# **Technical Memorandum**



# Regional San South Sacramento County Agriculture & Habitat Lands Recycled Water, Groundwater Storage, and Conjunctive Use Program

Subject:	South County Recycled Water Feasibility Study WSIP Updates
Prepared For:	Regional San
Prepared by:	Zachary Roy and Josh Uecker
Reviewed by:	Terrie Mitchell – Regional San
Date:	February 14, 2019
Updated:	June 14, 2019 and July 29, 2019
Reference:	0040-006

NOTE: Information on the existing 2015 Feasibility Study, approved by the US Bureau of Reclamation, is at <u>https://www.regionalsan.com/general-information/south-county-ag-feasibility-study</u>. The document and appendices can be downloaded from the website. The letter of approval of the Feasibility Study from the US Bureau of Reclamation is appended to this memo.

### **1** Introduction

The Sacramento Regional County Sanitation District (Regional San) is in the process of developing the South Sacramento County Agriculture & Habitat Lands Recycled Water, Groundwater Storage and Conjunctive Use Program (South County Ag Program or Program). The purpose of this Technical Memorandum (TM) is to update references and values used in Regional San's 2015 *South County Recycled Water Feasibility Study* (Feasibility Study) and in its 2017 Water Storage Investment Program (WSIP) application to reflect changes made to the Program's costs and benefits during the California Water Commission's (Commission) technical review and related appeal hearings.

The Commission conducted a technical review of the Program's August 2017 WSIP application and its Feasibility Study and related documents. During the technical review and subsequent Commission meetings, the values of some of the public and non-public benefits were adjusted. In order for Regional San's feasibility study to be considered complete, the Commission requested the economic feasibility, financial feasibility, and cost allocation analyses be updated to be consistent with the adjusted values and the Commission's conditional funding amount. These feasibility study components are updated herein to be consistent with the adjusted benefit values, and the Commission's conditional funding amount. Table 1 shows references made to the Feasibility Study in the WSIP application materials that have been updated. Updated WSIP application materials have been included as appendices to this TM. The Project was determined to be feasible by Regional San and the US Bureau of Reclamation in 2015, and with the adjustments herein from the WSIP materials and process, the project remains feasible.

Feasibility Study Section	WSIP Application Section Referenced in Original Feasibility Study and Feasibility Crosswalk <sup>1</sup>
<b>Cost Allocation</b> – Benefits-based cost allocation to determine the costs to be assigned to the Project beneficiaries. The federal government's Separable Costs-Remaining Benefits method is a commonly acceptable method to do a cost allocation.	A.10 Regional San CB and Allocation_Public Non-Public A- 10_SecBCMR
<b>Economic Feasibility</b> – Demonstrates that the expected benefits of the Project equal or exceed the expected costs, considering all benefits and costs related to or caused by the Project.	A.9 Regional San_Benefits and Cost Analysis_ A-9 BCA_SecBCMR
<b>Financial Feasibility</b> – Demonstrates that sufficient funds will be available from public (including the funds requested in the application) and non-public sources to cover the construction and operation and maintenance of the Project over the planning horizon. It must also show that beneficiaries of non-public benefits are allocated costs that are consistent with and do not exceed the benefits they receive.	A.9, A.10 Regional San_Benefits and Cost Analysis_ A-9 BCA_SecBCMR and Regional San CB and Allocation_Public Non-Public A- 10_SecBCMR

Fable 1: Feasibility Stud	Section References in W\$	SIP Application Materials
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# 2 Updated Benefit Calculations

### 2.1 Non-Public Benefit Changes

### Water Supply Reliability

During the technical review of the WSIP grant application, the value of North of Delta Water used for nonpublic benefits calculations was adjusted to match the value used for the public benefits. This increased the value of *Non-Public Water Supply Reliability*. Table 2 shows the value of North of Delta Water in the original WSIP grant application, and the final values used, per CWC guidance.

