable issues and dismissed.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**  
**Reference: Sections 85210.5, 85225.5 and 85225.25, Water Code.**

Review of Bay Delta Conservation Plan

16. If the Department of Fish and Game (department) determines that the Bay Delta Conservation Plan (BDCP) referred to in Water Code section 85053 meets all of the requirements of Water Code section 85320 for inclusion in the Delta Plan, it shall file the BDCP and its determination with the council.

**NOTE: Authority cited: Water Code sections 85053, 85225.30, 85320.**

17. Upon receipt of the department's determination, the executive officer of the council shall:

a) Post a notice and brief description of the BDCP, the department's determination, the date of filing and the right of any person to appeal

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that determination on its website and in a conspicuous location in the council's office;

b) Mail a notice and brief description of the BDCP, the department's determination and the right of appeal to any person requesting notice; and

c) Mail copies of the determination to each member of the council.

NOTE: Authority cited: Water Code sections 85225.30, 85320 (e).

18. Any person, including any member of the council or its executive officer, may appeal to the council the determination of the department that the BDCP meets all of the requirements of Water Code section 85320 for inclusion in the Delta Plan.

NOTE: Authority cited: Water Code sections 85225.30, 85320 (e).

19. a) Any appeal to the council made pursuant to Paragraph 18 shall be made within 30 days of the later of the following:
1. the filing with the council of the department's determination that the BDCP meets all the requirements of Water Code section 85320 for inclusion in the Delta Plan, or
  2. the conclusion of the council's hearing or hearings held pursuant to Water Code section 85320(d).
- b) The appeal shall be in writing and filed in electronic form. It shall clearly set forth the specific grounds for the appeal and the specific facts upon which it is based. These shall include a list of each specific requirement of Water Code section 85320 that the BDCP allegedly fails to meet. The appeal shall be considered filed with the council when the appellant's appeal is received, determined by staff to contain all the information required in this paragraph, and a hard-copy is printed and stamped "Filed" by the council staff with the date of filing indicated.
- c) If an appeal is filed before the council publicly notices a hearing to be held pursuant to Water Code section 85320(d), the council, in its discretion, may combine the hearing on appeal and the hearing pursuant to Water Code section 85320(d).

NOTE: Authority cited: Water Code sections 85225.30, 85320.

20. Within five working days of the filing of an appeal pursuant to Paragraph



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18, the executive director shall:

- a) Post a notice and brief description of the appeal on its website and in a conspicuous location in the council's office;
- b) Mail a notice and brief description of the appeal to any person requesting copies of such appeals; and
- c) Mail copies of the appeal and a brief description of the appeal to each member of the council.

NOTE: Authority cited: Water Code sections 85225.30, 85320 (e).

21. The council or its executive officer may request from the appellant or the department additional information necessary to clarify, amplify, correct, or supplement the information submitted with the appeal within a reasonable period.

NOTE: Authority cited: Water Code sections 85225.30, 85320 (e).

22. Any appeal made pursuant to Paragraph 18 may be dismissed if the council or its executive officer determines that it does not raise an appealable issue or if the appellant has failed to provide requested information to support her charge within a reasonable time, if that information is in the possession of or under the control of the appellant.

NOTE: Authority cited: Water Code sections 85225.30, 85320 (e).

23. The council shall determine, based upon a preponderance of the evidence, whether the department correctly determined that the BDCP meets all of the requirements of Water Code section 85320 for inclusion in the Delta Plan. In reaching its decision, the council shall give weight to the reasoning and factual findings of the department. The council may seek clarification from the department of its reasoning and factual findings prior to the council making its final determination.

NOTE: Authority cited: Water Code section 85225.30, 85320(b), (e).

- 23.5 a) The council shall conduct any hearing on an appeal made pursuant to Paragraph 18 in a manner deemed most suitable to ensure fundamental fairness to all parties concerned, and with a view toward securing all relevant information and material necessary to render a decision without unreasonable delay.

- b) The hearing need not be conducted according to technical rules relating

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to evidence and witnesses. Any relevant evidence shall be considered if it is the sort of evidence on which responsible persons are accustomed to rely in the conduct of serious affairs, regardless of the existence of any common law or statutory rule which might make improper the admission of such evidence over objection in a court proceeding. Unduly repetitious or irrelevant evidence shall be excluded upon order of the council or its chairperson.

c) Subject to Paragraph 23, evidence before the council includes, but is not limited to, the record before the department. The record will not include a transcript of any proceedings before the department unless provided by a party to the proceedings or requested by the council.

d) Any interested person may testify before the council regarding an appeal concerning the BDCP. Speakers' presentations shall be to the point and shall be as brief as possible. Visual and other materials may be used as appropriate. The council may establish reasonable time limits for presentations; such time limits shall be made known to all affected persons prior to any hearing. Where speakers use or submit to the council visual or other materials, such materials shall become part of the hearing record and shall be identified and maintained as such. Speakers may substitute reproductions of models or other large materials but shall agree to make the originals available upon request of the executive director.

e) Council members may ask questions of the appellant, the department's representative(s), any third party appearing at the hearing or staff. Questioning of speakers at the hearing by other persons shall not be permitted except by permission of the Chairperson.

f) Interested persons may submit written comments concerning an appeal. Any such comments will be considered by the council if they are received by the council at or before the hearing on the appeal; provided that those written comments should be submitted to the council at least 10 days prior to the hearing to ensure that they, or in appropriate cases, summaries, may be circulated to council members for their review ahead of the hearing.

g) The council may continue the hearing where it determines that a continuance would be appropriate.

NOTE: Authority cited: Water Code sections 85225.30, 85320(e).

24. The council's decision shall include specific written findings. The council shall post its decision on its website and mail copies to the department and all parties requesting notice.

*The paragraphs in **bold** are published in the California Code of Regulations, Title 23, Division 6. The section numbers are provided for ease of reference. Remaining (non-bold) paragraphs are retained in the Council's Administrative Procedures Governing Appeals.*

NOTE: Authority cited: Water Code sections 85225.30, 85320(e).

25. If the council decides that the department incorrectly determined that the BDCP meets all of the requirements of section 85320 for inclusion in the Delta Plan, and consequently grants the appeal, the department may revise its determination to meet the issues raised by the council, or may respond to the council's findings in detail, setting forth reasons why it has concluded that the BDCP meets all of the requirements of section 85320 for inclusion in the Delta Plan. Unless the council decides that the department's determination, as submitted or revised, correctly concludes that the BDCP meets all of the requirements of section 85320 for inclusion in the Delta Plan, the BDCP shall not be incorporated in the Delta Plan and the public benefits associated with the BDCP shall not be eligible for state funding.

NOTE: Authority cited: Water Code sections 85225.30, 85320 (a), (b), (e).

#### **EX PARTE COMMUNICATIONS**

**Codified as Cal. Code Reg., tit. 23, § 5024**

**(a) Hearings on appeals are subject to the ex parte communication restrictions of the Administrative Procedure Act (Gov. Code § 11430.10 et seq.). Pursuant to Government Code section 11430.10, an ex parte communication is a "communication, direct or indirect, regarding any issue in the proceeding, to the [council or council member] from an employee or representative of an agency that is a party or from an interested person outside the agency, without notice and opportunity for all parties to participate in the communication."**

**(b) The restrictions on ex parte communications apply from the date the appeal is filed to the date that the council issues a final decision on the appeal.**

**(c) To ensure compliance with this section, council members shall avoid ex parte communications while an appeal is pending. If a council member receives an ex parte communication, including, but not limited to, by an individual sending a letter to a council member concerning a pending appeal matter, the council member shall notify the council's legal adviser or executive officer.**

**(d) At the first appropriate publicly noticed council meeting after an**

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**appeal is filed, the council's legal adviser shall remind the council of this ex parte communications restriction and answer questions about its scope.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Sections 11430.10 and 11430.80, Government Code.**

**OFFICIAL NOTICE**  
**Codified as Cal. Code Reg., tit. 23, § 5032**

**(a) Notwithstanding any other provision of this article, the council may take official notice in any hearing that it conducts of any generally accepted technical or scientific matter within the council's jurisdiction and of any fact that may be judicially noticed by a court.**

**(b)(1) A party to an appeal and the Delta Protection Commission may submit a request to the council to take official notice of additional information that was not included in the certifying agency's submitted record to the council. That request, including the documentation or information requested for admission, shall be submitted to the council by the deadline specified by the council for those submittals in the applicable notice.**

**(2) Requests for additional information that are not submitted by the council's deadline in the required format or that do not include the required documentation or information shall not be considered for admission.**

**(c) To be considered for admission pursuant to this section, each request for each specific document or information requested to be considered for admission shall include all of the following:**

**(1) Specification that the request is being submitted pursuant to this section.**

**(2) The documentation or information that is the subject of the request. Each document or information that is the subject of a request shall be provided as a separate electronic document or file. Multiple documents or information submitted as one electronic file shall not be considered for admission.**

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**(3) Specific evidence that the information requested for admission is of the following:**

**(A) A generally accepted technical or scientific matter within the council's jurisdiction.**

**(B) A fact that may be judicially noticed by a court.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Section 11515, Government Code.**

#### **FILINGS AND MAILINGS** **Codified as Cal. Code Reg., tit. 23, § 5021**

**(a)(1) All filings, submissions, and mailings required to be submitted pursuant to this article shall be made electronically. Filings, submissions, and mailings shall be in 12-point black font.**

**(2) The council encourages electronic submittals to comply with the Web Content Accessibility Guidelines 2.0, or a subsequent version effective at the time of the filing of the certification of consistency, published by the Web Accessibility Initiative of the World Wide Web Consortium at a minimum Level AA success criteria.**

**(b) If the last day for a filing or submissions to the council required pursuant to this article is a weekend or a State holiday, that deadline shall be the next business day.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Section 12a, Code of Civil Procedure; Sections 7405, 11135 and 11546.7, Government Code.**

#### **GENERAL APPELAS ISSUES (CONSOLIDATION)** **Codified as Cal. Code Reg., tit. 23, § 5031**

**(a) The council, at its discretion, may consolidate appeals raising similar issues.**

**(b) The council or its executive officer, or delegee, may address**

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**issues related to this article in individual or consolidated appeals as necessary to further the interests of justice.**

**NOTE: Authority cited: Sections 85210 and 85225.30, Water Code.**

**Reference: Section 85225.5, Water Code.**

## PART II – STATUTORY PROVISIONS REQUIRING OTHER CONSISTENCY REVIEWS (AFTER ADOPTION OF THE DELTA PLAN)

In several other sections of SB X7 1, the council is directed to review for consistency with the Delta Plan, various plans of specified public agencies. This Part is directed at those reviews, which fall outside the scope of the procedures covered by Part I.

### 1. Delta Protection Commission's Economic Sustainability Plan.

Public Resources Code section 29759 requires the Delta Protection Commission (DPC), by July 1, 2011, to adopt an economic sustainability plan. That plan must include information and recommendations that inform the council's policies regarding the socioeconomic sustainability of the Delta's region.

Public Resources Code section 29761.5(b) requires the DPC to transmit copies of the plan to the council within 60 days of adoption. The council is required, within 180 days of the adoption of the plan, to review the plan for consistency with the Delta Plan.

### 2. Local and Regional Planning Documents.

Water Code section 85057.5(b)(3), excepts from the definition of "covered action", regional transportation plans prepared pursuant to Government Code section 65080. Paragraph (4) of that same section, excepts from the definition of "covered action", plans, programs, projects or activities within the secondary zone of the Delta that the applicable metropolitan planning organization under Government Code section 65080 has determined is consistent with either a sustainable communities strategy or an alternative planning strategy that would achieve specified greenhouse gas emission reduction targets as determined by the Air Resources Board.



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Because they are not “covered actions”, these types of local and regional planning documents are not subject to the statutory provisions governing consistency of state and local public agency actions (Water Code secs. 85225 et seq.), or the council's Administrative Procedures Governing Appeals (Part I, above), with one exception noted in paragraph (d), below.

However, Water Code section 85212 provides a separate requirement and process for consistency review by the council of these types of local and regional planning documents.

In particular:

- (a) The council is required to review and provide timely advice to local and regional planning agencies regarding the consistency of local and regional planning documents, including sustainable communities strategies and alternative planning strategies prepared pursuant to Government Code section 65080, with the Delta Plan.
- (b) The council's input must include, but not be limited to, reviewing the consistency of local and regional planning documents with the ecosystem restoration needs of the Delta and reviewing whether the lands set aside for natural resources protection are sufficient to meet the Delta's ecosystem needs.
- (c) A metropolitan planning organization preparing a regional transportation plan that includes land within the primary or secondary zones of the Delta must consult with the council early in the planning process regarding the issues and policy choices relating to the council's advice.
- (d) No later than 60 days prior to the adoption of a final regional transportation plan, the metropolitan planning organization must provide the council with a draft sustainable communities strategy and an alternative planning strategy, if any. Concurrently, the metropolitan planning organization must provide notice of its submission to the council in the same manner in which agencies file a certificate of consistency with regard to covered actions.
- (e) If the council concludes that the draft strategies are inconsistent with the Delta Plan, the council must provide written notice of the claimed inconsistency to the metropolitan planning organization no later than 30 days prior to the adoption of the final regional transportation plan.
- (f) If the council provides timely notice of a claimed inconsistency, the

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metropolitan planning organization's adoption of the final regional transportation plan must include a detailed response to the council's notice.

### PART III – OTHER FORMS OF REVIEW OR EVALUATION BY THE COUNCIL

1. Interested parties, including federal, state and local public agencies, are encouraged to confer with the council or its executive officer over the scope and potential impacts of the interim plan developed under Water Code section 85084. Interested parties will be provided an opportunity to comment and provide input on the interim plan as it is developed.
2. Similarly, prior to adoption of the Delta Plan, project proponents are encouraged to consult with the council or its executive officer early in the planning stages of projects that may constitute "covered actions" under Water Code section 85057.5 once the Delta Plan is adopted. Subject to available resources, the council may review and comment on planning documents and environmental review documents regarding potential "covered actions".
3. Subject to available resources, the executive officer or his designee may meet with interested parties, upon their request, to help mediate relevant disputes, including disputes, once the Delta Plan is adopted, over whether a project constitutes a "covered action" under Water Code section 85057.5. The intent of this mediation will be to provide an objective and informal forum for dispute resolution that will serve as a more efficient alternative to costly and time- consuming litigation.
4. Interested parties, including federal, state and local agencies, are encouraged to confer and coordinate with the council or its executive officer with regard to agency plans, studies, strategies, and recommendations required, or otherwise suggested, to be considered by the council for incorporation into the Delta Plan.

**EXHIBIT B  
TO MARQUEZ  
DECLARATION**



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**EXECUTIVE OFFICER**  
Jessica R. Pearson

December 16, 2022

Department of Water Resources  
Attention Delta Conveyance Office  
P.O. Box 942836  
Sacramento, CA 94236-0001

Delivered via email: [deltaconveyancecomments@water.ca.gov](mailto:deltaconveyancecomments@water.ca.gov)

## **RE: Comments on the Draft Environmental Impact Report for the Delta Conveyance Project**

Department of Water Resources – Delta Conveyance Office:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) for the Department of Water Resources (DWR) Delta Conveyance Project (project). The Delta Stewardship Council (Council) understands the stated purpose of the project is to develop new diversion and conveyance facilities in the Sacramento-San Joaquin Delta (Delta) in order to ensure a reliable water supply south of the Delta. Stated project objectives include, but are not limited to: addressing anticipated rising sea levels and other reasonably foreseeable consequences of climate change and extreme weather events; minimizing potential for health and safety impacts from reduced quantity and quality of water deliveries south of the Delta resulting from a major earthquake; protecting the ability of the State Water Project (SWP) (and potentially the Central

Valley Project (CVP)) to deliver water under varying hydrologic and regulatory conditions; and providing operational flexibility to improve aquatic conditions in the Delta and better manage impacts of further regulatory conditions on SWP (and potentially CVP) operations (DEIR, Chapter 2, pp. 2-2—2-3).

The Council is an independent state agency established by the Sacramento-San Joaquin Delta Reform Act of 2009, codified in Division 35 of the California Water Code, sections 85000-85350 (Delta Reform Act). The Delta Reform Act charges the Council with furthering California's coequal goals of providing a more reliable water supply and protecting, restoring, and enhancing the Delta ecosystem, to 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.)

Pursuant to the Delta Reform Act, the Council has adopted the Delta Plan, a management framework for the Delta and Suisun Marsh for achieving the coequal goals. The Delta Reform Act grants the Council specific regulatory and appellate authority over certain actions that take place in whole or in part in the Delta and Suisun Marsh, referred to as "covered actions." (Wat. Code, §§ 85022(a) and 85057.5.) The Council exercises that authority through the Delta Plan's regulatory policies (set forth in Title 23 of the California Code of Regulations, Sections 5002 through 5015). State and local agencies are required to demonstrate consistency with Delta Plan policies when carrying out, approving, or funding a covered action. (Wat. Code, §§ 85057.5 and 85225.) In addition, the Delta Plan contains recommendations, which are not part of the covered actions process, but articulate actions that the Council strongly encourages agencies to undertake.

## Covered Action Determination and Certification of Consistency with the Delta Plan

Water Code section 85057.5(a) provides a multi-part test to define what activities would be considered covered actions. Based on the project location and scope described in the DEIR, the project appears to meet the definition of a covered action because it:

1. Will occur in whole or in part within the boundaries of the Delta, as defined under Section 12220 of the Water Code, or Suisun Marsh, as defined under Section 29101 of the Public Resources Code. The proposed project alignments (i.e., central tunnel corridor and eastern tunnel corridor) and

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- facilities (i.e., intakes, tunnel reaches and shafts, forebays, pumping plant, and South Delta conveyance facilities) would be located in the Delta.
2. Will be carried out, approved, or funded by the state or a local public agency. DWR, a State agency, would carry out and approve the project.
  3. Will have a significant impact on the achievement of one or both of the coequal goals or the implementation of a government-sponsored flood control program to reduce risks to people, property, and State interests in the Delta. The project would construct and operate new conveyance facilities in the Delta, including a single-tunnel facility designed to increase reliability of water supply, and would add to existing state water project infrastructure. The project proposes new north Delta facilities to convey up to 7,500 cfs of water from the Sacramento River to the SWP facilities in the south Delta to increase reliability of water supply under varying earthquake, climate change, and regulatory conditions. It would also include mitigation and operational characteristics that would contribute to ecosystem restoration. Therefore, the project would have a significant impact on achievement of both of the coequal goals.
  4. Is covered by one or more of the regulatory policies contained in the Delta Plan (Cal. Code Regs., tit. 23, §§ 5003-5015). Delta Plan regulatory policies that may apply to the project are discussed below.

## Comments Regarding Delta Plan Policies and Potential Consistency Certification

The following information is offered to assist DWR in preparing the Final EIR (FEIR) and an eventual certification of consistency for the project. While not all documentation for a certification of consistency may be relevant or required for the FEIR, we include additional comments that are not specific to California Environmental Quality Act (CEQA) requirements within this letter. This is because some approaches or documentation (such as detailed hydrologic modeling) would be difficult to conduct again after analysis is completed to support the FEIR, and it may be more efficient to include such information in the FEIR, if not already present.

We also acknowledge that the DEIR baseline and environmental setting was established to correspond to the release of the Notice of Preparation (NOP) in January 2020. We have focused our comments and consideration of potential impacts identified in the DEIR to be aligned with this baseline.



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The comment letter describes regulatory Delta Plan policies that may apply to the project based on the available information in the DEIR. The information below may also assist DWR in describing the relationship between the proposed project and the Delta Plan in the FEIR.

## General Policy 1: Detailed Finding to Establish Consistency with the Delta Plan

Delta Plan Policy **G P1** (Cal. Code Regs., tit. 23, § 5002) specifies what must be addressed in a certification of consistency for a covered action. The following is a subset of Policy G P1 requirements that a project must meet to be considered consistent with the Delta Plan:

### Coequal Goals

Delta Plan Policy **G P1, subsection (b)(1)** (Cal. Code Regs., tit. 23, § 5002, subd. (b)(1)), requires that covered actions, in order to be consistent with the Delta Plan, must be consistent with G P1 and with each of the applicable Delta Plan regulatory policies implicated by the covered action. In certain situations where full consistency with all relevant regulatory policies may not be feasible, Delta Plan Policy **G P1, subsection (b)(1)**, allows for covered actions, in a certification of consistency, to include a specified determination that despite inconsistency with one or more Delta Plan policies, the covered action is consistent with the Delta Plan because, on the whole, it is consistent with the coequal goals. That determination must include 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.

In the event that DWR believes that consistency with all applicable regulatory policies may not be feasible, DWR should consider analyzing and documenting potential impacts – positive or negative – on the coequal goals and provide the specific information required by GP 1(b)(1) in the record. The Council acknowledges that this information goes beyond that required by CEQA. However, the certification of consistency will need to be supported by substantial evidence in the record. It may be useful to describe the impacts of the project to the public in the FEIR to establish a record for a future certification of consistency. If the impacts are not analyzed in the FEIR, it may

be helpful to include information that would support findings for a future certification of consistency relative to the coequal goals.

### Mitigation Measures

Delta Plan Policy **G P1, subsection (b)(2)** (Cal. Code Regs., tit. 23, § 5002, subd. (b)(2)) requires that actions not exempt from CEQA and subject to Delta Plan regulations must include all applicable feasible mitigation measures adopted and incorporated into the Delta Plan as amended April 26, 2018, or substitute mitigation measures that are equally or more effective. Mitigation measures adopted and incorporated into the Delta Plan are listed in the Delta Plan's Mitigation Monitoring and Reporting Program (Delta Plan MMRP) and are available at: <https://www.deltacouncil.ca.gov/pdf/delta-plan/2018-appendix-o-mitigation-monitoring-and-reporting-program.pdf>.

As the Council has previously commented on the July 2021 NOP for this project, DWR should review the Delta Plan MMRP and apply the applicable feasible mitigation measures adopted and incorporated into the Delta Plan, or substitute mitigation measures that are equally or more effective. The Draft EIR identifies a number of significant impacts that require mitigation, and less than significant impacts where incorporation of mitigation would lessen impacts. Council staff reviewed the proposed mitigation measures in the DEIR, as well as the measures outlined in Appendix 3B Environmental Commitments and Best Management Practices, and Appendix 3F Compensatory Mitigation Plan for Special-Status Species and Aquatic Resources. Based on this review, we offer the following comments:

- **Delta Plan Mitigation Measure 3-2** requires, prior to construction, "*a survey... of all wells located adjacent to the construction site to determine locations and depths of wells and the groundwater surface.*" DEIR Chapter 3, Description of the Proposed Project and Alternatives, describes the use and construction of launch and reception shafts, which would require dewatering activities, as well as post-construction activities. Additionally, in-water or open trenching construction activities related to the project may also require dewatering activities. If significant impacts to local wells or groundwater surfaces are identified in the FEIR, Delta Plan Mitigation Measure 3-2 would apply to the project and should be included in the FEIR as a mitigation measure. Delta Plan Mitigation Measure 3-2

describes actions to implement, monitor, and reduce impacts to any local wells or groundwater surfaces from such project activities.

- **Delta Plan Mitigation Measure 7-1** requires the establishment of *"buffer areas between projects and adjacent agricultural land that are sufficient to protect and maintain land capability and agricultural operation flexibility."* Although many proposed project features will be located adjacent to agricultural land, we could not locate a description of buffer areas that would protect adjacent agricultural land within the project design, within the environmental commitments and best management practices, or within the proposed mitigation measures. If impacts are identified, the FEIR should include a mitigation measure that requires buffer areas between project features and adjacent agricultural land that are sufficient to protect and maintain land capability and agricultural operation flexibility.
- **Delta Plan Mitigation Measure 8-1** requires mitigation for certain visual impacts. In order to better align with Mitigation Measure 8-1, DEIR Mitigation Measures AES-1b and AES-1c should include a requirement for development and approval of a post-construction restoration landscaping plan(s) to reduce the aesthetic impacts within a scenic corridor, identified within the EIR Aesthetic and Visual Resources Chapter. Alternatively, the EIR could include an alternative mitigation measure that is equally or more effective than Delta Plan Mitigation Measure 8-1.
- **Delta Plan Mitigation Measure 11-6** requires ecosystem restoration projects to include practices that address seepage of nuisance water onto adjacent lands such as performing seepage monitoring studies, developing a seepage monitoring plan, and implementing seepage control measures. We could not locate within the DEIR a mitigation measure that would addresses seepage of nuisance water onto adjacent lands. The FEIR should include an appropriate mitigation measure, if impacts are identified.
- **Delta Plan Mitigation Measure 21-3** requires that projects *"prepare a drainage or hydrology and hydraulics study that would assess the need and provide a basis for the design for ecosystem habitat restoration, including adjacent areas that would allow for migration of the habitat to higher elevations as the surface water elevations increase."* The DEIR includes compensatory mitigation options that consider sea level rise, sea level rise accommodation, elevation and climate change for special-status species. However, we could not

identify measures in the DEIR that would require a drainage or hydrology and hydraulics study to inform ecosystem habitat restoration design. Although this may be implied by the inclusion of mitigation options, the FEIR should describe if such studies are warranted for habitat restoration associated with the project, and should include, if applicable, mitigation measures that are equally or more effective than Delta Plan Mitigation Measure 21-3.

## Best Available Science

Delta Plan Policy **G P1, subsection (b)(3)** (Cal. Code Regs., tit. 23, § 5002, subd. (b)(3)) states that covered actions must document use of best available science as relevant to the purpose and nature of the project. The regulatory definition of "best available science" is provided in Appendix 1A of the Delta Plan (<https://www.deltacouncil.ca.gov/pdf/delta-plan/2015-appendix-1a.pdf>). Six criteria are included in Appendix 1A: relevance, inclusiveness, objectivity, transparency and openness, timeliness, and peer review. (Cal. Code Regs, tit. 23, § 5001, subd. (f).) This policy requires that the lead agency clearly document and communicate the processes and information used for analyzing project alternatives, impacts, and mitigation measures of proposed projects, in order to foster improved understanding and decision making.

The criteria for best available science from Table 1A-1 of the Delta Plan can be summarized as follows:

- **Relevance** requires that scientific information used should be, as available, germane to the Delta ecosystem and/or biological and physical components (and/or processes) affected by the proposed decisions. It also requires that quality and relevance of data and information be addressed.
- **Inclusiveness** requires that scientific information used shall incorporate a thorough review of relevant information and analyses across relevant disciplines.
- **Objectivity** requires that data collection and analyses considered shall meet the standards of the scientific method and be void of nonscientific influences and considerations.
- **Transparency and openness** require that sources and methods for analysis are clearly identified and explained, as are limitations and uncertainties.

- **Timeliness** requires that data collection shall occur in a manner sufficient for adequate analyses before a management decision is needed, and that scientific information used be applicable to current situations.
- **Peer review** establishes independent external review as the highest standard for ensuring the quality of the science and requires that it is applied to proposed projects and final project plans. Peer review should also be applied to project outcomes and products as appropriate.

Council staff reviewed the DEIR relative to these criteria, and our comments related to best available science are provided as Attachment 1 to this letter. The comments in [Attachment 1](#) of this letter are not a comprehensive listing of all possible relevant issues with respect to **G P1(b)(3)**, and the absence of a comment in this letter is not an endorsement that the DEIR demonstrates the use of best available science.

## Adaptive Management

Delta Plan Policy **G P1, subsection (b)(4)** (Cal. Code Regs., § 5002, subd. (b)(4)), requires that ecosystem restoration and water management covered actions include adequate provisions, appropriate to the scope of the action, to assure continued implementation of adaptive management. This requirement is satisfied through: a) the development of an adaptive management plan that is consistent with the framework described in Appendix 1B of the Delta Plan (<https://deltacouncil.ca.gov/pdf/delta-plan/2013-appendix-b-combined.pdf>), and b) documentation of adequate resources to implement the proposed adaptive management plan.

Considering the water management components of the project, the project will require an adaptive management plan (or plans) that addresses project construction activities, implementation and mitigation, and ongoing operations to comply with Delta Plan Policy G P1, subsection (b)(4). Because this Delta Plan requirement is not a CEQA requirement, we acknowledge that much of what may constitute an adaptive management plan in the record for the Delta Plan certification is not available for review at this time. For aspects of the adaptive management approach that are described in the DEIR, we offer comments below.

The DEIR describes an Operations Adaptive Management and Monitoring Plan (OAMMP), which “would be used to monitor and consider the design and operation of the new north Delta intakes and determine whether they

result in unanticipated effects that may warrant refinements in design, management, and/or operation.” This OAMMP appears to be the means DWR will use to demonstrate a comprehensive adaptive management approach for future operation of the project. This document should outline potential uncertainties related to project effects, the scientific basis for addressing those uncertainties, the programmatic structure for integrating monitoring results into the management process, and a clear statement of how adaptive management of project operations will be staffed and funded.

In addition to the OAMMP, DWR should also consider preparing a plan for how it will adaptively manage construction impacts and mitigation to meet project goals and comply with regulations. For example, DEIR Appendix 3B, section 3B.1.4 describes sediment control measures that will be enacted during construction, but does not describe how these control measures could change if they are not having the intended effect. An adaptive management plan would help to ensure that the control measures are effective. The description of the plan to monitor and manage sediment during operation of the proposed project in order to protect habitat for Delta smelt (found in section 3B.1.16) provides an example that could be used as a basis for adaptive management focused on mitigating potential construction impacts.

Future ecosystem restoration undertaken as mitigation for project impacts should also be guided by an adaptive management plan. In the case that those actions are themselves separate covered actions, the adaptive management plan would be required as part of the certification process for those covered actions. For mitigation activities that are not a separate covered action, adaptive management should be addressed in the certification of consistency for this project.

## Water Resources Policy 1: Reduce Reliance on the Delta through Improved Regional Water Self-Reliance

Delta Plan Policy **WR P1** (Cal. Code Regs., tit. 23, § 5003) requires proposed actions that export water from, transfer water through, or use water in the Delta to contribute to reduced reliance on the Delta and improve regional self-reliance.

The DEIR states that the project will restore and protect water supply reliability by constructing new facilities, including an isolated conveyance facility to be used in



conjunction with existing through-Delta conveyance. The Council understands that, as proposed, the project would not alter existing water rights or contractual amounts. However, because the project proposes to export water from and transfer water through the Delta, WR P1 applies to the project.

We acknowledge that at this time DWR may not know the details of all water suppliers' involvement, including potential federal involvement, and that **WR P1** is not a CEQA requirement. However, information to document contribution to reduced reliance could be included in the FEIR and more clearly describe potential project impacts to a range of areas. DWR should identify in detail all water suppliers (defined as both wholesalers and retailers) that would receive water from the Delta as a result of the project, identify in detail how those suppliers have adequately contributed to reduced reliance on the Delta, and describe how each has improved regional self-reliance as required by **WR P1**.

For purposes of **WR P1**, the information provided for each water supplier should include: (1) whether the supplier has adopted a current Urban or Agricultural Water Management Plan reviewed and approved by DWR; (2) identification, evaluation, and commencement of implementation activities identified in an Urban or Agricultural Water Management Plan that would reduce reliance on the Delta; and (3) the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance as a percentage or amount of water, drawn from the Urban or Agricultural Water Management Plan. DWR should ensure that the record supporting a future certification of consistency for the project specifically addresses the following items:

- List each urban and agricultural water supplier that would receive water as a result of the project.
- Include quantifiable data documenting reduced reliance, as described by this policy.
- Analyze reduced reliance under different alternatives and export scenarios, in light of the current range in physical project capacity described in the DEIR (6,000 cfs with a potential for up to 7,500 cfs, with potentially lower amounts depending on operational scenarios).

The Council notes that DWR prepared and distributed an example methodology describing how water suppliers could quantify reduced reliance on the Delta as Appendix C to its 2020 Urban Water Management Plan Guidebook

<https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And->

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[Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans/Final-2020-UWMP-Guidebook/UWMP-Guidebook-2020---Final-032921.pdf](#) ) and as Section A1.C of its 2020 Agricultural Management Plan Guidebook (<https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Agricultural-Water-Use-Efficiency/Files/Draft-2020-AWMP-Guidebook.pdf>). These example methodologies identify how documenting reduced reliance on the Delta and improved regional self-reliance at the water supplier level is both practical and possible. DWR and water suppliers should use these or similar methodologies extensively for this project.

It is also not clear how the Central Valley Project (CVP) may or may not be involved in the project. The FEIR should clarify involvement of the federal government and CVP and describe which CVP water suppliers would receive water as a result of the project and include the information as described above. If the project will provide water to a CVP water supplier, the requirements of WR P1 will apply to these suppliers as well.

## Water Resources Policy 2: Transparency in Water Contracting

As described in the DEIR, State Water Project (SWP) contract amendments are part of the project. DWR states that the DEIR “also analyzes related amendments to the long-term water supply contracts that may be needed”, and that “[t]he contract amendments, as they would directly relate to contract terms and conditions applicable to cost allocation for the Delta Conveyance Project, do not have different impacts from those analyzed for the Delta Conveyance Project” (DEIR, Chapter 3, Description of the Proposed Project and Alternatives, p. 3-1 and p. 3-165). The DEIR describes that DWR and local agencies that contract to receive water (referred to as Public Water Agencies or PWAs) have developed an Agreement in Principle (AIP). This AIP covers conceptual approaches to cost allocations and related financial and water management regarding the project (DEIR, Chapter 3, p. 3-164).

Delta Plan Policy **WR P2** (Cal. Code Regs., tit. 23, § 5004) requires that the contracting process for water from the SWP and/or the CVP be conducted in a publicly transparent manner consistent with applicable DWR and Bureau of Reclamation (Reclamation) policies. For purposes of Water Code section 85057.5(a)(3) and section 5001(j)(1)(E) of Chapter 3 of the Delta Plan, this policy covers the following:

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(1) With regard to water from the State Water Project, a proposed action to enter into or amend a water supply or water transfer contract subject to California Department of Water Resources Guidelines 03-09 and/or 03-10 (each dated July 3, 2003); and

(2) With regard to water from the Central Valley Project, a proposed action to enter into or amend a water supply or water transfer contract subject to section 226 of P.L. 97-293, as amended or section 3405(a)(2)(B) of the Central Valley Project Improvement Act, Title XXXIV of Public Law 102-575, as amended, and Rules and Regulations promulgated by the Secretary of the Interior to implement these laws.

The Bethany Reservoir alternative was not identified as a project alternative when the existing AIP was developed, and the potential involvement of CVP contractors remains unclear. Either of these conditions may require new terms within the AIP, which would be subject to **WR P2** requirements and might require new public negotiation meetings and public notifications in accordance with DWR guidelines 03-09 and 03-10 and Reclamation guidelines identified in Public Law 97-293 Title II, Reclamation Act of 1982, Section 226, Public Participation.

For existing and any new contract agreements identified as part of the project, DWR should provide thorough documentation of the advance noticing of public meetings, the opportunity for public observation of the negotiations, and describe how the negotiations were conducted in a public environment, to support the record for a future certification of consistency, as described above in the applicability of this policy and guidelines. This information may be provided in the FEIR or via another means within the certification record.

Lastly, although not a regulatory requirement, the Council encourages DWR to add a provision to its water contracts regarding reduced reliance on the Delta as stated in Delta Plan recommendation (**WR R2**): “[DWR] should include a provision in all [SWP] contracts, contract amendments, contract renewals, and water transfer agreements that requires the implementation of all State water efficiency and water management laws, goals, and regulations, including compliance with Water Code section 85021.”

### Ecosystem Restoration Policy 1: Delta Flow Objectives

Delta Plan Policy **ER P1** (Cal. Code Regs., tit. 23, § 5005) requires the State Water Resources Control Board's (Water Board) Bay-Delta Water Quality Control Plan flow

objectives be used to determine consistency with the Delta Plan for a project that could significantly affect flow in the Delta. This policy applies to the project because the project proposes new intakes at two locations along the Sacramento River, with an alternative for a third intake, which have the potential to significantly affect flow. Even under the No Project Alternative, flows are projected to change significantly at certain locations, especially in wet and dry water year types and under certain operational conditions (for example, as described in Appendix 5C, Table 5C-2, p. 5C-3). As noted in the DEIR, annual average surface water flows in the Delta could change relatively little, depending on the selected alternative (e.g., DEIR, Chapter 5, p. 5-3, Table 5.0). However, larger relative changes would occur within seasons.

The DEIR analyzes how the project may impact or alter Delta flows that are subject to the Bay-Delta Water Quality Control Plan flow objectives. This includes analysis under a range of projected climate impacts and compliance with current flow objectives, described by Water Board Decision 1641 (D-1641). In the DEIR, DWR states that the CalSim3 model was used to assess simulated monthly flows and that no changes were assumed for operational rules (DEIR, Appendix 5C, p. 5C-1). The DEIR also includes statements that although project alternatives could potentially result in higher electrical conductivity at some locations, the project alternatives “would not cause more frequent exceedance of the Bay-Delta WQCP [Water Quality Control Plan] water quality objectives for protection of agricultural, and fish and wildlife beneficial uses” (DEIR, Chapter 9, Water Quality, p. 9-3). While flow objectives are currently described by D-1641, the Water Board is undertaking updates to the Bay-Delta Water Quality Control Plan. In addition, the ongoing voluntary agreements process could influence flow objectives on a timeline similar to the FEIR. The DEIR includes sensitivity analyses that analyze potential compliance with regulations under theoretical flow requirements. This includes some, but not all, provisions from the Voluntary Agreement March 2022 Memorandum of Understanding (DEIR, Appendix 4C, p. 4C-1). These sensitivity analyses are useful. However, if specific changes are made to relevant flow objectives, the future certification should document the project’s ability to meet the specific requirements of the Bay-Delta Water Quality Control Plan, as it exists at that time.

Separate from the FEIR, the Council advises DWR to submit a petition for and obtain a Change in Point of Diversion from the Water Board prior to submitting a certification of consistency to the Council. Such documentation would provide clear documentation describing how DWR would comply with applicable standards.

## Ecosystem Restoration Policy 2: Restore Habitats at Appropriate Elevations

Delta Plan Policy **ER P2** (Cal. Code Regs., tit. 23, § 5006) requires habitat restoration to be consistent with Appendix 3 (<https://deltacouncil.ca.gov/pdf/delta-plan/2013-appendix-b-combined.pdf>), which describes the many ecosystem benefits related to restoring floodplains. The elevation map included as Figure 4-1 in Appendix 4 (<https://deltacouncil.ca.gov/pdf/delta-plan/2013-appendix-b-combined.pdf>) of the Delta Plan should be used as a guide for determining appropriate habitat restoration actions based on an area's elevation.

