

*Proposition 1 Water Storage Investment Program  
Inland Empire Utilities Agency*

Chino Basin Conjunctive Use Environmental Water  
Storage/Exchange Program

## **QUARTERLY REPORT #6**

October through December 2019

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Progress Report to the California Water Commission  
January 30, 2020

# 1. Purpose and Introduction

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This Quarterly Report is to inform the California Water Commission (Commission) of changes and updates to the project, schedule, and status of the Inland Empire Utilities Agency (IEUA) Chino Basin Conjunctive Use Environmental Water Storage/Exchange Program, hereafter referred to as the Chino Basin Program (CBP), occurring during the most recent quarter of October through December 2019. The report contents are based on guidance provided by Commission staff and document progress that IEUA is making toward complying with conditions required to enter a funding agreement with the Commission for implementation of the CBP.

The report is organized into the following sections:

1. Purpose and Introduction
2. Project Planning Update
3. Project Schedule Update
4. Project Cost and Financing Update
  - Attachment 1 — Table 1. Project Schedule
  - Attachment 2 — Table 2. Quarterly Reporting Items for Commission Hearing on Final Awards

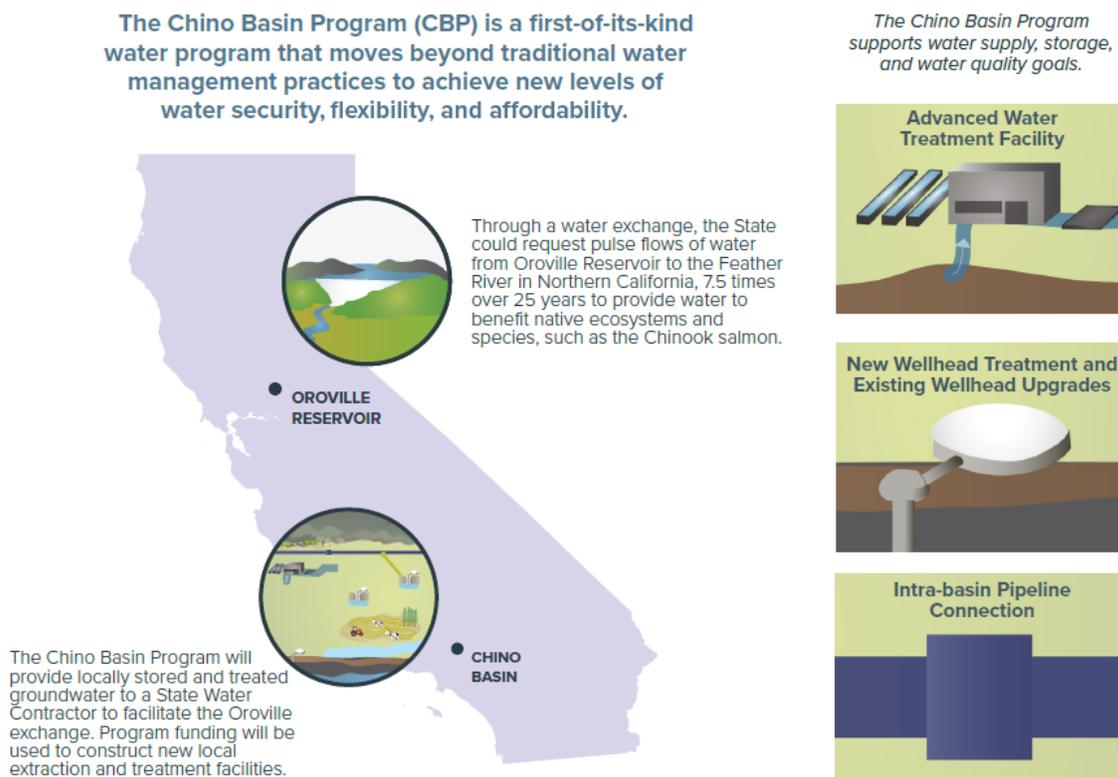
## 2. Project Planning Update

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The Project Planning Update is a narrative summary update of the project. The summary provides a description of the status of IEUA meeting the requirements and milestones identified by the Commission (see Attachments 1 and 2, respectively). Issues or concerns that have, will, or could affect milestones or requirements are also provided here. IEUA continues to work with its partner agencies to address key questions raised through meetings and focused technical workshops. Addressing these key questions is occurring concurrently with program planning and design and is helping to shape and refine the development of the CBP. While addressing these key questions does require additional attention, IEUA does not anticipate any significant changes to the overall CBP development schedule.

