



## MEMORANDUM

TO: SLDMWA Water Resources Committee Members, Alternates

FROM: Frances Mizuno, Interim Executive Director

DATE: November 5, 2018

RE: Los Vaqueros Reservoir Expansion Participation

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### BACKGROUND

The Water Authority on December 12, 2011 entered into a Memorandum of Understanding (MOU) regarding CalFed Bay-Delta Program Studies on the expansion of Los Vaqueros Reservoir (LVE) with Contra Costa Water District (CCWD) amongst other Water Agencies. The participation in the MOU required a payment of \$100,000, which was included in FY 17 Leg Ops 1 budget and paid in October 31, 2016. This cost was included in Leg Ops 1 budget as the Water Authority's participation was to explore potential SOD CVO-wide benefits from the project. Since the Authority's participation in the MOU, individual member agencies (Byron-Bethany Irrigation District, Del Puerto Water District, Grasslands Water District, San Luis Water District, Santa Clara Valley Water District and Westlands Water District) also entered into the MOU to seek potential storage/conveyance benefits directly for their respective districts. With the exception of Grasslands WD, each participant also paid \$100,000 for their participation.

The LVE Project includes expansion of the Los Vaqueros Reservoir from its current capacity of 160 TAF to 275 TAF, construction of a pipeline between CCWD's Transfer Pump Station and the State Water Project's California Aqueduct at Bethany Reservoir (the "Transfer-Bethany Pipeline"), upgrades to the existing Transfer Pump Station Facilities, and construction of the Neroly High Lift Station.

The potential benefits to the Water Authority members from the project include the operational flexibility to Reclamation to move CVP water south of Delta, conveyance and storage of water purchased through water transfers, and storage of rescheduled water for CVP contractors and Level IV Refuge Water for Grasslands Water District. (See Attachment 1 excerpts from the Draft Supplement to the Final EIS/EIR.)

### ISSUE FOR DISCUSSION

The MOU participants have determined potential benefits from this project and have drafted a proposed CCWD Cost Share Agreement for Los Vaqueros Reservoir Expansion Project Planning (Attachment 2). This agreement is for the purpose of providing for cost-sharing to (1) complete the Final Supplement to the 2010 Final EIS/EIR, (2) release the Final Feasibility Report in partnership with Reclamation, (3) complete financial evaluation of the Project for the Local Agency Partners (LAP), (4) develop a long-term governance structure for a likely new Joint Powers Authority (JPA), and (5) complete conceptual and preliminary design. The total cost under this draft Cost Share Agreement is \$2,833,036. The proposal is to share the cost equally amongst all the LAPs. There is a total of 14 MOU participants that are potential LAPs. The

cost for each LAP will depend on the total number of participants. (See attached Summary of Draft Cost Share Calculation for potential costs (Attachment 3 and 3A).)

The Water Authority will need to determine whether and how to participate in the Cost Share Agreement as a LAP.

#### **RELEVANT CONSIDERATIONS**

1. Whether individual Members will participate in the Cost Share Agreement on their own, through the Water Authority via an Activity Agreement, or both.

Benefits include:

- a. Ability to store Rescheduled Water when San Luis Reservoir is full.
- b. Ability to convey/store north-to-south water transfers with available capacity.

2. Are the benefits/costs worthwhile to continue participation?

Local Agency Partners can utilize the proposed project for storage or conveyance. In addition to the cost for participation in the Project, there will be supplemental usage fees applied for use of CCWD's existing facilities and EBMUD's facilities (use of Freeport Project). The proposed usage fee per acre-foot is costly. (See attached CCWD Proposed Usage Fees -Attachment 4) and EBMUD Usage Fee- Attachment 5). Current financial model estimate the cost for participation to be extremely high.

3. Should participation for south of Delta (SOD) CVP-wide benefits be through the Bureau of Reclamation (Reclamation) rather than through the Water Authority?

Reclamation is preparing the Feasibility Study. The study shows CVP operational flexibility benefits for SOD CVP Contractors.

Benefits include:

- a. Ability to convey Level 2 Refuge water, freeing up capacity in Jones PP for other deliveries.
- b. Ability to convey CVP Water when Banks/Jones are OMR limited.

4. Reclamation is also participating to provide Level IV refuge water supply. It is anticipated that Reclamation will fund up to 25% of the construction cost (WIIN Act limitation) through a negotiated Agreement with the new JPA for cost share and use of the facilities.

Existing agreements and environmental coverage for the Hayward Intertie currently limit the use of the Hayward Intertie to emergencies or planned critical maintenance. Drought conditions do not constitute an emergency under the Hayward Intertie's existing Joint Exercise of Powers Agreement. Any expanded or long-term use of the Hayward Intertie for Phase 2 Expansion operations would be subject to institutional agreements that would need to be negotiated and approved by the City of Hayward, EBMUD, and SFPUC. The details of any proposed use of the Hayward Intertie have not been sufficiently developed to allow for meaningful analysis of potential impacts to Hayward and EBMUD. In the event that use of the Hayward Intertie for Phase 2 Expansion operations is pursued in the future, all potential operational and environmental impacts would need to be identified, analyzed and mitigated, including hydraulic pressure, fire flow and water quality considerations for the City of Hayward and EBMUD.

In addition to using these two physical interties, Phase 2 Expansion water could also be delivered to ACWD, which is a member of BAWSCA, allowing ACWD to reduce its use of Hetch Hetchy water in exchange, thus freeing up Hetch Hetchy water to be delivered to other BAWSCA member agencies; this method of exchange would also be subject to institutional agreements that would need to be negotiated. Use of the South Bay Aqueduct to move water to SFPUC and BAWSCA or other agencies would be require a new conveyance agreement with DWR and approval by the agencies already contracted to use the South Bay Aqueduct (ACWD, SCVWD, and Zone 7).

SFPUC has identified a need for water in all water year types of up to 16.7 TAF/year, as well as an additional need for water in drier years of up to 57 TAF/year. In addition to SFPUC's identified demands, BAWSCA has identified a further need for water of 10 TAF/year in certain drier years. BAWSCA has identified a need for dedicated emergency storage of 5-10 TAF to meet its drier year demands.

#### **2.3.4.8 San Luis & Delta-Mendota Water Authority (SLDMWA)**

SLDMWA member agencies would receive water from the project through the new Transfer-Bethany Pipeline. SCVWD, which is a member of SLDMWA, could receive water delivered through the Transfer-Bethany Pipeline to the California Aqueduct and then either to the South Bay Aqueduct or to San Luis Reservoir. Grassland Water District is also a member of SLDMWA. The Refuge Water Supply Program has a conveyance agreement with SLDMWA to wheel CVPIA water supplies to the Refuges, including to Grassland Water District for private wetlands within the Grassland Resource Conservation District. SLDMWA and the south-of-Delta CVP contractors could also receive water exported at Jones Pumping Plant (or Banks Pumping Plant through a wheeling agreement with DWR) using capacity made available by wheeling Level 2 Refuge water supplies through CCWD facilities.

In addition to the water needs identified by the SLDMWA member agencies that are also Local Agency Partners in the Phase 2 Expansion, SLDMWA is interested in any additional water supply for south-of-Delta CVP contractors that could be made available by Phase 2 Expansion operations. South-of-Delta CVP contractors often are not allocated their full CVP contract amounts, even in wetter years. A specific amount of water needed by SLDMWA member agencies from the Phase 2 Expansion has not been included, because Phase 2 Expansion

operational constraints (both facility sizes and priority of usage) would limit the amount of water delivered to be less than the total amount of water needed to satisfy SLDMWA demands.

### **2.3.4.9 Alameda County Flood Control and Water Conservation District, Zone 7 (Zone 7)**

Zone 7 would receive water from the project through the new Transfer-Bethany Pipeline, delivered to the existing California Aqueduct and then to the existing South Bay Aqueduct. Water could also be delivered via exchange in the Delta via the South Bay Aqueduct. Zone 7 has identified a need for water delivery in drier years of up to 19 TAF/year. This dry year need could be met with storage of up to 5 TAF/year of Delta Surplus Water for Zone 7 in all year types. Zone 7 is also requesting 5 TAF/year of supplemental supply from the Phase 2 Expansion, in addition to SWP water that Zone 7 would place into storage. In years with higher SWP Table A allocations, Zone 7 has SWP contract allocation available to store in Los Vaqueros Reservoir. This storage can only be drawn upon by Zone 7.

## **2.4 Updates to Overall Construction Program**

Construction is expected to take about six years for Alternatives 1A, 1B, and 2A. As described in Chapter 1, Section 1.3, the Value Planning Report prepared by Reclamation in 2016 included the recommendation to sequence construction activities such that the construction of the Transfer-Bethany Pipeline would be completed first before beginning construction of the dam enlargement and other facilities. This sequence would allow for acceleration of the reservoir drawdown by delivering water released from the reservoir through the Transfer Pipeline and then through the Transfer-Bethany Pipeline to other Project Partners as well as through the Los Vaqueros Pipeline to CCWD.

For Alternative 4A the dam enlargement will not occur and reservoir drawdown is not required. Construction for facility improvements included in Alternative 4A could occur concurrently and is expected to take about two years.

Initiation of construction is anticipated in 2021 for all alternatives. The other details of the overall construction program remain the same as described in the Final EIS/EIR.