The DEIR describes potential future restoration sites and impacts with climate change in Chapter 3 and Chapter 30. Several maps in DEIR Appendix 3F identify specific alternative restoration site locations and conceptual cross sections and overviews of mitigation sites that include potential habitat types (DEIR, Chapter 3, Appendix 3F, pp. 3F-3, 3F-23, 3F-27, 3F-37, and 3F-48). These locations overlap with elevation categories identified in ER P2, including elevations appropriate for intertidal restoration. It is our understanding that the maps illustrate an approach to siting and designing habitat mitigation. The DEIR states that, “[t]he final compensatory habitat mitigation needs for the project will be determined once all regulatory permits and approvals are secured” (Appendix 3F, p. 3F-1) and “[t]he initial sites described herein are proposed to address the compensatory mitigation needs for many terrestrial and aquatic resources (Figure 3F-1). However, not all compensatory mitigation needs would likely be met through these sites” (p. 3F-2).

The FEIR should provide additional detail, if available and aligned with permit schedules, describing specific mitigation locations, describe how sites owned by others may be used for mitigation (for example, Bouldin Island, where an ongoing Delta Islands Adaptation project is in process), design approaches, and use of mitigation credits from approved habitat mitigation banks. This additional detail should also identify the elevation band(s) for each proposed habitat restoration or mitigation site in relation to current or long-term average water levels and best available science for projected sea level rise and inflows, and document how each proposed site aligns with **ER P2** or is otherwise an appropriate habitat restoration action.

### Ecosystem Restoration Policy 3: Protect Opportunities to Restore Habitat

Delta Plan Policy **ER P3** (Cal. Code Regs., tit. 23, § 5007) states that within priority habitat restoration areas (PHRAs) depicted in Appendix 5 of the Delta Plan (<https://deltacouncil.ca.gov/pdf/delta-plan/2013-appendix-b-combined.pdf>), significant adverse impacts to the opportunity to restore habitat at appropriate locations must be avoided or mitigated.

All three proposed alignments – the Bethany, Central, and Eastern alignments – traverse one or more PHRA(s) and include permanent features such as a water conveyance tunnel, New Hope Tract Maintenance Shaft, and improvement of existing roadways. Specifically, the proposed project (Alternative 5, Bethany Alignment) traverses the center of the Cosumnes-Mokelumne Confluence PHRA with the underground tunnel extending laterally about four miles. Other project features include the New Hope Tract Maintenance Shaft which is primarily underground but contains an approximately 11-acre surface pad, near the center of the PHRA. An existing road, approximately 0.3 miles in length, is located on the western edge of the PHRA and will be improved under the project. A portion of another roadway identified as part of Alternative 5 extends into the western edge of the Lower San Joaquin River Floodplain PHRA by about 2.3 miles.

Alternatives 1, 2a, 2b, and 2c for the Central Alignment include the tunnel portion that extends laterally approximately 2.3 miles underground through the center of the Cosumnes-Mokelumne Confluence PHRA. An approximately 11-acre pad at the surface would accommodate the New Hope Tract Maintenance Shaft in the center of the PHRA. These alternatives would also include the widening of approximately 0.8 miles of West Lauffer Road for better access to the New Hope Tract Maintenance Shaft in the center of the PHRA.

The Eastern Alignment that covers Alternatives 3, 4a, 4b, and 4c include the tunnel portion that extends about four miles into the central portion of the Cosumnes-Mokelumne Confluence PHRA. Similar to Alternative 5, the New Hope Tract Maintenance Shaft would include an approximately 11-acre pad on the surface and with proposed roadway improvements leading to the shaft extending approximately 0.3 miles into the PHRA.

The DEIR does not appear to analyze whether the potential for construction and operation of the proposed facilities would result in significant adverse impacts on



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the opportunity to restore habitat in PHRAs, nor does it identify mitigation measures to avoid or mitigate such potential impacts, that we could identify. While this analysis and mitigation, if applicable, is not required under established CEQA thresholds of significance, this information is required under **ER P3**.

#### Ecosystem Restoration Policy 4: Expand Floodplains and Riparian Habitats in Levee Projects

Delta Plan Policy **ER P4** (Cal. Code Regs., tit. 23, § 5008) requires levee projects to evaluate and, where feasible, incorporate alternatives to increase floodplains and riparian habitats. This policy applies to the project because modifications of Delta levees will be required to construct the intakes described in the DEIR, potentially to modify levees on Bouldin Island associated with potential tunnel launch shafts, and at other locations in the Delta to support ancillary facilities. The policy requires the evaluation of setback levees in several areas of the Delta, which include the Sacramento River between Freeport and Walnut Grove, Steamboat Slough, and Sutter Slough. This evaluation is not required under CEQA thresholds of significance. However, to support a future certification of consistency for the project with **ER P4**, DWR will need to conduct such an evaluation.

The DEIR contains programmatic descriptions of levee designs or considerations for a portion of the Lower Sacramento River. In the FEIR, it would be helpful to clarify specific considerations and project details, to the degree known at the time, that may take place at Roberts Island, the Twin Cities complex, or Bouldin Island (as described in DEIR Chapter 3, p. 3-13). Appendix 3F.4.3.1 includes a programmatic description of the challenges inherent to creating channel margin habitat along the Lower Sacramento River mainstem from Freeport to Rio Vista (pp. 3F-56 through 3F-57). However, this section does not identify, for the specific levee projects along this stretch, how these challenges would preclude such enhancements. The level of relevant levee engineering and schematics provided in reports from the Delta Conveyance Design and Construction Authority are helpful (for example, [Central and Eastern Corridor Options, 069 CE](#), PDF p. 3) but also do not describe consideration of levee alternatives.

A future certification of consistency for **ER P4** must be supported by substantial evidence in the record: a) describing the evaluation of potential to incorporate setback levees at locations within the areas identified in ER P4 where Delta levees would be modified to accommodate project or ancillary features; b) identifying

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alternatives that would expand floodplains and riparian habitats; and c) describing the feasibility of such alternatives. If the selected alternative includes levee projects in areas identified in **ER P4**, additional detail should be added to the FEIR or as part of a future certification of consistency.

### Ecosystem Restoration Policy 5: Avoid Introductions of and Habitat Improvements for Invasive Nonnative Species

Delta Plan Policy **ER P5** (Cal. Code Regs., tit. 23, § 5009) requires that the potential for new introductions of, or improved habitat conditions for, nonnative invasive species, striped bass, or bass must be fully considered and avoided or mitigated in a manner that appropriately protects the ecosystem.

The DEIR references invasive species and their habitat throughout the document, including in Chapter 13, Appendix 3B: Environmental Commitments and Best Practices (p. 3B-27), and Appendix 3F: Compensatory Mitigation Plan for Special-Status Species and Aquatic Resources (e.g., p. 3F-72). More specific standards relevant to mitigation are highlighted in Appendix 3F, section 3F-1.

Section 13.3.1.5, *Evaluation of Compensatory Mitigation*, provides a useful overview of relevant mitigation and focuses on the identified mitigation sites of Bouldin Island and the “I-5 ponds.” The FEIR should provide additional detail if available, especially if additional mitigation sites are identified, including analysis of how the project will avoid or mitigate introductions or improved habitat conditions for nonnative invasive species, striped bass, or bass. Proposed mitigation and minimization measures should be consistent with, and equally or more effective than, those identified in the Delta Plan MMRP

(<https://www.deltacouncil.ca.gov/pdf/delta-plan/2018-appendix-o-mitigation-monitoring-and-reporting-program.pdf>), including Delta Plan Mitigation Measure 4-1, which requires development and implementation of an invasive species management plan for any project whose construction or operation could lead to introduction or facilitation of invasive species establishment, and describes the required content of the management plan.

### Delta as Place Policy 1: Locate New Urban Development Wisely

Delta Plan Policy DP P1 (Cal. Code Regs., tit. 23, § 5010) requires that new residential, commercial, and industrial development be restricted to areas described in Delta Plan appendices 6 and 7.

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The project does not propose residential, commercial or industrial development as part of the identified alternatives.

## Delta as Place Policy 2: Respect Local Land Use when Siting Water or Flood Facilities or Restoring Habitats

Delta Plan Policy **DP P2** (Cal. Code Regs., tit. 23, § 5011) requires water management facilities, ecosystem restoration projects, and flood management infrastructure to be sited to avoid or reduce conflicts with existing uses or those uses described or depicted in city and county general plans for their jurisdictions or spheres of influence when feasible, considering comments from local agencies and the Delta Protection Commission. **DP P2** may also apply to mitigation within the Delta.

**DP P2** is independent of other state law related to local land use authority and the requirements of CEQA. **DP P2** requirements extend beyond CEQA requirements and thresholds of significance. While DWR is not required to analyze or provide mitigation measures for impacts beyond those required by CEQA in the DEIR, the certification of consistency for **DP P2** will need be supported by substantial evidence in the record. We recommend that where possible, the FEIR include documentation describing how conflicts with uses under **DP P2** will be avoided or reduced, when feasible, considering comments from local agencies and the Delta Protection Commission. Such information may be helpful in the record to support a future certification of consistency.

### DP P2 - Community Benefits Program

The DEIR includes a description of a Community Benefits Program. As described in the DEIR, “The Community Benefits Program is a set of commitments made by project proponents and created in coordination with the local community to address local effects that may occur as a result of the Delta Conveyance Project. These commitments are intended to go beyond traditional concepts of “environmental mitigation” to foster goodwill and address the adverse effects local communities may encounter during long construction periods” (DEIR, Chapter 34, p. 34-1). A framework for the program is also described in Appendix 3G (DEIR, Chapter 3, Appendix 3G). While the proposed Community Benefits Program would not be used to mitigate environmental impacts identified pursuant to CEQA, the program may provide a means to offset some potential conflicts with uses under **DP P2** that extend beyond CEQA requirements as part of a future certification of consistency with **DP P2**. We recommend that in the FEIR Appendix 3G the description of the

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Delta Community Fund (current described in Community Benefits Program Framework, section 3G.5.1) be supplemented to describe the anticipated funding mechanism(s) and funding amount(s).

#### DP P2 - Cyanobacteria Harmful Algal Blooms

Cyanobacteria Harmful Algal Blooms (CHABs) are known to interfere with existing uses such as agriculture, fishing and recreation, which may constitute a conflict with existing uses for **DP P2** purposes. To the extent that new CHABs were to form as a result of the project and create such interference, this could be considered a conflict with existing uses under **DP P2**. DWR conducted an analysis of CHABs during the peak season. While the DEIR states that "CHABs can form as early as May or June," (Appendix 9E.2.1.8), documented blooms occurred in April in 2021 (e.g. a record of Delta CHAB events is available online from the Council, <https://viewperformance.deltacouncil.ca.gov/index.php/pm/harmful-algal-blooms>. Data from California State Water Board Surface Water – Freshwater Harmful Algal Blooms Open Data Portal, CSV file Algae Bloom Report ID 2671). The DEIR references a technical memo on CHABs and *microcystis*. However, due to the observed occurrence of blooms outside the peak season, we recommend that DWR conduct sensitivity analysis which includes earlier months of the year to support the future certification of consistency. In addition, we recommend that DWR include this technical memo or other relevant supporting documents as part of a record for a future certification of consistency.

#### DP P2 - Recreation

Fishing, boating, swimming, hiking and other recreational uses people currently participate in are considered existing uses for purposes of **DP P2**. The DEIR's CEQA analysis of recreation impacts (Chapter 16) does not consider local use conflicts as contemplated in **DP P2**, only that the project would affect the region's ability to support the existing recreational visitors. This is responsive to the CEQA threshold, but **DP P2** contemplates existing uses beyond CEQA thresholds of significance. The DEIR analysis does not address the potential loss of existing recreational opportunities due to the project's implementation. **DP P2** focuses on conflicts with existing uses, including the potential for the project to impair recreational opportunities within the project site, and for purposes of **DP P2**, conflicts with these opportunities requiring analysis beyond that required by CEQA.

### DP P2 - Noise and Vibration

Frequent and/or extended exceedance of a noise standard can, for purposes of **DP P2**, present a use conflict with residential dwellings, such as disturbing everyday activities and sleep, as well as making some current daily business activities difficult to sustain. In Chapter 24 (Noise and Vibration), Mitigation Measure NOI-1: Develop and Implement a Noise Control Plan (DEIR, Chapter 24, p. 24-64 - 24-66), the FEIR should clarify how the specified duration of the Sound Insulation Program would be determined, as well as clarify the eligibility requirements for the program. For the purposes of **DP P2**, if DWR relies solely on weekly SLM to determine compliance and responds only after reviewing, that may exacerbate conflicts with nearby residences that will deal with the noise daily. Additionally, for the purposes of **DP P2**, the FEIR should also identify how residents can reach out to DWR if they believe they are affected by excessive sound levels, rather than waiting for DWR to contact them.

The DEIR also describes relocation assistance for property owners for the duration of the exceedance event, in addition to other measures, as proposed mitigation for a "Sound Level Monitoring Exceedance event." The FEIR should clarify how relocation would function to avoid or reduce the use conflict for property owners of businesses who may not be able to fully relocate their place of business, or how such use conflicts may otherwise be addressed, when feasible.

### DP P2 - Public Health, Air Quality, and Environmental Justice

Chapter 26 (Public Health) addresses project construction, operation, and maintenance impacts related to vector-borne diseases, substantial mobilization of or increases in chemical constituents, and adverse effects on public health due to exposure of sensitive receptors to new sources of electromagnetic fields and drinking water quality. The chapter does not mention air quality impacts from the project that will remain significant and unavoidable with the implementation of the proposed mitigation measures and environmental commitments (see Impact AQ-5: Result in Exposure of Sensitive Receptors to Substantial Localized Criteria Pollutant Emissions and Impact AQ-6: Result in Exposure of Sensitive Receptors to Substantial Toxic Air Contaminant Emissions). Furthermore, the Environmental Justice Chapter (Chapter 29) notes that "... the air quality effects would occur in areas with meaningfully greater minority and low-income populations and therefore represent a disproportionately adverse effect on environmental justice." (DEIR Chapter 29, p. 29-29). **DP P2** does not require specific measures to avoid or reduce potential conflicts with existing uses because they may create a

disproportionate impact on low-income and minority communities. However, **DP P2** does require that projects be sited to avoid or reduce conflicts with existing uses where feasible.

Existing uses may include uses for residential, livelihood, recreational and other purposes. Conflicts with these uses may result from project impacts that are adverse to human health, quality of life, and/or general wellbeing. If nearby low-income or minority communities currently bear high environmental burdens (e.g., high levels of air pollutants), or if community members possess other demographic characteristics that heighten their baseline level of social vulnerability to social and environmental stressors (e.g., disability, lack of housing), they may experience adverse impacts that conflict with their current use of land for residency, livelihood, recreation, or other purposes. These impacts may not be detectable by evaluating environmental impacts at the full project scale.

The DEIR draws on impact analyses in other resource chapters to determine which significant environmental impacts have the potential for “disproportionately high and adverse” effects on EJ communities (DEIR Chapter 29, p. 29-1). The DEIR states that “Because minority and low-income residents meeting or exceeding the respective environmental justice thresholds are present in high proportions in the study area census block groups, it is assumed that significant impacts that would not be reduced to a less-than-significant level would constitute a disproportionately adverse effect on environmental justice. Conversely, when impacts can be reduced to a less-than-significant level, effects on minority and low-income populations are likely not to exceed those on the general population; therefore, effects on environmental justice would not be considered disproportionately adverse” (DEIR Chapter 29, p. 29-2).

The DEIR states, “[f]or impacts that were determined not significant, no additional evaluation is needed because those impacts would not result in disproportionate effects on minority and low-income populations” (DEIR Chapter 29, p. 29-36), based on the assumption that where there are no significant impacts there would not be a disproportionately high and adverse impact on EJ communities (DEIR Chapter 29, p. 29-31). However, depending on how thresholds of significance are defined, an impact determined to be “less than significant” based on a significance threshold that considers the whole of the project site may still be adverse in a spatially concentrated area, creating conflict with existing residential, livelihood, recreational and other uses in that area. For example, the DEIR identifies that impacts related to



hazardous materials are less than significant with mitigation under alternative 5, yet the DEIR also notes that a nearby school will be exposed to hazardous materials (DEIR, pp. ES-104–ES-105). If such impacts are borne by one or a few very localized community(ies) (in this case, a school), and if they interfere with existing or designated uses, this may not represent a significant CEQA impact, but it could still constitute a conflict with an existing use for **DP P2** purposes.

The DEIR analysis of impacts on recreational fishing opportunities and subsistence fishing for very low-income households (DEIR Chapter 29, p. 29-33) presumes access to “numerous other locations” is possible. This analysis does not address the loss of existing fishing opportunities (an existing use), nor does it consider that those in EJ communities may face barriers to access (e.g., transportation, mobility) that prevent them from accessing alternative locations. These potential conflicts with existing uses should also be addressed in the FEIR.

The Council commends DWR for including analyses going beyond the requirements of CEQA, and for acknowledging project impacts that may disproportionately impact the many low-income and minority communities who comprise much of the project area. However, this approach may not identify localized and community-specific impacts in sufficient detail to demonstrate that conflicts with existing uses have been identified and that the project has been sited to avoid or reduce those conflicts where feasible.

#### DP P2 - Tribal Cultural Resources

DWR's review of the California Register of Historical Resources (CRHR) eligibility found the “Delta Cultural Landscape” as eligible for listing, rather than the eligibility of individual resources in the study area that Tribes have identified (habitats, waterways, archeological sites, mounds, trails, villages, etc.). We understand that this may be because the individual resources are themselves part of the Delta Cultural Landscape. The DEIR notes that “...Tribes may have additional information about resources' significance, location, and description to share with DWR during ongoing consultation...” and that “DWR will consider information provided through consultation about resources of importance to affiliated Tribes and reapply the three-step screening process, as appropriate...” (DEIR Chapter 32, p. 32-21). If, as a result of this process, DWR deems an individual resource as eligible for listing in the CRHR, this may implicate **DP P2** related to conflict with existing uses. To demonstrate consistency with **DP P2**, a future certification of consistency should describe how the project was sited to avoid or reduce conflicts with these existing

uses, or that doing so was infeasible, and provide substantial evidence in the record.

The DEIR does not report whether Tribes concur with the presentation of impacts to Tribal cultural resources, particularly the decision to recognize and assess impacts to the Tribal Cultural Landscape (TCL). The Council defers to Tribes on this matter. If consulting Tribes indicate that impacts to both individual resources and the full landscape should be described in the FEIR, the Council strongly encourages DWR to do so.

The DEIR recognizes the immense significance of the Delta to Tribes, stating, “the Delta holds great significance to Tribes and that Tribes oppose the Delta Conveyance Project due to the potential unmitigable impacts on the Tribal cultural landscape and the many resources that make this place foundational to Tribes” (DEI Chapter 32, p. 32-2). DWR identifies alterations to the Delta TCL resulting from the project as a significant impact, yet mitigation measures are defined in relation to types of character-defining features. This creates a potential mismatch between the scale of impact (landscape) and the scale of mitigation (character-defining features). The Council encourages DWR to continue to work with Tribes to achieve a project design that will avoid or reduce conflict with the existing Tribal use of the landscape as a culturally significant and sacred space prior to certifying consistency with the Delta Plan.

The DEIR recognizes that mitigation measures associated with other resource chapters may not account for those resources’ value as character-defining features of the TCL (DEIR Chapter 32, p. 32-4). As such, mitigation measures proposed in other resource chapters may not avoid or reduce conflicts with existing specific Tribal cultural uses as required by **DP P2**. The Council recommends that DWR affirm in the FEIR which mitigation measures referenced in Chapter 32 that address physical or biological resources elsewhere in the DEIR explicitly account for referenced impacts to Tribal cultural resources or character-defining features of the TCL.

As part of a future certification of consistency, DWR should demonstrate that all impacts to existing uses associated with known Tribal cultural resources have been considered, as a basis for siting the project to avoid or reduce conflicts when feasible. Since at present, the DEIR identifies the entire TCL as a tribal cultural resource, and that mitigation measures commit to protect types of character-defining features of the TCL, it is important that all known character-defining

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features, as determined through consultation with Tribes, be defined in this list in the FEIR (DEIR Chapter 32, Table 32-2) or other documentation prior to the certification of consistency.

As part of Mitigation Measure TCR-1d DWR commits to assisting Tribes with access to lands and waters, including facilitation of access agreements, as appropriate for ceremonial and other spiritual practices, as well as collecting and gathering of resources for traditional uses (DEIR Chapter 32, p. 32-49). The Council recommends that DWR include specific examples describing how such access may be provided, particularly in cases where barriers to access can be reasonably anticipated.

### Risk Reduction Policies

Based on a review of the DEIR, we have not identified circumstances where the project would implicate the Delta Plan's risk reduction policies (**RR P1** through **RR P4**). If the FEIR identifies such circumstances, the Council recommends that DWR engage in early consultation for these policies ahead of a submitting a certification of consistency.

### Closing Comments

We appreciate the opportunity to review the Delta Conveyance Project DEIR. As DWR proceeds with revisions and development of a FEIR, we invite you to continue to engage Council staff in early consultation to discuss project features and mitigation measures that would promote consistency with the Delta Plan. As part of the Council, the Delta Science Program's Adaptive Management Liaisons are also available to provide further consultation and guidance regarding appropriate application of best available science and adaptive management. In addition, we encourage DWR to continue to present at Council meetings, and to seek similar consultation with the Delta Independent Science Board.

More information on covered actions, early consultation, and the certification process can be found on the Council website, <http://deltacouncil.ca.gov/covered-actions>. Council staff are available to discuss issues outlined in this letter as you proceed in the next stages of your project and approval processes. Please contact Daniel Constable at (916) 902-6470 ([daniel.constable@deltacouncil.ca.gov](mailto:daniel.constable@deltacouncil.ca.gov)) with any questions.

Sincerely,

*Jeff Henderson*

Comments on the Draft Environmental Impact Report for the Delta Conveyance Project, December 16, 2022

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## Attachment 1

### G P1(b)(3) Best Available Science, Detailed Comments

The following comments are provided to expand on comments on Delta Plan Policy **G P1(b)(3)** provided in the Council's comment letter on the Delta Conveyance Project (project) Draft Environmental Impact Report (DEIR). The Council acknowledges that many of these comments do not directly pertain to California Environmental Quality Act (CEQA) requirements, and may not require response in the Final Environmental Impact Report (FEIR) to comply with CEQA. However, the FEIR may provide a suitable opportunity to address these points to build a record that supports a future certification of consistency with **G P1(b)(3)**.

#### General Comments

Several DEIR chapters include references to Department of Water Resources (DWR) technical memoranda for more information on methodology. However, many of these technical memoranda are not linked within the references and do not appear to be available online. In particular we identified references to unavailable DWR technical memoranda in Chapters 5 (especially Appendix 5A, Section C), Chapter 10 (Section 10.3.3.3 p.10-39), and Chapter 11 (Section 11.3.1.1 p. 11-38). These methodological details should be included explicitly and referenced memoranda should be included as attachments to the FEIR, when possible. (We understand copyright restrictions may limit what can be posted online).

Additionally, the Council recommends that DWR provide additional resources to support the public in providing informed comments regarding the project's use of best available science (BAS). As noted in the journal article *Public participation methods: a framework for evaluation* (Rowe and Frewer, 2000), members of the public must have access to adequate information resources, human resources, material resources, and time resources to contribute meaningfully to public processes. The Council appreciates that DWR has already provided many helpful resources to support public involvement, including particularly the July 2022 *Draft Environmental Impact Report Explained* document and explainer videos available on the project website. However, the DEIR still contains large amounts of technical material that requires additional explanation and interpretation. Ahead of releasing the FEIR, DWR should consider hosting workshops or panels that provide interested parties an opportunity to interact directly with technical experts and science communicators to facilitate public understanding of the methods and findings reported in the DEIR.

#### Appendix 3G: Community Benefits Program

As noted in our main comment letter, while we acknowledge that the Community Benefits Program goes beyond the requirements of CEQA, we also explain that it may provide a means to reduce some potential conflicts with existing uses that extend beyond CEQA requirements as part of a future certification of consistency with **DP P2**. If so, it would be

## Attachment 1: Comments on the Draft Environmental Impact Report for the Delta Conveyance Project, Department of Water Resources, December 14, 2022

subject to **G P1(b)(3)**. Moreover, even if not subject to that regulation, applying best available science is a good practice.

The DEIR does not describe a scientific basis for the design of the Community Benefits Program (CBP). As described in DEIR Appendix 3G, case studies of other community benefits programs were presented at a November 2021 CBP workshop. The FEIR should describe how these case studies informed the CBP as conceptualized in the DEIR. There are also extensive, interdisciplinary literature spanning topics such as environmental governance, human dimensions of natural resource management, stakeholder engagement, political ecology, and environmental psychology that are relevant to the design of a Community Benefits Program. Engagement with social scientific literature could inform the design of this program to increase the likelihood that it will achieve its objectives.

Also, pertaining to the BAS criterion of transparency and openness, Figure 3G-2 is difficult to interpret. It is not clear how stages of the three process elements (grant program, economic development/integrated benefits, community benefit agreements) relate to one another. For instance, the figure depicts that a draft community benefit agreement relates to public review of parameters of the economic development and integrated benefits, as conveyed by the vertical yellow arrows, but the meaning of the arrows is not explained. Council staff recommend that the FEIR include a descriptive caption to clarify the intent of Figure 3G-2.

### Chapter 5: Surface Water

The DEIR does not explain why inputs for the CalSim3 model were based on stream flows in the period 1922-2015, rather than through 2020, as the balance of the DEIR uses 2020 as a baseline. After review of the DEIR appendices, we understand that this may be due to the use of Coupled Model Interconnected Project (CMIP) 5 projections (e.g., Chapter 30, Appendix 30, p. 30A-3) and because sensitivity analyses conducted include a range of data that may capture similar conditions (Appendix 30). However, if this is accurate, it would be helpful to explicitly describe this within FEIR Chapter 5 rather than only in an appendix. Lastly, related to the BAS criterion of transparency and openness, staff recommend that DWR consistently describe the reasoning behind choosing model inputs at appropriate locations in the FEIR.

### Appendix 5A, Section B: Hydrology and Systems Operations Modeling

Climate models used to generate future conditions hydrology were based on CMIP 5 projections from 2013, not from the newest CMIP 6 projections. Also, the baseline period for the climate normals used in the analysis is from 1981-2010, despite the availability since May 2021 of updated climate normals for 1991-2020 which better reflect current climate conditions (<https://www.ncei.noaa.gov/products/land-based-station/us-climate-normals>).

We understand that, at the time of modeling for the DEIR, CMIP 6 model data was not available in a form usable by the relevant models. Similarly, we understand that the



inclusion of this more recent data may not change identified impacts. However, if this data is available prior to certification, we recommend either updating modeling to make use of this data, or conducting a new sensitivity analysis if the CMIP 6 data warrants this.

### Chapter 7: Flood Protection

The DEIR evaluates water stage using DSM2, which does not include system wide flood operations. This approach is different than the approach used in the Central Valley Flood Protection Plan. Additionally, the future conditions modeling did not include the projects from the State Systemwide Investment Approach for the middle century scenarios that were modeled. To demonstrate consistency with the BAS criterion of transparency and openness, the FEIR should clearly explain why the DSM2 model was selected to support the flood protection analysis when compared to other available options used by DWR for similar studies.

### Chapter 9: Water Quality

The Cyanobacteria Harmful Algal Blooms (CHABs) impact assessment only considered a June to November timeframe for CHAB formation, offering the explanation that these months are when blooms have been present in the Delta (DEIR Chapter 9, Impact WQ-14, p. 9-154), despite also stating in the DEIR that CHABs can form as early as May or June (Appendix 9E.2.1.8). While June to November may represent the peak time for CHABs in the Delta, blooms do occur beyond this time period(e.g. a [record of Delta CHAB events](#) is available online from the Council, <https://viewperformance.deltacouncil.ca.gov/index.php/pm/harmful-algal-blooms>. (Data from California State Water Board Surface Water – Freshwater Harmful Algal Blooms Open Data Portal, CSV file Algae Bloom Report ID 2671)). To demonstrate consistency with the BAS criterion of inclusiveness, the FEIR's CHABs analysis should be based on a review of available sources, and should consider potential project CHAB impacts based on temperature, velocity, turbidity, and nutrients for the entire year.

### Chapter 12: Fish and Aquatic Resources

#### *Water Temperature and Inflow Relationship*

Recent scientific studies have been published that provide new tools for assessing the role of inflow in affecting Delta water temperatures and provide greater clarity on the relationship between water temperature and inflow. For purposes of BAS, these studies are appropriate for inclusion and citation in the FEIR to support consistency with the timeliness and relevance BAS criteria.

In the research article *The Drivers of River Temperatures Below a Large Dam*, Daniels and Danner (2020) developed a river temperature model for the Sacramento River from Keswick Dam to Knight's Landing with the capability to test the influence of inflow volume

and temperature on downstream temperatures. They found that the influence of dam discharges and discharge temperatures are greatly reduced (but not eliminated) toward the lower reaches of the Sacramento River, such that air temperature is the primary correlate of Sacramento River temperatures at the most downstream region in their study (which terminates at Knight's landing).

In a recent research effort on *Seasonally variable relationships between surface water temperature and inflow in the upper San Francisco Estuary*, Bashevkin and Mahardja (2022) evaluated the relationship between water temperatures and inflow in the Delta and determined that there was a predominantly negative correlation, in which lower inflows are related to higher water temperatures, throughout much of the Delta. Temperature could increase by up to 2°C from high to low inflow years. This study did not assess causation, but it establishes a basis for a potential causal relationship between inflow temperature and/or volume and Delta water temperatures. The authors also review prior studies of inflow-temperature relationships in the Delta that may be of use to DWR in improving the scientific basis of analyses in the FEIR.

To demonstrate consistency with the BAS criteria of inclusiveness and transparency and openness, the potential effect of Sacramento River inflows on Delta water temperatures should be assessed and disclosed in the FEIR. It was unclear, based on our review of the DEIR, if such analysis has been completed, since many of the temperature model details are not provided in Appendix 5A Section C, but may be available in DWR technical memos cited in the DEIR but that are not available online. One way to complete this analysis would be to extend the Daniels and Danner (2020) model, to a location downstream of the proposed intakes, and to the Feather and American rivers.

#### *Zooplankton*

The choice of *Eurytemora affinis* for zooplankton food availability analyses raises a timeliness question, as *E. affinis* has not constituted a dominant proportion of the zooplankton biomass since the late 1980s (see *Shifts in Zooplankton Community Structure: Implications for Food Web Processes in the Upper San Francisco Estuary*, Winder & Jassby, 2011; or directly explore the data at <https://deltascience.shinyapps.io/ZoopSynth/>). Another approach would be to base food availability analysis on currently predominant species like *Pseudodiaptomus forbesi*, or better yet, on an index of zooplankton biomass available to and consumed by Delta Smelt.

#### *Modeling*

The high variability in model predictions in the outflow-abundance model results for Longfin Smelt and White Sturgeon raise for us some questions about the accuracy of the model. We could not identify, from the material reviewed, if sensitivity analyses were performed to validate model structure or preclude inclusion of additional covariates. Additional details on model validation would be helpful to improve the transparency and openness.

### *Additional Comments*

Overall, DWR could improve its approach to the BAS criterion of transparency and openness by making readability improvements throughout the chapter. For example, on page 12-13 the text switches between scientific and common names for species, making it difficult to follow, especially for readers unfamiliar with species names. In addition, the acronym “EC” is used to refer to both “existing conditions” and “electrical conductivity.”

### **Chapter 16: Recreation**

The DEIR assumes the substitutability of alternate recreational use areas when predicting that project construction would lead to temporary increases in the use of neighboring recreational areas (DEIR Chapter 16, pp. 16-24 and 16-26). The DEIR also states that the DWR opted not to conduct a full survey of recreational users in 2020 and 2021 out of concern that, due to the pandemic, the observations gained through a survey would not be representative of typical recreational use patterns (p. 16-6). In lieu of a user survey, DWR conducted interviews with eight managers from different recreation providers within the Delta. However, the DEIR does not explain why these specific eight managers were chosen, nor whether they are meant to offer a representative perspective regarding the range of recreation types and areas in the Delta potentially affected by the project. Research has shown that changes in outdoor recreation behavior persisted beyond the initial phases of the pandemic (*Back to nature: Norwegians sustain increased recreational use of urban green space months after the COVID-19 outbreak*, Venter et al. 2021). To demonstrate consistency with the BAS criteria of inclusiveness and relevance, DWR should consider the tools available to document the current typical recreation patterns in the Delta following the pandemic.

### **Chapter 17: Socioeconomics**

When justifying the use of the IMPLAN model, the DEIR states that IMPLAN is the most widely used input-output model system in the U.S. (DEIR Chapter 17, p. 17-38). For statements such as this, which represent the basis for a decision (in this case, the decision to use this particular model), a citation should be provided in order to be transparent about the information that led to the decision.

The DEIR also states that the IMPLAN estimate for the share of personal income earned in the region but exported outside the region is 15%, but it is not clear whether this 15% is a hard-coded aspect of the model, or a variable input chosen by DWR (p. 17-41). If the latter, the FEIR should state why DWR chose 15%. If the former, citations would provide to readers an understanding regarding whether that 15% estimate is realistic and would help improve transparency and openness regarding use of this model.

The qualitative description of social and community effects could benefit from additional references which would add support relative to the BAS criterion of objectivity (pp. 17-43–17-44). The DEIR describes how the project could influence social cohesion, sense of place, and other topics in affected communities, but presents no assessment in support of these

claims. There are established methodologies for surveying community members to understand how they might react to changes, and information gathered could provide meaningful guidance about the potential socioeconomic impacts of the project. Adding to the analysis here or documenting additional references in the FEIR could contribute towards better demonstrating the BAS criterion of objectivity.

### Chapter 19: Cultural Resources

Below, we recommend several revisions that would improve the transparency and openness of the DEIR analysis of impacts on cultural resources:

- Develop a visualization that clarifies how the various definitions and regulatory criteria used in this Chapter relate to one another. Suggested terms to include are “cultural resources,” “historical resources,” the National Register of Historic Places/California Register of Historic Resources (NRHP/CRHR) eligibility criteria, criteria of integrity, and the CEQA thresholds of significance. We also recommend including the NRHP/CRHR criteria in the main chapter narrative, rather than only in Appendix 19A.
- Explain the NRHP/CRHR criteria codes in a note to Table 19-3.
- Explain why some archaeological resources are currently identified but not evaluated for eligibility (p. 19-12).
- Provide evidence to support the statement that noise would only affect resources where a quiet setting is critical to the “public’s understanding of the resource” (p. 19-38).

### Chapter 23: Air Quality and Greenhouse Gases

In Appendix 23D, the DEIR states that the BenMAP model used to assess health impacts associated with air quality uses 2010 census data because, at the time of the drafting of this DEIR, the 2020 census data were not yet publicly available (DEIR Appendix 23D, p. 23D-9). To align with the BAS criterion of timeliness, DWR should either update this analysis or provide relevant sensitivity analysis prior to submitting a certification of consistency with the Delta Plan. Ideally this update could be done to inform the FEIR as well.

### Chapter 29: Environmental Justice

The analysis in this chapter does not characterize specific localized impacts, potentially overlooking differences in impacts that are important relative to the BAS criterion of relevance. Environmental justice (EJ) analyses are known to be sensitive to a spatial scale of analysis, and analyses conducted at larger spatial scales often mask disparities in impact that become evident at smaller scales (see, e.g., *Scales of justice: is there a geographic bias in environmental equity analysis?*, Baden et al. 2007). Commonly, analyses of environmental justice evaluate whether there are correlations between environmental risks/hazards and community socioeconomic or demographic characteristics, such as race or income, with communities defined at a specific, relatively small geographical scale (e.g.,

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Census block group). Many analyses compare communities where hazards or exposures are located, and those where they are not (see., e.g., *Racial/ethnic disparities in cumulative environmental health impacts in California: evidence from a statewide environmental justice screening tool*, Cushing et al. 2015). This “unit-hazard coincidence method” has been critiqued on various grounds and more sophisticated, e.g., distance-based, analytical methods are increasingly used (see *Disproportionate proximity to environmental health hazards: methods, models, and measurement*, Chakraborty et al. 2011), but the common relevant feature among these methods is that they start by assuming (and then empirically demonstrating) that impacts can vary at relatively small spatial scales, based on certain characteristics (e.g., race, income) that are by now established predictors of disproportional environmental burdens. This basic assumption should be used in the DEIR to assess project impacts at the Census block group, Census tract, and/or county level, using community information identified early in the chapter.

The DEIR considers the entire project area as one environmental justice community because of the “substantial presence throughout the study area” of low-income and minority populations (DEIR Chapter 29, p. 29-43). However, this coarse filter approach masks potentially relevant differences in impact within the project area. The analysis relies on findings in other resource chapters to summarize environmental justice impacts, but the impact analyses in those chapters do not characterize how impacts may vary between EJ- and non-EJ communities, or even between different EJ communities. A more robust environmental justice assessment would not only state that there are impacts on “environmental justice communities” writ large – it would also attempt to describe (qualitatively and/or quantitatively) what those impacts would be and how they would vary between communities. Including more granular information about these impacts would better align with methodologies commonly used in environmental justice analysis, and also produce relevant information that can inform mitigation that is tailored to localized impacts, particularly when those impacts would exacerbate environmental injustices.

Furthermore, the description of the analytical method the DEIR employs is not clear. Below, we recommend a number of revisions that would improve the transparency and openness of the EJ analyses:

- Use clear and consistent terms. Define and use terms consistently (e.g., EJ populations, EJ communities, minority and low-income communities). The DEIR term closest to providing an explicit definition of EJ communities in the chapter is “disenfranchised” (p. 29-4). This term should be explained and a citation provided if it is used. Consider defining EJ communities in operational terms, referring to the framework used throughout the chapter (i.e., in terms of race/ethnicity and income).
- Describe metrics used to identify low-income communities. The definition of low-income community (20% or more of the population has individual household income (MHI) less than 80% statewide MHI, or ~\$60,000) is only provided as a note to Table 29-2. This and other similar definitions should be included in the main

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narrative. More broadly, the description of the definition could be clarified. The definition of “low-income” (p. 29-15 line 8) refers to the California Public Resources Code definition for a disadvantaged community, as a community with MHI less than 80% statewide average. This 80% community metric is then used to calculate a \$60,000 threshold for individual households. The DEIR applied a community-based metric to set a threshold for individual household income and then this threshold was used to calculate percentages of households within an area (census block group, census tract, and county) at or below this threshold. The change in units (community to household) should be made clearer in the FEIR.

- The FEIR should provide a reference or explain how it defines “statewide average” on page 19-25, lines 12-13.

There are also several statements that should be supported by applicable references and/or analysis. These include:

- The statement that the DEIR represents the “typical scope of EJ analysis” (p. 29-4).
- Page 29-28 states that changes to SWP deliveries may benefit SWP-receiving minority and low-income communities, and also states that reductions in water deliveries or their reliability would result in disproportionate impacts to the same communities. Similar statements are found in the discussion of groundwater replenishment and water rates on page 20-30, lines 6-16.
- The statement that low-income and minority agricultural workers comprise a substantial proportion of environmental justice communities in the Delta (p. 29-41).
- The assessment of impacts of mitigation measures (p. 29-50).

