

Certification of Consistency

Step 1 - Agency Profile

A. GOVERNMENT AGENCY: Local Agency
Government Agency: California Department of Water Resources
Primary Contact: Heather Green
Address: 3500 Industrial Blvd
City, State, Zip: West Sacramento, CA 95691
Telephone/Fax: (916) 376-9762
E-mail Address: heather.green@water.ca.gov

B. GOVERNMENT AGENCY ROLE IN COVERED ACTION: Will Approve / Will Carry Out / Will Fund

Step 2 - Covered Action Profile

A. COVERED ACTION PROFILE: Project
Title: Lookout Slough Tidal Habitat Restoration And Flood Improvement Project

B. PROPONENT CARRYING OUT COVERED ACTION (If different than State or Local Agency):

Proponent Name: EIP III Credit Co., LLC
Address: 2330 Marinship Way, Suite 120
City, State, Zip: Sausalito, CA 94965

C. OPEN MEETING LAWS

Agencies whose actions are not subject to open meeting laws (Bagley-Keene Open Meeting Act [[Gov. Code sec 11120 et seq.](#)] or the Brown Act [[Gov. Code sec 54950 et seq.](#)]) must post their draft certification on their website and in their office for public review and comment, and mail to all persons requesting notice (Administrative Procedures Governing Appeals, Rule 3). A state or local public agency that is subject to open meeting laws is encouraged to post the draft certification on their website and in the office for public review and comment and to mail to all persons requesting notice.

Any state or local public agency that is subject to open meeting laws with regard to its certification is also encouraged to take those actions. It is encouraged to upload any evidence that the project, plan or program went through for public review and comment as part of a Bagley-Keene or Brown Act meeting.

Is your agency subject to open meeting laws (Bagley-Keene Open Meeting Act [[Gov. Code sec 11120 et seq.](#)] or the Brown Act [[Gov. Code sec 54950 et seq.](#)])? (Note: Select "Yes" if your agency or organization is subject to open meeting laws. Select "No" if your agency or organization is not subject to open meeting laws.) No

If your agency is not subject to open meeting laws (Bagley-Keene Open Meeting Act [[Gov. Code sec 11120 et seq.](#)] or the Brown Act [[Gov. Code sec 54950 et seq.](#)]) **did your agency, at least 10 days prior to the submission of a certification of consistency to the Delta Stewardship Council, post the draft certification on your website and in the office for public review and comment, and mail the draft certification to all** Yes

persons requesting notice?

Any state or local public agency that is subject to open meeting laws with regard to its certification is also encouraged to take those actions. It is encouraged to upload any evidence that the project, plan or program went through for public review and comment as part of a Bagley-Keene or Brown Act meeting.

Note: Any public comments received during this process must be included in the record submitted to the Council in case of an appeal.

D. COVERED ACTION SUMMARY: (Project Description from approved CEQA document may be used here)

The Proposed Project would restore within the Proposed Project Site approximately 3,165 acres of tidal wetland habitat, including habitat that is beneficial to Delta Smelt (*Hypomesus transpacificus*), and other fish and wildlife species. The Proposed Project was designed to provide multiple benefits, including improved flood conveyance. It would widen a portion of the Yolo Bypass to increase flood storage and conveyance, increase the resilience of levees, and reduce flood risk. Flood improvement elements as proposed are consistent with the Central Valley Flood Protection Plan, which calls for multi-benefit projects that expand the Yolo Bypass while incorporating ecosystem-enhancing features. To accomplish this, a new setback levee would be constructed to the east of Duck Slough and south of Liberty Island Road. The Shag Slough Levee would be breached in nine locations to provide tidal inundation to the areas within the Bowsbey and Liberty Farms Properties. The Vogel Levee would also be breached in two locations to provide tidal inundation to the areas within the Vogel Property. These breaches would also allow food for Delta Smelt that is produced within the new tidal wetland areas to be exported to the waterways of the Cache Slough Complex. The Shag Slough Levee would also be lowered at two locations to allow floodwaters from the Yolo Bypass to be conveyed across and stored within the Proposed Project Site during flood events. The Cache/Hass Slough Levee would undergo a series of improvements, remain in place, and function as a training levee to maintain stage differences between the Proposed Project Site and Cache and Hass Sloughs. Upon completion, the Proposed Project would protect approximately 3,400 acres of open space in perpetuity, including approximately 3,165 acres of tidal marsh and subtidal habitats and 149 acres of seasonal floodplain habitat in Solano County, California, and a very small portion of Yolo County, California. Restoring these habitats will increase food availability for Delta Smelt, Steelhead – Central Valley Distinct Population Segment (DPS) (*Oncorhynchus mykiss*), Chinook Salmon – Sacramento River winter-run Evolutionarily Significant Unit (ESU) (*Oncorhynchus tshawytscha*), Chinook Salmon – Central Valley spring-run ESU, Green Sturgeon – Southern DPS (*Acipenser medirostris*), and Longfin Smelt (*Spirinchus thaleichthys*), known hereafter as “Target Protected Fish Species,” as well as other native fishes within the Project Site and the surrounding Cache Slough Complex. It will also provide rearing habitat for Delta Smelt and salmonids, provide potential spawning habitat for Delta Smelt, and create habitat conditions for other aquatic and terrestrial wetland-dependent species, such as giant garter snake (*Thamnophis gigas*), that utilize the combination of Sacramento-San Joaquin River Delta habitat interfaces (i.e., Delta-freshwater, aquatic-tidal, marsh-floodplain, seasonal wetland-lowland grassland). Additionally, the Proposed Project would create over 40,000 acre-feet of transitory flood storage at the Delta confluence. The Lookout Slough Tidal Habitat Restoration and Flood Improvement Project was developed to partially fulfill a requirement under the 2008 U.S. Fish and Wildlife Service (USFWS) Delta Smelt Biological Opinion on the Coordinated Operations of the federal Central Valley Project and the State Water Project (2008 USFWS BiOp) to restore 8,000 acres of tidal habitat. Restoration of tidal habitat also would provide access for salmonid rearing at the Project Site and therefore was expected to be credited toward a restoration requirement in the 2009 National Marine Fisheries Service (NMFS) Biological Opinion and Conference Opinion on the Long-Term Operation of the Central Valley Project and the State Water Project (2009 NMFS BiOp). These restoration requirements in the 2008 USFWS BiOp and 2009 NMFS BiOp were carried forward as baseline conditions in the USFWS Biological Opinion for the Reinitiation of Consultation on the Coordinated Operations of the Central Valley Project and the State Water Project (2019 USFWS BiOp) and the NMFS Biological Opinion on Long Term Operation of the Central Valley Project and the State Water Project (2019 NMFS BiOp), which are the currently effective biological opinions governing coordinated operations of the Central Valley Project and State Water Project. The 8,000-acre tidal restoration requirement also is a condition (Condition 9.1.1) of the Incidental Take Permit for Long-Term Operation of the State Water Project in the Sacramento-San Joaquin Delta (2081-2019-066-00) (2020 LTO ITP), issued by the California Department of Fish and Wildlife on March 31, 2020. The 2020 LTO ITP is DWR’s California Endangered Species Act authorization to carry out ongoing State Water Project operations. The following names/locations in this project description describe specific areas, as well as levees and sloughs, within and adjacent to the Proposed Project Site: Bowsbey Property – Approximate 1,644-acre

