MEMORANDUM OF AGREEMENT

for the

IMPLEMENTATION OF THE 2008 and 2009 BIOLOGICAL OPINIONS FOR THE COORDINATED LONG-TERM OPERATION OF THE CENTRAL VALLEY PROJECT AND STATE WATER PROJECT

by and between

THE CALIFORNIA DEPARTMENT OF WATER RESOURCES OF THE STATE OF CALIFORNIA AND THE UNITED STATES DEPARTMENT OF

THE UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION

This Memorandum of Agreement ("Agreement") is entered into this 12 day of 1018, pursuant to the provisions of the California Water Resources Development Bond Act and other applicable laws of the State of California, and the Reclamation Act of June 17, 1902 (32 Stat. 388), as amended and supplemented, including but not limited to the Act of August 26, 1937 (50 stat. 844), as amended and supplemented, between the Department of Water Resources of the State of California ("DWR") and the United States Department of the Interior Bureau of Reclamation ("Reclamation"). DWR and Reclamation are referred to individually as "Party" and collectively as "Parties" in this Agreement.

1.0 RECITALS OF THE MEMORANDUM

- 1.1 The United States, through Reclamation, has constructed and is operating the Central Valley Project, California ("CVP"), for diversion, storage, carriage, distribution and beneficial use, for flood control, irrigation, municipal, domestic, industrial, fish and wildlife mitigation, protection and restoration, generation and distribution of electric energy, salinity control, navigation and other beneficial uses, of waters of the Sacramento River, the American River, the Trinity River, and the San Joaquin River and their tributaries.
- 1.2 DWR is a State agency within the California Natural Resources Agency responsible for constructing, operating, and maintaining the State Water Project ("SWP") storage and conveyance facilities located throughout California, including pumping facilities located in the Delta. The SWP is composed of 21 reservoirs and lakes and 11 other storage facilities with a combined storage capacity of more than 4 million acre-feet; five hydroelectric power plants and four pumping-generated plants; and more than 700 miles of major canals and aqueducts.

- 1.3 Pursuant to Sections 7.(a)(1) and (a)(2) of the Endangered Species Act of 1973, as amended and supplemented ("ESA"), Reclamation is to utilize its authorities in furtherance of the purposes of the ESA, and insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.
- 1.4 On December 15, 2008, the United States Fish and Wildlife Service ("USFWS") issued a Biological Opinion on the Coordinated Long-Term Operation of the CVP and SWP ("USFWS BiOp"). The USFWS BiOp includes, among other things, monitoring and reporting requirements, Reasonable and Prudent Alternative ("RPA") Actions and Components, Reasonable and Prudent Measures ("RPM"), Terms and Conditions, and Conservation Recommendations.
- 1.5 On June 4, 2009, the National Marine Fisheries Service ("NMFS") issued a Biological Opinion and Conference Opinion on the Coordinated Long-Term Operation of the CVP and SWP ("NMFS BiOp"). The NMFS BiOp includes, among other things, monitoring and reporting requirements, RPA Actions and Components, RPM, Terms and Conditions, and Conservation Recommendations.
- On August 2, 2016, DWR and Reclamation jointly requested the Reinitiation of Consultation on the Coordinated Long-Term Operation of the CVP and SWP, and by Presidential Memorandum, dated October 19, 2018, Reclamation shall issue a biological assessment by January 31, 2019, and USFWS and NMFS shall ensure issuance of their final biological opinions within 135 days thereafter.
- 1.7 The purpose of this Agreement is to: specifically identify funding for the joint and individual requirements for DWR and Reclamation that are set forth by the USFWS BiOp and the NMFS BiOp, and the subsequent and/or superseding biological opinions issued as described in Paragraph 1.6 (collectively referred to as "BiOps"); establish procedures for cooperation and collaboration; establish procedures for tracking and reporting expenditures; establish procedures to prioritize activities to satisfy the requirements of the BiOps; and, establish procedures for funding to implement the BiOps and this Agreement.