## **2.5 Updates to Permits and Approvals**

See Section 1.5, CEQA and NEPA Processes for the Los Vaqueros Reservoir Expansion, for a description of the CCWD and federal decision making processes applicable to the Supplement to the Final EIS/EIR. In addition, the section below addresses changes to the permits, approvals, and other processes described in the Final EIS/EIR.

### **2.5.1 Federal Decision Processes**

As a result of the 2016 Water Infrastructure for Improvements to the Nation Act (WIIN Act), the Secretary of the Interior may authorize construction of a State-led storage project if: 1) the

## **APPENDIX C**

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# **Sensitivity Study re Partner Benefits with Water Transfers**

In addition to the operations already described in this Supplement, Phase 2 Expansion facilities could be used to facilitate water transfers between willing north-of-Delta sellers and south-of-Delta buyers. This appendix presents the sensitivity analysis performed to evaluate the potential to convey transfer water generally for any of the Local Agency Partners or Refuges. Specific water transfers would need approval from Bureau of Reclamation (Reclamation), California Department of Water Resources (DWR), the State Water Resources Control Board, and other applicable parties and would need to be consistent with state and federal law.

### **C.1 Long-Term Water Transfers**

In March 2015, Reclamation and the San Luis and Delta-Mendota Water Authority (SLDMWA) released a Final EIS/EIR for Long-Term Water Transfers (Reclamation and SLDWMA, 2015), which evaluated the potential impacts of voluntary water transfers over a 10-year period, 2015 through 2024, from willing sellers upstream of the Delta to Central Valley Project (CVP) contractors south of the Delta and in the San Francisco Bay Area.

The potential environmental impacts of the Long-Term Water Transfers project were found to be beneficial or less than significant after mitigation pursuant to the California Environmental Quality Act (CEQA) in all categories. SLDMWA filed a Notice of Determination in April 2015 (SLDMWA, 2015) and Reclamation issued a Record of Decision in May 2015 (Reclamation, 2015) for the Long-Term Water Transfers project. The alternative implemented does not directly approve any specific transfer, but approves a set of criteria that must be met to transfer water. In 2017, SLDMWA prepared an Addendum to the Long-Term Water Transfers Final EIS/EIR (Reclamation and SLDMWA, 2017) to add potential willing sellers not previously identified in the Final EIS/EIR and increase amounts of water for potential transfer for specific sellers already included in the Final EIS/EIR; these additions could shift the location or quantity of water made available for transfer, but would not increase the total amount of water or the types of transfers.

The potential buyers identified were East Bay Municipal Utilities District (EBMUD), Contra Costa Water District (CCWD), and certain member agencies of SLDMWA, including Byron Bethany Irrigation District (BBID) and Santa Clara Valley Water District (SCVWD). The analysis in this appendix assumes that other Local Agency Partners or the Refuge Water Supply Program could follow a similar process as described by the Long-Term Water Transfers program to secure approvals for similar transfers. The willing sellers include water agencies and entities in the

Sacramento River, American River, Yuba River, Feather River, Merced River, and Sacramento-San Joaquin River Delta watersheds. Measures to make transfer water available include:

1. Agricultural conservation in the seller's service area
2. Cropland idling of rice, field crops, grains, and alfalfa
3. Groundwater substitution
4. Crop shifting
5. Reservoir release

**Table C-1** summarizes the maximum amount of water identified as potentially available for transfer in a year in the Long-Term Water Transfers Final EIS/EIR Table 2-5 (Reclamation and SLDMWA, 2015). Because of the unknown variability in actual hydrologic and operating conditions, it is likely that only a portion of this water supply would be available in any given year. The analysis in this appendix uses these maximum amounts of potentially available transfer water in order to provide an estimate of the upper limit of how much transfer water could be available to be conveyed through the Phase 2 Expansion facilities.

**TABLE C-1**  
**MAXIMUM AMOUNT OF TRANSFER WATER AVAILABLE BY TRANSFER TYPES AND PERIOD (TAF/YEAR)**

	April-June	July-September	Total <sup>1</sup>
Groundwater Substitution	127	164	291
Cropland Idling/Crop Shifting	67	110	177
Reservoir Release	0	97	97
Conservation	0	3	3

NOTE:

<sup>1</sup> Note that the categories of measures that could make water transfers available should not be added together. Willing sellers could make water available through groundwater substitution, cropland idling, or a combination of the two methods; however, they would not be able to make the full quantity specified in each category available in the same year. The total maximum amount of water available for transfer in a year identified by the Long-Term Water Transfer Final EIS/EIR is 511,094 acre-feet (Reclamation and SLDMWA, 2015).

## C.2 Water Transfer Operations

The Long-Term Water Transfers Final EIS/EIR addressed CVP and non-CVP sources of supply conveyed using existing CVP, State Water Project (SWP), and local facilities. This Appendix evaluates the use of Phase 2 Expansion facilities to convey the transfer water. This analysis considers Phase 2 Expansion facility capacity available after those facilities have been used to meet first CCWD's water supply and water quality needs and then the Local Agency Partner and Refuge operational priorities as described earlier in this Supplement.

Based on the quantities listed in Table C-1, sufficient volumes of transfer water are assumed to be available to allow diversions from April through September to maximize use of Phase 2 Expansion facility capacity. Transfer water would be diverted when the Delta is in balanced conditions through

Rock Slough, Old River, and/or Middle River Intakes if capacity at those intakes were available, subject to physical system as well as regulatory constraints. Use of the Freeport Intake is not evaluated, since EBMUD has indicated that Freeport Intake and/or the EBMUD facilities required for conveyance of water through the EBMUD-CCWD Intertie would not be available for use during the April through September time period that transfer water is generally available. If the EBMUD facilities were to become available for use to convey transfer water, additional analysis would be needed to determine potential operational or environmental impacts.

If pipeline and aqueduct capacity were available, transfer water would be delivered through the Transfer-Bethany Pipeline to the California Aqueduct and then either through the South Bay Aqueduct to Alameda County Water District (ACWD) or through San Luis Reservoir to SLDMWA or the Refuges. Delivery of transfer water to ACWD would occur if ACWD had unmet dry year demands from the Phase 2 Expansion. Delivery of transfer water to SLDMWA and the Refuges would occur whenever transfer water and facilities capacity were available, because the demands from SLDMWA member agencies and Refuges are large enough to be treated as unlimited in this analysis. If capacity in the Transfer-Bethany Pipeline were not available, transfer water would be stored in Los Vaqueros Reservoir, if storage capacity were available, to be delivered through the Transfer-Bethany Pipeline when capacity became available. The analysis specifically examines conveying transfer water for ACWD, SLDMWA, and the Refuges, at their request. The mechanism for conveying transfer water would be different for other Local Agency Partners that do not receive water through the Transfer-Bethany Pipeline, but the available capacity at Rock Slough, Old River, and Middle River Intakes would still be a relevant factor.

### C.3 Potential Water Transfers in Alternative 1B

This analysis was conducted by post-processing the CalSim II operations model results for Alternative 1B under the Future No Climate Change scenario. **Table C-2** summarizes the maximum amount of water that could be delivered through Phase 2 Expansion facilities, using capacity available after Alternative 1B operations. The primary limiting factor on the total amount of transfer water that could be delivered is the available capacity at Rock Slough, Old River, and Middle River Intakes for diverting transfer water from the Delta.

**TABLE C-2**  
**TRANSFER WATER DELIVERED THROUGH PHASE 2 EXPANSION FACILITIES**

Water Year Type	Average Transfers Delivered to ACWD (TAF/year)	Average Transfers Delivered to SLDMWA & Refuges (TAF/year)
Wet	0	23
Above Normal	1	39
Below Normal	2	47
Dry	7	43
Critically Dry	14	44
All Years	4	37

On average, 27 percent of the transfer water diverted would need to be stored in Los Vaqueros Reservoir for an average of two months before capacity became available in the Transfer-Bethany Pipeline to complete the delivery of the transfer water. “Spilling” of stored transfer water (where spilling is defined as replacement in storage with a higher priority diversion to storage by CCWD or other parties) is minimized to less than 1 percent of total transfer water stored by limiting storage of transfer water only to times when storage would be available in Los Vaqueros Reservoir. More transfer water could be stored in Los Vaqueros Reservoir, and therefore additional transfer water could be delivered, if water transfers were given a higher priority for storage under the Phase 2 Expansion operational rules (i.e., stored transfer water was not spilled in favor of storing a different type of water).

