

**PROPOSITION 1 WATER STORAGE INVESTMENT PROGRAM
DRAFT CONTRACT FOR ADMINISTRATION OF PUBLIC ECOSYSTEM BENEFITS
CHINO BASIN PROGRAM**

This Contract for Administration of Public Ecosystem Benefits (Contract) is made and entered into by and between the California Department of Fish and Wildlife (Department) and Inland Empire Utilities Agency (IEUA) (together, the Parties) for the Chino Basin Program (Program).

RECITALS

- A.** In November 2014, California voters approved Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Wat. Code, §§ 79700-79798) to provide funding for more reliable water supplies, the restoration of important species and habitat, and a more resilient and sustainably managed water infrastructure.
- B.** Chapter 8 of Proposition 1 (Wat. Code, §§ 79750-79760) dedicated \$2.7 billion for investments in water storage projects that improve the operation of the state water system, are cost effective, and provide a net improvement in ecosystem and water quality conditions. The California Water Commission (CWC) administers the Water Storage Investment Program (WSIP) to fund the public benefits associated with these projects. Through a rigorous selection process, the CWC made maximum conditional eligibility determinations (MCEDs), one for each WSIP project. The MCED represented the maximum amount of state funding a WSIP project was eligible for at the time of determination, based on the CWC's estimate of public benefits to be provided by each WSIP project. Public Benefits provided by WSIP projects may include flood control, ecosystem benefits, water quality improvements, emergency response, and recreation. At least 50% of the public benefits provided by WSIP projects must be ecosystem benefits.
- C.** Each WSIP project must enter into a contract with each public agency that administers the public benefits, after that agency makes a finding that the public benefits of the project for which that agency is responsible meet the relevant requirements of Water Code section 79750 *et seq.*
- D.** The CWC is the funding grantor of WSIP projects. The CWC awards final funding after a project completes all requirements for allocation of funds enumerated in Water Code section 79755.
- E.** As trustee agency for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species. (Fish & G. Code, §§ 711.7, 1802.) Pursuant to its statutory duties, the Department is responsible for making a finding that the Public Ecosystem Benefits of the project meet all the requirements of Water Code section 79750 *et seq.* and for entering into a contract with each project proponent to administer the Public Ecosystem Benefits. (Wat. Code, § 79755; Cal. Code Regs., tit. 23, § 6013, subd. (c)(2).)
- F.** IEUA is a regional wastewater treatment agency and distributor of imported water serving western San Bernadino County.

- G. The Program is a conjunctive use project that will develop an advanced water purification facility, aquifer replenishing facilities, and distribution infrastructure that will treat and store up to 15 thousand acre-feet (TAF) per year of recycled water in the Chino Basin and extract the water for delivery to the Metropolitan Water District of Southern California (Metropolitan) and for local use in-lieu of imported supply. Water treated and stored by the Program will allow Table A water to remain in Lake Oroville that would otherwise be delivered through the State Water Project (SWP) system. The stored water in Lake Oroville will be released as a pulse flow of up to 50 TAF in drier water years to the Low Flow Channel of the Feather River to provide benefits to spring-run Chinook salmon.
- H. The Parties recognize that the purpose of the Program is to provide both public and non-public benefits. (Wat. Code § 79753(a); Cal. Code Regs., tit. 23, § 6001 subd. (a)(53)). The Parties acknowledge that delivery of both public and non-public benefits to the fullest extent possible is necessary to maintain the Program's economic viability, and delivery of either public or non-public benefits is not intended to be obtained by prioritizing one benefit over the other. This Contract only covers the public ecosystem benefits. IEUA controls operation of the Program.
- I. The CWC deemed the Program feasible as required by Water Code section 79755 subdivision (a)(5)(B) on November 17, 2021.
- J. Pursuant to Water Code section 79755, subdivision (a)(3), the Department finds the following Public Ecosystem Benefits meet all of the requirements of Water Code section 79750 *et seq.*:
1. Improved conditions for spring-run Chinook salmon
- K. The purpose of this Contract is to ensure that public contribution of funds pursuant to Chapter 8 of Proposition 1 for the Program achieves the Public Ecosystem Benefits identified for the Program and described herein (Wat. Code, § 79755.) IEUA's obligation with respect to providing the specified Public Ecosystem Benefits will be achieved by IEUA implementing the agreed upon Project Implementation Actions and Benefit Implementation Actions as described in this Contract and carrying out adaptive management as described in Exhibit B, incorporated by reference as though set forth in full herein.

SECTION 1 ABBREVIATIONS AND DEFINITIONS

Unless the context otherwise requires, the terms defined in this section shall for all purposes of this Contract have the meanings hereinafter specified:

- A. **Adaptive Management** – shall have the same meaning as Water Code section 85052.
- B. **Adaptive Management Actions** – refers to those actions specifically identified in the Adaptive Management Plan Sections 2.1.5, 2.2.5, 3.1.5, and 4.1.6.
- C. **Adaptive Management Plan (AMP)** – the plan attached to this Contract as Exhibit B and which contains the elements required by California Code of Regulations, title 23, section 6014, subdivision (a)(2).
- D. **Adaptive Management Trigger (trigger)** – shall have the same meaning as California Code of Regulations, title 23, section 6001, subdivision (a)(84).
- E. **Annual Summary Report** – annually required report prepared by IEUA which

documents the progress and status of each Public Ecosystem Benefit, as described in Section 4.3.

- F. Benefit Environmental Response** – the ecosystem response derived from Project Implementation Actions and Benefit Implementation Actions.
- G. Benefit Implementation Actions** – defined as actions, identified in this Contract, that influence the quantity and/or quality of a Benefit Environmental Response.
- H. Best Available Science** – shall have the same meaning as California Code of Regulations, title 23, section 6001, subdivision (a)(9).
- I. Contract or CAPB** – Contract for Administration of Public Ecosystem Benefits.
- J. CWC** – California Water Commission.
- K. Decision-Making Body** – the group of individuals from the Department and IEUA designated by the Parties to coordinate on implementation of the Adaptive Management Plan for the Public Ecosystem Benefits.
- L. Department** – California Department of Fish and Wildlife.
- M. DWR** – The California Department of Water Resources.
- N. Efficiency Credit** – A quantity of water above the Table A dedication for the pulse flow that will be equivalent to the calculated carriage water percentage for the SWP-CVP system in a given year.
- O. Funding Agreement** – California Water Commission Funding Agreement.
- P. IEUA** – Inland Empire Utilities District.
- Q. Meet and Confer Process** – the process by which the Decision-Making Body collaboratively identifies limiting factors and recommends Adaptive Management Actions under Section 1.5 of the Adaptive Management Plan.
- R. Metropolitan** – Metropolitan Water District of Southern California.
- S. Performance Threshold** – the full extent of Project Implementation Actions and Benefit Implementation Actions and the quantity of Benefit Environmental Response anticipated to be achieved by implementation of with-project actions (Project Implementation Actions and Benefit Implementation Actions) compared to without-project actions (Future Baseline) or pre-project conditions (Pre-Project Baseline), based on best available science at the time of Contract execution.
- T. Program** – Chino Basin Program.
- U. Program Year** – sequentially numbered years beginning with the execution of the Funding Agreement.
- V. Project Implementation Actions** – the foundational actions the Project must execute for derivation of Public Ecosystem Benefits.
- W. Public Benefit Dispute Process** – the procedure by which the Department and IEUA seek to resolve any disagreement about the outcome of the Meet and Confer Process under Section 5 of this Contract.
- X. Public Ecosystem Benefit** – shall have the same meaning as California Code of Regulations, title 23, section 6001, subdivision (a)(63) and Water Code section 79753(a). For the purposes of the Adaptive Management Plan, the Public Ecosystem Benefit(s) shall be comprised of Project Implementation Actions, Benefit Implementation Actions, and Benefit Environmental Responses identified in the Contract for the Project.
- Y. Review Report** – Adaptive Management Plan Review Report.
- Z. State** – State of California.
- AA. SWP** – State Water Project.
- BB. TAF** – thousand acre-feet.
- CC. Water Year** – the 12-month period October 1 through September 30 of the following year.
- DD. WSIP** – Water Storage Investment Program.