2.0 TERMS AND CONDITIONS

2.1 Effective Date

This Agreement shall become effective upon the date first hereinabove written and shall remain in effect for the duration of the BiOps; or terminated by written mutual agreement of the Parties hereto; or, by any Party as provided in Paragraph 4.5 herein.

2.2 Designation of Responsibilities

The Parties acknowledge and agree that the requirements in the BiOps are the joint responsibility of DWR and Reclamation. The costs of these joint responsibilities are to be shared equally (50-percent to each Party), except as provided in Exhibits B and C herein. DWR and Reclamation shall be jointly responsible for satisfying the requirements set forth in Exhibit A. DWR shall be individually responsible for satisfying the requirements set forth in Exhibit B. Reclamation shall be individually responsible for satisfying the requirements set forth in Exhibit C. Exhibits A, B, and C to this Agreement may be revised at any time upon mutual written agreement of the Parties and without amendment of this Agreement; *Provided*, That Exhibits A, B, and C shall be revised by the Parties, without amendment of this Agreement, within ninety calendar days, unless otherwise modified by mutual agreement of the Parties, of the acceptance by Reclamation of the final biological opinions described in Paragraph 1.6 herein.

Within one month of the date hereinabove written, the Parties, recognizing this joint and shared responsibility, shall assign costs to DWR and Reclamation for each of the requirements in Exhibit A. In determining this proportional assignment, the Parties shall consider the existing expertise and knowledge of each Party, availability of existing and future funding, property and facility availability and requirements, costs of staff directly working on these requirements, and shall not include any indirect or overhead costs of any State or Federal agency. Nothing in this Agreement shall prohibit a Party from providing resources to the other Party's individual requirements, and such contributions shall be considered, upon mutual agreement of the Parties, as a contribution towards that Parties' joint responsibilities identified in Exhibit A.

2.3 Priority Projects and Actions

The Parties, acknowledge that each has limited resources to contribute to satisfy the joint and individual requirements identified in Exhibits A, B, and C hereto, and agree that the greatest benefit will result when the Parties cooperate and coordinate in the allocation of resources, including but not limited to financial resources, to mutually agreed upon "Priority Projects and Actions". Within one month of the date first hereinabove written, the Parties shall: (i) identify and prioritize all of the Priority Projects and Actions; (ii) identify the estimated resources need and assign costs to DWR and Reclamation for each of the Priority Projects and Actions; and, (iii) select one or more Priority Projects or Actions to which the Parties agree to first contribute staff time, expertise, knowledge, money or property. This listing of Priority Projects and Actions shall be incorporated as Exhibit D to this Agreement, and shall be updated annually with the Annual Financial Review, and more frequently if necessary, upon written mutual agreement of the Parties and without amendment to this Agreement. For each

Priority Projects and Action identified in Exhibit D, the Parties shall produce and adopt a work plan setting forth, at a minimum, the:

- (i) Leads and key staff; and
- (ii) Schedule and milestones; and
- (iii) Estimated budget and resource needs.

3.0 COOPERATION AND COORDINATION

3.1 Cooperation and Coordination

In order to further their mutual goals and objectives, the Parties shall communicate, coordinate, and cooperate with each other in order to ensure the efficient and effective administration of this Agreement and satisfaction of the requirements identified in Exhibits A, B, C and D hereto. In general, the Parties agree to:

- (i) Contribute equitable staff time, expertise, knowledge, money, and/or property as described in Paragraph 2.2 herein.
- (ii) Demonstrate flexibility in expenditures on activities to maximize the accomplishment of requirements.
- (iii) Work together in good faith to maximize efficiency, share knowledge, and coordinate.
- (iv) Openly share their respective science and participate in a shared framework for biological and water supply benefits.
- (v) Meet as provided in this Agreement, and as otherwise necessary.

3.2 Annual Financial Review Process and Meetings

No later than December 31 of each year this Agreement is in effect, the Parties agree to provide the Directors of DWR and Reclamation a joint "Annual Financial Review", which will set forth, at a minimum:

- A succinct narrative describing significant matters relating to compliance with the BiOps, including significant accomplishments of the prior calendar year.
- (ii) Each Party's contributions, for the prior calendar year, towards the satisfaction of the requirements listed on Exhibits A, B, C and D hereto.

