

Main Office

10060 Goethe Road
Sacramento, CA 95827-3553
Tel: 916.876.6000
Fax: 916.876.6160

Treatment Plant

8521 Laguna Station Road
Elk Grove, CA 95758-9550
Tel: 916.875.9000
Fax: 916.875.9068

Board of Directors

Representing:

County of Sacramento
County of Yolo
City of Citrus Heights
City of Elk Grove
City of Folsom
City of Rancho Cordova
City of Sacramento
City of West Sacramento

Christoph Dobson
District Engineer

Glenn Bielefelt
Director of Operations

Mike Huot
Director of Policy & Planning

Matthew Doyle
Director of Internal Services

Masiku Tapa Banda
Director of Finance

Nicole Coleman
Public Affairs Manager

www.regionalsan.com

May 25, 2023

Mr. Joe Yun, Executive Director - California Water Commission

Subject: Regional San's Request for a Final Award Hearing

Delivered via electronic mail to: Joseph.Yun@water.ca.gov

Dear Mr. Yun,

Thank you for your continued support for Sacramento Regional County Sanitation District's (Regional San's) Harvest Water Program. Regional San has completed all items detailed in the Water Storage Investment Program (WSIP) regulations, Water Code section 79755(a), in order to request a final award hearing and looks forward to coming before the Commission on June 21, 2023.

Regional San has completed all project designs and anticipates advertising construction bid packages over the next 9 months, with major construction beginning in Fall 2023 and recycled water service beginning in late 2025. Harvest Water will deliver up to 50,000-acre feet per year of tertiary-treated recycled water from the Sacramento Regional Wastewater Treatment Plant (SRWTP) to more than 16,000 acres of agricultural and habitat lands in southern Sacramento County. Harvest Water will facilitate groundwater recovery, boost sustainable agriculture, strengthen local habitats, and offer near-term benefits to the Sacramento-San Joaquin Delta.

As documented in the Commission's July 2018 Determination Recommendations, Harvest Water is a conjunctive use project and is eligible for WSIP funding up to 100 percent of the Project's total capital cost. The original July 2018 Maximum Conditional Eligibility Determination (MCED) of \$280.5 million for the Harvest Water Program has since been awarded two inflationary increases raising the MCED to \$291,841,209. The California Water Commission (Commission) is administering WSIP to fund the public benefits associated with Harvest Water. The Contracts for Administration of Public Benefits (CAPBs) with the California Department of Fish and Wildlife and the State Water Resources Control Board were executed in May 2023 and provided to Commission staff by the administering agencies.

Because the 2018 MCED costs were presented in 2015 dollars, Harvest Water has updated the public benefit monetization to reflect CAPB-contracted benefits in 2022 dollars and the capital costs have been updated to reflect final design estimates in 2022 dollars. Table 1 provides a summary of the benefit monetization, with additional details provided in the attachment entitled "Water Storage Investment Program (WSIP) Final Quarterly Report/Request for Final Award Hearing."

Table 1: Harvest Water Program Estimated Public Benefits Monetization

| Benefit | Current Program Benefit NPV (2022\$, in millions) |
|----------------------------------|--------------------------------------------------------------|
| Greater Sandhill Crane Habitat | \$155.9 |
| Additional Fall-run Chinook | \$79.8 |
| Passive Wetland/Riparian Habitat | \$37.8 |
| Active Wetland Habitat | \$41.0 |
| Active Riparian Habitat | \$31.3 |
| Vernal Pool Complex | \$14.6 |
| Improved Water Quality | \$360.4 |
| TOTAL | \$720.8 |

The public benefits discussed herein and established during the Program will continue long after the term of the CAPB, thereby increasing the total public benefit anticipated for Harvest Water. Regional San is committed to maximizing the delivery of recycled water to the Harvest Water service area and is committed to environmental stewardship within its service area to support the local ecosystem, as it has for decades managing the Bufferlands, which is comprised of over 2,100 acres of upland and wetland habitats that surround the SRWTP.

Since the 2018 MCEDs, the Project's costs have been refined as more detailed cost estimates have been developed during the Project's design. Eligible project costs have increased due to increased sizing of the pump station and distribution system to improve the level of service and system reliability, as well as due to significant inflation and cost escalation impacts to land values, construction costs, labor, materials and services since 2015. The current WSIP eligible costs are estimated at \$597.2 million. Additional information is provided in the attachment.