Several descriptions within the chapter or between statements in the chapter and other sections of the DEIR should be clarified to improve transparency and openness. These include:

- The DEIR refers to beneficial effects in the Delta from operations (p. 29-1), but the description of the Community Benefits Program notes that the project’s benefits do not accrue to local communities. As such, it is not clear what beneficial effects the DEIR refers to here. Similarly, the DEIR states that when impacts can be reduced to less-than-significant, minority and low-income populations are likely to benefit proportionately (p. 29-2). Evidence is not cited for this statement. As this logic underpins the subsequent EJ analysis, it should be more clearly explained.
- The definition of minority populations refers to the 1997 guidance from the Council on Environmental Quality, which differs from the categories used in the 2019 American Community Survey (ACS) (i.e., ACS separates Asian from Native Hawaiian/Other Pacific Islander – as also shown in Table 29-1). This discrepancy should be explained and/or reconciled.



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- Figure 29-2 shows Census tracts and Census block groups, not Census blocks as referenced in the narrative on page 29-9.
- On page 29-25 the DEIR states, “the criteria for [Disadvantaged Communities] DAC are comparable to the criteria for determining an environmental justice community used in this chapter, which are household income below 80% of statewide MHI or non-white ethnicity of any income bracket, combined with residence in Delta census tracts that contain any part of the project footprint.” However, “Non-White ethnicity” is not the same as the definition of minority provided earlier. On page 29-9 it appears that the category “Hispanic” includes White Hispanic people (as the DEIR states this category is defined “regardless of race” and Table 29-1 only includes “Total Hispanic” without differentiating White and non-White Hispanic). Therefore, it appears White Hispanic people are included in the DEIR definition of “minority communities.” In contrast, in the EJ survey the racial classification for DACs is “other than white” (p. 29-25), so presumably White Hispanic people were not included in the classification of DAC members. Therefore, the DAC criteria used in the survey do not appear to be directly comparable to the criteria used within the chapter. If comparability of categories is not possible, then, in accordance with the BAS criterion of transparency and openness, the DEIR should describe the discrepancy and any resulting limitations for the analysis.

Additional relevant content should be included in the environmental justice analysis, including the following:

- The DEIR states that EJ impacts on tribal cultural resources cannot be analyzed, because there is no control group for the test of disproportionality (p. 29-34). However, the EJ literature widely recognizes that any impact that exclusively affects only one community, a minority ethnic group (such as tribal community members), precisely fits the definition of an environmental justice impact. According to the EJ literature, lacking a control group for comparison does not matter if the proportional impact on a minority community is 100%. Therefore The FEIR should include a discussion of EJ impacts on tribal cultural resources.
- The FEIR should include an assessment of cumulative impacts that accounts for combined impacts of the project as well as other foreseeable environmental hazards and associated health burdens that may simultaneously be experienced by environmental justice communities (see Cushing et al. 2015 for discussion of importance of cumulative impacts analysis).

### Chapter 30: Climate Change

Modeling under the H++ scenario of >3 meters of sea level rise appears to assume that the geometry of the streams would be unchanged, which may be unrealistic given the stresses to the Delta’s flood management system. However, the FEIR should more fully describe the decisions made in the analysis related to end-of-century upper-end climate change

scenarios and Delta geometry, to help clarify the limitations of analysis and levels of uncertainty related to future climate change scenarios.

## Chapter 32: Tribal Cultural Resources

The Council recognizes that Tribes are the appropriate parties to evaluate whether Tribal cultural resources have been accurately assessed and impacts adequately characterized in the DEIR. Tribal expertise is the core evidence base for assessing impacts to Tribal cultural resources. To ensure that the material in this chapter meets the BAS criteria of relevance and inclusiveness, the Council recommends that DWR ensure Tribal review and endorsement/acceptance of the presentation of the following in the DEIR:

- Significance criteria. The DEIR states that the significance thresholds were developed to mirror common CEQA language (“materially impair”), but does not state whether the thresholds were informed by consulting Tribes.
- Confidential appendix. The DEIR states that this appendix was “reviewed by appropriate DWR officials,” but does not state whether the appendix was also reviewed by consulting Tribes.
- Tribal Cultural Landscape (TCL). The DEIR notes that DWR’s perspective that individual features contribute to the CRHR eligibility of the landscape as a whole “was shared with Tribes in consultation” and goes on to state, “all of these features are important as part of the Delta TCL and that the information in DWR’s record at the time of development of this Draft EIR did not support a finding that these features are CRHR-eligible separate from the Delta TCL” (p. 32-20). The DEIR does not state whether consulting Tribes support this approach.
- TCL character-defining features (e.g., Table 32-2). The DEIR does not state whether this list has been reviewed by Tribes for completeness or whether they agree with the characterization of features.
- Upstream impacts. The DEIR states that some consulting Tribes expressed concerns about indirect upstream impacts of the project. The DEIR cites to modeling analyses showing that “indirect operational changes” upstream would be “negligible” (p. 32-8). The DEIR should describe if and how the modeling outputs referenced here correspond to the impacts of interest or concern to Tribes, and whether Tribes’ concerns are addressed by these analyses.
- Data ownership. It is not clear in the DEIR if Tribes were consulted on the matter of data ownership, if they are comfortable with the way the data has been collected and used, or if they agree with the way data is characterized in this document (e.g., references to DWR “sharing” oral histories or identified Tribal cultural resources with Tribes; describing the confidential appendix as “part of DWR’s confidential CEQA administrative record” (p. 13). According to best practices for Tribal data sovereignty (e.g., *Tribal data governance and informational privacy: constructing “Indigenous*

*data sovereignty*” (Tsosie 2019), Tribes own all data collected for, by, and about them.

To enable transparency and openness for non-Tribal entities and members of the public to make an informed assessment of impacts on Tribal cultural resources, the Council recommends that DWR disclose how many consulting Tribes reviewed the chapter, generally summarize the Tribes’ commentary, and explain how Tribal comments were addressed, in all cases withholding sensitive and confidential information. Additionally, the DEIR seems to suggest consulting Tribes’ guidance to define a larger TCL boundary was not followed (lines 26 to 34 of p. 32-24). In this and any similar case where DWR made decisions independent of Tribal consultation or decisions to override the guidance of consulting Tribes, those decisions should be stated transparently and should be justified.

Related to the BAS criteria of relevance and inclusiveness, the Council recommends that DWR provide additional opportunities for active collaboration with interested consulting Tribes, establishing a framework and providing resources that will allow interested Tribes to substantively shape proposed mitigation measures. The DEIR states the Tribal Cultural Resources Management Plan will be prepared by individuals who meet professional standards defined by the Secretary of the Interior for cultural resources (p. 32-49). Council staff recommend that DWR consult with Tribes to determine if they have an interest in leading development of this plan, with DWR providing financial and logistical/coordination support. Additionally, proposed Mitigation Measure TCR-1d describes a passive role for Tribes in development of compensatory mitigation plans (p. 32-48), indicating that Tribes will be invited to respond to a document developed in advance and for other purposes. Council staff recommend that interested Tribes be involved and empowered to take leadership roles in the development of these plans.

Council staff recommend that the FEIR provide a visualization that depicts how the various definitions and regulatory criteria used to make significance determinations relate to one another. Suggested terms to include are “historic resource,” “Tribal cultural resource,” “cultural landscape,” “Tribal cultural landscape,” CEQA/PRC criteria (21074(a)(b)(c) and 5024.1(c)), the CRHR criteria, and the criteria of integrity.

### Chapter 35: Public Involvement

Regarding the BAS criterion of transparency and openness, the Council recommends that DWR cite relevant sources in this chapter to demonstrate the robustness of its public engagement efforts. In addition to social scientific literatures referenced above for the Community Benefits Program, there are several practical guides DWR could cite to demonstrate a scientific basis for its public engagement, including the [U.S. EPA’s Public Participation Guide](#), the [Institute for Local Government’s website on Inclusive Public Engagement](#), and the [U.S. Forest Service’s Public Engagement Reference Guide for Forest Service Employees](#).

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**EXHIBIT C  
TO MARQUEZ  
DECLARATION**



# 2024-2026 Exploratory Planning and Design Field Investigations - Environmental Compliance, Clearance, and Monitoring Plan

## 1.0 Introduction

On June 20, 2024, the trial court assigned to the litigation challenging Department of Water Resources' (DWR) certification of the Delta Conveyance Project (DCP) Final Environmental Impact Report (FEIR) and approval of the project, issued a ruling enjoining DWR from undertaking geotechnical work described in Chapter 3 of the DCP FEIR prior to completion of the certification procedure that the Delta Reform Act requires ("Preliminary Injunction Ruling"). In response to the Preliminary Injunction Ruling, DWR has ceased all geotechnical work described in Chapter 3 of the DCP FEIR. DWR will not recommence geotechnical work described in Chapter 3 of the DCP FEIR until the Preliminary Injunction Ruling is stayed, modified, or satisfied. This document was prepared for proposed 2024-2026 exploratory planning and design field investigations (hereafter preconstruction field investigations) including the 2024-2026 Proposed Geotechnical Activities that are currently enjoined by the Preliminary Injunction Ruling.

Data collected from preconstruction field investigations is used to inform planning and design studies prior to implementing and constructing the DCP. As these preconstruction field investigations were described and evaluated as part of the DCP FEIR (December 2023 – SCH # 2020010227), compliance with the DCP Mitigation Monitoring and Reporting Program (MMRP) is required (FEIR Section 3.15). This document constitutes the activity-specific environmental compliance monitoring plan (Plan) required by DCP FEIR Environmental Commitment (EC) – 14 (*Construction Best Management Practices for Biological Resources*) for the 2024-2026 preconstruction field investigations. DWR previously prepared an environmental compliance monitoring plan for the 2024 preconstruction field investigations that were completed in the Spring of 2024 prior to issuance of the Preliminary Injunction Ruling. As project planning proceeds, DWR will prepare separate activity-specific environmental compliance monitoring plans for other project activities. As discussed further below, this Plan includes the document objectives, the primary objectives of the 2024-2026 preconstruction field investigations, the study area, and monitoring commitments proposed to satisfy the needs of EC-14.

## 2.0 Document Objectives

Prior to commencing preconstruction field investigations, EC-14 requires DWR to develop an activity specific environmental compliance monitoring plan to monitor, enforce and document measures to protect special-status fish, wildlife, plant species, and their

habitats, designated critical habitat, and sensitive natural communities. This document provides the information that will be collected prior to, during, and then following preconstruction field investigations. Follow-up documentation will be required in the form of preconstruction site clearance survey documentation, daily monitoring logs, and quarterly monitoring reports. As per EC-14, this activity specific plan includes information and documentation collection protocols to satisfy the following elements (Refer to Section 6.0 – *Compliance with EC-14 Elements*).

- Reference to or inclusion of the Stormwater Pollution Prevention Plan (SWPPP) prepared under the [Construction General Permit](#) (CGP) (Order WQ 2022-0057- DWQ; NPDES NO. CAS000002), where one is needed. (See EC-4b, Develop and Implement Stormwater Pollution and Prevention Plans.)
- Summaries or copies of planning and preconstruction surveys (if applicable) for natural communities and special-status species.
- Description of mitigation measures to be implemented, including a description of site or activity specific Best Management Practices (BMPs) or additional measures not otherwise included in the project.
- Descriptions of monitoring parameters (e.g., turbidity), including the specific activities to be monitored (e.g., dredging, grading activities) and monitoring frequency and duration as well as parameters and reporting criteria (e.g., turbidity is not to exceed 10 nephelometric turbidity units (NTUs) above background. Exceedances will be reported, and the contractor must identify and correct the cause.).
- Description of roles and responsibilities of the monitors and protocols for notifying CDFW, NMFS, and USFWS, if needed.
- A daily monitoring log prepared by the monitor, which documents the day's activities, notes any problems identified and solutions implemented to rectify those problems, and document notifications of the superintendent and/or the fish and wildlife agencies regarding any exceedances of specific parameters (i.e., turbidity) or observations of special-status species. The monitoring log will also document activity start/end times, weather and general site conditions, and any other relevant information.

### 3.0 Preconstruction Field Investigations – Purpose and Background

FEIR Chapter 3 – *Description of the Proposed Project and Alternatives* describes the project evaluated in the FEIR. Section 3.15 – Field Investigations explains that ‘work related to geotechnical, hydrogeologic, agronomic testing, and construction test projects (geotechnical investigations) would occur during the preconstruction and construction periods following the adoption of the EIR, identification of an approved project footprint, and acquisition of all required permits.’ The preconstruction field investigations will ‘more specifically identify appropriate construction methods addressed in the final design

documents. These investigations would also address the establishment of geological and groundwater monitoring programs that could extend during the design and construction phases of the [Approved] project’ (TM 14B – Potential Future Field Investigations – Bethany Reservoir Alternative, 2022b).

To support the project description and environmental analysis in the FEIR, the Delta Conveyance Design and Construction Authority (DCA) working under the direction of DWR developed Engineering Project Reports (EPRs) and associated technical memoranda (TMs) (DCA 2022a, 2022b) to detail project engineering considerations. The Bethany Reservoir Alternative (Approved Project) EPR contains a detailed description of the Approved Project and the TMs that informed its design. Among other information, TM 14B – Potential Future Field Investigations – Bethany Reservoir Alternative details the geotechnical explorations (or field investigations) that constitute preconstruction field investigations necessary to support continued development of the project design documents. TM 14B Attachments A-C provide additional information related to field investigations used in the FEIR analysis of impacts for the Project (Option B2B or B2).

#### 4.0 Preconstruction Field Investigations – FEIR Description

The FEIR provides precise zones where field investigations would occur, and an approximated acreage and maximum number of each type of exploration was used for the FEIR impact analysis. This information was utilized to identify and disclose potential direct and indirect environmental effects that may result from the field investigations as analyzed in the FEIR. TM 14B, Attachment A (Option B2) provides total estimates for preconstruction field investigations.

FEIR Mapbook 3-3 for the Bethany Alternative (Approved Project) depicts the zones in which geotechnical investigations would occur (i.e., geotechnical investigation zone). Each map further indicates that geotechnical investigations would be conducted within all project feature construction boundaries.

#### 5.0 Preconstruction Field Investigations – General Terms

As proposed, the 2024-2026 preconstruction field investigations will *not* include the following geotechnical activities described in Chapter 3 of the DCP FEIR: overwater activities, activities that involve trenching, activities within the West Tracy Fault or Bethany Fault, pile driving, vibratory testing of dynamic properties, potholing, monument installation, test fills for settlement studies, 800 ft. inclined boreholes, or ground improvement test zones. Consistent with the protocols used for the geotechnical activities completed between 2020 - 2023<sup>1</sup> and in May and June of 2024, the 2024-2026 preconstruction field investigations will adhere to the following general terms:

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<sup>1</sup> DWR approved, and completed, the prior geotechnical activities between 2020-2023 in reliance on the July 2020 Soil Investigations for Data Collection in the Delta Final Initial Study and Mitigated Negative Declaration (Soil Investigations IS/MND) and associated addenda adopted in February 2021 and June 2022 (SCH#2019119073)

**Table 1: General Terms for 2024-2026 Preconstruction Field Investigations**

<b>General Terms for 2024-2026 Preconstruction Field Investigations<sup>2</sup>:</b>
Geologic activities shall occur for no more than 10.5 hours each day between 7:00 am to 7:00 pm Monday through Friday only, unless alternative arrangements are made with the landowner and are consistent with all other requirements.
No entries or inspections shall occur between Wednesday and Sunday of Thanksgiving week and between December 23 and January 1, or on the 4th of July, Labor Day, or the Memorial Day holidays
On vineyards and other planted land, there shall be no entries or inspections between September 1 and October 15 unless authorized by the landowner in writing
Between October 1 and February 25 there shall be no entries or inspections on hunting lands
DWR, its Contractors, and/or Representatives, will adhere to all access restrictions related to pesticides in use on the parcels where field investigations are proposed
In addition to preliminary site clearance and biological surveys, DWR may access a parcel for up to 2 days to undertake preliminary identification activities to designate the exact locations of the boring, and CPT sites, unless alternative arrangements are made with the landowner and are consistent with all other requirements
Entry for CPT shall be for no more than 2 days per CPT site, unless otherwise authorized by the owner due to site, weather, or other conditions
Entry for borings shall be permitted for up to 11 days per soil boring, unless otherwise authorized by the owner due to site, weather, or other conditions
Tribal representatives (2) and DWR (up to 4) have two (2) additional full days and two (2) half days to do pre-drilling site clearances prior to the commencement of drilling activities, unless alternative arrangements are made with the landowner and are consistent with all other requirements
DWR shall give approximately 14 days' notice of intended date to drill or CPT test by mail, phone and/or email to the owner's designated representative or, if none, to the owner; the notice will include a description of the activities that will be conducted on the property and a general description of the area where activities will take place
DWR shall give approximately 10 days' notice to confirm the information provided in the 14-day notification and to provide the owner's designated representative or, if none, the owner with information pertaining to the purpose of the several types of studies to be conducted on the property and the point of contact(s) for DWR

<sup>2</sup> DWR developed the terms in Table 1 in consideration of conditions included in prior court ordered entries for geotechnical activities, including the November 21, 2023, Order Permitting Entry and Investigation of Real Property for Environmental, Cultural, Geological, and Drilling Investigations entered by the San Joaquin County Superior Court in Judicial Council Coordination Proceedings (JCCP) Case No. 4594, as well as the terms of the proposed Temporary Entry Permits (TEPs) provided to landowners by DWR for the completed 2024 preconstruction field investigations.

General Terms for 2024-2026 Preconstruction Field Investigations <sup>2</sup> :
DWR shall give approximately 72-hour notice by phone and email (or utilizing the preferred communication method as agreed upon with the landowner or designated representative) to the owner’s designated representative or, if none, to the owner for entries
DWR should make all reasonable efforts to accommodate reasonable requests to alter the dates based on the owner's necessary use of the property
Maximum soil boring depth is limited to 300 feet <sup>3</sup>
DWR shall not enter closed structures on the property, including, specifically, office buildings, garages, fully enclosed sheds, and buildings not considered open to the public, unless alternative arrangements are made with the landowner and are consistent with all other requirements
DWR shall comply with any general rules or regulations of a reclamation district applicable to the underlying property owner regarding use or weight of vehicles on its easement area, or restricted access to pumping stations, digging near levees, and the like
DWR shall coordinate with the CA Department of Fish and Wildlife regarding entry to all areas covered by a conservation easement or grant.
DWR personnel and its contractors shall have identification cards and be prepared to show them to any owner who requests to see such
DWR personnel shall use their best efforts not to needlessly block or impede any activity by the owner or his or her agents on the property
DWR shall contact railways prior to entry and shall comply with reasonable conditions of special visible clothing near the railroad tracks and shall cross the railroad tracks with vehicles only at designated public crossings or in consultation with railroad personnel
DWR personnel should not linger or loiter or perform work within 25 feet of the railway tracks
DWR shall use designated crossing points for pedestrian crossing where reasonably available and shall cross only when no trains are observable
DWR shall not fence any area of property or to prevent access of the owners to their properties, except when DWR personnel are utilizing that specific area of the property
DWR vehicles or equipment shall not unreasonably block access by other vehicles on levee roads or other reclamation district-operated roadways
DWR shall not perform any borings or CPT holes within three hundred (300) feet of a landside levee toe, without first giving ten (10) days' notice of the change of site plan and proposed work to both the affected reclamation district and the landowner

<sup>3</sup> Prior Court Ordered Entries have authorized, and DWR has completed, soil borings up to a depth of 300 feet. The 2024-2026 preconstruction field investigations propose a maximum depth of 250 feet.

<b>General Terms for 2024-2026 Preconstruction Field Investigations<sup>2</sup>:</b>
DWR shall follow the guidelines in its Bulletin 74-90 with respect to the method by which the exploratory borings will be sealed
DWR shall restore the property, as near as possible, to its original condition after the activities are completed
Upon request by an owner, DWR shall promptly provide a copy of the drilling and CPT fact sheets that DWR is using for the geologic and drilling activities
Following compilation of the data gathered and within one hundred fifty (150) days of a written request by the landowner, DWR will provide the landowner with all data, including, but not limited to notes, surveys, reports, and photographs, obtained from any investigation on the landowner's property



## 6.0 Compliance with EC-14 Elements

### 6.1 Reference to or inclusion of the SWPPP prepared under the CGP, where one is needed. (See EC-4b, Develop and Implement Stormwater Pollution and Prevention Plans.)

- Federal statutes and regulations require discharges to waters of the United States comprised of stormwater associated with construction activity to obtain NPDES permit coverage (except operations that result in disturbance of less than one acre of total land area and that are not part of a larger common plan of development or sale). (Order WQ 2022-0057-DWQ NPDES NO. CAS000002). A SWPPP is not required for the 2024-2026 preconstruction field investigations because all 2024-2026 preconstruction field investigations will disturb less than one acre of total land area. Summaries or copies of planning and preconstruction surveys (if applicable) for natural communities and special-status species
- FEIR Chapter 13: Terrestrial Biological Resources includes a set of mapbooks specific to the approved project providing the distribution of natural communities (within the project area) and species-specific habitat models, used for the impact analyses. Summaries and/or copies of planning and preconstruction surveys, in compliance with the DCP Mitigation Monitoring and Reporting Program (MMRP), and measures in this document, will be developed once authorization is received to enter private properties. Preparation for preconstruction field investigation site clearance surveys typically involve a desktop review of aerial imagery which would include a California Natural Diversity Database (CNDDB) search, along with in-field surveys and verifications by qualified biologists and resource specialists. Information from on the ground surveys will be used to adjust preconstruction field investigation locations to avoid impacts to special status species, their habitats, as well as cultural and Tribal resources ascertained from California Historical Resources Information System (CHRIS) cultural resources records searches as well as field surveys. Daily monitoring reports and clearance survey information will be compiled into quarterly monitoring reports. Examples of daily logs and quarterly reports are attached to this report (See Attachments 1 and 2).
- Planning and preconstruction survey checklists will include elements from this document.

### 6.2 Description of mitigation measures to be implemented, including a description of site or activity specific BMPs or additional measures not otherwise included in the project.

- The 2024-2026 preconstruction field investigations will comply with a) the general terms for preconstruction field investigations (See Table 1), b) the DCP MMRP

measures (See Table 2), and c) an additional list of activity-specific measures informed by the protocols utilized by DWR in completing geotechnical activities from 2020-2023 (See Table 3).

**Table 2: DCP MMRP Measures**

**DCP MMRP Measures<sup>4 5</sup>**

Title	Description/Purpose
EC-1	Conduct Environmental Resources Worker Awareness Training
EC-2	Develop and Implement Hazardous Materials Management Plans
EC-3	Develop and implement spill prevention, containment, and countermeasure plans
EC-4a	Develop and implement Erosion and sediment control plans
EC-4b	Develop and Implement Stormwater Pollution Prevention Plans
EC-5	Develop and Implement a Fire Prevention and Control Plan
EC-6	Conduct Cultural Resources Awareness Training
EC-7	Off-Road Heavy-Duty Engines
EC-8	On-Road Haul Trucks
EC-9	On-Site Locomotives
EC-10	Marine Vessels
EC-11	Fugitive Dust Control
EC-12	On-Site Concrete Batching Plants
EC-13	DWR Best Management Practices to Reduce GHG Emissions
EC-14	Construction best Management practices for biological resources (Appendix 3B)
EC-15	Sediment Monitoring, Modeling, and Reintroduction Adaptive Management
EC-16	Provide Notification of Construction and Maintenance Activities in Waterways
EC-17	Pursue Solar Electric Power Options at Conveyance Facility Sites
EC-18	Minimize Construction-Related Disturbances to Delta Community Events and Festivals
AES-1a	Install Visual Barriers between Construction Work Areas and Sensitive Receptors
AES-1b	Apply Aesthetic Design Treatments to Project Structures
AES-1c	Implement Best Management Practices in Project Landscaping Plan

<sup>4</sup> For the complete descriptions of the MMRP measures, please go to: <https://cadwr.app.box.com/s/qct5ey81zeyaxouccc25yyrotzfh2wq8>

<sup>5</sup> Part of documenting compliance with mitigation measures in the MMRP includes confirming whether specific measures are applicable to an activity. Based on the scope of the proposed 2024-2026 preconstruction field investigations, some of the mitigation measures in the MMRP are not applicable. For example, the 2024-2026 preconstruction field investigations do not include overwater activities, therefore mitigation measures specific to overwater activities do not apply.

**DCP MMRP Measures<sup>4 5</sup>**

<b>Title</b>	<b>Description/Purpose</b>
AES-4a	Limit construction outside of daylight hours within 0.25 miles of residents at the intakes
AES-4b	Minimize fugitive light from portable sources used for construction
AES-4c	Install visual barriers along access routes, where necessary, to prevent light spill from truck headlights toward residences
AG-1	Preserve Agricultural Land
AG-3	Replacement or relocation of affected infrastructure supporting agricultural properties
AQ-1	Offset construction-generated criteria pollutants in the Sacramento Valley Air Basin
AQ-2	Offset construction-generated criteria pollutants in the San Joaquin Valley Air Basin
AQ-3	Offset construction-generated criteria pollutants in the San Francisco Bay Area Air Basin
AQ-5	Avoid Public Exposure to localized particulate matter and nitrogen dioxide concentrations
AQ-9	Develop and implement a Greenhouse Gas (GHG) Reduction Plan to Reduce GHG Emissions from Construction and Net CVP Operational Pumping to Net Zero
AQUA-1a	Develop and Implement an Underwater Sound Control and Abatement Plan
AQUA-1b	Develop and Implement a Barge Operations Plan
AQUA-1c	Develop and Implement a Fish Rescue and Salvage Plan
BIO-2a	Avoid or minimize impacts on special-status natural communities and special-status plants
BIO-2b	Avoid or minimize impacts on terrestrial biological resources from maintenance activities
BIO-2c	Electrical Power Line Support Placement
BIO-14	Avoid and Minimize Impacts on Vernal Pool Aquatic Invertebrates and Critical Habitat for Vernal Pool Fairy Shrimp
BIO-18	Avoid and Minimize impacts on Valley Elderberry Longhorn Beetle (VELB)
BIO-21	Avoid and minimize impacts on bumble bees
BIO-22a	Avoid and minimize impacts on California Tiger Salamander (CTS)
BIO-22b	Avoid and minimize operational traffic impacts on wildlife
BIO-23	Avoid and minimize impacts on Western Spadefoot Toad
BIO-24a	Avoid and minimize impacts on California Red-legged frog (CRLF) and critical habitat
BIO-24b	Compensate for impacts on California Red-Legged Frog Habitat Connectivity
BIO-25	Avoid and minimize impacts on Western Pond Turtle (WPT)
BIO-26	Avoid and minimize impacts on special-status reptiles

**DCP MMRP Measures<sup>4 5</sup>**

<b>Title</b>	<b>Description/Purpose</b>
BIO-30	Avoid and minimize impacts on Giant Garter Snake (GGS)
BIO-31	Avoid and minimize impacts on Western Yellow-Billed Cuckoo
BIO-32	Conduct preconstruction surveys and implement protective measures to avoid disturbance of California Black Rail
BIO-33	Avoid and minimize disturbance of Sandhill Cranes
BIO-34	Avoid California Least Tern Nesting Colonies and minimize indirect effects on colonies
BIO-35	Avoid and minimize impacts on Cormorant, Heron, and Egret Rookeries
BIO-36a	Conduct nesting surveys for special-status and non-special status birds and raptors and implement protective measures to avoid disturbance of nesting birds and raptors
BIO-36b	Conduct preconstruction surveys and implement protective measures to avoid disturbance of White-Tailed Kite
BIO-37	Conduct surveys for Golden Eagle and Avoid Disturbance of Occupied Nests
BIO-39	Conduct preconstruction surveys and implement protective measures to minimize disturbance of Swainson's Hawk
BIO-40	Conduct surveys and minimize impacts on Burrowing Owl
BIO-42	Conduct surveys and minimize impacts on Least Bell's Vireo
BIO-44	Conduct preconstruction surveys and implement protective measures to avoid disturbance of tricolored blackbird
BIO-45a	Compensate for the Loss of Bat Roosting Habitat on Bridges and Overpasses
BIO-45b	Avoid and Minimize impacts on roosting bats
BIO-46	Conduct Preconstruction survey for San Joaquin Kit Fox (SJKF) and implement avoidance and minimization measures
BIO-47	Conduct preconstruction survey for American Badger and implement avoidance minimization measures
BIO-53	Avoid and minimize impacts on terrestrial wildlife connectivity and movement
CMP	Compensatory Mitigation Plan
CUL-1a	Avoid Impacts on Built-Environment Historical Resources through Project Design
CUL-1b	Prepare and implement a built-environment treatment plan in consultation with interested parties
CUL-2	Conduct a survey of inaccessible properties to assess eligibility, determine if these properties will be adversely affected by the project, and develop treatment to resolve or mitigate adverse impacts
CUL-3a	Prepare and implement an archaeological resources management plan
CUL-3b	Conduct cultural resources sensitivity training
CUL-3c	Implement archaeological protocols for field investigations
CUL-5	Follow State and Federal Law Governing Human Remains If Such Resources Are Discovered during Construction
GW-1	Maintain groundwater supplies in affected areas
GW-5	Reduce Potential Increases in Groundwater Elevations near Project Intake Facilities

**DCP MMRP Measures<sup>4 5</sup>**

<b>Title</b>	<b>Description/Purpose</b>
HAZ-2	Perform a phase I Environmental Site Assessment prior to construction activities and remediate
NOI-1	Develop and implement a noise control plan
PALEO-1a	Prepare and implement a monitoring and mitigation plan for paleontological resources
PALEO-1b	Educate construction personnel in recognizing fossil material
PH-1a	Avoid creating areas of standing water during preconstruction field investigations and project construction
PH-1b	Develop and implement a mosquito management plan for compensatory mitigation sites on Bouldin Island and at I-5 ponds
SOILS-5	Conduct site-specific soil analysis and construct alternative wastewater disposal system as required
TCR-1a	Avoidance of impacts on Tribal Cultural Resources
TCR-1b	Plans for the management of Tribal Cultural Resources
TCR-1c	Implement measures to restore and enhance the physical, spiritual, and ceremonial qualities of affected Tribal Cultural Resources
TCR-1d	Incorporate Tribal knowledge into compensatory mitigation planning (restoration)
TCR-2	Perform an assessment of significance, known attributes, and integrity for individual CRHR eligibility
TRANS-1	Implement site-specific construction transportation demand management plan and transportation management plan
WQ-4	Contra Costa Water District Interconnection Facility
WQ-6	Develop and implement a mercury management and monitoring plan



**Table 3: Additional Compliance Parameters for 2024-2026 Preconstruction Field Investigations Based on Past Soil Investigations**

<b>Additional Compliance Parameters for 2024-2026 Preconstruction Field Investigations Based on Past Soil Investigations - Description<sup>6</sup></b>
Each Impact Area will be returned to as close to pre-activity conditions as possible. This will be documented by still photos taken pre- and post-activity
No building structures will be removed or disturbed. Preconstruction field investigations will occur at a distance greater than 100 feet (30.5 meters) from residences and small business operations, unless alternative arrangements are made with the landowner and are consistent with all other requirements. If fencing needs to be removed for access, it will be replaced after the work is completed.
No trees or vines will be removed during exploration activities; and only minor disturbances to vegetation would occur during mobilization of equipment. This minor disturbance may consist of mowing, removal of a few tree limbs, or trimming of bushes for site access. However, if access requires removal of any vegetation, the landowner would be consulted first to minimize the impact to both vegetation and the landowner.
Any proposed soil investigation activities that occur on agricultural lands will be grouted in accordance with materials that conform to ANSI and ASTM standards from the full depth to five feet (1.5 meters) below the surface. The final five feet (1.5 m) of topsoil will be replaced to return the Impact Area to as close to pre-activity conditions as possible. The backfill procedure will be in accordance with State of California Bulletin 74-81/74-90 and local county standards.
Water all exposed surfaces, as needed, two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
A qualified team of biologists will conduct a habitat assessment and reconnaissance level surveys (also referred to as site clearance surveys or preconstruction clearance surveys) approximately two weeks prior to the onset of ground disturbing soil investigation activities for any special status plants and wildlife that have the potential to occur within the project area (see FEIR Appendix 13 A -Special-Status Species with Potential to Occur in the Study Area). If, based on the habitat assessment and reconnaissance level surveys, the biologists identify the potential for special status wildlife impacts, the location will be shifted to a suitable location as identified by the qualified team of biologists, which is defined as a location that achieves the following performance standards: (1) is the minimum distance necessary (informed by mitigation measures BIO-2a through BIO-53, as referenced in the MMRP), to ensure that no special status plants and wildlife with the potential to occur is disturbed during the work activities, (2) does not increase impacts to other resources to above a level of significance, and (3) the qualified biologist team must determine that commencing activities does not have the possibility to cause unpermitted take under federal or State law. If a suitable location, as defined above, cannot be determined within adjacent areas by the qualified team of biologists, then the soil investigation at that location will not be conducted.

<sup>6</sup> DWR developed the additional measures included in Table 3 in consideration of the mitigation measures included in the Mitigation Monitoring and Reporting Program for the Soil Investigations IS/MND, as modified January 2023.

<b><i>Additional Compliance Parameters for 2024-2026 Preconstruction Field Investigations Based on Past Soil Investigations - Description<sup>6</sup></i></b>
The qualified biologist(s) must, at a minimum, have experience conducting surveys to identify the specific species and associated habitat that could occur on site.
All federally or state-listed species observed will be allowed to leave the Impact Area on their own. If the biologist determines that continuing activities could potentially cause unpermitted take under federal or State law to a federally or state-listed species, activities must cease. Work may not resume until the on-site biologist has determined there is no longer the possibility of causing unpermitted take under federal and State law.
No project activities will be conducted during or within 24 hours following a rain event in locations that have a potential for special status amphibians to occur or are near wetlands or other water features.
Any active rodent burrows or suitable cracks identified by a qualified biologist during the pre-construction survey will be flagged so that they can be avoided.
Any burrows, cracks, or fissures suitable for rodents that cannot be avoided and will be temporarily impacted by the movement and Placement of equipment or other project activities will be covered with plywood to avoid burrow collapse.
Leaf litter will be surveyed by the biologist for presence of wildlife prior to the onset of work, and if any special-status species are identified as using the leaf litter for refuge, it will be avoided and a buffer will be established by a qualified biologist and flagged.
Piles of rock, riprap, or other materials that could provide refuge to reptiles or amphibians will be avoided. If movement of such materials cannot be avoided, a qualified biologist will survey the area prior to disturbance and monitor the material movement and restoration of the area following completion of Proposed Project activities.
Sanitation facilities (e.g., portable toilets) shall be sited in a manner that avoids any direct connection to the storm drainage system or receiving water.
Sanitation facilities shall be regularly cleaned and/or replaced and inspected daily for leaks and spills.
Stockpiling materials, portable equipment, vehicles, and supplies, including chemicals, will be restricted to areas adjacent to the drill or CPT rig, and not adjacent or within riparian and wetlands areas or other sensitive habitats.
No public roads, waterways or land access will be fully closed.

<b><i>Additional Compliance Parameters for 2024-2026 Preconstruction Field Investigations Based on Past Soil Investigations - Description<sup>6</sup></i></b>
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A field reconnaissance, marking or staking the exploration site, and calling Underground Service Alert (USA) for utility clearance will be conducted by qualified personnel for each planned soil exploration location. Based upon the information gathered, sites will be adjusted to ensure no utilities are impacted.
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DWR shall not trap any wildlife in a conservation easement without specific approval or permit of USFWS, NMFS, or CDFW as appropriate.
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6.3 Descriptions of monitoring parameters (e.g., turbidity), including the specific activities to be monitored (e.g., dredging, grading activities) and monitoring frequency and duration as well as parameters and reporting criteria (e.g., turbidity is not to exceed 10 NTUs above background. Exceedances will be reported, and the contractor must identify and correct the cause.).

- Daily monitoring activities by the biologist shall include, but will not be limited to the following:
  - Conducting pre-construction nesting bird and Swainson's Hawk surveys 72 hours prior to the start of preconstruction field investigations, if they are planned to occur during the nesting season.
  - Monitoring project field activities
  - Assisting with siting equipment to avoid any sensitive resources located nearby and clearly marking or delineating any exclusion areas and monitoring for compliance with these avoidance measures.
  - Walking the site before crews enter each day and examining the area below any vehicle or piece of equipment that has been stationary for 24 hours or greater to ensure that no wildlife species are present.
  - Conducting environmental awareness training and/or cultural sensitivity training session for all new field personnel prior to the start of each workday. Maintaining a list of trained staff and provide to DCA Field Activity Coordinator (or equivalent).
  - Confirming the location of and emphasizing to the crew any flagged avoidance areas.
  - Documenting the field crew's activities and their compliance with the program's commitments in Daily Monitoring Logs which include photos when available. (This may include adhering to speed limits, trash containment, ensuring that there are no firearms and no pets, installation of escape ramps where necessary, and capping pipes/removal of debris piles.)
  - Monitoring for any federally or state-listed species or California Species of Special Concern per requirements listed in DCP MMRP and any environmental permits (where applicable). If any federally or state-listed species or nesting birds are observed, monitors will determine if activities are disturbing the species and if activities must cease or if the species are undisturbed and/or could leave on its own.
  - Alerting Lead Biological Monitor to any observations of federally or state-listed species or California Species of Special Concern immediately and recording in Daily Monitoring Log. (Follow protocols for wildlife agency notifications, as above.)

- Limiting work to periods of no precipitation.
- Completing Daily Monitoring Logs and providing to Project Biologist who will provide to DWR Environmental Manager. Ensure that Daily Monitoring logs include documentation of field activities, observations, and hours on site.

6.4 Description of roles and responsibilities of the monitors and protocols for notifying CDFW, NMFS, and USFWS, if needed.

- Section 2.1 (page 2-4) of the DCP MMRP describes the primary parties responsible for implementation, monitoring and reporting as it relates to the MMRP.
- Protocols for notifying wildlife agencies:
  - Per EC-14, any sightings of special status species will be reported to CDFW and USFWS via email within 1 working day of the discovery. A follow-up report will be sent to these agencies, including dates, locations, habitat description, and any corrective measures taken to protect special status species.
  - The qualified biologist(s) will maintain monitoring records that include (1) the beginning and ending time of each day's monitoring effort; (2) a statement identifying the species encountered, including the time and location of the observation; (3) the time the specimen was identified and by whom and its condition; (4) the capture and release locations of each individual (where permitted); (5) photographs and measurements of each individual; and (6) a description of any actions taken. The biologist(s) will maintain complete records in their possession while conducting monitoring activities and will immediately provide records to USFWS and CDFW upon request. If requested, all monitoring records will be provided to agencies according to the reporting requirements of the relevant permits.

