



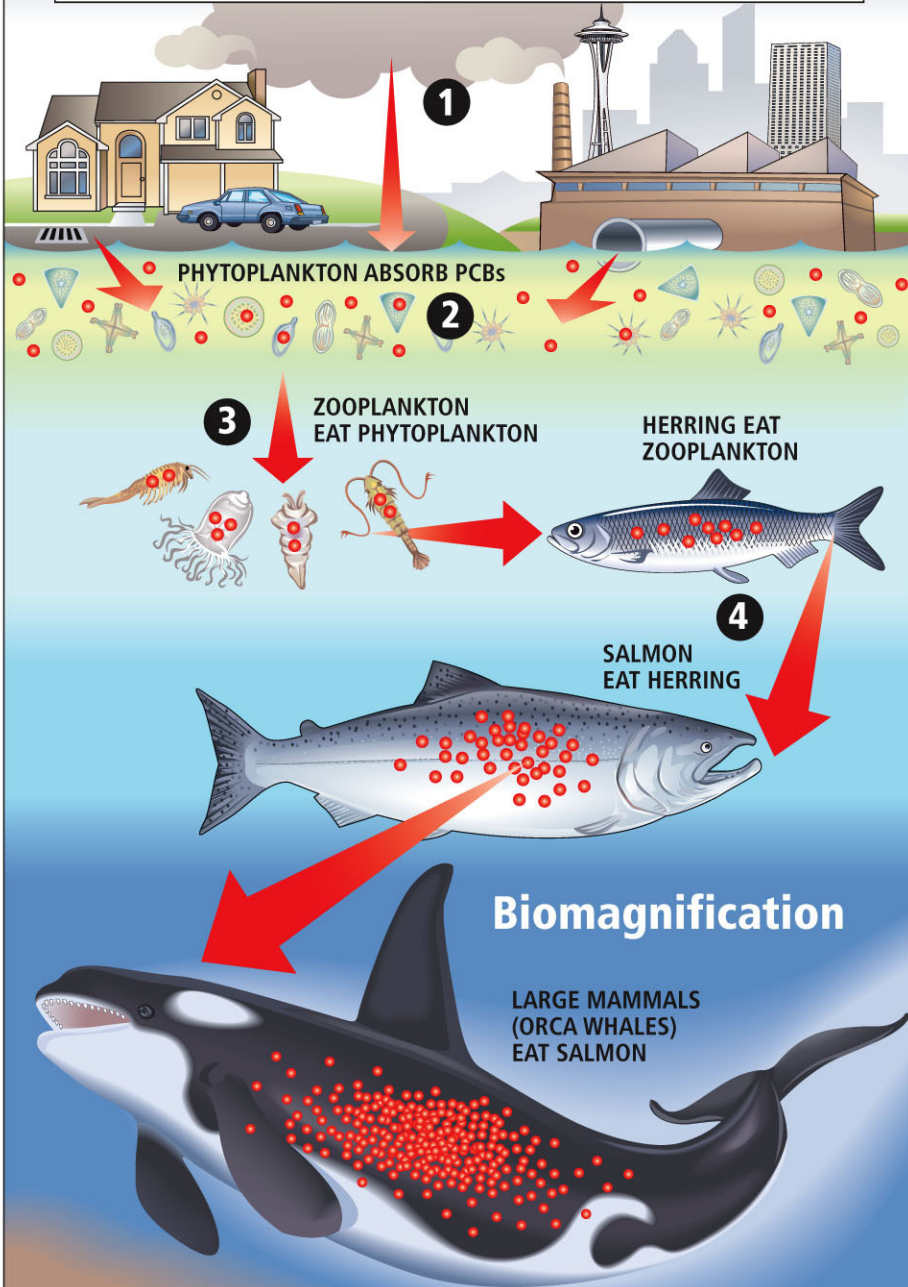
# Persistent Bioaccumulative and Toxic Contaminants in Puget Sound's Pelagic Food Web