Both Harvest Water's capital costs and public benefits exceed the current MCED of \$291.8 million. The Commission has increased MCEDs for project proponents as funds became available due to the withdrawal of the Temperance Flat project. Since there is a strong likelihood that additional future funding will be allocated to the WSIP, (e.g., the Governor's proposal to provide an additional \$500 million to WSIP projects), Regional San requests that the Commission stipulate that the execution of the Harvest Water Funding Award Agreement does not preclude this project from receiving additional WSIP funds in the future, if available. In addition to pursuing additional WSIP funding, Regional San will continue to pursue other state and federal funding opportunities to offset the remaining capital costs for this conjunctive use recycled water project.

Regional San is committed to the success of this exciting Program and looks forward to continued coordination with the Commission. If you have any questions about Harvest Water, please contact me at (916) 876-6092 or at mitchellt@sacsewer.com.

Sincerely,



Terrie L. Mitchell
Harvest Water Administrative Program Manager
Legislative & Regulatory Affairs Manager

Water Storage Investment Program (WSIP) Final Quarterly Report/Request for Final Award Hearing

Project Name: Harvest Water Program

Applicant Name: Sacramento Regional County Sanitation District (Regional San)

Introduction

The information provided below is in support of the Sacramento Regional County Sanitation District's (Regional San's) request that the California Water Commission (Commission) hold a public hearing for its Harvest Water Program's (Program/Project) Final Funding Award Determination under the Water Storage Investment Program (WSIP). The original July 2018 Maximum Conditional Eligibility Determination (MCED) of \$280.5 million for the Harvest Water Program has since been awarded two inflationary increases raising the MCED to \$291,841,209. To date, Regional San has received \$14,375,625 as Early Funding. As documented in the Commission's July 2018 Determination Recommendations, Harvest Water is a conjunctive use project and is eligible for WSIP funding up to 100 percent of the Project's total capital cost.

Harvest Water's WSIP Feasibility Hearing was held during the October 20, 2021 session and the Commission made a finding that the Project was feasible. As part of that meeting, Commission staff provided a report indicating that they had reviewed the Project and determined that Harvest Water can be technically and physically constructed and operated, is environmentally feasible, and is economically feasible. Additionally, for purposes of economic feasibility, Commission staff updated their economic analysis to allow the alternative cost of construction for a reverse osmosis facility to monetize (\$569.4 million) the water quality benefits of the Project. As a result, Commission staff updated and increased the present value of all the public benefits to approximately \$908 million for economic feasibility considerations.

The Harvest Water Project is fundamentally the same project as identified in the original WSIP application. Project features (facilities or operations) and benefits have not changed significantly since the application and July 2018 MCED conditionally awarded by the Commission. What has changed, however, are the Project's costs to construct, primarily due to an increase in system size to improve reliability and significant inflation between 2015 and 2023, and Project's monetized benefits, including the timing of when those benefits will be realized as described further in the sections below.

Regional San has completed all items detailed in WSIP regulations, Water Code section 79755(a) in order to request a final award hearing as detailed herein. In addition, Regional San has completed all Project designs and anticipates advertising construction bid packages over the next 9 months, with major construction beginning in Fall 2023 and recycled water service beginning in late 2025. Both Harvest Water's capital costs and public benefits exceed the current MCED of \$291.8 million. Regional San requests that the Commission stipulate that the execution of the Harvest Water Funding Award Agreement does not preclude this project from receiving additional WSIP funds in the future, if available. In addition to pursuing additional WSIP funding, Regional San will continue to pursue other

state and federal funding opportunities to offset the remaining capital costs for this conjunctive use recycled water project. Regional San is committed to the success of this exciting Program and looks forward to continued coordination with the Commission.

Statement of Project Changes that Affect Public Benefits or Cost Allocations

Benefits Summary:

Harvest Water will deliver up to 50,000-acre feet per year (AFY) of tertiary-treated recycled water from the Sacramento Regional Wastewater Treatment Plant (SRWTP) to more than 16,000 acres of agricultural and habitat lands in southern Sacramento County. As the Project has progressed through planning and into design, the following changes have affected the Project's public benefits that are included in the Contracts for Administration of Public Benefits (CAPBs):

- The Project has incorporated a 5-year ramp-up for recycled water deliveries to connect customers and enroll habitat lands.
- The Project has incorporated recycled water delivery cutbacks as required by Regional San's Water Rights Order during dry and critically dry years (which will sunset approximately 20 years after Project startup). Based on historical hydrology, average annual deliveries are estimated at 41,250 AFY during this time period with the ability to deliver up to 50,000 AFY.