6.5 A daily monitoring log will be prepared by the monitor, which documents the day's construction activities, notes any problems identified and solutions implemented to rectify those problems, and document notifications of the construction superintendent and/or the fish and wildlife agencies regarding any exceedances of specific parameters (i.e., turbidity) or observations of special-status species. The monitoring log will also document construction start/end times, weather and general site conditions, and any other relevant information.

- Daily biological monitoring reports will include the following, at minimum (refer to element, above, regarding protocols for notifying wildlife agencies) (See Example of Daily Monitoring Report in Attachment 1):
  - Date

- Start time.
- End time.
- Monitor name.
- Location Description
- Groups/Personnel
- Weather conditions
- Air Temperature (low/high)
- Precipitation
- Field Investigation Activity
- Daily Observation Summary
  - If special status species are encountered, include identification, by whom, time and condition
- Communication Summary
  - Shall include actions taken if special status species are encountered
- Site Photos containing locational data, altitude, and direction of view.

## 7.0 Demonstrated Compliance for past Geotech Activities

Based on clearance survey results, 2024-2026 preconstruction field investigations will be relocated, where necessary, to avoid potentially significant impacts on special status natural communities, special status plants, cultural resources, and Tribal resources. Prior field investigation (soil investigations) completed by DWR in 2022 and 2023, and in May and June of 2024, included this same commitment and were successfully completed or, where necessary, abandoned to avoid potentially significant impacts on these resources. This Plan incorporates measures implemented for DWR's prior field investigations in 2022 and 2023 (See Table 1 and Table 3). Compliance with these additional measures will further reduce the less than significant biological resource impacts identified and analyzed in the DCP FEIR.



## Attachment 1 - Field Investigations, Example Daily Logs



# DCA Biological Monitoring Report

Monitoring Summary			
Date: 2023-07-10	Start Time: 08:00	End Time: 14:00	Monitor: Morgan Henry
Location Description: DCBA1-DH-008		Groups/Personnel:	
Weather Conditions: clear sky		Air Temp (low/high): 51F/95F	Precipitation (inches): 0
Construction Activities: Preconstruction survey, Wildlife observation, Geotechnical investigations			
<div>Daily Observation Summary:<ul style="list-style-type: none"><li>A preconstruction survey was conducted before the crew arrived on site. There is a dry canal adjacent to the site. No nesting bird activity or other biological concerns observed.</li><li>Wildlife observed included RTHA, BLGR, MODO, HOFI, EUST, HOSP, AMGO, TUVU. All wildlife observed appeared undisturbed by drilling activities.</li><li>A pair of RTHAs were observed perched on top of a communications tower about 900ft away. One flew off to circle over a nearby field. No evidence of nesting observed.</li><li>0920-1000 The Gregg crew arrives and stages their vehicles. Staging took longer than normal due to tight conditions on site.</li></ul><p>0945-0955 Rob arrives onsite and touches base with the crew.</p><p>1000 Drilling begins.</p><p>1150-1215 Crew takes a break for lunch.</p><p>1340-1400 Drilling ends early for the day (missing pump out tool). Ended at 26.5 ft.</p></div>			
Communication Summary:			





Photo 1: Site photo.

Latitude: 38.242773	Longitude: -121.456785	Altitude: 30	Direction of View:
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Photo 2: Coms tower.

Latitude: 38.242822	Longitude: -121.456810	Altitude: 26	Direction of View:
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Photo 3: Drilling.			
Latitude: 38.242791	Longitude: -121.456782	Altitude: 26	Direction of View:

## Attachment 2 – Field Investigations, Example Quarterly Report

## DCA Delta Conveyance Design and Construction Authority 2021 Quarter Three Monitoring Report

Under the Department of Water Resources (DWRs) direction, the Delta Conveyance Design and Construction Authority (DCA) is conducting soil investigations for the purposes of measuring physical properties of the soils, location of the groundwater table, and other typical geologic and geotechnical parameters that will be used to inform and evaluate alternatives, consistent with Executive Order N-10-19, for a proposed single tunnel Delta conveyance (requiring a separate CEQA process) consistent with Governor Newsom's new approach to modernize Delta water conveyance.

The primary objective of the proposed soil investigation is to determine the composition, location, and geotechnical properties of soil materials, which are anticipated to be sand, silt, clay, and peat soils that are commonly found in the Delta. The planned work includes overwater and land-based soil borings, cone penetration tests (CPTs), and geophysical surveys.

The Study Area includes a portion of the Sacramento–San Joaquin River Delta (**Figure 1**), encompassing the area from south of the City of West Sacramento to just north of Bethany Reservoir, and stretched from east of Interstate 5 to west of State Route 160 (River Road). The landscape within the Study Area includes a variety of land-uses including agriculture, parks and open space, urban and rural residential neighborhoods, commercial development, and scenic roadways and waterways.

This quarterly report will provide highlights from the work conducted during the soil investigations at the Delta 2021 priority sites between July 1, 2021, and September 30, 2021. It begins by summarizing the safety concerns and measures that were implemented during all field investigations this season. Then, the results from the preconstruction clearance surveys for both cultural and biological resources, and 72-hour pre-activity bird surveys are noted. This is followed by a review of daily monitoring activities that were conducted, including a table with notes for each site monitored. Finally, there is a brief discussion of considerations or 'lessons learned' that could be useful for future work. As attachments, this document also provides a table of new field personnel who received environmental awareness training and/or cultural sensitivity training by date (**Attachment 1**) and details the preconstruction clearance surveys conducted by Environmental Science Associates under a separate cover (ESA 2021) (**Attachment 2**).

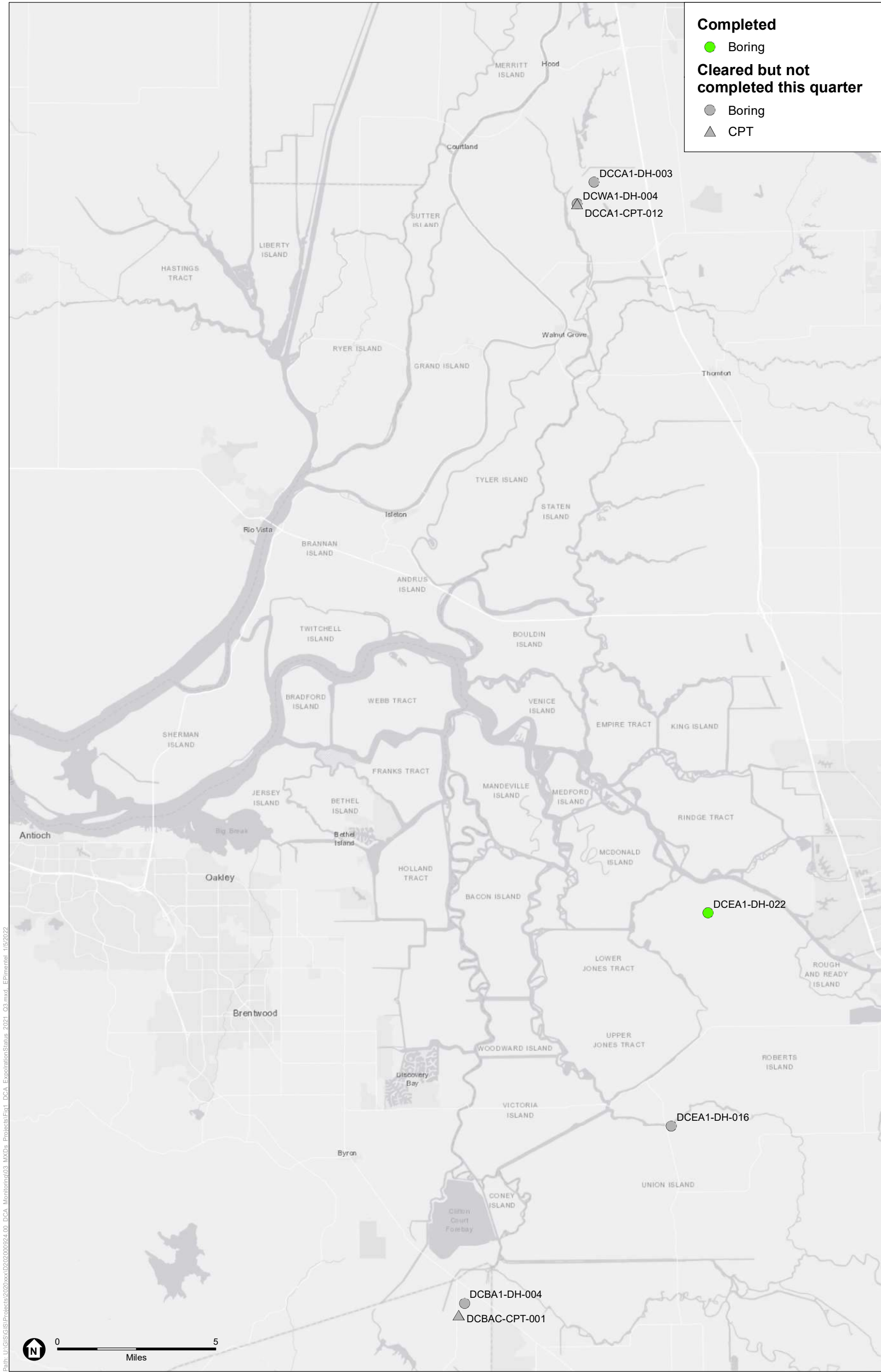
## Discussion

### Safety

The number one priority for the Project was safety. Daily tailgate meetings were conducted prior to the start of construction each day. Tailgate topics included daily activities, site specific concerns, and proper use of personal protective equipment (PPE). Primary safety concerns and actions taken while conducting the preconstruction clearance surveys and daily monitoring include:

- Wearing appropriate PPE (including added COVID-19 safety measures)
- Following speed limit





SOURCE: Esri, 2020; DWR, 2021; ESA, 2021

DCA Monitoring



**Figure 1**  
Exploration Status for Quarter 3  
July 1 to September 30 2021



- Watching out for farm equipment, including electric fences to intended to keep livestock out of worksite
- Refraining from monitoring in pinch points
- Monitoring at an appropriate distance from operating equipment
- Watching for moving traffic when working on or near roadways
- Environmental hazards (high winds, hot weather, etc.)
- Biological hazards (wasps and bees)

In addition to the standard safety measures discussed above, COVID-19 safety measures were also implemented for this project. COVID-19 specific measures included daily self-checks for elevated temperatures and other common signs associated with COVID, maintaining socially appropriate distances, wearing face masks, and regularly washing and/or sanitizing hands. All efforts were made to maintain safety for all aspects of the project.

### ***Preconstruction Clearance Surveys – Cultural Resources***

In October 2020, DWR Environmental Scientist (Archaeologist) Sarah Heffner and Jacqueline Wait provided ESA with the results of the California Historical Resources Information System (CHRIS) cultural resources records searches for the Project, including documentation and geospatial information. ESA archaeologists reviewed the CHRIS results for each Project location prior to cultural resources pre-construction clearance surveys. In March 2021, DWR Environmental Scientist (Archaeologist) Jacqueline Wait provided ESA with the results of additional CHRIS cultural resources records searches, conducted for Project locations added as part of the IS/MND Addendum. Because the revised location of DCEA1-DH-016 was outside of the coverage of previous CHRIS records searches, in September 2021, ESA requested that CHRIS conduct a records search for the revised location of DCEA1-DH-016. The Project was specifically designed to avoid all recorded cultural resources; thus, except in specific circumstances (e.g., large resources with no elements present at testing locations) no previously recorded cultural resources are present at any testing location.

ESA conducted pre-construction surveys for cultural resources in conjunction with biological resources surveys. Cultural resources field surveys were conducted on August 31 and September 27. The August field surveys covered four Project locations. The September field surveys covered three locations. Representatives from the California Valley Miwok (CVM) participated in all the August 31 surveys but were unable to attend those conducted on September 27. Representatives from the Shingle Springs Band of Miwok Indians (SSBM) attended two surveys on August 31 and were unable to attend those on September 27. Intensive pedestrian survey methods were used, consisting of walking the visible ground surface of the work, access, and staging areas, as well as adjacent right-of-way for each proposed testing location, in transects spaced no greater than 10 meters apart and inspecting the ground for cultural material (archaeological or architectural). Ground squirrel burrows and cut banks were inspected where feasible for evidence of subsurface cultural deposits. Digital photographs were taken to document field conditions, and a sub-meter accuracy global positioning system (GPS) unit was used to maintain survey limits as well as delineate changes to work and staging areas as well as testing locations. Ground visibility during the surveys was primarily limited by gravel pavement or grasses; however, these locations were preferred in order to avoid impacts to biological resources and avoid existing utilities. No cultural resources were observed during the surveys of the seven Project locations surveyed in August and September 2021.

The following potential cultural resources or elements are from Mitigation Monitoring and Reporting Plan (MMRP) for the project (DWR 2020 and 2021). The mitigation measure number is in parentheses, as well as the resource for which the mitigation was included. The items specifically included in the preconstruction clearance surveys are:

- All Impact Area would be reviewed by a qualified archaeologist to evaluate the potential for impacts, if any, to cultural resources. (MM CUL-1a)
- Locations that have no previous survey coverage must be surveyed by, or under the direct supervision of a qualified archaeologist prior to the start of any ground disturbing activities. (MM CUL-1b)
- If the archaeologist observes cultural or potential tribal cultural resources within the Impact Area or associated resource buffer as identified by a qualified archaeologist, the location will be shifted the minimum distance necessary to reduce the potential for significant cultural resource impacts without significantly increasing potential impacts to other resources. (MM CUL-1c)
- A tribal representative from the consulting tribes will be invited to participate in the pre-activity field visits and archaeological surveys in Impact Areas specified as an area of interest/concern during consultation by that consulting tribe/tribes. (MM CUL-1d)
- Consulting tribes will be informed of any potential tribal cultural resources located within the study area specified as an area of interest/concern by a consulting tribe/tribes. (MM CUL-1e)
- If a suitable location cannot be determined within adjacent areas, then the soil investigation at that location would not be conducted. (MM CUL-1f)

### ***Preconstruction Clearance Surveys – Biological Resources***

Preconstruction clearance surveys for biological resources were conducted by a Subconsultant Biologist from Environmental Science Associates (ESA) on August 31 and September 27. The August field surveys covered four Project locations and the September field surveys covered three locations. The following potential biological resources or habitat elements are from Mitigation Monitoring and Reporting Plan (MMRP) for the project (DWR 2020 and 2021). Note: 72 hour Pre-activity nesting bird surveys were not required after September 15, 2021. The mitigation measure number is in parentheses, as well as the particular resource for which the mitigation was included. The items specifically included in the preconstruction clearance surveys are:

- Potential for removal of any trees or vines (MM AES-1c)
- Locate work outside of wetlands (MM BIO-1b, General Biological Measures)
- Reconnaissance survey for special-status plants and wildlife (MM BIO-1d, General Biological Measures)
- Active rodent burrows or suitable cracks (MM BIO-2c, Special Status Amphibians)
- Leaf litter, rock, rip-rap, or other materials that could provide refuge to reptiles or amphibians (MM BIO-2e and 2g, Special Status Amphibians)
- Western Pond Turtle Avoidance and Minimization Measures (MM BIO 3a, 3b, and 3c, Western Pond Turtle)

- Upland habitat (containing cracks or rodent burrows) within 200 feet of suitable aquatic habitat for giant garter snake (MM BIO-4a, Giant Garter Snake)
- Active rookeries (MM Bio-5a, Rookery Birds; during the appropriate season)
- Actively nesting raptors (MM Bio-6a and 6b Raptors; excluding Swainson's Hawk and Burrowing Owl; during the appropriate season)
- Areas with potential breeding habitat for Tricolored Blackbird (MM Bio-7a and 7b, Tricolored Blackbird)
- Actively nesting birds (MM Bio-8a and 8b, Nesting Birds; during the appropriate season)
- Sandhill crane roosting sites (MM BIO-9a, Sandhill Crane; during the appropriate season)
- Burrowing owl and suitable habitat features (MM BIO-10a, Burrowing Owl)
- Actively nesting Swainson's Hawks (MM Bio-11a, Swainson's Hawk; during the appropriate season)
- All ground disturbing activities shall be located at least 100 feet from a vernal pool (MM BIO-12a and 12b, Vernal Pool Species)
- When feasible, project activities shall be sited at least 164 feet from elderberry shrubs with a stem diameter greater than 1-inch (MM BIO-13a, Valley Elderberry Longhorn Beetle)
- Bat roosting habitat (MM BIO-15a, Special Status Bats)
- Potential American Badger dens (MM BIO-16a, American Badger)
- Potential San Joaquin Kit Fox dens (MM BIO-17a, San Joaquin Kit Fox)
- Special-status plants (MM BIO-18b and 18c, Botanical Resources)
- Minor vegetation removal or disturbance of vegetation (MM BIO-19, Botanical Considerations for Vegetation Removal)

The survey also included a more general search for any other special-status species or their potential habitat elements.

### ***Daily Biological Monitoring During Investigations***

An ESA biologist conducted environmental monitoring on location the full duration of ground-disturbing activities. For the third Quarter, from July 1 to September 30, one (DCEA1-DH-022) of the seven Project locations was started and completed by September 30. For the other six Project locations monitoring and completion of work at the location continued into the following quarter. Note that one location, DCCA1-DH-003, was initially surveyed on 6/7/2021 then resurveyed on 8/31/2021 in anticipation of work commencing (and a lapse of more than 30 days from last survey). However, due to several different delays, work was not commenced at this location in Quarter three. The biologist conducted the following activities per the MMRP (DWR 2020 and 2021):

- Conduct pre-construction nesting bird and Swainson's hawk surveys 72 hours prior to start of construction. Note: this is not required after September 15.

- On-site monitoring for all project field activities.
- Assisted with siting equipment to avoid any sensitive resources located nearby and clearly marked or delineated any exclusion areas and monitored for compliance with these avoidance measures.
- Walked the site before crews entered each day and examined area below any vehicle or piece of equipment that had been stationary for 24 hours or greater to ensure that no wildlife species was present.
- Conducted environmental awareness training and/or cultural sensitivity training session for all new field personnel prior to the start of each workday. Maintained a list of trained staff and provided to DCA Field Activity Coordinator.
- Confirmed the location of and emphasized to the crew any flagged avoidance areas.
- Documented the field crew's activities and their compliance with the program's commitments in Daily Monitoring Logs which include captioned photos when available.
- Monitored for any federally or state-listed species or California Species of Special Concern per requirements listed in July 2020 ISMND and the February 2021 Addendum, MMRP and any environmental permits. If any federally or state-listed species or nesting birds were observed, monitors determined if activities were disturbing the species and if activities must cease or if the species were undisturbed or and could leave on its own.
- Alerted ESA Lead Monitor to any observations of federally or state- listed species or California Species of Special Concern immediately or within 4 hours and recorded in Daily Monitoring Log.
- Completed Daily Monitoring Logs and provided to ESA Lead Monitor who provided to DWR Environmental Field Manager. Daily Monitoring logs included documentation of field activities, observations, and hours on site.

**Table 1** summarizes the preconstruction clearance surveys and monitoring activities by location. The table identifies potential biological constraints observed at each of the locations during clearance surveys and how they were avoided during construction activities. In addition, the table summarizes compliance concerns observed during biological monitoring and how these concerns were resolved. Special status species observed during monitoring efforts are also noted in the biological monitoring section of the table. No cultural resources were observed during the preconstruction clearance surveys; therefore, no cultural monitors were required.

More common species that were observed during biological monitoring efforts, but not recorded in Table 1 consist of various waterfowl and shore birds including Canada geese, and snowy egrets. Raptors regularly observed include red-tailed hawks, northern harriers, turkey vultures, and American kestrels. Song birds observed included black birds, song and house sparrows, western meadowlarks, black phoebes, American crows, house finches and cliff swallows. Western fence lizards and a large group of bumble bees were also observed.

**TABLE 1**  
**SUMMARY OF CONSTRAINTS OBSERVED DURING THE CLEARANCE SURVEYS AND COMPLIANCE CONCERNS AND EQUIPMENT ISSUES DOCUMENTED DURING THE BIOLOGICAL MONITORING**

Location	Type of survey	Date	Issues/ Concerns
DCCA1-DH-003	Clearance Survey (Cultural/Biological)	6/7/2021, 8/31/2021	Cultural: No cultural resources observed. Biological: Work is outside of wetlands, and the nearby large irrigation ditch will be avoided. Thick weeds in the soybean field, including work area, could provide cover for some wildlife. Site was originally surveyed as a CPT site then again as Drilling site. Work was delayed more than 30 days, so resurvey was required. No new issues identified.
	72 hr. Pre- Activity Nesting Bird Survey	9/10/2021, 9/13/2021	No nesting birds or nests observed within 50ft of drill site. No nesting raptors within 100ft of drill site. No observed SWHA nests within 0.5 miles of drill site, biologist drove 0.5-mile buffer around site and scanned with binoculars to observe into gated or private property. Burrows observed in the side of the levee road outside of the marked work site. No animal activity observed in burrows, possibly ground squirrel.
	Biological Monitoring		POSTPONED. (MAY REQUIRE ADDITIONAL CLEARANCES WHEN START DATE IS CONFIRMED).
DCBA1-DH-004	Clearance Survey (Cultural/Biological)	8/31/2021	Cultural: No cultural resources observed. Tribal concerns for resources include freshwater shell relationship to other freshwater resources. Biological: a few burrows but not near bore hole. Work is outside of wetlands. No special status species observed.
	72 hr. Pre- Activity Nesting Bird Survey	N/A	Outside of nesting season, not required after 9/15
	Biological Monitoring	9/30/2021	No special status wildlife, nests or nesting activity observed near or in work area. MONITORING CONTINUED INTO NEXT QUARTER
DCEA1-DH-022	Clearance Survey (Cultural/Biological)	8/31/2021	Cultural: No cultural resources observed. Biological: Work is in young almond orchard and outside of wetlands. Water is present in canal so bore hole was moved to edge of orchard. Canal to be avoided. Small inactive burrows outside of work area. No special status species observed.
	72 hr. Pre- Activity Nesting Bird Survey	N/A	Not required after 9/15
	Biological Monitoring	9/20/2021– 9/23/2021, 9/27/2021– 9/30/2021	9/20 - Group of 20 sandhill cranes fly over. 9/21 - Hydraulic oil leak, captured on plastic sheeting and cleaned up with absorbent towels. 9/22 - Sandhill cranes fly over of site 9/30 - Water with "sheen" spilled outside drill box. Crew removed including soil underneath and placed in drums.
DCEA1-DH-016	Clearance Survey (Cultural/Biological)	9/27/2021	Cultural: No cultural resources observed. Tribal representative could not attend survey. Biological: Site is dirt agricultural staging area with row crops adjacent. Work is outside of wetlands. No special status species observed.
DCWA1-DH-004	Clearance Survey (Cultural/Biological)	9/27/2021	Cultural: No cultural resources observed. Tribal representative could not attend survey. Biological: Site is along dirt agricultural road through a watermelon field. No special status species observed.
DCBAC-CPT-001	Clearance Survey (Cultural/Biological)	8/31/2021	Cultural: No cultural resources observed. Biological: Work area on fallow farm field. Few burrows but avoided by bore hole. No special status species observed.
DCCA1-CPT-012	Clearance Survey (Cultural/Biological)	9/27/2021	Cultural: No cultural resources observed. Tribal representative could not attend survey. Biological: Site is along dirt agricultural road through a watermelon field. No special status species observed.

**Lessons Learned**

During the initial field season that brought all the teams together it was obvious that good communication would be a key factor in coordinating all the moving parts of this project. And, after a few initial minor hick-ups everyone pulled together, and good communication drew the multiple teams together into a single team. Although scheduling continued to be an issue throughout the project due to permitting and landowner issues, equipment breakdowns and delays, staffing issues due to Covid-19 and weather, the good communication protocols throughout the project helped alleviate some of the complications that are often associated with these scheduling issues.

As the project progressed, there was a turnover of drilling crews and equipment. Fortunately, the communication and diligence towards maintaining a clean site persisted. This resulted in proactive measures such as laying down plastic around the drilling area to catch spills and leaks as well as methods for quickly and efficiently dealing with any spills or leaks. This effort resulted in no major leaks or spills. And of the minor spills or leaks that did occur, crews were attentive to dealing with them quickly, so they did not become lingering concerns.

**References**

DWR (California Department of Water Resources). 2020. Soil Investigations for Data Collection in the Delta Initial Study Mitigated Negative Declaration. July 2020. Sacramento, California.

DWR (California Department of Water Resources). 2021. Addendum to the Initial Study/Mitigated Negative Declaration for Soil Investigations for Data Collection in the Delta. February 2021. Sacramento, California.





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# Attachment 1

## **Field Personnel Who Received Environmental Awareness Training and/or Cultural Sensitivity Training**



NEW FIELD PERSONNEL WHO RECEIVED ENVIRONMENTAL AWARENESS TRAINING AND/OR CULTURAL SENSITIVITY TRAINING PRIOR TO WORKING ONSITE								
Name (Last)	Name (First)	Email	Affiliation	Date	Project Health & Safety	Public Messaging	Environmental Awareness and Cultural Sensitivity	Environmental Awareness and Cultural Sensitivity (Field)

Example sign in sheet provided.  
Personal information removed.



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# Attachment 2

## 2021 Clearance Survey Reports



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## **2-1 Soil Investigations in the Delta Biological Pre-construction Clearance Survey Report August 2021**

Draft

## SOIL INVESTIGATION IN THE DELTA

Biological Pre-construction Clearance Survey Report for  
August 2021

Prepared for  
California Department of Water Resources

November 2021







Draft

# SOIL INVESTIGATION IN THE DELTA

Biological Pre-construction Clearance Survey Report for  
August 2021

Prepared for  
California Department of Water Resources  
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November 2021

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### Appendices

- A. Photographs
- B. Site Maps
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# SOIL INVESTIGATION IN THE DELTA

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## Biological Pre-Construction Clearance Survey Report for August 2021

### Introduction

#### Background

The Department of Water Resources (DWR) plans to conduct soil investigations for the purposes of measuring physical properties of the soils, location of the groundwater table, and other typical geologic and geotechnical parameters that will be used to inform and evaluate alternatives, consistent with Executive Order N-10-19, for a proposed single tunnel Delta conveyance (requiring a separate CEQA process) consistent with Governor Newsom's new approach to modernize Delta water conveyance.

The primary objective of the proposed soil investigation is to determine the composition, location, and geotechnical properties of soil materials, which are anticipated to be sand, silt, clay and peat soils that are commonly found in the Delta. The planned work includes overwater and land-based soil borings, cone penetration tests (CPTs), and geophysical surveys.

The Study Area includes a portion of the Sacramento-San Joaquin River Delta, encompassing the area from south of the City of West Sacramento to just north of Bethany Reservoir, and stretches from east of Interstate 5 to west of State Route 160 (River Road). The landscape within the Study Area includes a variety of land-uses including agriculture, parks and open space, urban and rural residential neighborhoods, commercial development, and scenic roadways and waterways.

This report documents the methods and summarizes the results of the environmental pre-construction clearance surveys conducted prior to the initiation of land-based soil borings, CPTs, and geophysical surveys planned for four locations. Biological surveys were conducted to ensure that locations were sited to avoid impacts to sensitive biological resources.

#### Survey Methodology

Pre-construction surveys for biological resources were conducted in conjunction with cultural resource surveys. Searches of the California Natural Diversity Database (CNDDB) were conducted for each of the survey locations to determine if there were any known resources in the work or staging areas. Surveys were conducted on August 31, by ESA biologist Kelly Bayne. Photographs are in **Appendix A**. Site maps are in **Appendix B**. Additional pre-construction nesting bird surveys were conducted no more than 72 hours prior to construction at each site by

biologists Chuck Hughes and Aaron Lopez. Survey results are in **Appendix C**. Surveys were conducted on foot in the work footprints, including the staging areas. Areas outside the work footprint were viewed with binoculars for potential resources nearby, such as bird nests.

At each location, the following items were specifically included in the survey. The survey also included a more general search for any other special-status species or their potential habitat elements. The following potential biological resources or habitat elements are from the Mitigation Monitoring and Reporting Plan (MMRP) for the project. The mitigation measure number and particular resource is in parentheses.

1. Potential for removal of any trees or vines (MM AES-1c)
2. Locate work outside of wetlands (MM BIO-1b, General Biological Measures)
3. Reconnaissance survey for special-status plants and wildlife (MM BIO-1d, General Biological Measures)
4. Active rodent burrows or suitable cracks (MM BIO-2c, Special Status Amphibians)
5. Leaf litter, rock, rip-rap, or other materials that could provide refuge to reptiles or amphibians (MM BIO-2e, MM BIO-2g, Special Status Amphibians)
6. Upland habitat (containing cracks or rodent burrows) within 200 feet of suitable aquatic habitat for giant garter snake (MM BIO-4a, Giant Garter Snake)
7. Sandhill crane roosting sites (MM BIO-9a, Sandhill Crane)
8. Burrowing owl and suitable habitat features (MM BIO-10a, Burrowing Owl)
9. All ground disturbing activities shall be located at least 100 feet from a vernal pool (MM BIO-12a, Vernal Pool Species)
10. When feasible, project activities shall be sited at least 164 feet from elderberry shrubs with a stem diameter greater than 1-inch (MM BIO-13a, Valley Elderberry Longhorn Beetle)
11. Bat roosting habitat (MM BIO-15a, Special Status Bats)
12. Potential San Joaquin Kit Fox dens (MM BIO-17a, San Joaquin Kit Fox)
13. Potential American Badger dens (MM BIO-16a, American Badger)
14. Special-status plants (MM BIO-18b, Botanical Resources)
15. Minor vegetation removal or disturbance of vegetation (MM BIO-19, Botanical Considerations for Vegetation Removal)
16. Active rookeries (MM Bio-5a, Rookery Birds)
17. Actively nesting raptors (MM Bio-6a, Raptors; excluding Swainson's Hawk and Burrowing Owl)
18. Actively nesting birds (MM Bio-8a, Nesting Birds)
19. Actively nesting Swainson's Hawks (MM Bio-11a, Swainson's Hawk)



## Results

### DCBAC-CPT-001

This work area is located in a fallow farm field comprised primarily of bare ground with isolated vegetation including tumbleweed, epilobium, wild oat, rip gut grass, and ryegrass. The adjacent staging area includes an existing graded driveway. The following results for this site correspond to the items listed in the survey methodology section:

1. No trees or vines will be removed.
2. There are no wetlands, or other waters, within the work or staging areas.
3. No special-status plants or wildlife were observed within the work or staging areas.
4. No rodent burrows or suitable cracks. There are a few burrows outside the work/staging area.
5. No on-ground vertical structure for wildlife refuge.
6. There are no burrows, or cracks suitable for giant garter snake within or near the work or staging areas. No GGS aquatic habitat nearby.
7. No sandhill crane roosting sites.
8. No suitable burrows, burrowing owls, their sign, or ground squirrels were observed in or near the work or staging areas
9. There are no vernal pools in or near the work or staging areas.
10. There are no elderberry shrubs in or near the work or staging areas.
11. There is no potential bat roosting habitat in or near the work or staging areas.
12. No suitable San Joaquin kit fox dens were observed.
13. No suitable American badger dens were observed.
14. No potential special-status plant habitat will be affected.
15. Minor vegetation removal may occur along roadside. No special-status vegetation is present.
16. No active rookeries observed.
17. No active nesting raptors observed.
18. No actively nesting birds.
19. No actively nesting Swainson's Hawks.

## DCCA1-DH-003

This work area is on the edge of a fallow farm field next to and adjacent dirt farm road. The following results for this site correspond to the items listed in the survey methodology section:

1. There are no trees and vines in or near the work or staging areas. No trees or vines will be removed.
2. There are no wetlands, or other waters, within the work or staging areas. There is an irrigation ditch on the other side of the dirt road from the work/staging areas. The ditch may meet wetland criteria and will be avoided.
3. No special-status plants or wildlife were observed within the work or staging areas.
4. No rodent burrows or suitable cracks.
5. There is little or no leaf litter in the work or staging areas, and no rock, rip-rap, or other materials providing refuge to reptiles or amphibians.
6. There are no burrows, or cracks suitable for giant garter snake within or near the work or staging areas.
7. No sandhill crane roosting sites.
8. No suitable burrows, burrowing owls, their sign, or ground squirrels were observed in or near the work or staging areas.
9. There are no vernal pools in or near the work or staging areas.
10. There are no elderberry shrubs in or near the work or staging areas.
11. There is no potential bat roosting habitat in or near the work or staging areas.
12. No suitable San Joaquin kit fox dens were observed.
13. No suitable American badger dens were observed.
14. No potential special-status plant habitat will be affected.
15. Minor vegetation removal of agricultural weeds will occur. No special-status vegetation is present.
16. No active rookeries observed.
17. No active nesting raptors observed.
18. No actively nesting birds. Nearby trees and utility poles nearby scanned with binoculars, no nests observed
19. No actively nesting Swainson's hawks.

## DCBA1-DH-004

This work area is located within a fallow farm field , along a dirt road next to a levee. The following results for this site correspond to the items listed in the survey methodology section:

1. No trees or vines will be removed.
2. There are no wetlands, or other waters, within the work or staging areas. There is an irrigation ditch located at the north end, resulting in bore hole being moved further south. Irrigation ditch located east next to toe. Both ditches are dry. The ditches may meet wetland criteria and will be avoided.
3. No special-status plants or wildlife were observed within the work or staging areas.
4. No rodent burrows or suitable cracks. There are a few burrows outside the work/staging area.
5. No on-ground vertical structure for wildlife refuge.
6. There are no burrows, or cracks suitable for giant garter snake within or near the work or staging areas. No GGS aquatic habitat nearby.
7. No sandhill crane roosting sites.
8. No suitable burrows, burrowing owls, their sign, or ground squirrels were observed in or near the work or staging areas
9. There are no vernal pools in or near the work or staging areas.
10. There are no elderberry shrubs in or near the work or staging areas.
11. There is no potential bat roosting habitat in or near the work or staging areas.
12. No suitable San Joaquin kit fox dens were observed.
13. No suitable American badger dens were observed.
14. No potential special-status plant habitat will be affected.
15. Minor vegetation removal may occur along roadside. No special-status vegetation is present.
16. No active rookeries observed.
17. No active nesting raptors observed.
18. No actively nesting birds.
19. No actively nesting Swainson's Hawks.

## DCEA1-DH-022

This work area is located along a portion of an almond orchard and a dirt farm road. The following results for this site correspond to the items listed in the survey methodology section:

1. No trees or vines will be removed.
2. There are no wetlands, or other waters, within the work or staging areas. Nearby canal will be avoided.
3. No special-status plants or wildlife were observed within the work or staging areas.
4. No rodent burrows or suitable cracks. There are a few burrows outside the work/staging area.
5. No on-ground vertical structure for wildlife refuge.
6. There are no burrows, or cracks suitable for giant garter snake within the work or staging areas.
7. No sandhill crane roosting sites.
8. No burrowing owls, their sign, or ground squirrels were observed in or near the work or staging areas
9. There are no vernal pools in or near the work or staging areas.
10. There are no elderberry shrubs in or near the work or staging areas.
11. There is no potential bat roosting habitat in or near the work or staging areas.
12. No suitable San Joaquin kit fox dens were observed.
13. No suitable American badger dens were observed.
14. No potential special-status plant habitat will be affected. The nearby ditch is potential Sanford's arrowhead habitat, but none seen.
15. Minor vegetation removal may occur along roadside. No special-status vegetation is present.
16. No active rookeries observed.
17. No active nesting raptors observed.
18. No actively nesting birds. Nearby trees and utility poles nearby scanned with binoculars, no nests observed
19. No actively nesting Swainson's Hawks.

