MEMORANDUM OF UNDERSTANDING BETWEEN U.S. ARMY ENGINEER RESEARCH AND DEVELOPMENT CENTER AND THE CALIFORNIA DEPARTMENT OF WATER RESOURCES FOR COLLABORATING ON ENGINEERING WITH NATURE AND INTEGRATED WATERSHED MANAGEMENT IN CALIFORNIA

This is a Memorandum of Understanding (MOU) between the U.S. Army Engineer Research and Development Center (ERDC) and the California Department of Water Resources (DWR). When referred to collectively, the ERDC and the DWR are referred to as the "PARTIES".

1. BACKGROUND: The mission of DWR is to sustainably manage the water resources of California, in cooperation with other agencies, to benefit the state's people and protect, restore, and enhance the natural and human environments in accordance with the California Water Resilience Portfolio, the DWR Strategic Plan, and the DWR Environmental Stewardship Policy. The US Army Corps of Engineers' (USACE's) Engineering With Nature® (EWN®) initiative seeks to intentionally align engineering and natural processes to efficiently and sustainably deliver economic, environmental, and social benefits through collaboration. Both DWR and USACE's ERDC have significant interests within their respective authorities for collaborating on nature-based engineering solutions for managing water, reducing flood risk, and restoring ecosystems. DWR and ERDC agree that the ability to achieve common water resources goals for California can be significantly enhanced through collaborative partnership between the Parties as outlined in this MOU. Furthermore, partnership among the Parties can further advance innovative planning, design, implementation, and operation of integrated watershed management efforts and projects in California.

2. AUTHORITIES: Section 110 of the Water Resources Development Act (WRDA) of 2020, amends Section 206(a) of the Flood Control Act of 1960 (33 U.S.C. 709a(a)) to allow the USACE to provide technical assistance to non-Federal interests and other Federal agencies for greater resiliency planning; Section 113 of WRDA 2020 amends Section 205 of the Flood Control Act of 1948 (33 U.S.C. 701s) to allow for natural or nature-based infrastructure projects to be considered as part of Section 205 continuing authorities program for small flood risk management projects; and Section 124 of WRDA 2020 instructs USACE, in coordination with non-Federal interests, to maximize the development, evaluation, and recommendation of project alternatives for future water resources development projects that produce multiple project benefits,

such as navigation, flood risk management, and ecosystem restoration benefits, including through the use of natural or nature-based features and the beneficial reuse of dredged material.

3. PURPOSE: The purpose of this MOU is to frame and confirm the Parties' intention to partner and collaboratively work together towards the achievement of sustainable, integrated, management of California's water resources and flood systems within each Parties' jurisdictional areas in a manner that promotes public safety and ecosystem health. This MOU provides the framework for defining the working relationship between the Parties within the context of the Parties' specific agency authorities, appropriations, missions, goals, and programs and projects at the State, regional, and local levels.

4. UNDERSTANDING OF THE PARTIES:

4.1 The Parties acknowledge:

4.1.1 The desire to work together to facilitate planning and implementation of integrated water resources programs and projects in California's Central Valley and statewide.

4.1.2 That certain laws, regulations, and policies govern the actions of the agencies, their personnel, and contractors.

4.1.3 That the Parties' involvement is based on the scope and timing of their authority, and on availability of funding.

4.2 The intent of the Parties is to:

4.2.1 Work together in a collaborative, innovative, and strategic manner on the efforts and projects as described in this MOU.

4.2.2 As needed and would be beneficial to the Parties, the Parties will also communicate and coordinate on development and implementation of Federal and State policies and legislation affecting integrated watershed management in California.

4.3 The intended areas of collaboration under the Parties' existing authorities:

4.3.1 Identification of existing and forthcoming related programs and activities that would warrant interagency planning and coordination, including but not limited to: the Central Valley Flood Protection Plan and associated Conservation

Strategy, and the San Joaquin River Basin integrated watershed management related planning efforts.

4.3.2 Identification and assessment of common goals drawn from each agency's strategic planning documents (e.g., California Water Resilience Portfolio, DWR's Strategic Plan, Central Valley Flood Protection Plan, USACE Campaign Plan, ERDC's Strategic Plan, EWN's Strategic Plan).

