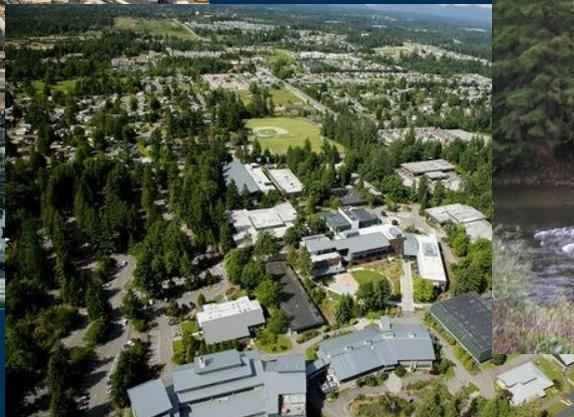




# Assessment of existing data for groundwater quality in the Duwamish watershed



<http://crosscut.com>



[www.greatbigcanvas.com](http://www.greatbigcanvas.com)



[www.ecy.wa.gov](http://www.ecy.wa.gov)

**Craig Senter and Kathy Conn**  
**U.S. Geological Survey**  
**Washington Water Science Center**

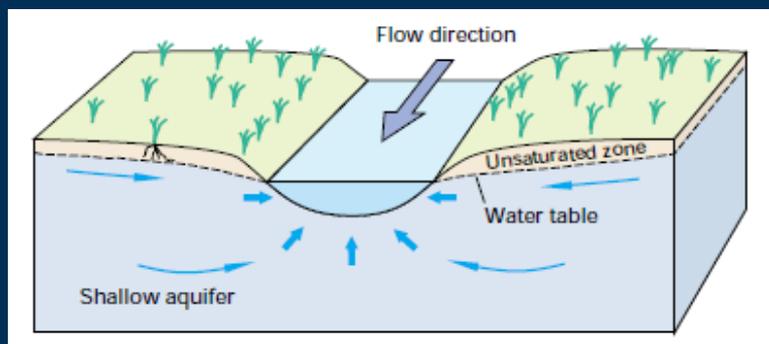
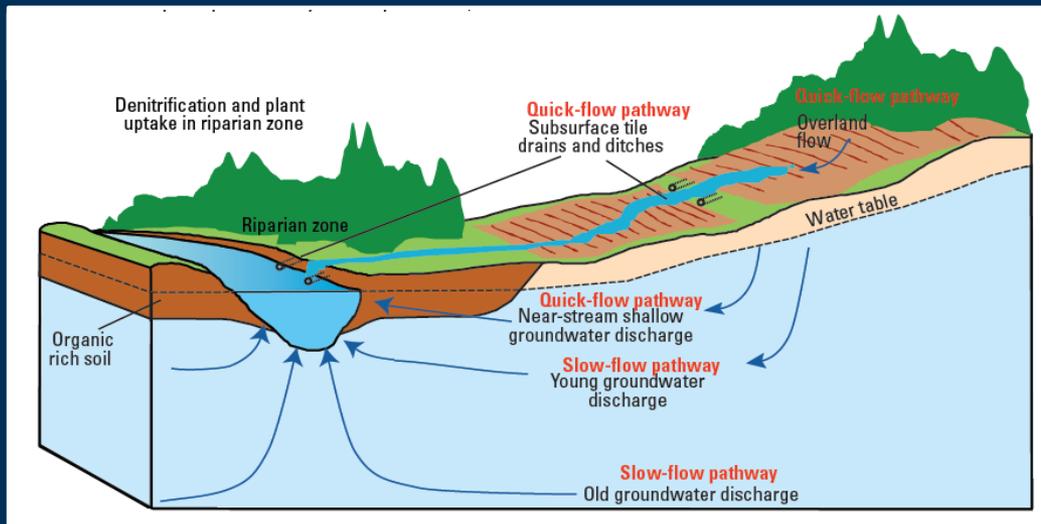
U.S. Department of the Interior  
U.S. Geological Survey

Green Duwamish Pollutant Loading Assessment  
Technical Advisory Committee  
April 10, 2019

