Watershed-Wide Next Steps/Candidate Studies

Straw poll order: #9, #5, 1, 8, 2, 3/4, 6 - Note comment that some Mission Reach projects may exceed importance of some Watershed projects.

Undefined Sources: Dry Weather/Low Flow
• Groundwater PCB Load at Mirabeau
  1. Additional biofilm monitoring with higher spatial resolution
  2. Additional water column sampling at Mirabeau
  3. Explore historic land use at SIP, evaluate data to see if we can differentiate a signal (eg., see past Ecology studies)
• Dry Weather Source Downstream of USGS Gage
  4. Synoptic survey to support mass balance assessment (split long reach into several segments) – Consider Synoptic Survey for purposes other than mass balance (more data is necessary for this area) – also check for potential unknown source of PCB-11 downstream of USGS gage. (opportunistically collect grabs to support trend assessment)
• Consider collecting data further downstream below Nine Mile to upper Lake Spokane - include LSR inputs [Placeholder – No action]
• Groundwater/Other Interactions between Plante’s Ferry and USGS Gage
  5. Further our understanding of groundwater hydrology - integrate with Mission Reach study
  6. Synoptic survey with greater spatial resolution (possibly combine with #4 above) – consider synoptic survey for purposes other than mass balance (more data is necessary for this area)

Undefined Sources: Wet Weather/High Flow
• High-Flow Mobilization of PCB Sources
  7. High flow synoptic survey (may need to use passive sampling, or take larger volume samples in order to see a signal)
• Groundwater Loading of Infiltrated Stormwater – Historically installed DRY WELLs (‘old style’)
  8. Infiltrated Stormwater – DRY WELLs – Initial assessment with existing data to determine potential effect of high contributing area historic dry wells
    • Later potential studies
      • Mass balance on dry well itself
      • Tracer study
      • Groundwater monitoring
      • Review how long it takes dry wells to drain
      • Review capacity of soils in the vadose zone to trap PCBs

Bioaccumulation/Understanding How Fish get their PCBs: Mission Focus?
• GW/Sediment sampling – Tailor Mission Reach sampling to potentially support future bioaccumulation modeling. (Sample to determine the cause of elevated benthic concentrations) - Integrate with Mission Reach study
Measure PCB in groundwater source and sediment source (consider also sampling biofilm) — ensure data collected will also support a future Bioaccumulation model. WHERE — Mission Reach has sediment

• Later stages of potential bioaccumulation assessment
  • Macroinvertebrate sampling
  • Food web study
  • Benthic source assessment/Fate and Transport model.