<sup>&</sup>lt;sup>1</sup> Feasibility Crosswalk provided with WSIP application submittal: Regional San\_WSIP Feasibility\_A-1 Feasibility Document\_SecFIR

Sacramento Valley Water Year Hydrologic Classification Index	Original WSIP Grant Application Value (Dollars per AF, 2015 Dollars)	Final WSIP Grant Application Value (Dollars per AF, 2015 Dollars)			
Wet		\$150			
Above Normal		\$198			
Below Normal	\$369.78	\$506			
Dry		\$539			
Critical Dry		\$845			

#### Table 2: Values of North of Delta Water

The original non-public benefit of *Water Supply Reliability* was estimated to be \$120.03M. The changes made to the value of North of Delta Water for calculating benefits caused the non-public benefit of *Water Supply Reliability* to increase to a total value of **\$145.89M**.

#### Avoided Cost of Fertilizer & Avoided Cost of Wastewater Discharges

In the original WSIP application, the benefit of *Avoided Cost of Fertilizer* and *Avoided Cost of Wastewater* Discharges did not accrue immediately after Program start-up, to account for construction timing uncertainty. During technical review, the Commission staff removed this delay, and began calculating the benefit immediately after Program start-up, which Regional San supported. The original public benefit of *Avoided Cost of Fertilizer* was estimated to be \$0.87M. Removing the construction delay caused the total value of *Avoided Cost of Fertilizer* to increase to a total value of \$0.90M. The original public benefit of *Avoided Cost of Wastewater Discharges* was estimated to be **\$2.25M**. Removing the construction delay caused the total value of *Avoided Cost of Vastewater Discharges* to increase to a total value of **\$2.33M**.

#### **Total Non-Public Benefit Amount**

Following the changes made to the benefit calculations during technical review, the total non-public benefit amount is valued at **\$149.11M**. The values of each non-public benefit are shown in Table 3.

Non-Public Benefit Category	Original WSIP Grant Application Value (Million Dollars, 2015 Dollars)	Final WSIP Grant Application Value (Million Dollars, 2015 Dollars)				
Water Reliability	\$120.03	\$145.89				
Avoided Cost of Fertilizer to Farmers	\$0.87	\$0.90				
Avoided Cost of Wastewater Discharges	\$2.25	\$2.33				
Total Non-Public Benefit	\$123.14*	\$149.11*				

#### Table 3: Non-Public Benefits Summary

\* Total Non-Public Benefits presented are based on non-rounded values from project application calculations. Rounded values are presented in the other cells of this table and the sums of rounded values in the table may not match presented total values.

### 2.2 Public Benefit Changes

#### Ecosystem Improvements

During the Commission meeting on May 3, 2018, adjusted benefits were determined for the *Ecosystem Improvement Benefits*. The adjusted benefit values from the May 2018 meeting were preceded by a series of back-and-forth comments and appeals as Commission staff evaluated claimed Project benefits.

Adjustments to ecosystem benefits were caused by the updated North of Delta water supply values outlined in Section 2.1 above (impacted Fall-run Chinook and Sandhill Crane habitat benefits). In addition to the North of Delta values, some of the ecosystem values changed based on assumptions related to efficacy of land use changes and associated ecosystem benefits (for wetland and riparian habitat improvement benefits). The original public benefit of *Ecosystem Improvements* included in the WSIP Application were estimated to be \$320.38M. The final adjustments by the Commission resulted in a public benefit of *Ecosystem Improvements* of **\$246.25M**.

#### Water Quality Improvements

During the technical review of the WSIP grant application, the benefit of *Water Quality Improvements* was revised due to a change in methodology. Originally, the benefit was estimated by determining the avoided costs of implementing a Reverse Osmosis (RO) system to deliver similar quality of water to discharge customers equivalent to the reduction in mass discharge associated with delivering recycled water to agricultural customers. This benefit of avoided costs was estimated to be \$569.48M. The Commission staff's preferred method relied on using benefit calculations previously done in the Bay Area Water Quality Model (BAWQM) and the Lower Colorado River Basin Water Quality Model (LCRWQM). The combined estimates from the BAWQM and LCRWQM results were evaluated to be \$23.83M. The Commission doubled the calculated benefit value to reflect a more complete assessment of the Project *Water Quality Improvement* public benefits, in order to account for additional benefits not captured under the BAWQM and LCRWQM, as well as other model uncertainties. The final adjustments resulted in a public benefit of *Water Quality Improvements* of **\$47.66M**.

