

Merced Integrated Regional Water Management Merced Region Drought Grant Proposal

Attachment 4: Work Summary



Attachment 4 consists of the following item:

✓ **Work Summary**

Brief summaries of the anticipated tasks, categorized into four budget categories: a) Direct Project Administration; b) Land Purchase/Easement; c) Planning/Design/Engineering/Environmental Documentation; and d) Construction/Implementation. The Work summary should also identify the anticipated deliverables for each task and current status of each project.

Work Summary

Brief summaries of the anticipated tasks necessary to complete each project are presented in this attachment with tasks organized by the four budget categories, as applicable:

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

Each Project Work Summary also identifies the anticipated deliverables for each task and the current status of the project, including permitting activities, to indicate the current stage of each task. The following Project Work Summaries are presented in this proposal:

- Highlands Groundwater Conservation Project
- Cressey Recharge Basin Enlargement Project
- Water Meter Conservation Project



Highlands Groundwater Conservation Project

This project would deliver surface water from MID to 717 acres each year to be used in lieu of groundwater pumping in the Highlands area to better manage the groundwater basin. This project will allow water to be banked in the groundwater basin. During critically dry years, when insufficient surface water is available to meet full demands, the existing wells that have been idled would be available for pumping. In most years, sufficient surface water would be delivered to meet 100 percent of demands, completely offsetting groundwater use. In critically dry years, it is anticipated that groundwater pumping would be needed to meet 25 percent of demands, with surface water meeting the remaining 75 percent of demands. Facilities required include an upgraded booster pump station No. 32, modified booster pump station No. 40, replacement of 6,500 feet of existing pipelines, installation of 4,000 feet of new pipelines, and installation of outlet structures and pressure boxes.

Table 4-1 provides the work summary for this project. To-date, only the conceptual design has been completed. The remaining tasks indicated below will be completed per the schedule in Attachment 6.

Table 4-1: Work Summary – Highlands Groundwater Conservation Project

Proposal Title: Merced Region Drought Grant Proposal		
Project Title: Highlands Groundwater Conservation Project		
Task	Description of Work	Deliverables
<i>Category (a) Direct Project Administration</i>		
Task 1: Project Administration	Manage project timeline and deadlines; prepare invoices and backup documentation; complete project coordination.	<ul style="list-style-type: none"> • Invoices and Backup Documentation • Performance Monitoring Plan
Task 2: Labor Compliance Program	Follow OSHA guidelines, receive weekly certified payroll reports.	<ul style="list-style-type: none"> • Adoption of Labor Compliance Program • Certified Payroll Reports
Task 3: Reporting	Prepare and submit progress reports to DWR.	<ul style="list-style-type: none"> • Quarterly and Final (Project Completion) Reports to DWR starting after contract execution
<i>Category (b) Land Purchase/Easement</i>		
Task 4: Land Acquisition	Acquire various easement or fee strips along the proposed pipeline and laterals (approximately 30 foot easements are required across parcels 056-040-096, 056-040-078, and 056-040-071)	<ul style="list-style-type: none"> • Proof of Title Transfer for Easements and Quitclaims • Fee Simple Documentation
<i>Category (c) Planning/Design/Engineering/Environmental Documentation</i>		
Task 5: Assessment and Evaluation	Conceptual design work has been completed.	<ul style="list-style-type: none"> • Conceptual Design (see Appendix 3-1)
Task 6: Final Design	Develop design plans (30%, 60%, 90% and final), calculations, project specifications and bid documents.	<ul style="list-style-type: none"> • Final Plans and Technical Specifications • Bid Documents
Task 7: Environmental Documentation	Prepare and adopt an Initial Study/ Mitigated Negative Declaration (IS/MND) to comply with CEQA.	<ul style="list-style-type: none"> • Adopted IS/MND • Notice of Determination



Proposal Title: Merced Region Drought Grant Proposal		
Project Title: Highlands Groundwater Conservation Project		
Task	Description of Work	Deliverables
Task 8: Permitting	Acquire Encroachment Permit (no regulatory permits from the United States Corps of Engineers [USACE], United States Fish and Wildlife Service [USFWS], Regional Water Quality Control Board [RWQCB], or the California Fish and Wildlife [CDFW] are anticipated to be needed)	<ul style="list-style-type: none"> Final County Encroachment Permit
Category (d) Construction/Implementation		
Task 9: Construction Contracting	Prepare bid package, bid advertisement, and review, select, and award the construction project.	<ul style="list-style-type: none"> Bid Advertisement Notice of Award Contract Notice to Proceed
Task 10: Construction		
Subtask 10.1 Mobilization and Site Preparation	Conduct mobilization (bringing construction equipment to the project site and establishing project staging areas), and surveying and staking of the project site.	<ul style="list-style-type: none"> Survey maps Approved Submittals
Subtask 10.2 Project Construction	Replace and/or construct new trunk and lateral lines (10,500 feet total), install outlet structures, install larger pump at booster station No. 32, modify booster station No. 40 to remove pump and install spill structure.	<ul style="list-style-type: none"> Daily Reports Progress Reports
Subtask 10.3 Performance Testing and Demobilization	Perform pressure and leak test on pipeline and performance/witness testing at the booster stations.	<ul style="list-style-type: none"> Project Completion Certificate Project Performance Monitoring Plan Warranties As-built Drawings
Task 11: Environmental Compliance / Mitigation / Enhancement	Develop and implement Storm water Pollution Prevention Plan BMPs	Approved SWPPP; Notice of Intent (NOI) for the SWPPP
Task 12: Construction Administration	Perform construction management and inspection, respond to requests for information (RFIs) and Change Order requests, maintain the budget and schedule, and notify the public of construction activities.	<ul style="list-style-type: none"> Inspection Reports Field Notes Progress Meeting