SECTION 2 ROLES AND RESPONSIBILITIES

2.1 DEPARTMENT

The Department has authority to administer the Public Ecosystem Benefits under the WSIP. The Department is exercising that authority by executing a Contract with each WSIP project to provide the Public Ecosystem Benefits identified in the Contract. The Public Ecosystem Benefits will be provided through each project's performance of its Project Implementation Actions and Benefit Implementation Actions and implementation of the Adaptive Management Plan. The Department will: i) provide ongoing technical expertise and guidance toward the administration, implementation, and management of the Program's Public Ecosystem Benefits, including requesting from DWR pulse flow releases from Lake Oroville, ii) collect Benefit Environmental Response metric data and evaluate performance thresholds and iii) inform the CWC of Public Ecosystem Benefits provided, any Adaptive Management Actions triggered, any benefit changes, or other information deemed appropriate.

2.2 INLAND EMPIRE UTILITIES AGENCY

Inland Empire Utilities Agency (IEUA) has oversight authority of the Program and is responsible for implementation of Project Implementation Actions, Benefit Implementation Actions, and Adaptive Management Actions anticipated to result in the Benefit Environmental Response described in this Contract, including monitoring for the public ecosystem benefits, and reporting to the Department and the CWC pursuant to California Code of Regulations, title 23, section 6014, subdivisions (a)(2)(A)(3) and (a)(2)(A)(4), respectively, except as otherwise identified in the Adaptive Management Plan. IEUA may delegate elements of Program reporting or execution of the Adaptive Management Plan. However, any delegation does not relieve IEUA of its responsibility to ensure that the terms and conditions identified in the Contract are met.

SECTION 3 TERM

This Contract shall become effective upon the execution of a Funding Agreement between the CWC and IEUA. The Contract Term is 30 years, or until termination of the Funding Agreement, whichever occurs first, unless otherwise terminated or amended as provided in the Contract. The Contract Term of 30 years includes 5 years of construction and groundwater recharge and 25 years of ecosystem benefit implementation.

SECTION 4 PUBLIC ECOSYSTEM BENEFITS

4.1 DESCRIPTION OF PUBLIC ECOSYSTEM BENEFITS

Pursuant to California Code of Regulations, title 23, section 6012 subdivision (g), the Department has confirmed the following benefits meet the requirements of Water Code section 79750 *et seq.*: Improved conditions for spring-run Chinook salmon.

4.1.1 Improved conditions for Spring-run Chinook Salmon

The Program will provide up to 50 TAF of water from March to June in drier years dedicated to pulse flows in the Feather River from Lake Oroville to improve conditions for spring-run Chinook salmon through the Delta. Pulse flows released to the Feather River will continue through the system as Delta outflow to continue to support spring-run Chinook salmon.

4.1.1.1 Pulse Flow Operational Exchange Process

Pulse flow releases from Lake Oroville can only occur through an operational exchange process between IEUA, DWR, and a partnering SWP Water Supply Contractor. That process is described in this section.

The Program will treat and store 15 TAF of recycled water in the Chino Basin per year. Metropolitan, in coordination with IEUA, will take local water deliveries from the Program, in-lieu of a portion of its Table A allocation from the SWP. Metropolitan, as a SWP Water Supply Contractor, in coordination with the Program, will facilitate the operational exchange with DWR to the SWP system to make the water available in Lake Oroville for pulse flows.

On an annual basis, the Department will confirm with IEUA the amount of water available for an exchange, as determined pursuant to the IEUA-Metropolitan Exchange Agreement (included as Exhibit C to this contract) and confirm Metropolitan's exchange availability based on the most current Metropolitan SWP water allocation percentage. If the volume of water available is sufficient to benefit salmonids given the current conditions, the Department may request a pulse flow from DWR and will submit a Pulse Flow release schedule. DWR will conduct an operational analysis, as specified in the DWR-CDFW Agreement, to determine whether the pulse flow request can be accommodated. If DWR finds that the Pulse Flow release schedule proposed by the Department needs to be modified, DWR and the Department will coordinate in developing a modified schedule. The Department may accept the modified Pulse Flow release schedule or cancel the pulse flow release. DWR, as the operator of the SWP, has the final decision on whether a pulse flow release occurs.

Table A water that would have otherwise been delivered to Metropolitan as Delta exports requires an additional volume of outflow to maintain water quality conditions in the Delta, called "carriage water", calculated as a percentage of exported water. Because the Program delivers local water from the Chino Basin directly to Metropolitan, no carriage water is required, and the Program will receive an "efficiency credit" equal to the carriage water savings that will apply towards pulse flow releases from Lake Oroville. The volume of water released from Lake Oroville for a pulse flow equals the volume of Table A water that Metropolitan would have received from the SWP plus the efficiency credit. The Program assumes a 20% efficiency credit on average, but the actual percentage will vary year to year based on DWR's final determination of carriage water for that year.

In years when a pulse flow has been released, an accounting of the volume of water that was released and continued through the system as Delta outflow will be provided by DWR, using the methodology described in the DWR-CDFW Agreement.

4.2 ADAPTIVE MANAGEMENT

The Parties agree that IEUA shall manage the Public Ecosystem Benefits according to principles of Adaptive Management. The Adaptive Management Plan is attached, referred hereto as Exhibit B and incorporated by reference as though set forth in full herein. IEUA must comply with all provisions of the Adaptive Management Plan.

4.3 REPORTING

4.3.1 Reporting to the Department

4.3.1.1 Annual Summary Reports

Each year, IEUA shall provide an Annual Summary Report to the Department by July 31st. The Annual Summary Report shall document progress and current status of each public ecosystem benefit provided, including a description of any changes to Project Implementation Actions, Benefit Implementation Actions, or Benefit Environmental Responses since the last report.

4.3.1.2 Adaptive Management Review Reports

Adaptive Management Actions shall be reported based on the schedule established for each Public Ecosystems Benefit in the Adaptive Management Plan, including a five-year Adaptive Management Review Report ("Review Report") as described in Section 1.6 of the Adaptive Management Plan. All reports shall be submitted to the Department's designated WSIP Program Manager. Reports shall include all components described in Section 1.6 of the Adaptive Management Plan and include Reporting Components identified for specific Project Implementation Actions, Benefit Implementation Actions, and any Benefit Ecosystem Response evaluations provided by the Department.

4.3.2 Reporting to the California Water Commission

IEUA shall provide a copy of the Annual Summary Report described in Section 4.3.1.1 to the CWC at the same time such report is submitted to the Department.

4.4 REQUIREMENT TO SHARE DATA

In addition to data required by the Annual Summary Report and the Review Report, the Department may make additional specific data requests reasonably related to the administration of the Contract. IEUA shall provide data responsive to the Department's request on a reasonable timeline agreed to by both Parties. If IEUA relies on data acquired by a third party and such data are not collected on behalf of IEUA, IEUA shall identify the third party which holds the data relied upon to the Department. Data that may be requested may include, but are not limited to, reports, modeling and datasets.

4.5 ASSURANCES

The Parties have determined that the following provide the required assurances under California Code of Regulations, title 23, section 6014 subdivision (a)(2)(A)(5):

- (1) IEUA has entered into an agreement with Metropolitan that specifies Metropolitan's role in facilitating the exchange of water with DWR and IEUA to provide for pulse flow releases from Lake Oroville.
- (2) The Department and DWR have entered into an agreement on the process for implementing pulse flow releases.
- (3) DWR and Metropolitan have entered into an SWP Exchange Agreement to allow Metropolitan to transfer a portion of its Table A supplies to DWR to provide for pulse flow releases from Lake Oroville.