#### **Recreation Improvements**

During the technical review of the WSIP grant application, the benefit of *Recreation Improvements* was removed due to potential double counting of benefits. The Commission determined that the benefit of *Recreation Improvements* was already accounted for in the *Ecosystem Improvements* evaluation. The final adjustments caused the public benefit of *Recreation Improvements* under the WSIP application process to decrease to a total value of **\$0**.

#### **Total Public Benefit Amount**

Following the changes made to the benefit calculations during technical review, the total public benefit amount is valued at **\$293.91M**. The values of each public benefit are shown in Table 4.

Public Benefit Category	Original WSIP Grant Application Value (Million Dollars, 2015 Dollars)	Final WSIP Grant Application Value (Million Dollars, 2015 Dollars)				
Ecosystem Improvements	\$320.38	\$246.25				
Water Quality Improvements	\$569.48	\$47.66				
<b>Recreation Improvements</b>	\$6.73	\$0				
Total Public Benefit	\$896.59	\$293.91				

#### Table 4: Public Benefits Summary

### **3 Updated Conditional Funding Amount**

During technical review, the calculated *WSIP Eligible Funding* amount was changed due to updated benefit values, as well as an updated evaluation of eligible Program costs. The total updated benefit value was \$293.91 M, as discussed in Section 2 of this TM. Program costs were separated into eligible costs versus operational and maintenance costs (which are not eligible for funding). The *Conditional Funding Amount* from the Commission is equal to the *WSIP Eligible Funding* amount. The original calculated *WSIP Eligible Funding* amount was \$304.02M. However, the final adjustments by the Commission caused the *WSIP Eligible Funding* amount to decrease to **\$280.53M** (which is less than the updated total public benefit amount). The WSIP eligible amounts of each Program Cost Category are shown in Table 5.

Project Cost Category	Original Estimated Program Cost in Application (Million Dollars, 2015 Dollars)	WSIP Eligible Funding Amount (Million Dollars, 2015 Dollars)
Construction Costs, Contingency, and Implementation Allowance	\$216.90	\$216.90
Ecological Program Establishment	\$54.19	\$54.19
Ecological Monitoring Program	\$38.88	\$7.14
Governance, Contracting, and Legal Fees	\$0.50	\$0.50
Public Outreach and Education	\$0.21	\$0.00
Groundwater Banking Program	\$4.30	\$1.80
Interest During Construction	-\$10.96	N/A
Total Eligible Project Costs	\$304.02	\$280.53

 Table 5: WSIP Eligible Funding Amount

# 4 Updated Feasibility Study Materials

### 4.1 Cost Allocation

The Cost Allocation section of the Feasibility Study was originally outlined in the WSIP grant application. The original materials were contained in the **Benefit Calculation**, **Monetization**, **and Resiliency Tab A.10**. Refer to Appendix A for the updated materials. Costs allocated to beneficiaries are not more than quantified benefits.

### 4.2 Economic Feasibility

The Feasibility Study provided an early documentation demonstrating economic feasibility, and an updated benefit cost analysis was prepared in support of the WSIP grant application. These materials were contained in the **Benefit Calculation, Monetization, and Resiliency Tab A.9**. These materials referenced additional materials, including the **Benefit Calculation, Monetization, and Resiliency Tab A.9**. These materials referenced additional materials, including the **Benefit Calculation, Monetization, and Resiliency Tab A.9**. These materials referenced additional materials, including the **Benefit Calculation, Monetization, and Resiliency Tab A.9**. These materials referenced additional materials, including the **Benefit Calculation, Monetization, and Resiliency Tab A.10**. Refer to Appendix A for the updated Benefit Cost analysis. The updated metadata and assumptions are discussed in Appendix B. The calculated benefit : cost ratio for the Project was updated to **1.04** following the Commission's technical review.

### 4.3 Financial Feasibility

Section 9.3 of the Feasibility Study provided discussion on:

- Willingness of the non-Federal project sponsor (Regional San) to pay for its share of capital costs and the full operations, maintenance, and replacement costs;
- A plan for funding the construction, operations, maintenance, and replacement costs by the non-Federal sponsor;
- A description of Federal and non-Federal sources of funding.