IEUA continues to make progress with the planning and preliminary design of the CBP (see **Figure 2-1** and **Figure 2-2**). IEUA continues to work with its partners to define water sources for the program and associated facilities, costs, and agreements. The design team is completing configurations for the advanced water purification facilities, pipeline interties and pump stations, and new wells and wellhead treatment systems. Alternative configurations and estimated costs continue to be refined. Evaluation criteria designed to meet program objectives will be applied to identify recommended alternatives for further development. The preliminary design effort will be documented in the Preliminary Design Report (PDR) due to be completed in the next several months. The PDR will support development of partnership agreements, environmental planning, and development of monitoring and operational plans. IEUA also continues to work with State agencies to define how water stored in Chino Basin will be used in dry years in lieu of southern California-bound State Water Project (SWP) flows that will instead be used in northern California for pulse flows in the Feather River to meet the statewide public-benefit goals of the program. Provided further below is an update on progress made on specific planning and preliminary design efforts that occurred during the most recent quarter.

Figure 2-1. Location and Features of the Chino Basin Program



## Water Sources

Planning efforts continue to identify potential water sources for advanced water purification to meet the need to produce 15 thousand acre-feet per year of advanced treated water. As described in the previous progress report, IEUA continues to work closely with local agency partners to define the physical and institutional arrangements for supplying water to the CBP. Water resource partnerships are being configured based on mutual benefits and reflected in draft agreement principles, which are under review by IEUA and its partners.