property in the northwestern portion of the Proposed Project Site bounded by Liberty Island Road to the north, Shag Slough to the east, Lookout Slough to the south, and Duck and Hass Sloughs to the west. Liberty Farms Property – Approximate 1,678-acre property in the southeastern portion of the Proposed Project Site bounded by Lookout Slough to the north, Lookout and Cache Sloughs to the west, the cross levee to the south, and Shag Slough to the east. Vogel Property – Approximate 55-acre property in the southwestern portion of the Proposed Project Site bounded by the Bowlsbey Property to the north and Cache Slough to the south, east, and west. Shag Slough Levee – State Plan of Flood Control (SPFC) levee on the west side of Shag Slough, which borders the eastern boundaries of the Bowlsbey and Liberty Farms Properties. The Shag Slough Levee is part of the Yolo Bypass West levee system. Cache/Hass Slough Levee – SPFC levee located on the north side of Cache and Hass Sloughs, which borders the southern boundaries of the Bowlsbey and Liberty Farms Properties. The Cache/Hass Slough Levee is part of the Yolo Bypass West levee system. Cache/Hass Slough Training Levee – The Proposed Project includes improvements to the stability of the Cache/Hass Slough Levee and the Cross Levee. The improved levee would function to maintain stage differences between the Proposed Project Site and waters in Cache/Hass Slough during bypass flooding events. The Cache/Hass Slough Training Levee refers to the Cache/Hass Slough Levee and the Cross Levee in their modified post-project state and altered function. Duck Slough Setback Levee – Proposed SPFC setback levee proposed as part of the Yolo Bypass levee system, located on the eastern side of Duck Slough and the southern side of Liberty Island Road. Cross Levee – SPFC levee on the southern end of the Proposed Project Site, runs roughly west-east between Cache and Hass Sloughs. Vogel Levee – Existing agricultural levee located on the eastern, southern, and western boundaries of the Vogel property. Lookout Slough – Man-made drainage/water control channel that separates the Bowlsbey and Liberty Farms Properties. Lookout Slough is not connected to Cache Slough and is not open to tidal inundation. Duck Slough – Man-made drainage/water control channel that forms the western boundary of the Bowlsbey Property. Duck Slough is not connected to Hass Slough and is not open to tidal inundation. Sycamore Slough – Remnant of a historical slough, which is no longer connected to Hass Slough and is not open to tidal inundation. [ATT 17_DEIR_ChIII_Project Description.pdf](#)

E. STATUS IN THE CEQA PROCESS: Final Certified Document

F. STATE CLEARINGHOUSE NUMBER:(if applicable) 2019039136

G. COVERED ACTION ESTIMATED TIME LINE:

ANTICIPATED START DATE: (If available) 04/01/2021

ANTICIPATED END DATE: (If available) 04/01/2024

H. COVERED ACTION TOTAL ESTIMATED PROJECT COST: \$120,000,000

I. IF A CERTIFICATION OF CONSISTENCY FOR THIS COVERED ACTION WAS PREVIOUSLY SUBMITTED, LIST DSC REFERENCE NUMBER ASSIGNED TO THAT CERTIFICATION FORM:

J. Supporting Documents:

[ATT 1_CEQA NOD.pdf](#), [ATT 2_DEIR_ChIV.G_Hydrology_Water Quality.pdf](#), [ATT 3_FEIR_Ch2_Revisions to DEIR.pdf](#), [ATT 4_FEIR_AppX_RMA Lookout Slough Report.pdf](#), [ATT 5_FEIR_Ch3_Response to Comments.pdf](#), [ATT 6_DEIR_ChIV.B_Agriculture_Forestry.pdf](#), [ATT 7_CAP Mitigation Equivalence Table.pdf](#), [ATT 8_Draft Lookout Slough AMMP.pdf](#), [ATT 9_DEIR_AppF Lookout Slough BRA.pdf](#), [ATT 10_DEIR_AppP Tidal Hydro_Hydraulic Analysis.pdf](#), [ATT 11 Lookout Slough 100% BODR.pdf](#), [ATT 12_TM Restoration Guidance Delta Smelt.pdf](#), [ATT 13_DEIR_ChV_Cumulative Impacts.pdf](#), [ATT 14_DEIR_AppO Baseline Study Flood Conveyance.pdf](#), [ATT 15_Hydrologic_Hydraulic System Analysis.pdf](#), [ATT 16_DEIR_AppS_Potential Salinity Impacts.pdf](#), [ATT 17_DEIR_ChIII_Project Description.pdf](#), [ATT 18_USFWS Avoidance_Minimization Measures.pdf](#), [ATT 19_DEIR_ChII_Executive Summary.pdf](#), [ATT 20_DEIR_AppR_Hydrologic_Hydraulic Risk.pdf](#), [ATT 21_DEIR_ChIV.D_Biological Resources.pdf](#), [ATT 22_DEIR_ChIV.A_Impacts Found to be LTS.pdf](#), [ATT 23_DEIR_ChIV.I_Public Services.pdf](#), [ATT 24_DEIR_AppE_Good Neighbor Checklist.pdf](#), [ATT](#)

Step 3 - Consistency with the Delta Plan

DELTA PLAN CHAPTER 2

[G P1/Cal. Code Regs., tit. 23, § 5002](#) - Detailed Findings to Establish Consistency with the Delta Plan.

G P1/Cal. Code Regs., tit. 23, § 5002 identifies what must be addressed in a certification of consistency filed by a State or local public agency with regard to any covered action and 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 listed under Delta Plan Chapters 3, 4, 5, and 7 of this form. Inconsistency with this policy may be the basis for an appeal.

A certification of consistency must include detailed findings that address each of the regulatory policies identified in Cal. Code Regs., tit. 23, §§ 5002-5013 and listed on this Form that is implicated by the covered action.

As outlined in Cal. Code Regs., tit. 23, § 5002 (b)(1), 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.

Specific requirements of this regulatory policy:

a. [G P1\(b\)\(1\)/Cal. Code Regs., tit. 23, § 5002, subd. \(b\)\(1\)](#) - Coequal Goals

As outlined in **Cal. Code Regs., tit. 23, § 5002 (b)(1)**, 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.

Is the covered action consistent with this portion of the regulatory policy?

N/A

Answer Justification:

The Proposed Project is consistent with the relevant regulatory policies as described in the following sections and attachments. Additionally, the Proposed Project is consistent with the Delta Plan's Coequal Goals through restoration of native ecosystem habitats and functions, protecting approximately 3,400 acres of open space in permanence comprising approximately 3,165 acres of tidal marsh and subtidal habitats and 149 acres of seasonal floodplain habitat, partially fulfilling DWR's State Water Project/Central Valley Project restoration obligations. The Proposed Project directly supports ecosystem health, one of the Delta Plan's Coequal Goals. The second of the Delta Plan's Coequal Goals, water supply reliability, is not significantly changed by the Proposed Project. Current irrigation use would be discontinued on 1,364 acres of irrigated pastureland, reducing demand for water pumped from Cache, Hass, and Duck Sloughs. During the Proposed Project's three-year construction period, work activities would use surface water sourced from existing entitlements from adjacent sloughs, which

would be adequate to serve the Proposed Project's water needs, including during dry and multiple dry years. Following completion of construction, the Proposed Project area would consist of native ecosystem which would not require application of water and would be resilient to changes in precipitation. The tidal marsh plain would be constructed at elevations which would facilitate regular inundation by tidal waters, and the proposed tidal channel system would naturally convey water throughout the site. Therefore, after the Proposed Project's construction, on-site Delta waters would be sufficient for the designed habitat functions. Furthermore, the Proposed Project would have minimal, if any, impact on water availability or water quality for nearby development. As further detailed in Attachment 2 – Draft EIR, Chapter IV.G, Hydrology and Water Quality, Attachment 3 - Final EIR, Chapter 2, IV.G., Attachment 4 – Final EIR, Appendix X - Resource Management Associates Lookout Slough Tidal Habitat Restoration and Flood Improvement Project Modeling, and Master Response #1 in Attachment 5 – Final EIR, Chapter 3 Response to Comments, hydrodynamic and water quality modeling for the Proposed Project found that changes to the area's flood regime and tidal prism were unlikely to affect diversion use, and would have little effect on water quality or availability for nearby properties and other uses. For agricultural operations and municipal water facilities' use, including RD 2068's agricultural diversion, the State Water Project's Barker Slough Pumping Plant, the City of Vallejo's Cache Slough Pumping Plant, and private agricultural diversions, RMA modeling results showed that the Proposed Project is predicted to cause both decreases and increases in salinity and bromide concentrations (using electrical conductivity [EC] as a surrogate for salinity) both seasonally and spatially. Predicted EC was converted to bromide using numerical relationships between EC and bromide concentration. For additional information see response to ER P1. The salinity analysis includes reference to background concentrations and applicable water quality objectives. The standards for salinity in the Delta are set by D-1641 and no standards are in effect for bromide, although it has been recognized as a constituent of concern warranting additional study and evaluation. RMA modeling results did not indicate any instance of non-compliance with D-1641 standards and no violations of D-1641 chloride standards are identified for any of the locations modeled, including the Contra Costa Water District (CCWD) intakes. The Proposed Project is not predicted to cause non-compliance or make non-compliance with the D-1641 salinity standard more likely for agricultural, municipal, or fish and wildlife beneficial uses. Thus, the Proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Irrigation and agriculture-related infrastructure are among the improvements to be funded to offset the Proposed Project's impacts to farmland, discussed in detail in Attachment 6 – Draft EIR, Chapter IV.B, Agriculture and Forestry, Attachment 3 – Final EIR, Chapter 2, IV.B., and Master Response #2 in Attachment 5 – Final EIR, Chapter 3 Response to Comments. These improvements include off-site enhancements to the adjacent Zanetti property, where irrigation capabilities would be augmented on 320 acres and new irrigation infrastructure installed on 440 acres currently not irrigated. The additional demand for irrigation water resulting from these off-site improvements would depend on a number of factors and is difficult to estimate at this time. However, DWR expects the new irrigation water use would be lower than the amount used