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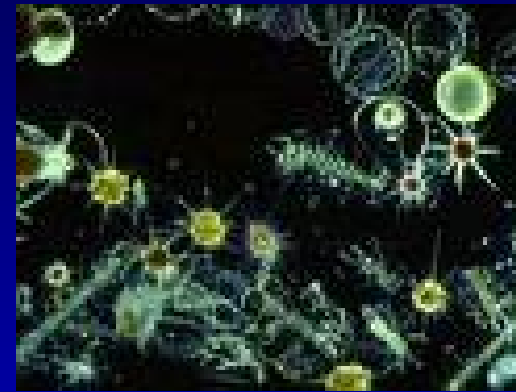
● PCBs are released from multiple sources into Puget Sound



Simplified pathway for PCBs entering and biomagnifying in the pelagic food web

Source: Seattle Post-Intelligencer  
"The Zone"  
[thezone@seattlepi.com](mailto:thezone@seattlepi.com)

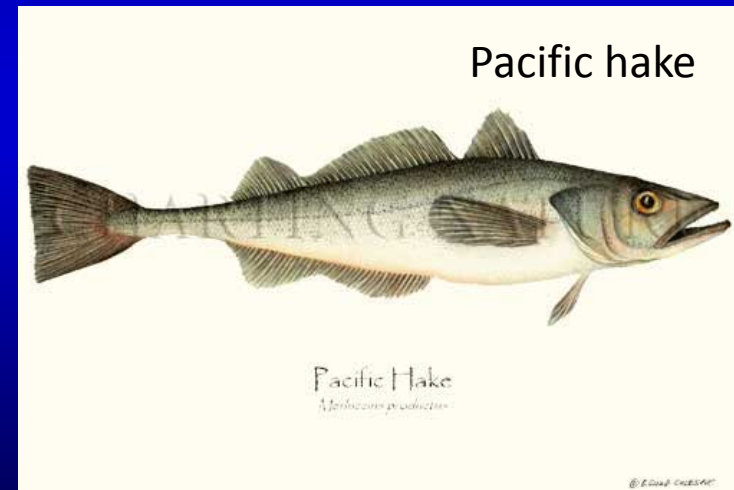
We added three species/groups.....



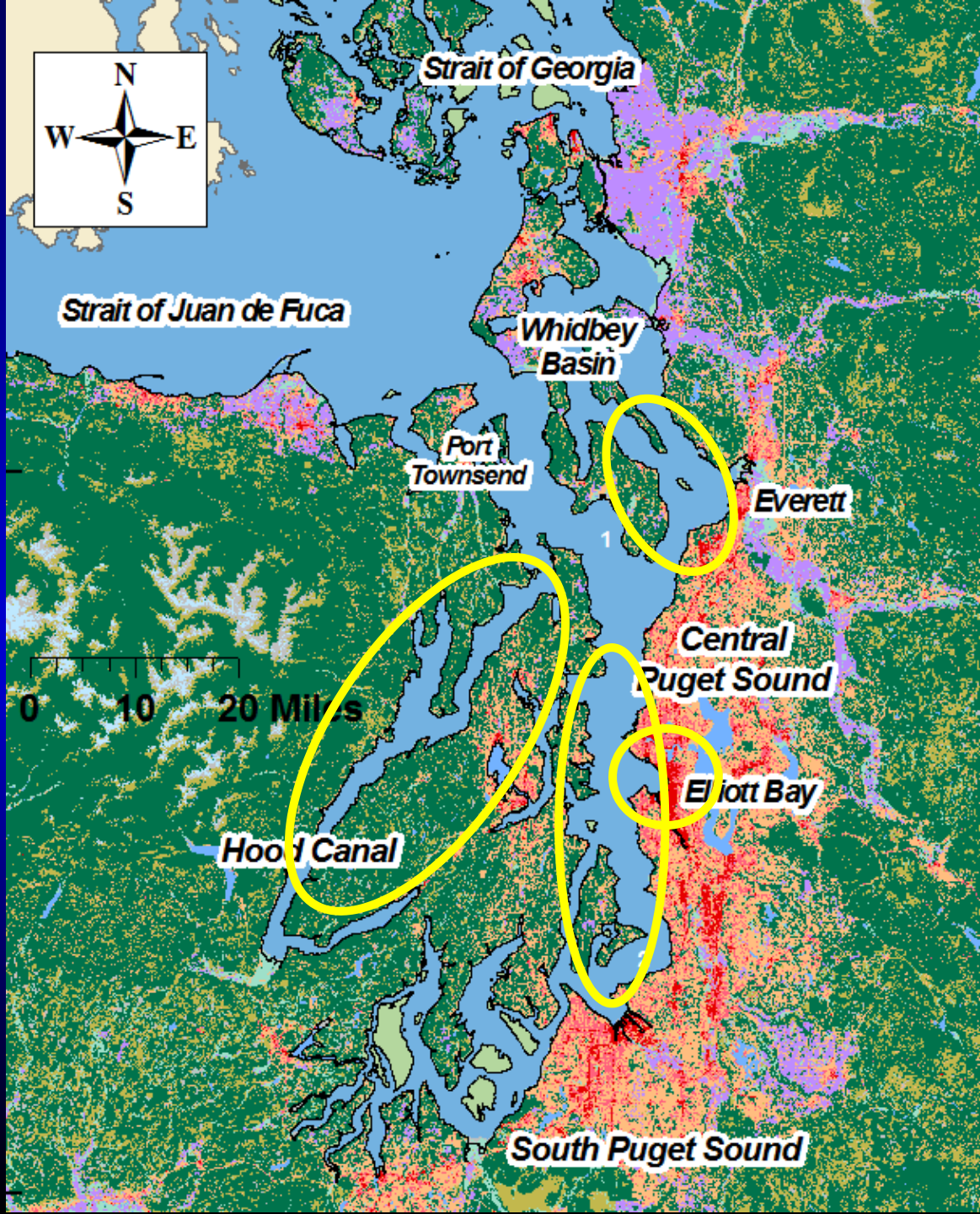
Primary producer  
Phytoplankton (POM)