The Project's ecosystem public benefits will be contracted with the California Department of Fish and Wildlife (CDFW). The Project's water quality public benefit will be contracted with the State Water Resources Control Board (SWRCB). The benefits as itemized in the CAPBs reflect a more conservative approach to quantifying benefits that are most likely to be achieved (for example, the benefits should ramp up even more quickly than contracted for, but for compliance purposes, we are assuming a gradual ramp up of water deliveries to account for any unplanned obstacles to getting all water deliveries maximized within 5 years of startup). The WSIP application package identified anticipated benefits, whereas the CAPBs detail contracted benefit commitments. The Harvest Water Program team anticipates that benefits will likely accrue beyond the CAPB benefit values both during the term of the CAPBs, as well as beyond the term of the CAPBs. Discussion of each public benefit is provided below.

Greater Sandhill Crane Habitat

The Program will aim to support an average of 700 additional Sandhill cranes within the Program Area by enrolling an average of 3,500 acres of habitat lands in the Program through water delivery and land management. The physical benefit has not changed from the 2018 MCED. The water delivery has increased to 2.5 AF/acre. The benefit begins in Year 2 of the Project. The public benefits under contract with CDFW are consistent with the benefits identified above and consistent with CDFW findings during the MCED process in 2018.

Sandhill crane benefit monetization is based on the alternative cost of land and water required to achieve the same benefit and was valued during the 2018 MCED process at \$61.2M in 2015 dollars. The benefit has been updated to 2022 dollars using the following updated information:

- USDA Land Values Annual Summary shows the average price of cropland in California in 2022 as \$15,410, per acre up 44.2% from the average price of \$10,690 per acre in 2015.
- North-of-Delta unit water benefit in 2015 dollars was adjusted to \$311 per acre-foot (AF) in dry years and \$575/AF in critical years based on improved water market information. The values were then increased to 2022 dollars using the California Consumer Price Index CPI inflation adjustment from 2015 to 2022 of 29.1%.

With this updated information, the value of the benefit is consistent with the CAPB and is estimated at \$155.9 million in 2022 dollars.

Additional Fall-run Chinook (Cosumnes River Flow)

The Program’s in-lieu groundwater recharge activities will improve groundwater levels adjacent to the Cosumnes River and will reduce water losses from the river to the aquifer. These flows will begin accruing in the first few years of Program operations and will accumulate over 20 years to an average of 13,000 AFY. The benefit begins in Year 2 of the Project. The changes from the WSIP application in the water delivery and physical benefit are reflected in the public benefits under contract with CDFW. Generally, the changes are the addition of the ramp-up time and a slight reduction in the annual volume of additional water in the river.

The benefit monetization is based on the alternative cost of water required to provide the same flow benefit and was valued during the 2018 MCED process at \$79.3 million in 2015 dollars. The benefit has been updated to 2022 dollars using the following updated information:

- Assume Cosumnes River flow increases will accumulate linearly for 20 years to an annual average of 13,000 AFY.
- North-of-Delta unit water benefit in 2015 dollars was adjusted to \$311 per acre-foot (AF) in dry years and \$575/AF in critical years based on improved water market information. The values were then increased to 2022 dollars using the California Consumer Price Index CPI inflation adjustment from 2015 to 2022 of 29.1%.

With this updated information, the value of the benefit is consistent with the CAPB and is estimated at \$79.8 million in 2022 dollars.

Passive Wetland and Riparian Habitat

The Program’s in-lieu groundwater recharge activities will increase groundwater elevation levels to 10 feet below ground surface (bgs) or higher (shallower), increasing existing wetland/riparian habitat function on more than 2,633 acres. It is anticipated that the benefits are commensurate to what was originally contemplated in the 2018 MCED process (5% habitat function improvement on 303 acres, 10% on 682 acres, 25% on 1085 acres, and 50% on 583 acres). However, a more conservative figure of a 10% habitat improvement on 2,633 acres is being used for the CAPB and current benefit monetization to simplify monitoring and reporting. The benefit begins in Year 7 and ramps up to full implementation at Year 10 of the Project.