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## References

- Reclamation, 2015. Record of Decision, Long-Term Water Transfers. Bureau of Reclamation, May 2015. [[https://www.usbr.gov/mp/nepa/documentShow.cfm?Doc\\_ID=21522](https://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=21522)]
- Reclamation and SLDMWA, 2015. Long-Term Water Transfers Final Environmental Impact Statement/Environmental Impact Report. Bureau of Reclamation and San Luis and Delta-Mendota Water Authority, March 2015. [[https://www.usbr.gov/mp/nepa/documentShow.cfm?Doc\\_ID=21161](https://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=21161)]
- Reclamation and SLDMWA, 2017. Addendum to Long-Term Water Transfers EIS/EIR. May 2017.
- SLDMWA, 2015. Notice of Determination for the Long-Term Water Transfers project. San Luis and Delta-Mendota Water Authority, April 9, 2015. [[https://www.usbr.gov/mp/nepa/documentShow.cfm?Doc\\_ID=21481](https://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=21481)]

**CONTRA COSTA WATER DISTRICT  
Cost Share Agreement for  
Los Vaqueros Reservoir Expansion Project Planning**

THIS AGREEMENT is made as of September\_\_\_\_, 2018 between Contra Costa Water District hereinafter referred to as “CCWD,” a County Water District organized and existing under Division 12 of the California Water Code; and

Alameda County Flood Control and Water Conservation District, Zone 7 hereinafter referred to as “Zone 7 Water Agency”, a special district organized and existing under Act 20, Section 36 of the Water Code – Uncodified Acts; and

Alameda County Water District hereinafter referred to as “ACWD”, a County Water District organized and existing under Division 12 of the California Water Code; and

Bay Area and Water Supply & Conservation Agency hereinafter referred to as “BAWSCA”, a public agency organized and existing under Division 31 of the California Water Code; and

The City of Brentwood hereinafter referred to as “Brentwood”; and

Byron Bethany Irrigation District hereinafter referred to as “BBID”, a Multicounty Special District organized and existing under Division 11 of the California Water Code; and

East Bay Municipal Utility District hereinafter referred to as “EBMUD”, a Municipal Utility District organized and existing under Division 6 of the California Public Utilities Code; and

East Contra Costa Irrigation District hereinafter referred to as “ECCID”, an irrigation district organized and existing under Division 11 of the California Water Code; and

Del Puerto Water District hereinafter referred to as “DPWD”, a water district organized and existing under Division 13 of the California Water Code; and

Grassland Water District hereinafter referred to as “GWD”, a water district organized and existing under Division 13 of the California Water Code; and

San Francisco Public Utilities Commission hereinafter referred to as “SFPUC”, a department of the City and County of San Francisco; and

San Luis Water District hereinafter referred to as “SLWD”, a water district organized and existing under Division 11 of the California Water Code; and

San Luis & Delta-Mendota Water Authority hereinafter referred to as “SLDMWA”, a California joint powers authority operating under and by virtue of Section 6500, et seq., of the California Government Code; and

Santa Clara Valley Water District hereinafter referred to as “SCVWD”, an independent special district created by an act of the Legislature of the State of California and Water Code Appendix, Chapter 60; and

**Westlands Water District** hereinafter referred to as “WWD”, a California water district organized and existing under Division 13 of the California Water Code.

Throughout this Agreement, (1) ACWD, BAWSCA, BBID, Brentwood, DPWD, ECCID, EBMUD, GWD, SFPUC, SLDMWA, SLWD, SCVWD, WWD, and Zone 7 Water Agency may be referred to together as Local Agency Partners, and (2) CCWD and the Local Agency Partners may be referred to together as the “Agencies” or “Parties”, or individually as a “Party”.

### RECITALS

WHEREAS, the Local Agency Partners share an interest in providing a reliable, high quality water supply at a reasonable cost while preserving or enhancing the environment; and

WHEREAS, the Local Agency Partners each have different concerns regarding their water supplies, reliability, and water quality for their individual agencies; and

WHEREAS, the original 100,000-acre-foot Los Vaqueros Reservoir was constructed in 1998 to provide drinking water quality improvements and emergency supplies for CCWD’s customers; and

WHEREAS, the Phase 1 Los Vaqueros Reservoir Expansion was constructed in 2012 and expanded the capacity of the reservoir to 160,000 acre-feet with the purpose of providing drinking water quality improvements, emergency supplies, and additional water supply reliability benefits for CCWD’s customers; and

WHEREAS, in February of 2013, EBMUD approved Principles of Agreement with CCWD for water supply reliability partnership; and

WHEREAS, in February of 2016, EBMUD and CCWD approved Principles of Agreement concerning, among other things, CCWD’s potential future use of the Freeport Regional Water Project and EBMUD’s potential future use of Los Vaqueros Reservoir; and

WHEREAS, the Local Agency Partners are considering the Phase 2 Los Vaqueros Reservoir Expansion Project (Project) to develop regional water supplies for environmental water management, to improve regional water supply reliability, and to improve regional water quality, while maintaining the existing benefits for CCWD’s customers; and

WHEREAS, the Local Agency Partners recognize that the Project may be mutually beneficial for all Parties and may address, in full or in part, each Party’s individual concerns regarding water supply, reliability, and water quality; and

WHEREAS, the planning to date for the Project includes, but is not limited to, planning for the construction of an expanded reservoir with a capacity of 275,000 acre-feet, construction of a pipeline between CCWD's Transfer Pump Station and the California Department of Water Resources' California Aqueduct at Bethany Reservoir (the "Transfer-Bethany Pipeline"), upgrades to the existing Transfer Pump Station facilities, and construction of the Neroly High Lift Pump Station; and

WHEREAS, the Local Agency Partners, the California Department of Water Resources, and other federal, state, and local agencies executed a Memorandum of Understanding regarding the CALFED Bay-Delta Program Studies on the Expansion of Los Vaqueros Reservoir in 2001 ("2001 LV MOU"), as amended and extended through December 31, 2018; and

WHEREAS, the United States Department of the Interior, Bureau of Reclamation ("Reclamation") is authorized to complete a Federal Feasibility Report for the Los Vaqueros Reservoir Expansion by the CALFED Bay-Delta Authorization Act (Public Law 108-361) and has received federal appropriations in support of this work in excess of \$18 million since 2001; and

WHEREAS, CCWD and Reclamation jointly prepared a Final Environmental Impact Statement/Environmental Impact Report on March 12, 2010 ("Final EIS/EIR") that evaluated the expansion of Los Vaqueros Reservoir in two phases: an initial phase of expansion from 100,000 acre-feet to 160,000 acre-feet and a future phase of expansion from 160,000 acre-feet to 275,000 acre-feet; and

WHEREAS, the 2016 Water Infrastructure Improvements for the Nation ("WIIN") Act authorizes Federal financial participation in State-led surface storage projects such as the Los Vaqueros Reservoir Expansion Project; and

WHEREAS, Reclamation and CCWD executed a Memorandum of Understanding for Completion of Phase 2 of the Los Vaqueros Reservoir Expansion Investigation and Sharing of Costs on December 16, 2015 ("Reclamation-CCWD Cost Share MOU") that allows for in-kind services by Local Agency Partners to be eligible for tracking and reporting as non-federal expenditures that will help Reclamation secure additional federal funds for planning of the Project; and

WHEREAS, all of the Local Agency Partners executed individual cost sharing agreements with CCWD ("Individual Cost Sharing Agreements") to prepare a Draft Federal Feasibility Report in partnership with Reclamation, a Draft Supplement to the Final Environmental Impact Statement/Environmental Impact Report ("Draft Supplement to the Final EIS/EIR"), and a funding application to the California Water Commission for implementation funding under its Water Storage Investment Program ("WSIP"); and

WHEREAS, CCWD and certain Local Partners have provided in-kind services and financial support for Project planning efforts to date; and

WHEREAS, through a competitive process CCWD previously selected the Consultant

Team to develop the Draft Supplement to the Final EIS/EIR and the Federal Feasibility Report; and

WHEREAS, on June 30, 2017, CCWD and Reclamation released the Draft Supplement to the 2010 Final EIS/EIR that evaluated the environmental effects of changes in the Project, changes in circumstances, and new information since certification of the Final EIS/EIR; and

WHEREAS, on August 11, 2017, CCWD submitted a funding application for the Project and on July 24, 2018 the California Water Commission determined that the Project was eligible for up to \$459 million of funding from the WSIP, including \$13.65 million of early funding; and

WHEREAS, the work funded through the Individual Cost Sharing Agreements is nearly complete; and

WHEREAS, on February 2, 2018, Reclamation released the public Draft Federal Feasibility Report; and

WHEREAS, the Local Agency Partners recognize that additional planning activities are required to advance the Project consistent with the requirements of the Water Storage Investment Program (California Water Code §79700-79798); and

WHEREAS, the Local Agency Partners agree that planning of the Project shall be conducted in a manner consistent with the “beneficiaries pay” principle such that future costs will be allocated equitably in accordance with the benefits received if the Project or any part thereof proceeds, and that no Party will be obligated to fund the benefits from the Project or any part thereof provided to other entities.

NOW, THEREFORE, the Parties agree that the above recitals are hereby incorporated into and made a part of this Agreement, and further agree as follows:

1. Purpose. The primary purposes of this Agreement are to provide for cost-sharing of the funding requirements for:
  - a) the completion of the Final Supplement to the 2010 Final EIS/EIR (“Final Supplement to the Final EIS/EIR”);
  - b) the release of the Final Federal Feasibility Report in partnership with Reclamation;
  - c) a financial evaluation of the Project for the purpose of the Local Agency Partners’ making upcoming decisions regarding their financial commitment to project implementation.
  - d) the development of a long-term governance structure (currently envisioned as a Joint Powers Authority);
  - e) initiation of consultations with federal, state, and local entities for Project permits, approvals, certifications, and agreements;
  - f) conceptual and preliminary design advancement of Project facilities; and
  - g) any other activities mutually agreed to by the Parties pursuant to and consistent with this Agreement.

This Agreement designates roles and responsibilities as related to the receipt of WSIP early funding.