Primary consumer  
Krill (*Euphausia pacifica*)



“resident” predators  
Pacific hake (*Merluccius productus*) and  
Walleye pollock (*Theragra chaclogramma*)



Focus on  
three  
basins and  
one  
urban  
embayment

# Sampling for phytoplankton (particular organic matter, POM)



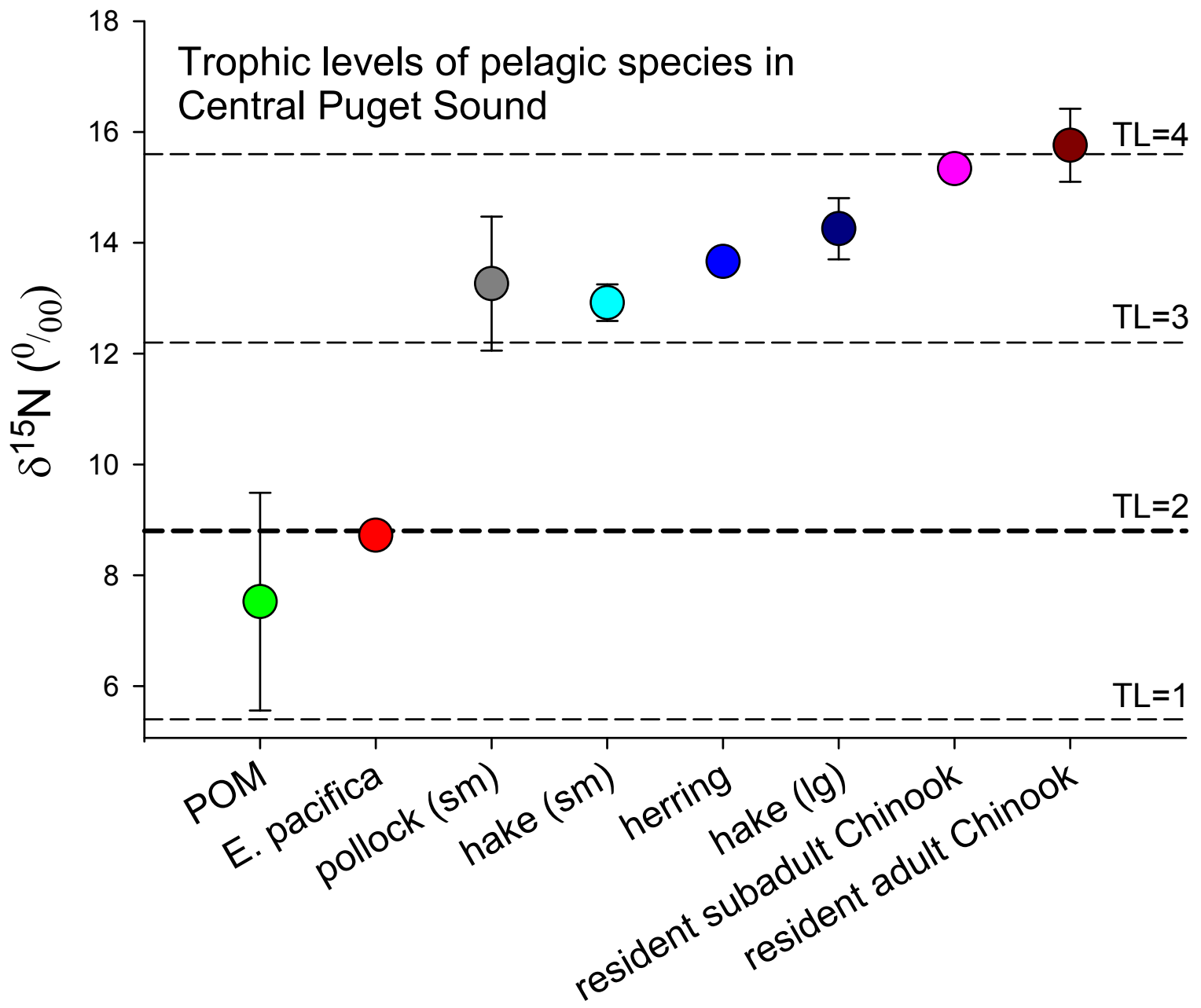


Sampling for  
krill...