to irrigate the Bowsbey Property's farmland that would no longer be in production due to the Proposed Project, resulting in an overall reduction in water demand. The Proposed Project supports significant gains in ecosystem health and is consistent with maintaining water supply reliability. Therefore, DWR has determined that the Proposed Project is consistent with the Coequal Goals policy of the Delta Plan, and with each of the regulatory policies contained in Article 3 relevant to the covered action. [ATT 2_DEIR_ChIV.G_Hydrology_Water Quality.pdf](#), [ATT 3_FEIR_Ch2_Revisions to DEIR.pdf](#), [ATT 4_FEIR_AppX_RMA Lookout Slough Report.pdf](#), [ATT 5_FEIR_Ch3_Response to Comments.pdf](#), [ATT 6_DEIR_ChIV.B_Agriculture_Forestry.pdf](#), [ATT 16_DEIR_AppS_Potential Salinity Impacts.pdf](#), [ATT 2_DEIR_ChIV.G_Hydrology_Water Quality.pdf](#), [ATT 3_FEIR_Ch2_Revisions to DEIR.pdf](#), [ATT 4_FEIR_AppX_RMA Lookout Slough Report.pdf](#), [ATT 5_FEIR_Ch3_Response to Comments.pdf](#), [ATT 6_DEIR_ChIV.B_Agriculture_Forestry.pdf](#), [ATT 16_DEIR_AppS_Potential Salinity Impacts.pdf](#)

b. [G P1\(b\)\(2\)/Cal. Code Regs., tit. 23, § 5002, subd. \(b\)\(2\)](#) - Mitigation Measures

G P1(b)(2)/Cal. Code Regs., tit. 23, § 5002, subd. (b)(2) provides that 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, (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. For more information, see Cal. Code Regs., tit. 23, § 5002, and Delta Plan Appendix O, Mitigation Monitoring and Reporting Program, which are referenced in this regulatory policy.

Is the covered action consistent with this portion of the regulatory policy?

Yes

Answer Justification:

The Proposed Project includes all applicable feasible mitigation measures adopted and incorporated into the Delta Plan as amended April 26, 2018, or substitute mitigation measures that DWR finds are equally or more effective, as detailed in the Attachment 7 - Mitigation Equivalency Table. [ATT 7_CAP Mitigation Equivalence Table.pdf](#)

c. [G P1\(b\)\(3\)/Cal. Code Regs., tit. 23, § 5002, subd. \(b\)\(3\)](#) - Best Available Science

G P1(b)(3)/Cal. Code Regs., tit. 23, § 5002, subd. (b)(3) provides that, relevant to the purpose and nature of the project, all covered actions must document use of best available science. For more information, see [Appendix 1A](#), which is referenced in this regulatory policy.

Is the covered action consistent with this portion of the regulatory policy?

Yes

Answer Justification:

An iterative design process occurred regarding the tidal marsh and other restoration features for the Proposed Project in consultation with fisheries biologists, hydrologists and other scientists. The design process included a series of design review meetings that facilitated the collection and incorporation of feedback from the Project sponsor, regulatory agencies, stakeholders, and scientists. The process involved a review and evaluation of historical and regional precedence for the tidal marsh design; utilization of science-based channel design software to produce channel layouts with refined curvature and sinuosity; development of a surface model with channel design integrated into the base topographic surface; and

hydrodynamic and particle tracking modeling. Design resources included: • Biological Resources Assessment (BRA): Lookout Slough Restoration Project. WRA, Revised December 2019. (Attachment 9) • Basis of Design Report – Tidal Hydrology and Hydraulic Analysis: Lookout Slough Restoration Project, Environmental Science Associates, January 2019. (Attachment 10) • Lookout Slough Tidal Habitat Restoration and Flood Improvement Project: 100% Basis of Design Report. Wood Rodgers, December 2020/2019. (Attachment 11) • Technical Memorandum – Restoration Guidance for Delta Smelt. WRA, 2017. (Attachment 12) Effects on regional water quality salinity and bromide were analyzed using predictive regional models developed over the last 20 years and used by multiple agencies such as the Metropolitan Water District of Southern California, State Water Contractors, Contra Costa Sanitary District, California Department of Water Resources, and other state agencies, to achieve a very strong predictive capacity (e.g. R2 typically greater than 0.85) when compared to observed salinity conditions throughout the Delta and Suisun Bay (Attachment 4, Attachment 16). As further described in Attachment 5 (Final EIR, Chapter 3 Response to Comments) the best available science indicates the Proposed Project would not raise dissolved organic carbon (DOC) and affect the quality of water treated at water treatment plants for the following reasons: the lack of impact from the nearby Liberty Island restoration; the limited potential for water particles from the Proposed Project reaching the NBA intake; and the potential environmental processing of DOC on the Proposed Project Site. In addition, the potential effects of methylmercury were analyzed using the best available and up-to-date science and the Proposed Project was found to not be a source of methylmercury and would have a less-than-significant impact on methylmercury concentrations in the Delta (Attachment 5 – Final EIR, Chapter 3 Response to Comments). Adaptive management of the Proposed Project through the Draft Adaptive Management and Monitoring Plan (AMMP) will be based on input from monitoring data in conjunction with adaptive review of whether restoration goals and objectives are being achieved. The AMMP is structured around conceptual models of tidal wetland function with respect to smelt and salmon (Sherman et al. 2017). The models derive from peer-reviewed literature and government agency reports describing studies throughout the estuary and relevant ecosystems elsewhere. The methods and sampling strategy described are designed to provide data that are comparable across restoration projects and with ongoing regional monitoring surveys. Comparable data from the channels adjacent to the Proposed Project Site and reference sites would facilitate project monitoring as well as the eventual assessment of restoration program effectiveness. Proposed Project monitoring and adaptive management strategies are subject to adjustment as new data and scientific information arises. Data comparability and transparency would be maintained throughout the evolution of the project and its monitoring period. [ATT 4_FEIR_AppX_RMA Lookout Slough Report.pdf](#), [ATT 8_Draft Lookout Slough AMMP.pdf](#), [ATT 9_DEIR_AppF Lookout Slough BRA.pdf](#), [ATT 10_DEIR_AppP_Tidal Hydro_Hydraulic Analysis.pdf](#), [ATT 11 Lookout Slough 100% BODR.pdf](#), [ATT 12_TM Restoration Guidance Delta Smelt.pdf](#), [ATT 16_DEIR_AppS_Potential Salinity Impacts.pdf](#)

G P1(b)(4)/Cal. Code Regs., tit. 23, § 5002, subd. (b)(4) provides that an ecosystem restoration or water management covered action must include adequate provisions, appropriate to its scope, to assure continued implementation of adaptive management. For more information, see [Appendix 1B](#), which is referenced in this regulatory policy. Note that this requirement may be satisfied through both of the following:

(A) An adaptive management plan that describes the approach to be taken consistent with the adaptive management framework in Appendix 1B; and

(B) Documentation of access to adequate resources and delineated authority by the entity responsible for the implementation of the proposed adaptive management process.

Is the covered action consistent with this portion of the regulatory policy?

Yes

Answer Justification:

The Proposed Project includes an adaptive management and monitoring plan (AMMP) that is consistent with the Delta Plan Appendix 1B adaptive management framework, included in full as Attachment 8. DWR is responsible for ensuring management and monitoring activities are completed, maintaining records, reporting, and coordinating and approving any research activities proposed on the Project Site. Various groups within CDFW and DWR, as well as qualified consultants are responsible for specialized monitoring as described in the AMMP. For a detailed list including adaptive management tasks and responsible parties, please see Table 11. Parties Responsible for Specific Monitoring and Adaptive Management in the AMMP. Long-term management activities will be funded through DWR's State Water Project operations and maintenance budget for perpetual operation and maintenance of the Proposed Project. [ATT 8_Draft Lookout Slough AMMP.pdf](#)

DELTA PLAN CHAPTER 3

[WR P1 / Cal. Code Regs., tit. 23, § 5003](#) - **Reduce Reliance on the Delta through Improved Regional Water Self-Reliance**

Is the covered action consistent with this portion of the regulatory policy?