(iii) Forecasted costs for the next five years.

Within three months of the date first hereinabove written, DWR and Reclamation will adopt an agreed upon financial reporting plan further detailing the annual financial review and reporting process.

4.0 MISCELLANEOUS PROVISIONS

4.1 Contacts

Each Party will designate a point of contact and alternate who will be responsible for administration of this Agreement on behalf of each Party. The point of contacts will meet at least quarterly to discuss cost-sharing, project update, and other significant information. Within one week of the date hereinabove written, each Party shall provide in writing to the other party with its initial point of contact and alternate, and each Party may change its point of contact and/or alternate by written notice to the other Party.

4.2 No Delegation of Authority

Nothing in this Agreement shall cause, or shall be deemed to cause, any delegation of authority from any Party in this Agreement to any other Party.

4.3 Severability

In the event one or more provisions contained in this Agreement is rendered illegal or impossible, or implementation is otherwise barred in any way by, executive or legislative brand action, or by policy decisions therein, the Parties will meet and confer to determine whether such portion will be deemed severed from this Agreement and the remaining parts of the Agreement will remain in full force and effect as though such illegal, impossible, or barred portion had never been part of this Agreement.

4.4 Preservation of Rights and Authorities

All provisions of this Agreement are intended and will be interpreted to be consistent with all applicable provisions of State and Federal law. The Parties recognize that each party to this Agreement has specific statutory and regulatory authority and responsibilities, and that actions of these public agencies must be consistent with applicable procedural and substantive requirements. Nothing in this Agreement is intended to, nor will have the effect of, constraining or limiting any public entity in carrying out its statutory responsibilities. Nothing in this Agreement constitutes an admission by any party as to the proper interpretation of any provision of law, nor is anything in this Agreement is intended to, nor will it have the effect of, waiving or limiting any public entity's rights and remedies under any applicable law. The purpose of this Agreement is to determine the allocation of costs to satisfy the requirements of the BiOps as identified in Exhibits A, B, and C hereto.

4.5 Dispute Resolution

In the event of a dispute regarding interpretation or implementation of this Agreement, a party shall provide written notice of the dispute to the other Party. The Parties shall endeavor to resolve the dispute by meeting within 30 days of the written notice, or at a later date by mutual written agreement by the Parties. The representative for each party to this meeting shall be an individual authorized by that party to resolve interpretation of this Agreement or implementation issues. If the dispute is unresolved following the meeting, the Director of DWR and the Regional Director of Reclamation or their designees shall meet within 30 days (Directors' meeting), or at a later date by mutual written agreement of the Parties, after the initial meeting to resolve the dispute. If the dispute still remains unresolved, the Parties may elect to terminate this Agreement. Except as specifically provided, nothing herein is intended to waive or abridge any right or remedy that any party may have.

4.6 Federal - Availability of Appropriations

The expenditure or advance of any money or the performance of any obligation of Reclamation under this Agreement shall be contingent upon appropriation or allotment of funds. Absence of appropriation or allotment of funds to the United States shall not relieve DWR from any obligations under this Agreement. No liability shall accrue to the United States in case funds are not appropriated or allotted.

4.7 State – Availability of Funds

The commitments and obligations under this Agreement of the State, by and through DWR, are subject to the availability of funds. Absence of funds to the State shall not relieve Reclamation from any obligations under this Agreement. No liability shall accrue to the State for failure to perform any obligation under this Agreement in the event that funds are not available.

4.8 Drafting Considerations

This Agreement has been negotiated and reviewed by the Parties, each of whom is sophisticated in the matters to which this Agreement pertains and no one party shall be considered to have drafted any articles in this Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year first written above.

CALIFORNIA DEPARTMENT OF WATER RESOURCES:

12-12-18

BUREAU OF RECLAMATION:

Karla Nemeth, Director

Michael Ryan, Regional Director