SECTION 5 PUBLIC BENEFIT DISPUTE PROCESS

5.1 DISPUTES OVER PUBLIC BENEFITS NOT RESOLVED BY ADAPTIVE MANAGEMENT

The Department shall review the Annual Summary Report and five-year Review Report described in Section 4.3.1 of this Contract and Section 1.6 of the Adaptive Management Plan. If the Department concludes, based on the Annual Summary Report, Review Report and best available science, as applicable, that Project Implementation Actions, Benefit Implementation Actions, or Benefit Environmental Response metrics are below the associated Adaptive Management Trigger as described in the Adaptive Management Plan, the Adaptive Management Decision-Making Body shall convene as described in Section 1.5 of the Adaptive Management Plan. If the Adaptive Management Decision-Making Body cannot agree on the appropriate course of action as described in Section 1.5 of the Adaptive Management Plan, the Department may initiate the public benefit dispute process described in this section. The decision to initiate the Public Benefit Dispute Process shall be made by the Department's Deputy Director of the Ecosystem Conservation Division. The Department may only initiate the public benefit dispute process when:

- The Parties disagree on appropriate Adaptive Management Actions within the Program's control and identified in the Adaptive Management Plan and the Department determines that not adjusting adaptive management in the manner recommended by the Department will result in an insufficient Public Ecosystem Benefit; or
- The Parties disagree on whether the Public Ecosystem Benefit should be adjusted; or
- The Parties disagree on whether the Public Ecosystem Benefit continues to be feasible; or
- The Department determines the Public Ecosystem Benefit is no longer occurring due to the IEUA's failure to conduct Project Implementation Actions and/or Benefit Implementation Actions and no excuse exists for such failure.

5.2 DEPARTMENT INITIATION OF PUBLIC BENEFIT DISPUTE PROCESS

If the Department elects to initiate the Public Benefit Dispute Process the Department shall provide written notice to IEUA. The written notice shall:

- (1) State the disputed issues that prompted the Meet and Confer Process described in Section 1.5 of the Adaptive Management Plan;
- (2) Document the alternatives considered during the Adaptive Management Decision-Making Body's meet and confer process described in Section 1.5 of the Adaptive Management Plan; and
- (3) State whether resolution was achieved, in whole or in part and state the specific relief, including the timeline, agreed to as part of any resolution;
- (4) Identify all outstanding issues that remain unresolved; and
- (5) Propose a solution to the remaining unresolved issues.

The Department may also request additional relevant information from the IEUA that may inform the Department's understanding of the dispute.

5.3 IEUA RESPONSE

Within 60 days of the Department's written notification to IEUA as described in Section 5.2, IEUA shall provide a written response to the Department. The response shall identify the issues, propose a solution to the dispute, and respond to the Department's requests for additional

relevant information.

5.4 MEETINGS

Throughout the Public Benefit Dispute Process, either Party may request a meeting with the other Party at any time.

5.5 AGREEMENT ON SOLUTION; PROCESSING AMENDMENTS AS NECESSARY

If during the Public Benefit Dispute Process the Parties mutually agree on a solution and the solution requires an amendment to the Contract, including to the Adaptive Management Plan, the Parties shall process an amendment as described in Section 8.6 of this Contract and the CWC Funding Agreement Exhibit D, Paragraph D.3.

5.6 FAILURE TO AGREE ON SOLUTION; DEPARTMENT FINDING OF INSUFFICIENT PUBLIC BENEFIT

Should the Parties not mutually agree on a solution to the public benefit dispute, the Department may submit a finding of insufficient public benefit to the CWC for its consideration and action pursuant to Funding Agreement paragraph 16. The decision to submit a finding of insufficient public benefit shall be made by the Department Director. With its finding of insufficient public benefit, the Department shall provide the CWC an explanation regarding the cause of the insufficient public benefit. The explanation shall also include a description of remedial actions taken to date by IEUA, including any mitigating circumstances, its determination of whether the insufficient public benefit is the fault of IEUA, and the Department's recommended corrective actions. The Department's recommended corrective actions may include only the Project Implementation Actions as specified in 2.1.1 of the Adaptive Management Plan and Adaptive Management Actions (Sections 2.1.5, 2.2.5, 3.1.5 and 4.1.6) and that are reasonable and feasible and within IEUA's control. IEUA may also provide any information it believes is pertinent to the CWC. Should a decision by the CWC result in a change to the Public Ecosystem Benefit provided, the Parties shall process an amendment pursuant to Section 8.6 that appropriately reflects the ongoing obligations of IEUA.

SECTION 6 DISPUTE RESOLUTION

6.1 CONTINUING RESPONSIBILITIES

Both Parties shall continue with their responsibilities under this Contract during any dispute.

6.2 DISPUTES INVOLVING PUBLIC BENEFITS

If the Parties fail to resolve a dispute covered by Section 5 of this Contract, the Department shall notify the CWC of the dispute. The Parties shall follow the procedure set forth in Section 5 of this Contract.

6.3 OTHER DISPUTES

For any other disputes not covered by Section 5 of this Contract, Parties shall attempt to

negotiate a resolution to any dispute and process any amendment necessary to this Contract to implement the terms of any such resolution.

SECTION 7 SPECIFIC PERFORMANCE

In the event of a default by IEUA, as determined by the CWC following a full dispute resolution process pursuant to Section 5 of this Contract and Funding Agreement paragraphs 15 and 16, before the Term of this Contract is complete then, in addition to any and all other remedies available at law or in equity, the Department may seek specific performance of Project Implementation Actions as specified in Section 2.1.1 of the Adaptive Management Plan and Adaptive Management Actions (Sections 2.1.5, 2.2.5, 3.1.5, and 4.1.6) and that are reasonable and feasible and within IEUA's control. The Department may not seek specific performance for the Benefit Environmental Responses. IEUA reserves any and all rights, defenses, potential causes of action, claims, and remedies regarding any request or pursuit of specific performance under this paragraph. If after completing the aforementioned dispute resolution process, a court determines that there has been a default of any of the Project Implementation Actions or Adaptive Management Actions identified in this paragraph, the Parties acknowledge that specific performance pursuant to this paragraph is an appropriate remedy because the benefits to the Department from the Program, as described in Section 4 (Public Ecosystem Benefits), are unique and damages would not adequately compensate the Department for the loss of such benefits.

SECTION 8 GENERAL TERMS AND CONDITIONS

8.1 GOVERNING LAW

This Contract is governed by and shall be interpreted in accordance with the laws of the State of California.

8.2 SUPERSEDING PREVIOUS AGREEMENTS

This Contract supersedes all prior discussions, negotiations, understandings, or agreements of the Parties relating to the Contract or the Program.

8.3 PROJECT ACCESS

The Program site is located on properties owned by IEUA. IEUA shall ensure that the Department and the Department's employees and agents have safe and suitable access to facilities under the direct ownership and/or control of IEUA at all reasonable times during the Term of this Contract for the purpose of inspecting the public ecosystem benefits. The Department shall not unreasonably interfere with IEUA use of their property. The Department shall notify IEUA at least five (5) business days prior to entering IEUA's property. The Department shall notify IEUA at least seven (7) business days prior to entry to coordinate with IEUA or its agents for access and shall provide the rationale for the purpose of the requested entry. (Cal. Code Regs., tit. 23 § 6014, subd. (a)(2)(A)(6).)

8.4 INDEMNIFY AND HOLD HARMLESS

IEUA shall indemnify and hold and save the Department, its officers, agents, and employees free and harmless from any and all liabilities for any claims and damages (including inverse condemnation) that may arise out of the Program and this Contract, including, but not limited to any claims or damages arising from planning, design, construction, maintenance, monitoring, verification, and/or operation of this Program, except to the extent resulting from the negligence or willful misconduct of the Department, its officers, employees, and agents.

8.5 NO WAIVER

Enforcement of the terms of this Contract by the Department shall be at the discretion of the Department, and any forbearance by the Department to exercise its rights under this Contract shall not be deemed or construed to be a waiver by the Department of such term or of any rights of the Department under this Contract.

8.6 AMENDMENTS

This Contract, including the Adaptive Management Plan, may be amended at any time by mutual agreement of the Parties, except insofar as any proposed amendments are in any way contrary to applicable law. No amendment shall be valid unless made in writing and signed by the Parties and agreed to by the CWC. Only persons duly authorized to sign an amendment on behalf of either Party may do so. No oral understanding or agreement not incorporated in this Contract is binding on either of the Parties. Requests by either Party for amendments must be in writing, stating the amendment request and the reason for the request. Neither Party shall have an obligation to agree to an amendment. All amendments agreed to by the Parties shall be submitted to the CWC pursuant to Funding Agreement Exhibit D, Paragraph D.3. If the Parties mutually agree to an amendment that substantially reduces, eliminates, or substantially repurposes the Public Ecosystems Benefit, the Parties shall notify the Commission pursuant to Funding Agreement paragraph 17.

