1	Appendix G
2	Alternative 4A (Proposed Project)
3	Compatibility with the Delta Plan

1 2

3

Appendix G Alternative 4A (Proposed Project) Compatibility with the Delta Plan

This appendix is intended to discuss an approach that may be considered for Alternative 4A, the 4 5 proposed project, to meet the Delta Plan Consistency requirements. This appendix is not a formal certification of consistency with the Delta Plan and it is possible that coordination with the Delta 6 7 Stewardship Council and possible, relevant future Delta Plan amendments may affect the approach 8 to compliance with the Delta Reform Act and consistency with the Delta Plan. This section also 9 includes brief descriptions of the Delta Reform Act, Delta Stewardship Council, and the Delta Plan. An ongoing, parallel process will continue through the development of the Final Environmental 10 Impact Report/Environmental Impact Statement (EIR/EIS) to coordinate with the Delta 11 Stewardship Council, submit formal consistency documentation, and develop an official consistency 12 13 certification. Appendix 3I from the Draft EIR/EIS discusses how the Bay Delta Conservation Plan (BDCP) would be incorporated into the Delta Plan as an approved Habitat Conservation 14 Plan/Natural Community Conservation Plan (HCP/NCCP). The revised proposed project, identified 15 in the Partially Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS), no longer includes an 16 HCP/NCCP (see Section 1. Introduction, of the RDEIR/SDEIS for more information): therefore 17 18 Alternative 4A will not be incorporated into the Delta Plan and will follow a different process to demonstrate consistency with the Delta Plan. That process is discussed below with references to 19 relevant information in the RDEIR/SDEIS and the Delta Plan. 20

21G.1Delta Reform Act and the Delta Stewardship22Council

The Sacramento–San Joaquin Delta Reform Act of 2009 (California Water Code Section 85000 et seq.), established an independent State agency, the Delta Stewardship Council (DSC) to further the co-equal goals of ecosystem restoration and a reliable water supply. The DSC is charged with the development and implementation of the comprehensive Delta Plan.

- The Delta Reform Act gave the DSC direction and authority to serve two primary governance roles: (1) set a comprehensive, legally enforceable direction for how the State manages important water and environmental resources in the Delta through the adoption of a Delta Plan, and (2) ensure coherent and integrated implementation of that direction through coordination and oversight of
- 31 State and local agencies proposing to fund, carry out, and approve Delta-related activities.

G.2 The Delta Plan

The Delta Reform Act of 2009 establishes major new state policy in the Delta in an effort to advance the "two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem" (Water Code, Section 85054). This significant step forward in addressing historic problems in the Delta creates requirements for accomplishing the two "coequal goals," as well as system of shared responsibility and authority among state and local agencies. The

- 1 Act created the Council, and as one of its first milestones, required the Council to develop a Delta
- 2 Plan that furthers the coequal goals (Water Code, Sections 85200, 85300 et seq.). California
- 3 Department of Water Resources (DWR) has significant interests in the Council's Delta Plan due to its
- 4 role as the operator of the State Water Project (SWP) and related Delta facilities. DWR
- 5 responsibilities in operating the SWP involve compliance with regulatory requirements, including
- 6 those of the Council in evaluating projects as consistent with the Delta Plan's coequal goals.

7 G.3 Delta Plan Consistency Process

8 The state or local agency that proposes to undertake a covered action, prior to initiating the 9 implementation of that covered action, is required to file a Certification of Consistency with the 10 Delta Stewardship Council using the online form found on the Delta Stewardship Council's website. Detailed findings must be included to demonstrate how the covered action is consistent with all 11 12 relevant policies of the Delta Plan. The online form prompts the agency for the requirements to be included and may be uploaded to the form. Typically, the lead agency, for purposes of California 13 Environmental Quality Act (CEQA) compliance, will file the Certification of Consistency with the 14 Delta Stewardship Council. 15