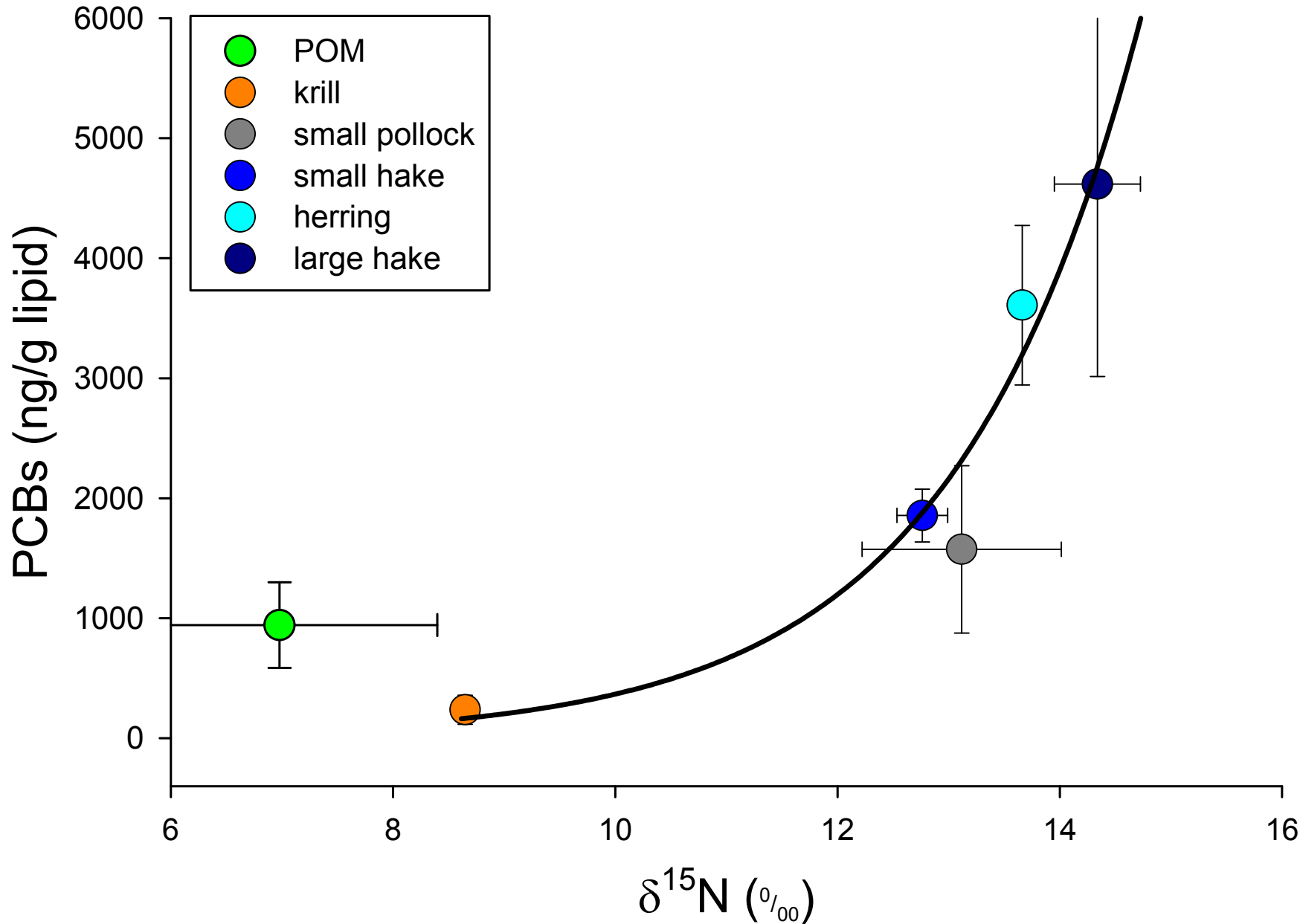


... and hake



