

Mojave Region Proposition 84 IRWM Round 3 Grant Attachment 4 – Budget



Introduction

This Attachment provides a summary of the overall Proposal budget as well as the budgets for the individual projects. A Proposal Budget (per Table 9 of the California Department of Water Resources (DWR) 2015 Proposal Solicitation Package (PSP) for this grant application) provides a snapshot of the overall Proposal costs. Each individual project budget is broken down by work plan tasks (per Table 8 of the PSP) and is consistent with Attachment 3 Work Plan and Attachment 5 Schedule.

The total budget for this proposal is \$28.5M. Of this amount, \$4.0M is being requested from DWR through the IRWM Grant Program, of this \$7.0M is being provided through non-State funding sources (funding match), and \$17.5M is being provided through other State funds (for example, the State Water Resources Control Board (SWRCB) State Revolving Fund (SRF) Loan Program, Cleanup and Abatement Grants) and is not being used towards the Proposal's funding match.

Consistency with Work Plan and Schedule

Both the Work Plan and Schedule provide discussions of the work items under the general categories outlined in the budget and are thus consistent with the budget items provided in this attachment. The general categories for the budget are as follows:

- a) Direct Project Administration
- b) Land Purchase/Easement
- c) Planning/Design/Engineering/Environmental Documentation
- d) Construction/Implementation

Budgets Provided

A summary budget for the Proposal is provided as Table 4-1 (PSP Table 9) (the end of this document). Projects in this Proposal are numbered as follows:

- 1. Mojave Region Commercial, Industrial and Institutional (CII) Turf Phase II Removal Program
- 2. Hi-Desert Sewer Collection System Phase 1A
- 3. Leak Detection Services for Mojave Region 100% DAC Small Water Systems Phase 1 Program

Tables 4-1 through 4-3 (PSP Table 8) provide detailed budgets for each of the individual projects consistent with the categories provided in the Guidelines.

Funding Match

Please note that for many of the budget categories shown in each budget table, there may be several tasks and sub-tasks. The budget tables also present the proposed funding match for each project within the Proposal, including information that describes how each project will contribute to the Proposal's 25% funding match. While the Mojave Region is serving almost 80% disadvantaged communities based on population, only one of the three projects is requesting a funding waiver - *Leak Detection Services for Mojave Region 100% DAC Small Water Systems Phase 1 Program*. If the DAC project for which a funding match waiver is being requested is removed, the funding match will increase from 24.6% to 25%, as shown in row (f) of Table 4-4.

Project Budgets

Table 4-1 – Project Budget (PSP Table 8)					
Proposal Title: Mojave Region IRWM 2015 Round 3 Proposal					
Project Title: Mojave Region CII Turf Phase II Removal Program					
Project serves a need of a DAC?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Funding Match Waiver request?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
		(a)	(b)	(c)	(d)
Category		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source	Total Cost
(a)	Direct Project Administration	\$50,000	\$0	\$0	\$50,000
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0
(c)	Planning/Design/Engineering/Environmental Documentation	\$20,000	\$0	\$0	\$20,000
(d)	Construction/Implementation	\$680,000	\$250,000	\$0	\$930,000
(e)	Grand Total, (a) through (d)	\$750,000	\$250,000	\$0	\$1,000,000

* The Non-State Funding source for match for this Project will be from a Federal US Bureau of Reclamation Grant Agreement No. R15AP00132: “Mojave Region CII Turf Removal Program.”

Description of Project Budget

The following text describes how the budget shown is reasonable, based on current available information. The Mojave Region CII Turf Phase II Removal Program has an estimated total cost of \$1,000,000.

Total costs of the Project have been assessed based on the Mojave Region’s past experience with the existing Mojave CII Turf Removal Project which was awarded via the Proposition 84 Integrated Regional Water Management (IRWM) Drought Grant funds and similar projects of this type.

Each budget category includes costs related to each Task described in the Work Plan (Attachment 3), and is described below.

Budget Category (a): Direct Project Administration

Direct project administration costs total \$50,000, which will cover individual tasks including Administration (Task 1) and Reporting (Task 3). These costs have been estimated based on the Mojave Water Agency’s (MWA’s) previous experience with similar water rebate types of projects and related administration tasks. As such, Administration (Task 1) costs are estimated at 3% of the total project cost; Reporting (Task 3) costs are also estimated at 3% of total project cost.