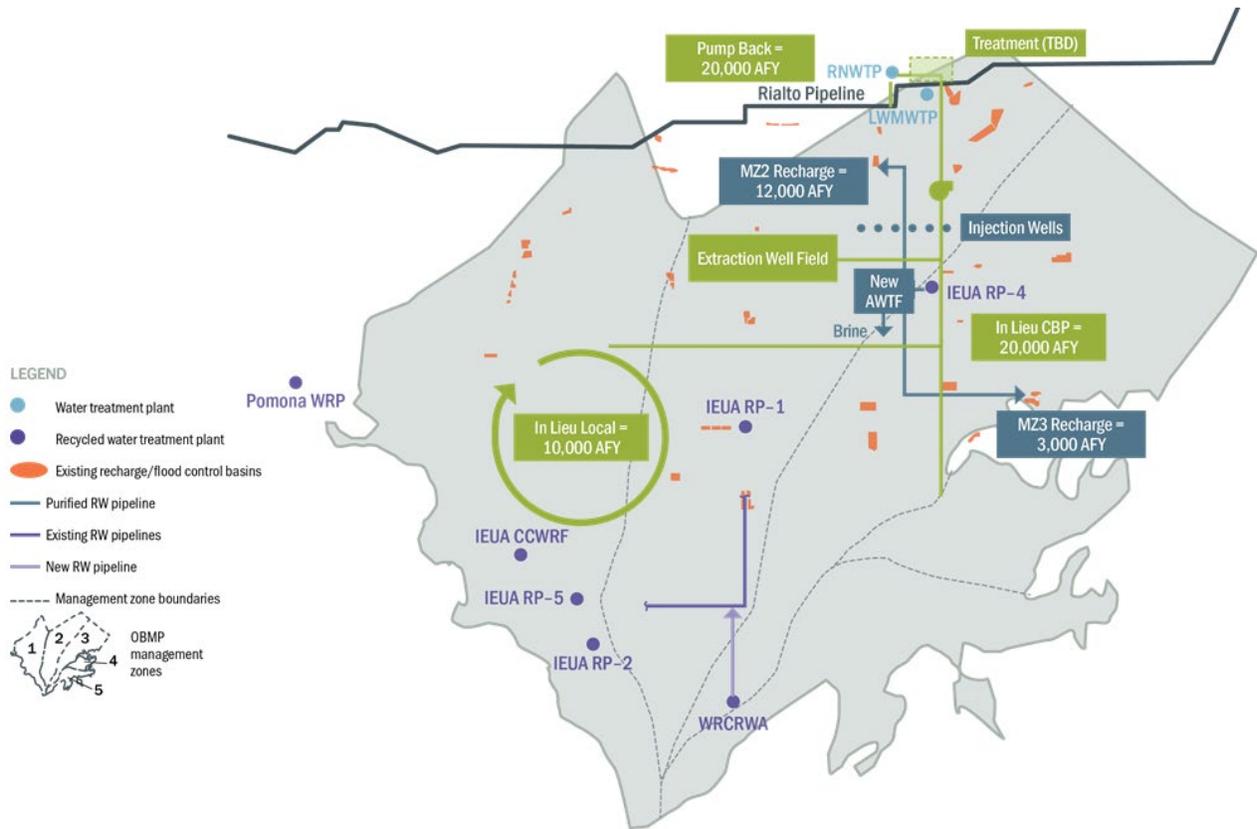
## Preliminary Design Report Study

The PDR Study is refining alternatives based upon review and feedback from local partnering agencies. During this most recent quarter, the PDR effort focused on the following elements:

- Developing project component designs that achieve desired operational flexibility
- Developing refined estimated capital and operational costs
- Documenting input data and alternatives formulation

Over the next several months the PDR team will evaluate the alternatives based on evaluation criteria and review recommendations with local agencies. The PDR team will develop draft technical memoranda describing the alternatives formulation, evaluation, and recommendations.

Figure 2-2.CBP – Example Program Alternative



## CBP Exchange Operations – Preliminary Analysis

IEUA, working with its local and State partners, continues to evaluate the potential to support pulse flows of up to 50,000 acre-feet originating in Lake Oroville during the spring of dry years designed to improve survival rates of emigrating juvenile Chinook salmon. The water for these pulse flows would be provided through an exchange with new water supplies stored (banked) in the Chino Groundwater Basin and extracted for use in the region in exchange for SWP supplies that would subsequently be released from Lake Oroville in the form of pulse flows. IEUA is conducting operations analyses to evaluate the integration of the CBP with Metropolitan Water District of Southern California (MWDSC) and SWP operations. The goals of this analysis include demonstrating the CBP operations can be accommodated by SWP and MWDSC without significant risk of unintended consequences; identifying operational constraints to guide development of agreement terms; and identifying opportunities for additional benefits to the SWP, MWDSC, IEUA, and other agencies through the CBP.

Preliminary findings indicate that CBP operations could be successfully completed under most hydrologic conditions. Extremely dry conditions, such as those that occurred in 2015, may require alternative approaches to meet these same objectives. For instance, IEUA is exploring “pre-delivery” in years prior to an exchange to add needed operational flexibility. These and other alternative approaches will be further evaluated and discussed in the coming months.

## **CBP PEIR and Permitting Update**

IEUA continues to coordinate plans for preparation of the CBP Programmatic Environmental Impact Report (PEIR) with other regional environmental planning efforts, such as the Chino Basin Storage Framework and Optimum Basin Management Program Update. The development of the CBP PEIR will start later this year when recommendations from the PDR Study are available and the draft project description can be prepared.

## **Design, Construction, and Operation Update**

As noted above, additional feasibility and preliminary design studies are underway. These efforts are defining project infrastructure alternatives and operational elements needed to complete design and development of operations plans.

## **Communications and Engagement Update**

The CBP implementation requires close planning and coordination with local, regional, and State agencies. IEUA sees these efforts as critical to developing a clear understanding of interests, needs, and concerns, and continues to develop and advance its project communications and outreach efforts through various means as discussed below.

### *CBP Outreach Efforts*

The Association of California Water Agencies' annual conference held a session on December 4, 2019, highlighting "Water Industry Trends Programs" and the contributions these programs make to the resiliency of the State's water system. IEUA Board Secretary/Treasurer Steve Elie discussed the importance of regional cooperation and benefits that surround the CBP.



*Association of California Water Agencies Fall 2019 Conference, San Diego, CA – Water Industry Trends Program Session*

### *CBP Workgroup*

As described in previous progress reports, IEUA initiated a workgroup process (the CBP Workgroup) to help develop the CBP that best achieves the objectives and provides broad mutual benefit to the region. Through the participation in these CBP Workgroup sessions IEUA is working with local and regional agencies to discuss integration and coordination of local and CBP objectives and associated agreements, and to obtain input and identify questions. IEUA will hold additional focused workgroup sessions in 2020 to work with agencies to address key questions raised about the CBP and to collaborate on further analysis and development of the CBP. The CBP Workgroup workshop sessions conducted through 2019 are summarized in **Table 2-1**.