# Appendix A

## **Photographs**







**Photograph 1**  
The staging area of DCBAC1-CPT-001 (August 31, 2021)



**Photograph 1**  
The work area of DCCA1-DH-003 (August 31, 2021)



**Photograph 2**  
The work area of DCBA1-DH-004 (August 31, 2021)



**Photograph 3**  
The work area at DCEA1-DH-022 (August 31, 2021)

## Appendix B

### **Site Maps**





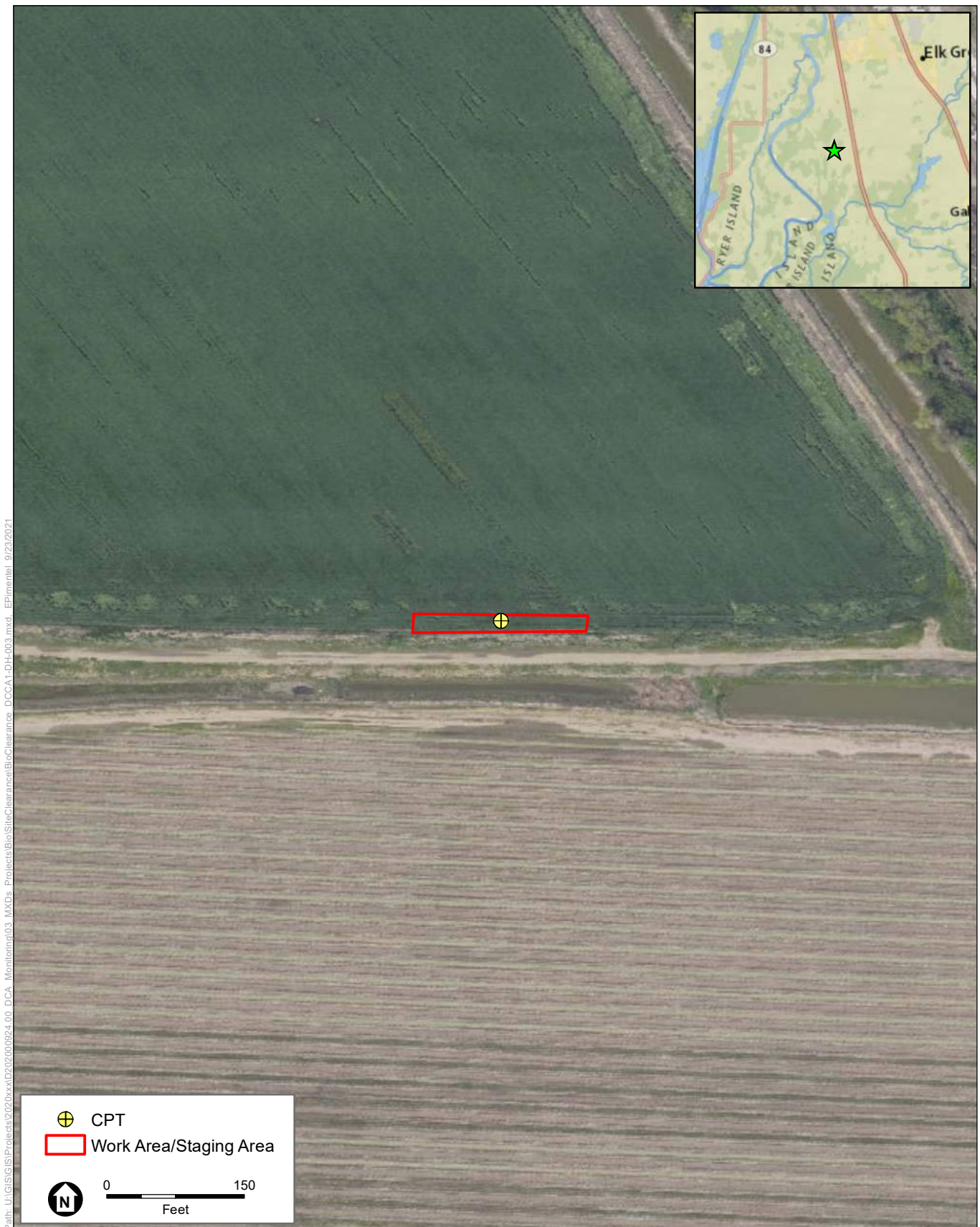


SOURCE: ESA, 2021; DCA, 2021

DCA Soils Investigation

**DCBAC-CPT-001**  
Site Clearance - Biological Resources



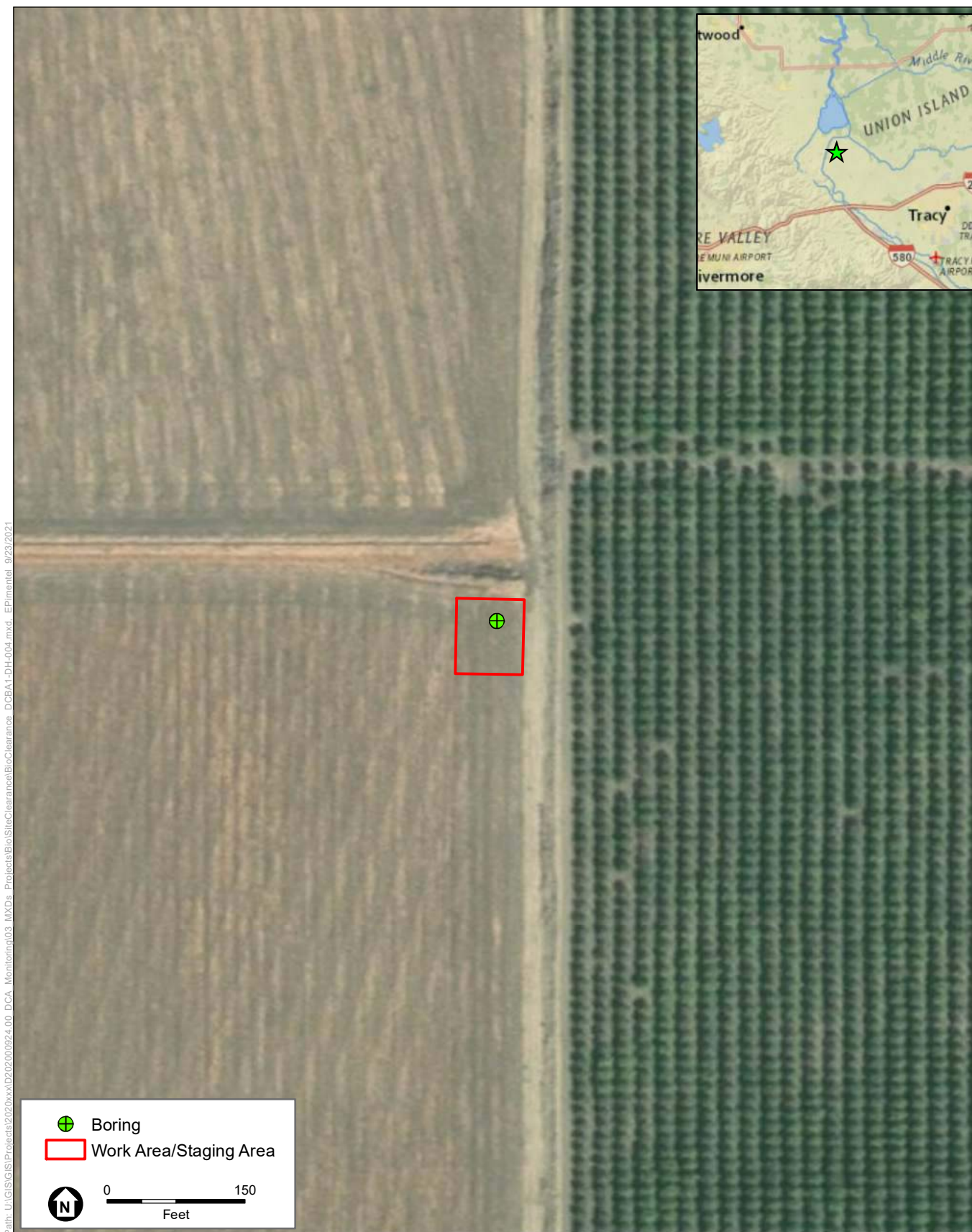


SOURCE: ESA, 2021; DCA, 2021

DCA Soils Investigation

**DCCA1-DH-003**  
Site Clearance - Biological Resources

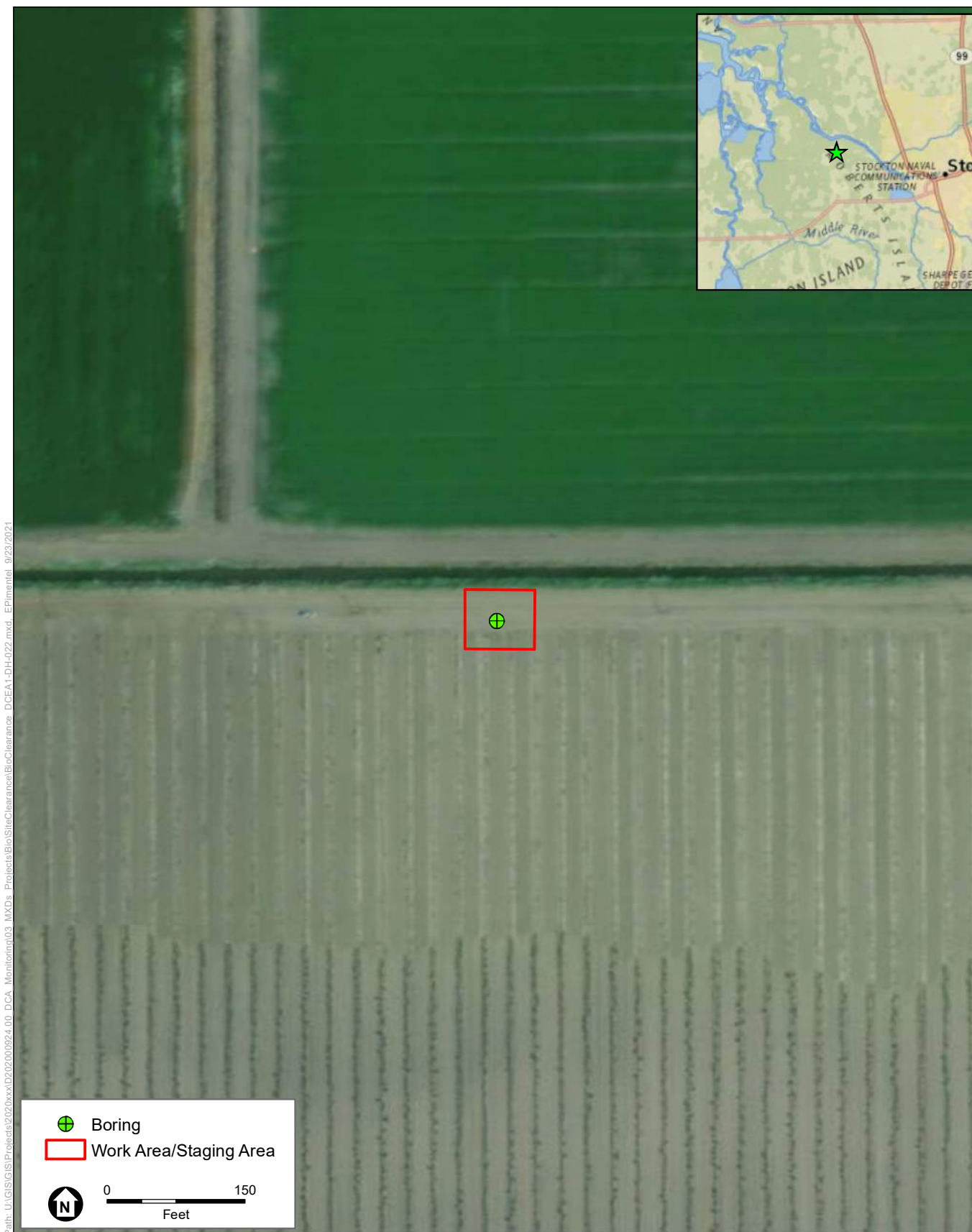




SOURCE: ESA, 2021; DCA, 2021

DCA Soils Investigation

**DCBA1-DH-004**  
Site Clearance - Biological Resources



SOURCE: ESA, 2021; DCA, 2021

DCA Soils Investigation

**DCEA1-DH-022**  
Site Clearance - Biological Resources



## Appendix C

### **Pre-Construction Bird Surveys**



## Pre-Construction Bird Surveys

For soil investigation field activities that occurred during February 1 – August 31 a pre-construction survey was conducted a maximum of 72 hours prior to the onset of soil investigation activities by a qualified biologist for the following: actively nesting birds, actively nesting raptors, including Swainson's hawks, and active rookeries.

If clearance surveys were not conducted, then drilling activities did not occur during the month of reporting.

**TABLE 1**  
**SUMMARY OF CONSTRAINTS OBSERVED DURING THE CLEARANCE AND**  
**PRE-CONSTRUCTION SWAINSON'S HAWK NESTING SURVEYS**

2021 Survey Date	Location	Monitor	Survey Results Summary
31-Aug	DCBAC-CPT-001	KB	Bio Clearance: Work area on fallow farm field comprises of tumbleweed, epilovum, wild oat, rip gut grass, ryegrass. A few burrows but location of bore hole avoided the burrows. Remnant nest in tractor. No trees or vines will be removed. Work is outside of wetlands and none nearby. No special-status species observed. No burrows or GGS suitable cracks present in the work area. Some small burrows too small for BUOW are nearby but outside the work area. No owl signs present. No on-ground vertical structure for wildlife refuge. No GGS aquatic habitat nearby. No sandhill crane roosting sites, vernal pools, elderberry shrubs, bat roosting habitat, badger dens, or potential SJKF dens observed nearby. No potential special-status plant habitat will be affected.
31-Aug	DCCA1-DH-003	KB	Bio Clearance: Site previously cleared for DCCA1-CPT-001. No new issues for drilling location. Site is in the edge of a soybean field. There is a dirt farm road and a large irrigation ditch nearby. No trees or vines will be removed. Work is outside of wetlands and the ditch will be avoided. No special-status species observed. No burrows or GGS suitable cracks present. Thick weeds in the soybean field, including work area, could provide cover for some wildlife. No burrows suitable for burrowing owl, nor owl sign present. No sandhill crane roosting sites, vernal pools, elderberry shrubs, bat roosting habitat, badger dens, or potential SJKF dens observed nearby. Trees and utility poles nearby scanned with binoculars, no nests observed. Work will remove soybean plants and weeds in the soybean field, no potential special-status plant habitat will be affected.
10-Sep		CH	Pre-construction survey: No active nests observed with binocular scan of trees and utility poles within sight. One inactive grass cup nest observed in a poison oak shrub next to a utility pole about 20 feet west of work area (nest falling over and in disrepair, no eggs or bird activity). There is also a burrow about 75 east of work area next to another utility pole, no owl sign seen, doesn't appear frequently or ever used by ground squirrels currently, cobwebs around entrance and a plant growing in entrance.
13-Sep		AL	Pre-con SWHA Survey: No SWHA or SWHA nests observed in or around drill site. No observed SWHA nests within .5 miles of drill site, drove a 0.5 mile buffer around site and scanned with binoculars to observe into gated or private property.

**TABLE 1**  
**SUMMARY OF CONSTRAINTS OBSERVED DURING THE CLEARANCE AND**  
**PRE-CONSTRUCTION SWAINSON'S HAWK NESTING SURVEYS**

2021 Survey Date	Location	Monitor	Survey Results Summary
31-Aug	DCBA1-DH-004	KB	Bio Clearance: On farm land down dirt road next to levee. Minimal vegetation. Ditch on north. Bore hole was moved further south. Ditch to east next to toe. Both ditches are dry. No trees or vines will be removed. Work is outside of wetlands and none nearby. No special-status species observed. No burrows or GGS suitable cracks present in the work area. Some small burrows too small for BUOW are nearby but outside the work area. No owl signs present. No on-ground vertical structure for wildlife refuge. No GGS aquatic habitat nearby. No sandhill crane roosting sites, vernal pools, elderberry shrubs, bat roosting habitat, badger dens, or potential SJKF dens observed nearby. No potential special-status plant habitat will be affected.
31-Aug	DCEA1-DH-022	KB	Bio Clearance: Water in canal so they moved the bore hole to the edge of the almond orchard. Vehicle will pull into the orchard row. Work will occur in disturbed area. Avoid canal with water. No trees or vines will be removed. Work is outside of wetlands and none nearby. No special-status species observed. No burrows or GGS suitable cracks present in the work area. Some small burrows too small for BUOW are nearby but outside the work area. No on-ground vertical structure for wildlife refuge. No GGS aquatic habitat nearby. No burrows suitable for burrowing owl, nor owl sign present. No sandhill crane roosting sites, vernal pools, elderberry shrubs, bat roosting habitat, badger dens, or potential SJKF dens observed nearby. Trees and utility poles nearby scanned with binoculars, no nests observed. No vegetation removal is needed, and only ruderal vegetation nearby. No potential special-status plant habitat will be affected.



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## **2-2 Soil Investigations in the Delta Biological Pre-construction Clearance Survey Report September 2021**





Draft

## SOIL INVESTIGATION IN THE DELTA

Biological Pre-construction Clearance Survey Report for  
September 2021

Prepared for  
California Department of Water Resources

November 2021





Draft

# SOIL INVESTIGATION IN THE DELTA

Biological Pre-construction Clearance Survey Report for  
September 2021

Prepared for  
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November 2021

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### **Appendices**

- A. Photographs
- B. Site Maps



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# SOIL INVESTIGATION IN THE DELTA

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## Biological Pre-Construction Clearance Survey Report for September 2021

### Introduction

#### Background

The Department of Water Resources (DWR) plans to conduct soil investigations for the purposes of measuring physical properties of the soils, location of the groundwater table, and other typical geologic and geotechnical parameters that will be used to inform and evaluate alternatives, consistent with Executive Order N-10-19, for a proposed single tunnel Delta conveyance (requiring a separate CEQA process) consistent with Governor Newsom's new approach to modernize Delta water conveyance.

The primary objective of the proposed soil investigation is to determine the composition, location, and geotechnical properties of soil materials, which are anticipated to be sand, silt, clay and peat soils that are commonly found in the Delta. The planned work includes overwater and land-based soil borings, cone penetration tests (CPTs), and geophysical surveys.

The Study Area includes a portion of the Sacramento-San Joaquin River Delta, encompassing the area from south of the City of West Sacramento to just north of Bethany Reservoir, and stretches from east of Interstate 5 to west of State Route 160 (River Road). The landscape within the Study Area includes a variety of land-uses including agriculture, parks and open space, urban and rural residential neighborhoods, commercial development, and scenic roadways and waterways.

This report documents the methods and summarizes the results of the environmental pre-construction clearance surveys conducted prior to the initiation of land-based soil borings, CPTs, and geophysical surveys planned for two locations. Biological surveys were conducted to ensure that locations were sited to avoid impacts to sensitive biological resources.

#### Survey Methodology

Pre-construction surveys for biological resources were conducted in conjunction with cultural resource surveys. Searches of the California Natural Diversity Database (CNDDB) were conducted for each of the survey locations to determine if there were any known resources in the work or staging areas. Surveys were conducted on September 27, by ESA biologist Chuck Hughes. Photographs are in **Appendix A**. Site maps are in **Appendix B**. Surveys were conducted

on foot in the work footprints, including the staging areas. Areas outside the work footprint were viewed with binoculars for potential resources nearby, such as bird nests.

At each location, the following items were specifically included in the survey. The survey also included a more general search for any other special-status species or their potential habitat elements. The following potential biological resources or habitat elements are from the Mitigation Monitoring and Reporting Plan (MMRP) for the project. The mitigation measure number and particular resource is in parentheses.

1. Potential for removal of any trees or vines (MM AES-1c)
2. Locate work outside of wetlands (MM BIO-1b, General Biological Measures)
3. Reconnaissance survey for special-status plants and wildlife (MM BIO-1d, General Biological Measures)
4. Active rodent burrows or suitable cracks (MM BIO-2c, Special Status Amphibians)
5. Leaf litter, rock, rip-rap, or other materials that could provide refuge to reptiles or amphibians (MM BIO-2e, MM BIO-2g, Special Status Amphibians)
6. Upland habitat (containing cracks or rodent burrows) within 200 feet of suitable aquatic habitat for giant garter snake (MM BIO-4a, Giant Garter Snake)
7. Sandhill crane roosting sites (MM BIO-9a, Sandhill Crane)
8. Burrowing owl and suitable habitat features (MM BIO-10a, Burrowing Owl)
9. All ground disturbing activities shall be located at least 100 feet from a vernal pool (MM BIO-12a, Vernal Pool Species)
10. When feasible, project activities shall be sited at least 164 feet from elderberry shrubs with a stem diameter greater than 1-inch (MM BIO-13a, Valley Elderberry Longhorn Beetle)
11. Bat roosting habitat (MM BIO-15a, Special Status Bats)
12. Potential San Joaquin Kit Fox dens (MM BIO-17a, San Joaquin Kit Fox)
13. Potential American Badger dens (MM BIO-16a, American Badger)
14. Special-status plants (MM BIO-18b, Botanical Resources)
15. Minor vegetation removal or disturbance of vegetation (MM BIO-19, Botanical Considerations for Vegetation Removal)
16. Active rookeries (MM Bio-5a, Rookery Birds)
17. Actively nesting raptors (MM Bio-6a, Raptors; excluding Swainson's Hawk and Burrowing Owl)
18. Actively nesting birds (MM Bio-8a, Nesting Birds)
19. Actively nesting Swainson's Hawks (MM Bio-11a, Swainson's Hawk)

## Results for DCEA1-DH-016

This work area is located in an agricultural staging area adjacent to fields with row crops. The following results for this site correspond to the items listed in the survey methodology section:

1. No trees or vines will be removed.
2. There are no wetlands, or other waters, within the work or staging areas. There is an irrigation site to the west of the project area. The ditch may meet wetland criteria and will be avoided.
3. No special-status plants or wildlife were observed within the work or staging areas.
4. No rodent burrows or suitable cracks in the work/staging area. There are a few burrows outside the work/staging area with no sign of recent use by wildlife.
5. No on-ground vertical structure for wildlife refuge.
6. There are no burrows, or cracks suitable for giant garter snake within the work or staging areas.
7. No sandhill crane roosting sites.
8. No suitable burrows, burrowing owls, their sign, or ground squirrels were observed in or near the work or staging areas.
9. There are no vernal pools in or near the work or staging areas.
10. There are no elderberry shrubs in the work or staging areas. There are some elderberry shrubs west of Tracy Boulevard, but the nearest one is at least 200 feet away from the site.
11. There is no potential bat roosting habitat in or near the work or staging areas.
12. No suitable San Joaquin kit fox dens were observed.
13. No suitable American badger dens were observed.
14. No potential special-status plant habitat will be affected.
15. Minor vegetation removal may occur along edge of work area. No special-status vegetation is present.
16. No active rookeries observed, survey was conducted outside of the nesting season.
17. No active nesting raptors observed, survey was conducted outside of the nesting season.
18. It is outside of the active nesting bird season.
19. No actively nesting Swainson's Hawks, survey was conducted outside of the nesting season.

## Results for DCWA1-DH-004/DCCA1-CPT-012

This work area is on an agricultural dirt road that transects a watermelon field. The following results for this site correspond to the items listed in the survey methodology section:

1. There are no trees and vines in or near the work or staging areas. No trees or vines will be removed.
2. There are no wetlands, or other waters, within the work or staging areas. There is an irrigation ditch to the north. The ditch may meet wetland criteria and will be avoided.
3. No special-status plants or wildlife were observed within the work or staging areas.
4. No rodent burrows or suitable cracks.
5. There is little or no leaf litter in the work or staging areas, and no rock, rip-rap, or other materials providing refuge to reptiles or amphibians.
6. There are no burrows, or cracks suitable for giant garter snake within or near the work or staging areas.
7. No sandhill crane roosting sites.
8. No suitable burrows, burrowing owls, their sign, or ground squirrels were observed in or near the work or staging areas.
9. There are no vernal pools in or near the work or staging areas.
10. There are no elderberry shrubs in or near the work or staging areas.
11. There is no potential bat roosting habitat in or near the work or staging areas.
12. No suitable San Joaquin kit fox dens were observed.
13. No suitable American badger dens were observed.
14. No potential special-status plant habitat will be affected.
15. Minor vegetation removal of agricultural weeds will occur. No special-status vegetation is present.
16. No active rookeries observed, survey was conducted outside of the nesting season.
17. No active nesting raptors observed, survey was conducted outside of the nesting season.
18. No actively nesting birds, survey was conducted outside of the nesting season.
19. No actively nesting Swainson's hawks, survey was conducted outside of the nesting season.

# Appendix A

## **Photographs**







**Photograph 1**  
The work and staging area of DCEA1-DH-016 (September 27, 2021)



**Photograph 1**

The work and staging area of DCWA1-DH-004/DCCA1-CPT-012 (September 27, 2021)

## Appendix B

### **Site Maps**







SOURCE: ESA, 2021; DCA, 2021

DCA Soils Investigation

**DCEA1-DH-016**  
Site Clearance - Biological Resources





SOURCE: ESA, 2021; DCA, 2021

DCA Soils Investigation

**DCWA1-DH-004 and DCCA1-CPT-012**  
Site Clearance - Biological Resources





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## **2-3 Soil Investigations in the Delta Cultural Resources Pre-construction Clearance Survey Report: August 2021**

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## **2-4 Soil Investigations in the Delta Cultural Resources Pre-construction Clearance Survey Report: September 2021**

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**EXHIBIT D  
TO MARQUEZ  
DECLARATION**

# Delta Conveyance Project

## Tribal Cultural Resources Management Plan

### Part I: Avoidance Phase

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# I. Introduction and Key Concepts

## Purpose and Scope

Part I of the Tribal Cultural Resources Management Plan (TCRMP) establishes an overarching set of principles, procedures and methods that the Department of Water Resources (DWR) and the Delta Conveyance Design and Construction Authority (DCA) will reference during performance of pre-construction field investigations in locations that are able to be postponed in the event that such investigations would result in impacts to Tribal cultural resources. Pre-construction field investigations will support the design and planning activities that must be completed prior to implementation and construction of the project. Due to the discrete nature of the activities and the flexibility in adjusting locations or delaying data collection until later phases of the Project this is considered the Avoidance Phase with respect to development of this part of the TCRMP. Avoidance is the overarching approach in this Part I of the TCRMP, Part II of the TCRMP will consider avoidance first but will also consider evaluation, treatment, and mitigation.

This document contains six chapters. Chapter 1 includes an explanation of key concepts such as regulatory background and roles and responsibilities, and a reminder of the *Principles for Tribal Engagement* that were developed during the environmental review of the Project. Chapter 2 provides a description of the field investigations and related activities included in this phase of the Project and DWR's commitment to avoiding impacts to Tribal cultural resources.

Throughout the environmental review process for the Project, DWR has engaged in consultation with Tribes and has committed to working with Tribes to create opportunities for collaboration on development of the contents of various mitigation plans, including the TCRMP. Chapter 3 of this document discusses how DWR will coordinate with California Tribes, including procedures and methods for Tribal engagement during the Avoidance Phase activities. Chapter 4 provides background and detailed procedures for avoiding impacts to Tribal cultural resources by conducting pre-field research, conducting Tribal site clearance surveys, documenting survey results, and managing data.

Chapter 5 is for any references cited in this document and Chapter 6 is a template library for any templates to be utilized in the implementation of Part I of the TCRMP.

## Background

The DCP Environmental Impact Report (EIR) Project description includes pre-construction, during construction, and post-construction field investigations. The soil investigation project activities approved under a 2020 Initial Study/Mitigated Negative Declaration (IS/MND) were to support consideration of various conveyance alternatives whereas the field investigations evaluated in the EIR are to inform the advancement of ongoing design and planning prior to implementing and constructing the Project. Like the 2020 Soil Investigation Project, the Avoidance Phase component of the TCRMP covers pre-construction soil borings, cone penetration tests, geophysical surveys, and other similar data collection activities. For this reason, Part I of the TCRMP is informed by the current Tribal coordination process for the 2020 Soil Investigation Project and associated IS/MND with procedures that evolved over time through engagement with actively coordinating Tribes (all of which are also consulting Tribes on the DCP).

## Soils Investigations for Data Collection in the Delta IS/MND

On July 9, 2020 DWR, as California Environmental Quality Act (CEQA) lead agency, approved the Soil Investigations for Data Collection in the Delta project (SCH #2019119073) (2020 Soil Investigation Project). The project objective was “to determine the composition, location, and geotechnical properties of soil materials commonly found in the Delta which would inform the design, environmental analysis, and development of alternatives for a potential Delta conveyance project and contribute to DWR’s overall understanding of Delta geology.” The 2020 Soil Investigation Project included soil borings, cone penetration tests, and geophysical surveys throughout the Delta region. While related to the Delta Conveyance Project, the 2020 Soil Investigation Project went through a separate review process under CEQA.

During development of the IS/MND for the 2020 Soil Investigations Project, DWR consulted with three Tribes under AB 52 (Wilton Rancheria, United Auburn Indian Community of the Auburn Rancheria of California, and Ione Band of Miwok Indians) and two Tribes per the Department’s Tribal engagement policy (California Valley Miwok Tribe (Sheep Ranch Rancheria of Me-Wuk Indians of California) and Northern Valley Yokuts Tribe). After AB 52 consultation was closed and the 2020 Soil Investigation Project was approved but prior to the initiation of fieldwork, DWR was notified by Shingle Springs Band of Miwok Indians and Yocha Dehe Wintun Nation that they would like to coordinate on the 2020 Soil Investigation Project and they were included in Tribal coordination. After fieldwork was initiated, Buena Vista Rancheria of Me-Wuk Indians also notified DWR of their interest in coordination and they were added to the consultation list for the 2020 Soil Investigation Project. All eight Tribes are still included in Tribal communications on the 2020 Soil Investigation Project.

## Delta Conveyance Project Environmental Impact Report

On December 21, 2023, DWR as CEQA lead agency, certified the EIR, approved the Project, made CEQA findings, and adopted the Mitigation Monitoring and Reporting Program (MMRP). Chapter 32, Tribal Cultural Resources, of the Project’s EIR includes the following measures for mitigating the significant impacts of the Project that have been specifically included as part of DWR’s approval of the Project:

- MM TCR-1a: Avoidance of Impacts on Tribal Cultural Resources
- MM TCR-1b: Plans for the Management of Tribal Cultural Resources
- MM TCR-1c: Implement Measures to Restore and Enhance the Physical, Spiritual, and Ceremonial Qualities of Affected Tribal Cultural Resources
- MM TCR-1d: Incorporate Tribal Knowledge into Compensatory Mitigation Planning (Restoration)
- MM TCR-2: Perform an Assessment of Significance, Known Attributes, and Integrity for Individual California Register of Historical Resources (CRHR) Eligibility

Mitigation measure TCR-1b begins with the premise that “DWR will construct the project in a manner that avoids physically disturbing Tribal cultural resources when feasible and, if complete avoidance is not feasible, implement other resource-specific treatment measures that minimize or mitigate the physical disturbance to Tribal cultural resources.” This premise recognizes that the requirements for managing Tribal cultural resources are different for project activities that prioritize avoidance of impacts to Tribal cultural resources than for project activities that cannot commit to avoidance.

Therefore, DWR opted to prepare plans for the management of Tribal cultural resources in two parts: Part I for the avoidance phase and Part II for the planning, design, and construction phase of the Project.

DWR remains committed to ongoing Tribal engagement throughout the Project planning, design, and construction phases. Part II of the TCRMP will be informed by ongoing site visits and field surveys and coordination with Tribes to help ensure that multiple perspectives are represented. Part II of the TCRMP will support DWR's consideration of options for avoidance, treatment, and mitigation of potential adverse effects to Tribal cultural resources, including those resources that were identified as eligible for listing in the California Register of Historical Resources during preparation of the EIR as well as those that may be identified and evaluated during Project implementation.

The EIR's mitigation measures should be implemented in an interdisciplinary manner. Practically speaking, the TCRMP will expand upon the interrelationships between cultural and natural resource mitigation commitments and provide a roadmap for successful implementation. Development of the TCRMP gives the DWR Project team and consulting Tribes an opportunity to centralize the lessons learned together during nearly three years of consultation on the Project and establish the goals, principles, criteria, procedures, and templates to be followed by all Project personnel throughout the avoidance phase field investigations and subsequent phases of Project planning, design, and construction.

DWR will continue to consult with Tribes to ensure that procedures for future activities – such as continued identification of Tribal cultural resources, preparation of resource-specific treatment plans, or incorporation of Tribal knowledge into other Project plans developed for implementation of the Project – embrace an Indigenous perspective on the holistic interrelatedness between humans and the larger ecological landscape. Therefore, an objective of Tribal collaboration on the development of Part I and Part II of the TCRMP is to ensure Tribal input on the development and implementation of management strategies for Tribal cultural resources.

## **Roles and Responsibilities**

### **Department of Water Resources (DWR)**

On December 21, 2023, DWR certified the EIR and approved the Project. DWR is the project proponent and lead agency for compliance with CEQA for the Delta Conveyance Project, including implementation of mitigation measures and commitments in the EIR. DWR is responsible for ensuring the development of the TCRMP, in collaboration with the consulting Tribes, and enforcement of any additional commitments within the plan.

### **Delta Conveyance Design and Construction Authority (DCA)**

The DCA is a joint powers authority governed by a seven-member Board comprised of representatives from sixteen of the Public Water Agencies that are serviced by the DWR's State Water Project. Under the oversight of DWR, the DCA conducts engineering and design work and will ultimately manage construction of the Project. The DCA has and will continue to participate in the development of the TCRMP in order to provide feedback on the practical implementation of measures in the field that the DCA staff or their contractor would be responsible for implementing; however, DWR is ultimately responsible for ensuring implementation of environmental compliance activities.

## Consulting Tribes

The following 13 Tribes consulted during the development of the EIR for the Project:

- California Valley Miwok Tribe (Sheep Ranch Rancheria of Me-Wuk Indians of California)
- Ione Band of Miwok Indians
- Northern Valley Yokuts Tribe
- Shingle Springs Band of Miwok Indians
- United Auburn Indian Community of the Auburn Rancheria of California
- Wilton Rancheria
- Winnemem Wintu Tribe
- Wintu Tribe of Northern California & Toyon-Wintu Center
- Yocha Dehe Wintun Nation
- Buena Vista Rancheria of Me-Wuk Indians
- Rincon Band of Luiseño Indians
- Viejas Band of Kumeyaay Indians
- Yurok Tribe

Consulting Tribes have been contacted to collaborate on the development of the TCRMP (Parts I and II) to provide Tribal subject matter expertise in support of the identification and appropriate management of Tribal cultural resources, which may include Tribal monitoring, treatment, and management of cultural resources and Tribal cultural resources, and appropriate measures for inadvertent discoveries of resources.

## Identified Tribal Representatives

All coordinating Tribes will provide contact information for representatives that would like to be included in communications specific to this Avoidance Phase of the TCRMP. Tribes may elect to identify different representatives dependent on the communication sub-type described below or elect not to participate in this phase of the Project. Electing not to participate in the Avoidance Phase component of the TCRMP would not have any bearing on participation in other phases of the Project including development and implementation of Part II of the TCRMP. Tribes that elect not to participate at this time could choose to participate at any time during the implementation of this Plan by contacting the DWR lead. Additionally, Tribes may update the appointed contacts at any time by notifying the DWR lead.

## Principles for Tribal Engagement

Consistent with Public Resources Code Section 21080.3.1, DWR's Tribal Engagement Policy, and the California Natural Resources Agency (CNRA)'s Tribal Consultation Policy, DWR developed a set of principles which outlined process and methods for identifying Tribal cultural resources in preparation of the development of the Project EIR. This set of principles was based on best practices for engagement



with Tribes and will be carried forward through implementation of the Project, including this Avoidance Phase.

Principle #1: The Department recognizes that Tribal Cultural Resources are a distinct category of CEQA environmental concern because they represent the unique heritage of California Native American Tribes.

Principle #2: The Department recognizes that California Native American Tribes have knowledge, expertise, and values regarding the significance of Tribal Cultural Resources that are distinctive from non-Tribal people.

Principle #3: The Department seeks to conduct meaningful and culturally sensitive consultation with California Native American Tribes for the purpose of identifying potential Tribal Cultural Resources in the CEQA process.

Principle #4: Consulting with Tribes during the Department's effort to identify Tribal Cultural Resources helps the Department achieve the CEQA objective of making decisions based on substantial evidence about the resources affected by the DCP.

Principle #5: The Department is committed to proactively and transparently sharing information with California Native American Tribes about the project's CEQA process and facilitating a consultation process that promotes Tribes' ability to meaningfully affect project outcomes.

Principle #6: The Department recognizes that information shared by consulting Tribes regarding potential Tribal Cultural Resources is sensitive and may be confidential, and the Department is committed to ensuring that any sensitive and confidential information shared with the Department is prohibited from public disclosure unless expressly authorized.

Principle #7: The Department recognizes its responsibility and authority to determine which resources qualify as Tribal Cultural Resources for the purpose of CEQA, and that the DCP may affect other resources that are important to Tribes.

Principle # 8: The Department recognizes that the identification of Tribal Cultural Resources is fundamental to the AB 52 consultation process and that identification, information sharing, and proposal of mitigation is to be achieved through culturally sensitive consultation with California Native American Tribes.

## **II. Description of Avoidance Phase Field Investigations**

Identifying soil and water quality characteristics along the approved Project alignment through pre-construction field investigations will inform further planning and design of the Project and contribute to the overall understanding of the Delta's geology.

Soil investigations can be performed by implementing two common methods. One option is to sample soils at a specific location through vertical borings up to 250 feet deep and typically 4 - 8 inches in diameter. Soil is collected and tests are performed at select depths, a geologist documents observations, and soil is sent to a laboratory for additional testing. Another option is to perform a Cone Penetration Test, where an approximately 1.5-inch diameter cone is pushed as deep as 200 feet into the ground. The tip and sleeve of the descending cone detect changes in friction and pressure. These measurements reveal various characteristics about the soil. A special attachment to the cone can be used to collect

small samples of water. Hydraulic conductivity and water quality testing can also be conducted within existing wells or within borings fitted with temporary wells.

## **Future Field Investigations**

This document, the Avoidance Phase part of the TCRMP, is specifically to support the advancement of the pre-construction project design and planning. However, completion of design and construction will each include additional field investigations where full avoidance of sensitive resources may not be achievable; these activities will be addressed in Part II of the TCRMP. DWR is continuing coordination with Tribes on the most effective way to develop Part II of the TCRMP.

## **Potential Effects on Tribal Cultural Resources**

While there is some potential for effects to previously unrecorded Tribal cultural resources during this initial Avoidance Phase, processes have been developed to avoid impacts to the greatest extent possible. As described in detail in Chapter 4, any potential sensitive materials or locations of Tribal concern will be avoided by these Avoidance Phase activities and documented for future formal identification and evaluation (if those steps cannot be taken currently without the potential for impacts to the resource or private property).

# **III. Collaboration with California Tribes**

## **Procedures and Methods for Tribal Engagement**

### **Engagement Roles and Responsibilities**

DWR Lead: Ensures implementation of the procedures herein, including communication to Tribes regarding Project schedules, and development and scheduling of Cultural Sensitivity Training.

Archaeology Lead: Supports the Cultural Sensitivity Training. Responsible for scheduling archaeological surveys of project areas. Develops survey maps with known records and provides both the maps and records to the Lead Tribal Monitor prior to surveys. Coordinates with the Tribal Monitor/Surveyor in the field to include their observations in the formal survey report.

Honored Elder/Traditionalist: A subject matter expert as identified by the Tribe, may be consulted in the identification of potential resources of Tribal concern.

Tribal Historic Preservation Officer (THPO)/ Cultural Resources Director: A subject matter expert with extensive knowledge of the Tribe's traditional and ancestral practices, knowledge of laws concerning the protection of Tribal cultural resources and treatment of Native American burials, and has authority delegated by their Tribe to supervise and make decisions or recommendations regarding cemetery (burials) and sacred site protection.

Cultural Resources Manager (Monitor Coordinator Role): A subject matter expert with knowledge of Native American village sites, cultural, ceremonial, and burial practices, with ability to identify graves, funerary objects, and cultural artifacts and familiarity with laws governing the protection of Tribal resources. Supports and oversees the Lead Tribal Monitor in coordination and supervision of Tribal Monitors including assigning staff to appropriate work areas, reviewing and compiling reports and documentation, and identification of Tribal resources. Coordinates cultural sensitivity trainings with

DWR on an annual or as needed basis to provide an overview of Tribal perspectives regarding cultural importance and sensitivity of the Project area and a mandatory training for Project staff. Coordinates with Project leads including DWR staff or other contractor personnel on the appropriate protection and/or treatment of Tribal resources.

Lead Tribal Monitor/surveyor: Works with DWR to coordinate scope and schedule, supervise and schedule Tribal monitors to appropriate work areas, review and compile documentation and reports, and coordination with Project leads. Coordinates with Tribal supervisors (THPO, Cultural Resources Director, Cultural Resources Manager) and DWR staff in the identification, protection, or recovery of resources of Tribal concern in the field. Responsible for participating (or delegating a representative) in monthly meetings with other coordinating Tribes to provide a summary of the previous month's survey activities. Responsible for reviewing Cultural Sensitivity Training materials and for participating in the (at minimum) annual training presentation (along with or instead of the THPO/Cultural Resources Director).

Tribal Monitor/surveyor: Has expertise in identification of resources of Tribal concern in the field and can coordinate with Tribal supervisors (THPO, Cultural Resources Director, Cultural Resources Manager, Lead Tribal Monitor) and DWR staff on identification, protection, and/or recovery, as appropriate. Responsible for documenting identification, avoidance, and/or protection measures of resources of Tribal concern, reporting to Tribal supervisors to confirm actions, and submitting documentation (monitor/survey logs, reports, and photos) as appropriate.