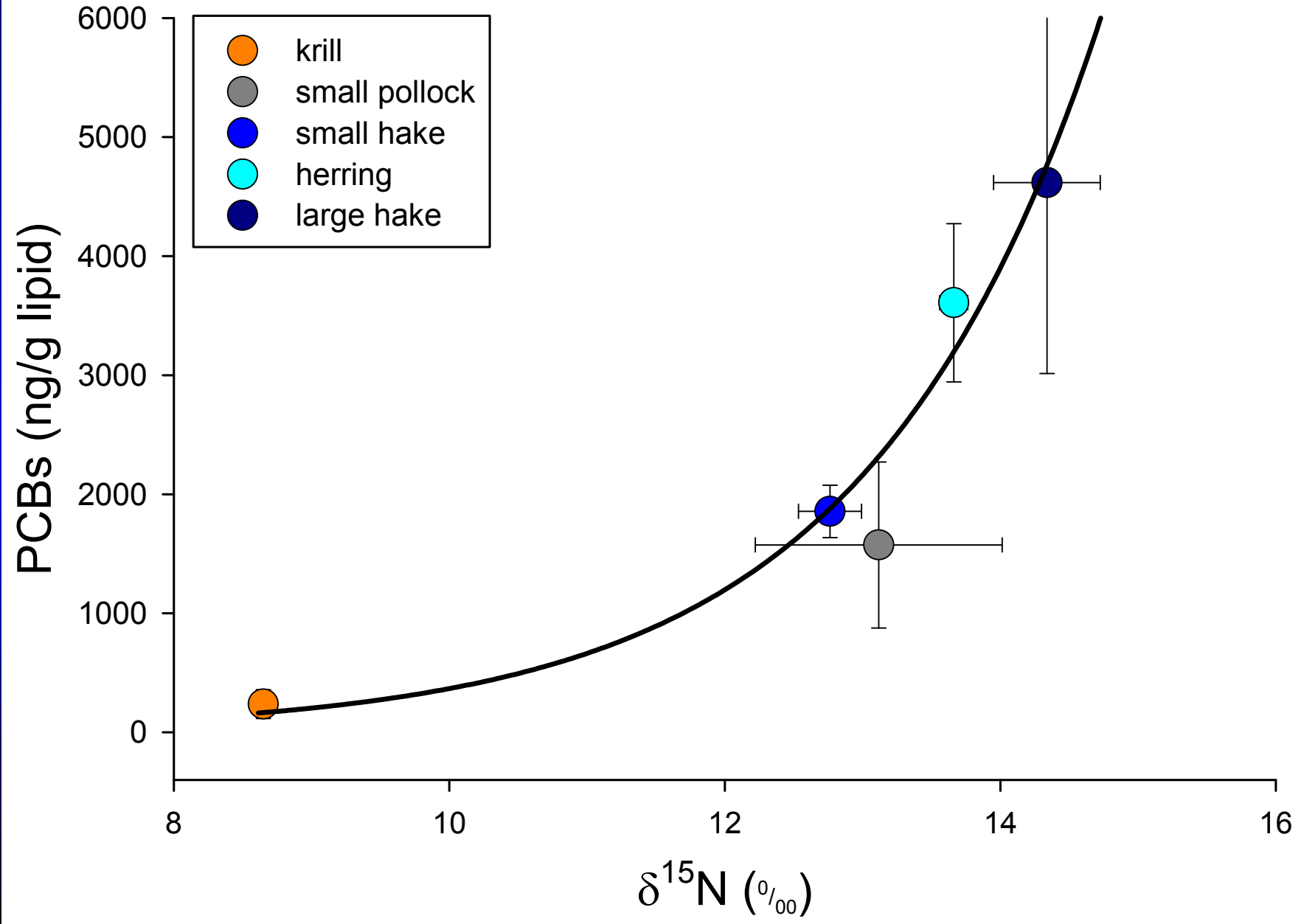