All work needed for Purposes a, 3b, and c will be completed during the term of this Agreement.

Work to meet Purposes d, e, and f will commence during the term of this Agreement and will continue after the term of this Agreement, provided that new agreements are reached by CCWD and some or all of the Local Agency Partners which contain provisions to continue Work related to Purposes d, e, and f. Consultant Team work and CCWD staff work for these purposes will be partially funded by this Agreement.

A detailed scope of work and budget for activities funded by this Agreement are included in Exhibit A and Exhibit B, respectively, which are attached hereto and incorporated herein as if fully set forth in this Agreement.

## 2. Obligations and Responsibilities.

### 2.1 CCWD Responsibilities

- a) CCWD will be responsible for planning a Project that is consistent with the principles for participation in the expansion of Los Vaqueros Reservoir and each and every determination and commitment adopted in 2003 by CCWD's Board of Directors in Resolution No. 03-24 and supported in the 2004 advisory vote in favor of expansion by voters within CCWD ("CCWD Board Principles"). Resolution 03-24 and Resolution 03-25 authorizing the advisory vote are shown in Exhibit C and Exhibit D, respectively, which are attached hereto and incorporated herein as if fully set forth.
- b) CCWD will work with Reclamation to jointly prepare a Federal Feasibility Report and a Final Supplement to the Final EIS/EIR for the Project, both of which will include an evaluation of Project operations that have been designed to provide benefits to the State and to each of the Local Agency Partners.
- c) CCWD will contract with and manage the environmental, legal, permitting, water rights, engineering, operations and financial modeling consultants providing support to the Project ("Consultant Team") for purposes a, b, and c and any other purposes that the Local Agency Partners determine would be beneficial and CCWD is agreeable to perform. CCWD will have authority on consultant procurement including sole source authorization decisions as appropriate for services related to facilities owned and operated by CCWD.
- d) CCWD will prepare operations models of the Project. CCWD will

share modeling results with the Local Agency Partners. CCWD will update the operations modeling as needed. Updates to operations modeling may include but are not limited to changes requested by Local Agency Partners, changes in regulations, and changes to the make-up of the Local Agency Partners pursuant to Section 6 or 12 of this Agreement.

- e) CCWD will provide relevant excerpts and/or chapters to the Local Agency Partners to facilitate their review of and input on the Final Federal Feasibility Report and the Final Supplement to the Final EIS/EIR per Section 2.4(b) of this Agreement, as those documents are developed, and shall work cooperatively with the Local Agency Partners to incorporate their comments on the Final Federal Feasibility Report and the Final Supplement to the Final EIS/EIR, subject to Section 8 of this Agreement. The full documents are available to review upon the request of any Party.
- f) CCWD will maintain the website for the project and will post all relevant public documents on the site.
- g) CCWD will provide input and facilitate discussions with the Local Agency Partners regarding the potential future governance structure of the Project.
- h) CCWD will initiate discussion and seek to reach agreement on the terms of a Memorandum of Understanding (“MOU”) with the Department of Water Resources (“DWR”) to develop a series of agreements including but not limited to temporary and long-term easements, conveyance through the State owned facilities, coordinated operations, and potential changes in water rights held by DWR for the State Water Project; and CCWD will execute such MOU if CCWD is able to reach agreement with DWR.
- i) CCWD will negotiate the terms of an Early Funding Agreement with the California Water Commission consistent with Section 10 of this Agreement; and CCWD will execute such Early Funding Agreement if CCWD is able to reach agreement with the California Water Commission. CCWD will be responsible for meeting the commitments of the Early Funding Agreement, with the participation and support of the Local Agency Partners as defined in this Agreement.
- j) CCWD will initiate discussions with the California Water Commission, California Department of Fish and Wildlife and the California Department of Water Resources to develop long term agreements as required by the WSIP regulations.

## 2.2 East Bay Municipal Utility District Responsibilities

- a) EBMUD will provide input as required for any updated analyses for the Final Supplement to the Final EIS/EIR regarding potential changes in operations along the Mokelumne River and at the Freeport Intake Facility. EBMUD will evaluate changes in benefits and impacts along the Mokelumne River.
- b) EBMUD will provide input for the hydraulic assessment of the existing and proposed future CCWD-EBMUD interties.
- c) EBMUD will provide information regarding the schedule, cost, engineering, and design of new or upgraded facilities that are proposed such as the relining of the EBMUD Mokelumne Aqueduct No. 2 and the installation of variable frequency drives at the EBMUD Walnut Creek pumping plant.
- d) EBMUD will provide input as required for any updated evaluation the feasibility and cost of diverting water at the Freeport Intake for the benefit of the Project.
- e) EBMUD will evaluate the feasibility and cost of conveying and treating water from the LVE Project through the EBMUD treatment and distribution system and delivered to other Local Agency Partners as a backup or emergency alternative to normal deliveries.
- f) EBMUD will contribute to the development of the financial evaluation of the Project by providing costs estimates for EBMUD's assets contributed to the Project. EBMUD's contributed assets may include but are not limited to: use of Freeport Intake Facility, conveyance through EBMUD's distribution system, treatment of water distributed to other Local Agency Partners through the EBMUD system, water transfers and exchanges with other Local Agency Partners.
- g) EBMUD will work with CCWD and other Local Agency Partners to analyze benefits to the Project from using higher quality source water from the Mokelumne River or the Freeport Intake Facility.
- h) EBMUD will evaluate and initiate any changes to their water rights, water supply contracts, and any other agreements and permits that may be necessary to participate in the Project and coordinate this effort with other ongoing water rights evaluations led by CCWD as needed for the Project.

### 2.3 Grassland Water District Responsibilities

- a) GWD will continue to provide support for communications with non-governmental organizations, as well as local, state, and federal agencies, legislators, and other stakeholders.

- b) GWD will participate in the development of agreements and permits that pertain to providing wildlife refuge benefits.
- c) GWD will provide timely input on the operations, needs, and constraints of the wildlife refuges served by GWD.
- d) GWD will support the development of funding sources for near-term and long-term refuge water supply benefits.
- e) GWD will support the development of wheeling and conveyance agreements as required to deliver water to wildlife refuges.
- f) GWD will provide input on the Federal Feasibility Report and the Final Supplement to the Final EIS/EIR to ensure that the description of benefits to wildlife refuges are accurate and consistent with other existing agreements and obligations.

#### 2.4 Responsibilities of the Other Local Agency Partners

- a) Local Agency Partners will provide timely input on operations, needs, and constraints for their agencies and on project alternatives in development to CCWD as needed for project planning.
- b) Local Agency Partners will review and provide timely feedback on the administrative draft of the Federal Feasibility Report and the Final Supplement to the Final EIS/EIR prior to the public release of these documents to ensure that discussion of Local Agency Partners and project benefits is accurate and appropriate.
- c) Local Agency Partners will provide support in communications with non-governmental organizations as well as local, state, and federal agencies.
- d) Local Agency Partners will provide financial support as described in Exhibit A and in-kind services to assist in the preparation and review of the Final Supplement to the Final EIS/EIR.

#### 2.5 Joint Responsibilities

- a) CCWD and Local Agency Partners will work together to achieve the purposes described in Section 1 of this Agreement, including, subject to Section 9 of this Agreement, jointly defending the Final Supplement to the Final EIS/EIR in the event of litigation.

### 3. Cost & Payment.

- a) Total costs to complete the activities are identified in Exhibit B and the Local Agency Partner's total share of the cost shall not exceed \$3,167,786 unless the

Parties agree to amend the budget consistent with Section 17 of this Agreement, in order to comply with requirements for an Early Funding Agreement as provided for in Section 10 of this Agreement, or for any other activities agreed upon among the Parties to this Agreement. The Local Agency Partners' cost share total described herein is exclusive of any joint defense or litigation cost share amounts pursuant to Section 9 of this Agreement.

- b) Funds remaining on account from previous Individual Cost Sharing Agreements, if any, will be applied to the total cost of activities shown in Exhibit B.
- c) The Parties shall each be invoiced by CCWD for their share of the budgeted costs detailed in Exhibit B.
  - i. Fifty percent (50%) of each of the Local Agency Partners' cost share, as shown in Exhibit B, shall be remitted to CCWD as payment within sixty (60) days of execution of this Agreement by each of the Local Agency Partner. An invoice for the remaining fifty percent (50%) of each of the Local Agency Partners' cost share, shall be submitted by CCWD to each of the Local Agency Partners on July 1, 2019 and payment shall be remitted to CCWD within sixty (60) days.
  - ii. Funds contributed by the Local Agency Partners shall only be committed by CCWD and expended for all work required to further the purposes set forth in Section 1 of this Agreement, with each Local Agency Partners' share of the expenditures proportional to its share of the total Local Agency Partner funding.
  - iii. If funds remain after work under this Agreement is completed, each Local Agency Partner can determine a pro-rata return of its contributed funds or a pro-rata distribution of its contributed funds towards future work consistent with Section 7 of this Agreement.
- d) In-kind services may include labor costs and overhead costs for staff who are providing in-kind services for Project activities under this Agreement, including but not limited to data collection, document review, communications, stakeholder outreach, and attending Project meetings. In-kind services will contribute toward the funding match required by the Early Funding Agreement between CCWD and the California Water Commission.