## **Resources Awareness Training**

Consistent with EC-6 of the DCP MMRP, prior to the start of ground disturbance, a qualified DWR archaeologist will conduct a mandatory cultural resources awareness training for all personnel involved in ground-disturbing work about cultural resources sensitivity in the project footprint and cultural resources that could be encountered during work. Participants will be required to sign a form stating that they have received and understand the training. Coordinating Tribes will have an opportunity to review and provide input into training materials and participate in the presentation to reflect Tribal perspectives, which will occur annually at minimum and be recorded.

DWR will develop Tribal resources awareness training in coordination with affiliated Tribes to support avoidance and protection of character-defining features. Prior to the start of ground disturbance, a mandatory Tribal resource awareness training presented by a Tribal representative designated or approved by the Tribe through the consultation process. The training will be provided for all personnel involved in ground-disturbing work. DWR will maintain the record of training and make it available, upon request (EIR Mitigation Measure TCR-1c).

## **Monthly Project Information Meetings**

DWR will convene monthly Avoidance Phase information meetings to provide updates on field activities, schedule, and allow for updates from the Tribal Lead Monitor. This meeting will include identified representatives from all coordinating Tribes that elect to participate. As part of this monthly meeting series, DWR will annually (typically in February prior to the spring field season) provide an anticipated field work plan for the year including a list of locations, figure of locations, and a KMZ for easy reference.

## **Weekly Communication**

DWR will provide weekly schedule updates via email during the active field season to communicate schedule changes, site clearance scheduling, site clearance survey summaries, and any other field considerations relevant to the coordination group.

## **Inter-Tribal Coordination**

While the Monthly Project Information Meetings would provide an opportunity for inter-Tribal coordination, DWR acknowledges that there may be a need for the Tribal Lead Monitor to coordinate directly with other Tribes in the staffing of Tribal monitors and in the consideration of resources of Tribal concern.

## **Individual Meetings**

At any point in the implementation of this Plan any Tribe may request an individual coordination meeting with DWR. Additionally, concurrent with the implementation of this TCRMP, DWR may be coordinating with Tribes separately regarding implementation of mitigation measures TCR-1a through TCR-1d and TCR-2 for other phases of the Project.

## **Coordination with Other Agencies**

The initial data collection activities in this Plan prioritize avoidance of impacts to sensitive resources and would not be carried out, assisted, funded, permitted, licensed, or approved by a Federal agency. As such, the activities in this Plan do not require Section 106 of the National Historic Preservation Act. All Tribal coordination for this Avoidance Phase of the project would be through DWR.

## **Decision Making**

The primary goal of Part I of the TCRMP is to support avoidance of impacts to resources of Tribal concern. At any point, if coordinating parties have recommendations for how to modify these procedures to increase efficiency or effectiveness those recommendations will be discussed with the participating Tribal representatives at a monthly Project information meeting. DWR will implement recommendations whenever possible. Most recommendations will be resolved in the field, i.e., at the tactical level (see Figure 1). If there is disagreement among the tactical group on the recommendation or if there are concerns amongst the group in the implementation of any of the procedures in the plan then those issues will be raised to the operational level (i.e., the regular monthly meeting group and coordination with Tribal Supervisors if they are not a regular participants). Any decisions or discoveries that occur at the tactical level will be documented and shared at the operational level. Such tactical level notifications shall also be e-mailed out to Tribal Points of Contact no later than the end of the week. If resolution cannot be made at that level then the recommendation/issue will be raised to the Strategic level. The discovery of a new TCR, TCR feature or human remains cannot be resolved at the tactical level and must be elevated and resolved at the appropriate level of government-to-government consultation (operational and strategic). A specific meeting among the disagreeing parties, Tribal government representatives and/or Tribal Chairperson and DWR upper management will be convened to develop a good faith effort towards mutual agreement. DWR recognizes that each Tribe may have different governance structures that Figure 1 may be inconsistent with, the Figure was developed to indicate that decision making related to avoidance of potential resources would primarily be made in the field at the tactical level. Additionally, DWR's Executive Manager, Office of Tribal Affairs (OTA), will be actively

involved in decision making at both the operational and strategic levels, and OTA will also provide guidance and recommendations at the tactical level.

	DWR/DCA	CONSULTING TRIBES
STRATEGIC	DWR DIRECTOR	TRIBAL CHAIRPERSON
	DWR (DCO) ENVIRONMENTAL PROGRAM MANAGER	TRIBAL GOVERNMENT REPRESENTATIVE
OPERATIONAL	DWR LEAD	TRIBAL HISTORIC PRESERVATION OFFICER
TACTICAL	DCA FIELD COORDINATOR	LEAD TRIBAL MONITOR/SURVEYOR
	DWR ARCHAEOLOGY FIELD LEAD	TRIBAL MONITOR/SURVEYOR
	DWR BIOLOGY FIELD LEAD	

**Figure 1: Decision Making**

## IV. Avoidance of Tribal Cultural Resources

### Known Tribal Cultural Resources in the Delta

A critical Tribal perspective that resulted from government-to-government consultation with Tribes is the importance of the Delta as a holistic landscape valued for its interrelated natural and cultural elements. This perspective led DWR to evaluate the Delta as a Tribal cultural landscape with categories of character-defining features that compose the whole landscape. DWR used information received during consultation to determine that the Sacramento-San Joaquin Delta Tribal Cultural Landscape (Delta TCL) qualifies under CEQA as a Tribal cultural resource.

The Delta TCL is central to the identity of consulting Tribes. Tribal people continue to look to the Delta for livelihood, ecological knowledge, ceremony and spirituality, and heritage. Consulting Tribes continue

to recognize their stewardship responsibilities in the Delta, and practice stewardship in private and public ways. Despite extensive modifications to the Delta in the nineteenth and twentieth centuries, the Delta continues to be a sacred place and recognized ancestral homeland of consulting Tribes. Consulting Tribes practice ceremony such as traveling with seasonal salmon runs; gathering plants for crafts, medicine, ceremony, and food; fishing and hunting; education; maintaining traditional cultural and ecological knowledge; leadership; community gatherings; to support the overall health of the Tribes.

Character-defining features of the Delta TCL include:

- the Delta as a Tribal homeland and place of origin.
- the rivers and waterways within the Delta that are sacred.
- terrestrial and aquatic plant and animal species and habitats that are part of the Delta's ecosystem and Tribal heritage.
- ethnohistorical locations that are sacred places and historically important.
- archaeological sites that are sacred or important historical places.
- views and vistas of and from the Delta that are sacred and important to Tribal heritage.

In addition to evaluating the Delta TCL for CRHR eligibility, DWR considered whether any of the landscape's character-defining features, such as biological species habitats, waterways, TCRs with physical components, built mound structures, trails, villages, ceremonial places, and cemeteries and burials possess cultural value as an individual resource, separate from what they contribute to the landscape. Although evidence in DWR's record at the time supported a finding of significance at the landscape level, DWR also recognized the need to continue coordination throughout implementation of the mitigation measures to allow affiliated Tribes to continue to share their knowledge and, thus, expand DWR's understanding regarding the importance of these resources. Identification of TCRs with physical components during the Avoidance Phase, so that they can be protected, is a central goal of this management plan.

## **Site Clearance Procedures**

### **Pre-field Research**

DWR will review and compile current information regarding Tribal cultural resources and known archaeological sites for each Avoidance Phase impact area. This compilation of data will be provided to Tribal survey participants prior to the field surveys. This will include the CHRIS records and survey maps. Data regarding biological, aquatic, and other natural resources would be provided as requested.

### **Conducting Geotechnical Site Clearance Surveys**

Site clearance surveys will be conducted for each Avoidance Phase impact area approximately 2 weeks prior to planned field activities. These site clearance survey activities typically include geologists, surveyors, scientists, Tribal representatives, and the cultural resource team for reconnaissance. These site clearance surveys are needed to evaluate access to the exploration locations and identify the locations of underground utilities; potential Tribal cultural, cultural, and archaeological resources; and potential environmental, including biological, botanical, and wetland, resources. This will include an



inventory of records, walking and photographing the area, evaluating potential habitat, and recording observations. Surveyors may remove minimal vegetation if the ground surface is not visible.

The surveys will be non-invasive, consisting only of observations and staking the final soil investigation location. If there is no area within an accessible property where the proposed investigation impact area can be moved for avoidance of sensitive resources, then the proposed soil investigation at that location will not be conducted. The impact area considered during these reconnaissance surveys is inclusive of the area required for parking for various field personnel. This type of avoidance is made possible by the flexible nature of this Avoidance Phase of data collection and the relatively small size of the proposed impact areas.

The DWR lead (or designated field coordinator) will coordinate with the Tribal Lead Monitor regarding the site clearance schedule. However, due to potential property access limitations for work on private property and coordination with a relatively large site clearance survey team, if there are unforeseen circumstances and Tribal Monitor is not able to make it to the site clearance survey DWR will coordinate remotely with the Tribal Monitor with regards to the clearance teams findings for the location and if there are not any major concerns from the Tribal Monitor, will proceed with the field work.

Any recommendations regarding a potential resource of Tribal concern should be identified by the Tribal Monitor during the site clearance survey so that the Avoidance Phase impact area cleared can avoid impacts to that potential resource. These recommendations will be shared with consulting Tribes per Section 3, Procedures and Methods for Tribal Engagement and any additional recommendations regarding discoveries and treatment will be used during future identification activities covered by TCRMP Part II. If an agreement regarding Avoidance Phase impact area adjustment cannot be reached in the field among the site clearance team, then the Decision Making process outlined in Chapter 3 of this TCRMP will be initiated.

## **Documenting Survey Results**

As described above under Site Clearance Procedures, site clearance surveys have a specific process for identification and documentation of potential resources that are generally different than that of the Tribal survey activities conducted for DCP. DWR representatives shall be responsible for filling out the standard field survey form, which can be found in section VI Template Library of this Plan. For site clearance surveys, Tribal representative(s) may complete a Tribal survey form for each day and location of survey. If a Tribal survey form is completed<sup>1</sup>, the form shall identify the date and time of survey, location/designation, the name of the Tribal representative, locations surveyed, a description of observations made during the survey, a statement of whether any cultural or potential Tribal cultural resources were identified, the disposition of any identified Tribal cultural resources, any actions taken by the Tribal representative(s), any recommendations made by the Tribal representative(s), and how any disagreements were resolved. If a Tribal survey form is also completed, they would be considered confidential to the Tribe that drafted the form and DWR shall obtain permission from the Tribe that drafted the survey form before sharing that form with other Tribal Representatives. DWR may share general information from the form (i.e., confirming that a TCR was or was not identified) with the other consulting Tribes per Section 3, Procedures and Methods for Tribal Engagement. Sensitive materials or locations of Tribal concern will be avoided by Avoidance Phase field investigation activities and documented for future formal identification and evaluation after Part II of the TCRMP is developed.

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<sup>1</sup> Note: Tribes that are being compensated for participation in site clearance surveys are required to complete Tribal survey forms.



## **Unexpected Discoveries**

Thorough desktop review and on the ground surveys are conducted to avoid potential sensitive resources however if an inadvertent discovery is made after soil investigations have commenced at a site then consistent with Mitigation Measure 3c, regarding cultural resources, should unexpected potential Tribal cultural resources be exposed during field investigations, all work will immediately stop in the immediate vicinity (e.g., within 100 feet [30 meters]) of the find until it can be evaluated and DWR can establish an appropriate plan of action in coordination with the Tribes.

## **Data Management (Confidentiality)**

The parties agree to protect confidential information. If confidential information is included within the field survey form, the Tribal representative should clearly label the form as “Confidential”. Forms and summaries provided by the Tribe labeled as “Confidential” shall be treated as such and shall not be disclosed without the prior written consent of the Tribe.

## **Identification of Tribal Cultural Resources**

As noted previously, the Avoidance Phase focuses on avoidance of impacts to potential Tribal cultural resources and as such, a full evaluation and formal identification of any resource is unnecessary for this phase of the Project.

Private property access to support the investigations may be DWR’s first opportunity to access some areas in the Project footprint that have not previously been surveyed. As such, any surveys related to Avoidance Phase activities should ensure adequate documentation of potential Tribal cultural resources for future design and construction considerations. Access limitations on private property may hinder the extent in which DWR would be able to evaluate an area of Tribal concern due to restricted access to certain parts of the property, reduced time on the property, or a constrained ability to disturb the land/agricultural activities. If formal identification and evaluation cannot be conducted within the access limitations, then the survey team will document the potential resource to the extent possible and make recommendations for the next steps in identification/evaluation to be carried out after Part II of the TCRMP is developed, if the property is acquired by DWR in the future.

## **Repatriation Requests**

DWR acknowledges that Tribal governments may have their own protocols regarding the treatment and repatriation of human remains or management of resources of Tribal concern. Certain cultural materials and sacred objects may require special handling and may also include repatriation to the Tribe, as appropriate. DWR shall accommodate the Tribal recommendations and requests to the fullest extent permitted by law. On privately owned land DWR, to the greatest extent practicable and through coordination with the DCA, will assist with coordination between the Tribe and the landowners regarding repatriation.

## **Criteria and Standards for Identification and Evaluation**

While identification and evaluation, due to access limitations, will likely be deferred to a later phase of the Project (and included in resource management and survey plans per commitments in the MMRP), recommendations for future steps in identification and evaluation will consider the following regulatory definitions.

Under Section 21074(a) of the California Public Resources Code, “Tribal cultural resources are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1 [of the Public Resource Code]. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.”

Under Section 21074(b) of the California Public Resources Code, a “cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.”

Under Section 21074(c) of the California Public Resources Code, a “historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “nonunique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).”

DWR will consider whether a resource qualifies as a “Tribal cultural resource” by applying the four approaches described in Public Resources Code 21074(a)-(c), listed above. In general, a resource needs to be significant to a Tribe, with the lead agency’s concurrence, or it must be eligible for listing in the CRHR to be a Tribal cultural resource. DWR’s first step in applying the Public Resources Code will be to consult with affiliated Tribes to identify resources that have cultural value to one or more Tribes. DWR will also conduct record searches to identify resources with cultural value to Tribes that are included in the CRHR or local register of historical resources, and any resources that were not listed but had previously been assessed and determined eligible for inclusion in the CRHR.

If a resource was not previously listed on the CRHR (or a local register), DWR will evaluate whether the resource may be eligible for listing on the CRHR (considering among other things any previous CRHR-eligibility evaluations) and thereby satisfying Section 21074(a)(1) of the Public Resources Code. For resources that were not already listed on the CRHR or a local register of historical resources, DWR will also evaluate them in accordance with 21074(a)(2) of the Public Resources Code to determine whether DWR finds the resource “significant” pursuant to Section 5024.1(c) of the Public Resources Code.

## V. References and Resources

## VI. Document History

For tracking purposes and version control, reviewers of this document are listed below and if revisions are proposed it is noted below.

Version	Date	Version description	Prepared by	Reviewed by	Revisions proposed?	Notes
1	2/27/2024	Initial submission to Tribes for review	DWR	N/A	N/A	
2	5/21/2024	UAIC review and proposed revisions and comments	N/A	UAIC	Yes	
3	7/15/2024	DWR responses and revisions based on UAIC comments	DWR	DWR	Yes	Document discussed with UAIC on 6/11. Revisions proposed based on discussions.

## VII. Template Library



**CONFIDENTIAL – NOT FOR PUBLIC RELEASE**  
**CALIFORNIA DEPARTMENT OF WATER RESOURCES**  
**NATIVE AMERICAN DAILY REPORT**

<b>Representative(s) Name:</b>			
<b>Representative Affiliation:</b>			
<b>Project Name:</b>			
<b>Date:</b>	<b>Start Time:</b>	<b>End Time:</b>	<b>Hours:</b>
<b>DWR Liaison:</b>		<b>Cultural Specialist(s):</b>	
<b>Project Location/Site:</b>			
<b>Areas Surveyed:</b>			
<b>Description of Survey Activities:</b>			
<b>Discoveries of Interest or Artifacts/Remains Found:</b>			
<b>Comments/Concerns:</b>			
<b>Representative Signature:</b>			<b>Date:</b>

**SUPERIOR COURT OF THE STATE OF CALIFORNIA  
COUNTY OF SACRAMENTO**

**Department 36**

**Judge: Hon. Stephen P. Acquisto**

Related Case Nos. 24WM000006; 24WM000008; 24WM000009;  
24WM000010; 24WM000011; 24WM000014; 24WM000012;  
24WM000017; 24WM000062; 24WM000076

**DECLARATION OF  
DEMETRI POLYZOS  
IN SUPPORT OF CALIFORNIA  
DEPARTMENT OF WATER RESOURCES'  
EX PARTE APPLICATION**

1 I, Demetri J. Polyzos do hereby state and declare as follows:

2 1. I am a manager in the Water Resource Management Group within the Metropolitan  
3 Water District of Southern California (Metropolitan). I have been employed by Metropolitan since  
4 2006 and have worked primarily on matters relating to Metropolitan's water supplies. In my current  
5 capacity, I am responsible for managing Metropolitan's Water Surplus Drought Management Plan  
6 (WSDM Plan) activities, which include Metropolitan's management of water supply delivered from  
7 the State Water Project (SWP), which conveys water across the Sacramento-San Joaquin River Delta  
8 (Delta). My role also involves overseeing the ongoing development of Metropolitan's Integrated  
9 Water Resource Plan (IRP), which has been Metropolitan's adaptive management strategy for  
10 ensuring that Southern California's water needs will be met over the long term. During and before  
11 my time with Metropolitan, I regularly review scientific papers, technical reports and state and  
12 federal agency reports regarding relevant subject matters, including hydrologic and precipitation  
13 forecasting, historic hydrology in California and the Colorado River basin, water supply planning  
14 and climate change.

15 2. I am a registered civil engineer in the State of California and have over 28 years of  
16 experience in the field of water resources. I am a graduate of the University of California at Davis  
17 with a Bachelor of Science degree in civil engineering. I make this declaration of my own personal  
18 knowledge, my review of Metropolitan's WSDM and IRP documents and the Department of Water  
19 Resources' (DWR's) documents attached as exhibits or cited in this declaration. I have personal  
20 knowledge of the manner in which Metropolitan's IRP and WSDM are kept and each was developed  
21 and adopted in the ordinary course of business. The sources of information at the time of preparation  
22 are such that I believe the records and citations referred to below to be trustworthy. If called as a  
23 witness, I could and would testify competently to the truth of the matters set forth herein.

24 3. Metropolitan is a public agency organized under the Metropolitan Water District Act.  
25 It operates as a voluntary cooperative of 26 member agencies, which also are public agencies  
26 themselves. Its members are 12 special districts and 14 municipalities, all of which provide water at  
27 wholesale to their own member agencies and/or to retail customers for municipal, domestic,  
28 agricultural, and industrial use. Metropolitan's member agencies, or their own member agencies, in



1 turn serve nearly 19 million people—almost half the California population—throughout the  
2 Southern California region in the counties of Ventura, Los Angeles, Riverside, San Bernardino,  
3 Orange, and San Diego.

4 4. Metropolitan was created by the State Legislature for the purpose of building and  
5 financing the Colorado River Aqueduct and began importing water supplies through that system to  
6 the Southern California coastal areas in 1941. As Southern California’s population grew, so did the  
7 demand for water, prompting Metropolitan to enter a long-term contract with the California DWR in  
8 1960 that gives Metropolitan participation rights in the SWP, meaning Metropolitan has the right to  
9 use the SWP conveyance system and to a contracted water amount pursuant to an annual allocation  
10 based on availability referred to as “SWP Table A allocation.” For example, under Metropolitan’s  
11 SWP contract, a 100 percent SWP Table A allocation would mean it would be entitled to receive  
12 1.911 million acre-feet of water from the SWP in that calendar year.<sup>1</sup> This represents roughly 46  
13 percent of the SWP’s annual Table A allocation. But in extremely dry years like 2014, 2021, and  
14 2022,<sup>2</sup> the allocation dropped as low as 5 percent. Metropolitan’s share of the SWP Table A  
15 allocation in those years was less than 96,000 acre-feet. Since the SWP’s inception, contractors like  
16 Metropolitan are required to assume full financial responsibility for the SWP’s water supply-related  
17 capital expenditures and operations, maintenance, power, and replacement costs—regardless of the  
18 amount of SWP water the contracting agency receives in any given year. In other words, the SWP  
19 contractors do not purchase units of water, they pay for participation rights in the SWP.

20 5. Metropolitan’s two imported water supply sources (the Colorado River Aqueduct and  
21 SWP conveyance) support Southern California’s trillion-dollar economy. Today, on average nearly  
22 30 percent of Southern California’s water supply originates as precipitation in the northern Sierra  
23 Nevada mountain range and is diverted by the SWP facilities in the Delta.

24 6. One of the many challenges facing water managers in California is maintaining water  
25

26 <sup>1</sup> One acre-foot equals about 326,000 gallons, or enough water to cover an acre of land, a little less  
27 than the size of a football field, one foot deep, and is about the amount used by three Southern  
28 California families in a year.

<sup>2</sup> A water year is defined as October 1–September 30.

1 supply reliability in a state that has the highest variable hydrologic conditions in the nation.<sup>3</sup> In just  
2 the last five years from 2019-2024, northern California experienced an unprecedented period of  
3 drought followed by its wettest year on record. This variability can also be experienced within the  
4 same year, as was the case in water year 2022-2023 that began with the continuation of record dry  
5 conditions only to end with a near-record high amount of precipitation and snowpack. As explained  
6 below, other factors including the impacts of climate change, seismic activity, and environmental  
7 regulations to protect endangered species further reduce SWP reliability. The Delta, where about  
8 half of the state's total streamflow is received and is the location of SWP water diversion facilities, is  
9 susceptible to these factors. Due to regulatory restrictions on SWP operations imposed to protect  
10 sensitive fish species in the Delta and other effects from climate change, the average annual water  
11 supply yield of the SWP to water contractors receiving SWP water diverted from the Delta declined  
12 by roughly 20 percent, from 2,958 thousand acre-feet in the 2005 Delivery Capability Report to  
13 2,401 thousand acre-feet in the Draft 2023 Delivery Capability Report—a drop of 557,000 acre-  
14 feet—as shown in Figure 6-1 of DWR's Draft 2023 Delivery Capability Report, reproduced below.<sup>4</sup>

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16 ///

17 ///

18 ///

19 ///

20 ///

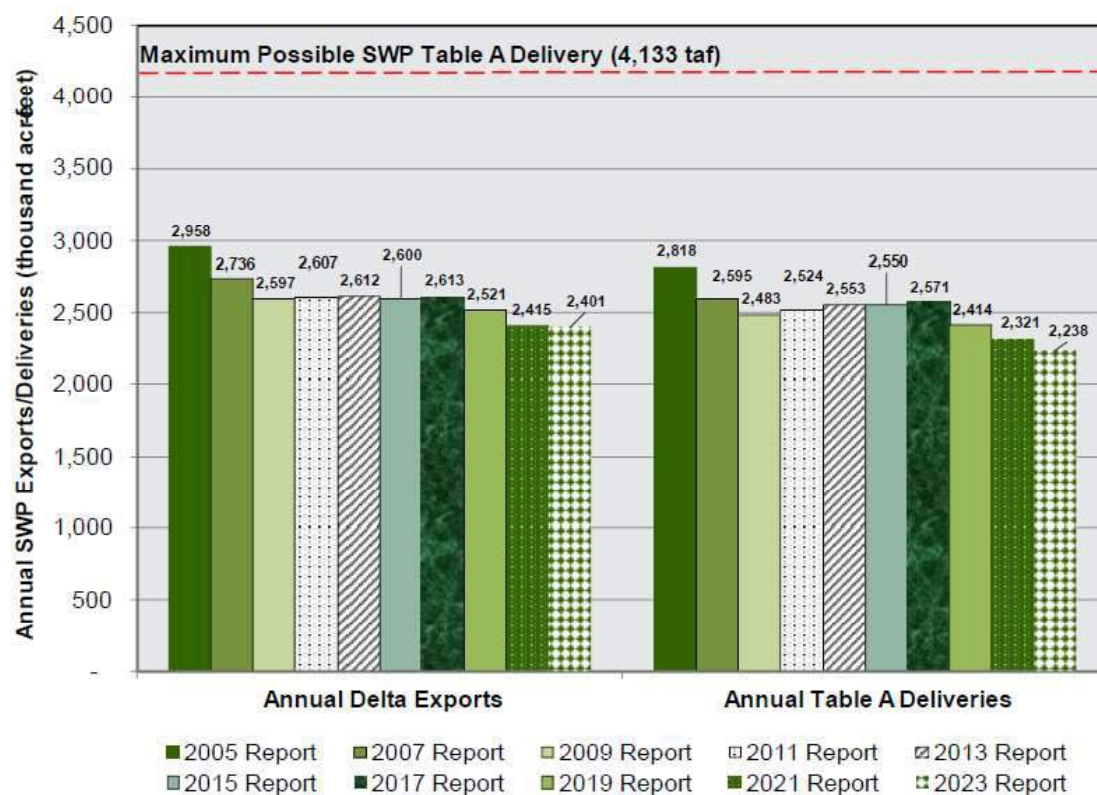
21 ///

22 ///

23  
24 <sup>3</sup> He, Minxue, Andrew Schwarz, Elissa Lynn, Michael Anderson (California Department of Water  
25 Resources). 2018. Projected Changes in Precipitation, Temperature, and Drought across California's  
26 Hydrologic Regions. California's Fourth Climate Change Assessment. Publication number: CCCA4-  
EXT-2018-002 at p. 1, available at  
<https://www.noaa.gov/sites/default/files/legacy/document/2020/Oct/07354626677.pdf>, last accessed  
July 17, 2024.

27 <sup>4</sup> May 2024 Draft State Water Project Delivery Capability Report 2023, Figure 6-1 at p. 6.50,  
28 available at [https://data.cnra.ca.gov/dataset/d32744ae-2e11-4d6c-aa49-cc17085e4d30/resource/e6319787-5219-4bc5-852f-111c800f8dd7/download/draft\\_dcr2023\\_v12.pdf](https://data.cnra.ca.gov/dataset/d32744ae-2e11-4d6c-aa49-cc17085e4d30/resource/e6319787-5219-4bc5-852f-111c800f8dd7/download/draft_dcr2023_v12.pdf), last visited July 17, 2024.

**Figure 6-1. Estimated Average Annual Delta Exports and SWP Table A Water Deliveries (Excluding Butte County, Yuba City, and Plumas County FCWCD), for 2005 through 2023 Reports**



7. DWR's modeling of the impacts of climate change and sea level rise on SWP supplies shows further declines in long-term average reliability under a 2070 scenario of 570,000 acre-feet, whereas with the DCP, known as Alternative 5 (Bethany Alternative) in the Final Environmental Impact Report, those declines would be lowered to 167,000 acre-feet, as reported in DWR, Facts About the Economic Value of the Delta Conveyance Project, Benefits, Costs, Commitments, and Innovations (2024) at p. 2, chart titled State Water Project Deliveries, a true and correct copy of which is attached as **Exhibit A** and publicly available at [https://water.ca.gov/-/media/DWR%20Website/Web%20Pages/Programs/Delta%20Conveyance/Public%20Information/DCP\\_Economic%20Value%20Brochure\\_2024\\_Final.pdf](https://water.ca.gov/-/media/DWR%20Website/Web%20Pages/Programs/Delta%20Conveyance/Public%20Information/DCP_Economic%20Value%20Brochure_2024_Final.pdf), last visited July 15, 2024.

8. Metropolitan recognized, following the drought of the late 1980s and early 1990s, that relying solely on imported supplies, in particular through the SWP system, was not sustainable

1 to meet the demands of a growing population. The development and implementation of a new long-  
2 term water strategy was needed to ensure a reliable water supply for Southern California. In 1996,  
3 Metropolitan published its inaugural Integrated Water Resources Plan (IRP), calling for the  
4 diversification of water resources that would include conservation and local resources development,  
5 as well as a vast storage network of reservoirs and groundwater basins. The IRP focused on  
6 capturing water in wet years, storing those supplies for use in dry years, lowering demand through  
7 conservation and water use efficiency, which avoids or defers Metropolitan's transportation  
8 infrastructure costs, and developing a more diverse water supply portfolio.

9         9. Metropolitan and its member agencies have successfully implemented the long-term  
10 plan set forth in the 1996 IRP and have produced regular updates to the IRP in 2004, 2010, 2015,  
11 and 2020 to address evolving water management challenges. Since the IRP's inception, Southern  
12 California has made extensive investments in demand management and water use efficiency and has  
13 reduced its dependency on imported supplies delivered through the Colorado River Aqueduct and  
14 SWP. For example, through investment in water conservation and other water demand reduction  
15 efforts, Metropolitan's service area has reduced the gallons per capita per day ("gpcd") of water use  
16 in Metropolitan's service by nearly 40 percent since 1980 as shown in **Figure 1**, below.  
17 Metropolitan, in its regular course of business concerning water management, collects the underlying  
18 data for and created Figures 1 through 3 below; and Figures 1 through 3 are accurate and truthful  
19 representations of the water data.

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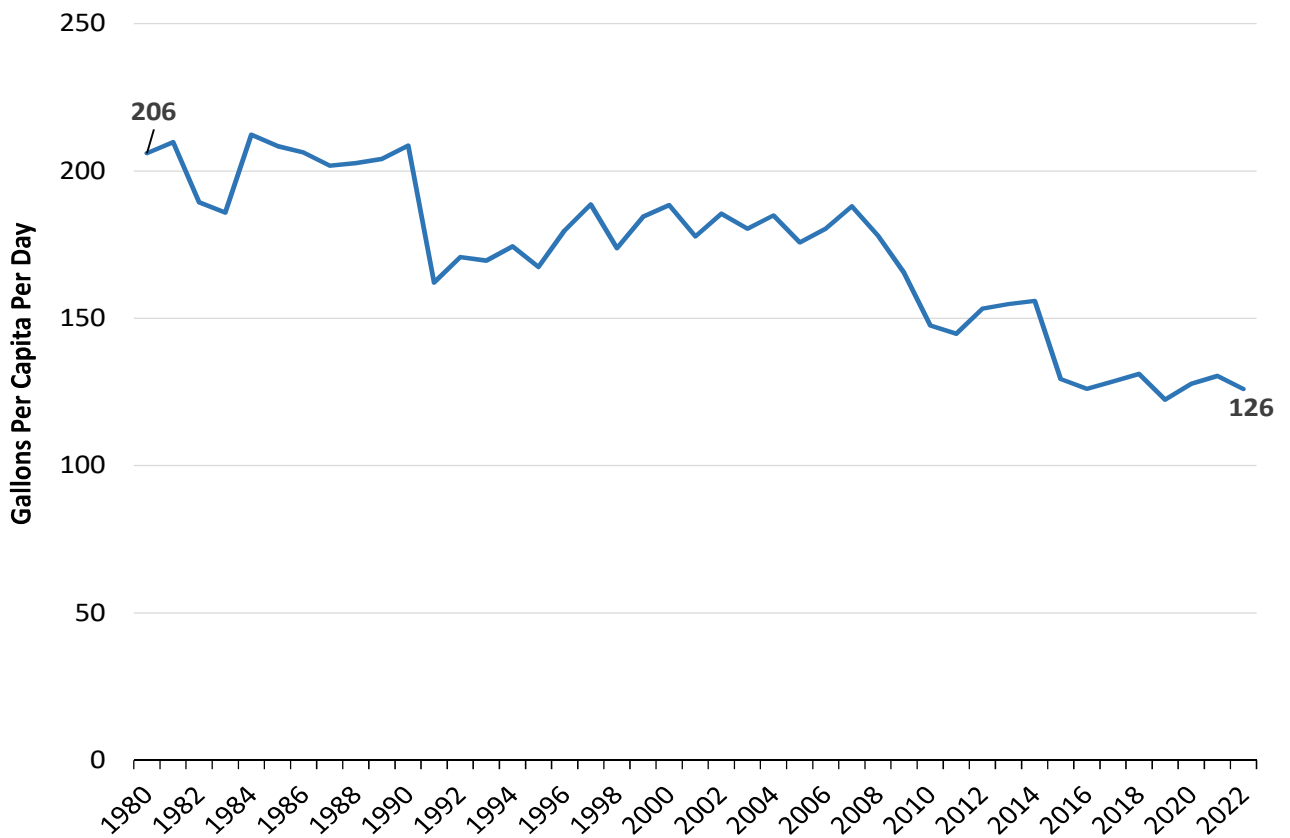
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**Figure 1: Gallons Per Capita Per Day of Potable Consumptive Demand**

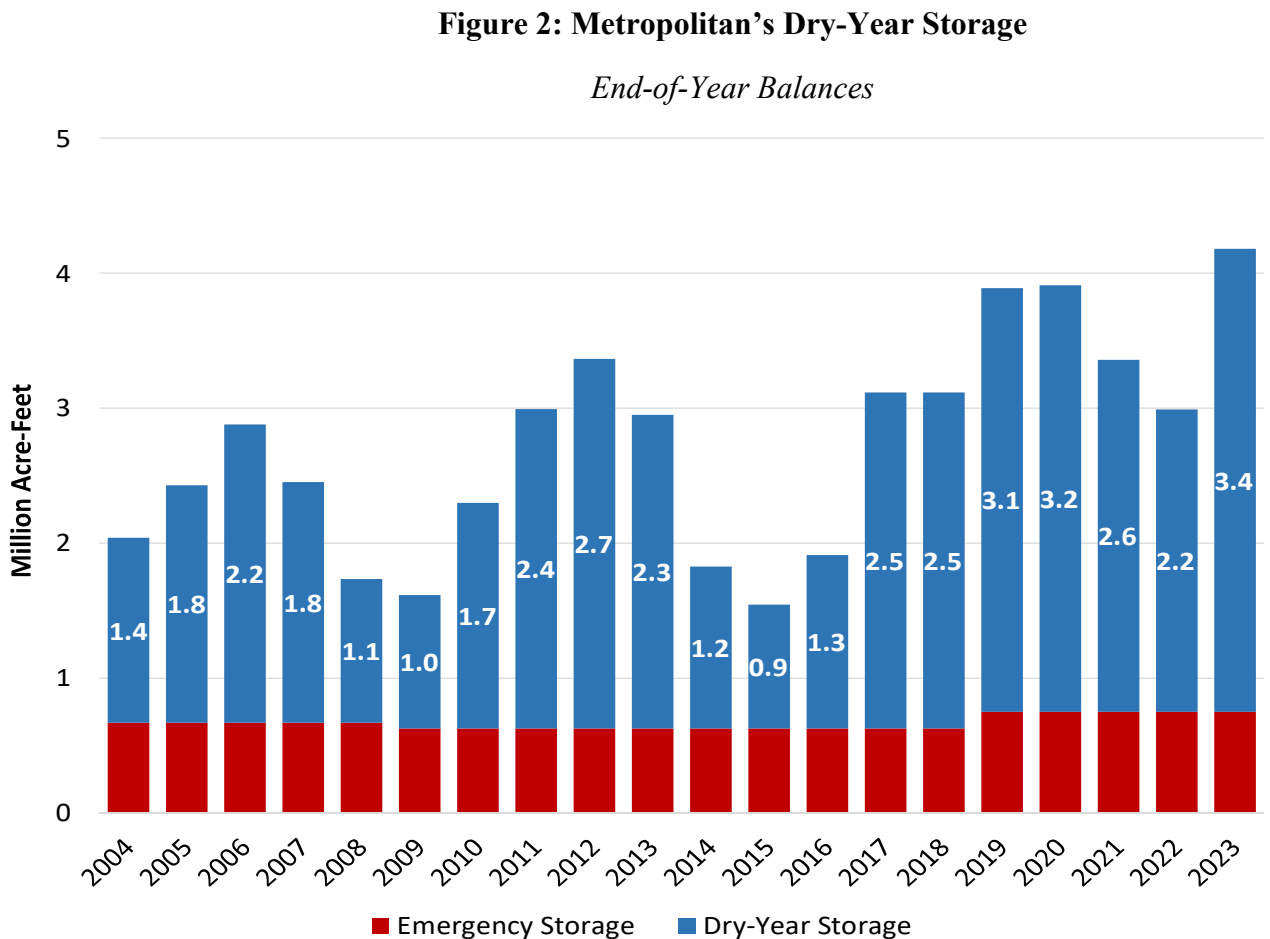
*Water Use Efficiency Gains*



10. In addition, Metropolitan has implemented water management programs to further reduce demand on imported supplies. Since 1990, those efforts have more than doubled its service area recycled water production, and made significant progress in cleaning groundwater basins, allowing for increased local water production when imported supplies are limited. Since 1980, Metropolitan achieved a 25-fold increase in its storage capacity to over 5.9 million acre-feet of storage capacity.

11. By the end of calendar year 2020, the onset of the most recent drought, Metropolitan had accumulated just over 3.2 million acre-feet in its dry-year storage facilities and programs, the highest storage balance in its history at the time. During the recent drought from 2020-2022, Metropolitan tapped into these stored supplies to supplement its limited imported water supplies and meet demand within its service area. With the near-record-breaking wet hydrologic conditions in

2023, Metropolitan replenished its dry-year storage accounts and reached a new record-high amount of 3.4 million acre-feet. Metropolitan’s end-of-year dry-year storage balances from 2004 through 2023 are shown in **Figure 2**.



12. Thanks to the actions prompted by the implementation of strategic planning initiated with the first IRP in 1996 and continuing today, urban retail water demands in Southern California have remained stable despite a population increase of over five million people in its service area from 1985 to 2022, as shown in **Figure 3**. These actions provide a comprehensive approach to water management, minimize the impact of water shortages on the region’s retail consumers and economy, and have allowed Metropolitan to better manage wet year water supplies for use in dry years.