# Central Puget Sound

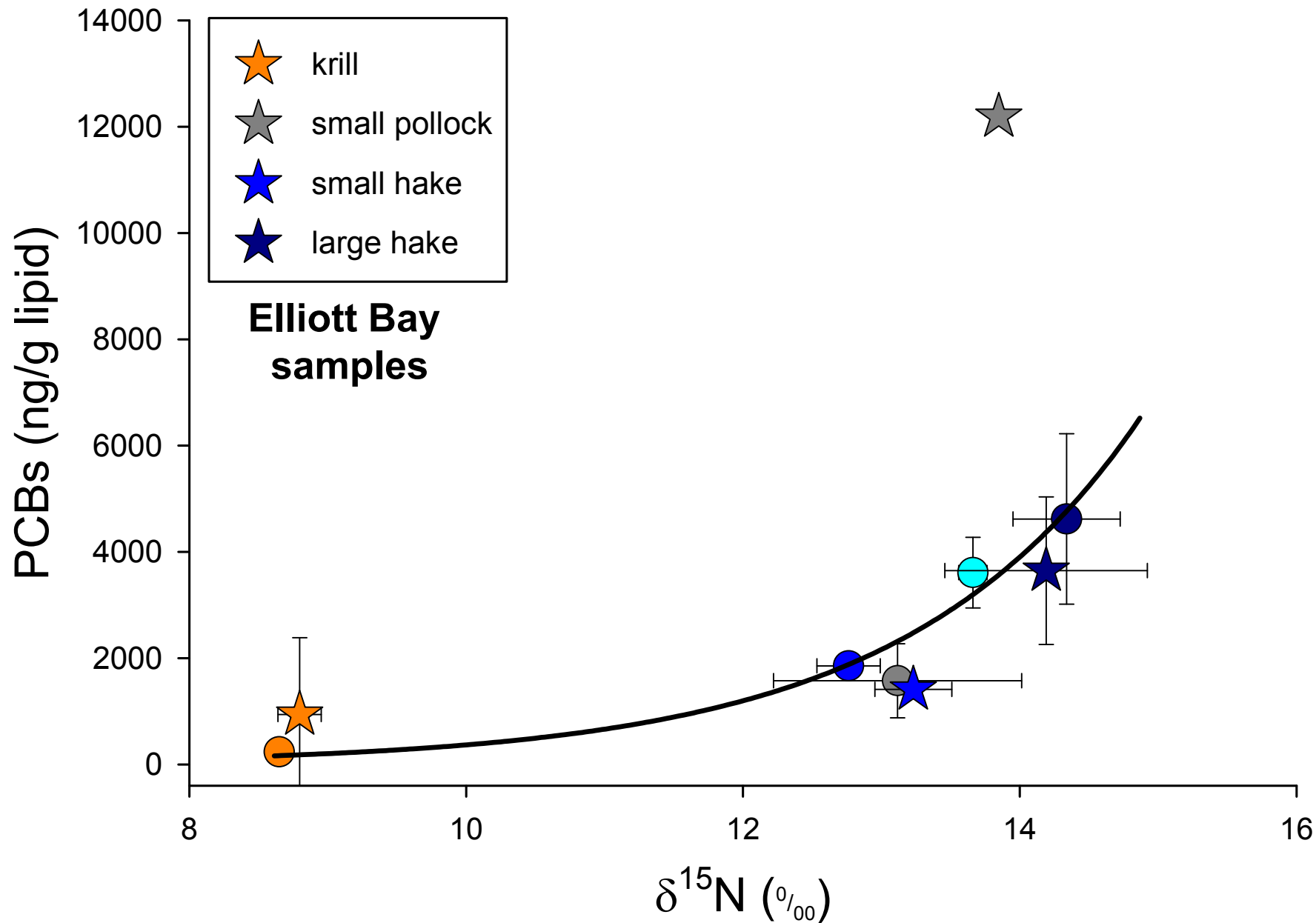