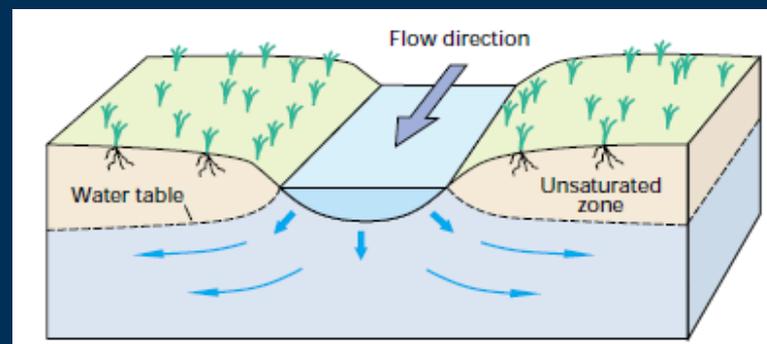
# Objectives

- Input values for HSPF model
  - Concentrations of contaminants in groundwater
- Preliminary chemical loading estimates from groundwater to Green-Duwamish River
  - How important is groundwater as a source of chemicals?

# Why Groundwater?



Gaining

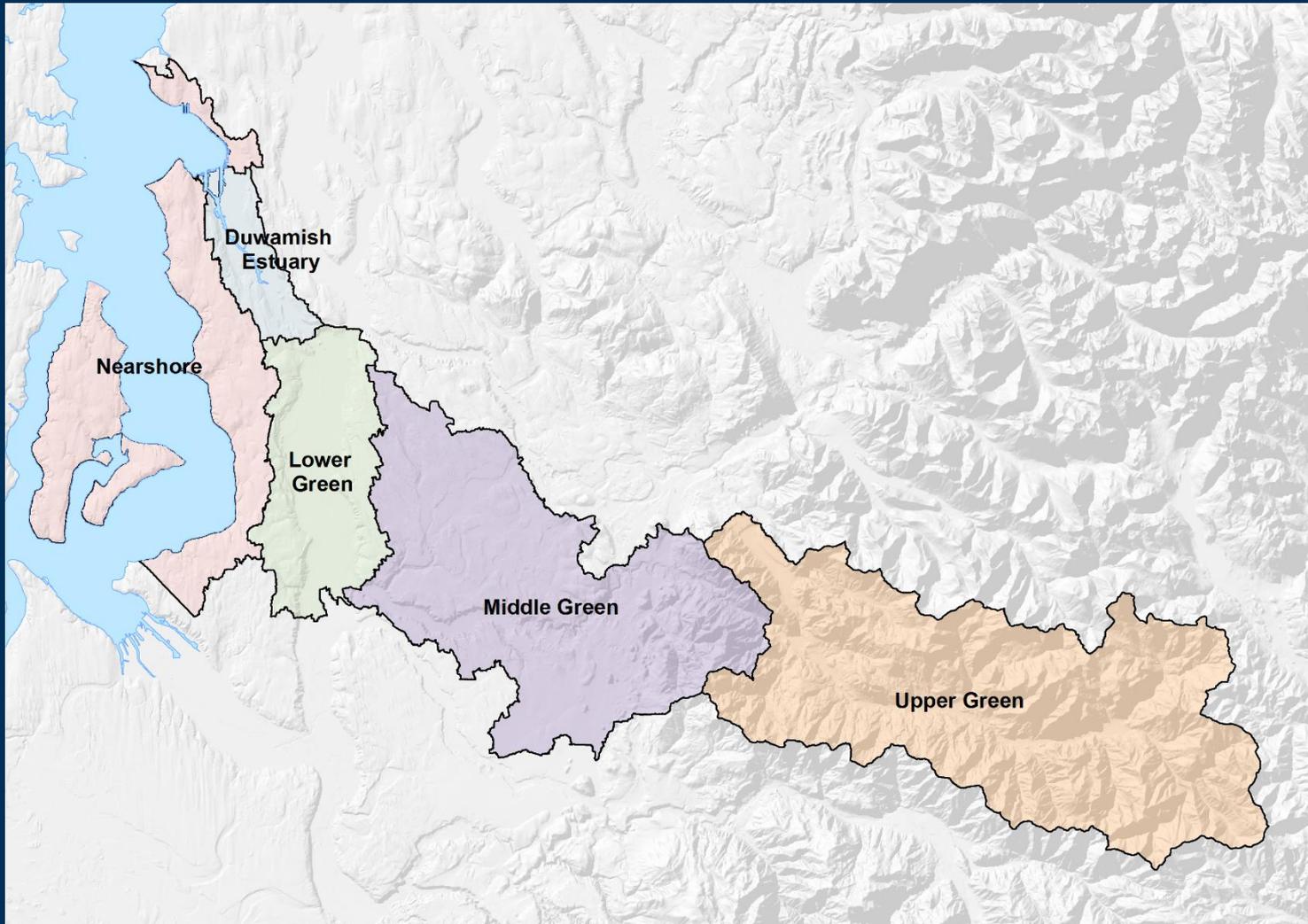


Losing