N/A

Answer Justification:

This policy is not applicable because water suppliers would not receive water as a result of the Proposed Project and DWR is not a water supplier.

[WR P2 / Cal. Code Regs., tit. 23, § 5004](#) - **Transparency in Water Contracting**

Is the covered action consistent with this portion of the regulatory policy?

N/A

Answer Justification:

The Proposed Project does not involve water supply or water transfer contracts from the State Water Project or Central Valley Project.

DELTA PLAN CHAPTER 4

[Cal. Code Regs., tit. 23, § 5002, subd. \(c\)](#) - **Conservation Measure**

Cal. Code Regs., tit. 23, § 5002, subd. (c) provides that a conservation measure proposed to be implemented pursuant to a natural community conservation plan or a habitat conservation plan that was: (1) Developed by a local government in the Delta; and (2) Approved and permitted by the California Department of Fish and Wildlife prior to May 16, 2013 is deemed to be consistent with the regulatory policies listed under Delta Plan Chapter 4 of this Form (i.e. sections 5005 through 5009) 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.

Is the covered action consistent with this portion of the regulatory policy?

N/A

Answer Justification: The Proposed Project is not proposed pursuant to a natural community conservation plan (NCCP) or habitat conservation plan (HCP).

[ER P1 / Cal. Code Regs., tit. 23, § 5005](#) - **Delta Flow Objectives**

Is the covered action consistent with this portion of the regulatory policy?

N/A

Answer Justification: The Proposed Project does not significantly affect flow in the Delta. Potential changes to Delta flows and water levels from the Proposed Project were modeled and are discussed in the Draft and Final EIRs and Attachment 15 – Hydrologic and Hydraulic System Analysis for the Proposed Project. State Water Resources Control Board flow objectives were used to assess potential environmental impacts to water quality and quantity resulting from the Proposed Project. Cumulative impacts from the Proposed Project and 30 other projects with potential impacts to Delta flows were analyzed in Attachment 13 – Draft EIR, Chapter V. Cumulative Impacts and Attachment 3 – Final EIR, Chapter 2, V, and were found to be less than cumulatively considerable. [ATT 2_DEIR_ChIV.G_Hydrology_Water Quality.pdf](#), [ATT 3_FEIR_Ch2_Revisions to DEIR.pdf](#), [ATT 5_FEIR_Ch3_Response to Comments.pdf](#), [ATT 10_DEIR_AppP_Tidal Hydro_Hydraulic Analysis.pdf](#), [ATT 13_DEIR_ChV_Cumulative Impacts.pdf](#), [ATT 14_DEIR_AppO_Baseline Study_Flood Conveyance.pdf](#), [ATT 15_Hydrologic_Hydraulic System Analysis.pdf](#), [ATT 16_DEIR_AppS_Potential Salinity Impacts.pdf](#)

[ER P2 / Cal. Code Regs., tit. 23, § 5006](#) - **Restore Habitats at Appropriate Elevations**

Is the covered action consistent with this portion of the regulatory policy?

Yes

Answer Justification: The Ecosystem Restoration Program’s Conservation Strategy for Restoration of the Sacramento-San Joaquin Delta, Sacramento Valley and San Joaquin Valley Regions (California Department of Fish and Wildlife 2014) identifies the highest priority areas of the Delta for restoration to include lands that are in the existing intertidal range, floodplain areas that can be seasonally inundated, and traditional and upland habitats. The Proposed Project Site was historically influenced by tidal action and the proposed restoration would re-establish tidal activity and enhance ecological processes, species diversity, and habitat heterogeneity through the creation of subtidal, intertidal, and floodplain habitat. Analyzed against Appendix 4 of the Delta Plan, the majority of the Proposed Project Site exhibits elevations within the intertidal habitat range. Physical conditions including salinity, temperature, and turbidity of adjacent waterbodies are presently suitable for target special-status fish species and would remain so upon Proposed Project implementation. The Proposed Project would restore approximately 3,165 acres of tidal marsh habitat including intertidal and shallow subtidal habitats including a network of tidal channels. Elevation was a key consideration in selecting the Proposed Project Site, which has an elevation profile such that the site would be subject to daily tidal inundation if not excluded from surrounding waters by levees. [ATT 3_FEIR_Ch2_Revisions to DEIR.pdf](#), [ATT 17_DEIR_ChIII_Project Description.pdf](#)

[ER P3 / Cal. Code Regs., tit. 23, § 5007](#) - **Protect Opportunities to Restore Habitat**

Is the covered action consistent with this portion of the regulatory policy?

Yes

Answer Justification:

The goal of the Proposed Project is to restore approximately 3,165 acres of tidal wetland habitat that is beneficial to Delta Smelt and other fish and wildlife species. All potentially significant adverse impacts that could result from this restoration opportunity have been avoided or mitigated, as detailed in the Proposed Project's Draft EIR, Table II-1, Summary of Environmental Impacts that were Analyzed and Mitigation Measures; see also revisions to the Draft EIR made to Table II-1 in Attachment 3. Avoidance and minimization measures for listed species and critical habitat under the jurisdiction of NMFS and USFWS are included in the Proposed Project's USFWS Biological Opinion and the NMFS Programmatic Biological Opinion. [ATT 3_FEIR_Ch2_Revisions to DEIR.pdf](#), [ATT 18_USFWS Avoidance_Minimization Measures.pdf](#), [ATT 19_DEIR_ChII_Executive Summary.pdf](#)

[ER P4 / Cal. Code Regs., tit. 23, § 5008](#) - **Expand Floodplains and Riparian Habitats in Levee Projects**

Is the covered action consistent with this portion of the regulatory policy?

Yes

Answer Justification:

The Proposed Project was designed to provide multiple benefits, including improved flood conveyance. It would widen a portion of the Yolo Bypass to increase flood storage and conveyance, increase the resilience of levees, and reduce flood risk. Flood improvement elements as proposed are consistent with the 2012 Central Valley Flood Protection Plan and the 2017 Update, which calls for multi-benefit projects that expand the Yolo Bypass while incorporating ecosystem-enhancing features. The Duck Slough Setback Levee is proposed as part of the Proposed Project to expand the Yolo Bypass floodplain, meet current standards for SPFC levees, and reduce upstream flood stages. Approximately 40,000 acre-feet of additional transitory flood storage will be gained in the Yolo Bypass floodplain as a result of the Proposed Project. [ATT 10_DEIR_AppP_Tidal Hydro_Hydraulic Analysis.pdf](#), [ATT 14_DEIR_AppO_Baseline Study_Flood Conveyance.pdf](#), [ATT 15_Hydrologic_Hydraulic System Analysis.pdf](#), [ATT 20_DEIR_AppR_Hydrologic_Hydraulic Risk.pdf](#)

[ER P5 / Cal. Code Regs., tit. 23, § 5009](#) - **Avoid Introductions of and Habitat for Invasive Nonnative Species**

Is the covered action consistent with this portion of the regulatory policy?