- 16 The Delta Reform Act defines a "covered action" as (Water Code Section 85057.5(a)):
- ...a plan, program, or project as defined pursuant to Section 21065 of the Public Resources Code that
 meets all of the following conditions:
- 19 1. Will occur, in whole or in part, within the boundaries of the Delta or Suisun Marsh;
- 20 2. Will be carried out, approved, or funded by the state or a local public agency;
- 21 3. Is covered by one or more provisions of the Delta Plan;
- 4. Will have a significant impact on the achievement of one or both of the coequal goals or the
 implementation of government-sponsored flood control programs to reduce risks to people,
 property, and state interests in the Delta.
- A state or local agency that proposes to carry out, approve, or fund a plan, program, or project must determine whether that plan, program, or project is a covered action. That determination must be reasonable, made in good faith, and consistent with the Delta Reform Act and relevant provisions of the Delta Plan. If requested, DSC staff will meet with an agency's staff during early consultation to review consistency with the Delta Plan and to offer advice as to whether the proposed plan, program, or project appears to be a covered action.
- Once a state or local agency has determined that their plan, program, or project is a covered action under the Delta Plan, they are required to submit a written certification to the DSC, with detailed findings, demonstrating that the covered action is consistent with the Delta Plan (Water Code Section 85225)
- 34 Section 85225).
- 35 If an agency determines that a proposed plan, program, or project is not a covered action, that
- 36 determination is not subject to DSC regulatory review. The agency determination is, however,
- 37 subject to judicial review as to whether it was reasonable, made in good faith, and is consistent with
- 38 the Delta Reform Act and relevant provisions of the Delta Plan.

- 1 The DSC has developed a discretionary checklist that agencies may use to facilitate the process, as
- 2 well as certification forms and related materials, available at:
- 3 http://coveredactions.deltacouncil.ca.gov/certification_process.aspx

4 G.4 Consistency Requirements

Covered actions, in order to be consistent with the Delta Plan, must be consistent with Delta Plan
regulatory requirements listed in Appendix B of the Delta Plan and listed below. The DSC
acknowledges that some requirements may not be feasible or relevant to the covered action. In
these cases, the agency may still file a certification of consistency if the overall project is consistent
with the co-equal goals. Certifications of consistency must include detailed findings that address
each of the following requirements:

- Mitigation Measures (23 California Code of Regulations [CCR] Section 5002)
- Best Available Science (23 CCR Section 5002)
- Adaptive Management (23 CCR Section 5002)
- Reduce Reliance on the Delta through Improved Regional Water Self-Reliance (23 CCR Section 5003)
- Transparency in Water Contracting (23 CCR Section 5004)
- Conservation Measure (23 CCR Section 5002)
- Delta Flow Objectives (23 CCR Section 5005)
- Restore Habitats at Appropriate Elevations (23 CCR Section 5006)
- Protect Opportunities to Restore Habitat (23 CCR Section 5007)
- Expand Floodplains and Riparian Habitats in Levee Projects (23 CCR Section 5008)
- Avoid Introductions of and Habitat for Invasive Nonnative Species (23 CCR Section 5009)
- Locate New Urban Development Wisely (23 CCR Section 5010)
- Respect Local Land Use When Siting Water or Flood Facilities or Restoring Habitats (23 CCR
 Section 5011)
- Prioritization of State Investments in Delta Levees and Risk Reduction (23 CCR Section 5012)
- Require Flood Protection for Residential Development in Rural Areas (23 CCR Section 5013)
- Protect Floodways (23 CCR Section 5014)
- Floodplain Protection (23 CCR Section 5015)
- 30 CEQA requires (see CEQA Guidelines Section 15125(d)) that a "...EIR shall discuss any
- 31 inconsistencies between the proposed project and applicable general plans and regional plans." The
- 32 proposed project, California Water Fix, is consistent with the requirements of the Delta Plan. The
- 33 following summarizes the key elements of California Water Fix that demonstrate consistency with
- 34 the Delta Plan.

1 G.4.1 Mitigation Measures

The proposed project (Alternative 4A) identifies specific mitigation measures proposed when necessary to avoid, minimize, rectify, reduce or eliminate, or compensate for impacts of the alternatives on the environmental resource areas. To the extent possible, applicable feasible mitigation measures identified in the Delta Plan's Program EIR will be included, or mitigation measures determined to be more effective will be substituted. Mitigation is presented to meet CEQA's specific requirement that whenever possible, agency decision makers adopt feasible

8 mitigation available to reduce a project's significant impacts to a less-than-significant level.