Budget Category (b): Land Purchase/Easement

No land acquisition activities (Task 4) are required for implementation of this project.

Budget Category (c): Planning/Design/Engineering/Environmental Documentation

This category has a cost total of \$20,000, which will cover the Design/Engineering (Task 6). Task 5 (Assessment and Evaluation) is included in the Mojave Region IRWM Plan completed in June 2014, so no budget was required for this document. MWA will advertise the Turf Removal Program and perform public outreach, focusing on large landscape customers. Outreach will be eighteen months of advertising for the Project to include Print and

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Broadcast media ads and attending community functions to distribute multilingual applications. Task 7: Environmental Documentation is already 100% complete from a previous phase of the turf program and the permitting task (Task 8) is not applicable for this Project. The costs for the Project Monitoring Plan (Task 9) have been included in the Design/Engineering Task.

Budget Category (d): Construction/Implementation

Contract Services (Task 10) does not apply to this Project, so this budget category (d) includes costs for Construction Administration (Task 11) and Construction/Implementation (Task 12). For Task 11, costs for construction administration are estimated at \$30,000 using MWA’s previous experience with turf replacement projects. The proposed Task 12: Construction/Implementation budget is based on the assumption that \$900,000 in rebates will be provided for the total eighteen months of project implementation. MWA staff will work with large landscape customers, through its retail water purveyors, to write contracts for reimbursing \$1 per square foot of turf removal.

Table 4-2 – Project Budget (PSP Table 8)					
Proposal Title: Mojave Region IRWM 2015 Implementation Proposal					
Project Title: Hi-Desert Sewer Collection System Phase 1A					
Project serves a need of a DAC?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Funding Match Waiver request?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source**	Total Cost
(a)	Direct Project Administration	\$0	\$0	\$390,000	\$390,000
(b)	Land Purchase/Easement	\$0	\$291,948	\$0	\$291,948
(c)	Planning/Design/Engineering/Environmental Documentation	\$0	\$0	\$2,122,164	\$2,122,164
(d)	Construction/Implementation	\$2,750,000	\$6,439,763	\$14,932,967	\$24,122,729
(e)	Grand Total, (a) through (d)	\$2,750,000	\$6,731,710	\$17,445,131	\$26,926,841

* The Non-State Funding source for the match for this Project is from the United States (US) Department of Interior, Bureau of Reclamation (USBR) Title XVI Water Reclamation and Reuse Program. USBR has appropriated HDWD \$6,897,500 towards the Phase 1 Sewer Collection System and the WRF. Also, HDWD has been awarded an US EPA grant for this Project totaling \$334,500 to assist with geotechnical studies and right-of-way acquisition.

** The Other State Funding sources include a State Water Resources Control Board (SWRCB) Cleanup and Abatement grant (\$1.5M) and a State Clean Water State Revolving Fund (CWSRF) loan (1%) for the total cost of the Project.

Description of Project Budget

The following text describes how the budget shown is reasonable, based on current available information. The Hi-Desert Sewer Collection System Phase 1A has an estimated total cost of \$26,926,841.

Total costs of the Project have been assessed based on an engineer’s estimate and the Hi-Desert Water District’s (District’s) past experience with similar projects of this type.

Each budget category includes costs related to each Task described in the Work Plan (Attachment 3), and is described below.

Budget Category (a): Direct Project Administration

Direct project administration costs total \$390,000, which will cover individual tasks including Administration (Task 1), Labor Compliance (Task 2) and Reporting (Task 3). These costs have been estimated based on the District’s previous experience with similar types of projects and related administration tasks. As such, all three tasks are estimated at 0.5% of the total project cost or \$130,000 for each task.

Budget Category (b): Land Purchase/Easement

While all construction activity for the sewer pipelines will be contained within streets right-of-way (r/w), including pipe storage, excavation, spoils, and compaction activities, the *Hi-Desert Water District Assessment District No. 2014-1 Engineer’s Report* (Webb, 2015) (Hi-Desert Water District (HDWD) Assessment District Report) identified several utility easements or r/w that will need to be acquired in order to maintain the alignment proposed for the sewer collection facilities. The types of easements include several roadways that do not have any

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identified rights-of-way dedication and several easements necessary for the alignments that cross residential and commercial property. The Report also presented a cost estimate for the required easements for the entire Phase 1 at \$769,751.