8.7 SUCCESSORS AND ASSIGNS

This Contract and all of its provisions shall apply to and bind the successors and assigns of the Parties. No assignment or transfer of this Contract or any part thereof shall be valid unless and until it is approved by the Department and made subject to such reasonable terms and conditions as the Department may impose.

8.8 SEVERABILITY

Should any portion of this Contract be determined to be void or unenforceable, such shall be severed from the whole and the Contract shall continue as modified.

8.9 INDEPENDENT CONTRACTOR

IEUA, and the agents and employees of IEUA, in the performance of this Contract, shall act in an independent capacity and not as officers or employees or agents of the Department. IEUA acknowledges and promises that the Department is not acting as an employer to any individuals furnishing services or work on the Program pursuant to this Contract.

8.10 PROGRAM REPRESENTATIVES

All inquiries may be directed to the Program Representatives:

Kristal Davis-Fadtke
Environmental Program Manager
California Department of Fish and Wildlife
P.O. Box 944209
Sacramento, CA 94244
Kristal.Davis-Fadtke@wildlife.ca.gov

[Name]
[Title]
[Project Proponent Full Name]
[Mailing Address]
[E-mail address]

Parties shall inform each other in writing of any changes to Program Representatives.

EXHIBITS

Each exhibit referenced in this Contract and listed below is incorporated by reference as though set forth in full herein.

Exhibit A – Department’s Findings Regarding Public Ecosystem Benefits for Chino Basin Program

Exhibit B – Ecosystem Adaptive Management Plan for Chino Basin Program

Exhibit C – Agreement between IEUA and Metropolitan to implement the Chino Basin Program

Exhibit D – Placeholder for additional Agreements

IN WITNESS WHEREOF, this Contract is made and entered into in the State of California by Inland Empire Utilities Agency and the Department, each of which hereby agrees to the terms and conditions of this Contract.

California Department of Fish and Wildlife
By:

Signature: _____
Printed name: Meghan Hertel
Title: Director, California Department of Fish and Wildlife

Date: _____

Inland Empire Utilities Agency
By:

Signature: _____
Printed name: [Name]
Title: [Title]

Date: _____

EXHIBIT A

**DEPARTMENT'S FINDINGS REGARDING PUBLIC ECOSYSTEM BENEFITS
FOR CHINO BASIN PROGRAM**

DRAFT

EXHIBIT B
ECOSYSTEM ADAPTIVE MANAGEMENT PLAN
CHINO BASIN PROGRAM

DRAFT

**PROPOSITION 1 WATER STORAGE INVESTMENT PROGRAM
DRAFT CONTRACT FOR ADMINISTRATION OF PUBLIC ECOSYSTEM BENEFITS
CHINO BASIN PROGRAM
EXHIBIT B
DRAFT ECOSYSTEM ADAPTIVE MANAGEMENT PLAN**

**SECTION 1 PROGRAM-WIDE APPROACH FOR ADAPTIVE MANAGEMENT AND
REPORTING**

1.1 OVERVIEW

The Chino Basin Program (Program) is a water treatment and storage program that will develop an advanced water treatment facility and aquifer replenishing facilities that will store 15 thousand acre-feet (TAF) per year of treated wastewater in the Chino Basin. This water would be provided to Metropolitan Water District of Southern California (Metropolitan) for local use in-lieu of imported supply that would otherwise be delivered from the State Water Project (SWP). That water will be dedicated to pulse flow releases up to a total of 50 TAF in March through June of drier years, from Lake Oroville to the Low Flow Channel of the Feather River to improve conditions for spring-run Chinook salmon downstream through the Delta.

1.2 ADAPTIVE MANAGEMENT PLAN APPROACH

This Adaptive Management Plan outlines a monitoring plan, including project implementation milestones and Performance Thresholds (defined in Section 1.4) that demonstrate the Program's success in carrying out the Project Implementation Actions and Benefit Implementation Actions specified in the Contract for Administration of Public Ecosystem Benefits. The Adaptive Management Plan identifies how monitoring will be used to adaptively manage the Program's Public Ecosystem Benefits through a Meet and Confer Process and Adaptive Management Actions provided that any Adaptive Management Actions required to be taken by IEUA shall be reasonable and feasible. The intent of the Adaptive Management Plan is to increase the likelihood of achieving and maintaining the desired Benefit Environmental Responses, the ecosystem response derived from Project Implementation Actions and Benefit Implementation Actions, while recognizing that Benefit Environmental Responses are subject to various uncertainties beyond the scope of IEUA's control and responsibility, which can include, but are not limited to, California hydrology, future regulatory conditions, changing water operations outside of the Program's influence, changes in land use, and climate change. Adaptive management of the Program will be implemented on a five-year cycle. Although not all specified Benefit Environmental Responses are anticipated to occur within every five-year review cycle, a five-year review cycle provides a regular opportunity to evaluate data from the previous years of program implementation, maintenance and monitoring and allows for incorporation of new technologies and lessons learned into subsequent implementation, monitoring, maintenance, and performance tracking.

This Adaptive Management Plan is structured according to definitions and requirements outlined in the statute and California Code of Regulations. Water Code section 85052 defines adaptive management as "a framework and flexible decision-making process for ongoing knowledge acquisition, monitoring, and evaluation leading to continuous improvement in management

planning and implementation of a project to achieve specified objectives.”¹

The California Code of Regulations (CCR), Title 23, Waters, Water Storage Investment Program (WSIP), section 6014, subdivision (a)(2)(A) states, “[t]he contract between an administering agency and applicant shall contain:

- (1) An adaptive management plan for the public benefits funded under the [WSIP] Program. The adaptive management plan shall contain:
 - a. Public benefit monitoring metrics;
 - b. Monitoring locations, frequencies, and timing;
 - c. Metric evaluation methodology and associated threshold or trigger levels based on best available science that initiate Adaptive Management Actions;
 - d. Decision making process including the administering agency role and the Adaptive Management Actions that would be taken when a trigger is reached;
 - e. Funding sources and financial commitments to implement the adaptive management plan;
 - f. Other items deemed necessary on a case-by-case basis by administering agencies entering into the contract.”

1.3 ROLES AND RESPONSIBILITIES

Roles and responsibilities for each party are identical to those contained in Section 2 of the Contract for the Administration of Public Ecosystem Benefits.

1.3.1 Adaptive Management Expectations

IEUA is obligated to deliver the Project Implementation Actions and Benefit Implementation Actions identified in this Contract and implement this Adaptive Management Plan. This Adaptive Management Plan acknowledges that while the Benefit Environmental Responses (i.e., targeted ecosystem improvement outcomes) identified are derived by physical changes resulting from Project Implementation Actions and Benefit Implementation Actions, they may also be influenced by additional factors that are beyond the Program’s control. However, the WSIP intends to achieve ecosystem improvement from physical changes in or resulting from Program operations, as such, failure to achieve a Benefit Environmental Response will trigger Adaptive Management Actions, if those actions will lead to achievement of the Benefit Environmental Responses. Descriptions of Project Implementation Actions, Benefit Implementation Actions, and anticipated Benefit Environmental Responses are presented in Table 1.

¹ Section 6001(a)(1) of the WSIP Regulations provides that the definition of “adaptive management” for WSIP “has the same meaning as provided in California Water Code section 85052.”

Table 1. Project Implementation Actions, Benefit Implementation Actions, and anticipated Benefit Environmental Response for the Chino Basin Program.

Project Implementation Actions	Benefit Implementation Actions	Benefit Environmental Response
1. Replenishment of advanced treated recycled water in the Chino Basin 2. Release of up to 50 TAF pulse flow to the Feather River	1. Maintain agreement with Metropolitan for implementation of the Program	1. Improved conditions for spring-run Chinook salmon

Project Implementation Actions: Defined as foundational actions the Program must execute for derivation of Public Ecosystem Benefits. Ramping of Project Implementation Actions may be established with defined project implementation milestones. However, once Performance Threshold (defined in Section 1.4) metrics are achieved, they should be maintained for the duration of the Contract.