This benefit is based on the alternative cost of wetland habitat required to achieve the same benefit and was valued during the 2018 MCED process at \$53.7 million in 2015 dollars. The benefit has been updated to 2022 dollars using the following updated information:

- Assumes a more conservative estimate of 10% improvement on all 2,633 acres.
- Removes a 30% reduction factor that was previously applied to habitat acreage monetization values during the MCED development process.
- The wetland mitigation bank credit cost average was \$152,378 per acre in 2015 dollars. The values were then increased to 2022 dollars using the USDA Land Values Annual Summary price of cropland in California adjustment from 2015 to 2022 of 44.2%.

With this updated information, the value of the benefit is consistent with the CAPB and is estimated at \$37.8 million in 2022 dollars.

Active Wetland Habitat

The Program will use active management strategies to create, restore, or enhance a total of 1,300 acres of wetlands within the Program Area. The Program will achieve this through direct water delivery and/or increasing groundwater elevation levels to 10 feet bgs or higher (shallower), in addition to performing land management activities such as native species plantings, weed control, and protection from herbivory. The acreage and physical benefit have not changed since the 2018 MCED. The benefit begins in Year 7 and ramps up to full implementation at Year 10 of the Project. The public benefits under contract with CDFW are consistent with the benefit identified above and consistent with CDFW findings during the MCED process in 2018.

This benefit is based on the alternative cost of wetland habitat required to achieve the same benefit and was valued during the 2018 MCED process at \$28.5 million in 2015 dollars. The benefit has been updated to 2022 dollars using the following updated information:

- The values were increased to 2022 dollars using the USDA Land Values Annual Summary price of cropland in California adjustment from 2015 to 2022 of 44.2%.

With this updated information, the value of the benefit is consistent with the CAPB and is estimated at \$41.0 million in 2022 dollars.

Active Riparian Habitat

The Program will create or enhance a total of 500 acres of riparian habitat within the Program Area. The Program will provide direct water delivery to riparian habitat as needed, in addition to performing land management activities such as native species plantings, weed control, and protection from herbivory. The acreage and physical benefit have not changed from the 2018 MCED. The benefit begins in Year 7 and ramps up to full implementation at Year 10 of the Project. The public benefits under contract with CDFW are consistent with the benefit identified above and consistent with CDFW findings during the MCED process in 2018.

This benefit is based on the alternative cost of riparian habitat required to achieve the same benefit and was valued during the 2018 MCED process at \$21.7 million in 2015 dollars. The benefit has been updated to 2022 dollars using the following updated information:

- The values were increased to 2022 dollars using the USDA Land Values Annual Summary price of cropland in California adjustment from 2015 to 2022 of 44.2%.

With this updated information, the value of the benefit is consistent with the CAPB and is estimated at \$31.3 million in 2022 dollars.

Vernal Pool Complex

The Program will permanently protect and enhance 353 acres of vernal pool complex located within the Program Area by implementing cattle grazing management strategies and upland water application, as needed. The acreage and physical benefit have changed slightly from the 2018 MCED. While the total complex acres decreased from 500 to 353 acres, the wetted acreage increased from 50 to 56 acres. The public benefits under contract with CDFW are consistent with the benefit identified above.

This benefit was based on the alternative cost of an additional 500 acres of vernal pool complex and 50 wetted acres and was valued during the 2018 MCED process at \$10.5 million in 2015 dollars. The benefit has been updated to 2022 dollars using the following updated information:

- The wetted acres are the primary monetization driver; therefore, the benefit is essentially unchanged from 2018 aside from a one-year delay to implementation.
- The values were increased to 2022 dollars using the USDA Land Values Annual Summary price of cropland in California adjustment from 2015 to 2022 of 44.2%.

With this updated information, the value of the benefit is consistent with the CAPB and is estimated at \$14.6 million in 2022 dollars.

Improved Water Quality

The Program will improve salinity conditions in the Sacramento River and Delta waterways. A portion of the discharge from the Sacramento Regional Wastewater Treatment Plant (SRWTP) will be utilized for agricultural irrigation instead of being discharged to the Sacramento River and ultimately the Delta. This diversion will result in reduced total dissolved solids (TDS) loading to the Sacramento River and Delta waterways. Based on a 5-year program ramp-up, recycled water deliveries are estimated to increase approximately linearly to 100% in Year 5 for the CAPB. The benefit begins in Year 2 of the Project. The public benefits under contract with SWRCB are consistent with the benefit identified above.