9 DWR is preparing a Mitigation, Monitoring and Reporting Program (MMRP) that will be available 10 with the Final EIR/EIS. The Executive Summary of the RDEIR/SDEIS includes a list of all of the 11 Mitigation Measures identified. Please refer to Table ES-9 (Summary of BDCP EIR/EIS Impacts and 12 Mitigation) for a complete list of impacts and associated mitigation measures. For a more in depth 13 discussion of the development and purpose of proposed mitigation measures, please refer to the 14 Executive Summary of the RDEIR/SDEIS.

15 G.4.2 Best Available Science

Since 2006, the proposed project has been developed based on the best available science, data
 gathered from various agencies and experts over many years, input from agencies, stakeholders and
 independent scientists, and more than 600 public meetings, working group meetings and
 stakeholder briefings. All of the documents, studies, administrative drafts, and meeting materials –
 more than 3,000 documents – have been posted online since 2010 in an unprecedented

21 commitment to public access and government transparency.

The EIR/EIS analyzed the impacts of the proposed project using the best available science. Several models and analytical methods were used to characterize and analyze the operational changes in water operations in the SWP and Central Valley Project (CVP) systems under each alternative. These tools represent the best available technical tools for purposes of conducting the analyses; examples include Delta Simulation Model 2 (DSM2) and CALSIM. Refer to Chapter 4, *Approach to the Environmental Analysis*, and Appendix 5A, *Modeling Technical Appendix*, of the Draft EIR/EIS for more detail on the models and analytical tools used.

Appendix 3F, Intake Locations Analysis, of the Draft EIR/EIS and the fish screen analysis (Appendix 29 5B, Entrainment, of the Draft BDCP) identified potential intake locations through an iterative process 30 31 involving engineers and resource experts most familiar with existing facility operations, river hydrology, and the biological resources in the Delta. This process included convening a Fish 32 Facilities Technical Team (state and federal regulatory agency and industry experts), conducting a 33 Value Planning Study, and participating in numerous collaborative meetings with technical staff 34 from the various agencies and consultants collaborating in the BDCP process to discuss evolving 35 36 information. In late 2010, DWR contributed a report summarizing studies and analysis relevant to selection of intake locations. The report, Two Dimensional Hydraulic Modeling Studies of Delta 37 38 Habitat Conservation and Conveyance Program (DHCCP) Intakes, summarized preliminary two dimensional hydraulic modeling results of the Sacramento River section covering the proposed 39 intake sites for the DHCCP. The objective of these modeling studies was to quantify the near-field 40 impacts of the proposed intake technologies on Sacramento River hydraulics. 41

References cited can be found in Chapter 34 of the Draft EIR/EIS as well as following the discussion
 and analysis of each additional alternative considered in the RDEIR/SDEIS.

G.4.3 Adaptive Management

Considerable scientific uncertainty exists regarding the Delta ecosystem, including the effects of CVP 4 5 and SWP operations and the related operational criteria. To address this uncertainty, DWR, Bureau of Reclamation (Reclamation), California Department of Fish and Wildlife (CDFW), U.S. Fish and 6 Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and the public water agencies 7 8 will establish a robust program of collaborative science, monitoring, and adaptive management. The 9 proposed project (Alternative 4A) will include an adaptive management plan that describes the 10 approach to be taken, which, to the extent feasible, will be consistent with the adaptive management framework in Appendix 1B of the Delta Plan. For the purposes of analysis, it is assumed that the 11 Adaptive Management and Monitoring Plan (AMMP) developed for Alternative 4A would not, by 12 13 itself, create or contribute to any new significant environmental effects; instead, the AMMP would influence the operation and management of facilities and protected or restored habitat associated 14 with Alternative 4A. 15

Collaborative science and adaptive management will support the proposed project by helping to address scientific uncertainty where it exists, and as it relates to the benefits and impacts of the construction and operations of the new water conveyance facility and existing CVP and SWP facilities. Specifically, collaborative science and adaptive management will, as appropriate, develop and use new information and insight gained during the course of project construction and operation to inform and improve:

- the design of fish facilities including the intake fish screens;
- the operation of the water conveyance facilities under the Section 7 biological opinion and
 2081b permit; and
- habitat restoration and other mitigation measures conducted under the biological opinions and
 2081b permits.

