

Pre-Return Flow Root River Monitoring Plan Bid Proposal Summary

PREPARED FOR: Waukesha Water Utility
 PREPARED BY: CH2M
 DATE: January 19, 2017
 PROJECT: 684409

Overview

The United States Geological Survey (USGS) at Madison, WI and the University of Wisconsin - Parkside (UW-Parkside) at Kenosha, WI provided proposals to complete the tasks documented in the *Pre-Return Flow Root River Monitoring Plan* (December, 2016). The Plan includes water chemistry and biological monitoring plans to assess pre-return flow conditions of the Root River near and downstream of the proposed return flow. Sampling would occur from February through December 2017. A summary of the sampling efforts that were included in this bid are the following:

Water Chemistry Sampling	
Total Number of Sampling Events:	17
Total Number of Water Quality Samples:	1,152
Macroinvertebrate Sampling and Habitat Assessment	
Total Number of Sampling Events:	2
Total Macroinvertebrate Samples:	12
Fish Sampling	
Total Number of Sampling Events:	2
Total Fish Samples:	10

Proposals Received

The USGS and UW-Parkside each provided two proposals to present variations in levels of effort provided by both parties. These proposals include:

- USGS Proposal – Base**
 Budget for the completion of all Root River Monitoring Plan tasks.
- USGS Proposal – Multi-parameter Probe**
 Budget for equipment, equipment management and maintenance, and data retrieval and QA/QC for a multi-parameter water quality probe at the proposed return flow discharge Location C.
- UW-Parkside – Base**
 Budget for the completion of all Root River Monitoring Plan tasks.
- UW-Parkside – Base without Multi-parameter Probe**
 Budget for the completion of all Root River Monitoring Plan tasks excluding the multi-parameter water quality probe monitoring at Location C.

	USGS Proposed Budget Base	USGS Proposed Budget Multi-parameter Probe	UW-P Proposed Budget Base	UW-P Proposed Budget Base without Multi-parameter Probe
<i>Water Chemistry Sampling</i>				
Total Labor Cost:	\$81,178	\$11,400	\$29,193	\$29,193
Total Equipment Cost:	\$15,000	\$15,000	\$11,700	\$3,060
Total Travel Expense Cost:	\$8,840	\$200	\$2,652	\$2,652
Total Laboratory Expense Cost:	\$42,922	-	\$42,572	\$42,572
Total WQ Chemistry Sampling Cost:	\$147,940	\$26,600	\$86,117	\$77,477
<i>Macroinvertebrates Sampling and Habitat Assessment</i>				
Total Labor Cost:	\$15,144		\$14,623	\$14,623
Total Equipment Cost:	\$250		\$3,936	\$3,936
Total Travel Expense Cost:	\$1,530		\$336	\$336
Total Laboratory Expense Cost:	\$3,900		<i>Included in above costs</i>	<i>Included in above costs</i>
Total Macro and Habitat Cost:	\$20,824		\$18,895	\$18,895
<i>Fish Sampling</i>				
Total Labor Cost :	\$16,207		\$5,327	\$5,327
Total Equipment Cost:	\$100		\$4,164	\$4,164
Total Travel Expense Cost:	\$1,900		\$336	\$336
Total Fish Sampling Cost:	\$18,207		\$9,827	\$9,827
Totals	\$186,971	\$26,600	\$114,839	\$106,199
Potential Cost Share (25%)	\$46,743	\$6,650	-	-
Revised Total	\$140,228	\$19,950	\$114,839	\$106,199

Recommendation

The proposals from USGS and UW-Parkside meet the scope and requirements of the Plan for a period between February and December 2017. Contracting with UW-Parkside is recommended for the Base Proposal without the multi-parameter probe for a budget cost of \$106,199. This proposal provides the following benefits to the City of Waukesha:

- Low cost for the base monitoring.
- Utilizes local resources and minimizes travel costs.
- Provides college student educational engagement opportunities by utilizing a local University that maintains quality control while also utilizing student help to provide educational opportunities while minimizing labor costs.
- Utilizes a professor from the University of Wisconsin-Waukesha to lead the fish biological sampling.
- Engages a non-federal entity that can partner with future grants, such as the EPA Challenge grants.

Contracting with USGS is recommended for monitoring with the multi-parameter probe at Location C for a budget cost of \$26,600. This proposal provides the following benefits to the City of Waukesha:

- Utilizes decades of experience in deploying and maintaining remote sensing probes in river environments.
- Compliments an existing contract between the City and USGS for monitoring at Location C.
- Allows USGS to store and transmit data to the existing webpage for data transmittal and monitoring.

Combining these two proposals have a budget total cost of \$132,799.