*Table 2-1. CBP Workgroup Workshops through 2019*

<b>Month</b>	<b>Workshop</b>	<b>Objectives</b>
<b>December 2018</b>	CBP Workgroup No. 1	CBP overview, workgroup charter, introduce CBP Collaborative Memorandum of Understanding (MOU) for CBP participation, identify key questions
<b>January 2019</b>	CBP Workgroup No. 2	CBP costs/benefits review, review questions, present draft MOU for CBP participation
<b>February 2019</b>	CBP Workgroup No. 3	CBP water sources and financial analysis review, introduce CBP agreement terms, review questions
<b>May 2019</b>	CBP Workgroup No. 4	IEUA rate study update, review CBP PDR approach, review CBP agreement terms, review questions
<b>June 2019</b>	CBP Workgroup No. 5	CBP water sources review, CBP PDR alternatives and evaluation approach, review questions
<b>August 2019</b>	CBP Workshops	CBP water sources
<b>September 2019</b>	CBP Workshops	CBP economic analysis, water sources, and PDR alternatives

### *MWDSC and State Engagement*

IEUA continues to coordinate with the MWDSC and State agencies to evaluate the operational parameters and associated conditions for the CBP (see **Table 2-2** below). Technical analysis continues to focus on understanding operations, facilities, and potential benefits of the exchange arrangement between the CBP, MWDSC, and the State. Meetings during this past quarter with MWDSC focused on refining concepts for the management of stored water and pumpback of that stored water into the MWDSC system as part of CBP exchange operations.

The CBP team is continuing to work closely with the California Department of Water Resources (DWR) and California Department of Fish and Wildlife (CDFW) to evaluate the CBP exchange conditions for delivery of pulse flows in the Feather River. IEUA coordinated a joint meeting involving the CBP team, CDFW, DWR, MWDSC, and the Commission. This first joint meeting reviewed the status of the CBP, the roles and responsibilities of each agency supporting the CBP, and the necessary agreements and their interdependencies required for the CBP. Subsequent joint meetings will be used to further advance the analysis of operational conditions, monitoring and management

plans, environmental planning, and agreements necessary to implement, operate, and manage the program.

IEUA continues to coordinate closely with Commission management to provide updates on project progress, to discuss the respective roles and responsibilities of agencies involved in the development and implementation of Water Storage Investment Programs (WSIP) like the CBP, and to more clearly define the pathway ahead for completing the analysis and agreements for these programs.

*Table 2-2. CBP Engagement Meetings with MWDSC and State Agencies in Q4 2019*

<b>Month</b>	<b>Agency Meetings</b>	<b>Purpose</b>
<b>October</b>	MWDSC Partnering Discussions (recurring meetings)	Continued discussion of CBP operations with MWDSC system, identify/address challenges and opportunities
<b>November</b>	CDFW, DWR, CWC, MWDSC Joint Meeting	CBP update, further analysis of CBP-SWP exchange operations, roles and responsibilities, and steps forward
<b>November</b>	MWDSC Partnering Discussions (recurring meetings)	Continued discussion of CBP operations with MWDSC system, identify/address challenges and opportunities
<b>December</b>	MWDSC Partnering Discussions (recurring meetings)	Continued discussion of CBP operations with MWDSC system, identify/address challenges and opportunities

### 3. Project Schedule Update

IEUA and local agency partners are working together to define the program elements on a schedule consistent with the proposed commitments to achieve local and statewide public benefits (see **Figure 3-1** and **Table 3-1**). The program completion date remains December 2025, with full operation commencing in 2026. Additional details of the schedule and progress are provided in Attachments 1 and 2, respectively.

Figure 3-1. Simplified CBP Schedule



CBP milestones leading up to the Commission’s WSIP conditional funding award date are shown on **Table 3-1**.

Table 3-1. CBP Funding Milestones

Date	Milestone
Winter 2019/2020	Complete water sources evaluation, refine economic evaluation, and complete PDR
Spring 2020	Consensus on water sources, draft terms for water sources
Summer 2020	Draft agreement terms (Phase 1) with local agencies and MWDSC
Fall 2020	Draft agreement terms (Phase 1) with resource agencies
Spring/ Summer 2021	Draft PEIR, final agreement terms with local and resource agencies
Fall 2021	CWC final funding award negotiations and funding agreement execution

## Next Steps

As discussed in the previous progress report, IEUA will continue to work with local and regional partners to further develop the CBP and will continue to drive the following activities:

**CBP Workshops:** Conduct focused workshops with local partner agencies to discuss the analysis of key questions about economics, water sources, operational costs, and consideration of emerging water quality contaminants.