Cressey Recharge Basin Enlargement Project

This project will expand an existing recharge basin from 8 acres to 13 acres to directly recharge and better manage the Merced Groundwater Subbasin. The Cressey Recharge Basin Enlargement Project is the second phase of an existing recharge basin project. The site is located at the southwest corner of Mercedes Avenue and Jones Road, north of the town of Winton, in the unincorporated area of Merced County. The existing recharge basin began operating in 2011 after successful completion of an associated pilot project. The pilot project was demonstrated to recharge 2.6 AF/AC/day. Similar to the existing project, the sources of recharge water for the expanded recharge basin would include Lake McClure flood releases, precipitation from the watershed, and planned releases by the MID Board of Directors when water is available. Facilities required include the enlarged basin and upgrades to the SCADA system.

Table 4-2 provides the work summary for this project. Conceptual design of the enlargement project is complete. Field assessments, including geotechnical investigations, were conducted as part of the pilot project. As monitoring wells and necessary appurtenances have been installed as part of original recharge project, they will not need to be built as part of this proposed project. The remaining tasks indicated below will be completed per the schedule in Attachment 6.

Table 4-2: Work Summary – Cressey Recharge Basin Enlargement Project

Proposal Title: Merced Region Drought Grant Proposal		
Project Title: Cressey Recharge Basin Enlargement Project		
Task	Description of Work	Deliverable
<i>Category (a) Direct Project Administration</i>		
Task 1: Project Administration	Manage project timeline and deadlines; prepare invoices and backup documentation; complete project coordination	<ul style="list-style-type: none"> • Invoices and Backup Documentation • Performance Monitoring Plan
Task 2: Labor Compliance Program	Follow OSHA guidelines, receive weekly certified payroll reports.	<ul style="list-style-type: none"> • Adoption of Labor Compliance Program • Certified Payroll Reports
Task 3: Reporting	Prepare and submit progress reports and final project completion report to DWR.	<ul style="list-style-type: none"> • Quarterly and Final (Project Completion) Reports to DWR starting after contract execution
<i>Category (b) Land Purchase/Easement</i>		
Task 4: Land Acquisition	Not Applicable. The property where the basin would be expanded is owned by MID.	Not Applicable
<i>Category (c) Planning/Design/Engineering/Environmental Documentation</i>		
Task 5: Assessment and Evaluation	The pilot recharge project included geotechnical investigations at the 18-acre site; monitoring wells have also been installed as part of the original project. Because site investigations and assessment of the pilot project and original recharge basin project have been completed and is directly applicable to this project, no additional effort is required.	<ul style="list-style-type: none"> • Conceptual Design, including results of the geotechnical investigation (see Appendices 3-9, 3-10, and 3-11)



Proposal Title: Merced Region Drought Grant Proposal		
Project Title: Cressey Recharge Basin Enlargement Project		
Task	Description of Work	Deliverable
Task 6: Final Design	Conceptual design work has already been completed, based primarily on the work that was previously done as part of the pilot project and the original recharge basin project. Thus, this task would involve development of 30%, 60%, 90%, and final design plans, calculations, project specifications and bid documents.	<ul style="list-style-type: none"> • Final Plans and Technical Specifications • Bid Documents
Task 7: Environmental Documentation	Prepare and adopt an IS/MND to comply with CEQA	<ul style="list-style-type: none"> • Adopted IS/MND • Notice of Determination
Task 8: Permitting	Acquire encroachment Permit (no regulatory permits from USACE, USFWS, RWQCB, or the CDFW are anticipated to be necessary)	<ul style="list-style-type: none"> • Final County Encroachment Permit
<i>Category (d) Construction/Implementation</i>		
Task 9: Construction Contracting	Prepare bid package, advertise bid; review, select, and award the construction project.	<ul style="list-style-type: none"> • Bid Advertisement • Notice of Award • Contract • Notice to Proceed
Task 10: Construction		
Subtask 10.1 Mobilization and Site Preparation	Conduct mobilization (bring construction equipment to the project site and establish project staging areas), and complete surveying and staking of the project site	<ul style="list-style-type: none"> • Approved Submittals • Approved Permits
Subtask 10.2 Project Construction	Perform earthwork (basin excavation, site grading and stockpiling of excess materials on site or off-haul of excess material); upgrade SCADA hardware and programming	<ul style="list-style-type: none"> • Daily Reports • Progress Reports (monthly)
Subtask 10.3 Performance Testing and Demobilization	Commissioning period for SCADA system to troubleshoot any technical issues. Staff training on controls and instrumentation. On-site monitoring well to document water table elevations.	<ul style="list-style-type: none"> • Project Completion Certificate • Project Performance Monitoring Plan • Warranties • As-built Drawings
Task 11: Environmental Compliance/Mitigation/Enhancement	Develop and implement SWPPPs	<ul style="list-style-type: none"> • Approved SWPPP; NOI for the SWPPP
Task 12: Construction Administration	Perform construction management and inspection, respond to requests for information (RFIs) and Change Order requests, maintain the budget and schedule, and notify the public of construction activities.	<ul style="list-style-type: none"> • Inspection Reports • Field Notes • Progress Meeting