N/A

Answer Justification:

This policy is not applicable because the Project would not result in a reasonable probability of introducing, or improving habitat conditions for, nonnative invasive species. One of the project objectives is to restore tidal habitat similar to the historic Delta and conditions that are favorable to native species and that discourage nonnative species. Prior to construction of the Proposed Project, invasive plant species would be controlled as part of site preparation activities. As part of the clearing process, target invasive plant species would be mechanically removed and/or sprayed. Waste piles would subsequently be processed and disposed of or buried on-site to avoid regrowth. Targeted invasive species include but are not necessarily limited to: Common reed (*Phragmites australis*), pampas grass (*Cortaderia selloana*),

giant reed (*Arundo donax*), Brazilian waterweed (*Egeria densa*), water hyacinth (*Eichhornia crassipes*), spongeplant (*Limnobium laevigatum*), red sesbania (*Sesbania punicea*), and water primrose (*Ludwigia* spp.). Invasive species control, monitoring, adaptive management, and long-term management actions are included as part of the Proposed Project. It is expected that the Proposed Project will reduce overall cover of invasive species within the Proposed Project Site, resulting in improvements to water quality and habitat integrity. Through the AMMP, DWR has planned for an appropriate level of monitoring and potential management responses. DWR will be responsible for ensuring management and monitoring activities meet the Proposed Project's applicable performance standards; DWR's Fish Restoration Program, California State Parks -- Division of Boating and Waterways, and DWR contractors will conduct invasive plant monitoring and control on the Proposed Project Site. Existing conditions at the Proposed Project Site support tidal aquatic habitat accessible to native and non-native fishes on the outboard sides of levees, and the restored interior area to be opened to tidal waters would provide access for native fish as well as various fish predators. Restoration of tidal wetlands and the associated subtidal channel network within the Proposed Project Site would have the beneficial effect of increasing the amount of habitat available to native fish. However, it is also expected that non-native fish such as striped bass (*Morone saxatilis*) and Mississippi silverside (*Menidia beryllina*) that can prey on native fish could occur within the new habitat. The new habitat would also provide foraging areas for wildlife species that consume both native and non-native fish, such as egrets, herons and otters. The Proposed Project has been designed to favor native fish species while discouraging establishment and colonization by non-native fish species. Nine breaches are designed along the Shag Slough Levee, ranging in width to as large as approximately 650 feet. Such large breaches allow water to slowly enter and exit the site. Numerous, enlarged breaches avoid creating high velocity funnels that can disorient fish as they enter or exit the site. Proposed channel geometry also favors native fish species with dendritic channels. Constructed channels at appropriate depths have been designed to be large and allow for tidal exchange, maximizing primary productivity while minimizing the potential for non-native species establishment. Culverts, which attract non-native fish predators such as striped bass, will not be used on the Proposed Project. Restored wetland habitat has been demonstrated to benefit juvenile salmonids and native fish. The increase in wetland habitat and high food productivity provided by the Proposed Project is expected to benefit growth rates and body sizes of these fish. Larger fish are stronger swimmers and can more actively avoid predation. Additionally, larger body size is important to surpassing the mouth gape of predators. When native fish are faster or larger than predators, the potential for predation by piscivorous fish is thus reduced. The only construction-related effect that may support predation on all (native and non-native) fishes would be with the temporary addition of sheetpile cofferdams during construction. Cofferdams installed along breach sites may provide perches for cormorants (*Phalacrocoracidae* sp.) or other predatory birds to target fish. However, these perches are likely to be in close proximity to construction which causes disturbance that is likely to flush birds away. Additionally, sheetpile cofferdams are located along the shoreline at similar heights to extant trees and woody vegetation. Therefore, the potential for sheetpiles to act as a predatory perch would be less than

significant, as extant conditions already support similar perches (i.e., riparian trees) and construction-related disturbance is likely to disturb birds perching on the cofferdams, making them less effective. [ATT 3_FEIR_Ch2_Revisions to DEIR.pdf](#), [ATT 5_FEIR_Ch3_Response to Comments.pdf](#), [ATT 14_DEIR_AppO_Baseline Study_Flood Conveyance.pdf](#), [ATT 21_DEIR_ChIV.D_Biological Resources.pdf](#)

DELTA PLAN CHAPTER 5

[DP P1 / Cal. Code Regs., tit. 23, § 5010](#) - **Locate New Urban Development Wisely**

Is the covered action consistent with this portion of the regulatory policy?

N/A

Answer Justification:

The Proposed Project does not involve any new residential, commercial, and industrial development.

[DP P2 / Cal. Code Regs., tit. 23, § 5011](#) - **Respect Local Land Use When Siting Water or Flood Facilities or Restoring Habitats**

Is the covered action consistent with this portion of the regulatory policy?

Yes

Answer Justification:

This policy is relevant because the Project involves the siting of ecosystem restoration. Local land use policies, plans and programs, and potential impacts to each of these, were considered through the Proposed Project's CEQA compliance process and are addressed in Attachment 22 – Draft EIR, Chapter IV.A Impacts Found to be Less Than Significant, Table IV.A-1 and in Attachment 3 – Final EIR, Chapter 2, IV.A, in Relevant Delta Plan and Delta Land Use and Resource Management Plan Policies, and in the appropriate resource chapters. Additionally, DWR's "Good Neighbor Checklist" was used to assess potential effects on neighboring properties outside the context of CEQA. With implementation of various items outlined in the Good Neighbor Checklist (Attachment 24 - Draft EIR, Appendix E) and mitigation measures described in Attachment 6 – Draft EIR, Chapter IV.B Agriculture and Forestry, Attachment 3 – Final EIR, Chapter 2, IV.B, and Attachment 5 – Final EIR, Chapter 3 Response to Comments, Response to Letter 4: Delta Protection Council, conflict with existing agricultural land uses from the Proposed Project would be minimal. The current agricultural operator of the Proposed Project Site and Solano County Supervisors were engaged throughout the project planning process and played an active role in developing the planned mitigation for the Proposed Project's conversion of the Bowsbey Property to non-agricultural use and additional non-mitigation steps to maintain continued ranching operations relocated by the Proposed Project. This collaborative effort took place over the course of two years and included adjacent landowners with the intent of assuring the operator's continued productivity. Hydrological modeling was also conducted and the Proposed Project's design modified to address water level concerns of nearby diverters. The Draft EIR was filed with the State Clearinghouse on December 16, 2019 and made available online and at public libraries in Davis, Dixon, Rio Vista, and Vacaville for public review ending on February 14, 2020. A public meeting to receive public comments on the Draft EIR was held on January 22, 2020. Additional details on the public participation and environmental review process is provided in Section 1.3 of Attachment 25 – Final EIR, Chapter 1 Introduction. The Proposed Project would not result in conflicts with any of the following local land use policies, plans, programs and ordinances: General Plan and Zoning: The Proposed Project is compatible

with the Solano County General Plan and Zoning. The Proposed Project Site consists of irrigated agricultural land and managed wetlands. The Solano County General Plan designates the site and its surroundings as agricultural land with a resource conservation overlay. The Proposed Project Site is currently zoned A-80 (Exclusive Agricultural 80 acres). The Exclusive Agriculture designation, however, allows for resource conservation uses, including 1) conservation and mitigation banks; 2) tidal, managed, and seasonal wetland restoration; and 3) cultivation of plants and natural feed important to wildlife habitat. The Solano County General Plan implementation program's regulation AG.I-1 requires mitigation for loss of agricultural land at a minimum of 1.5:1. The project would result in the loss of approximately 1,460 acres of prime farmland on the Bowsbey property (Draft EIR pp. IV.B-10 through IV.B-15, with revisions in Final EIR, Chapter 2, IV.B). Proposed Project Mitigation Measure AG-1a would offset this loss by requiring the purchase of at least one agricultural conservation easement for a minimum of 1,000 acres, and funding for agricultural improvements (e.g., irrigation infrastructure) on a nearby farmed property. Mitigation Measure AG-1 would result in irrigation improvements of 320 acres of Prime Farmland that could not previously be farmed as Prime Farmland; new irrigation infrastructure for 340 acres of land that will become Prime Farmland with the new system; new irrigation infrastructure for 100 acres of non-Prime Farmland; improved drainage of non-irrigated rangeland for 960 acres; and the preservation of 1,000 acres of Prime Farmland through conservation easements. Together, these mitigation measures would meet or exceed the General Plan's required mitigation ratio for loss of agricultural land of 1.5:1.

Solano County Multispecies Habitat Conservation Plan: The Proposed Project Site is within the Plan Area of the Solano County Water Agency's Solano Multispecies Habitat Conservation Plan. Use of the Proposed Project Site is consistent with the Plan's Coastal Marsh Natural Community goals and objectives, which apply to all marsh habitats within the historic influence of tidal action, including areas that are currently influenced by tidal action or are diked and no longer affected by tides. One of the stated goals of the Plan is to "contribute to enhancing essential ecological processes, functions, and values; species diversity; and habitat heterogeneity of coastal marsh habitat within the Plan Area." The Proposed Project Site was historically influenced by tidal action and the proposed restoration would re-establish tidal activity and enhance ecological processes, species diversity, and habitat heterogeneity through the creation of subtidal, intertidal, and floodplain habitat.