In summary, the broad purposes of the program will be to: (1) undertake collaborative science, (2)
guide the development and implementation of scientific investigations and monitoring for both
permit compliance and adaptive management, and (3) apply new information and insights to
management decisions and actions.

31G.4.4Reduce Reliance on the Delta through Improved32Regional Water Self-Reliance

DWR supports Demand Management Measures (DMM) which are tools to reduce reliance on 33 34 imported water. DMMs include urban best management practices (BMPs), agricultural efficient water management practices (EWMPs), and groundwater management. Water recycling, storm 35 36 water management, and desalinization are considered alternative sources of water supply. The use 37 and combination of these water management measures and alternative sources of supply help local 38 and regional water suppliers reduce their reliance on water from the Delta. Demand management is 39 a tool that will continue to be used by water agencies and individual water users as part of an integrated water management approach to water supply reliability, regardless of whether and how 40 the proposed project is implemented. Based on existing regulatory mandates as well as economic 41

- and environmental imperatives, state and regional/local efforts will continue to improve water use
 efficiency over that already achieved during the past few decades.
- 3 Appendix 1C, *Demand Management Measures*, of the Draft EIR/EIS includes information regarding
- 4 the existing and projected water deliveries and demands of several of the larger SWP and CVP
- 5 contracting agencies, along with a description of the significant steps being taken by these agencies
- 6 to manage future water demand within their service areas. In this appendix, the terms "demand
- 7 management," "water conservation," and "water use efficiency" are used interchangeably when
- 8 referring to programs to reduce water use and water waste. This appendix also provides a summary
- 9 and references to statewide water management efforts.
- While the DMMs are not proposed as part of any alternative, Appendix 1C of the Draft EIR/EIS is
 intended to provide information on the important contribution made by DMM towards reducing
 demand in areas served by water exported from the Delta. By reducing long-term water demand in
 areas served by the SWP and CVP contracting agencies, demand management efforts complement
 the environmental objectives of the proposed project.
- 15 Most DMMs are implemented at the local and regional level. Water suppliers and regional agencies generally are the lead agencies implementing water conservation and water management actions. 16 These local agencies have direct contact with retail customers and know the local situation and are 17 best suited to design and implement effective conservation programs. DWR is and has been involved 18 19 in several statewide water conservation and water management programs including urban and 20 agricultural water management plans and the water conservation provisions of Senate Bill x7-7 and Assembly Bill 1420. Yet these far reaching programs do not give DWR authority to mandate or 21 impose conservation requirements on suppliers or regional agencies. No penalties attach for non-22 compliance with state conservation requirements, but suppliers may become ineligible for state 23 water management grant funds. DWR encourages and incentivizes water conservation, improved 24 25 water management and the development and implementation of Agricultural and Urban Water
- 26 Management Plans through grant funding and by providing technical assistance.

27 G.4.5 Transparency in Water Contracting

28 Consistent with DWR Guidelines 03-09 and/or 03-10 (Appendix 2A of the Delta Reform Act), DWR is 29 committed to participating in the water contracting process for the SWP a public and transparent 30 matter. The purpose of these guidelines is to describe the process for DWR's review of proposed 31 permanent transfers of SWP Annual Table A Amounts and, by so doing, provide disclosure to SWP 32 contractors and to the public of DWR's process and policy for approving permanent transfer of SWP 33 Annual Table A Amounts. Such disclosure should assist the public in participating in that review.

34 G.4.6 Delta Flow Objectives

The current WQCP in effect in the Delta is the 2006 Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta Estuary (Bay-Delta WQCP) (State Water Resources Control Board 2006). The Bay-Delta WQCP identifies beneficial uses of water in the Delta to be protected, water quality objectives for the reasonable protection of beneficial uses, and an implementation program to achieve the water quality objectives. DWR complies with Delta flow objectives by use of real time operating procedure and will continue to do so into the future when new objectives are set. Refer to Chapter 8, *Water Quality*, Sections 8.1.3.4 and 8.3.1.7 in Appendix A of this RDEIR/SDEIS for a discussion of historical compliance with chloride and electrical conductivity objectives,
 respectively.