#### 4. Reporting

- a) CCWD will act as the fiscal agent and receive funds from the Local Agency Partners, maintain accounting records of expenditures, and prepare quarterly summaries of expenditures and in-kind services from all Parties. CCWD will

provide the summaries to the Parties and Reclamation to document local cost share.

- b) Each Local Agency Partner will maintain an accounting of the value of its in-kind services including labor hours and overhead costs reported by all staff members participating in the Project and provide that accounting to CCWD within sixty (60) days following the completion of each quarter. The accounting will include sufficient detail for CCWD to provide this information to Reclamation and the California Water Commission, together with CCWD staff costs and Consultant Team costs as compiled by CCWD to document local cost share.
- c) If CCWD executes an Early Funding Agreement with the California Water Commission as described in Section 10 of this Agreement, the value of the in-kind services may be used as the non-State funding match, or may be eligible for reimbursement from the California Water Commission.

5. Term. This Agreement is effective as of the date first written above and shall terminate on the earlier of the completion of the work contemplated herein or December 31, 2019, unless the term is modified consistent with Section 17 of this Agreement.

6. Withdrawal. Any Party may withdraw from this Agreement upon thirty (30) days written notice to the other Parties. In the event a Party chooses to withdraw prior to the completion of work or prior to the termination of this Agreement, the Party will forego the funds contributed, and the value of in-kind services provided, and shall not be reimbursed in any manner. Failure or refusal by any Party to enter into a joint defense and litigation cost-sharing agreement pursuant to Section 9 of this Agreement shall be considered to be a voluntary withdrawal pursuant to this Section 6. If a Party withdraws, the Project benefits assigned to the withdrawn Party may be re-distributed among the remaining Local Agency Partners. If additional capacity remains, CCWD and the Local Agency Partners will determine whether or not an additional Local Agency Partner is added as described in Section 12 of this Agreement.

7. Return of Contribution. Pursuant to Section 3 of this Agreement, contributed funds remaining upon termination pursuant to Section 5 of this Agreement, each Party shall request either a return of funds or allocate funds towards future work on the Project on a pro rata basis proportional to each Party's total contribution. No contributed funds, or value of in-kind services, shall be returned to any Party or Parties who withdraw from this Agreement pursuant to Section 6 of this Agreement, nor shall contributed funds or value for in-kind services be returned to any Party or Parties who cease participation in the Project due to their failure or refusal to enter into a joint defense and cost-sharing agreement pursuant to Section 9 of this Agreement.

8. California Environmental Quality Act/National Environmental Policy Act. CCWD and Reclamation will complete the Final Supplement to the Final EIS/EIR for the Project, and then CCWD will provide the Final Supplement to the Final EIS/EIR to the Local Agency Partners.

The Parties recognize that CCWD has not decided whether or on what conditions to approve the Project, and the Parties intend that this Agreement in no way affects the independent judgment to be exercised and findings required to be made by CCWD under CEQA or Reclamation under NEPA in the event the Project is approved and implemented. CCWD and Reclamation retain full authority to make the final determination of what is to be included in such documents.

Each Local Partner Agency, according to its own judgment, may take any additional actions pursuant to federal or state resource protection laws that it determines are required for its continued participation in the Project.

9. Joint Defense. Notwithstanding anything in this Agreement to the contrary, each of the Local Agency Partners expressly agrees and acknowledges that as a condition of continued participation in the Project, it will share CCWD's cost of the defense of the Final Supplement to the Final EIS/EIR and Project from any claim or litigation filed in any court of law pursuant to the California Environmental Quality Act, the National Environmental Policy Act, and any other applicable federal or state law ("CEQA/NEPA Litigation"). Each of the Local Agency Partners agrees and acknowledges that to continue their participation in the Project after any CEQA/NEPA Litigation has been filed in any court, they will enter into a separate joint defense and litigation cost sharing agreement within thirty (30) days of receiving any claim or legal challenge which shall account for the necessary scope of work and anticipated budget pertaining to any such defense and specify the respective responsibilities of the Parties to such agreement, including cost-sharing. Nothing in this Agreement requires any of the Local Agency Partners to enter such a joint defense and litigation cost sharing agreement. If a Local Agency Partner decides not to enter into such an agreement, that Agency shall be withdrawn from this Agreement pursuant to Section 6 of this Agreement.

10. California Water Commission Early Funding Agreement. Early funding, equal to fifty percent of the estimated total planning and permitting costs, was requested from the California Water Commission, and was approved on July 24, 2018 in an amount of \$13.65 million. The Early Funding Agreement may require a funding match from non-State entities. At a reasonable time prior to CCWD executing an Early Funding Agreement with the California Water Commission, the Parties will meet to discuss the terms and obligations of the proposed early funding.

11. Federal Funding. The 2019 federal Omnibus Appropriations bill is expected to allocate additional funding to Reclamation for Reclamation or State-led water storage projects, as authorized in Section 4007 of the 2016 WIIN Act. The Parties are seeking \$10,000,000 in new WIIN Act funding for design and pre-construction activities and initial demonstration of wildlife refuge benefits. If federal funding for the Project is appropriated by Congress, Reclamation would receive the requested funding and the funds would support Reclamation's consultant team and the federal permitting process. Some portion of the federal funds may be directly applied to the scope of work contained in Exhibit A. The federal funds could be credited towards any non-state cost share that may be required in the Early Funding Agreement as described in Section 10 of this Agreement.

12. Adding New Partners. Prior to the Parties' consideration of the addition of a new Local Agency Partner, the identity of the potential new Local Agency Partner and a description

of the benefits that the potential new Local Agency Partner seeks to obtain must be presented to the CCWD Board of Directors for the Board of Directors' determination whether the addition of the potential new Local Agency Partner would be consistent with the CCWD Board Principles described in Section 2.1(a) of this Agreement, above. If the CCWD Board of Directors determines that the addition of the potential new Local Agency Partner is consistent with the CCWD Board Principles described in Section 2.1(a) of this Agreement, the potential new Local Agency Partner will be presented to all signatory Parties to this Agreement for their approval. The unanimous written agreement of all signatory Parties to this Agreement is required to add a new Local Agency Partner.

13. Indemnity. In performance of this Agreement, each Party and its agents, employees, and contractors shall act in an independent capacity and not as officers, employees, or agents of any other Party. Except as otherwise declared herein, no Party assumes any liability for the activities of any other Party in performance of this Agreement. Each Party is responsible in proportion to its fault for liability, including but not limited to personal injury or property damage that may arise out of this Agreement, except to the extent such injury, damage, or loss was caused by the negligence or willful misconduct of any other Party, or its Directors, officers, agents, or employees. Each Party expressly agrees to defend, indemnify, and hold harmless any other Party and its Directors, officers, agents and employees from and against any and all loss, liability, expense, claims, suits, and damages, including attorneys' fees, arising out of or resulting from the first Party's, its Directors', officers', agents', and employees' negligent acts, errors or omissions, or willful misconduct, in its performance under this Agreement.

Each Party shall be responsible for any adverse impacts to its own customers that may result from the operation or performance of this Agreement, except as arising out of or resulting from the negligent acts, errors or omissions, or willful misconduct of any other Party, its Directors', officers, agents, and employees.

Each Party shall exercise reasonable care in the performance of its obligations and rights under this Agreement to ensure that each Party's facilities and operations, including water rights, entitlements, and contracts are not impaired or damaged.

14. Dispute Resolution. Should any dispute arise concerning any provisions of this Agreement or breach thereof, or the Parties' rights and obligations thereunder, the disputing Parties shall meet and confer in an attempt to resolve the dispute. Prior to commencing legal action, the Party or Parties asserting a breach or dispute shall provide to the other Party or Parties thirty (30) days written notice of the intent to take such action and the basis of the dispute or alleged breach. Within fifteen (15) days of delivery of the notice, the Parties shall meet and confer in an attempt to resolve the contested issues. Each Party will designate a member of that Party's executive management to conduct the negotiation in good faith.

The Parties shall make good faith efforts to resolve all disputes related to this Agreement at the lowest possible cost, subject to the approval of the Parties' respective governing bodies. Each Party shall bear its own attorneys' fees and costs in all aspects of dispute resolution. Unless the Parties agree upon an alternative forum of dispute resolution, any litigation concerning claims and disputes related to this Agreement shall be filed in and timely prosecuted to conclusion in the Superior Court in and for Contra Costa County, and each Party hereby waives its right to move

to change venue.

15. Governing Law. This Agreement, its construction, and all work performed under it shall be governed by the laws of the State of California, without giving effect to conflict of law provisions. Venue shall be in the Contra Costa County Superior Court, unless otherwise agreed to by the Parties to the dispute or pursuant to California Code of Civil Procedure section 394.

16. Severability. If any provision of this Agreement, or the application thereof, is held invalid or unenforceable by a court of competent jurisdiction, all other provisions of this Agreement, and application thereof, shall remain valid and enforceable and will be construed in such a manner so as to affect the original intent of the Parties to the maximum extent possible.

17. Amendment. No amendment of this Agreement shall be valid unless made in writing and signed by the Parties.

18. Third Party Beneficiaries. Nothing in this Agreement, express or implied, is intended to or shall confer upon any Person other than the Parties and their respective successors and permitted assigns any legal or equitable right, benefit or remedy of any nature under or by reason of this Agreement.

