Background

The mission of the Task Force is to identify and remove sources of PCBs to the Spokane River. Sampling of PCBs in Spokane River biofilm by Ecology (Era-Miller and Wong, 2022) identified several areas of elevated PCBs in the Mission Reach. Furthermore, a review of historical land use and other data sources identified numerous upland areas in the vicinity of Mission Reach with the potential for previous release of PCBs (LimnoTech, 2022). The available information is insufficient to define whether groundwater delivery of historic PCB sources is contributing to elevated PCB concentrations of the Mission Reach.

The Task Force is unable to conduct future monitoring activities due to its plan to sunset in June of 2023. The Task Force’s Technical Track Work Group, in conjunction with Ecology, has determined it worthwhile to scope out activities that could be conducted by the entity that eventually replaces the Task Force. This document provides a “conceptual” scope of work describing in broad terms groundwater sampling in the Mission Reach. Should the Task Force approve, this document would be converted in the future into a more formal scope of work.

Purpose

The purpose of this project is to conduct monitoring PCBs in the groundwater/surface water interface (GSI) near locations of observed biofilm contamination in the Mission Reach of the Spokane River. The outcome of this effort will be an improved understanding of the delivery of PCBs via groundwater from upland areas of the Mission Reach to the Spokane River.

Scope of Work

The scope of work consists of two components: 1) Monitoring of PCBs at the groundwater/surface water interface of the Spokane River, and 2) Data assessment.

Task 1: Monitoring of PCBs at the Groundwater/Surface Water Interface of the Spokane River

Previous work conducted by the Task Force demonstrated the feasibility of collecting water from the groundwater/surface water interface using temporary push-point piezometers (i.e., Henry samplers). This task consists of sampling PCBs at up to 56 GSI locations associated with observed biofilm contamination in the Mission Reach, corresponding to eight GSI samples associated with seven areas of contamination (Figure 1). Samples would be collected during a single low-flow condition and analyzed using Method 1668.
Task 2: Data Interpretation and Reporting

The data collected in Task 1 will be validated and blank-corrected in accordance with the project QAPP. The validated data will then be assessed to address the following questions:

- How do PCB concentrations at the GSI stations compare to Spokane River concentrations and water quality standards?
- Which of the previously identified sites with the potential for historical PCB release are located in the vicinity of elevated PCB concentrations at the GSI stations?

All project findings will be documented in a technical report and all PCB data collected will be uploaded to Ecology’s Environmental Information Management (EIM) database.
Deliverables and Schedule

The expected deliverables and schedule for delivery are provided in Table 1.

Table 1. Deliverables and Schedule

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft QAPP</td>
<td>Four weeks after project initiation</td>
</tr>
<tr>
<td>Final QAPP</td>
<td>Twelve weeks after project initiation</td>
</tr>
<tr>
<td>Sample collection</td>
<td>July 31, 2024</td>
</tr>
<tr>
<td>Laboratory results</td>
<td>October 31, 2024</td>
</tr>
<tr>
<td>Data validation</td>
<td>November 30, 2024</td>
</tr>
<tr>
<td>Draft technical report</td>
<td>December 31, 2024</td>
</tr>
<tr>
<td>Final technical report</td>
<td>January 31, 2025</td>
</tr>
<tr>
<td>Data loaded to EIM</td>
<td>January 31, 2025</td>
</tr>
</tbody>
</table>

Budget

A rough estimate of total cost for conducting this work is $150,000. These estimates are based upon cost estimates assuming the use of contractors (field and laboratory) that have worked for the Task Force in the past. Itemized costs are provided in Table 2.

Table 2. Itemized Budget

<table>
<thead>
<tr>
<th>Item</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft and final QAPP</td>
<td>$10,000</td>
</tr>
<tr>
<td>Task 1: Monitoring of PCBs at the groundwater/surface water interface of the Spokane River</td>
<td>$120,000</td>
</tr>
<tr>
<td>Task 4: Data assessment and reporting</td>
<td>$20,000</td>
</tr>
<tr>
<td>Total</td>
<td>$150,000</td>
</tr>
</tbody>
</table>

References