Task 4 includes a budget for the land easement task at an estimated \$291,948 (cost estimated using the HDWD Assessment District Report's Total Easement Acquisitions for all of Phase 1 (\$769,751) multiplied by the cost ratio of total construction costs for *Phase 1A / Total Phase 1* = (\$22,354,593 / \$58,940,272).¹

Budget Category (c): Planning/Design/Engineering/Environmental Documentation

This budget category includes costs for Design/Engineering (Task 6), Environmental Documentation (Task 7), Permitting (Task 8), and Project Monitoring Plan (Task 9). The Design task is approximately 98% complete and estimated from actual expenses to date from the District, totaling \$2,122,164.²

The Environmental Documentation task (Mitigated Negative Declaration (SCH#2009061035) including 2 addendums) is 100% complete and its cost is not included in this grant request.

Permitting costs are included in Task 6 (Design/Engineering) and include (1) Caltrans; (2) Town of Yucca Valley - an encroachment permit; and (3) Mojave Desert Air Quality Management District.

The cost for the Project Monitoring Plan (Task 9) has also been included in the Design/Engineering Task.

Budget Category (d): Construction/Implementation

This budget category includes costs for Construction Contracting Services (Task 10), Construction Administration (Task 11), and Construction (Task 12). Construction Contracting includes bidding and selection of the construction contractor(s) and is included in the fee for Task 11 – Construction Administration. Construction contingency has been budgeted under Construction Administration (Task 11), assuming 10% of the total construction cost, which accounts for the current level of design. Including the contingency, Task 11 has an estimated budget for the contract administration task at \$1,768,136 (cost estimated using the same method previously described in Task 6).³

Task 12 (Construction) is based on an engineer's estimate and includes 25.3 miles of sewer pipelines primarily in the eastern third of the HDWD's service area near the proposed Wastewater Reclamation Facility (WRF) as shown on Figure 3 (Attachment 2) and including manholes and necessary appurtenances. Also, two pump stations are included in Phase 1A: the Paxton Pump Station and Barron Pump Station.

¹ Easement costs multiplied by ratio of current Design Engineer's (Atkins) cost estimate (dated June 2015) (\$22,354,593) to the total collection system construction cost taken from Table 2 in *HDWD Assessment District Report* (less paving and the Kickapoo pump station) (\$58,170,521).

² Design costs taken from Table 3 in *HDWD Assessment District Report* and multiplied by ratio of current Design Engineer's (Atkins) stated in the previous footnote to the total WRF and collection construction cost taken from Table 2 in *HDWD Assessment District Report* (\$122,732,165).

³ Contract administration costs taken from Table 3 in *HDWD Assessment District Report* and multiplied by ratio of current Design Engineer's (Atkins) stated in the first footnote to the total WRF and collection construction cost detailed in the second footnote.

Table 4-3 – Project Budget (PSP Table 8)					
Proposal Title: Mojave Region IRWM 2015 Implementation Proposal					
Project Title: Leak Detection Services for Mojave Region 100% DAC Small Water Systems Phase 1					
Project serves a need of a DAC?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Funding Match Waiver request?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source (Funding Match)*	Cost Share: Other State Fund Source	Total Cost
(a)	Direct Project Administration	\$50,000	\$0	\$0	\$50,000
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0
(c)	Planning/Design/Engineering/Environmental Documentation	\$25,000	\$0	\$0	\$25,000
(d)	Construction/Implementation	\$425,000	\$0	\$0	\$425,000
(e)	Grand Total, (a) through (d)	\$500,000	\$0	\$0	\$500,000

*Waiver request is being asked for the funding match portion of this 100% DAC Project.

Description of Project Budget

The following text describes how the budget shown is reasonable, based on current available information. The Leak Detection Services for Mojave Region 100% DAC Small Water Systems Phase 1 Program has an estimated total cost of \$500,000.

Total costs of the Phase 1 Program have been assessed based on our Team member’s (California Rural Water Association (CRWA)) estimate and past experience with similar projects of this type. CRWA is currently teaming with MWA completing some evaluation of DAC common and urgent needs and has employees with many years’ of field experience in this type of leak detection methodology.