19. Entire Agreement. This Agreement, together with the attachments hereto, constitutes the complete agreement between the Parties and supersedes any prior written or oral communications between the Parties.

20. Successors and Assigns. This Agreement and all of its provisions shall apply to and bind the successors and assigns of each and every Party to this Agreement.

21. Counterpart Signatures. This Agreement may be executed in counterparts each of which shall be deemed to be an original but all of which taken together shall constitute one and the same Agreement.

22. Notices. Any notice under this Agreement may be sent by electronic mail, USPS mail, or overnight mail to the designated persons identified below.

23. Waiver. No waiver of any kind pursuant to this Agreement will constitute a continuing waiver unless so stated in a writing signed by the waiving Party.

24. Confidentiality.

- a) In connection with CCWD's preparation of the Final Supplement to the Final EIS/EIR, the Parties may share confidential and or privileged information that may be properly withheld from disclosure pursuant to the California Evidence Code and/or the California Public Records Act, including shared data, opinions, legal opinions, preliminary drafts, notes, interagency or intra-agency communications, attorney work products, documents or correspondence subject to attorney-client privilege, and documents or correspondence subject to the deliberative process privilege or the official information privilege.

- i) The Parties shall clearly designate confidential documents and information as “confidential”.
- ii) A Party’s disclosure of confidential information to another Party or Parties shall not constitute a waiver of an applicable privilege or CPRA exemption.
- iii) The Parties agree to promptly notify the other Parties of any California Public Records Act request, demand by subpoena, discovery request, or any other formal or informal request for disclosure of any confidential information provided by any Party to this Agreement.
- iv) A disclosing Party shall be provided sufficient notice in order that it may consider and take any actions, including seeking a protective order, to prevent the disclosure of its confidential information disclosed pursuant to this Agreement. So long as sufficient notice is provided, the Party or Parties receiving a California Public Records Act request, demand by subpoena, discovery request, or any other formal or informal request for disclosure of any confidential information provided by any Party to this Agreement shall have no liability to a disclosing Party relative to any lawful disclosure of confidential information disclosed pursuant to this Agreement.
- v) Nothing in this Section 24 shall prevent a Party from disclosing its own confidential information or from disclosing information that is otherwise available in the public domain.
- vi) If a Party withdraws from this Agreement, the withdrawing Party shall be obligated to continue to protect the confidentiality of all confidential information disclosed pursuant to this Agreement as though such Party continued to be a party to this Agreement. Notwithstanding the foregoing, a withdrawn Party shall be entitled to use factual, legal and analytical information contained in any confidential information for its own purposes, provided that in so doing it does not disclose the confidential information to any non-Party to this Agreement without the prior written consent of the disclosing Party or Parties that hold any rights, or privileges with respect to the confidential information.

Robert Shaver, General Manager  
Alameda County Water District

Nicole Sandkulla, CEO / General Manager  
Bay Area Water Supply and Conservation Agency

Rick Gilmore, General Manager  
Byron Bethany Irrigation District

Gustavo "Gus" Vina, City Manager  
City of Brentwood

Jerry Brown, General Manager  
Contra Costa Water District

Anthea G. Hansen, General Manager  
Del Puerto Water District

Alexander R. Coate, General Manager  
East Bay Municipal Utility District

Patricia A. Corey, General Manager  
East Contra Costa Irrigation District

Ric Ortega, General Manager  
Grassland Water District

Michael Carlin, Deputy General Manager  
San Francisco Public Utilities Commission

Frances Mizuno, Interim General Manager  
San Luis & Delta-Mendota Water Authority

Lon Martin, General Manager  
San Luis Water District

Norma J. Camacho, Chief Executive Officer  
Santa Clara Valley Water District

Thomas W. Birmingham, General Manager  
Westlands Water District

Valerie Pryor, General Manager  
Zone 7 Water Agency

**Summary of Draft Cost Share Calculation**

19-Oct-18

**Actual Costs to Date (August 15, 2017 - September 30, 2018)<sup>1</sup>**

	Expended	CWC Reimbursement of Expenditures (50%)
Consultant/legal Cost	\$497,663	
Reclamation Cost (labor and services) <sup>2</sup>	\$1,051,100	
CCWD In-kind services (labor)	\$942,525	
LAP In-kind services (labor)	\$176,241	
<b>Total</b>	<b>\$2,667,529</b>	<b>\$1,333,764</b>

**Projected Total Costs for term covered by Multi-party Agreement (October 1, 2018 - December 30, 2019)**

	Total Projected Cost	CWC Reimbursement of Projected Costs (50%)
Consultant/legal Cost	\$6,980,500	
Reclamation Cost (labor and services)	\$910,000	
CCWD In-kind services (labor)	\$3,488,000	
LAP In-kind services (labor) <sup>3,4</sup>	\$244,900	
<b>Total</b>	<b>\$11,623,400</b>	<b>\$5,811,700</b>

**Projected Total Costs for Multi-party Agreement (October 1, 2018 - December 30, 2019)**

	Amount
Total Projected Costs	\$11,623,400
less Reclamation Cost	-\$910,000
less CCWD In-kind services (portion) <sup>5</sup>	-\$490,000
less LAP In-kind services	-\$244,900
less CWC Invoice #1 payment	-\$1,333,764
less projected CWC Invoice payments	-\$5,811,700
<b>Total</b>	<b>\$2,833,036</b>

**Projected Individual Agency Costs for Multi-party Agreement (varied by total number of agencies assumed to be participating)**

	Total for Each LAP <sup>6</sup>	50% Invoice #1 (ASAP after execution)	50% Invoice #2 (July 1, 2019)
Equal Share Per Agency (14 Agencies) <sup>7</sup>	202,360	\$101,180	\$101,180
Equal Share Per Agency (13 Agencies) <sup>8</sup>	<b>217,926</b>	<b>\$108,963</b>	<b>\$108,963</b>
Equal Share per Agency (12 Agencies)	236,086	\$118,043	\$118,043
Equal Share per Agency (11 Agencies)	257,549	\$128,774	\$128,774
Equal Share per Agency (10 Agencies)	283,304	\$141,652	\$141,652

**Notes:**

- 1 - August 15, 2017 is earliest possible date for reimbursement by CWC under Early Funding Agreement between CCWD and CWC as specified in CWC WSP Regulations.
- 2 - Actual Reclamation costs are shown through June 30, 2018. Actual costs from July 1 - September 30, 2018 are not yet available and estimated in projected costs through December 31, 2019.
- 3 - Assumes Projected LAP staff cost is equal to 7% of CCWD staff cost
- 4 - CWD assumed to provide In-kind services only. Remainder of the development costs associated with refuge benefit provided by CWC early funding agreement and Reclamation through the 2015 Cost share MOU between Reclamation and CCWD
- 5 - Assumes a portion of CCWD In-kind services (labor) for project development that is not reimbursed by CWC Early Funding Agreement is funded by CCWD.
- 6 - Amount of financial contribution for each agency are assumed to be equal shares and are dependent on the total number of agencies participating in the Multi-party Agreement. Financial contributors provide contributions towards consultant and legal costs.
- 7 - A maximum of 14 agencies are assumed to be participating in the Multi-party Agreement (includes CCWD and a total of 13 local Agency/Partners)
- 8 - For planning purposes the Multi-party Agreement currently assumes a total of 13 agencies are providing financial contributions in the Multi-party agreement.



**Contra Costa Water District Proposed Usage Fees  
Draft: October 5, 2018**

A usage fee will be included in the reimbursements to the Contra Costa Water District (CCWD) for the use of CCWD's existing facilities as part of the Phase 2 Los Vaqueros Reservoir Expansion Project (Project). The usage fee to be collected by CCWD is intended to recover three components of CCWD's costs: capacity usage, renewal/replacement, and operations/maintenance.

Capacity Usage Fee

Excess or unused capacity in CCWD's existing facilities will be utilized to convey water to the Local Agency Partners according to the Project's operational rules and priorities. CCWD has developed a "rental" model in past agreements where the capacity usage fee is determined by dividing the interest on the debt service by annual deliveries to develop a cost per acre-foot. The principal amount of the debt service is not included in the calculation of the capacity usage fee as the renter is not receiving the same priority and benefits that the owner of the facility enjoys. The capacity usage fee in this instance is not conveying ownership. The draft capacity usage fees for conveyance facilities are provided in Table 1.

**Table 1 – Conveyance Capacity Usage Fees**

Conveyance Facility	Original Cost, less Grants	Capacity (cfs)	Debt Service Interest <sup>2</sup> (\$/yr)	Capacity Usage Fee <sup>3</sup> (\$/AF)
Los Vaqueros Pipeline	\$48,519,455	400	\$1,307,800	\$14.11
Middle River Pipeline	\$40,963,850	250	\$1,104,145	\$19.06
Middle River Intake	\$24,736,150	250	\$666,742	\$11.51
Old River Pipeline	\$38,293,849	320	\$1,032,178	\$13.92
Old River Intake	\$30,497,364	250	\$822,030	\$14.19
Rock Slough Facilities <sup>1</sup>	\$117,170,377	350	\$3,158,226	\$38.95
Transfer Pipeline	\$23,998,870	200	\$646,869	\$13.96
Transfer Pump Station/Tank	\$17,281,844	200	\$465,817	\$10.05

1. Rock Slough Facilities include the Rock Slough Fish Screen, Canal Replacement Project (4 miles), Contra Costa Canal (3 miles), and Pumping Plants 1 – 4.
2. Facilities are at various stages of debt service. The interest payment is assumed to be equal to the interest only portion of the debt service at year 15 of a 30-year loan at 4%.
3. The capacity usage fee was determined per acre-feet of water delivered by applying an overall facility utilization factor of 32%, based on operations modeling results.