G.4.7 Restore Habitats at Appropriate Elevations

Impacts to terrestrial species and natural communities will be mitigated through habitat restoration. 4 Any such restoration requirements will be developed in consultation with both state and federal fish 5 and wildlife agencies. The proposed project (Alternative 4A) will include a description of how 6 habitat restoration performed as part of this project will be carried out at the appropriate elevation, 7 8 and, to the extent feasible, use the Delta Plan regulation's Appendix 4 elevation restoration map as a 9 guide. The proposed project would achieve federal and state endangered species act compliance 10 using the "Section 7" process under the federal Endangered Species Act (ESA), and through a Section 2081 incidental take permit for California Endangered Species Act (CESA) authorized by CDFW. As a 11 trustee agency under CEQA, CDFW is actively involved in providing technical guidance and support 12 to the proposed project. 13

14 G.4.8 Protect Opportunities to Restore Habitat

The operable barrier constructed at the head of Old River may be partially constructed in the Lower San Joaquin River Floodplain Priority Habitat Restoration Area. The construction of this individual feature would require less than 6 acres of land and would not substantially reduce opportunities for habitat restoration in this area. Mitigation will be determined in consultation with fish and wildlife agencies, including CDFW.

20G.4.9Avoid Introductions of and Habitat for Invasive21Nonnative Species

The proposed project addresses invasive species introduction and improved habitat conditions for 22 23 nonnative invasive species through a combination of Environmental Commitments, mitigation measures and best management practices described in Appendix 3B of the Draft EIR/EIS and in 24 25 Appendix A of the RDEIR/SDEIS. These management practices, although on a smaller footprint than described for Alternative 4, would follow a similar approach as is described in Chapter 3, Section 3.4, 26 *Conservation Measures*, of the Draft BDCP. It is important to note that invasive species in the Delta 27 28 ecosystem are extremely prevalent and difficult to effectively control. Therefore, control efforts 29 focus on new infestations of the most ecologically damaging species for which effective suppression techniques are available. Avoidance and minimization measures described in Appendix 3B of the 30 31 Draft EIR/EIS and in Appendix A of this RDEIR/SDEIS will be implemented in association with nonnative invasive control to ensure that impacts to native species within the Delta are minimized. 32 33 Listed below are relevant actions related to nonnative invasive species. All of these measures work towards avoiding introductions of and habitat for invasive nonnative species. 34

G.4.9.1 Environmental Commitment 11: Natural Communities Enhancement and Management

This action would apply to all protected and restored habitats under Alternative 4A and would be implemented, where applicable, to manage and enhance these. Environmental Commitment 11 includes a goal to control the spread of noxious weeds and invasive plants into new areas and to control existing infestations of these plants. Invasive plant assessment and monitoring is described

- 1 along with applicable guidelines and techniques including prevention, manual and mechanical
- control, prescribed burning, grazing and chemical control. A nonnative terrestrial animal control is
 also described.

G.4.9.2 Environmental Commitment 15: Localized Reduction of Predatory Fishes (Predator Control)

This action would reduce populations of predatory fishes at locations of high predation risk (i.e., 6 7 predation hotspots) associated with construction and operation of the proposed water conveyance 8 facilities. This action would be applied only to the reach of the Sacramento River adjacent to the 9 north Delta intakes and to Clifton Court Forebay. Environmental Commitment 15 would remove 10 predator refuge habitat and reduce predator abundance in the construction areas. At a minimum, Environmental Commitment 15 will target the removal of an amount of predator refuge 11 commensurate with the amount that may be created by construction of water conveyance facilities. 12 These measures are expected to fully mitigate any indirect effect on predation rates associated with 13 14 construction.

15 G.4.9.3 Develop and Implement a Barge Operations Plan

16To address the following potential impacts on aquatic habitat and species from barge and tugboat17operations associated with Conservation Measure (CM) 1 construction, the project proponents will18ensure that a barge operations plan is developed and implemented for each project that requires the19use of a barge. This commitment is related to Avoidance and Minimization Measures (AMM) 7 Barge20Operations Plan, described in Draft BDCP Appendix 3.C. This plan includes preventing the21introduction of aquatic invasive species by using a Biological Monitor that would visually inspect for22invasive aquatic species on in-water equipment such as barges and small work boats.

