

Overview of Results

Fish and Water Column PCBs – Fall 2020

TTWG Meeting

March 31, 2021

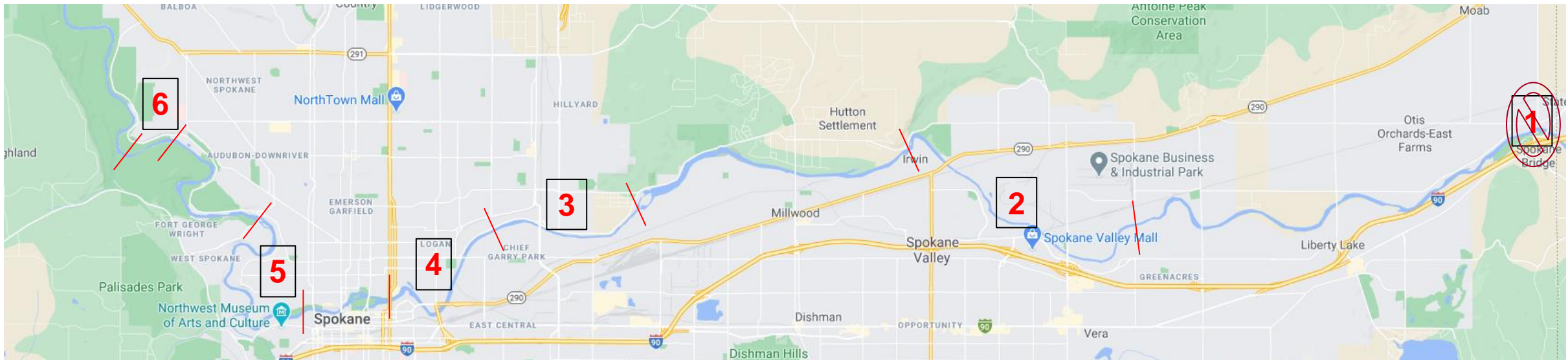


Background

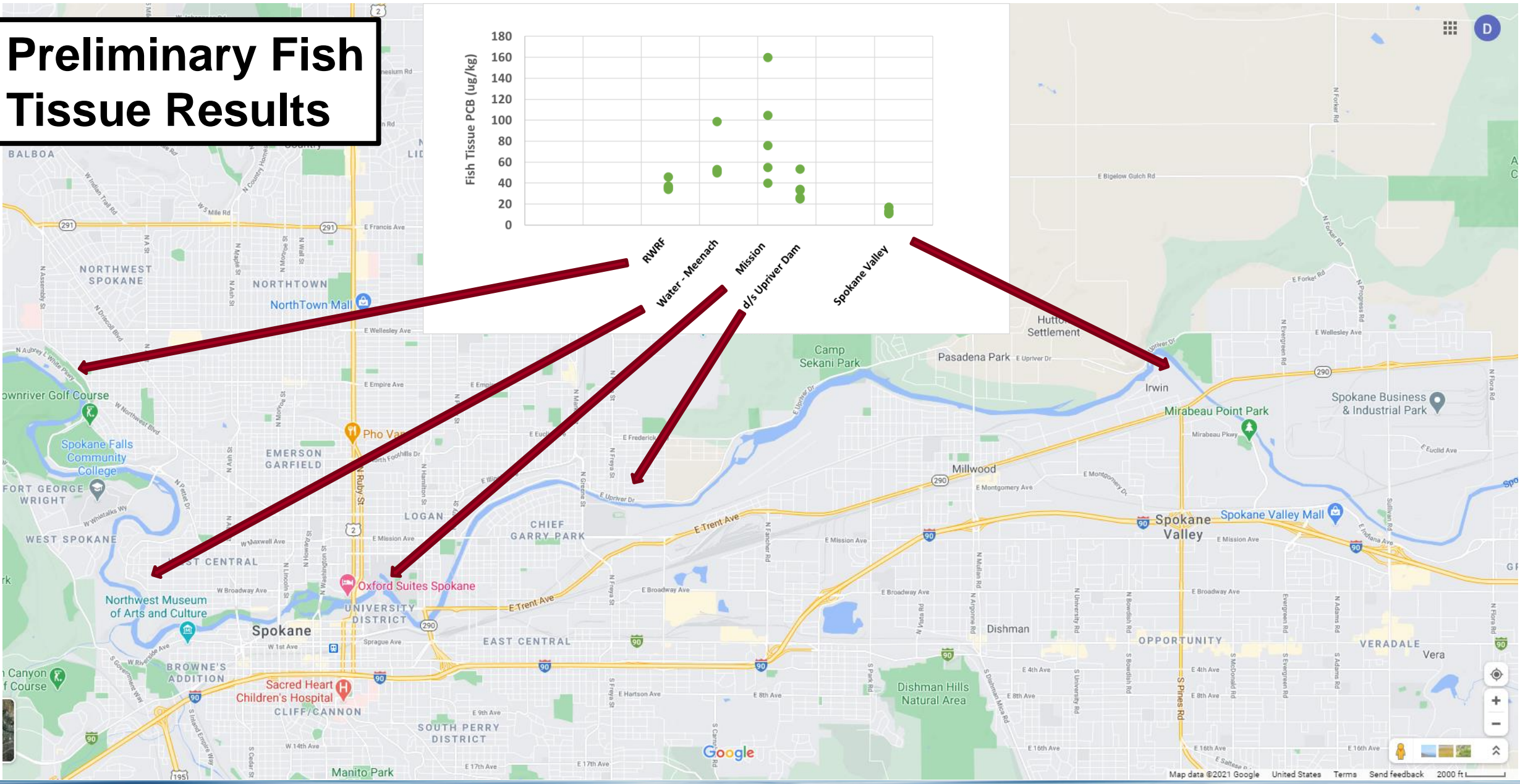
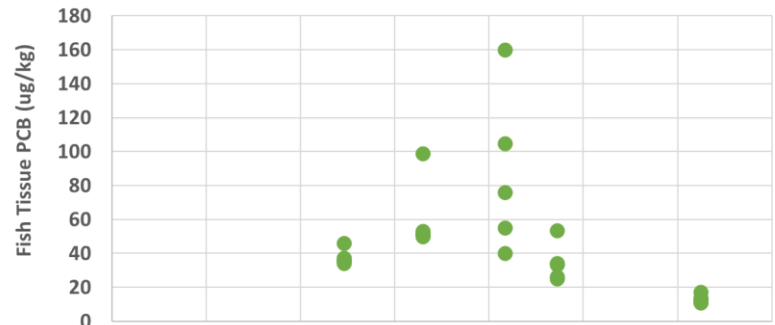
- SRRTTF has begun implementing a long-term PCB monitoring program
 - Fish: Year-old Redband Trout
 - Single event per monitoring year
 - Water column: Semi-Permeable Membrane Device
 - Three events per monitoring year: low, moderate and high flow
- Laboratory data from first SPMD event and fish tissue sampling has been received
 - Preliminary discussion of initial data review
 - Data have not been blank-corrected or validated

Fish Sampling Locations

1. State Line
 - Insufficient numbers of fish available
2. Flora Road to Donkey Island
3. Upriver Dam to Crestline Street
4. Crestline Street to Division Street (Mission Reach)
5. Water St. to TJ Meenach
6. RWRF to the kayak takeout site