The Project includes the expansion of the Los Vaqueros Reservoir from its current capacity of 160 thousand acre-feet (TAF) to 275 TAF. The costs to expand the dam would be fully paid by the Project beneficiaries. The existing reservoir will serve as the foundation to the expanded reservoir and previous CCWD investment and existing dam facilities will provide benefits to the Project. The determination of the capacity usage fee for the existing Los Vaqueros Dam follows the same methodology as the conveyance facilities (debt service interest); however, an adjustment factor is proposed to recognize that CCWD's storage capacity is not directly used or impacted by the new storage. The usage fee would be applied each year water is stored in the expanded reservoir. An alternative to a volumetric usage fee for storage would be an annual fixed payment to CCWD,

which could be considered in future negotiations. The draft capacity usage fees for the existing Los Vaqueros Dam facilities are provided in Table 2.

**Table 2 – Storage Capacity Usage Fees**

Facility	Original Cost (\$)	Debt Service Interest <sup>2</sup> (\$/yr)	Full Usage Fee (\$/AF/yr)	Pro-Rated Usage Fee <sup>3</sup> (\$/AF/yr)
Los Vaqueros Dam Facilities <sup>1</sup>	\$385,635,618	10,394,475	\$64.97	\$37.80

1. Includes the original 100 TAF dam and expansion to 160 TAF.
2. Facilities are at various stages of debt service. The interest payment is assumed to be equal to the interest only portion of the debt service at year 15 of a 30-year loan at 4%.
3. Pro-rated usage fee was assumed to be 58% of the Full Usage fee based on the proportion of CCWD’s capacity (160 TAF) to the expanded reservoir capacity (275 TAF).

Renewal/Replacement (Wear & Tear) Usage Fee

The additional use of CCWD’s facilities will incrementally increase the renewal and replacement costs, as pumps, motors, and other facilities will require more frequent rehabilitation than would have been required absent the Project. The costs for the increased rehabilitation needs and replacement for conveyance facilities (intakes, pump stations, pipelines) is proposed to be recovered through a wear and tear usage fee. The wear and tear usage fee is determined by dividing the annual depreciation of the facility by the annual deliveries to determine a per acre-foot charge. Annual depreciation is based on the current replacement cost. CCWD will also seek the ability to review the wear and tear charge periodically with Local Agency Partners, or upon significant facility rehabilitation, to ensure that the charge is appropriately recovering the cost of incremental wear and tear. Local Agency Partners would not be responsible for any additional renewal/replacement costs (including facility replacement) beyond the renewal/replacement usage fee. The draft renewal/replacement usage fees are provided in Table 3.

**Table 3 – Renewal/Replacement Usage Fee**

Conveyance	Replacement Cost	Assumed Useful Life	Capacity	R/R Usage Fee, \$/AF
Los Vaqueros Pipeline	\$89,043,961	75	400	\$12.81
Middle River Pipeline	\$69,462,174	75	250	\$15.99
Middle River Intake	\$41,499,765	50	250	\$14.33
Old River Pipeline	\$70,277,707	75	320	\$12.64
Old River Intake	\$55,969,428	50	250	\$19.33
Rock Slough Facilities <sup>1</sup>	\$299,055,398	75	350	\$49.18
Transfer Pipeline	\$44,043,250	75	200	\$12.67
Transfer Pump Station and Tank	\$31,716,017	40	200	\$17.11

1. Rock Slough Facilities exclude Pumping Plant 1, as this is a modified facility and R/R for PP1 is included elsewhere in the financial model.
2. The usage fee was determined per acre-feet of water delivered by applying an overall facility utilization factor of 33%, based on operations modeling results.

Operations and Maintenance

The District incurs both fixed and variable costs in operating and maintaining the existing facilities. Some examples of fixed O&M costs include valve exercising, preventative maintenance, labor, agency fees, and biological monitoring. These fixed costs do not change significantly in response to varying water deliveries. Fixed O&M costs for the existing facilities are proposed to be allocated to the Local Agency Partners based on the average historical modeled deliveries, as established in the Proforma financial model. For example, the Local Agency Partners receive approximately 33% of the water delivered through the facilities and would be allocated 33% of the fixed O&M costs associated with those facilities. The fixed O&M is currently estimated to be \$3.2 million per year. The proportion allocated for reimbursement is 33% of this amount, or \$1.05 million.

Power is the primary variable O&M cost, and the additional power costs associated with pumping of water for Project beneficiaries would be passed on directly to the Local Agency Partners. Current estimates of power costs for the existing facilities are shown in Table 4.

**Table 4 – Variable Power Costs**

<b>Facility</b>	<b>Estimated Power Cost (\$/AF)</b>
Middle River Intake	\$46.70
Old River Intake	\$38.20
Rock Slough Facilities	\$22.70
Transfer Pump Station	\$70.00

**EAST BAY MUNICIPAL UTILITY DISTRICT**

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DATE: October 18, 2018

MEMO TO: Maureen Martin, Contra Costa Water District

FROM: Alice Towey, East Bay Municipal Utility District

SUBJECT: EBMUD Usage Fee Calculation for Los Vaqueros Reservoir Expansion Project

**INTRODUCTION**

EBMUD is evaluating participation in the Los Vaqueros Reservoir Expansion Project. One option for EBMUD participation would be to use available capacity in its facilities, including the Freeport Facilities and the Mokelumne Aqueducts, to wheel water to the Los Vaqueros Reservoir on behalf of other Project Partners. To help with discussions related to cost, EBMUD has prepared this first draft, preliminary usage fee to reflect the costs associated with wheeling water through its facilities. This usage fee has been incorporated into the proforma financial model developed by Clean Energy Capital. It should be noted that this usage fee is approximate, preliminary, and is subject to further refinement by EBMUD.

The purpose of this memorandum is to document the assumptions underlying the preliminary usage fee and to present some of the potential restrictions on use of EBMUD facilities by other Project Partners.

**EBMUD FACILITIES**

Figure 1 shows the EBMUD facilities that could be used to wheel water to the Los Vaqueros Reservoir. EBMUD facilities include the Freeport Regional Water Project (FRWP), the Folsom South Canal Connection (FSCC), the Mokelumne Aqueducts, and the EBMUD-CCWD raw water intertie. CCWD or other Project Partners could use these facilities to wheel water supplies including CVP supplies or transfer water.

