6.3 Studies to Address Data Gaps

Due to the diffuse nature of PCB source area, poorly defined pathways between source areas and delivery mechanisms, and uncertain environmental response, the Task Force will contemplate additional studies to address some key data gaps. The Task Force will consider the need to conduct any of these studies as part of their annual Implementation Review Summary. It is noted that some of these studies may be conducted by Ecology's Environmental Assessment Program, in which case the Task Force will provide review and comment.

6.3.1 Key Data Gaps

Key data gaps identified by the Task Force correspond to bioaccumulation of PCBs in fish and assessment of sediment PCB concentrations. Measured water column PCB concentrations in the Spokane River are currently at levels similar to, and often below, the listed water quality standard. Fish tissue concentrations, however, remain well above target levels.

There is also a commonly held assumption that legacy bottom sediments are not a significant contributor to PCB impairment of the Spokane River because: 1) The River is viewed as sediment-poor, with many non-depositional zones, and 2) Remediation activities have been conducted at areas of known legacy sediment contamination. This assumption may not be accurate, however, as there are known areas of sediment deposition in impounded sections of the river that have not been sufficiently sampled to provide a clear understanding of sediment PCB contributions. Furthermore, assessment of congener patterns in PCB sources, bottom sediments, and fish may provide insight on the sources most responsible for existing fish tissue levels.

6.3.2 Study Plan

The Task Force intends to address these key data gaps in a three step process, consisting of: 1) Screening-level mining of existing data, 2) Formatting of data, 3) More rigorous assessment. Results of the screening analyses will inform understanding of the importance of water column vs. sediment sources in contributing to fish tissue contamination, and likely sources of PCBs to sediments and fish. These high-level results will also help target areas where more rigorous assessment is needed. Rigorous assessment of PCB congener patterns require the data to be stored in a particular format that is different from the format currently used to store the data. The second phase of work will consist of compiling and formatting all relevant data into a database into the required format. The final phase of work will consist of the implementation of more rigorous studies that are identified as part of the screening level assessment. Details regarding the specific scope and schedule for this work will be developed by the Task Force's Technical Track Work Group.