Aesthetics: The Proposed Project is compatible with the Solano County General Plan's protection of scenic resources and viewsheds important to the County, including scenic vistas, scenic resources, and day or nighttime public views.

Energy Use: The Proposed Project is compatible with Solano County's Climate Action Plan for Energy and Efficiency as construction energy use would not be wasteful, inefficient, or unnecessary and there would be negligible operational energy use.

Farmland Protection: As described in pages IV.B-10 to IV.B-12 in Draft EIR, Chapter IV.B Agriculture and Forestry and Master Response #2 in Attachment 5 – Final EIR, Chapter 3 Response to Comments, the Proposed Project would convert prime farmland to non-agricultural use. To offset this loss, Mitigation Measure AG-1 would result in irrigation improvements of 320 acres of Prime Farmland that could not previously be farmed as Prime Farmland; new irrigation infrastructure for 340 acres of land that will become Prime Farmland with the new system;

new irrigation infrastructure for 100 acres of non-Prime Farmland; improved drainage of non-irrigated rangeland for 960 acres; and the preservation of 1,000 acres of Prime Farmland through conservation easements. Improvements would be selected in coordination with the property owner(s) and/or their agricultural lessees in a manner which best improves the agricultural viability and drainage in this part of Solano County.

Williamson Act: As described in pages IV.B-13 to IV.B-14 in Chapter IV.B, Agriculture and Forestry (Attachment 6), the Proposed Project meets the principals of compatibility contained in the Williamson Act, and would not conflict with the applicable Williamson Act contracts. The Williamson Act contracts covering the Proposed Project Site were adopted in 1970, 1979, and 1984. Each contract contains a compatibility provision for open space use pursuant to Government Code section 51205. More specifically, all three Williamson Act contracts identify Open Space as an allowed use independent of the separate and equally allowed use for agricultural purposes, and nothing in the language of the contracts prevents the open space use from occupying all of the contracted parcels. As an example, the Liberty Williamson Act Contract, paragraph 11, cites "Watershed and Conservation or Marsh Preservation zoning" as compatible zones, with attendant uses being compatible with the purposes of the Contract. All three contracts require that their subject property be maintained in agricultural or open space use and recognize that the lands in question have "substantial public value as open space." Open space includes "use or maintenance of land in a manner that preserves its natural characteristics, beauty, or openness for the benefit and enjoyment of the public, [or] to provide habitat for wildlife..." (Gov. Code § 51201). The Proposed Project would provide habitat for both aquatic and terrestrial wildlife. The Government Code also provides for open space uses for land that is located in a wildlife habitat area, a managed wetland area, a submerged area, or an area enrolled in the United States Department of Agriculture Conservation Reserve or Enhancement Programs. As discussed by the Draft EIR pages III-8 through III-14, and page IV.B-2 through IV.B-5 (with revisions in Final EIR, Chapter II, III and IV.B), the Proposed Project site is covered by one or more of these characteristics (e.g. the Proposed Project site contains submerged areas, managed wetlands, wildlife habitat, and the Liberty Farms property is covered by U.S. Department of Agriculture Wetlands Reserve Program [WRP]). As defined by California law and the existing contracts, all three properties would be under open space use as submerged land and/or wildlife habitat upon Proposed Project completion.

Conservation Easements: The Natural Resources Conservation Service (NRCS) has confirmed that it considers the restoration of tidal marsh habitat for the Proposed Project a compatible use in the context of the existing WRP easements on the Liberty Farms Property. The Proposed Project's Long-Term Management Plan (LTMP) and Wetlands Reserve Plan of Operations (WRPO) will support a Compatible Use Authorization to facilitate implementation of the project and provide the necessary protections to target protected fish species within the areas subject to the existing WRP easement.

Transportation: The Proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, or bicycle and pedestrian facilities. The Proposed Project would have vehicle miles traveled (VMT) associated with short-term construction activities and has the potential to affect VMT through proposed roadway modifications. Due to the temporary nature of these VMT increases and the

incorporation of project design features to minimize VMT, short-term changes to VMT would be less than significant. Given the relatively low frequency with which the Proposed Project would generate VMT in the long-term, impacts to VMT and conflict with CEQA Guidelines Section 15064.3, subdivision (b) would not be significant. The Proposed Project would not substantially increase hazards due to a geometric design feature or incompatible use. The Proposed Project would not physically or permanently alter publicly accessible roadways in a manner that might result in inadequate emergency access.

Water Supply: Diversions near the Proposed Project Site include the nearby RD 2068 agricultural diversion, the State Water Project's Barker Slough Pumping Plant, and private agricultural diversions. The largest nearby agricultural diversion is the RD 2068 diversion, which has a maximum capacity of 140 cfs. The Barker Slough Pumping Plant is the largest municipal diversion near the Proposed Project Site, located over eight miles by navigable waterways to the west. It is a major source of drinking water for communities served by the North Bay Aqueduct north of the Delta, supplying water for Travis Air Force Base, American Canyon, Benicia, Calistoga, Fairfield, Napa, Vacaville, Vallejo, and Yountville. Water rights decision D-1641 established multiple compliance monitoring stations to protect drinking water beneficial uses, including: Contra Costa Canal at Pumping Plant 1 (C5), Clifton Court Forebay (C9), the Delta Mendota Canal entrance (DMC1), the North Bay Aqueduct at Barker Slough (SLBAR3), and the City of Vallejo intake at Cache Slough (C19) and other stations. Resource Management Associates, Inc. (RMA) has modeled regional salinity impacts from the Proposed Project for these locations during dry and below normal years (Attachment 2 – Draft EIR, IV.G Hydrology and Water Quality, Attachment 3 – Final EIR, Chapter 2, IV.G, Master Response #1 in Attachment 5 – Final EIR, Chapter 3 Response to Comments, and Attachment 4 – Final EIR, Appendix X – Resource Management Associates Lookout Slough Tidal Habitat Restoration and Flood Improvement Project Modeling), and Environmental Science Associates, Inc. (ESA) has provided interpretation of the modeling results (Attachment 16 – Draft EIR, Appendix S, Potential Salinity Impacts Assessment, Environmental Science Associates). RMA also modeled potential changes in salinity at the Contra Costa Water District's intakes at Mallard Slough, Old River, and Victoria Canal. The potential effects of the Proposed Project on agricultural water users associated with potential increases in special-status fish species in the Delta was analyzed (Attachment 5 – Final EIR, Chapter 3 Response to Comments) and agricultural diversions in the region of the Proposed Project are currently located in critical habitat for several listed fish species, and thus they are already subject to compliance with the state and federal endangered species acts. The modeled effects of the Proposed Project's restoration activities at Delta drinking water intakes are expected to include limited increases and decreases in salinity relative to base conditions, predicted from the dry and below normal model years. RMA predicts reduced electrical conductivity (EC is the standard measurement that directly correlates with the concentration of dissolved salts) at the Barker Slough North Bay, Antioch and Rio Vista diversion intakes (reductions of 3-5 percent). The C19 diversion intake station is predicted to have increases in EC, up to 5.5 percent higher than base conditions, for at least one month per year, primarily in the summer and fall. The remaining monitored intake sites are expected to see EC increases between 1 and 3.5 percent. The Proposed Project would have almost no impact on maximum