Contribution percentages presented in the Feasibility Study are subject to change, but Regional San would cover any portion of project construction, operations, maintenance, and replacement costs not covered by Federal or State funding, including funding for operations and maintenance costs required to deliver the recycled water supply and ecosystem benefits. Regional San considers this project essential to its wastewater management and reuse Operations. The source of funds for planning, design and construction will be the Sacramento Regional County Sanitation District Capital Budget Fund #262A. Once required Program milestones have been met and Regional San executes a funding agreement with the California Water Commission, a majority of the capital Program expenses will be eligible for reimbursement through the \$280.5 million WSIP grant. Regional San will use the revenues from the sale of recycled water to help fund some of the operational and maintenance costs of the South County Ag Program. Regional San's wastewater treatment rate revenues will also be used to fund the remaining capital costs and future operational and maintenance costs of the South County Ag Program. These funds are located in Regional San's Operating Fund #261A.

### 5 Conclusion

Cost allocations to beneficiaries of non-public benefits were calculated for the original WSIP grant application. These materials were contained in the Benefit Calculation, Monetization, and Resiliency Tab A.10. Refer to Appendix A for the updated materials. Updated cost allocations to beneficiaries of non-public benefits are consistent with and do not exceed the benefits they receive.

Regional San is committed to the successful implementation of the South County Ag Program. This Project would be a landmark example of a more holistic approach to managing water resources for the benefit of the environment, agriculture and local communities. In addition to managing water resources more holistically, Regional San values the South County Ag Program as a way of diversifying effluent disposal opportunities, expanding the recycled water program, and minimizing Regional San's environmental impact consistent with its mission to manage its effluent responsibly. Regional San is well established to finance the Project and pay for its share of capital costs and the full operations, maintenance, and replacement costs. The Regional San Board has voiced support for the project, as have ratepayers in past surveys. Regional San has rate setting authority to ensure full and reliable effluent disposal and reuse, and is committed to cover costs beyond WSIP funding for the project. Thus, the project has been determined by Regional San to be financially feasible, in addition to being economically feasible, and with all of its costs allocated fairly.

### 6 References

California Water Commission. 2016. Water Storage Investment Program Technical Reference. November.

- RMC Water and Environment. 2014. Sacramento Regional County Sanitation District South County Recycled Water Feasibility Study. May.
- RMC Water and Environment. 2017. South Sacramento County Agriculture and Habitat Lands Recycled Water, Groundwater Storage, and Conjunctive Use Program. Water Storage Investment Program Application. *Benefit Calculation, Monetization, and Resiliency Tab A.9*
- RMC Water and Environment. 2017. South Sacramento County Agriculture and Habitat Lands Recycled Water, Groundwater Storage, and Conjunctive Use Program. Water Storage Investment Program Application. *Benefit Calculation, Monetization, and Resiliency Tab A.10*

# 7 Appendices

# APPENDIX A – Updated Benefit Calculation, Monetization, and Resiliency

# Regional San South Sacramento County Agriculture & Habitat Lands Recycled Water, Groundwater Storage, and Conjunctive Use Program

Benefit Based Cost Allocation and Summary Sheet



	Total Project Cost Allocation												
-	Total Multiple Purpose Project Cost	Total Benefits	Cost to Benefit Ratio	Public Benefit Ratio	Proportion of WSIP Ask to Ecosystem Benefits	Public Benefit Project Capital Cost (NPV)	WSIP Ask Amount	Remaining after WSI					
\$	424,032,347.39	\$ 443,021,704.99	1.04	1.05	88%	\$ 280,528,310.00	\$ 280,528,300.00	\$					