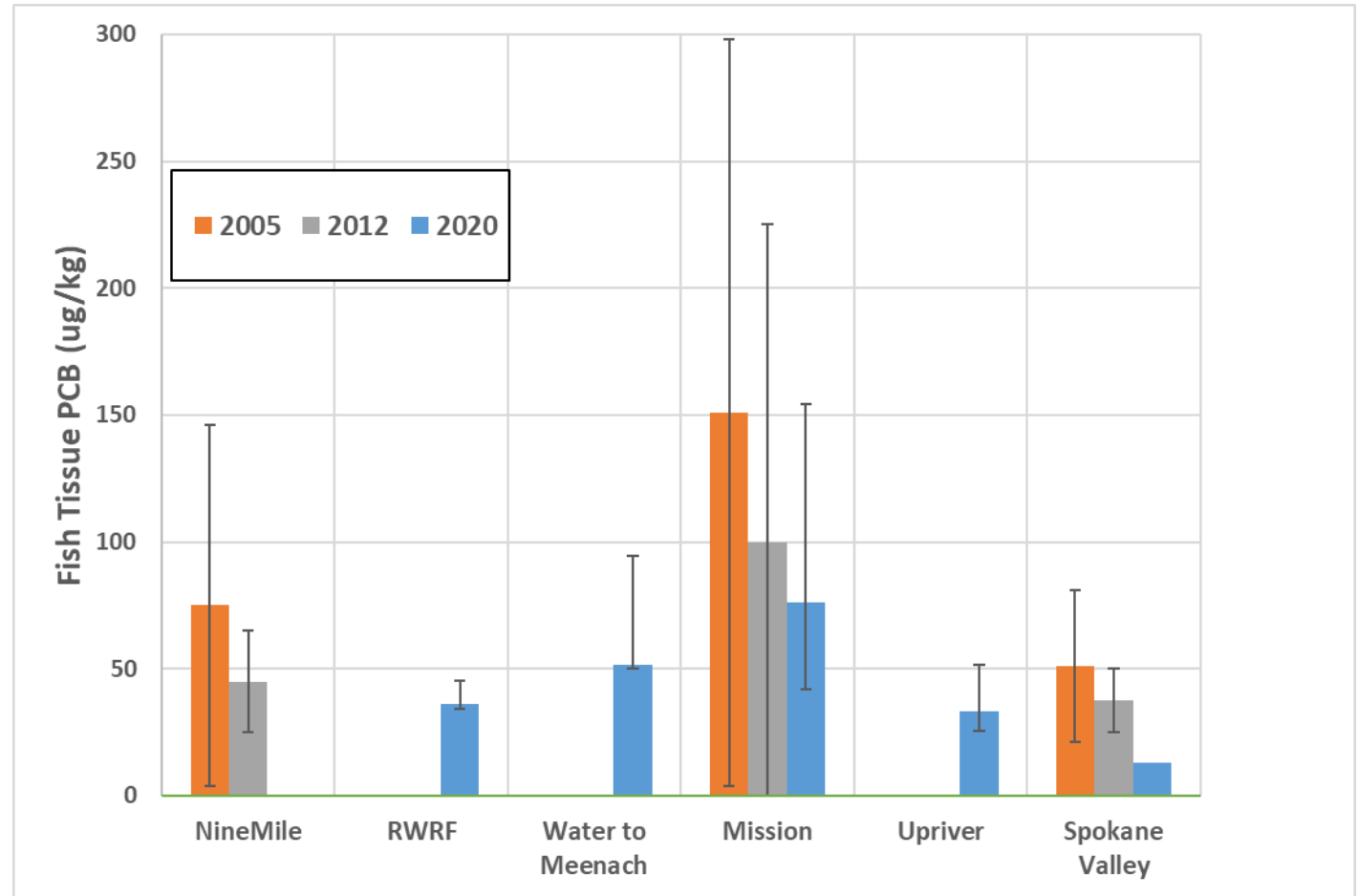


Preliminary Fish Tissue Results



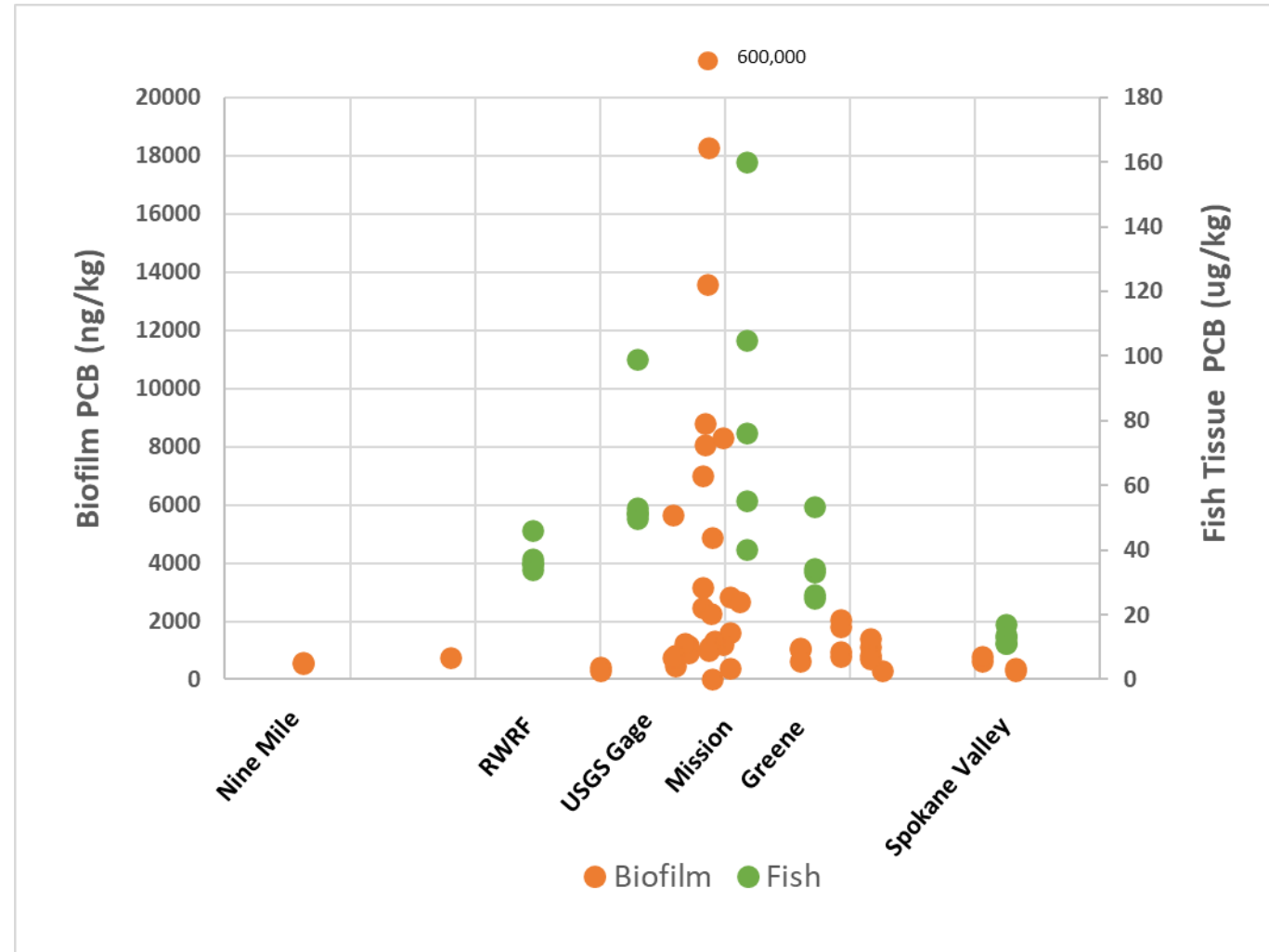
How Do Fish (Trout) Results Compare to Prior Years?

- Similar spatial pattern
 - Mission Reach roughly twice as high as other reaches
- Concentrations lower than prior years
 - Years are not directly comparable
 - Whole fish (2020) as opposed to fillets (2005 and 2012)
 - Year-old trout as opposed to a mix of ages
 - Similar lipid content