This benefit was based on the reduced urban salinity costs associated with reduced salinity in the Delta and was valued during the 2018 MCED process at \$47.7 million in 2015 dollars. The benefit has been updated to 2022 dollars utilizing the following updated information:

- The California (CPI) inflation adjustment of 29.1%.
- Program water deliveries will ramp-up linearly over 5 years to reach 100% deliveries in Year 5.

With this updated information, the value of the benefit is consistent with the CAPB and is estimated at \$55.3 million in 2022 dollars.

However, in the original WSIP application, Regional San estimated the present value of this benefit at \$569.4 million based on the cost of reverse osmosis required to reduce the mass loading of salinity by the same amount as the Project. That approach was rejected by Commission staff during the 2018 MCED process. Yet, as part of the staff report for the October 20, 2021 Commission meeting, Commission staff updated their analysis to include the alternative cost of construction for reverse osmosis (valued at \$569.4 million), as one of the benefits of the Project for purposes of economic feasibility. This calculation of water quality benefits, at a minimum, establishes a higher valuation for private benefits for the Harvest Water Program, which can be factored into an accounting for overall program benefits and costs. To the extent that the benefit of diverting up to 50,000 AFY of recycled

water to land rather than the Sacramento River creates an effluent diversification benefit to Regional San, along with the water quality benefit of reduced salinity and other potential constituents of future concern, those private benefits could also be viewed as providing public benefits as well.

Regional San recently completed a \$1.6 billion upgrade to the Sacramento Regional Wastewater Treatment Plant (SRWTP). Regional San was not obligated to implement reverse osmosis to comply with the discharge standards identified in the NPDES permit for the upgraded treatment facility. The reduction of salinity and other constituents from the Sacramento River and Delta waterways will offer significant statewide benefits. The benefit monetization for the alternative cost of reverse osmosis was estimated at \$569.4 million in 2015 dollars during the 2018 MCED process. Since that benefit value related to the cost of reverse osmosis was subsequently used by Commission staff in the Harvest Water Program Continuing Eligibility and Feasibility Determination hearing 2021, a justification could be made to incorporate that value into the water quality MCED. As such, the benefit valuation could then be updated to 2022 dollars utilizing the following updated information:

- The Bureau of Reclamation Construction Cost Trends (CCT) index indicates a 38.3% increase in construction costs from January 2015 to December 2022.
- Program water deliveries will ramp-up linearly over 5 years to reach 100% deliveries in Year 5.

With this updated information, the value of the benefit utilizing the alternative cost approach is estimated at \$734 million in 2022 dollars.

Based on the two different approaches outlined above to value the water quality benefits, the monetized value for this public benefit lies somewhere between \$55.3million and \$734 million. In accordance with WSIP regulations, the ecosystem improvements public benefits must account for 50 percent or more of the total requested Program cost share. Therefore, the water quality improvement benefit monetization would be limited to \$360.4 million, equal to the combined value of the six ecosystem improvements, and is tabulated as such in Table 2 below.

Summary of Public Benefits and Updated Accounting for Private Benefits

A summary of the public benefits is tabulated below. As shown, the CAPB-contracted benefits are valued at \$720.8 million, with ecosystem benefits accounting for 50%.

Table 2: Harvest Water Program Estimated Public Benefits Monetization

| Benefit | 2018 MCED NPV (2015\$, in millions) | Current Program Benefit NPV based on CAPB public benefits (2022\$, in millions) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------|
| Greater Sandhill Crane Habitat | \$61.2 | \$155.9 |
| Additional Fall-run Chinook | \$79.3 | \$79.8 |
| Passive Wetland/Riparian Habitat | \$53.7 | \$37.8 |
| Active Wetland Habitat | \$19.9 | \$41.0 |
| Active Riparian Habitat | \$21.7 | \$31.3 |
| Vernal Pool Complex | \$10.1 | \$14.6 |
| Improved Water Quality | \$47.7 | \$360.4* |
| TOTAL | \$293.6 | \$720.8 |
| <p>Note: * The value of the water quality improvement benefit exceeds the value of the ecosystem improvement benefits. As such, the monetized value for this benefit has been set at \$360.4 million, equal to the combined value of the six ecosystem improvements.</p> | | |