**Water Sources:** Complete water source evaluations and draft partnership agreements.

**PDR:** Complete refinement and evaluation of preliminary alternatives and identify recommended alternatives for further development.

**Partner and State Agency Coordination:** Continue to meet and coordinate with local and regional agency partners and State agencies to work collaboratively on key elements and issues to advance CBP planning and development.

**Communications and Outreach:** Continue to conduct one-on-one meetings and presentations for special committees and boards, distribute informational materials to interested parties, prepare news briefs, and provide web postings.

## **4. Project Cost and Financing Update**

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### **Capital Costs, Cash Flow, and Financing**

IEUA is continuing its analysis of potential funding sources to help with financing of the CBP. The CBP team completed a refined financial life cycle analysis of the alternatives identified by the PDR Study. The findings from these efforts will provide information needed to help IEUA and partner agencies make decisions about CBP development, implementation, operations, and financial and operational partnership agreements.

### **Pursuit of Additional Grant Funds**

IEUA continues to explore additional grant opportunities for the CBP, including federal grant programs (i.e., Water Infrastructure Improvements for the Nation (WIIN) Act), State grant programs (i.e., Proposition 68), and State Revolving Funds programs.

## **ATTACHMENT 1**

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### **Table 1. Project Schedule**



Table 1. Project Schedule

Funding Agreement Milestone	Start Date	Finish Date	% Complete
<b>Non-Public Benefits Cost-Share Contracts</b> (other agreements may be required and will be included when identified)			
Agreements with IEUA Member Agencies	2019	2020	35%
Agreements with State Water Project Contractor	2019	2021	20%
Chino Basin Storage and Recovery Application	2019	2021	5%
<b>Contracts for Administration of Public Benefits</b>			
CDFW (ecosystem agreement)	2019	2021	15%
SWRCB (water quality)	2019	2021	5%
DWR (emergency response)	2019	2021	5%
DWR (operations agreement)	2019	2021	15%
<b>Completed Feasibility Studies</b> (includes feasibility studies related to planning efforts that are the framework for the CBP as well as CBP-specific studies)			
2000 Optimum Basin Management Plan (OBMP) for Chino Basin	1995	2000	100%
2001 Chino Basin Organics Management Strategy	1998	2001	100%
2002 Recycled Water System Feasibility Study	2000	2002	100%
2002 Wastewater Facilities Master Plan	2000	2002	100%
2002 Salinity Management Plan	2000	2002	100%
2005 Urban Water Management Plan	2003	2005	100%
2005 Recycled Water Implementation Plan	2003	2005	100%
2007 Recycled Water Three Year Business Plan	2006	2007	100%
2010 Urban Water Management Plan	2009	2011	100%
2013 Recharge Master Plan Update	2011	2013	100%
2015 Energy Management Plan	2014	2015	100%
2015 Recycled Water Program Strategy	2013	2016	100%
2015 Wastewater Facilities Master Plan Update	2014	2016	100%
2015 Water Use Efficiency Business Plan Update	2014	2016	100%
2016 Feasibility Study of Recycled Water Interconnection — Pomona, Monte Vista Water District, and IEUA	2014	2016	100%
2016 Integrated Water Resources Plan	2013	2016	100%
2017 Recycled Water Intertie Study – Jurupa Community Services District and IEUA	2014	2017	100%
2018 Recharge Master Plan Update	2017	2018	100%
2020 OBMP Update for Chino Basin	2018	2020	45%
CBP Feasibility Studies and Pre-Design	2019	2021	35%
IEUA Rate Study	2019	2020	75%
<b>Environmental Documentation</b> (includes environmental documentation already completed that supports elements of the CBP)			
IEUA Facilities Master Plan PEIR	2016	2017	100%
OBMP Update for Chino Basin EIR Addendum	2016	2017	100%
OBMP Update for Chino Basin CEQA	2019	2020	0%