Benefit Implementation Actions: Defined as actions, identified in this Contract, that influence the quantity and/or quality of a Benefit Environmental Response. Ramping of Benefit Implementation Actions associated with establishing physical benefit quantities may be established as benefit implementation milestones. Agreements and/or operations necessary for benefit implementation should be implemented for the Term of the Contract. In cases where a Benefit Implementation Action is fundamental to achieving the Benefit Environmental Response(s) but may be influenced by factors outside of the Program's control, the meet and confer process discussed in Section 1.5 of this Adaptive Management Plan will be used to recommend a course of action should an Adaptive Management Trigger (defined in Section 1.4) occur.

Benefit Environmental Response: The Ecosystem Improvement as defined in California Code of Regulations, title 23, section 6001, subdivision (a)(28): a public benefit that includes changing the timing of water diversions, improvement in flow conditions, temperature, or other public benefits that contribute to the restoration of aquatic ecosystems and native fish and wildlife, including those ecosystems and fish and wildlife in the Delta, pursuant to Water Code section 79753(a)(1). Ecosystems include both aquatic and terrestrial habitats and natural communities. Based on current best available science, the Project Implementation Actions and Benefit Implementation Actions are anticipated to result in achievement of the Benefit Environmental Response Performance Thresholds identified for the Program.

As part of the communication structure for implementation of this Adaptive Management Plan, a Decision-Making Body formed by representatives of IEUA and the Department will be established to coordinate on adaptive management for all Public Ecosystem Benefits. It is the responsibility of the Parties to each identify its own representative(s) for participation in the Decision-Making Body. Other partners, resources, and expertise may be involved as needed and at the discretion of the Decision-Making Body.

1.4 ADAPTIVE MANAGEMENT THRESHOLDS AND TRIGGERS

California Code of Regulations, title 23, section 6001, subdivision (a) provides definitions for the terms “threshold” and “trigger” in the context of adaptive management. “Threshold” means a numerical value for a specific metric that is a boundary between acceptable and unacceptable situations or conditions, or a specific metric that must be exceeded for a certain reaction, result, or condition to occur. “Trigger” means an event, situation, or measurement that initiates or requires a management action. Each monitoring metric is associated with an adaptive management threshold and trigger. These are pre-determined decision points specific to each Project Implementation Action, Benefit Implementation Action, and Benefit Environmental Response. Program status for each benefit’s Project Implementation Actions, Benefit Implementation Actions, and Benefit Environmental Response will be assessed as described below:

Performance Thresholds

Performance Thresholds are established as the full extent of Project Implementation Actions and Benefit Implementation Actions and the quantity of Benefit Environmental Response anticipated to be achieved by implementation of with-project actions (Project Implementation Actions and Benefit Implementation Actions) compared to without-project actions (future baseline) or pre-project conditions (pre-project baseline), based on best available science at the time of Contract execution. Performance Threshold values can be anticipated absolute values, short- or long-term averages, or rolling averages depending on the benefit described. Performance Threshold values indicate expected or better conditions above baseline conditions. Project Implementation Actions and Benefit Implementation Actions will have specified Performance Thresholds associated with Contract commitments. If a ramp-up period is expected, implementation milestones may be established for Project Implementation Actions and Benefit Implementation Actions, as appropriate, to serve as interim Performance Thresholds that the Program should achieve over a specified amount of time.

Adaptive Management Triggers

Adaptive Management Triggers are events, situations, and/or values determined to be below Performance Thresholds, assessed on a five-year review cycle. Adaptive Management Triggers are evaluated based on monitoring metrics associated with Project Implementation Actions, Benefit Implementation Actions, and Benefit Environmental Responses, and are determined by the evaluation of specified monitoring metrics compared to the associated Performance Threshold. Adaptive Management Trigger indicates when a Public Ecosystem Benefit is experiencing a potential challenge, is not on the expected trajectory to achieve the Performance Threshold, and the monitoring data is below the Performance Threshold.

Phases

Performance Thresholds and Adaptive Management Triggers are prescribed in two phases, where each phase has its own set of thresholds and associated triggers identified.

Phase 1 occurs during the Program’s initial ramp-up period (if applicable). A ramp-up period may apply if the Program needs time to initiate and/or implement Project Implementation Actions or Benefit Implementation Actions, such as soliciting participation, enrolling acres, developing water storage volume, etc. During Phase 1, implementation milestones are established for Project and Benefit Implementation Actions as interim Performance Thresholds to show progress during the ramp-up period towards achieving the full contractual benefit

quantity. Implementation milestones will have associated Adaptive Management Triggers.

Phase 2 occurs after the ramp-up period has ended, if applicable, and/or once the Program is able to deliver the full contractual benefit quantity. During Phase 2, adaptive management will occur around the Performance Threshold and its associated trigger. If the Program does not require an initial ramp-up period for Project or Benefit Implementation Actions, then adaptive management will apply to only Phase 2.

1.5 DECISION-MAKING PROCESS

Program performance will be evaluated on its success in achieving Performance Thresholds identified for the Project Implementation Actions, Benefit Implementation Actions and Benefit Environmental Response. If an Adaptive Management Trigger occurs, then decision-making processes and Adaptive Management Actions will be initiated as described below.

When a ramp-up period is required for Project Implementation Actions and Benefit Implementation Actions, Program performance will be evaluated during the ramp-up period on its success in achieving the benefit-specific implementation milestones. The purpose of implementation milestones is to show progress during the ramp-up period towards achieving Performance Thresholds.

1.5.1 Adaptive Management Trigger Decision-Making Processes

Should a Project Implementation Action Adaptive Management Trigger occur, the Program will identify limiting factors and implement any appropriate Adaptive Management Actions from the potential actions delineated in Sections 2.1.5. and 2.2.5. Should a Benefit Implementation Action Adaptive Management Trigger occur, the Program will identify limiting factors and implement any appropriate Adaptive Management Actions from the potential actions delineated in Section 3.1.5. Should a Benefit Environmental Response Adaptive Management Trigger occur, the Program will identify limiting factors and implement any appropriate Adaptive Management Actions from the potential actions delineated in Section 4.1.6. The Program may also identify reasons why Adaptive Management Actions are not reasonable or feasible or may not result in the achievement of Performance Thresholds (e.g., extended drought conditions or infrastructure repairs) and will propose a plan in the Annual Report to meet Performance Thresholds in the next Adaptive Management Review Report period. The Program will report to the Department as identified in Section 1.6.

If, after review of the Annual Summary Report or Adaptive Management Review Report, along with other relevant monitoring data, the Department concludes that Project Implementation Actions and Benefit Implementation Actions are occurring and Project Implementation Action, Benefit Implementation Action, and Benefit Environmental Response metrics are at or above the associated Adaptive Management Triggers or the Department concludes it is not feasible to meet Performance Thresholds in the reporting period in question, the Department will confirm this status with the Program and the Program will continue to implement its monitoring plan.

If, after review of the Annual Summary Report or Adaptive Management Review Report, along with other relevant monitoring data, the Department concludes that Project Implementation Action, Benefit Implementation Action, or Benefit Environmental Response metrics are below the associated Adaptive Management Trigger and, if relevant, current Adaptive Management

Actions being taken will not be sufficient to achieve Performance Thresholds, the Department will initiate the Meet and Confer Process. Through the Meet and Confer Process, the Decision-Making Body will identify the limiting factor(s) to achieving conditions at or above the Adaptive Management Triggers.

Should the Program refuse to meet and confer, the Department will independently investigate the limiting factor(s).