Public Benefits Beyond the Term of the CAPB

The public benefits discussed herein and established during the Program will continue long after the term of the CAPB, thereby increasing the total public benefit anticipated for Harvest Water. Regional San is committed to environmental stewardship within its service area to support the local ecosystem, as it has for decades managing the Bufferlands, which is comprised of over 2,100 acres of upland and wetland habitats that surround the SRWTP. Additionally, Regional San is committed to maximizing the delivery of recycled water to the Harvest Water service area. Continued use of recycled water will:

- Sustain the water quality public benefits through the continued diversion of recycled water from the Sacramento River and Delta waterways.
- Sustain the ecosystem benefits of Fall-run Chinook through increased Cosumnes River flows.
- Sustain wetland/riparian habitat function which relies on the improved groundwater levels. Based on modeling to date, it is estimated that an additional 1000 acres of wetland and riparian habitat will be improved beyond the 2,633 identified in the CAPB.

Additionally:

- Groundwater levels will be further protected in the future through the compliance requirements of the Sustainable Groundwater Management Act (SGMA) as Harvest Water is incorporated into the Groundwater Sustainability Plan for the South American Subbasin.
- Vernal pool complexes will continue beyond the term of the CAPB as that land will be protected by conservation easement in perpetuity.

Cost Summary:

The current Maximum Conditional Eligibility Determination (MCED) for Harvest Water is \$291,841,209 (\$14,375,625 of which has already been awarded by the Commission and received by Regional San as Early Funding). As documented in the Commission’s July 2018 Determination Recommendations,

Harvest Water is a conjunctive use project and is eligible for more than 50 percent (up to 100%) of the Project’s total capital cost.

Throughout planning and preliminary design, the project costs have been regularly reviewed and updated. The present value of project costs in 2022 dollars are tabulated below. The estimated costs provided are WSIP-eligible costs for capital and establishment (including the portion of the ecological monitoring program used in the early years to ensure the ecological program is properly established).

Table 3: Harvest Water Program Estimated Capital Costs Comparison

| Project Cost Category | WSIP Eligible Costs, Application (2015\$, millions) | WSIP Eligible Costs, Current (2022\$, millions) |
|-----------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------|
| Construction Costs, Contingency, and implementation | \$ 216.9 | \$ 511.0 |
| Ecological Program Establishment | \$ 54.2 | \$ 74.5 |
| Ecological Monitoring Program | \$ 7.1 | \$ 8.5 |
| Governance, Contracting, and Legal Fees | \$ 0.5 | \$ 1.5 |
| Groundwater Banking | \$ 1.8 | \$ 1.8 |
| TOTAL | \$ 280.5 | \$597.2 |

Since the 2018 WSIP Determination, the Project’s costs have been refined as more detailed cost estimates have been developed during the Project’s design.

- Construction Costs have increased primarily for the following reasons:
 - The pump station and distribution system have increased in size to increase the level of service and system reliability for future recycled water customers. The pump station capacity has been increased from approximately 70 mgd to approximately 100 mgd, and the distribution pipeline diameters have been increased accordingly. Additionally, the total miles of pipeline designed for the system have increased.
 - Inflation and escalation of construction costs since 2015 have greatly impacted capital costs. As noted above, the Bureau of Reclamation Construction Cost Trends (CCT) index indicates a 38.3% increase in construction costs from January 2015 to December 2022, with the midpoint of construction anticipated in another 2-3 years. This also increased contingencies and soft costs, which are estimated as a percentage of construction and will be refined as designs and bid packages are finalized.
- Ecological Program Establishment Costs have increased due to inflation and escalation impacts to land values, construction costs, labor, materials, and service since 2015 noted above. (CPI inflation adjustment of 29.1%, USDA Land Values cropland in California adjustment of 44.2%, and USBR construction cost escalation of 38.3%).
- Ecological Monitoring Program costs have increased due to inflation impacts to labor and services since 2015 noted above and are partially mitigated by improved remote sensing and other technologies allowing lower cost monitoring during the establishment period.
- Governance, Contracting, and Legal Fees have increased primarily for the following reasons:
 - Inflation impacts to labor and services since 2015 noted above.

- The costs of developing CAPBs, the Funding Agreement, and contracts with landowners were higher than anticipated. The agreements required extensive coordination with administering agencies for technical details for all benefit categories and extensive meeting and preparation time to execute agreements.
- Groundwater Banking costs are anticipated to remain relatively unchanged. Escalation and inflation increases are estimated to be offset through improved analytical tools and the ability to utilize some existing monitoring wells within the recycled water service area.