<b>Funding Agreement Milestone</b>	<b>Start Date</b>	<b>Finish Date</b>	<b>% Complete</b>
CBP PEIR	2019	2020	0%
<b>Federal, State, and Local Approvals</b>			
Federal: Potential operations approvals w/USBR	2019	2021	0%
Federal: Potential permitting approvals w/USACE	2019	2021	0%
Federal: Other possible federal permits/approvals tbd	2019	2021	0%
State: Incidental Take Permit, if needed (w/CDFW)	2019	2021	0%
State: Section 1707 water rights change, if needed (by DWR, w/SWRCB)	2019	2021	0%
State: SWP water supply contract amendments, if needed (by SWPC, w/DWR)	2019	2021	0%
State: Other possible State permits/approvals tbd	2019	2021	0%
Local: Possible encroachment permits (w/city/county)	2019	2021	0%
Local: Storage in Chino Basin Water Bank (w/CBWM)	2019	2021	0%
Local: Other possible local permits/approvals tbd	2019	2021	0%
<b>Funding Agreement Components</b>			
Project Workplan	2017	2021	10%
Project Schedule	2017	2021	10%
Project Budget	2017	2021	10%
<b>Project Design</b>	2021	2023	0%
<b>Construction</b>	2023	2025	0%
<b>Begin Operations</b>	2026	2075	0%

## **ATTACHMENT 2**

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### **Table 2. Quarterly Reporting Items for Commission Hearing on Final Awards**



Table 2. Quarterly Reporting Items for Commission Hearing on Final Awards\*

Description	Estimated Completion Date	% Complete
<b>Contracts for non- public cost-share</b> (other agreements may be required and will be included when identified)		
Agreements with IEUA Member Agencies	2020	35%
Agreements with State Water Project Contractor (SWPC)	2021	20%
Chino Basin Storage and Recovery Application	2021	5%
<b>Contracts for administration of public benefits</b>		
CDFW (ecosystem)	2021	15%
SWRCB (water quality)	2021	5%
DWR (emergency response)	2021	5%
DWR (operations)	2021	15%
<b>Completed feasibility studies</b> (includes feasibility studies related to planning efforts that are the framework for the CBP as well as CBP-specific studies)		
2000 Optimum Basin Management Plan (OBMP) for Chino Basin	Done	100%
2001 Chino Basin Organics Management Strategy	Done	100%
2002 Recycled Water System Feasibility Study	Done	100%
2002 Wastewater Facilities Master Plan	Done	100%
2002 Salinity Management Plan	Done	100%
2005 Urban Water Management Plan	Done	100%
2005 Recycled Water Implementation Plan	Done	100%
2007 Recycled Water Three Year Business Plan	Done	100%
2010 Urban Water Management Plan	Done	100%
2013 Recharge Master Plan Update (RMPU)	Done	100%
2015 Energy Management Plan	Done	100%
2015 Recycled Water Program Strategy	Done	100%
2015 Wastewater Facilities Master Plan Update	Done	100%
2015 Water Use Efficiency Business Plan Update	Done	100%
2016 Feasibility Study of Recycled Water Interconnection — Pomona, Monte Vista Water District, and IEUA	Done	100%
2016 Integrated Water Resources Plan	Done	100%
2017 Recycled Water Intertie Study – Jurupa Community Services District and IEUA	Done	100%
2018 Recharge Master Plan Update	Done	100%
OBMP Update for Chino Basin CEQA	2020	40%
CBP Feasibility Studies and Pre-Design	2021	35%
IEUA Rate Study	2020	75%

Description	Estimated Completion Date	% Complete
<b>Final environmental documentation</b> (includes environmental documentation already completed that supports elements of the CBP)		
IEUA Facilities Master Plan PEIR	2017	100%
OBMP Update for Chino Basin EIR Addendum	2017	100%
OBMP CEQA Update for Chino Basin	2020	0%
CBP PEIR	2020	0%
<b>All required federal, State, and local approvals, certifications, and agreements</b>		
Federal: Potential operations approvals w/USBR	2021	0%
Federal: Potential permitting approvals w/USACE	2021	0%
Federal: Other possible federal permits/approvals tbd	2021	0%
State: Incidental Take Permit, if needed (w/CDFW)	2021	0%
State: Section 1707 water rights change, if needed (by DWR, w/SWRCB)	2021	0%
State: SWP water supply contract amendments, if needed (by SWPC, w/DWR)	2021	0%
State: Other possible State permits/approvals tbd	2021	0%
Local: Possible encroachment permits (w/ city/county)	2021	0%
Local: Storage in CBWB (w/Chino Basin Watermaster)	2021	0%
Local: Other possible local permits/approvals tbd	2021	0%

\*Note: Updates to the Funding Agreement and Status Update sections of the Table 2 quarterly reporting template (provided by the Commission) are for elements needed to execute a funding agreement. The Commission requires an update of these elements only when a significant change has occurred. There currently is no information to report for these elements and there has been no change in the information related to these elements at this time.



## CONTACT INFORMATION

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