Through the Meet and Confer Process or the Department's independent investigation:

1. If the Decision-Making Body determines that the Project Implementation Action Adaptive Management Trigger or a Benefit Implementation Action Adaptive Management Trigger has occurred and that Adaptive Management Actions are warranted, the Decision-Making Body will recommend reasonable and feasible Adaptive Management Actions from the possible Adaptive Management Actions identified for the benefit in Sections 2.1.5, 2.2.5, and 3.1.5 and will also recommend a timeline for the Program to implement any modifications identified.
 - a. If the Program successfully implements the recommended Adaptive Management Actions, then the monitoring plan will continue with annual evaluation of metrics compared to Performance Thresholds and Adaptive Management Triggers. After a subsequent five-year review cycle of the annual metric assessment showing achievement of Performance Thresholds, the Program can resume monitoring with a five-year adaptive management review.
 - b. If the Decision-Making Body cannot agree on limiting factors or recommended actions to achieve Performance Thresholds at or above Adaptive Management Triggers, the Department may initiate the Public Benefit Dispute Process. See CAPB Section 5.
 - c. If the Program does not implement the recommended Adaptive Management Actions according to the recommended timeline or fails to achieve Performance Threshold levels at or above Adaptive Management Triggers because of a failure to implement Project Implementation Actions or Benefit Implementation Actions, the Department may initiate the Public Benefit Dispute Process. See CAPB Section 5.
2. If a Benefit Environmental Response Adaptive Management Trigger occurs, the Decision-Making Body will determine the limiting factors to the best of its ability and may recommend reasonable and feasible Adaptive Management Actions from the possible Adaptive Management Actions identified for the benefit in Section 4.1.6 if implementation of those actions may lead to achievement of the Benefit Environmental Response(s).
 - a. If recommended Adaptive Management Actions are implemented by the Program, monitoring will continue with annual evaluation of metrics until the succeeding five-year review.
 - i. If Performance Thresholds are achieved at the succeeding five-year adaptive management review, no further action needs to be taken and the Program can resume the regular schedule of monitoring with five-year adaptive management review.
 - ii. Should the Benefit Environmental Response Adaptive Management Trigger occur after ten succeeding years after initial implementation of the Adaptive Management Action (two five-year review cycles), the Decision-

Making Body will meet and confer and determine if an adjustment to the Adaptive Management Plan for the Public Ecosystem Benefit in question, or to the Benefit Environmental Response Performance Threshold is needed, or an alternative Public Ecosystem Benefit can be achieved. Additionally, if the specific Adaptive Management Action in (a) above is not achieving the benefit environmental response, IEUA is not obligated to continue those specific Adaptive Management Actions specified in Section 4.1.6 at that location specified by the Decision-Making Body. (This paragraph does not apply to Adaptive Management Actions specified in Sections 2.1.5, 2.2.5, and 3.1.5).

- iii. Accordingly, the Department will process an amendment and inform the CWC of any benefit changes. See CAPB Section 8.6, Funding Agreement paragraph 17.
- iv. Should the Benefit Environmental Response Adaptive Management Trigger occur after ten succeeding years after initial implementation of the Adaptive Management Action (two five-year review cycles) or further five-year review cycles and the Decision-Making Body determines that no additional Adaptive Management Actions will result in achieving the Public Ecosystem Benefit, the Parties may mutually agree to terminate the requirements of this Contract specific to that Public Ecosystem Benefit. Accordingly, the Department will process an amendment and inform the CWC of the changes. See CAPB Section 8.6. If the Parties mutually agree to terminate the requirements of this Contract specific to an ecosystem benefit, the Parties shall also notify the Commission pursuant to Funding Agreement paragraph 17.
- b. Should the Program choose not to implement Adaptive Management Actions, the Department may initiate the Public Benefit Dispute Process. See CAPB Section 5.
- c. Should the Decision-Making Body not agree on an adjustment to the Adaptive Management Plan, or to the Benefit Environmental Response Performance Threshold, or to an alternative Public Ecosystem Benefit, the Department may initiate the Public Benefit Dispute Process. See CAPB Section 5.

1.5.2 Force Majeure: Events Not Covered by Adaptive Management Trigger Decision-Making Processes

The foregoing Adaptive Management Trigger Decision-Making Process addresses foreseeable events and changing circumstances that interfere with the Program's implementation of Project Implementation Actions or Benefit Implementation Actions. In the event that a catastrophic disruption occurs that renders one or more Project Implementation Actions and/or Benefit Implementation Actions impossible (e.g., due to destruction of essential infrastructure), the Program will notify the Department in writing of the impossibility and propose a timeline to resume Project Implementation and/or Benefit Implementation Actions. Alternatively, the Program may inform the Department that the delivery of affected Public Ecosystem Benefit(s) is no longer possible. After the Program has stabilized any health or human safety-related impacts of the unforeseen circumstance, the Decision-Making Body will meet and confer and decide one of the following:

1. The Decision-Making Body may mutually agree that the Public Ecosystem Benefit(s) continue to be possible. The Decision-Making Body will determine whether an

adjustment to the Adaptive Management Plan for the Public Ecosystem Benefit in question is needed; an adjustment to the Benefit Environmental Response Performance Threshold is needed; or an alternative Public Ecosystem Benefit can be achieved. Accordingly, the Department will process an amendment and inform the CWC of any benefit changes. See CAPB Section 8.6, Funding Agreement paragraph 17.

- a. Should the Decision-Making Body not agree on whether an adjustment to the Adaptive Management Plan or an adjustment to the Benefit Environmental Response Performance Threshold is needed the Department may initiate the Public Benefit Dispute Process. See CAPB Section 5.
2. The Decision-Making Body may mutually agree that the Public Ecosystem Benefit is no longer possible due to the catastrophic disruption addressed by this section and may mutually agree to terminate the Project Implementation Actions and/or Benefit Implementation Actions, specific to any Public Ecosystem Benefit that are no longer possible. Accordingly, the Department will process an amendment and inform the CWC of the changes. See CAPB Section 8.6. If the Decision-Making Body mutually agrees to terminate the requirements specific to a Public Ecosystem Benefit, the Parties shall also notify the Commission pursuant to Funding Agreement paragraph 17.
 - a. Should the Decision-Making Body not agree on whether the Public Ecosystem Benefit continues to be possible, the Department may initiate the Public Benefit Dispute Process. See CAPB Section 5.

After completing the process set forth above in this paragraph 1.5.2, if the Parties continue to have a dispute and a party brings an action, neither this paragraph 1.5.2 nor anything else in this Adaptive Management Plan or CAPB constitutes a contrary agreement under Cal. Civil Code section 1511(2) that could eliminate or change a statutory defense to performance under Civil Code section 1511(2).

1.6 PROGRAM REPORTING

Pursuant to California Code of Regulations, title 23, section 6014, subdivision (a)(2)(A)(3), IEUA will provide to the Department an Annual Summary Report (Annual Report) that includes:

- Summary of Project Implementation Actions and Benefit Implementation Actions
- Discussion of challenges and/or success in achieving Project Implementation Actions and Benefit Implementation Actions
- Summary of data collection methods for Project Implementation Actions and Benefit Implementation Actions
- All data for Project Implementation Actions and Benefit Implementation Actions
- Discussion of management activities
- Other relevant information

IEUA will provide to the Department an Adaptive Management Review Report (Review Report) each five years or annually should an Adaptive Management Trigger occur. The Review Report shall include:

- Items listed above for the Annual Summary Report
- Evaluation of Performance Thresholds
- Discussion of any Adaptive Management Triggers that occurred, limiting factors that may have contributed to Adaptive Management Triggers occurring, and Adaptive Management Actions taken to meet Performance Thresholds

- Discussion of challenges and/or success in achieving Public Ecosystem Benefit(s) (i.e., Project Implementation Actions, Benefit Implementation Actions, and Benefit Environmental Responses) Performance Thresholds

Reports should be provided to the Department electronically and be Americans with Disabilities Act compliant. Review and response by the Department to the Program shall be completed within 60 days of submission of the Annual Report, and within 90 days of submission of the Review Report.

1.7 FUNDING ADAPTIVE MANAGEMENT PLAN IMPLEMENTATION

Pursuant to California Code of Regulations, title 23, section 6014, subdivision (a)(2)(A)(1)(e), this Adaptive Management Plan contains Public Ecosystem Benefit monitoring metrics, monitoring locations, frequencies, and timing, metric evaluation methodology and associated thresholds and trigger levels based on best available science that initiate Adaptive Management Actions, decision making processes, funding sources and financial commitments to implement this Adaptive Management Plan, and any other items deemed necessary to the Contract. IEUA may elect to participate in collaborative partnerships regarding the implementation of monitoring and/or Adaptive Management Actions of ecosystem benefits. However, should existing monitoring undertaken through collaborative partnerships cease, it is the Program's responsibility to either implement necessary monitoring or identify and implement other monitoring partnerships for the Project Implementation Actions of this Adaptive Management Plan. Monitoring for the Benefit Environmental Response shall rely on existing monitoring programs and stations.