23G.4.9.4Fund the California Department of Boating and Waterways'24Programs for Aquatic Weed Control

Environmental Commitment 13 Invasive Aquatic Vegetation Control provides for the control of 25 egeria, water hyacinth, and other invasive aquatic vegetation throughout the Plan Area. The project 26 27 Implementation Office would partner with existing programs operating in the Delta (including 28 California Department of Boating and Waterways (DBW), U.S. Department of 29 Agriculture-Agriculture Research Service, University of California Cooperative Extension Weed Research and Information Center, California Department of Food and Agriculture, local Weed 30 Management Areas, Resource Conservation Districts, and the California Invasive Plant Council) to 31 perform risk assessment and subsequent prioritization of treatment areas to strategically and 32 effectively reduce expansion of the multiple species of invasive aquatic vegetation in the Delta. This 33 risk assessment would dictate where initial control efforts would occur to maximize the 34 35 effectiveness of the conservation measure. The proposed project's contribution to DBW's aquatic weed control would include enhancement funding for those areas with project impacts that are 36

37 located outside DBW's risk assessment area.

1G.4.10Respect Local Land Use When Siting Water or Flood2Facilities or Restoring Habitats

Delta Plan Policy 2 (Respect Local Land Use When Siting Water or Flood Facilities or Restoring
 Habitats) requires that parties responsible for proposed actions avoid or reduce incompatibilities
 with existing or planned uses when feasible. In some cases, commitments and mitigation measures
 identified in this document (see, for example, Mitigation Measure AG-1: Develop an Agricultural
 Lands 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, in

- 9 Chapter 14, *Agricultural Resources*, of the Draft EIR/EIS) will help meet this requirement. For more
- 10 information see Chapter 13, *Land Use*, Section 13.3.3.9, in Appendix A of this RDEIR/SDEIS.

G.5 Delta Plan Appeals Process

Any person who claims that a proposed covered action is inconsistent with the Delta Plan and, as a result of that inconsistency, the action will have a significant adverse impact on the achievement of one or both of the coequal goals or implementation of government-sponsored flood control programs to reduce risks to people and property in the Delta, may file an appeal with regard to a certification of consistency submitted to the DSC. The appeals process and timeline is listed below.

- The appeal shall clearly and specifically set forth the basis for the claim, including specific
 factual allegations, that the covered action is inconsistent with the Delta Plan.
- The appeal shall be filed no later than 30 days after the submission of the certification of
 consistency. If no person appeals the certification of consistency, the state or local public agency
 may proceed to implement the covered action.
- The appeal shall be heard by the DSC within 60 days of the date of the filing of the appeal, unless
 the DSC, or by delegation the executive officer, determines that the issue raised on appeal is not
 within the DSC's jurisdiction or does not raise an appealable issue. The DSC shall make its
 decision on the appeal within 60 days of hearing the appeal.
- The DSC, or by delegation the executive officer, may dismiss the appeal for failure of the
 appellant to provide information requested by the DSC within the period provided, if the
 information requested is in the possession or under the control of the appellant.
- After a hearing on an appealed action, the DSC shall make specific written findings either 29 • denying the appeal or remanding the matter to the state or local public agency for 30 31 reconsideration of the covered action based on the finding that the certification of consistency is not supported by substantial evidence in the record before the state or local public agency that 32 filed the certification. Upon remand, the state or local agency may determine whether to 33 proceed with the covered action. If the agency decides to proceed with the action or with the 34 action as modified to respond to the findings of the DSC, the agency shall, prior to proceeding 35 with the action, file a revised certification of consistency that addresses each of the findings 36 made by the DSC and file that revised certification with the DSC. 37
- If the covered action is found to be inconsistent, the project may not proceed until it is revised so
 that it is consistent with the Delta Plan.

G.6 References

- State Water Resources Control Board. 2006. Water Quality Control Plan for the San Francisco
 Bay/Sacramento-San Joaquin Delta Estuary. Available:
- 4 http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/wq_control_plans/2
- 5 006wqcp/docs/2006_plan_final.pdf. Accessed: June 19, 2015.