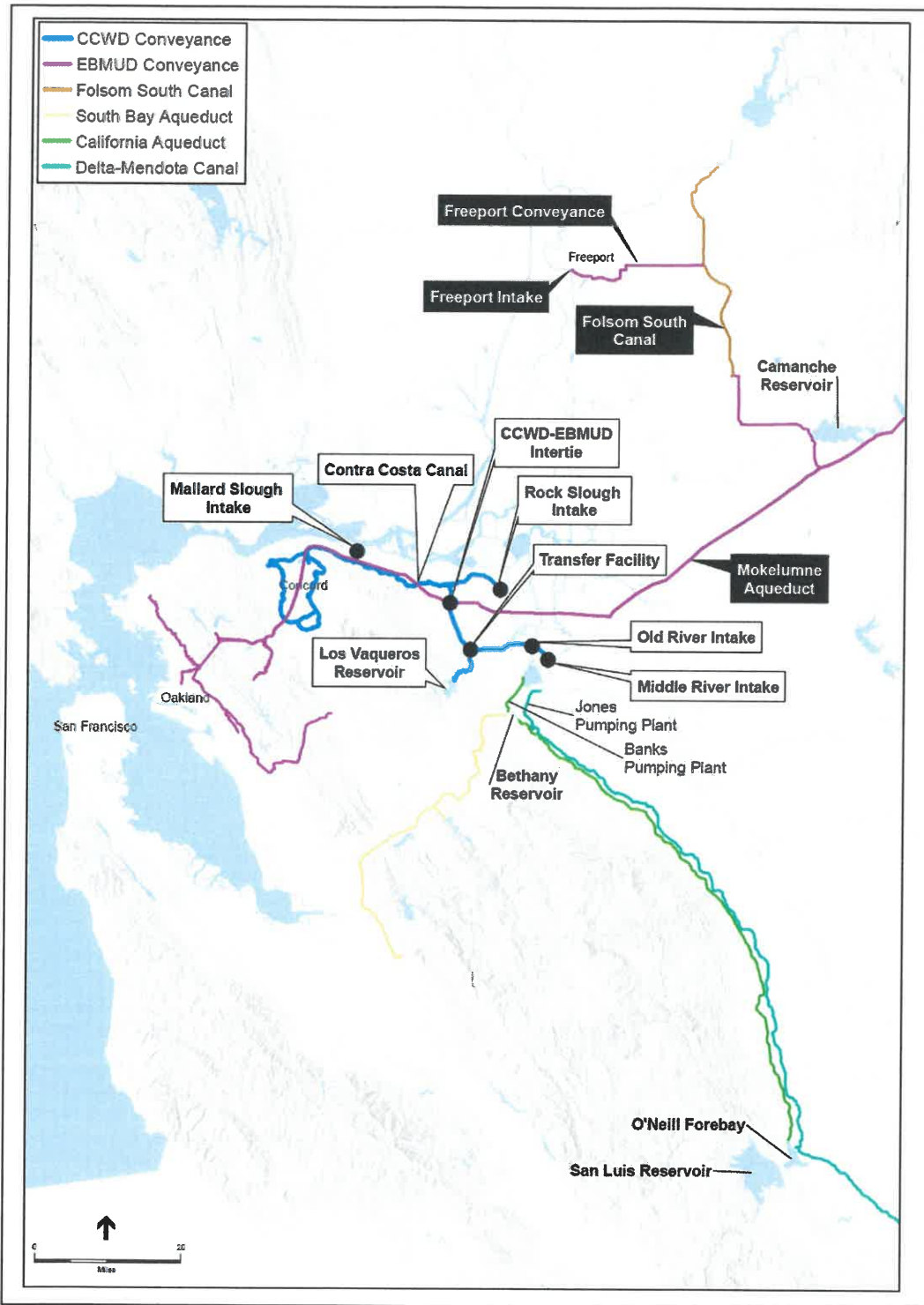


Figure 1. EBMUD and CCWD Facilities

## EBMUD USAGE FEE CALCULATION

Table 1 summarizes the components of the preliminary EBMUD Usage Fee. These components include a facility use charge, costs for conveyance, and Freeport start-up and shutdown. Cost per

acre-foot (AF) for the Mokelumne Aqueduct Relining project and Walnut Creek Pumping Plant (WCPP) Variable Frequency Drive (VFD) project are also included. Following are more details on each component.

#### Facility Use Charge

The facility use charge is based on proportionate use of facility capacity and annual depreciation. The costs in the usage fee are based on a tech memo prepared in 2013 as part of the Bay Area Regional Desalination Project, “Annual Fixed Cost Estimate for Wheeling Desalination Water Using EBMUD’s System.”

#### Conveyance

The conveyance costs included in the table are provided as an estimate; normally EBMUD would bill the recipient of the water based on actual time, materials, and other costs. This component includes costs associated with physically moving the water from FRWP to the Los Vaqueros Reservoir. Costs for operations of FRWA and the FSCC are based on actual 2014-2015 operating costs. Raw water pumping costs at the Walnut Creek Pumping Plant are estimates. The cost to refill EBMUD’s Briones Reservoir following completion of the transfer is also included; typically Briones storage is depleted to meet EBMUD demands while Mokelumne Aqueduct No. 2 is dedicated to the wheeling operation.

#### Freeport Start-up and Shutdown

There are considerable costs associated with start-up and shutdown of the Freeport Facilities; for the purposes of this Usage Fee calculation, EBMUD assumed a \$750,000 cost for each use of these facilities, based on real costs in 2014-2015. The start-up and shutdown costs are incurred each time the facilities are placed into service, regardless of the duration of use of the facilities. Costs include draining, chlorinating, and refilling the pipeline and startup and testing of pump stations.

The \$750,000 cost was converted to a \$/AF value by examining the CalSIM modeling results from CCWD. Over the 82-year hydrologic record, the CalSIM results show fifteen periods of time when EBMUD’s Freeport facilities would be used for one or more contiguous years. For each period, it was assumed that the Freeport facilities would be started up and shutdown once, and that the cost of startup and shutdown would be shared evenly by each agency moving water that period. For each contiguous period, the \$750,000 startup cost was divided by the volume conveyed during that period to determine a cost per AF for that period. Then, the results of all fifteen periods were averaged, and the median and mean were used to provide the range of costs per AF that are included in Table 1.

#### Mokelumne Aqueduct Relining

EBMUD would use its Mokelumne Aqueduct No. 2 to convey Mokelumne River water to the Los Vaqueros Reservoir. However, studies conducted by EBMUD have shown that this Aqueduct is in need of extensive maintenance. EBMUD has determined that a planned maintenance project – the Mokelumne Aqueduct Relining Project – would contribute to the overall reliability of the Project by ensuring that there is hydraulic capacity to convey the water to

the reservoir and by reducing the risk of aqueduct failure. This maintenance project will preserve the integrity of the pipe and restore its hydraulic capacity.

EBMUD has developed a planning level cost estimate for the Relining Project. For the purposes of the LVE project, only the length of pipe from EBMUD's Pardee Reservoir to the CCWD intertie is considered here, although EBMUD plans to reline the pipe all the way to the WCPP, as well as portions of Mokelumne Aqueduct No. 3. The approximate cost to reline this 40 mile length of pipeline is estimated to be \$130 million. CCWD's application for grant funding through the Water Storage Improvement Program (WSIP) included \$18.06 million for this project, but for the purposes of this preliminary usage fee calculation the WSIP funding is not considered.

EBMUD followed a "rental" model similar to that used by CCWD to develop a per-AF unit cost for this project. The capacity usage fee for this project was calculated by dividing the interest on debt service (based on year fifteen of a 30-year loan at 4% interest) by the aqueduct capacity, assumed here to be 100 MGD.

Additional use of EBMUD's facilities will also incrementally increase the renewal and replacement costs. EBMUD accounted for increased wear and tear on the Mokelumne Aqueduct No. 2 by dividing the annual depreciation of the facility (based on the \$130 million cost of the relining project) by the aqueduct capacity.

#### Walnut Creek Pumping Plant VFD Project

Wheeling water for the Project Partners as currently envisioned would require EBMUD to make upgrades at its WCPP, particularly the installation of VFDs to balance flows coming in with system demands. EBMUD has developed a conceptual cost estimate of \$40 million for this project. The WSIP funding application included \$5.6 million for this project, but for the purposes of this preliminary usage fee the grant funding is not considered.

Unlike the Mokelumne Aqueduct Relining Project, EBMUD is only implementing this capital project if it participates in the Los Vaqueros Reservoir Expansion Project. Therefore, EBMUD used a different methodology for calculating costs.

The cost per AF was developed by dividing the annual interest on debt service, plus half of the principal, by the aqueduct capacity of 100 MGD. Only 50% of the principal is charged, to reflect the fact that EBMUD would derive benefits from the project outside of participation in Los Vaqueros.

#### **AVAILABILITY OF EBMUD FACILITIES TO WHEEL WATER**

There are operational limitations on when EBMUD could wheel water for the Project, as EBMUD would need to ensure availability of the Mokelumne Aqueducts to meet its own ongoing operational needs. During the summer, EBMUD generally requires the full use of the Mokelumne Aqueducts to meet customer demands. EBMUD's Mokelumne Aqueduct No. 2 may be available during wet years in the months of October through February for use to move water for the project partners. Availability of the Mokelumne Aqueduct to wheel water for other

agencies may be affected by future changes in hydrology, customer needs, and regulatory requirements. In addition, for the next twenty years, there are planned maintenance activities during this four-month window that may periodically make the Mokelumne Aqueducts unavailable. Therefore, Mokelumne Aqueduct No. 2 is only available on a case-by-case, or year-by-year, basis.

In addition, the use of EBMUD facilities to wheel water for other agencies would be guided by the “Principles for Use by Other Parties of Unassigned EBMUD Capacity in Freeport Regional Water Project Facilities,” adopted by EBMUD’s Board of Directors on January 10, 2017 (see Attachment 1). These Principles set out EBMUD’s objectives for the facilities and conditions for use. Use of the facilities must not interfere with EBMUD or Sacramento County Water Agency’s use of the facilities. The Principles also emphasize the need for project proponents to demonstrate good conservation practices.

**Table 1. EBMUD USAGE FEES**

Includes Freeport Facilities, Mokelumne Aqueducts, Intertie  
October 18, 2018

Component	Cost/AF <sup>(1)</sup>	Notes
Facility Use Charge	\$120	Use charge is based on proportionate use of the facility capacity and annual depreciation of facility. Rehab or financing costs for Freeport Facilities are not included since the facilities are fairly new.
Conveyance <sup>(2)</sup>	\$306	Includes FRWA operations, FSCC, SMUD mitigation, chemicals, full cost of labor, Briones refill, Walnut Creek pumping, ODCs. Aqueducts or intertie costs are not included.
Freeport Start-up and Shutdown <sup>(2)(3)</sup>	\$12-\$52	Based on 2014 actual costs for Freeport startup and shutdown and CCWD CalSIM modeling results.
Mokelumne Aqueduct Relining <sup>(4)</sup>	\$44	
Walnut Creek Pumping Plant VFD Project <sup>(5)</sup>	\$14	
<b>Total</b>	<b>\$496-\$536</b>	

**Notes:**

- 1 Costs are estimates and subject to change.
- 2 This is a cost estimate. In most cases, EBMUD would bill the party for costs based on actual time, materials, and other costs.
- 3 Based on 2014 Freeport project operation cost, 2016 depreciation rates, and Regional Desalination wheeling cost estimates.
- 4 Cost includes payment of interest on debt service and depreciation divided by aqueduct capacity.
- 5 Cost includes payment of interest on debt service and half of principal divided by aqueduct capacity.

Attachment 1  
“Principles for Use by Other Parties of Unassigned EBMUD  
Capacity in Freeport Regional Water Project Facilities”