SECTION 2 ADAPTIVE MANAGEMENT OF PROJECT IMPLEMENTATION ACTIONS

2.1 REPLENISHMENT OF ADVANCED TREATED RECYCLED WATER IN THE CHINO BASIN

2.1.1 Monitoring Metrics and Performance Thresholds

Monitoring metrics and performance thresholds for the replenishment of recycled water will be:

2.1.1.1 Metric 1: Volume of Treated Recycled Water Produced

Performance Threshold: The Program will annually produce 15 TAF of advanced treated recycled water of a quality that can be replenished to the Chino Groundwater Basin.

2.1.1.2 Metric 2: Volume of Advanced Treated Recycled Water Replenished to the Chino Groundwater Basin

Performance Threshold: The Program will replenish the Chino Groundwater Basin with 15 TAF of advanced treated water annually.

2.1.2 Monitoring Methodology

The volume of water treated will be metered continuously at the effluent discharge point of the advanced water purification facility. The volume of water replenished will be metered continuously at the replenishment facilities used by the Program.

Location: Effluent discharge point of the water treatment plant and influent point of replenishment wells, or metered discharge to basins or other recharge facilities.

Timing and frequency: The volume of water treated and replenished will be metered continuously at each facility and reported as monthly totals.

2.1.3 Reporting Components

Consistent with, and in addition to, items identified in the CAPB Section 4.3 and Section 1.6 of this Adaptive Management Plan, the Program will provide the following information pertaining to Project Implementation Activities:

Annual Report: IEUA will report the total volume of water treated and replenished to the Chino Groundwater Basin by month and year.

Review Report: IEUA will report the total volume of water treated and replenished to the Chino Groundwater Basin during the preceding five years.

2.1.4 Adaptive Management Triggers

Trigger for Adaptive Management: For Metric 1, the trigger for adaptive management will be if the Program produces less than 15 TAF annually of purified recycled water of a quality that can be replenished to the Chino Groundwater Basin. For Metric 2, the trigger for adaptive management will be if the Program replenishes the Chino Groundwater Basin with less than 75 TAF of purified water over the 5-year evaluation period.

2.1.5 Management Actions

If an Adaptive Management Trigger occurs, decision-making shall follow the Decision-Making Process described in Section 1.5. The potential Adaptive Management Actions are aimed at treating and replenishing sufficient water to meet the Performance Thresholds in Section 2.1.1. These actions are the following:

- Maintenance and/or rehabilitation to the treatment, conveyance and replenishment facilities.
- Use of additional replenishment facilities to meet annual 15 TAF Performance Threshold.
- Extend the term of the CAPB beyond 30 years until 375 TAF have been released as pulse flows from Lake Oroville as described in Section 2.2 below.

2.2 RELEASE OF UP TO 50 TAF PULSE FLOW TO THE FEATHER RIVER

2.2.1 Monitoring Metrics and Performance Thresholds

Monitoring metrics and performance thresholds for the release of up to 50 TAF pulse flow will be:

2.2.1.1 Metric 1: Pulse Flow Release

To count toward the Performance Threshold, water released from Lake Oroville for pulse flows must be released to the Low Flow Channel and be released solely for the purposes of this ecosystem benefit, as described in CAPB section 4.1.1. The pulse flows must be in addition to any regulatory requirements, DWR contractual obligations, flood releases, or pulses provided under separate agreements or programs.

Performance Threshold: A minimum of one pulse flow will be provided every five years to achieve the following cumulative volumes:

- Program Years 5 – 15: 150 TAF
- Program Years 16 – 25: 300 TAF
- Program Years 26 – 30: 375 TAF

Additional pulse flows and volumes exceeding those listed above may occur if requested by the Department and will not exceed the cumulative volume of 375 TAF.

2.2.2 Monitoring Methodology

DWR intends to measure the flow rates, timing, and duration of the pulse flow releases. The flow rate of the pulse flow releases into the Low Flow Channel shall be calculated by the following:

$$\text{Pulse Flow Release} = (\text{A}) \text{ Total Release to Feather River} - (\text{B}) \text{ Feather River Release @ River Outlet} - (\text{C}) \text{ Baseline Flows in the Low Flow Channel}$$

DWR intends to provide a pulse flow release data report to IEUA and the Department, upon request that includes flow rates, timing, and duration of the pulse flow releases to the Low Flow Channel and accounting for the pulse flow release after the confluence of the Feather River with the Sacramento River and through the Delta.

Location: Pulse flows will be released from Lake Oroville into the Low Flow Channel of the Feather River.

Timing and frequency: Measurement of and accounting for the pulse flow shall occur in any year a pulse flow is released.

2.2.3 Reporting Components

Consistent with, and in addition to, items identified in the CAPB Section 4.3 and Section 1.6 of this Adaptive Management Plan, the Program will provide the following information pertaining to Project Implementation Actions:

Annual Report: The Program will report the total volume of pulse flows released for the report year.

Review Report: The Program will report the cumulative volume of pulse flows released for the preceding five years.

2.2.4 Adaptive Management Triggers

Trigger for Adaptive Management: A trigger will occur if the minimum number of pulse flow releases and cumulative volume Performance Thresholds in Section 2.2.1.1 are not met.

2.2.5 Management Actions

If an Adaptive Management Trigger occurs, decision-making shall follow the Decision-Making Process described in Section 1.5. The potential Adaptive Management Actions are aimed at ensuring sufficient pulses flows are provided to achieve the cumulative volume of 375 TAF. These actions are the following:

- IEUA will work with its local partners, DWR, and/or Metropolitan to eliminate barriers to providing pulse flows.
- Extend the term of the CAPB beyond 30 years until 375 TAF have been released as pulse flows from Lake Oroville as described in Section 2.2.

SECTION 3 ADAPTIVE MANAGEMENT OF BENEFIT IMPLEMENTATION ACTIONS

3.1 AGREEMENT BETWEEN IEUA AND METROPOLITAN

IEUA and Metropolitan have entered into an agreement that specifies conditions and requirements for Metropolitan to transfer its Table A supply for a pulse flow and receive an equivalent amount of water from IEUA. The Agreement is included as Exhibit C to the CAPB.

3.1.1 Monitoring Metrics and Performance Thresholds

3.1.1.1 Metric 1: Maintain IEUA- Metropolitan Agreement

Performance Threshold: The IEUA-Metropolitan Agreement will be maintained such that pulse flow volumes and frequencies meet the Performance Thresholds identified in Section 2.2.1.1 or any change to pulse flow volume or frequency agreed to by the Department and IEUA.

3.1.2 Monitoring Methodology

The IEUA-Metropolitan Agreement and actions thereunder will be monitored and reported consistent with Section 1.6 of the Adaptive Management Plan.

3.1.3 Reporting Components

Consistent with, and in addition to, items identified in the CAPB Section 4.3 and Section 1.6 of this Adaptive Management Plan, IEUA will provide the following information pertaining to specific Benefit Implementation Activities:

IEUA will report to the Department anytime a modification to the current IEUA-Metropolitan Agreement is considered or adopted, particularly if potential changes may affect the volume or frequency of pulse flows. If a new agreement is established between IEUA and Metropolitan, a copy of the modified IEUA-Metropolitan Agreement will be provided to the Department within seven (7) business days of execution.

Annual Report: IEUA will report any modifications to the IEUA-Metropolitan Agreement during

the preceding year and describe any changes to the exchange process that may affect the volume or frequency of water that can be provided for a pulse flow. The modified Agreement will be provided.

Review Report: IEUA will report any modifications to the IEUA-Metropolitan Agreement during the preceding 5-years and describe whether any changes to the agreement may affect the volume or frequency of water that can be provided for a pulse flow. The modified Agreement will be provided.

3.1.4 Adaptive Management Triggers

Trigger for Adaptive Management: A trigger will occur if the IEUA-Metropolitan Agreement is terminated by any party or if it is modified in a manner that prevents exchanges to occur such that pulse flow releases do not meet the Performance Thresholds identified Section 2.2.1.1.