Total Multiple Purpose Project Cost	Total Benefits	Cost to Benefit Ratio	Public Benefit Ratio	Proportion of WSIP Ask to Ecosystem Benefits	Public Benefit Project Capital Cost (NPV)	WSIP Ask Amount	Remaining Public Costs after WSIP to Regional San	Total Allocated Non-Public Costs				
\$ 424,032,347.39	\$ 443,021,704.99	1.04	1.05	88%	\$ 280,528,310.00	\$ 280,528,300.00	\$ 783,757.21	\$ 142,720,290.18				
	Benefits Based Cost Percentage Calculation											
Agency	Ecosystem Improvements Total Value Benefits Amount	Recreational Purposes Total Value Benefits Amount	Reliability (Water Supply) Total Value Benefits Amount	Water Quality Total Value Benefits Amount	Reduced and Avoided Fertilizer Total Value Benefits Amount	Reduced and Avoided Discharge Total Benefits Amount	Percent of Total Benefit	Benefits Based Total Allocated Costs				
Public	\$ 246,250,000.00	\$-	\$-	\$ 47,660,000.00	\$-	\$-	66%	\$ 281,312,057.21				
Non-Public	\$ -	\$-	\$ 145,886,350.03	\$ -	\$ 898,154.09	\$ 2,327,200.87	34%	\$ 142,720,290.18				
Total	\$ 246,250,000.00	\$-	\$ 145,886,350.03	\$ 47,660,000.00	\$ 898,154.09	\$ 2,327,200.87	100%	\$ 424,032,347.39				

Total Public Benefits by Category										
Benefit		Benefit Value	Percent of Total Benefit	Porti	on of Present Value Total Project Cost Allocated to Benefit					
Ecological	\$	246,250,000.00	56%	\$	235,694,920.52					
Recreation	\$	-	0%	\$	-					
Flood Control	\$	-	0%	\$	-					
Water Quality	\$	47,660,000.00	11%	\$	45,617,136.70					
Emergency Response	\$	-	0%	\$	-					
Totals	\$	293,910,000.00	66%	\$	281,312,057.21					

Total Non-Public Benefits by Category									
Benefit	User Benefit Value Percent of Non-Public Benefit Allocation of Non-Public Total Project Co				cation of Non-Public Portion of Total Project Costs				
Agricultural Uses of Recycled Water	Agricultural Users	\$	-	0%	\$	-			
Municipal Uses from Groundwater Bank	Banking Partner	\$	145,886,350.03	98%	\$	139,633,184.47			
Reduced Fertilizer Costs	Agricultural Users	\$	898,154.09	1%	\$	859,656.27			
Reduced Discharge Costs	Regional San	\$	2,327,200.87	2%	\$	2,227,449.44			
Totals	-	\$	149,111,704.99	100%	\$	142,720,290.18			

Total Non-Public Benefits by User												
lleor	Deve of the Medice		Percent of Non-Public	A	llocation of Non-Public Portion of	Ren	maining Public Costs after WSIP		Total Allocation			
User Benefits value		Benefit		Total Project Costs to Regional San				TOTAL ANOCATION				
Regional San	\$	2,327,200.87	2%	\$	2,227,449.44	\$	783,757.21	\$	3,011,206.65			
Banking Partner	\$	145,886,350.03	98%	\$	139,633,184.47	\$	-	\$	139,633,184.47			
Agricultural Users	\$	898,154.09	1%	\$	859,656.27	\$	-	\$	859,656.27			
Totals	\$	149,111,704.99	100%	\$	142,720,290.18	\$	783,757.21	\$	143,504,047.39			