# Methods

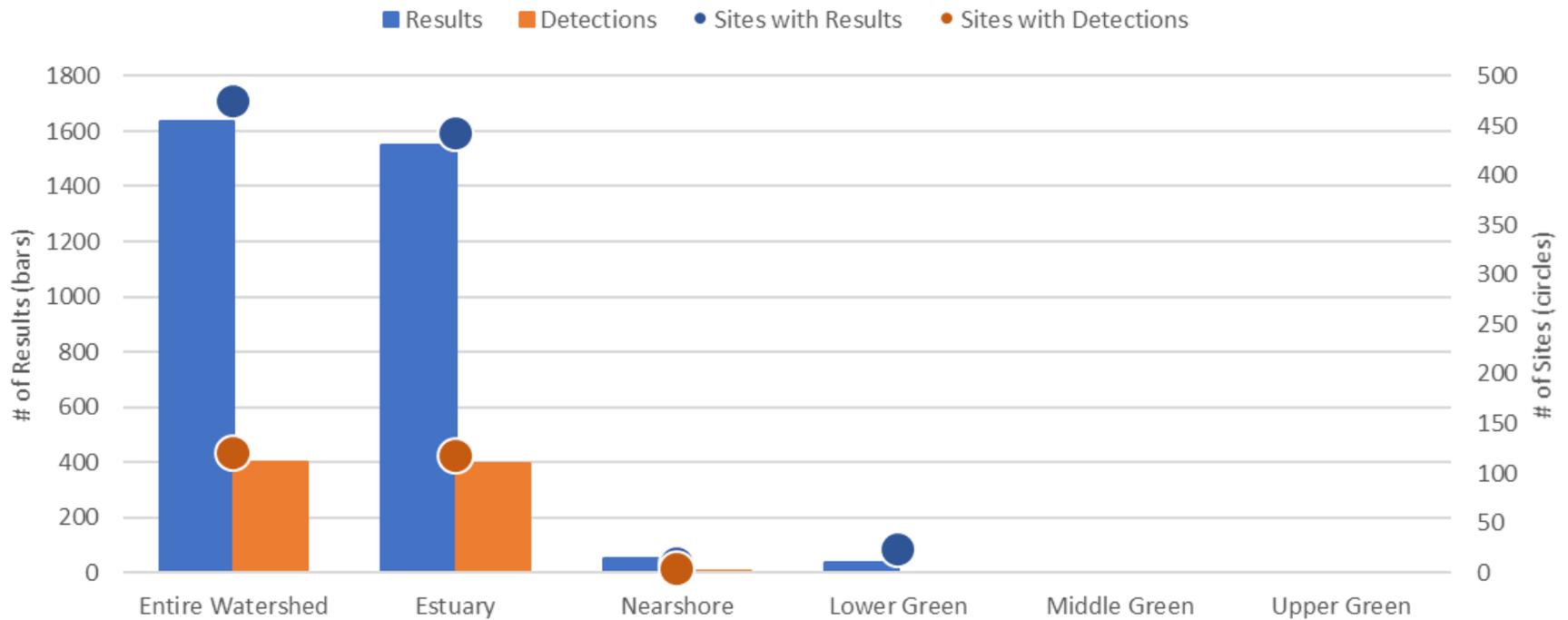
- **Compile groundwater chemical concentrations in the watershed**
  - **What parameters?**
    - PCBs
    - cPAHs
    - Arsenic
    - Phthalates (DEHP as surrogate)
    - Copper
    - Zinc
  - **Where from (databases)?**
    - USGS (NWIS)
    - Ecology (EIM)
    - Leidos
    - King County
    - Other site-specific studies

