

LimnoTech Preliminary Information for Phase II

Phase II Overview

Development of a pollution control implementation plan requires a clear understanding of the specific sources contributing to the impairment, such that control actions can be specifically targeted to address the appropriate sources. Existing PCB monitoring data on the Spokane River are sufficient to demonstrate the several different sources (e.g. stormwater runoff, wastewater treatment plants) contribute PCBs to the river. The available data are inadequate, however, to accurately define the magnitude of each source or provide information on the importance of other potential sources (e.g. groundwater, snowmelt). The Spokane River Regional Toxics Task force is gathering data in a step-wise manner to support development of an Implementation Plan to address PCB impairment. Year 1 monitoring being conducted during 2014 is focusing on low river flow conditions and is designed to determine the magnitude of dry weather PCB sources such as groundwater. An additional year of monitoring is necessary to define the magnitude of PCBs entering the river from stormwater runoff and snow melt. This second year of monitoring would build upon the data currently being collected, using the same basic framework of:

- 1) Measuring PCB concentrations at locations in the river where flow gaging stations exist;
- 2) Using the observed concentration and flow data to define the PCB load (e.g. grams per day) passing through each sampling location; and
- 3) Determining the mass of PCBs being delivered to each river segment as the difference between downstream and upstream load

Rather than focus only on low flow conditions, Year 2 sampling would be conducted during periods of stormwater runoff and snow melt. In addition to measuring instream concentrations, PCB concentrations would also be measured at key stormwater outfalls and tributaries delivering snow melt. Information collected in Year 2 would be used in conjunction with the Year 1 monitoring that is currently being conducted to define the magnitude of all major PCB source categories.

Phase II Costs

Our estimate for Phase II costs is \$75,000, corresponding to

- Preparation for Field Activities: \$15,000
- Data Processing: \$25,000
- Meetings and Coordination: \$35,000

The only change from our original cost estimate is for Preparation for Field Activities, as we will be sending two people (Cathy and our field supervisor) to the field preparation instead of one. Note that the Coordination costs assume that we will have someone in the field for the entire synoptic survey period, but not for the seasonal sampling.