

SRRTTF Budget Allocations: Monitoring and Control Actions

MONITORING to fulfill Comp Plan Element 6.1 (“Implementation Effectiveness Assessment”), which states “In-river concentrations will be assessed via review of long-term river monitoring data to be collected by the Task Force and/or Ecology...The above assessment [review of data] will be conducted five years after the issuance of this Comprehensive Plan.”

Partial Synoptic Sampling - High Frequency (top choice by 13 of 16 TTWG respondents)

Scope: Conduct multi-purpose synoptic sample at select locations to address Barker Road to Plantés Ferry Park groundwater contribution and track concentration changes. (Note: Ecology will also perform a central tendency data evaluation in 2019) (This element requires the SRRTTF to generate new additional data for compilation)

Locations - Barker Road, Plantés Ferry Park, and Nine Mile gaging station locations

Sampling Plan - Collect samples at each location four times during a calendar year so that each river flow regime is covered

Frequency - Every other year

Budget - **\$50,000 / event** (could be conducted twice over four-year period, for total of \$100,000)

Approved for funding with the \$310,000 legislative funding

1. **Study groundwater upgradient of Kaiser at Industrial Park.**

Scope: Utilize existing Kaiser groundwater data to develop a plan to determine the location of suspected sources within Industrial Park in collaborate with the Toxics Control Program which may involve the drilling and sampling of monitoring wells.

Budget - **\$140,000 (estimate)**

Comp Plan Element 5.14 Category C Identification of Sites of Concern for Contaminated Groundwater

2. **Perform a PCB mass balance assessment in the Spokane River in the Plantés Ferry Park/Upriver Dam/Greene Street reaches.**

Scope: Collect dry weather flow data and surface water samples from these three locations to better determine the impacts of the gaining and losing reaches in the area. The addition of Upriver Dam location data will provide the opportunity to assess the impact of groundwater in the Upriver Dam to Greene Street gaining reach, where a contaminated groundwater site is located. (This work could also provide monitoring data based upon the option selected) **Budget** - **\$50,000 (estimated)**

Comp Plan Element 5.14 Category C Identification of Sites of Concern for Contaminated Groundwater

3. **Conduct product testing.** **Scope:** Identify consumer products (dyes, etc.) to be tested for PCB utilizing input from previous Ecology testing data and others, such as the Spokane Solid Waste Directory.

Budget - **\$35,000 (estimated)**

Comprehensive Plan Element 5.8 PCB Product Testing

4. **Green Chemistry Advancement.** **Scope:** In coordination with Ecology's HWTRP, prepare a presentation/proposal to Greener Solutions Program at UC Berkeley, develop a syllabus, and pursue funding for the Program's efforts. Engage with WSU (CEREO?) with an eye toward WSU starting Greener Solutions Program. (Third party prep of materials)

Budget - **\$10,000 (estimated)**

Comprehensive Plan Element 5.7.2 Support of Green Chemistry Alternatives

5. **Develop outreach materials and/or update Spokane River toxics guide.** **Scope:** Develop various education and outreach materials to increase business and public awareness on how to 1) identify and dispose of PCB-containing items, and/or 2) adjust purchasing practices to select products with lower PCB content. Options include an information package and checklist for use by agencies that make site visits to businesses on PCB issues and management; public education and outreach materials on PCB waste disposal and selecting products with lower PCB content; updating the Spokane River toxics guide; adapting the San Francisco

Estuary Project (SFEP) document to make it suitable for use as a guidance document for Spokane-area building contractors on how to reduce PCB load during demolition and remodeling. (Third party preparation of materials)

Budget - \$25,000

Comprehensive Plan Elements 5.8.2 Conduct public education on products containing PCBs; 5.9.2 Waste Disposal Assistance; 5.13 Building Demolition and Renovation Control; and 5.15.2 Actions That Require Development of New Work Plans

Other on list for alternative funding:

Analyze existing data to identify potential relationships between homologs/congeners in the water column and homologs/congeners in fish tissue at Plantes Ferry Park

Scope: Per LimnoTech scope, perform a screening level analysis with existing data to assess if fish tissue PCB concentrations are at a level generally consistent with observed water column concentrations.

Budget - \$2,000 (quoted)

Comprehensive Plan Element 6.3.1 Key Data Gaps

Conduct a PMF analysis utilizing available PCB data.

Scope: Have Dr. Rodenburg at Rutgers perform a watershed scale PMF analysis using available analytical data including river data, discharger monitoring data, and groundwater data. Purpose would be to try and identify any PMF factors that would help in the identification of specific source types such as Aroclors (legacy) or inadvertently produced PCBs.

Budget - \$50,000 to \$75,000 (estimated)

Comprehensive Plan Element 5.14 Category C Identification of Sites of Concern for Contaminated Groundwater

Study to Understand Relationship Between Fish Tissue / Water Column / Sediment.

Scope: SRRTTF's Spokane River data shows fairly consistent geometric mean PCB concentrations at Plantes Ferry Park and Greene Street, however, fish tissue data is markedly different at those locations. In an attempt to understand the cause of this difference, data collection in the Mission Park area would be undertaken. Water column sampling at Greene Street annually during four river flow regimes each year for three years. Sediment survey in the Mission Park area once during the same three-year period. With input from WDFW, sample fish tissue (three species), in the three years of age range, once at the end of three-year period

Budget - \$100,000 (estimate)

Comprehensive Plan Element 6.3 Studies to Address Data Gaps

Perform a PCB mass balance assessment in the River in the Spokane gage to Nine Mile gage segment.

Scope: Collect dry weather flow data and surface water samples from these two locations to better determine the impact of the gaining reach in the area. Groundwater flow into this reach of the river has not yet been evaluated for PCB contribution. (This work could also provide monitoring data based upon the option selected.)

Budget - \$50,000 (estimated)

Comp Plan Element 5.14 Category C Identification of Sites of Concern for Contaminated Groundwater

Educate local governments about PCB related Low Impact Development (LID).

Scope: Prepare educational materials for and make presentations to local governments concerning the benefits of LID related to PCB with an emphasis on the City of Spokane's experience. (Third party preparation of materials)

Budget - \$5,000 (estimated)

Comprehensive Plan Element 5.4 Low Impact Development

Survey Schools and Public Buildings.

Scope: Meet with Spokane Public Schools to educate them on PCB issues with respect to their presence in building materials. Offer third party sampling and testing services for a building demolition project (Linwood Elementary) to support the development of BMPs for the demolition and management of building materials.

Budget - \$20,000 to \$25,000 (estimated)

Comprehensive Plan Elements 5.9.2 Waste Disposal Assistance; 5.13 Building Demo & Renovation Control; & 6.2.2 Survey Schools & Public Buildings