Water Meter Conservation Project

LCGSD proposes to install 525 new water meters (500 connections to homes and 25 connections to businesses, schools and County Park) and transmitter equipment in the community of Le Grand. Each meter would be housed in a box under the curb outside each site to allow for real-time water usage readings. The project is an emergency drought-preparedness project and would immediately help alleviate the dire drought impacts identified in Attachment 2 for this DAC, particularly related to the precipitous drop (50 feet) in groundwater levels that has resulted in the need for LCGSD to redrill all of its municipal wells.

Table 4-3 provides the work summary for this project. To date, final design has been completed (see **Appendix 3-16**). The remaining tasks indicated below will be completed per the schedule in Attachment 6.

Table 4-2: Work Summary –Water Meter Conservation Project

Proposal Title: Merced Region Drought Grant Proposal		
Project Title: Water Meter Conservation Project		
Task	Description	Deliverable
<i>Category (a) Direct Project Administration</i>		
Task 1: Project Administration	Manage project timeline and deadlines; prepare invoices and backup documentation; perform project coordination; execute MOU between MID and LCGSD.	<ul style="list-style-type: none"> • Invoices and Backup Documentation • Performance Monitoring Plan
Task 2: Labor Compliance Program	Follow OSHA guidelines, receive weekly certified payroll reports.	<ul style="list-style-type: none"> • Adoption of Labor Compliance Program • Certified Payroll Reports
Task 3: Reporting	Prepare and submit progress reports to DWR.	<ul style="list-style-type: none"> • Quarterly and Final (Project Completion) Reports to DWR starting after contract execution
<i>Category (b) Land Purchase/Easement</i>		
Task 4: Land Acquisition	Not Applicable. Installation of new meters will occur on existing road rights-of-ways.	
<i>Category (c) Planning/Design/Engineering/Environmental Documentation</i>		
Task 5: Assessment and Evaluation	Not Applicable. Project is 100% Bid ready.	
Task 6: Final Design	Final Design has been completed.	<ul style="list-style-type: none"> • Bid Documents (see Appendix 3-16)
Task 7: Environmental Documentation	Prepare a CEQA Notice of Exemption (NOE). The NOE is expected to be completed in July 2014.	<ul style="list-style-type: none"> • Notice of Exemption
Task 8: Permitting	Acquire encroachment Permit. No regulatory permits from USACE, USFWS, RWQCB, or CDFW are anticipated to be required	<ul style="list-style-type: none"> • Final City Encroachment Permit



Proposal Title: Merced Region Drought Grant Proposal Project Title: Water Meter Conservation Project		
Task	Description	Deliverable
Task 9: Construction Contracting	Advertise the bid package; review, select, and award the construction project.	<ul style="list-style-type: none"> • Bid Advertisement • Notice of Award • Contract • Notice to Proceed
<i>Category (d) Construction/Implementation</i>		
Task 10: Construction		
Subtask 10.1 Mobilization and Site Preparation	Procure equipment and coordinate shutdown procedures.	<ul style="list-style-type: none"> • Approved Submittals
Subtask 10.2 Project Construction	Install new meters at all service connections.	<ul style="list-style-type: none"> • Daily Reports • Progress Reports (monthly)
Subtask 10.3 Performance Testing and Demobilization	Pressure test service connections. Monitor and record demands throughout the service area.	<ul style="list-style-type: none"> • Project Completion Certificate • Project Performance Monitoring Plan • Warranties • As-built Drawings
Task 11: Environmental Compliance/Mitigation/Enhancement	File a CEQA Notice of Exemption.	<ul style="list-style-type: none"> • Notice of Exemption
Task 12: Construction Administration	Perform construction management and inspection, respond to requests for information (RFIs) and Change Order requests, maintain the budget and schedule, and notify the public of construction activities.	<ul style="list-style-type: none"> • Inspection Reports • Field Notes • Progress Meeting