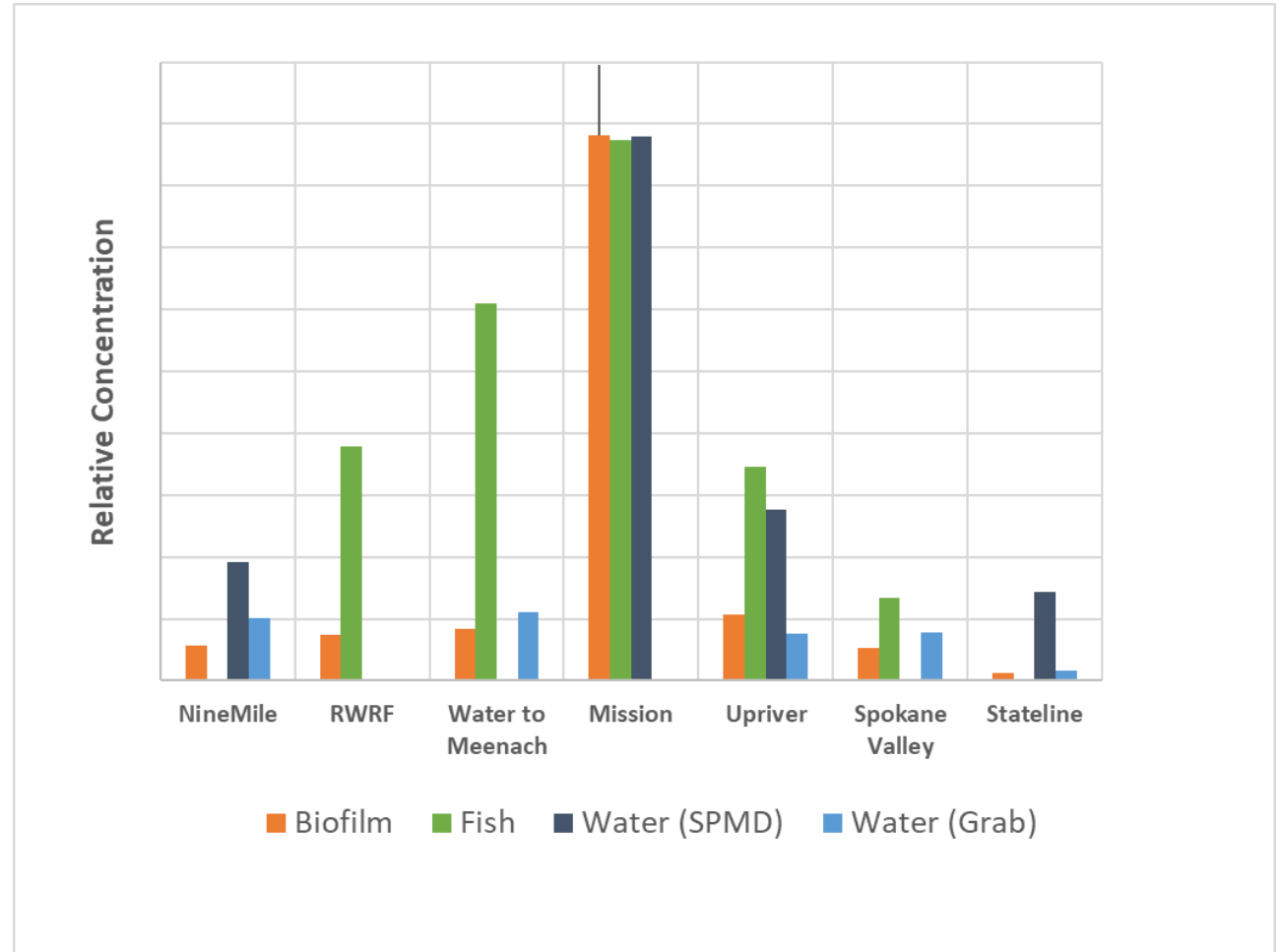
How Do Fish Results Compare to Other Media?

- Fish tissue and biofilm PCBs both peak in Mission Reach
- Fish tissue PCBs increase and decrease more gradually over distance than does biofilm



How Do Fish Results Compare to Other Media?

- Water column concentrations also peak in Mission Reach
 - SPMD may represent localized source
 - Sample collected directly adjacent to location of peak biofilm PCB concentrations



Interim Findings

- Weight of evidence continues to build regarding the presence of PCB source near Mission Reach
 - PCB “signal” appears to be present in water column*, sediment, and fish

*Based on a single, unvalidated SPMD sample

Spring 2021 Monitoring Update

- Second round of SPMD deployment completed
 - Winter moderate flow: mid-February to mid-March
- Artificial fill samples collected at same time as SPMD retrieval
 - Five samples each of brick and concrete substrate collected from river bottom
- “Overnight” Federal Express delivery of samples to laboratory took several days
 - Samples exceeded desired holding temperatures when delivered to the laboratory
 - First impression is this is not serious enough to invalidate the data

Winter 2021 Monitoring Update

- Interesting findings bank-side from Gravity as part of artificial fill sampling
 - Saw “a lot of cables with insulators” along the bank
 - Manager at No-Li Brewhouse said “they've dug up all kinds of things around that area”
- Potential source of PCB contamination?



Questions?