3.1.5 Management Actions

If an Adaptive Management Trigger occurs, decision-making shall follow the Decision-Making Process described in Section 1.5. The potential Adaptive Management Actions are aimed at maintaining or revising the IEUA-Metropolitan Agreement so it supports the achievement of a cumulative volume of pulse flows of 375 TAF. These actions are the following:

- Negotiate modifications/amendments to the IEUA-Metropolitan Agreement as needed and appropriate to continue to provide the public benefit.
- Implement the Dispute Resolution procedures in Section XII of the IEUA-Metropolitan Agreement.

SECTION 4 ADAPTIVE MANAGEMENT OF BENEFIT ENVIRONMENTAL RESPONSES

4.1 IMPROVED CONDITIONS FOR SPRING-RUN CHINOOK SALMON

4.1.1 Benefit Environmental Response

The Feather River is a major tributary to the Sacramento-San Joaquin Delta (Delta) and Chinook salmon in the Feather have been experiencing long-term decline, mirroring the pattern of the larger Central Valley Chinook salmon population in the Delta watershed. Both fall-run and spring-run Chinook salmon utilize the Feather River below Lake Oroville for spawning, rearing and migration. Spring-run salmon are listed as threatened under both the California state and federal endangered species acts. Flow regimes on the Feather River are highly managed, resulting in conditions that are often not beneficial for salmon. The objective of the pulse flow releases is to provide a benefit to spring-run Chinook salmon in the Feather River downstream of Lake Oroville and through the Delta.

Periodic pulse flows released from Lake Oroville during the spring can provide a range of improved conditions for both adult and juveniles rearing and migrating in the Feather River through a range of mechanisms that include but are not limited to: increase of downstream flows, increase in downstream outmigration speed when environmental conditions are otherwise poor (juveniles), decrease in river temperatures, reduction in predation (juveniles), dilution of pathogen loads, and facilitating the upstream migration of adults to the Low Flow Channel and the Feather River Fish hatchery.

The specific benefit(s) targeted may vary between pulse flows, and the associated monitoring metrics and performance thresholds that apply will likewise vary as described below for each metric. The Department has the unique knowledge and experience to identify the timing of pulse flows to optimize the benefit to the fishery.

4.1.2 Monitoring Metrics and Performance Thresholds

4.1.2.1 Metric 1: Environmental and Biological Parameters that Reflect Improved Conditions and/or Responses to Pulse Flows for Spring-run Chinook Salmon

Pulse flows in the Feather River are expected to provide multiple benefits for spring-run Chinook salmon. The specific type and magnitude of the benefit will depend on the timing and shape (volume, duration) of the pulse flows, which may change from release to release depending on the specific goals and preceding environmental conditions of any given pulse flow release schedule.

The following subset of monitoring metrics shall be identified and tracked depending on the goals and best scientific information available at the time of the release. Metrics identified below reflect the current and most up to date scientific information available that shall be utilized to measure various benefit environmental responses for spring-run Chinook salmon. The metrics and monitoring methods below may be modified as scientific knowledge changes or additional data becomes available to evaluate the Benefit Environmental Response. Benefit Environmental Response monitoring will rely on existing and future monitoring programs conducted by entities other than IEUA.

- a. **Juvenile Salmon Fish Catches:** The Department's Lower Feather River Rotary Screw Traps are located near the Star Bend Park boat ramp and are designed to collect data on juvenile salmon migrating downstream in the Feather River.
- b. **Adult Salmon Fish Counts:** DWR's Feather River Fish Monitoring Station provides counts to assess the upstream migration of adult salmonids.
- c. **Flow at Thermalito Diversion Dam Fish Barrier:** Flow at this station will indicate whether water levels are high enough for upstream migrating adult salmon to pass above the Sunset Weir migration barrier.
- d. ***C. shasta* Spore Counts:** Per-liter counts of *C. shasta* actinospores in the water column and infection rates of juvenile salmon will indicate whether pulse flow releases diluted the prevalence of the infectious stage of the parasite and reduced infections in fish. These parameters can be compared to periods outside of pulse flows.

Performance Thresholds:

- a. **Juvenile Salmon Fish Catches:** Daily catches of all juvenile salmon at the Department's Lower Feather River rotary screw trap will increase as the pulse flow propagates past the trap, in comparison to catches observed prior to the pulse flow. If pulse flow coincides with the release of hatchery spring-run juveniles, catches of hatchery-marked juveniles will increase as the pulse flow propagates past the trap, in comparison to catches observed prior to the pulse flow.
- b. **Adult Salmon Fish Counts:** Weekly counts of upstream migrating adult salmon at the DWR Feather River Fish Monitoring Station will increase with the pulse flow release in comparison to counts observed during the weeks immediately preceding.
- c. **Flow at Thermalito Diversion Dam Fish Barrier:** Flows of at least 3,000 cfs must be reached for at least 5 consecutive days.
- d. ***C. shasta* Spore Counts:** Downstream per liter spore counts of *C. shasta* in water

samples will decrease during and several weeks following the pulse flow release.

4.1.3 Monitoring Methodology

- a. **Juvenile Salmon Fish Catches:** Flow increases can encourage the downstream migration of juvenile spring-run Chinook salmon released from the Feather River Fish Hatchery or spring-run Chinook salmon rearing in the Low Flow Channel, particularly when flows are low or unchanging. In the Feather River, a pulse flow can encourage juvenile salmon to move downstream more quickly through less favorable environmental conditions, and more quickly through areas where *C. shasta* pathogen concentrations are high. Juvenile salmon fish counts at the downstream rotary screw trap and identification of catches from hatchery releases will provide data on the speed and survival. The use of acoustic telemetry-based systems timed with hatchery releases of tagged individuals may also be utilized to indicate increased movement past fixed receiver stations.
- b. **Adult Salmon Fish Counts:** The DWR Feather River Fish Monitoring Station is located in the Low Flow Channel, approximately 1.5 miles upstream of the Thermalito Afterbay Outlet. The weir funnels fish through two 12" wide x 16" tall passage chutes equipped with video monitoring equipment. Fish are counted as they move upstream and these counts will indicate whether pulse flow releases attract adult salmonids to Low Flow Channel, the Feather River Fish Hatchery and to adjacent areas where spawning conditions are more favorable.
- c. **Flow at the Thermalito Diversion Dam Fish Barrier:** Sunset Weir is a 10-foot-tall boulder weir on the Feather River located south of the town of Live Oak that can impede the upstream migration of salmon, particularly when flow and water levels are low. Pulse flows can raise flows and water levels that allow fish to navigate over the weir and continue migrating upstream. Flows of 3,000 cfs or greater in the Feather River near Lake Oroville are known to raise water levels such that upstream migrating salmon are able to navigate over the weir. Maintaining flows for several consecutive days will facilitate increases fish passage.
- d. ***C. shasta* Spore Counts:** Pulse flow releases have the potential to dilute the infectious *C. shasta* spore form of the pathogen and decrease the number of infections in juvenile salmon. Per-liter counts of *C. shasta* actinospores in the water column will indicate whether releases diluted the prevalence of the infectious stage of the parasite. Summaries of fish infection rates in salmon before, during, and after releases will indicate whether pulses affected infection prevalence in juvenile salmon.

4.1.4 Reporting Components

The Department will gather the data and evaluate the metrics and Performance Thresholds identified in Section 4.1.2. The Department will provide IEUA relevant summaries of the Benefit Ecosystem Response, as appropriate.

4.1.5 Adaptive Management Triggers

Trigger for Adaptive Management: After two pulse flows have been released, the Department determines that the ecological benefits targeted have not been observed in association with releases. Benefits targeted will vary from year to year and may include upstream migration by adult salmon into the Low Flow Channel or Feather River Fish Hatchery, downstream migration of juvenile salmon, or reduction of *C. Shasta* prevalence or infection rate.

4.1.6 Management Actions

If an Adaptive Management Trigger occurs, decision-making shall follow the Decision-Making Process described in Section 1.5. Adaptive Management Actions will include the following actions as appropriate:

- The Department will work with DWR to change the timing and duration of pulse flows to achieve the desired environmental response.
- The Department will call on different volumes of pulse flows or multiple pulses in one year, with the total volume not to exceed 50 TAF that year.

EXHIBIT C

**EXCHANGE AGREEMENT BETWEEN THE INLAND EMPIRE UTILITIES AGENCY AND THE
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA TO ASSIST IN
IMPLEMENTATION OF THE CHINO BASIN PROGRAM**

DRAFT