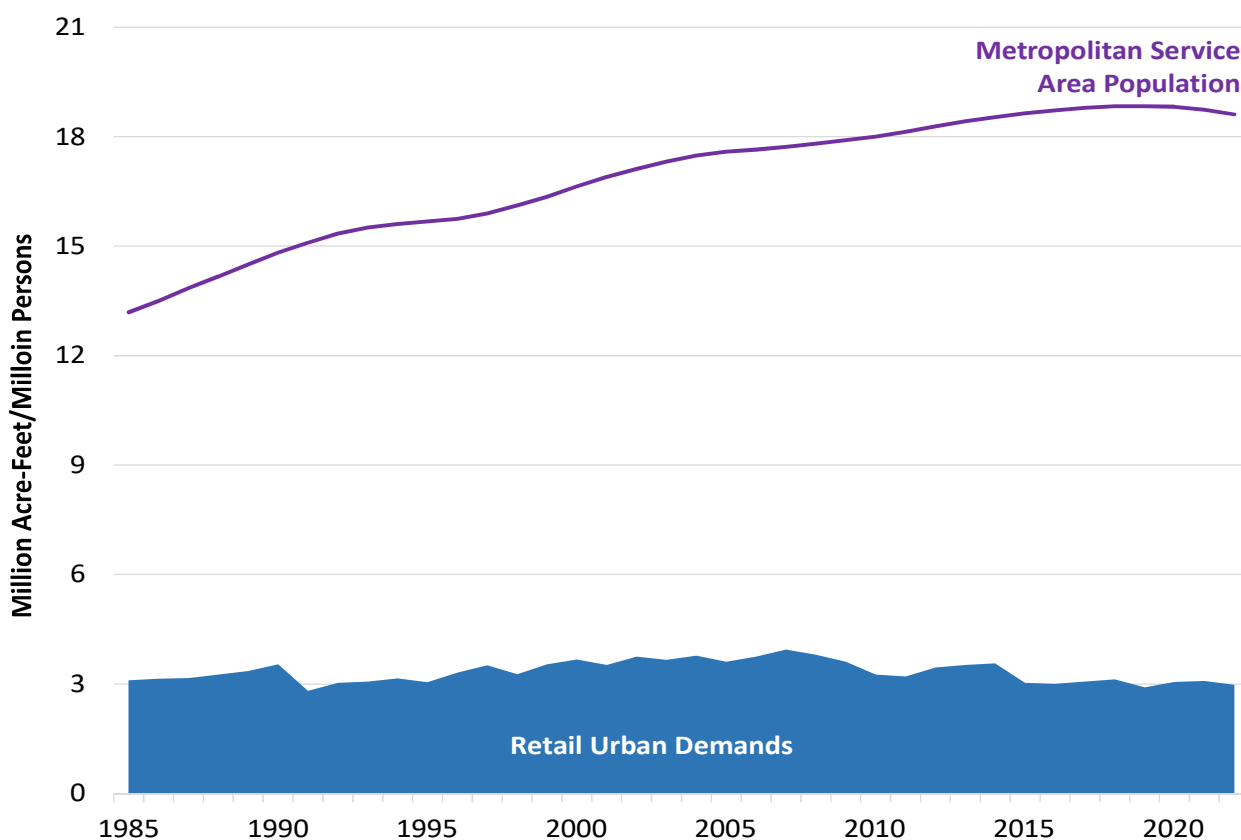
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**Figure 3: Populations vs. Demands**

*Demands Remain Flat as Population Grew by 5.4 Million*



13. As part of the IRP implementation, Metropolitan and its member agencies developed, adopted and implement the Water Surplus and Drought Management (WSDM) Plan for Southern California.<sup>5</sup> The guiding principle of the WSDM Plan is to minimize the impacts of water shortages on the region's retail consumers and economy. The WSDM Plan recognizes the interdependence of surplus and shortage actions and is a coordinated plan that utilizes all available resources developed through the IRP to maximize supply reliability. In surplus conditions, when imported supplies exceed projected water demands for imported water, Metropolitan utilizes available storage facilities and programs to maximize the benefits of stored water to its member agencies. The WSDM Plan also provides a description of storage options and a framework for storing water in these facilities

<sup>5</sup> Water Surplus and Drought Management Plan, Report No. 1150 (August 1999), available at [https://www.mwdh2o.com/media/20239/24\\_water\\_supply\\_drought\\_management\\_plan.pdf](https://www.mwdh2o.com/media/20239/24_water_supply_drought_management_plan.pdf), last visited July 17, 2024.



1 and programs when surplus supplies are available to Metropolitan. For example, in the 2022-2023  
2 water year, imported water supply far exceeded demands due to record precipitation, and  
3 Metropolitan stored roughly 1.2 million acre-feet of water, one of Metropolitan's largest single-year  
4 increase to its dry-year storage portfolio in its history. Through investments in conveyance and  
5 storage facilities, and by developing storage partnerships with agencies throughout the state,  
6 Metropolitan is well positioned to store surplus supplies when they are available to prepare for future  
7 dry periods.

8 14. In shortage conditions, when imported supplies are limited and not sufficient to meet  
9 the imported water demand, the WSDM Plan has identified critical actions, storage programs and  
10 facilities, and conservation programs to respond to that shortage. The selection of the specific  
11 actions, and the extent to which Metropolitan implements them are proportional to the severity of the  
12 shortage conditions. Except in severe or extreme shortages or emergencies, the WSDM Plan allows  
13 shortages to be mitigated without impacting ultimate retail municipal, industrial, or agricultural  
14 customers.

15 15. Given California's hydrologic variability, Metropolitan plans water management  
16 actions for both surplus and shortage conditions consistent with the WSDM Plan principles at the  
17 onset of each year. These water management actions may include storage puts and withdrawals,  
18 purchase of transfer water supplies, a call for extraordinary drought conservation, public education  
19 on water use efficiency, and the development of additional supply or storage programs. As the water  
20 year progresses, Metropolitan is ready to implement the appropriate water management actions and  
21 adjust as supply and demand balance conditions change. Metropolitan's diverse water supply and  
22 storage portfolio established by the IRP and the water management principles outlined in the WSDM  
23 Plan helped Southern California survive the recent droughts with minimal shortages and economic  
24 hardships.

25 16. The implementation goals established for the WSDM Plan, with the first goal being to  
26 "avoid mandatory import water allocations to the extent practicable" are not always achieved. As  
27 indicated in Figure 3, above, Metropolitan's end-of-year dry-year storage balances began declining  
28 in 2012 at the onset of a drought. In 2014, Metropolitan withdrew over 1 million acre-feet from

1 storage, the highest single-year withdrawal in Metropolitan's history. With additional withdrawals  
2 and declining end-of-year dry-year storage balances projected for 2015, Metropolitan's Board  
3 authorized a Water Supply Allocation (Allocation), limiting deliveries to its member agencies to  
4 ensure a reasonable amount of water remained in storage reserves in case the drought continued.

5 17. During the last drought, California faced enormous challenges. The drought years  
6 2020, 2021, and 2022 were the driest consecutive three-year period ever recorded in the state,  
7 causing cumulative impacts that stressed even the most robust and resilient water systems across the  
8 state. By the second year, conditions had deteriorated so much that DWR could only deliver a 5  
9 percent SWP Table A allocation. By the third year, with another 5 percent SWP Table A allocation,  
10 DWR had to provide emergency supplies to meet basic human health and safety needs and  
11 Metropolitan had to severely limit the imported water supply to certain Southern California  
12 communities dependent on the extremely sparse State water from Northern California. For example,  
13 Metropolitan implemented an Emergency Water Conservation Program (EWCP) to avoid running  
14 out of water and reoperated its distribution system to push as much water as possible from the  
15 already strained Colorado River supply to areas experiencing acute shortages. Moving forward,  
16 Metropolitan is advancing measures to enhance resilience and guard against future droughts and  
17 disruptions affecting its service area. Metropolitan's drought resiliency measures include investing in  
18 local supply projects, improving existing infrastructure, and exploring new storage opportunities.  
19 However, the full benefits of these investments can only be realized with timely improvements to  
20 Metropolitan's imported water supply system reliability, including the Delta Conveyance Project.

21 18. It is notable that this extreme drought period in California was immediately preceded  
22 and followed by very wet years in 2019 and 2023. California has the most volatile year-to-year  
23 precipitation in the nation, and this volatility is becoming even more pronounced. As California's  
24 precipitation becomes more erratic and the Colorado River remains in a continuous drought since the  
25 early 2000's, there is increasing pressure on Metropolitan's overall water outlook. Therefore,  
26 modernizing infrastructure to capture, convey, and store water effectively in the face of climate  
27 change is critical for long-term reliability and resilience. This was a key finding in Metropolitan's  
28 2020 IRP update, which used scenario planning to quantify impacts on water reliability under

1 varying climate change conditions.<sup>6</sup>

2 19. Consistent with the IRP, managing through dry periods requires actions both to  
3 reduce demands as well as maximize storage opportunities during wet periods to be able to draw  
4 upon stored supplies in dry periods. The Delta Conveyance Project furthers this key objective in both  
5 ways; it not only improves opportunities to capture water in wet years, but it also enables water to be  
6 periodically diverted during high river flows from storm runoff water that even occurs in dry years.  
7 While future hydrologic conditions cannot be predicted precisely, periods of wet and dry conditions  
8 will continue to occur regardless of year type. The conditions are becoming more extreme and  
9 frequent. No time must be wasted in moving forward with initiatives like the Delta Conveyance  
10 Project to allow California to make the most of the opportunities when water is available and store  
11 those supplies for use in dry periods. This approach can potentially delay or even avoid the need for  
12 Metropolitan to allocate supplies to its member agencies, ensuring a more reliable and resilient water  
13 supply.

14 20. For example, even in a “critical” hydrologic water year like 2021-2022,<sup>7</sup> there were  
15 opportunities to capture additional supplies following two storm events. DWR, which determines the  
16 available SWP supplies to allocate in a given year, conducted a “hindcast” calculation for the SWP  
17 allocation for 2021 that modeled SWP supplies assuming the Delta Conveyance Project had been in  
18 place and operating in compliance with regulatory standards for protection of fisheries and water  
19 quality objectives. A true and correct copy of the results of this modeling is attached hereto as  
20 **Exhibit B**, titled Delta Conveyance Project Modernizing California’s Water Infrastructure 2024 Fast  
21 Facts and is publicly available on DWR’s website at [https://water.ca.gov/-/media/DWR-](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Delta-Conveyance/Public-Information/DCP_Fast-Facts_Final.pdf)  
22 [Website/Web-Pages/Programs/Delta-Conveyance/Public-Information/DCP\\_Fast-Facts\\_Final.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Delta-Conveyance/Public-Information/DCP_Fast-Facts_Final.pdf). It  
23 found that an additional 236,000 acre-feet could have been captured which is enough water for  
24

25 <sup>6</sup> 2020 Integrated Water Resources Plan (IRP) – Regional Needs Assessment (April 12, 2022) at  
26 pp. 1, 4, available at [https://www.mwdh2o.com/media/sgvlkith/2020\\_irp\\_needs\\_assessment.pdf](https://www.mwdh2o.com/media/sgvlkith/2020_irp_needs_assessment.pdf), last  
27 visited July 17, 2024.

28 <sup>7</sup> DWR calculates in an index the unimpaired flows of the Sacramento, American, Feather and Yuba  
Rivers, key river systems that help determine the annual SWP supply availability. This index,  
generally referred to as the “Sacramento River Index” is used to determine the water year type  
classification and is broken down into five categories, “Wet”, “Above Normal”, “Below Normal”,  
“Dry” and “Critical.”

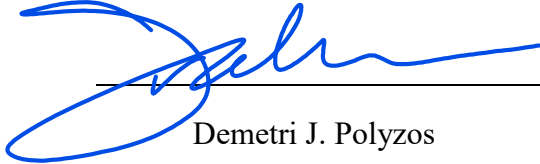
roughly 850,000 households for one year had the Delta Conveyance Project been in place. For Metropolitan, its share of this supply equates to approximately 100,000 acre-feet of additional supplies, enough water for nearly 300,000 households within its service area. In 2021, Metropolitan withdrew approximately 600,000 acre-feet of water from its storage programs to balance supplies with demands. Receiving an additional SWP delivery of 100,000 acre-feet would have reduced this storage withdrawal, potentially leaving more water in storage facilities accessible to those communities subjected to the EWCP or in Diamond Valley Lake, Metropolitan's largest surface water reservoir. Taking opportunities to preserve water in these storage programs and facilities may have deferred, lessened the severity of, or even helped avoid the EWCP completely in 2022 and bolster water supply reliability for Southern California.

21. DWR conducted a similar "hindcast" exercise for the start of calendar year 2024 and identified that an additional 909,000 acre-feet of water could have been captured between January 1 and April 11, 2024. (**Exh. B.**) DWR stores supplies captured from the Delta in San Luis Reservoir, a critical reservoir in the SWP system. Storage levels in San Luis Reservoir are an important consideration for DWR when setting the SWP allocation. The earlier DWR can fill San Luis Reservoir the sooner DWR can increase and set the final SWP allocation. Finalizing the SWP allocation earlier in a given year offers numerous benefits. It supports State Water Contractors in their decision-making processes, which often have financial implications, such as the need to purchase additional supplies, to implement crop production, and to impose water restrictions. Early SWP allocation information can help avoid costly and unnecessary actions. Additionally, it assists DWR in meeting regulatory requirements which are typically more stringent from April to June by reducing the export of additional water from the Delta during this time.

22. The Delta Conveyance Project supports the IRP's objective of capturing and storing water in wet years for use in dry years. The modeling above indicates that the Delta Conveyance Project would expand on this objective by capturing supplies during high flows from periodic storms which can occur even in "below normal", "dry", or "critical" water years. Metropolitan can take delivery of these SWP supplies to help meet existing demands and has significant capacity to store surplus water for future use. The Delta Conveyance Project, therefore, is consistent with

1 Metropolitan's IRP objective to maintain reliability of its imported water supplies.

2 23. I declare under penalty of perjury under the laws of State of California that the  
3 foregoing is true and correct. Executed this <sup>22<sup>nd</sup></sup>~~th~~ day of July, 2024 at Los Angeles, California.

4  
5  
6   
7 Demetri J. Polyzos

**EXHIBIT A  
TO POLYZOS  
DECLARATION**



## Facts About the Economic Value of the Delta Conveyance Project

### Benefits, Costs, Commitments, and Innovations



**The Delta Conveyance Project** is one of California's most important climate adaptation projects. Extreme weather is leading to more rain, less snow, and a limited ability to capture and move water. The Delta Conveyance Project will protect supplies by capturing water when it is plentiful to better endure dry years and adapt to extreme weather. It protects against the threat posed by earthquakes, sea level rise and levee failure. And it helps resolve conflicts in the south Delta to both protect fish and provide needed water supply.

### Need for Protecting the State Water Project

The State Water Project captures and moves water all over California, from the Bay Area to the Mexico border and communities in between. It is an affordable source of high-quality, clean, and safe water for 27 million Californians and 750,000 acres of agriculture. If the State Water Project service area were a nation, it would represent the eighth largest economy in the world. And it is an important foundation for an entire suite of water supply and resiliency programs implemented by local public water agencies.

### Economic Benefits

The Delta Conveyance Project passes the benefit-cost test. It enables water needs to be satisfied and water supply reliability to be maintained. It protects against a declining baseline of supplies, allows SWP to adapt against climate change, guards against earthquake risks, and helps resolve conflicts in the south Delta by improving operational flexibility.

### Cost Estimate

An updated cost estimate was prepared by the Delta Conveyance Design and Construction Authority (DCA), using a detailed and rigorous approach, the cost of the project is estimated to be \$20.1B in real 2023 (undiscounted) dollars. A preliminary cost assessment conducted in 2020, early in the design process, showed the project would cost about \$16B, which accounting for inflation to 2023 would result in a similar cost. This demonstrates that even as details are added, and refinements are made to the program, costs are holding steady. The DCA is also evaluating potential design or construction innovations that would help manage costs for the program.



## Benefits Outweigh Costs

After adjusting to account for the value of money over time (see page 3 regarding “discounting”), the benefits are \$37.96 billion and the costs are \$17.26 billion. This results in a benefit-cost ratio of 2.2, meaning that the benefits outweigh the costs and every dollar spent generates \$2.20 in benefits.

The project passes the benefit-cost ratio test, making the project economically viable and robust under all future scenarios analyzed.

Benefits are quantified in four different areas: Urban water supply reliability, agricultural water supply, water quality, and seismic reliability.

The primary benefit of the DCP is that the project protects against the expected effects of climate change and sea level rise, avoiding future shortages and maintaining water supply reliability.

## Understanding Benefits

### Urban Water Supply Reliability:

- More SWP deliveries under wetter periods allow agencies to:
  - Fill storage more frequently
  - Enter drought periods with higher reserves
  - Impose fewer periods of mandatory rationing
  - Reduce severity and frequency of shortages
- Urban economic benefits measured as consumers’ willingness to pay (WTP) to avoid shortages.

### Agricultural Water Supply

- Agricultural value of water based on the UC Davis Statewide Agricultural Production model and water market transaction data from Nasdaq Veles CA Water Index.

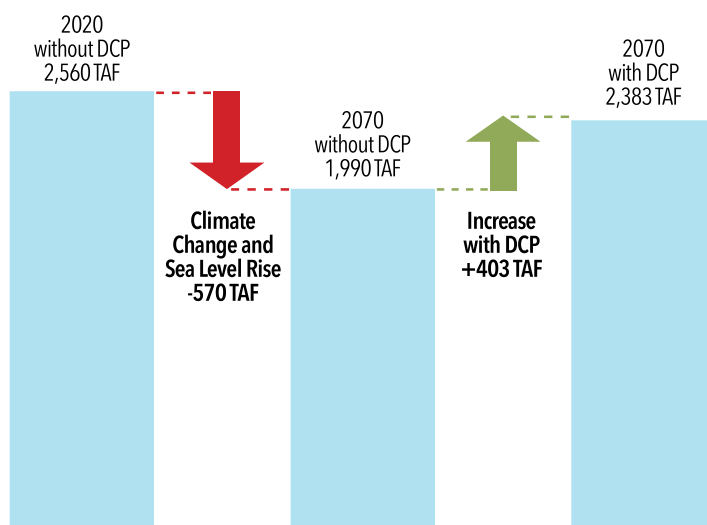
### Water Quality:

- Lower salinity improves water quality.
- For urban agencies, this improves taste, the useful life of appliances, the cost of water softening, for example.
- For agricultural agencies, the cost is based on reducing requirements for additional irrigation water needed to flush salts from the root zone of crops.

### Earthquake Disruption:

- Avoiding potentially significant disruption to state-wide water supply caused by earthquakes saves time, saves money and protects water quality.

## State Water Project Deliveries:



## Missed Opportunity

If the Delta Conveyance Project were operational during the big winter storms of winter 2021-2022, January 1 through May 9, 2024, a significant amount of water could have been captured and moved.

Winter 2021-2022	January 2023	Jan 1-May 9, 2024
<b>Amount of water that could have been captured:</b>		
<b>236,000</b> acre-feet	<b>228,000</b> acre-feet	<b>909,000</b> acre-feet
<b>That's enough water to supply:</b>		
Over <b>2.5 million</b> people for one year	Over <b>2.3 million</b> people for one year	Over <b>9.5 million</b> people for one year
<b>or</b>		
Nearly <b>850,000</b> households for one year	Nearly <b>800,000</b> households for one year	Over <b>3.1 million</b> households for one year



## Assumptions that influence benefits and costs:

- Yield: assumed to provide about 403,000 acre-feet annually on average
- The cost of the project: assumed to be \$20.1 billion in undiscounted 2023 dollars
- Real discount rates: between 2% and 1.4% (Federal Office of Management and Budget, Circular A-4 guidance)
- Environmental mitigation: \$960 million
- Construction period: 15 years
- Life span of the project: 100 years



## Summary of Benefits and Costs

	Main Cost Estimate	Cost with DCA Recommended Innovation Savings
<b>Present Value of Future Benefits</b>		
	2023 (\$M)	2023 (\$M)
Urban Water Supply and Reliability	\$33,300	\$33,300
Agricultural Water Supply and Reliability	\$2,268	\$2,268
Urban Water Quality	\$1,330	\$1,330
Agricultural Water Quality	\$90	\$90
Seismic Reliability Benefits (Water Supply)	\$969	\$969
Seismic Reliability Benefits (Water Quality)	\$2	\$2
<b>Total Benefits</b>	<b>\$37,960</b>	<b>\$37,960</b>
<b>Present Value of Future Costs</b>		
	2023 (\$M)	2023 (\$M)
Construction Costs	\$11,486	\$10,723
Other Project Costs	\$3,021	\$2,852
Community Benefit Program	\$153	\$153
Environmental Mitigation	\$735	\$735
O & M Costs*	\$1,697	\$1,697
Environmental Impacts after Mitigation	\$167	\$167
<b>Total Costs</b>	<b>\$17,259</b>	<b>\$16,327</b>
<b>Benefit-Cost Ratio</b>	<b>2.20</b>	<b>2.33</b>

\*O&M Costs: includes operations and maintenance costs for project facilities



## Understanding Discounting and the “Time Value of Money”

### How does a Benefit-Cost Analysis account for inflation?

Inflation is the general increase in the price of goods and services over time, and it poses a challenge for benefit-cost analysis. To ensure a consistent comparison, all future costs and benefits reflect 2023 prices, a method known as using “real prices” in economic terms. This approach removes the distorting effects of inflation, allowing present-day expenditures to be directly comparable to future benefits and providing a clear basis for evaluating a project’s economic viability.

### How would unexpected inflation affect the analysis?

If inflation impacts future costs and benefits similarly, changes in the inflation rate will not affect the conclusions of the benefit-cost analysis. However, if inflation disproportionately affects costs or benefits, it could skew the analysis. This is unlikely for the DCP, where benefits tied to water rates and costs associated with construction expenses generally escalate in tandem.

### Why does the Benefit-Cost Analysis account for the time value of money (e.g. discount future costs and benefits)?

The time value of money is a recognition that money available today is worth more than the same amount in the future because it can be used immediately—to pay for things or to invest and earn more money. This concept is crucial, especially in long-term projects like the DCP, which assumes a 15-year construction period starting in 2029 followed by a 100-year operational project life.

### How is the real discount rate applied?

The ‘real discount rate’ used in this process is determined based on federal guidance and calculated by taking the returns on treasury bills and subtracting the rate of inflation. This discounting process, distinct from the previously discussed use of real prices to account for inflation, helps prioritize projects that offer the best economic returns over their lifecycle, ensuring efficient allocation of resources.

### Why is the cost of the project lower in the Benefit-Cost Analysis and higher in the cost estimate?

The cost estimate and benefit-cost analysis are equivalent but expressed differently. The cost estimate is presented in real 2023 dollars. The benefit-cost analysis is shown as “present value.” Present value accounts for various distortions to the value of money over time, including inflation and the potential for investment and it is calculated using a “discount” rate.





## Other Important Considerations:

### Climate change

Climate change and sea level rise are expected to significantly reduce future SWP deliveries. Future precipitation and runoff are forecasted using multiple climate scenarios that show an annual loss of more than half a million acre-feet by 2070. The primary benefit-cost analysis assumes 1.8 feet of sea level rise by 2070. Multiple sensitivity analyses test robustness of this assumption. In each of the scenarios tested, the benefits of the project significantly exceed costs.

### Transfers and Trading

If there are water years that a Public Water Agency's supplies exceed local needs, they may choose to transfer those supplies and the associated costs, consistent with water law and existing water supply contracts. This flexibility will allow PWAs to preserve water supplies for local needs and to transfer those excess supplies—and costs—to other parts of the state, particularly those with limited access to drinking water.

### Unmitigated Environmental Impacts

Some environmental impacts are expected to be significant and unavoidable. Where possible, the cost of those impacts has been considered and included. This results in a cost of about \$153 million for lost agricultural land, air quality, noise, and transportation impacts.

### Cost of Doing Nothing

Failing to implement the Delta Conveyance Project has real financial consequences resulting from climate change, sea level rise and seismic events.



## Some benefits of the Delta Conveyance Project are not monetized in the benefit-cost analysis and yet are compelling for decision-makers:

- Increased operational flexibility: Resolving conflicts in the south Delta between fish and water supply goals.
- Community Benefits Program: \$200 million investments for high-priority local Delta projects, in addition to local business utilization, job training, and infrastructure leave-behinds that have potential to provide benefits that are ultimately likely to represent values beyond this funding commitment.
- Job creation: The project will create 5,000 high-paying jobs.
- Groundwater supplies: Protecting affordable surface water supplies relieves pressure on dwindling or constrained groundwater sources.

## Cost Estimate: Conservative, Comprehensive, Based on Industry Standards

DWR approved the Bethany Alignment of the Delta Conveyance Project in December 2023 after concluding the project Environmental Impact Report (EIR). This approved project provided the basis for an updated cost estimate.

The estimate is comprehensive, conservative, and reflects industry standard methodologies. It:

- Is based on the 6,000 cubic feet per second Bethany Reservoir Alternative as outlined in the project Final EIR
- Includes construction costs and other costs, like planning, management, land, mitigation, power and community benefits
- Uses cost estimating approach that builds up based on labor, equipment, materials, and schedule
- Uses a thorough reconciliation process with independent cost-estimating teams and resolves cost differences
- Assumes a reasonable 30% contingency to account for uncertainties

## Methodology: A More Rigorous Approach

The updated cost estimate uses a more rigorous approach for concept-level designs. It:

- Uses engineering documentation in drawings and technical reports
- Develops costs based on unit rates, quantities, and durations
- Replaces most cost “allowances” with actual estimates and material price quotes
- Uses better understanding of ground conditions, schedule, and risks

**The cost estimate has been prepared by the Delta Conveyance Design and Construction Authority, a joint powers agency comprised of the participating Public Water Agencies responsible for funding, and ultimately building, the project.**





## Total Project Costs Summary\*

Feature	Total Cost (\$M)	Feature	Total Cost (\$M)
<b>Construction Costs</b>		<b>Other Project Costs</b>	
Intakes	\$1,714	DCO Oversight	\$426
Main Tunnels	\$6,353	Program Management Office	\$668
Pumping Plant and Surge Basin	\$2,536	Engineering/Design/Construction Management	\$2,167
Aqueduct Pipe and Tunnels	\$563	Permitting and Agency Coordination	\$67
Discharge Structure	\$99	Total Planning/Design/Construction Management	<b>\$3,328</b>
Access Logistics and Early Works	\$253	Land	\$158
Communication	\$13	DWR Mitigation	\$960
Restoration	\$17	Power	\$415
Construction Subtotal	<b>\$11,548</b>	CCWD Settlement Agreement	\$47
Contingency (30%)	\$3,464	Community Benefits Program	\$200
Total Construction Costs	<b>\$15,012</b>	Total Other Costs	<b>\$1,780</b>

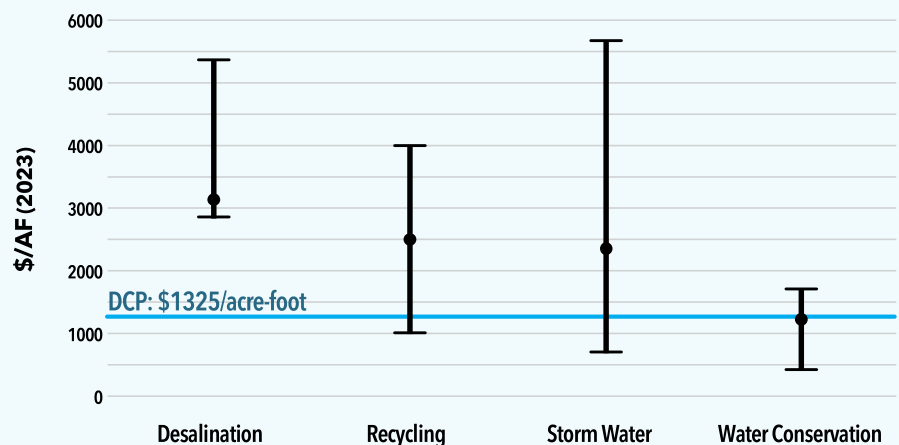
\*Costs are in undiscounted 2023 dollars.

## Total Project Costs = \$20,120

Cost Category	Total Project Cost Estimate (\$M)	Total Project Cost with Secondary Innovations Estimate (\$M)
Construction Costs	\$15,012	\$14,008
Other Project Costs	\$5,108	\$4,886
Total Project Costs	<b>\$20,120</b>	<b>\$18,894</b>

## Comparing the Delta Conveyance Project to Alternative Supplies

The per-acre cost of the Delta Conveyance Project is less than the costs of most other types of supplies. Alternative supplies also lack the ability to provide an equivalent scale of supply and are not able to protect the long-term stability of State Water Project supplies. While a full suite of options is being considered for California and local water purveyors, the Delta Conveyance Project is the most viable and irreplaceable.



## Innovations Identify Significant Cost Savings

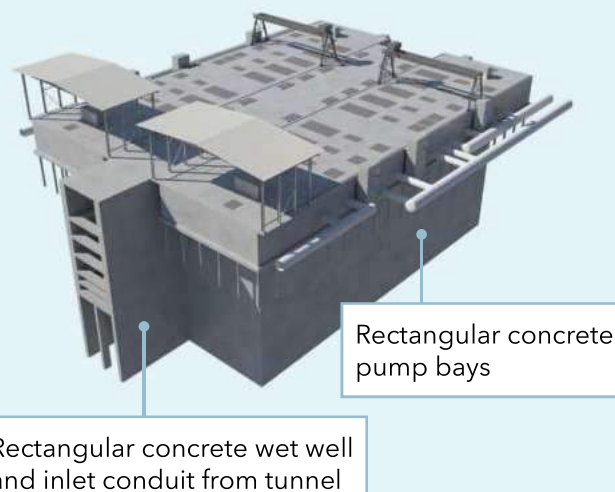
Value engineering is a part of the design phase of a project. It is used to cut costs, save time, reduce risk, or reduce community or environmental disturbances. The approved project represents a conservative configuration for analysis of impacts. An initial review of potential design and construction innovations shows an opportunity to reduce costs by about \$1.2 billion.\*

### Innovation Example

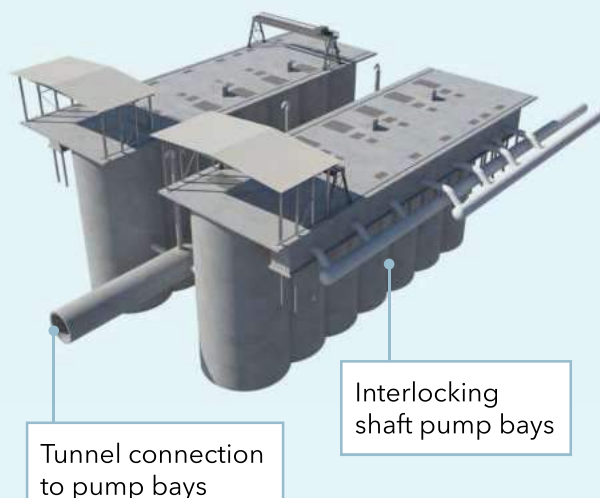
In the Engineering Project Report, the Bethany Reservoir Pumping Plant (BRPP) is a below-ground structure with vertical rectangular diaphragm walls and consists of dry-pit pump bays housing the pumping plant equipment and piping plus an adjoining rectangular concrete wet well and wet well inlet conduit connected to the tunnel reception shaft located along the center of the overall structure.

This innovation would replace the vertical, deep box diaphragm wall arrangement with interlinking shafts of diaphragm wall construction that would house the pumping plant equipment and piping and a tunnel that would replace the wet well and wet well inlet conduit, greatly reducing construction quantities and expediting schedule due to construction sequence improvements.

#### CURRENT PUMPING PLANT DESIGN



#### INNOVATION CONCEPT



### INNOVATION ADVANTAGES:

- Reduces construction quantities (soil excavation, concrete, rebar)
- Shortens construction schedule by 981 days
- Reduces direct construction cost by \$138,720,000
- No changes to above-ground site configuration and surface features

\*Does not represent changes to the approved project description.

### For More Information



For more information on cost, benefits, funding and financing of the State Water Project and the Delta Conveyance Project, view this [FAQ](#) or use the QR code.

For more about the Delta Conveyance Project, visit:  
[water.ca.gov/deltaconveyance](http://water.ca.gov/deltaconveyance)

For more about the project permitting process, visit:  
[deltaconveyanceproject.com](http://deltaconveyanceproject.com)

For more information about project design and engineering, visit: [dcdca.org](http://dcdca.org)





**EXHIBIT B  
TO POLYZOS  
DECLARATION**

# Delta Conveyance Project

Modernizing California's Water Infrastructure | 2024



## Fast Facts

### WATER SUPPLY RELIABILITY

The Delta Conveyance Project protects against future water supply losses caused by climate driven weather extremes, sea level rise and earthquakes. It will help the State Water Project (SWP) safely capture, move and store water from big, but infrequent, storm events.



Climate change means more rain in the winter and more runoff and river flows than before.



According to the United States Geological Survey there is a **72% chance of a 6.7 or greater magnitude earthquake** occurring in the Bay Area by 2043 that could cause levees in the Delta to fail, crippling the state's ability to deliver clean water.



Significant sea level rise predicted by **2100**.



Sierra snowpack, the state's largest source of surface water, will be reduced by **65%** on average by century's end.

### MISSED OPPORTUNITY

If the Delta Conveyance Project was operational during the big winter storms of winter 2021-2022, January 1 through May 9, 2024, a significant amount of water could have been captured and moved.

Winter 2021-2022	January 2023	Jan 1-May 9, 2024
Amount of water that could have been captured:		
<b>236,000</b> acre-feet	<b>228,000</b> acre-feet	<b>909,000</b> acre-feet
That's enough water to supply:		
Over <b>2.5 million</b> people for one year	Over <b>2.3 million</b> people for one year	Over <b>9.5 million</b> people for one year
or		
Nearly <b>850,000</b> households for one year	Nearly <b>800,000</b> households for one year	Over <b>3.1 million</b> households for one year
Percent of the total volume of water exported by the SWP per year		
<b>45%</b> water year 2021	<b>40%</b> water year 2022	<b>100%</b> 2024 exports

### MODERNIZED WATER INFRASTRUCTURE

Use of design and engineering innovations have resulted in a project that is responsive to community needs and lessens environmental effects to the extent feasible.



**1 below-ground tunnel**  
for approximately  
45 miles

**100-130 feet**  
approximate depth  
range of tunnel

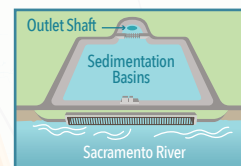
**Earthquake resilient**  
due to significantly less  
ground motion than at  
the surface during a  
seismic event



**18 inches** thickness  
of tunnel segments

#### 2 new intakes

in the North Delta with  
a total capacity of 6,000  
cubic feet per second (cfs)



**T-shaped fish screens**, with  
cleaning apparatus below  
surface 1,500 feet long

#### Pumping plant

connects the tunnel directly to  
the existing Bethany Reservoir  
on the California Aqueduct



Clifton Court Forebay

Bethany Reservoir

Bethany Complex

California Aqueduct

Tracy

STOCKTON



Facilities designed to withstand **200 year flood event**  
on top of **10.2 feet** of sea level rise



Project construction will create over  
**5,000 good-paying jobs** at the peak



# Delta Conveyance Project

Modernizing California's Water Infrastructure | 2024



## IMPORTANT WATER SUPPLY

The [State Water Project](#) is an important water supply for California that can't be replaced.



### 27 MILLION PEOPLE

receive clean, safe and affordable water from the SWP, including nearly 7 million disadvantaged community members



### 750,000 ACRES OF FARMLAND

are irrigated with SWP water



Water supplied by the SWP sustains the world's **FIFTH LARGEST ECONOMY**



**2/3** of California's water originates in the **SIERRA NEVADA MOUNTAINS**



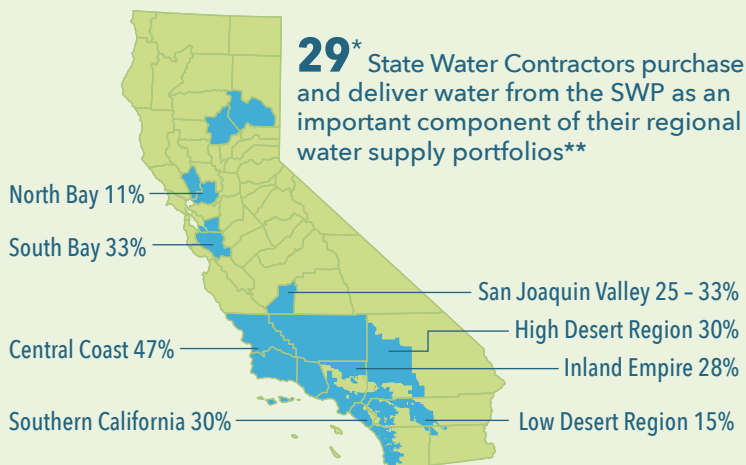
**50%** of California's water supply flows through the Delta and is delivered to **3 OUT OF 5 CALIFORNIANS**



**\$400** billion in contributions to California's economy by SWP water



**Important foundation** for local water supply projects, including groundwater recharge, recycling, storage and others



**29\*** State Water Contractors purchase and deliver water from the SWP as an important component of their regional water supply portfolios\*\*

\*Of the 29 State Water Contractors, 18 are currently participating in the Delta Conveyance Project  
\*\*Percentages represent regional water supplies dependent on reliable Delta infrastructure

## EXTENSIVE PUBLIC INPUT



### Environmental Review

**142-day** comment period, where **729 letters** and other communications totaling **7,300 individual comments** were received



### Community Benefits Program

Acknowledge and address the reality that project impacts are local to the Delta, but direct project benefits accrue to other parts of the state

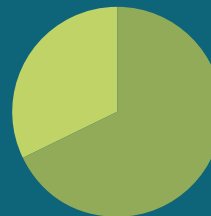


### Community Engagement

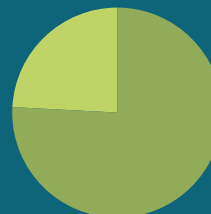
Engaged with Delta communities to hear their ideas and concerns through a **Stakeholder Engagement Committee** comprised of Delta residents, business owners and other stakeholders, and an [Environmental Justice community survey](#)

## SUPPORT FOR MODERNIZING WATER INFRASTRUCTURE

The public is highly concerned about the condition of state and local water infrastructure and a [recent poll](#) shows voters strongly support increased funding for water-related infrastructure and are extremely supportive of building a new tunnel.



**68%** of California voters rate the "condition of state and local water supply infrastructure like reservoirs, dams, canals, sewers and storm drains" as an extremely or very serious problem



**76%** of voters support building a new tunnel underneath the Sacramento-San Joaquin Delta to upgrade California's primary water delivery infrastructure



**SUPERIOR COURT OF THE STATE OF CALIFORNIA  
COUNTY OF SACRAMENTO**

**Department 36**

**Judge: Hon. Stephen P. Acquisto**

Related Case Nos. 24WM000006; 24WM000008; 24WM000009;  
24WM000010; 24WM000011; 24WM000014; 24WM000012;  
24WM000017; 24WM000062; 24WM000076

**DECLARATION OF  
CRAIG WALLACE  
IN SUPPORT OF CALIFORNIA  
DEPARTMENT OF WATER RESOURCES'  
EX PARTE APPLICATION**

1 I, Craig Wallace, do hereby state and declare as follows:

2 1. I am the State Water Project Manager at Kern County Water Agency (“Agency”). I  
3 have been employed by the Agency since January 2015 and have worked primarily on matters  
4 relating to the Agency’s water supplies.

5 2. Since January 2020, I have been employed in my current position as State Water  
6 Project Manager. In my current capacity, I am responsible for tracking the Agency’s water supply  
7 from the State Water Project (“SWP”), which conveys water across the Sacramento-San Joaquin  
8 River Delta (“Delta”), and is delivered to the Agency’s 14 member units. As part of my job duties, I  
9 regularly review scientific papers, technical reports and state and federal agency reports regarding  
10 relevant subject matters, including hydrologic and precipitation forecasting, historic hydrology in  
11 California, water supply planning and climate change.