mean daily chloride levels used to determine water quality compliance at intake sites. The Proposed Project is expected to result in only relatively small percentage changes (1-3 percent increases at South Delta intakes and 1-4 percent decreases at Antioch and Contra Costa Water District intakes) to bromide concentrations. Altogether, the RMA modeling indicates that even for sites that would experience an increase in salinity as a result of the Proposed Project, the Proposed Project would not make non-compliance with D-1641 water quality objectives more likely. The changes in EC predicted to occur are considerably less than the natural variations between seasons and between the same time in different years. Based on the RMA modeling results, Proposed Project salinity changes would therefore not result in substantial adverse effects on the beneficial use of Delta waters as a drinking water source. The potential for the Proposed Project to affect water quality for in-Delta agricultural irrigation (and wildlife) users by increasing salinity concentrations at their agricultural diversion intakes was also analyzed by RMA. The D-1641 stations for agricultural beneficial uses include Sacramento at Emmaton (D22) and Collinsville (C2), and San Joaquin at Jersey Point (D15) and Prisoners Point (D29). The RMA modeling results for stations D22 and D15 indicate that EC levels would be slightly reduced for most of the year, with 3-4 percent decreases in spring and summer, compared to existing conditions, and indicate minimal or no changes for station C2. The only predicted increase in EC at D-1641 stations designated for agricultural beneficial uses due to the Proposed Project occurs at station D29 during the fall, although the slight increases do not make non-compliance more likely. Any short-term increases would not exceed any D-1641 compliance requirements that protect agricultural and wildlife beneficial uses. The Proposed Project's restoration of tidal wetland habitat would alter the existing drainage system in and adjacent to the Proposed Project Site, including tidal exchanges that could affect agricultural water supply and drainage. Modeling by RMA predicted a slight reduction in the tidal range with an increase of heights of low tides (up to 0.1 ft. at mean lower low water) and a reduction in the heights of high tides (up to 0.2 ft. at mean higher high water). The modeling predicts there would be a reduction in the average elevation of high tides and an increase in the average elevation of low tides in the immediate vicinity of the Proposed Project Site (i.e., along Shag Slough). These predicted changes in tidal height diminish in channels located farther away from the Proposed Project Site. The slight reduction in average high tides is not expected to appreciably affect the operations of agricultural intakes in the Delta. Since there would also be a slight increase in average low tides in the immediate vicinity of the Proposed Project Site, there would be minor but offsetting balance to the changes in average tidal range impacts on the timing of local agricultural water pumping (either for use of water for irrigation or for discharge of excess water on irrigated lands) over the course of a full tidal cycle. Even at their largest value of approximately 0.2 ft, the Proposed Project's effects on water surface elevation are only a fraction of the total tide range and its natural variations during the entire tidal cycle. The average natural tide range for the areas adjacent to the Proposed Project is approximately 4 and 4.4 ft (discussed in detail in the Draft EIR, IV.G and Final EIR, Chapter 3). During construction, the Proposed Project would use surface water sourced from existing entitlements from adjacent sloughs, which would be adequate to serve the Proposed Project's water needs, including during dry and multiple dry years.

Following completion of construction, the Proposed Project site would be a native ecosystem which would not require application of water and would be resilient to changes in precipitation. Nearby agricultural operations and municipal water facilities' use of existing pumps and diversions would therefore be unchanged and existing water entitlements and resources are therefore sufficient to serve the Proposed Project and reasonably foreseeable future development during normal, dry, and multiple dry years. As further described in Attachment 5 – Final EIR, Chapter 3 Response to Comments, the Proposed Project would not raise Dissolved Organic Carbon (DOC) and affect the quality of water treated at water treatment plants for the following reasons: the lack of impact from the nearby Liberty Island restoration; the limited potential for water particles from the Proposed Project reaching the NBA intake; and the potential environmental processing of DOC on the Proposed Project Site. In addition, the potential effects of methylmercury were analyzed using the best available and up-to-date science and the Proposed Project was found to not be a source of methylmercury and would have a less-than-significant impact on methylmercury concentrations in the Delta (Attachment 5 – Final EIR, Chapter 3 Response to Comments).

Wastewater: The Proposed Project does not include any wastewater generating or growth-inducing components. No service would be required from the local wastewater treatment provider and the wastewater treatment provider serving the area would have adequate capacity for the Proposed Project's projected demand in addition to existing commitments.

Solid Waste Generation: The Proposed Project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure, impair solid waste reduction attainment, or conflict with any local, state, or federal regulations on solid waste reduction. One resident lives along this segment of Liberty Island Road, and access would be maintained or moved to assure continued emergency ingress and egress for occupants. There are no other properties served by this portion of Liberty Island Road apart from the Liberty Island Ecological Reserve, which does not contain any residences or businesses that would require evacuation or response in the event of an emergency.

Emergency Response or Evacuation: The Proposed Project would not substantially impair an emergency response or evacuation plan. Liberty Island Road presently ends on the eastern side of the Liberty Farms Property. One resident lives along this segment of Liberty Island Road, and access would be maintained or moved to assure continued emergency ingress and egress for occupants. There are no other properties served by this portion of Liberty Island Road apart from the Reserve, which does not contain any residences or businesses that would require evacuation or response in the event of an emergency. The sole terrestrial access point to the Reserve is the Shag Slough Bridge, which is no longer safely accessible by vehicles (foot traffic only) due to its poor structural condition, and would remain inaccessible following Liberty Island Road vacation. Fire and police protection for the Reserve is currently provided by boat access from entities with emergency marine services such as the Solano County Sherriff Marine Patrol Division or the Coast Guard. Potential impacts to emergency access to the Reserve are discussed in further detail in the Draft EIR, Chapter IV.I, Public Services.

Emergency Services: The Proposed Project would not increase demand for fire and police emergency services.

Wildfire: The Proposed Project would not exacerbate wildfire risks and expose occupants to pollutant concentrations

from wildfire or the uncontrolled spread of wildfire. The Proposed Project would not exacerbate long-term fire risk in the Proposed Project Site or its vicinity and would not attract more people to the area. No new roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk are proposed. The Proposed Project would therefore not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Vector Control: As a whole, the Proposed Project would result in a decrease in suitable mosquito breeding habitat relative to current conditions through the creation of open water channels subject to tidal circulation, increase in water surface turbidity, and creation of more favorable habitat for predators (such as fish). Studies have demonstrated that restoring tidal connectivity through the removal of barriers and creation of channels that increase open water circulation can significantly reduce mosquito populations. By removing irrigated pastures and periodically flooded but stagnant duck habitat, the Proposed Project is expected to reduce local mosquito populations. The Proposed Project's negative effect on breeding mosquitoes would be further pronounced due to the site's elevation profile. As there would be less suitable mosquito breeding habitat present under the post-project conditions, there would be no need for new, expanded or relocated governmental facilities for the purpose of maintaining mosquito control performance standards. The Proposed Project would not increase risk of vectors or demand for Solano County Mosquito Abatement District services. Exposure of People or Structures to Significant Risks: The Proposed Project would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. [ATT 2_DEIR_ChIV.G_Hydrology_Water Quality.pdf](#), [ATT 3_FEIR_Ch2_Revisions to DEIR.pdf](#), [ATT 4_FEIR_AppX_RMA Lookout Slough Report.pdf](#), [ATT 5_FEIR_Ch3_Response to Comments.pdf](#), [ATT 6_DEIR_ChIV.B_Agriculture_Forestry.pdf](#), [ATT 16_DEIR_AppS_Potential Salinity Impacts.pdf](#), [ATT 17_DEIR_ChIII_Project Description.pdf](#), [ATT 22_DEIR_ChIV.A_Impacts Found to be LTS.pdf](#), [ATT 23_DEIR_ChIV.I_Public Services.pdf](#), [ATT 24_DEIR_AppE_Good Neighbor Checklist.pdf](#), [ATT 25_FEIR_Ch1_Introduction.pdf](#)

DELTA PLAN CHAPTER 7

[RR P1 / Cal. Code Regs., tit. 23, § 5012](#) - Prioritization of State Investments in Delta Levees and Risk Reduction

Is the covered action consistent with this portion of the regulatory policy?

Yes

Answer Justification:

The Proposed Project is consistent with the below goals listed in the Priorities for State Investment in Delta Integrated Flood Management Table Ecological and flood risk considerations warrant levee improvements on the Proposed Project Site, which has a strong potential to create high-quality, contiguous habitat for aquatic special-status species while reducing the risk of failure of the existing levee system. In the Cache Slough Complex, levee maintenance responsibilities are shared among DWR and local reclamation districts (RDs). Eastern Solano County has 21 RDs and one Levee Maintenance District that maintain levees protecting over 80,000 acres of land and 700 people. The state of California estimates that over \$12 billion in levee repairs are needed in the Delta; approximately \$900 million have been earmarked for this purpose recently. Lands within the Proposed Project Site are protected by levees maintained and operated by RD 2098. Adjacent

lands are protected by levees maintained and operated by RD 2098, 2068, 2104, and 2060. Levee systems on the Proposed Project Site's perimeter along Cache Slough and Hass Slough are considered deficient due to lack of adequate freeboard and deferred maintenance over time, making them particularly vulnerable to increases in water level, erosion, or wind-wave run-up potential.

