DRAFT RECORD OF DECISION

DELTA ISLANDS AND LEVEES, SACRAMENTO – SAN JOAQUIN RIVER DELTA, CALIFORNIA ECOSYSTEM RESTORATION

The final interim integrated feasibility report and joint environmental impact statement (final integrated report), dated [*add date*], and the report of the Chief of Engineers, dated [*add date*] for the Delta Islands and Levees Feasibility Study addresses ecosystem restoration in the California Delta. Based on these reports, the reviews of other Federal, State, and local agencies, Native American Tribes, input from the public, and the review by my staff, I find the plan recommended by the Chief of Engineers to be technically feasible, economically justified, cost effective, in accordance with environmental statutes, and in the public interest. Public review of the draft FR/EIS was completed on June 2, 2014. All comments submitted during the public comment period were responded to in the Final FR/EIS. A 30-day waiting period and state and agency review of the Final FR/EIS was completed on {*add DATE SAR PERIOD ENDED*}.

The integrated report, incorporated herin by reference, evaluated the restoration of intertidal marsh to create important habitat for sensitive and threatened species, including the delta smelt. The plan recommended for implementation is the Recommended Plan and Environmentally Preferred Alternative – Alternative 3, and includes:

- Restoration of up to 340 acres of intertidal marsh habitat by reversing the effects of subsidence at Big Break through the placement of up to 1 million cubic yards of dredged material;
- Approximately 90 acres would be planted with aquatic vegetation; and,
- Approximatley 250 acres would be shallow water habitat for fish species

The recommended plan would implement the associated monitoring and adaptive management plan. Structural flood risk management measures were considered in this study but were ultimately screened out due to a less than favorable benefit cost ratio, resulting in a single purpose ecosystem restoration study.

In addition to the recommended plan described above, two additional alternatives were evaluatied in the impact assessment: a "no action" plan, and Alternative 2, which includes creation of 160 acres of intertidal marsh habitat at Big Break placed over 5 years. Several other structural and non-structural alternatives were considered but were eliminated due to greater cost relative to benefits, adverse environmental effects, and/or inconsistency with policy.

All practicable means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Key environmental factors, which are coordinated with the appropriate resource agencies, include water quality compliance during the placement of

dredged material, and potential impacts to listed fish species during construction. These impacts would be short term during construction, with long term benefits to fish species and water quality from successful restoration. Best Management Practices (BMPs) would be implemented during construction to limit these impacts, including water quality control measures such as sacrificial straw bales and turbidity curtains, if necessary, in order to limit the area where increased turbidity would occur. By using the BMPs to limit the area of impact, it also reduces the possibility of significant cumulative impacts from turbidity. There would be long term beneficial cumulative effects from implementing the Delta Study, in combination with other restoration efforts going on in the Delta. There would be no mitigation associated with this action; however, in accordance with Corps policy for ecosystem restoration projects, post-construction monitoring would be required to ensure that the restoration meets the established success criteria in the monitoring and adaptive management plan. The plan estimates 5 years of postconstruction monitoring for each segment of restoration, for a total of 15 years of monitoring, due to the 10 year construction period. This proposed monitoring period is to account for the need to adaptively construct the project and apply any lessons learned throughout the 10 year construction timeframe. Monitoring will cease when the restoration has met the established success criteria, which could occur less than 5 years following the final construction year.

In accordance with section 7 of the Endangered Species Act of 1973, as amended, the U.S. Fish and Wildlife Service (USFWS) issued a Biological Opinion on June 14, 2018. Both USFWS and the National Marine Fisheries Service (NMFS) determined that the project will enhance critical habitat for sensitive species. All terms and conditions resulting from these consultations shall be implemented in order to minimize take of threatened and endangered species. A final Coordination Act Report was received from USFWS on June 26, 2018, with recommendations for conservation measures to be included in the recommended plan under the Fish and Wildlife Coordination Act of 1934. The Corps will consider these recommendations and implement them, as appropriate, during final design of the restoration project.

The National Marine Fisheries Service concurred with the Corps' determination that temporary impacts during construction of the recommended plan may affect, but are not likely to affect listed fish species, and long term the recommended plan is likely to provide benefits to juvenile salmonids and sturgeon. A concurrence letter was received from NMFS on June 15, 2018. In addition, the NMFS concurrence letter identified that the recommended plan would result in no adverse effects to essential fish habitat under the Magnusson-Stevens Fisheries Management Act.

In accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, the Corps determined that the recommended plan will not adversely affect historic properties. A concurrence letter was received from the State Historic Preservation Officer (SHPO) on May 29, 2014. During the preconstruction engineering and design phase of the project, the Jersey Island pipeline and haul route footprint will be inventoried and evaluated for historic properties. If any additional effects are identified, consultation would be reinitiated under Section 106 of the NHPA, as appropriate.

In accordance with the guidelines for specification of disposal sites for dredged or fill material under section 404(b)(1) of the Clean Water Act, the Corps determined that the recommended plan is the least environmentally damaging practicable alternative. A water quality certification pursuant to section 401 of the Clean Water Act will be obtained from the California Central Valley Regional Water Quality Control Board (RWQCB) during the pre-construction engineering and design phase. In a letter dated July 03, 2018, the RWQCB stated that they support implementation of the recommended plan. The Corps confirmed that the recommended plan is consistent with the RWQCB requirements and committed to developing and implementing appropriate BMPs in coordination with the RWQCB, including the preparation of a Stormwater Pollution Prevention Plan during the pre-construction engineering and design phase.

In addition with the above discussed potential effects and BMPs to avoid or minimize adverse effects, the Corps will coordinate with the East Bay Regional Park District (EBRPD) to ensure that recreational boaters are aware of the construction activities in Big Break. As necessary, safety boats and flaggers would be used to provide detours to boaters if routes are blocked by the pipeline. Due to the reduction in recreational boating acreage, the Corps will incorporate a "kayak trail" into the restoration area as part of the preconstruction design process.

Technical, environmental, and economic criteria used in the formulation of alternative plans were those specified in the Water Resource Council's 1983 <u>Economic and Environmental</u> <u>Principles and Guidelines for Water and Related Land Resource Implementation Studies</u>. All applicable laws, executive orders, regulations and local government plans were considered in the evaluation of alternatives. Based on review of these evaluations, I find the ecosystem restoration benefits of the recommended plan outweigh the costs of any adverse effects. This Record of Decision completes the National Environmental Policy Act process.

Date

R.D. James Assistant Secretary of the Army (Civil Works)