WSIP + All Allocated Costs =	\$ 424,032,347.3

# APPENDIX B – Updated Benefit Calculation, Monetization, and Resiliency Metadata

	Question					
	Where does each cost estimate come from?	What assumptions are made about these values?	When is the cost accrual start date?	What assumptions are made about the start date?	Discount Rate	Lifetime
Cost	Individual Cost Estimate Sources can be found on Tab 4.2, and are repeated to the right.	Individual Cost Estimate Assumptions for costs not taken from other Technical Documents can be found on Tab 4.2, and are repeated to the right.	Construction Start Date is currently 2018.	The Construction Start Date is based on the Project Schedule, and the Operations Start Date is based on the Construction	The Discount Rate used to reduce the Net Present Values of each of the benefits. Only one discount rate was	The Time for which the cost is calculated over, capital costs are simplified to have no lifetime, but are instead discounted
			Operations Start Dtae is currently 2023.	Start Date Plus the Accelerated Construction Timeline on the Project Schedule.	used in this project (3.5%)	according to the year in which they are paid.
Pipeline, Public ROW	Facilities Plan, 2017	Described in Facilities Plan, 2017	Construction (2018)		0.035	Capital
Pipeline, On-Farm (Private)	Facilities Plan, 2017	Described in Facilities Plan, 2017	Construction (2018)		0.035	Capital
Distribution Pump Station	Facilities Plan, 2017	Described in Facilities Plan, 2017	Construction (2018)		0.035	Capital
Customer Turnouts	Facilities Plan, 2017	Described in Facilities Plan, 2017	Construction (2018)		0.035	Capital
Construction Contingency	Facilities Plan, 2017	Described in Facilities Plan, 2017	Construction (2018)		0.035	Capital
Implementation Allowance	Facilities Plan, 2017	Described in Facilities Plan, 2017	Construction (2018)		0.035	Capital
Ecological Program & Establishment	10 year implementation period. Provided by Fresh Water trust		Construction (2018)		0.035	Capital
Governance, Contracting, Legal	Cost Estimation Made by Dave Richardson, W&C	\$100k for LAFCO. \$100k for development of general agreement. \$3k per participant to finalize contracts - assumed 100 participants.	Construction (2018)		0.035	Capital
Groundwater Modeling - Institutional	Cost Estimation Made by Dave Richardson, W&C	Assumes extensive need for back-and-forth negotiation with partners	Construction (2018)		0.035	Capital
Groundwater Modeling - Groundwater Modeling	Cost Estimation Made by Jim Blanke, W&C	\$175k for revisions and refinements to the baseline in the South American and Cosumnes Sub basin - or in contribution to development of a new regional model. \$100k for scenario development and simulation (assumes 5 scenarios). \$75k for 2 memoranda (scenario development and results). \$100k for meetings (assuming 10 meetings, internal, SCGA, Cosumes Sub basin, SGA, City of Sacramento/SCWA, RWA). \$50k for project coordination.	Construction (2018)		0.035	Capital

	Question					
	Where does each cost estimate come from?	What assumptions are made about these values?	When is the cost accrual start date?	What assumptions are made about the start date?	Discount Rate	Lifetime
Cost	Individual Cost Estimate Sources can be found on Tab 4.2, and are repeated to the right.	Individual Cost Estimate Assumptions for costs not taken from other Technical Documents can be found on Tab 4.2, and are repeated to the right.	Construction Start Date is currently 2018. Operations Start Dtae is currently 2023.	The Construction Start Date is based on the Project Schedule, and the Operations Start Date is based on the Construction Start Date Plus the Accelerated Construction Timeline on the Project Schedule.	The Discount Rate used to reduce the Net Present Values of each of the benefits. Only one discount rate was used in this project (3.5%)	The Time for which the cost is calculated over, capital costs are simplified to have no lifetime, but are instead discounted according to the year in which they are paid.
Groundwater Modeling - Environmental	Cost Estimation Made by Josh Uecker and Robin Cort, W&C		Construction (2018)		0.035	Capital
Groundwater Monitoring Plan	Cost Estimation Made by Jim Blanke, W&C	\$50k for plan development. \$50k for meetings and outreach. \$50k for access agreements.	Construction (2018)		0.035	Capital
Groundwater Monitoring Wells	Cost Estimation Made by Jim Blanke, W&C	\$50k for site access. \$100k for drilling. Pending more detailed analysis and driller quotes. Item potentially covered by existing sites, which would negate the need for this item.	Construction (2018)		0.035	Capital
Public Outreach Staff (5 Years)	Cost Estimation Made by Linda Dorn, Regional San		Operation (2023)		0.035	5 Years, beginning after Construction (2023- End of 2027).
Public Outreach Media (Year 1)	Cost Estimation Made by Linda Dorn, Regional San		Operation (2023)		0.035	1 Year, beginning after Construction (2023- End of 2023).
Public Outreach Media (Year 2-5)	Cost Estimation Made by Linda Dorn, Regional San		Operation (2023)		0.035	4 Years, beginning after the first year of Media (2024- End of 2027).
Ecological Monitoring Program	Provided byThe Fresh Water Trust	This is duplicative to some extent with the Ecological Program & Establishment section above; The Freshwater Trust plans to divide the costs between up front in Ecological Program & Establishment and ongoing costs here.	Operation (2018)		0.035	89 Years
Pipeline & Pump Station Operations and Maintenance	Facilities Plan, 2017		Operation (2023)		0.035	84 Years
Pipeline & Pump Station Renewal and Replacement Fund	Cost Estimation Made by Dave Richardson, W&C	Includes a sinking fund payment made annually to replace pump station and customer turnouts in Year 50; fund terminates at year 50 (not held for full 84 years)	Operation (2023)		0.035	50 Years (Until pump Replacement Occurs)
Groundwater Management	Cost Estimation Made by Dave Richardson, W&C	Includes groundwater modeling activities to address perceived groundwater impacts, meetings, TM, and coordination. Includes coordination with GSA and GSP activities.	Operation (2023)		0.035	84 Years
Groundwater Monitoring Program	Cost Estimation Made by Jim Blanke, W&C	Assumes GWL monitoring of 18 wells. WQ sampling for 2 wells (NO3 and TDS/general chemistry). Technical Memorandum and coordination.	Operation (2023)		0.035	84 Years