Each budget category includes costs related to each Task described in the Work Plan (Attachment 3), and is described below.

Budget Category (a): Direct Project Administration

Direct project administration costs total of \$50,000, which will cover individual tasks including Administration (Task 1) and Reporting (Task 3). These cost estimates have been estimated based on previous MWA experience with similar types of projects and related administration tasks. As such, Administration (Task 1) costs are estimated at 5% of the total project cost; Reporting (Task 3) costs are also estimated at 5% of total project cost.

Budget Category (b): Land Purchase/Easement

No land acquisition activities (Task 4) are required for implementation of this project.

Budget Category (c): Planning/Design/Engineering/Environmental Documentation

This budget category includes costs for Design/Engineering (Task 6), Environmental Documentation (Task 7), Permitting (Task 8), and Project Monitoring Plan (Task 9). The Design task is approximately 80% complete. The

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Environmental Documentation task and the Permitting tasks are not applicable to this Project. The cost for the Project Monitoring Plan (Task 9) is estimated at \$25,000 based on MWA/CRWA’s previous experience.

Budget Category (d): Construction/Implementation

Contract Services (Task 10) does not apply to this Phase 1 Program, so this budget category includes costs for Construction Administration (Task 11) and Construction (Task 12). For Task 11, costs for construction administration are estimated at \$25,000 using MWA’s previous experience with small water system (SWS) projects. The proposed implementation budget for Construction (Task 12) is based on the letter from CRWA estimating the average cost for leak detection for an SWS as follows:

SWS Leak Detection Support	Average Cost*	Assumed SWS Requiring Leak Detection Support	Total Cost Assumed for Phase 1 Program
Critical distribution zones leak detection support	\$4,500	11	\$49,500
Entire distribution network leak detection support	\$22,500	15	\$337,500
Subtotal		26	\$387,000
Contingency			\$13,000
TOTAL			\$400,000

*Obtained from California Rural Water Association (CRWA) in cost estimate sent on 6/30/15.

A budget of \$400,000 was assumed for the Construction Task (Task 12) for the Phase 1 Leak Detection in 26 DAC SWS in the Mojave Region. The basis for this budget is the assumption that approximately 15 of the 26 SWS would require their entire distribution network to be reviewed using the proposed leak detection method and the remaining eleven systems would only require the critical distribution zones to be reviewed using the leak detection method. However, due to unknown field conditions, these costs are only estimates and this program has been made as flexible as possible to accommodate unusual field findings.

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Proposal Budget

The Proposal budget for all three projects is presented in Table 4-4 (PSP Table 9) below. The total cost of the Proposal is \$28.5M. A total of \$4.0M in grant funds is being requested in this Proposal, which is 100% from the Colorado River Funding Area and \$0 from the Lahontan Funding Area. The non-State funding match is 25 percent of the total.

Table 4-4 – Proposal Budget (PSP Table 9)						
Proposal Title: Mojave Region IRWM 2015 Round 3 Proposal						
Individual Project Title		(a)	(b)	(c)	(d)	(e)
		Requested Grant Amount	Cost Share: Non-State Fund Source (Funding Match)	Cost Share: Other State Fund Source	Total Cost	% Funding Match (Col b/ Col d)
(a)	Mojave Region CII Turf Phase II Removal Program (CR)	\$750,000	\$250,000	\$0	\$1,000,000	25%
(b)	Hi-Desert Sewer Collection System Phase 1A (CR)	\$2,750,000	\$6,731,710	\$17,445,131	\$26,926,841	25%
(c)	Leak Detection Services for Mojave Region 100% DAC SWS Phase 1 (CR)	\$500,000	\$0*	\$0	\$500,000	0%
(d)	Proposal Total, (a) through (c)	\$4,000,000	\$6,981,710	\$17,445,131	\$28,426,841	24.6%
(e)	DAC Funding Match Waiver Total	\$500,000	\$0*	\$0	\$500,000	--
(f)	Grand Total	\$3,500,000	\$6,981,710	\$0	\$27,926,841	25.0%

*Funding Match Waiver Requested
 (CR) Colorado River Funding Area
 (L) Lahontan Funding Area