4.3.3 Identification of shared program and policy goals.

4.3.4 Research and development efforts and studies that would serve as a foundation for innovation at strategic and operational levels.

5. PERSONNEL: Each Party is responsible for all costs of its personnel, including pay and benefits, support, and travel. Each Party is responsible for supervision and management of its personnel.

6. GENERAL PROVISIONS:

6.1 POINTS OF CONTACT: The following points of contact (POC) will be used by the Parties to communicate in the implementation of this MOU. Each Party may change its point of contact upon reasonable notice to the other Party.

6.1.1. For the ERDC:

Primary: Todd S. Bridges, Ph.D. Phone: (601) 634-3626 Email: <u>Todd.S.Bridges@usace.army.mil</u>

Alternate: Jeffrey K. King, Ph.D., P.E. Phone: (202) 706-3534 Email: <u>Jeffrey.K.King@usace.army.mil</u>

6.1.2. For the DWR:

Primary: Kristopher Tjernell Phone: (916) 653-5791 Email: <u>Kristopher.Tjernell@water.ca.gov</u>

Alternate: Steve Rothert Phone: (916) 539-4400

Email: Steve.Rothert@water.ca.gov

6.2. CORRESPONDENCE: All correspondence to be sent and notices to be given pursuant to this MOU will be addressed, if to the ERDC, to –

6.2.1 United States Army Engineer Research and Development Center ATTN: Todd S. Bridges, Ph.D. Environmental Laboratory, EZS 3909 Halls Ferry Road Vicksburg, MS 39180 Phone: (601) 831-0691 Email: Todd.S.Bridges@usace.army.mil

and, if to the DWR, to –

6.2.2 California Department of Water Resources ATTN: Kristopher Tjernell California Department of Water Resources P.O. Box 942836 Sacramento, CA 94236-0001 Phone: (916) 653-5791 Email: <u>Kristopher.Tjernell@water.ca.gov</u>

Or as may from time to time otherwise be directed by the Parties.

6.3 FUNDS AND MANPOWER: This MOU does not document nor provide for the exchange of funds or manpower between the Parties nor does it make any commitment of funds or resources.

6.4 AUTHORITIES AND AVAILABILITY OF FUNDS: DWR and EWN intend to conduct activities contemplated in this agreement in accordance with existing authorities and subject to the availability of funds. If provisions of this MOU are determined to be inconsistent with existing laws or regulations or directives governing the Parties, then the provisions of this MOU not affected by a finding of inconsistency shall remain in full force and effect.

6.5 MODIFICATION OF THE AGREEMENT: This MOU may only be modified by the written agreement of the Parties, duly signed by their authorized representatives.

6.6 PARTICIPATION WITH OTHER PARTIES: This MOU in no way restricts the Parties from participating with other public or private agencies, organizations, and

individuals. All Parties recognize the importance of continuing cooperation and participation with the government and non-governmental organizations and institutions in programs of mutual interest.

6.7 TERMINATION OF UNDERSTANDING: This MOU may be terminated by either Party by giving at least 30 days written notice to the other Party. The MOU may also be terminated at any time upon the mutual written consent of the Parties.

6.8 ENTIRE UNDERSTANDING: It is expressly understood and agreed that this MOU embodies the entire agreement between the Parties regarding the MOU's subject matter.

6.9 EFFECTIVE DATE: This MOU takes effect beginning on the day after the last Party signs.

6.10 EXPIRATION DATE: This MOU shall expire five (5) years after the effective date unless terminated earlier by either party in accordance with article 6.6.

IN WITNESS WHEREOF, the PARTIES have caused this MOU to be executed by their duly authorized representatives as follows:

FOR: State of California, Department of Water Resources

kristopher a tjernell

5/18/2021

DATE

Kristopher Tjernell Deputy Director, Integrated Watershed Management California Department of Water Resources

FOR: US Army Engineer Research and Development Center - ERDC

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5 May 2021

David W. Pittman, P.E., Ph.D. Director DATE