# Green/Duwamish Watershed

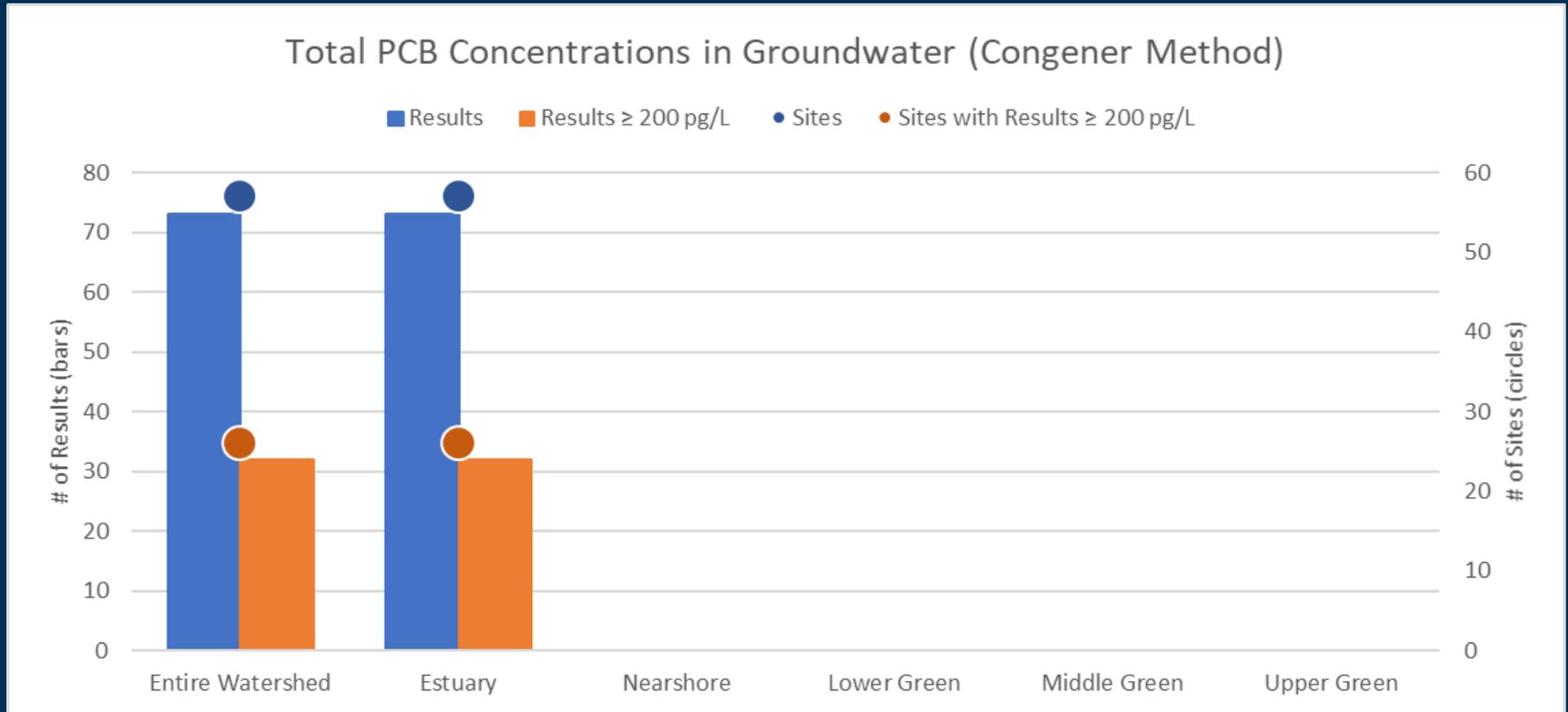


# Preliminary Results

Total PCB concentrations in Groundwater (Aroclor Method)



# Preliminary Results



# What's Next?

- **Continue to compile all available PCB data in the basin**
  - To support groundwater concentration estimates for each sub-basin
- **Compile other parameters of interest**
- **Identify gaps with all parameters geographically**
- **Explore surrogate methods or potential future sampling**

# Questions?



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