12 3. I have a Bachelor of Science degree in civil engineering from California Polytechnic  
13 State University, San Luis Obispo and I obtained a Masters of Business Administration degree from  
14 the University of California, Davis. I have approximately 19 years of experience in the field of water  
15 resources.

16 4. I make this declaration of my own personal knowledge and my review of Agency  
17 records and the Department of Water Resources’ (DWR’s) documents cited in this declaration. I  
18 have personal knowledge of the manner in which the Agency’s records are kept and each was  
19 developed and adopted in the ordinary course of business. The sources of information at the time of  
20 preparation are such that I believe the records and citations referred to below to be trustworthy. If  
21 called as a witness, I could and would testify competently to the truth of the matters set forth herein.

22 5. The Agency is a public agency formed in 1961 under the Kern County Water Agency  
23 Act. The Agency serves as the local contracting entity in Kern County for the SWP and has entered  
24 into water supply contracts with its member units that allocate the Agency’s water supply under its  
25 SWP contract to provide water for agricultural and municipal and industrial uses of those member  
26 units and their customers.

27 6. The Agency also participates in a wide scope of water management activities,  
28 including water quality, flood control and groundwater operations to preserve and enhance Kern

County's water supply.

7. The Agency entered into a long-term contract with DWR in 1963 that gives the Agency participation rights in the SWP, meaning the Agency has the right to use the SWP conveyance system and the rights to a contracted water amount pursuant to an annual allocation based on availability. For example, under the Agency's SWP contract, a 100 percent allocation would mean it would be entitled to receive 982,730 acre-feet of what is referred to as "Table A" water from the SWP in that year.<sup>1</sup> But in an extremely dry year like 2022,<sup>2</sup> when the allocation was 5 percent, the Agency's allocation of Table A water was 49,137 acre-feet.

8. Since the SWP's inception, such contracts have required the Agency and other SWP contractors to assume full financial responsibility for the SWP's water supply-related capital expenditures and operations, maintenance, power, and replacement costs—regardless of the amount of SWP water the contracting agency receives in any given year. In other words, the SWP contractors do not purchase units of water, they pay for participation rights in the SWP. The Agency has the second largest SWP Table A allocation, behind only the Metropolitan Water District of Southern California, and the Agency is entitled to roughly 25 percent of the SWP's annual Table A allocation.

9. The Agency on average receives approximately 40 percent of its surface water supply through the SWP.

10. One of the many challenges facing water managers in California is maintaining water supply reliability in a state that has the highest variable hydrologic conditions in the nation.<sup>3</sup> In just the last five years, from 2019 through 2024, northern California experienced an unprecedented period of drought followed by its wettest year on record and then a subsequent wet year. This variability can also be experienced within the same year, as was the case in water year 2022-2023

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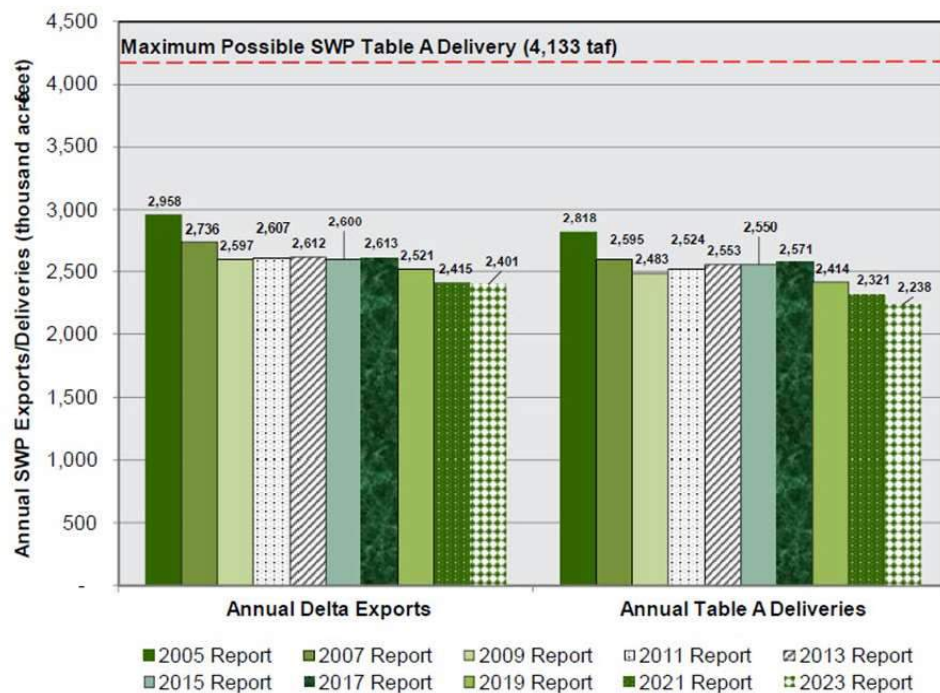
<sup>1</sup> One acre-foot equals about 326,000 gallons, or enough water to cover an acre of land, a little less than the size of a football field, one foot deep, and is about the amount used by three Southern California families in a year.

<sup>2</sup> A water year is defined as October 1–September 30.

<sup>3</sup> He, Minxue, Andrew Schwarz, Elissa Lynn, Michael Anderson (California Department of Water Resources). 2018. Projected Changes in Precipitation, Temperature, and Drought across California's Hydrologic Regions. California's Fourth Climate Change Assessment. Publication number: CCCA4-EXT-2018-002 at p. 1, available at <https://www.noaa.gov/sites/default/files/legacy/document/2020/Oct/07354626677.pdf>, last accessed July 17, 2024.

that began with the continuation of record dry conditions only to end with a near-record high amount of precipitation and snowpack. As explained below, other factors including the impacts of climate change, seismic activity and environmental regulations to protect endangered species further reduce SWP reliability. The Delta, where about half of the state's total streamflow is received and is the location of SWP water diversion facilities, is susceptible to these factors. Due to regulatory restrictions on SWP operations imposed to protect sensitive fish species in the Delta and other effects from climate change, the average water supply yield of the SWP to water contractors receiving SWP water diverted from the Delta declined by roughly 20 percent, from 2,958 thousand acre-feet in the 2005 Delivery Capability Report to 2,401 thousand acre-feet in the Draft 2023 Delivery Capability Report, a drop of 557,000 acre-feet, as shown in Figure 6-1 of DWR's Draft Delivery Capability Report that follows.<sup>4</sup>

**Figure 6-1. Estimated Average Annual Delta Exports and SWP Table A Water Deliveries (Excluding Butte County, Yuba City, and Plumas County FCWCD), for 2005 through 2023 Reports**



<sup>4</sup> May 2024 Draft State Water Project Delivery Capability Report 2023, Figure 6-1 at p. 6.50, available at [https://data.cnra.ca.gov/dataset/d32744ae-2e11-4d6c-aa49-cc17085e4d30/resource/e6319787-5219-4bc5-852f-111c800f8dd7/download/draft\\_dcr2023\\_v12.pdf](https://data.cnra.ca.gov/dataset/d32744ae-2e11-4d6c-aa49-cc17085e4d30/resource/e6319787-5219-4bc5-852f-111c800f8dd7/download/draft_dcr2023_v12.pdf).



1           11.     DWR’s modeling of the impacts of climate change and sea level rise on SWP  
2 supplies shows further declines of 570,000 acre-feet in long-term average reliability under a 2070  
3 scenario, whereas with the DCP, known as Alternative 5 (Bethany Alternative) in the Final  
4 Environmental Impact Report, those declines would be lowered to 167,000 acre-feet, as reported in  
5 DWR, Facts About the Economic Value of the Delta Conveyance Project, Benefits, Costs,  
6 Commitments, and Innovations (2024) at p. 2, chart titled State Water Project Deliveries, a true and  
7 correct copy of which is attached as **Exhibit A** and publicly available at [https://water.ca.gov/-](https://water.ca.gov/-/media/DWR%20Website/Web%20Pages/Programs/Delta%20Conveyance/Public%20Information/DCP_Economic%20Value%20Brochure_2024_Final.pdf)  
8 [/media/DWR%20Website/Web%20Pages/Programs/Delta%20Conveyance/Public%20Information/](https://water.ca.gov/-/media/DWR%20Website/Web%20Pages/Programs/Delta%20Conveyance/Public%20Information/DCP_Economic%20Value%20Brochure_2024_Final.pdf)  
9 [DCP\\_Economic%20Value%20Brochure\\_2024\\_Final.pdf](https://water.ca.gov/-/media/DWR%20Website/Web%20Pages/Programs/Delta%20Conveyance/Public%20Information/DCP_Economic%20Value%20Brochure_2024_Final.pdf), last visited July 15, 2024.

10           12.     Given California’s hydrologic variability, the Agency takes water management  
11 actions for both surplus and shortage conditions. These water management actions may include  
12 storage puts and withdrawals, purchase of transfer water supplies, a call for extraordinary drought  
13 conservation, public education on water use efficiency, and the development of additional supply or  
14 storage programs. As the water year progresses, the Agency is ready to implement the appropriate  
15 water management actions and adjust as supply and demand balance conditions change.

16           13.     The Agency has invested \$38.2 million in the initial planning efforts for the Delta  
17 Conveyance Project, which projects to increase the reliability of the SWP as discussed below.

18           14.     The Agency has invested a total of \$72.4 million in planning efforts for two prior  
19 Delta conveyance proposals and the current Delta Conveyance Project.

20           15.     The Agency made these investments to attempt to safeguard its SWP water supplies  
21 in light of the projected reduction in SWP allocations over time and the expected effects of climate  
22 change and regulatory restrictions on water supplies traversing the Delta.

23           16.     Managing through dry periods requires both actions to reduce demands as well as  
24 maximizing storage opportunities during wet periods to be able to draw upon stored supplies in dry  
25 periods. The Delta Conveyance Project is designed to further this key objective by improving  
26 opportunities to capture more water in wet years and to periodically divert water during high river  
27 flows from storm runoff water in otherwise dry years.

28     ///

1           17. For example, even in a “critical” hydrologic water year like 2021-2022,<sup>5</sup> there were  
2 opportunities to capture additional supplies following two storm events. DWR, which determines the  
3 available SWP supplies to allocate in a given year, conducted a “hindcast” calculation for the SWP  
4 allocation for 2021 that modeled SWP supplies assuming the Delta Conveyance Project had been in  
5 place and operating in compliance with regulatory standards for protection of fisheries and water  
6 quality objectives. A true and correct copy of the results of this modeling is attached hereto as  
7 **Exhibit B**, titled Delta Conveyance Project Modernizing California’s Water Infrastructure 2024 Fast  
8 Facts and is publicly available on DWR’s website at [https://water.ca.gov/-/media/DWR-](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Delta-Conveyance/Public-Information/DCP_Fast-Facts_Final.pdf)  
9 [Website/Web-Pages/Programs/Delta-Conveyance/Public-Information/DCP\\_Fast-Facts\\_Final.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Delta-Conveyance/Public-Information/DCP_Fast-Facts_Final.pdf). It  
10 found that an additional 236,000 acre-feet could have been captured, had the Delta Conveyance  
11 Project been in place, which is enough water for roughly 850,000 households for one year. For the  
12 Agency, its share of this supply equates to approximately 25,960 acre-feet of additional supplies.

13           18. DWR conducted a similar “hindcast” exercise for the start of calendar year 2024 and  
14 identified that an additional 909,000 acre-feet of water could have been captured between January 1  
15 and April 11, 2024. (**Exh. B.**) DWR stores supplies captured from the Delta in San Luis Reservoir, a  
16 critical reservoir in the SWP system. Storage levels in San Luis Reservoir are an important  
17 consideration for DWR when setting the SWP allocation. The earlier DWR can fill San Luis  
18 Reservoir the sooner DWR can increase and set the final SWP allocation. Finalizing the SWP  
19 allocation earlier in a given year offers numerous benefits. It supports State Water Contractors in  
20 their decision-making processes, which often have financial implications, such as the need to  
21 purchase additional supplies, to implement crop production, and to impose water restrictions. Early  
22 SWP allocation information can help avoid costly and unnecessary actions. Additionally, it assists  
23 DWR in meeting regulatory requirements which are typically more stringent from April to June.

24           19. Such substantial increases in water supplies would significantly benefit the Agency  
25 and would have increased the Agency’s Table A allocation by approximately 99,990 acre-feet for  
26

---

27 <sup>5</sup> DWR calculates in an index the unimpaired flows of the Sacramento, American, Feather and Yuba Rivers, key river  
28 systems that help determine the annual SWP supply availability. This index, generally referred to as the “Sacramento  
River Index” is used to determine the water year type classification and is broken down into five categories, “Wet”,  
“Above Normal”, “Below Normal”, “Dry” and “Critical.”

1 the 2023-2024 water year. That additional water supply also likely would have increased the SWP  
2 allocation DWR would have allowed, not only for 2023-2024, but in prior years as well.

3 20. Given the arid nature of Kern County, the Agency's member units could put such  
4 additional water supplies to use, including to reduce the need for groundwater production in the  
5 overdrafted local basins, which is subject to regulation and significant restrictions over time under  
6 the Sustainable Groundwater Management Act of 2014.

7 21. The Delta Conveyance Project supports the Agency's objective of capturing and  
8 storing water in wet years for use in dry years. The modeling above indicates the Delta Conveyance  
9 Project would expand on this objective by capturing supplies during high flows from periodic  
10 storms, which can occur even in "below normal" or "dry" water years. The Agency can take delivery  
11 of these SWP supplies to help meet existing demands and has significant capacity to store surplus  
12 water for future use. The Delta Conveyance Project is an important element of the Agency's goal to  
13 maintain reliability of its imported water supplies.

14 22. The Agency is concerned that delaying geotechnical investigatory work will result in  
15 delays to the commencement of construction of the Delta Conveyance Project and thus increased  
16 costs that will reduce the benefits the Agency will derive from that project.

17 I declare under penalty of perjury under the laws of the State of California that the foregoing  
18 is true and correct. Executed this 23rd day of July, 2024 at Bakersfield, California.

19  
20  
21 

22 Craig Wallace  
23  
24  
25  
26  
27  
28

**EXHIBIT A  
TO WALLACE  
DECLARATION**



## Facts About the Economic Value of the Delta Conveyance Project

### Benefits, Costs, Commitments, and Innovations



**The Delta Conveyance Project** is one of California's most important climate adaptation projects. Extreme weather is leading to more rain, less snow, and a limited ability to capture and move water. The Delta Conveyance Project will protect supplies by capturing water when it is plentiful to better endure dry years and adapt to extreme weather. It protects against the threat posed by earthquakes, sea level rise and levee failure. And it helps resolve conflicts in the south Delta to both protect fish and provide needed water supply.

### Need for Protecting the State Water Project

The State Water Project captures and moves water all over California, from the Bay Area to the Mexico border and communities in between. It is an affordable source of high-quality, clean, and safe water for 27 million Californians and 750,000 acres of agriculture. If the State Water Project service area were a nation, it would represent the eighth largest economy in the world. And it is an important foundation for an entire suite of water supply and resiliency programs implemented by local public water agencies.

### Economic Benefits

The Delta Conveyance Project passes the benefit-cost test. It enables water needs to be satisfied and water supply reliability to be maintained. It protects against a declining baseline of supplies, allows SWP to adapt against climate change, guards against earthquake risks, and helps resolve conflicts in the south Delta by improving operational flexibility.

### Cost Estimate

An updated cost estimate was prepared by the Delta Conveyance Design and Construction Authority (DCA), using a detailed and rigorous approach, the cost of the project is estimated to be \$20.1B in real 2023 (undiscounted) dollars. A preliminary cost assessment conducted in 2020, early in the design process, showed the project would cost about \$16B, which accounting for inflation to 2023 would result in a similar cost. This demonstrates that even as details are added, and refinements are made to the program, costs are holding steady. The DCA is also evaluating potential design or construction innovations that would help manage costs for the program.

## Benefits Outweigh Costs

After adjusting to account for the value of money over time (see page 3 regarding “discounting”), the benefits are \$37.96 billion and the costs are \$17.26 billion. This results in a benefit-cost ratio of 2.2, meaning that the benefits outweigh the costs and every dollar spent generates \$2.20 in benefits.

The project passes the benefit-cost ratio test, making the project economically viable and robust under all future scenarios analyzed.

Benefits are quantified in four different areas: Urban water supply reliability, agricultural water supply, water quality, and seismic reliability.

The primary benefit of the DCP is that the project protects against the expected effects of climate change and sea level rise, avoiding future shortages and maintaining water supply reliability.

## Understanding Benefits

### Urban Water Supply Reliability:

- More SWP deliveries under wetter periods allow agencies to:
  - Fill storage more frequently
  - Enter drought periods with higher reserves
  - Impose fewer periods of mandatory rationing
  - Reduce severity and frequency of shortages
- Urban economic benefits measured as consumers’ willingness to pay (WTP) to avoid shortages.

### Agricultural Water Supply

- Agricultural value of water based on the UC Davis Statewide Agricultural Production model and water market transaction data from Nasdaq Veles CA Water Index.

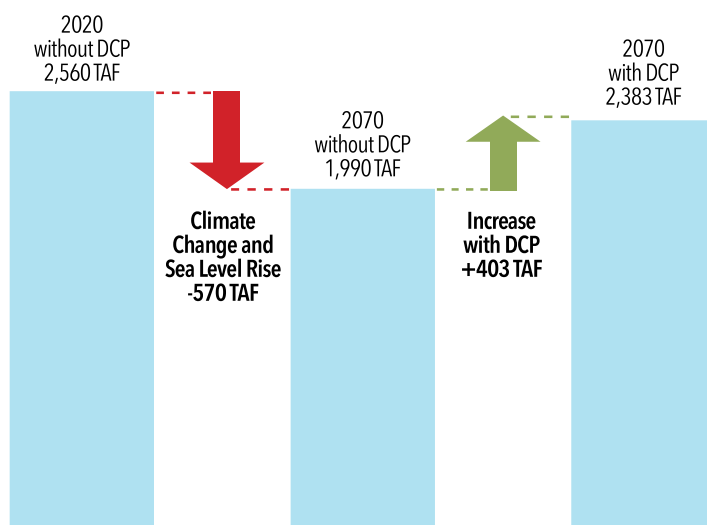
### Water Quality:

- Lower salinity improves water quality.
- For urban agencies, this improves taste, the useful life of appliances, the cost of water softening, for example.
- For agricultural agencies, the cost is based on reducing requirements for additional irrigation water needed to flush salts from the root zone of crops.

### Earthquake Disruption:

- Avoiding potentially significant disruption to state-wide water supply caused by earthquakes saves time, saves money and protects water quality.

## State Water Project Deliveries:



## Missed Opportunity

If the Delta Conveyance Project were operational during the big winter storms of winter 2021-2022, January 1 through May 9, 2024, a significant amount of water could have been captured and moved.

Winter 2021-2022	January 2023	Jan 1-May 9, 2024
<b>Amount of water that could have been captured:</b>		
<b>236,000</b> acre-feet	<b>228,000</b> acre-feet	<b>909,000</b> acre-feet
<b>That's enough water to supply:</b>		
Over <b>2.5 million</b> people for one year	Over <b>2.3 million</b> people for one year	Over <b>9.5 million</b> people for one year
<b>or</b>		
Nearly <b>850,000</b> households for one year	Nearly <b>800,000</b> households for one year	Over <b>3.1 million</b> households for one year





## Assumptions that influence benefits and costs:

- Yield: assumed to provide about 403,000 acre-feet annually on average
- The cost of the project: assumed to be \$20.1 billion in undiscounted 2023 dollars
- Real discount rates: between 2% and 1.4% (Federal Office of Management and Budget, Circular A-4 guidance)
- Environmental mitigation: \$960 million
- Construction period: 15 years
- Life span of the project: 100 years



## Summary of Benefits and Costs

	Main Cost Estimate	Cost with DCA Recommended Innovation Savings
<b>Present Value of Future Benefits</b>		
	2023 (\$M)	2023 (\$M)
Urban Water Supply and Reliability	\$33,300	\$33,300
Agricultural Water Supply and Reliability	\$2,268	\$2,268
Urban Water Quality	\$1,330	\$1,330
Agricultural Water Quality	\$90	\$90
Seismic Reliability Benefits (Water Supply)	\$969	\$969
Seismic Reliability Benefits (Water Quality)	\$2	\$2
<b>Total Benefits</b>	<b>\$37,960</b>	<b>\$37,960</b>
<b>Present Value of Future Costs</b>		
	2023 (\$M)	2023 (\$M)
Construction Costs	\$11,486	\$10,723
Other Project Costs	\$3,021	\$2,852
Community Benefit Program	\$153	\$153
Environmental Mitigation	\$735	\$735
O & M Costs*	\$1,697	\$1,697
Environmental Impacts after Mitigation	\$167	\$167
<b>Total Costs</b>	<b>\$17,259</b>	<b>\$16,327</b>
<b>Benefit-Cost Ratio</b>	<b>2.20</b>	<b>2.33</b>

\*O&M Costs: includes operations and maintenance costs for project facilities





## Understanding Discounting and the “Time Value of Money”

### How does a Benefit-Cost Analysis account for inflation?

Inflation is the general increase in the price of goods and services over time, and it poses a challenge for benefit-cost analysis. To ensure a consistent comparison, all future costs and benefits reflect 2023 prices, a method known as using “real prices” in economic terms. This approach removes the distorting effects of inflation, allowing present-day expenditures to be directly comparable to future benefits and providing a clear basis for evaluating a project’s economic viability.

### How would unexpected inflation affect the analysis?

If inflation impacts future costs and benefits similarly, changes in the inflation rate will not affect the conclusions of the benefit-cost analysis. However, if inflation disproportionately affects costs or benefits, it could skew the analysis. This is unlikely for the DCP, where benefits tied to water rates and costs associated with construction expenses generally escalate in tandem.

### Why does the Benefit-Cost Analysis account for the time value of money (e.g. discount future costs and benefits)?

The time value of money is a recognition that money available today is worth more than the same amount in the future because it can be used immediately—to pay for things or to invest and earn more money. This concept is crucial, especially in long-term projects like the DCP, which assumes a 15-year construction period starting in 2029 followed by a 100-year operational project life.

### How is the real discount rate applied?

The ‘real discount rate’ used in this process is determined based on federal guidance and calculated by taking the returns on treasury bills and subtracting the rate of inflation. This discounting process, distinct from the previously discussed use of real prices to account for inflation, helps prioritize projects that offer the best economic returns over their lifecycle, ensuring efficient allocation of resources.

### Why is the cost of the project lower in the Benefit-Cost Analysis and higher in the cost estimate?

The cost estimate and benefit-cost analysis are equivalent but expressed differently. The cost estimate is presented in real 2023 dollars. The benefit-cost analysis is shown as “present value.” Present value accounts for various distortions to the value of money over time, including inflation and the potential for investment and it is calculated using a “discount” rate.



## Other Important Considerations:

### Climate change

Climate change and sea level rise are expected to significantly reduce future SWP deliveries. Future precipitation and runoff are forecasted using multiple climate scenarios that show an annual loss of more than half a million acre-feet by 2070. The primary benefit-cost analysis assumes 1.8 feet of sea level rise by 2070. Multiple sensitivity analyses test robustness of this assumption. In each of the scenarios tested, the benefits of the project significantly exceed costs.

### Transfers and Trading

If there are water years that a Public Water Agency's supplies exceed local needs, they may choose to transfer those supplies and the associated costs, consistent with water law and existing water supply contracts. This flexibility will allow PWAs to preserve water supplies for local needs and to transfer those excess supplies—and costs—to other parts of the state, particularly those with limited access to drinking water.

### Unmitigated Environmental Impacts

Some environmental impacts are expected to be significant and unavoidable. Where possible, the cost of those impacts has been considered and included. This results in a cost of about \$153 million for lost agricultural land, air quality, noise, and transportation impacts.

### Cost of Doing Nothing

Failing to implement the Delta Conveyance Project has real financial consequences resulting from climate change, sea level rise and seismic events.



## Some benefits of the Delta Conveyance Project are not monetized in the benefit-cost analysis and yet are compelling for decision-makers:

- Increased operational flexibility: Resolving conflicts in the south Delta between fish and water supply goals.
- Community Benefits Program: \$200 million investments for high-priority local Delta projects, in addition to local business utilization, job training, and infrastructure leave-behinds that have potential to provide benefits that are ultimately likely to represent values beyond this funding commitment.
- Job creation: The project will create 5,000 high-paying jobs.
- Groundwater supplies: Protecting affordable surface water supplies relieves pressure on dwindling or constrained groundwater sources.



## Cost Estimate: Conservative, Comprehensive, Based on Industry Standards

DWR approved the Bethany Alignment of the Delta Conveyance Project in December 2023 after concluding the project Environmental Impact Report (EIR). This approved project provided the basis for an updated cost estimate.

The estimate is comprehensive, conservative, and reflects industry standard methodologies. It:

- Is based on the 6,000 cubic feet per second Bethany Reservoir Alternative as outlined in the project Final EIR
- Includes construction costs and other costs, like planning, management, land, mitigation, power and community benefits
- Uses cost estimating approach that builds up based on labor, equipment, materials, and schedule
- Uses a thorough reconciliation process with independent cost-estimating teams and resolves cost differences
- Assumes a reasonable 30% contingency to account for uncertainties

## Methodology: A More Rigorous Approach

The updated cost estimate uses a more rigorous approach for concept-level designs. It:

- Uses engineering documentation in drawings and technical reports
- Develops costs based on unit rates, quantities, and durations
- Replaces most cost “allowances” with actual estimates and material price quotes
- Uses better understanding of ground conditions, schedule, and risks

**The cost estimate has been prepared by the Delta Conveyance Design and Construction Authority, a joint powers agency comprised of the participating Public Water Agencies responsible for funding, and ultimately building, the project.**



## Total Project Costs Summary\*

Feature	Total Cost (\$M)	Feature	Total Cost (\$M)
<b>Construction Costs</b>		<b>Other Project Costs</b>	
Intakes	\$1,714	DCO Oversight	\$426
Main Tunnels	\$6,353	Program Management Office	\$668
Pumping Plant and Surge Basin	\$2,536	Engineering/Design/Construction Management	\$2,167
Aqueduct Pipe and Tunnels	\$563	Permitting and Agency Coordination	\$67
Discharge Structure	\$99	Total Planning/Design/Construction Management	<b>\$3,328</b>
Access Logistics and Early Works	\$253	Land	\$158
Communication	\$13	DWR Mitigation	\$960
Restoration	\$17	Power	\$415
Construction Subtotal	<b>\$11,548</b>	CCWD Settlement Agreement	\$47
Contingency (30%)	\$3,464	Community Benefits Program	\$200
Total Construction Costs	<b>\$15,012</b>	Total Other Costs	<b>\$1,780</b>

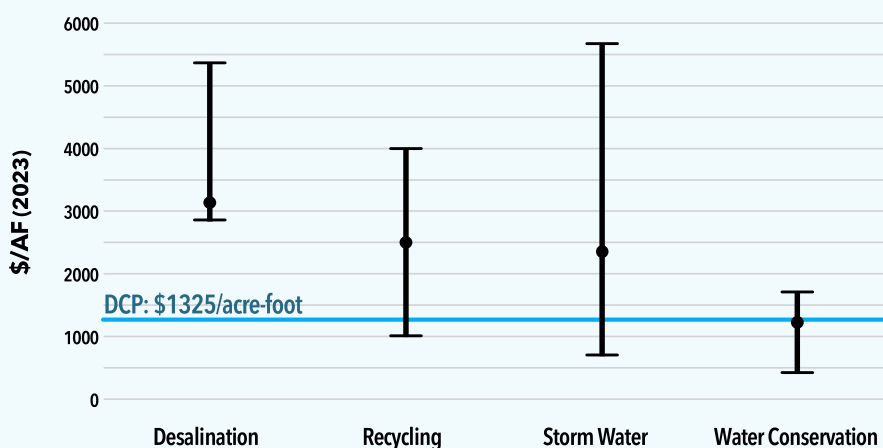
\*Costs are in undiscounted 2023 dollars.

## Total Project Costs = \$20,120

Cost Category	Total Project Cost Estimate (\$M)	Total Project Cost with Secondary Innovations Estimate (\$M)
Construction Costs	\$15,012	\$14,008
Other Project Costs	\$5,108	\$4,886
Total Project Costs	<b>\$20,120</b>	<b>\$18,894</b>

## Comparing the Delta Conveyance Project to Alternative Supplies

The per-acre cost of the Delta Conveyance Project is less than the costs of most other types of supplies. Alternative supplies also lack the ability to provide an equivalent scale of supply and are not able to protect the long-term stability of State Water Project supplies. While a full suite of options is being considered for California and local water purveyors, the Delta Conveyance Project is the most viable and irreplaceable.



## Innovations Identify Significant Cost Savings

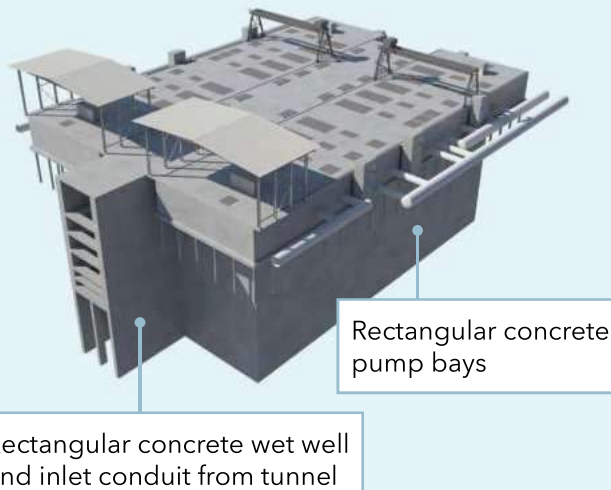
Value engineering is a part of the design phase of a project. It is used to cut costs, save time, reduce risk, or reduce community or environmental disturbances. The approved project represents a conservative configuration for analysis of impacts. An initial review of potential design and construction innovations shows an opportunity to reduce costs by about \$1.2 billion.\*

### Innovation Example

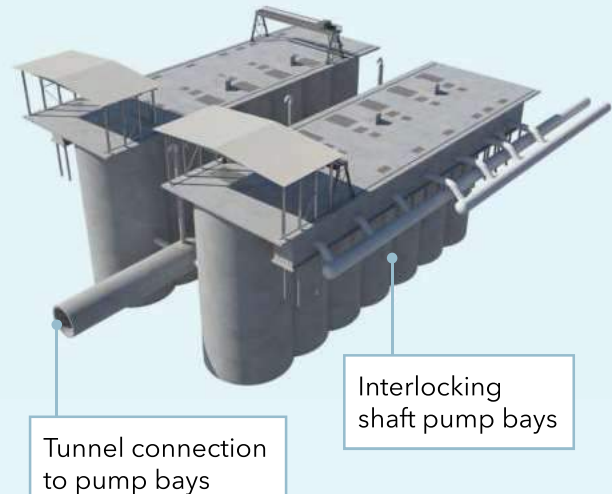
In the Engineering Project Report, the Bethany Reservoir Pumping Plant (BRPP) is a below-ground structure with vertical rectangular diaphragm walls and consists of dry-pit pump bays housing the pumping plant equipment and piping plus an adjoining rectangular concrete wet well and wet well inlet conduit connected to the tunnel reception shaft located along the center of the overall structure.

This innovation would replace the vertical, deep box diaphragm wall arrangement with interlinking shafts of diaphragm wall construction that would house the pumping plant equipment and piping and a tunnel that would replace the wet well and wet well inlet conduit, greatly reducing construction quantities and expediting schedule due to construction sequence improvements.

#### CURRENT PUMPING PLANT DESIGN



#### INNOVATION CONCEPT



### INNOVATION ADVANTAGES:

- Reduces construction quantities (soil excavation, concrete, rebar)
- Shortens construction schedule by 981 days
- Reduces direct construction cost by \$138,720,000
- No changes to above-ground site configuration and surface features

\*Does not represent changes to the approved project description.

### For More Information



For more information on cost, benefits, funding and financing of the State Water Project and the Delta Conveyance Project, view this [FAQ](#) or use the QR code.

For more about the Delta Conveyance Project, visit: [water.ca.gov/deltaconveyance](http://water.ca.gov/deltaconveyance)

For more about the project permitting process, visit: [deltaconveyanceproject.com](http://deltaconveyanceproject.com)

For more information about project design and engineering, visit: [dcdca.org](http://dcdca.org)



**EXHIBIT B  
TO WALLACE  
DECLARATION**



# Delta Conveyance Project

Modernizing California's Water Infrastructure | 2024



## Fast Facts

### WATER SUPPLY RELIABILITY

The Delta Conveyance Project protects against future water supply losses caused by climate driven weather extremes, sea level rise and earthquakes. It will help the State Water Project (SWP) safely capture, move and store water from big, but infrequent, storm events.



Climate change means more rain in the winter and more runoff and river flows than before.



According to the United States Geological Survey there is a **72% chance of a 6.7 or greater magnitude earthquake** occurring in the Bay Area by 2043 that could cause levees in the Delta to fail, crippling the state's ability to deliver clean water.



Significant sea level rise predicted by **2100**.



Sierra snowpack, the state's largest source of surface water, will be reduced by **65%** on average by century's end.

### MISSED OPPORTUNITY

If the Delta Conveyance Project was operational during the big winter storms of winter 2021-2022, January 1 through May 9, 2024, a significant amount of water could have been captured and moved.

Winter 2021-2022	January 2023	Jan 1-May 9, 2024
Amount of water that could have been captured:		
<b>236,000</b> acre-feet	<b>228,000</b> acre-feet	<b>909,000</b> acre-feet
That's enough water to supply:		
Over <b>2.5 million</b> people for one year	Over <b>2.3 million</b> people for one year	Over <b>9.5 million</b> people for one year
or		
Nearly <b>850,000</b> households for one year	Nearly <b>800,000</b> households for one year	Over <b>3.1 million</b> households for one year
Percent of the total volume of water exported by the SWP per year		
<b>45%</b> water year 2021	<b>40%</b> water year 2022	<b>100%</b> 2024 exports

### MODERNIZED WATER INFRASTRUCTURE

Use of design and engineering innovations have resulted in a project that is responsive to community needs and lessens environmental effects to the extent feasible.



**1 below-ground tunnel**  
for approximately  
45 miles

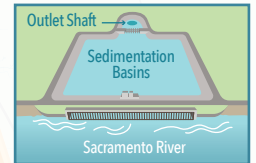
**100-130 feet**  
approximate depth  
range of tunnel

**Earthquake resilient**  
due to significantly less  
ground motion than at  
the surface during a  
seismic event

**36 feet**  
tunnel diameter  
(inside)

**18 inches** thickness  
of tunnel segments

**2 new intakes**  
in the North Delta with  
a total capacity of 6,000  
cubic feet per second (cfs)



**T-shaped fish screens**, with  
cleaning apparatus below  
surface 1,500 feet long

**Pumping plant**  
connects the tunnel directly to  
the existing Bethany Reservoir  
on the California Aqueduct



Clifton Court Forebay

Bethany Reservoir

Bethany Complex

California Aqueduct

Tracy

STOCKTON



Facilities designed to withstand **200 year flood event**  
on top of **10.2 feet of sea level rise**



Project construction will create over  
**5,000 good-paying jobs** at the peak





# Delta Conveyance Project

Modernizing California's Water Infrastructure | 2024



## IMPORTANT WATER SUPPLY

The [State Water Project](#) is an important water supply for California that can't be replaced.



### 27 MILLION PEOPLE

receive clean, safe and affordable water from the SWP, including nearly 7 million disadvantaged community members



### 750,000 ACRES OF FARMLAND

are irrigated with SWP water



Water supplied by the SWP sustains the world's **FIFTH LARGEST ECONOMY**



**2/3** of California's water originates in the **SIERRA NEVADA MOUNTAINS**



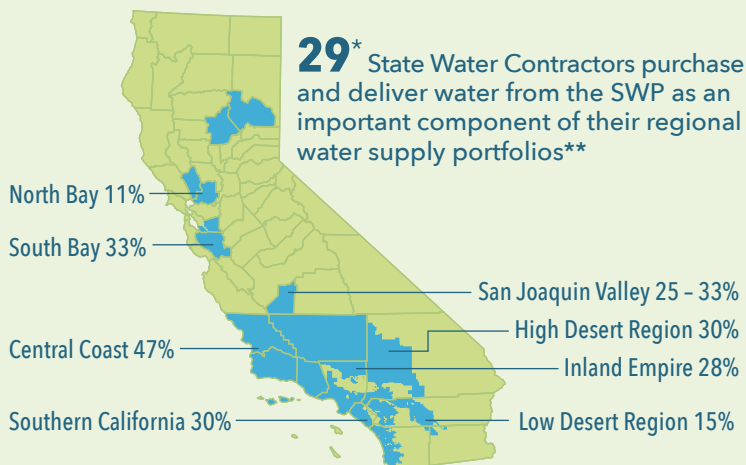
**50%** of California's water supply flows through the Delta and is delivered to **3 OUT OF 5 CALIFORNIANS**



**\$400** billion in contributions to California's economy by SWP water



**Important foundation** for local water supply projects, including groundwater recharge, recycling, storage and others



**29\*** State Water Contractors purchase and deliver water from the SWP as an important component of their regional water supply portfolios\*\*

\*Of the 29 State Water Contractors, 18 are currently participating in the Delta Conveyance Project  
\*\*Percentages represent regional water supplies dependent on reliable Delta infrastructure

## EXTENSIVE PUBLIC INPUT



### Environmental Review

**142-day** comment period, where **729 letters** and other communications totaling **7,300 individual comments** were received



### Community Benefits Program

Acknowledge and address the reality that project impacts are local to the Delta, but direct project benefits accrue to other parts of the state

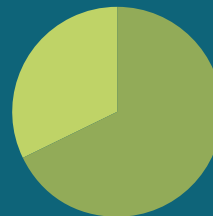


### Community Engagement

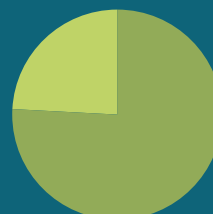
Engaged with Delta communities to hear their ideas and concerns through a **Stakeholder Engagement Committee** comprised of Delta residents, business owners and other stakeholders, and an [Environmental Justice community survey](#) ➔

## SUPPORT FOR MODERNIZING WATER INFRASTRUCTURE

The public is highly concerned about the condition of state and local water infrastructure and a [recent poll](#) ➔ shows voters strongly support increased funding for water-related infrastructure and are extremely supportive of building a new tunnel.



**68%** of California voters rate the "condition of state and local water supply infrastructure like reservoirs, dams, canals, sewers and storm drains" as an extremely or very serious problem



**76%** of voters support building a new tunnel underneath the Sacramento-San Joaquin Delta to upgrade California's primary water delivery infrastructure