The updated O&M value and replacement costs in 2022 dollars are tabulated below.

Table 4: Harvest Water Program Estimated Operations and Maintenance Annual Costs

| Cost Component | Estimated Annual Cost (2022\$, in millions) |
|------------------------------------|--------------------------------------------------------|
| Harvest Water O&M | \$5.9 |
| Groundwater Accounting Program O&M | \$0.25 |
| Renewal and Replacement Fund | \$0.55 |

Requested MCED Update:

The public benefits are monetized at more than \$720 million and exceed the estimated WSIP eligible costs of \$597.2 million. Both Harvest Water’s capital costs and public benefits exceed the current MCED of \$291.8 million. As Harvest Water is a conjunctive use project and is eligible for WSIP funding up to 100 percent of the Project’s total capital cost, the MCED for Harvest Water should be increased up to the total capital cost of \$597.2 million as WSIP funding becomes available.

Information for Water Code section 79755 requirements

Water Code section 79755(a)(2): Contracts for Non-Public Benefits:

A Regional San Board resolution agreeing to the non-public benefit cost share was adopted on April 12, 2023. In addition to WSIP funding, Harvest Water was awarded \$30 million through the Water Infrastructure Improvements for the Nation (WIIN) Act administered through the U.S. Bureau of Reclamation (Reclamation) and is working to execute a funding agreement with Reclamation by the end of 2023. Regional San will continue to pursue additional WSIP funding if it becomes available, as well as other state and federal funding opportunities to offset the remaining capital costs. The remaining balance of capital costs and costs ineligible for grant funding will be financed by Regional San through cash reserves, as well as recycled water and wastewater treatment rate revenues. Harvest Water capital costs are included in Regional San’s annual budget, capital financing plan, and its long-term financial plan.

Water Code section 79755(a)(3): Executed Contracts for the Administration of Public Benefits (CAPBs):

The Contracts for Administration of Public Benefits (CAPBs) with California Department of Fish and Wildlife and State Water Resources Control Board were executed in May 2023 and were provided to Commission staff by the administering agencies.

Water Code section 79755(a)(5)(A): Completed Feasibility Study:

Feasibility documents were submitted in advance of the January 1, 2022 deadline (Water Code section 79757(a)). No other documents are needed to meet this requirement.

Water Code section 79755(a)(5)(B) Commission Determinations:

There are no project changes that would affect the determinations made in 2018 and 2021 related to feasibility, consistency with laws and regulations, or beneficial uses of the Delta.

Water Code section 79755(a)(5)(C) Completed Environmental Documentation:

Water Code section 79755(a)(5)(C) requires all State and Federal environmental documents to be complete prior to the Final Award Hearing.

The following environmental documents are currently provided as links on the CWC website¹ related to the Water Code section 79757(a) January 1, 2022 eligibility requirement, and will be linked again with the final funding requirement:

- Draft and Final Programmatic EIR
- IS checklist for Lateral Pipelines and On-Farm Connections
- CEQA Addenda for HWP Groundwater Accounting and Ecological Plan and Wintertime Application and On-Farm Connections Vehicle Turnouts Projects

In addition, the following environmental documents have been submitted to CWC or are publicly available at the links provided:

- Regional San Board of Directors Resolutions for Harvest Water Environmental Documents:
 - Certification Of Environmental Documentation And Approval Of The South Sacramento County Agriculture And Habitat Lands Recycled Water Program
 - [https://agendanet.saccounty.gov/RegionalSanitation/Documents/ViewDocument/Executed Material - Item No. 5.pdf?meetingId=4149&documentType=Minutes&itemId=261327&publishId=207828&isSection=false](https://agendanet.saccounty.gov/RegionalSanitation/Documents/ViewDocument/Executed%20Material%20-%20Item%20No.%205.pdf?meetingId=4149&documentType=Minutes&itemId=261327&publishId=207828&isSection=false)
 - Find The Harvest Water Program’s Lateral Pipelines And On-Farm Connections Project Is Within The Scope Of The Certified Environmental Impact Report

¹ <https://cwc.ca.gov/Water-Storage/WSIP-Project-Review-Portal/All-Projects/Harvest-Water-Program>