# APPENDIX C – United States Bureau of Reclamation Approval Memo



IN REPLY REFER TO: **MP-730 PRJ-1.10** 

# United States Department of the Interior

BUREAU OF RECLAMATION Mid-Pacific Regional Office 2800 Cottage Way Sacramento, CA 95825-1898

DEC 1 6 2015

#### MEMORANDUM

To:	Director, Policy and Administration Attention: 84-50000
Through:	David G. Murillo Regional Director
From:	Michelle H. Denning Regional Planning Officer

Subject: Review Team Recommendation that the Sacramento Regional County Sanitation District Title XVI Recycled Water Feasibility Study for the South Sacramento County Agriculture & Habitat Lands Recycled Water Project is Complete

The purpose of this memorandum is to request your concurrence with the Review Team's findings for the Sacramento Regional County Sanitation District (Regional San) Title XVI Recycled Water Feasibility Study (Report). For the reasons outlined below, the Review Team finds the Report is complete and meets the requirements of Public Law (P.L.) 102-575, as amended, and the Bureau of Reclamation's Directives and Standards (WTR 11-01), Title XVI Water Reclamation and Reuse Program Feasibility Study Review Process. Therefore, the Mid-Pacific Region recommends Reclamation find that the Report meets the requirements of a feasibility study, as defined under Section 1604 of P.L. 102-575, as amended.

Reclamation received a copy of Regional San's Report on June 14, 2014. The MP Region conducted an initial review of the Report and determined there was sufficient information to begin the review process. In a memorandum to you dated July 3, 2014, the MP Region recommended establishment of a Review Team to include Ms. Katharine Dahm (Policy and Administration), Ms. Jennifer Beardsley (PNRO), and Ms. Nicole Johnson (MPRO). The Director, Policy and Administration concurred, and the Review Team was established.

The Report was reviewed and compared to the criteria identified in the Directives and Standards for the review process on feasibility reports. By letter dated September 16, 2014, Regional San was requested to revise the Report to improve its format and provide additional information as required by the Directives and Standards, as they relate to the proposed South Sacramento County Agriculture & Habitat Lands Recycled Water Project (South County Ag Project). Regional San revised and resubmitted the Report on February 3, 2015.

A second review of the Report was conducted and by letter dated March 16, 2015, additional information was requested regarding the Recharge Pond component of the South County Ag Project and the "No Project Costs for Existing Agricultural Uses". In response to this request and our meeting on September 16, 2015, by letter dated April 29, 2015, Regional San submitted errata for the Report for WTR 11-01 Section (8)(e) – *Legal and Institutional Requirements*, to address the unresolved issues surrounding these project elements.

Based on the review of the final submittal by Regional San, the Review Team finds the Report meets the requirements of a complete feasibility study as identified in WTR 11-01 and, therefore, meets the requirements of a feasibility study as defined in Section 1604 of P.L. 102-575, as amended. The MP Region requests your concurrence and approval of the review team's finding.

If you have any further questions or concerns, please contact Ms. Nicole Johnson at 916-978-5085 or njohnon@usbr.gov.

cc: 84-51000 (KDahm) PN-6520 (CLay)

Concur:

Roseann Gonzales Oirector, Policy and Administration

2016