Goal #2: Levee Network The Proposed Project was designed to increase local flood conveyance in the Yolo Bypass, which would be achieved by building the Duck Slough Setback Levee, a project levee within the State Plan of Flood Control, to the 100-year flood event (or the 1957 authorized design profile, whichever is higher) with six feet of freeboard and one extra foot for climate resiliency, consistent with DWR's flood planning objectives for the Central Valley. Additionally, the levee was designed to conform to applicable standards from the California Code of Regulations, the Corps Engineering Manual, the Corps Design Guidance for Levee Under-Seepage, and the Code of Federal Regulations.

Goal #1 Levee Network and Goal #2 Localized Flood Protection and Ecosystem Conservation The Proposed Project would widen a portion of the Yolo Bypass to increase flood storage and conveyance. For discussion on Water Supply please see response to DP P2. The Proposed Project does not address the issue of Delta Emergency Preparedness, Response, and Recovery, but the improved flood protection that would result from implementation of the Proposed Project is expected to have a marginally beneficial reduction, if there is any effect at all, in potential need for these services. Hydraulic models were utilized to assess the potential for increased stages in Cache and Hass Sloughs, as well as for other locations adjacent to, upstream of, and downstream of the Proposed Project Site. The model analysis indicates that there would be no change to water levels in Cache and Hass Sloughs, and that the Proposed Project would generally result in localized stage reductions in the Yolo Bypass and would not result in upstream or downstream stage increases. Stage decreases would have modest but positive impacts on flood-related public services by reducing demand on levees. The new Duck Slough Setback Levee will meet or exceed the USACE PL 84-99 standards and provide stronger flood protection for life and property protected by the new levee, and will provide a net enhancement of floodplain habitat.

Goal #1 Ecosystem Conservation and Goal #3 Levee Network and Ecosystem Conservation The Proposed Project would restore approximately 3,165 acres of tidal wetland habitat including intertidal and shallow subtidal habitats and protect in perpetuity 3,400 acres of open space including channel-margin habitat. By expanding the Yolo Bypass floodplain, constructing the Duck Slough Setback Levee, and improving the Cache/Hass Slough Levee, the Proposed Project would provide stronger protection to life and property north of Duck Slough as well as throughout the area that depends on flood protection from the Yolo Bypass. The Cache and Hass Slough area is listed in table 4-2 (Priorities for State Investment in Delta and Suisun Marsh Levees) of the Delta Stewardship Council's Investment Strategy, July 2017. Therefore, the Proposed Project and covered action is consistent with the RR P1 / Cal. Code Regulations., title. 23, § 5012 and Delta Stewardship Investment Strategy. [ATT 10 DEIR AppP Tidal Hydro Hydraulic Analysis.pdf](#), [ATT 14 DEIR AppO Baseline Study Flood Conveyance.pdf](#), [ATT 15 Hydrologic Hydraulic System Analysis.pdf](#), [ATT 20 DEIR AppR Hydrologic Hydraulic Risk.pdf](#)

[RR P2 / Cal. Code Regs., tit. 23, § 5013](#) - **Require Flood Protection for Residential Development in Rural Areas**

Is the covered action consistent with this portion of the regulatory policy?

N/A

Answer Justification:

The Proposed Project does not involve new residential development of five or more parcels.

[RR P3 / Cal. Code Regs., tit. 23, § 5014](#) - **Protect Floodways**

Is the covered action consistent with this portion of the regulatory policy?

Yes

Answer Justification:

The Proposed restoration and levee work within the Proposed Project Site would require an encroachment permit from the Central Valley Flood Protection Board (CVFPB) and Section 408 Permission from the Corps. These state and federal authorizations would be issued after the Proposed Project provides sufficient information and analysis to demonstrate that the proposed encroachments from the Duck Slough Setback Levee would not unduly impede the free flow of water in the floodway or jeopardize public safety. Setback of a portion of the Yolo Bypass West Levee through replacement of the Shag Slough Levee with the Duck Slough Setback Levee would locally expand the Yolo Bypass Floodplain and improve flood conveyance in the Yolo Bypass system, which is important for flood protection throughout the greater Sacramento Region. Levee setback would reduce flood risk to properties north and west of Duck Slough during flooding events of a 1% ACE (100-year recurrence frequency) or greater. The Proposed Project Site would provide approximately 40,000 acre-feet of additional flood conveyance during such events and the Duck Slough Setback Levee would provide more freeboard and greater protection than the Shag Slough Levee. The proposed Duck Slough Setback Levee was designed according to the standards of the CVFPB, the Corps, and FEMA. Additional detail on this analysis of floodway effects can be found in Attachment 14 – Draft EIR Appendix O – Baseline Study Deliverable for Flood Conveyance Optimization. EIP and DWR submitted an application for the CVFPB Encroachment Permit and Corps Section 408 Permission for the Proposed Project in December 2019. Flood control systems in the vicinity of the Proposed Project Site are mostly managed by Reclamation District (RD) 2098 and RD 2068. These entities are charged with maintenance and operation of levees, sloughs, canals, pumps, and other flood protection structures within their area of jurisdiction. As flood control systems in the Delta function as an interconnected network, inundation of the Proposed Project Site may have implications for nearby RDs, potentially altering flood risk in the area and modifying the capacity of nearby levees to provide flood protection. Accordingly, hydraulic models were developed to inform the Proposed Project design and to evaluate probable changes to regional hydrology for the Proposed Project alone and in conjunction with nearby related projects. The findings of these models are discussed in Attachment 2 - Draft EIR, Chapter IV.G, Hydrology and Water Quality; they support the Proposed Project's consistency with Delta Policy RR P3 for protection of floodways. Through levee modifications such as setback, breach, and degradation, floodwaters from the Yolo Bypass would be conveyed through the Proposed Project Site during flooding events, increasing local flood storage during bypass flooding events. Hydraulic models discussed in further detail in

Attachment 2 - Chapter IV.G, Hydrology and Water Quality, indicate that this would not lead to any off-site increases in water surface elevations. This would therefore not lead to any off-site flooding which might necessitate expanded stormwater drainage facilities. The Proposed Project is therefore consistent with Delta Plan policy RR P3 for protection of floodways. Following the Proposed Project's completion, RD 2098 would be responsible for maintaining the Duck Slough Setback Levee. DWR would be responsible for maintaining the Cache/Hass Slough Training Levee and the Shag Slough Levee north of the northernmost breach, where an access-controlled boat launch for use by public agencies would be constructed. The Shag Slough Levee would no longer serve in a flood control capacity and would accordingly not be maintained for that function. The Proposed Project's potential impacts on levee maintenance operations are discussed in Attachment 23 – Draft EIR, Chapter IV.I, Public Services. [ATT 2_DEIR_ChIV.G_Hydrology_Water Quality.pdf](#), [ATT 3_FEIR_Ch2_Revisions to DEIR.pdf](#), [ATT 10_DEIR_AppP_Tidal Hydro_Hydraulic Analysis.pdf](#), [ATT 14_DEIR_AppO_Baseline Study_Flood Conveyance.pdf](#), [ATT 15_Hydrologic_Hydraulic System Analysis.pdf](#), [ATT 20_DEIR_AppR_Hydrologic_Hydraulic Risk.pdf](#), [ATT 23_DEIR_ChIV.I_Public Services.pdf](#)

[RR P4 / Cal. Code Regs., tit. 23, § 5015 - Floodplain Protection](#)

Is the covered action consistent with this portion of the regulatory policy?

Yes

Flood improvement, including floodplain expansion within a portion of the Yolo Bypass, is a primary objective of the Proposed Project. The potential effects of these floodplain restoration activities have been analyzed in the Draft EIR and were found not to have a significant adverse impact on floodplain values and functions. [ATT 2_DEIR_ChIV.G_Hydrology_Water Quality.pdf](#), [ATT 3_FEIR_Ch2_Revisions to DEIR.pdf](#), [ATT 10_DEIR_AppP_Tidal Hydro_Hydraulic Analysis.pdf](#), [ATT 14_DEIR_AppO_Baseline Study_Flood Conveyance.pdf](#), [ATT 15_Hydrologic_Hydraulic System Analysis.pdf](#), [ATT 17_DEIR_ChIII_Project Description.pdf](#), [ATT 20_DEIR_AppR_Hydrologic_Hydraulic Risk.pdf](#), [ATT 21_DEIR_ChIV.D_Biological Resources.pdf](#), [ATT 22_DEIR_ChIV.A_Impacts Found to be LTS.pdf](#)

Answer Justification:

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