- [https://agendanet.saccounty.gov/RegionalSanitation/Documents/ViewDocument/Item No. 5 - Executed Material.pdf.pdf?meetingId=6596&documentType=Minutes&itemId=372795&publishId=871174&isSection=false](https://agendanet.saccounty.gov/RegionalSanitation/Documents/ViewDocument/Item%20No.%205%20-%20Executed%20Material.pdf.pdf?meetingId=6596&documentType=Minutes&itemId=372795&publishId=871174&isSection=false)
 - Approve The Filing Of The Addendum To The Certified Environmental Impact Report For The Harvest Water Ecological Plan And Wintertime Application
 - [https://agendanet.saccounty.gov/RegionalSanitation/Documents/ViewDocument/Item No. 5 - Executed Material.pdf.pdf?meetingId=6755&documentType=Minutes&itemId=376261&publishId=913678&isSection=false](https://agendanet.saccounty.gov/RegionalSanitation/Documents/ViewDocument/Item%20No.%205%20-%20Executed%20Material.pdf.pdf?meetingId=6755&documentType=Minutes&itemId=376261&publishId=913678&isSection=false)
 - Approve The Addendum To The Certified Environmental Impact Report For Harvest Water To Cover The Groundwater Accounting Project
 - [https://agendanet.saccounty.gov/RegionalSanitation/Documents/ViewDocument/Item No. 2 - Executed Material.pdf.pdf?meetingId=6795&documentType=Minutes&itemId=379119&publishId=939357&isSection=false](https://agendanet.saccounty.gov/RegionalSanitation/Documents/ViewDocument/Item%20No.%202%20-%20Executed%20Material.pdf.pdf?meetingId=6795&documentType=Minutes&itemId=379119&publishId=939357&isSection=false)
 - Approve The Addendum To The Certified Environmental Impact Report For The Harvest Water Program To Cover The Vehicle Turnouts
 - [https://agendanet.saccounty.gov/RegionalSanitation/Documents/ViewDocument/Item No. 2 - Executed Material.pdf.pdf?meetingId=6801&documentType=Minutes&itemId=382826&publishId=964937&isSection=false](https://agendanet.saccounty.gov/RegionalSanitation/Documents/ViewDocument/Item%20No.%202%20-%20Executed%20Material.pdf.pdf?meetingId=6801&documentType=Minutes&itemId=382826&publishId=964937&isSection=false)
- Notice of Determination filed with the State Clearinghouse: SCH Number 2015022067
 - <https://ceganet.opr.ca.gov/Project/2015022067>
- Environmental Assessment (EA) and Finding of No Significant Impact (FONSI).
 - https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=50444

Water Code section 79755(a)(5)(C): Federal, State, Local Approvals, Certifications, and Agreements required for construction have been obtained:

Harvest Water developed technical information and submitted application materials for a number of coordinated environmental permit efforts and local approvals. The following table lists the pertinent permits required for construction and dates obtained.

In addition, Harvest Water obtained an Order Approving Change in Purpose and Place of Use of Treated Wastewater (Order WW0092) from the State Water Resources Control Board in September 2019 as well as a Certificate of Completion approving Regional San’s annexation and sphere of influence amendment for the Harvest Water service area from the Sacramento Local Agency Formation Commission in June 2021.

Table 5: Summary of Approvals, Certifications, and Agreements

| Permit/Approval | Entity Issuing Item | Date Obtained |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------|
| Order Approving Change in Purpose and Place of Use of Treated Wastewater (Order WW0092) | SWRCB, Division of Water Rights | September 2019 |
| Local Agency Formation Commission (LAFCo) Certificate of Completion | Sacramento LAFCo | June 2021 |
| Lake and Streambed Alteration Agreement | CDFW | April 2021 |
| Aquatic Resources Impact Application | South Sacramento Conservation Agency (SSCA) | March 2022 |
| South Sacramento Habitat Conservation Plan (SSHCP) Coverage, including <ul style="list-style-type: none"> • Section 404 Permit authorization under USACE Programmatic General Permit 17 for the SSHCP • CDFW Incidental Take Permit authorization through the SSHCP • Section 7 Consultation authorization through the SSHCP | SSCA | March 2022 |
| Notice of Applicability for the Clean Water Act 401 Water Quality Certification | Central Valley Regional Water Quality Control Board | November 2021 |
| National Historic Preservation Act Section 106 compliance and Tribal Consultation | USBR, as federal lead agency | January 2021 |