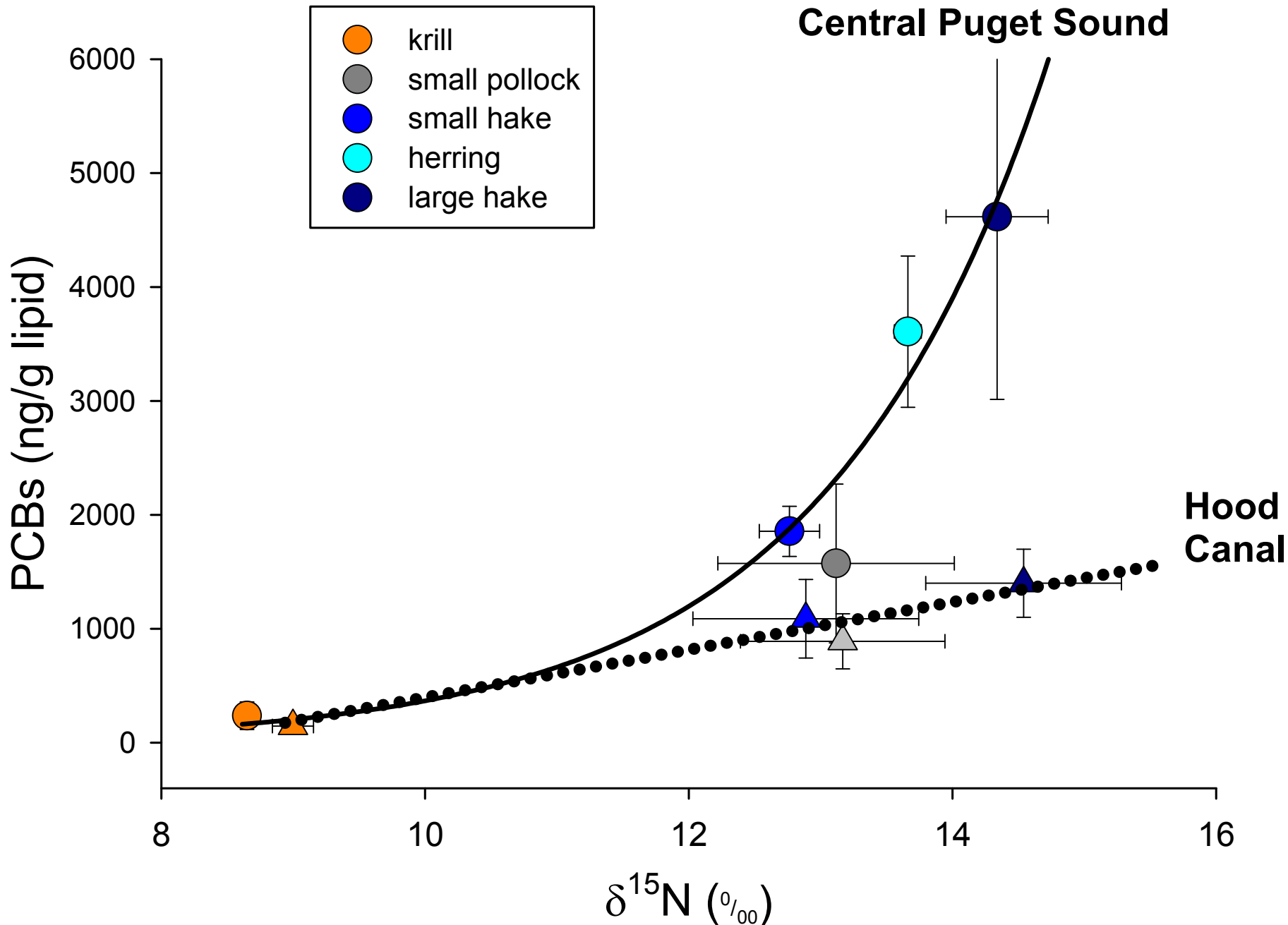


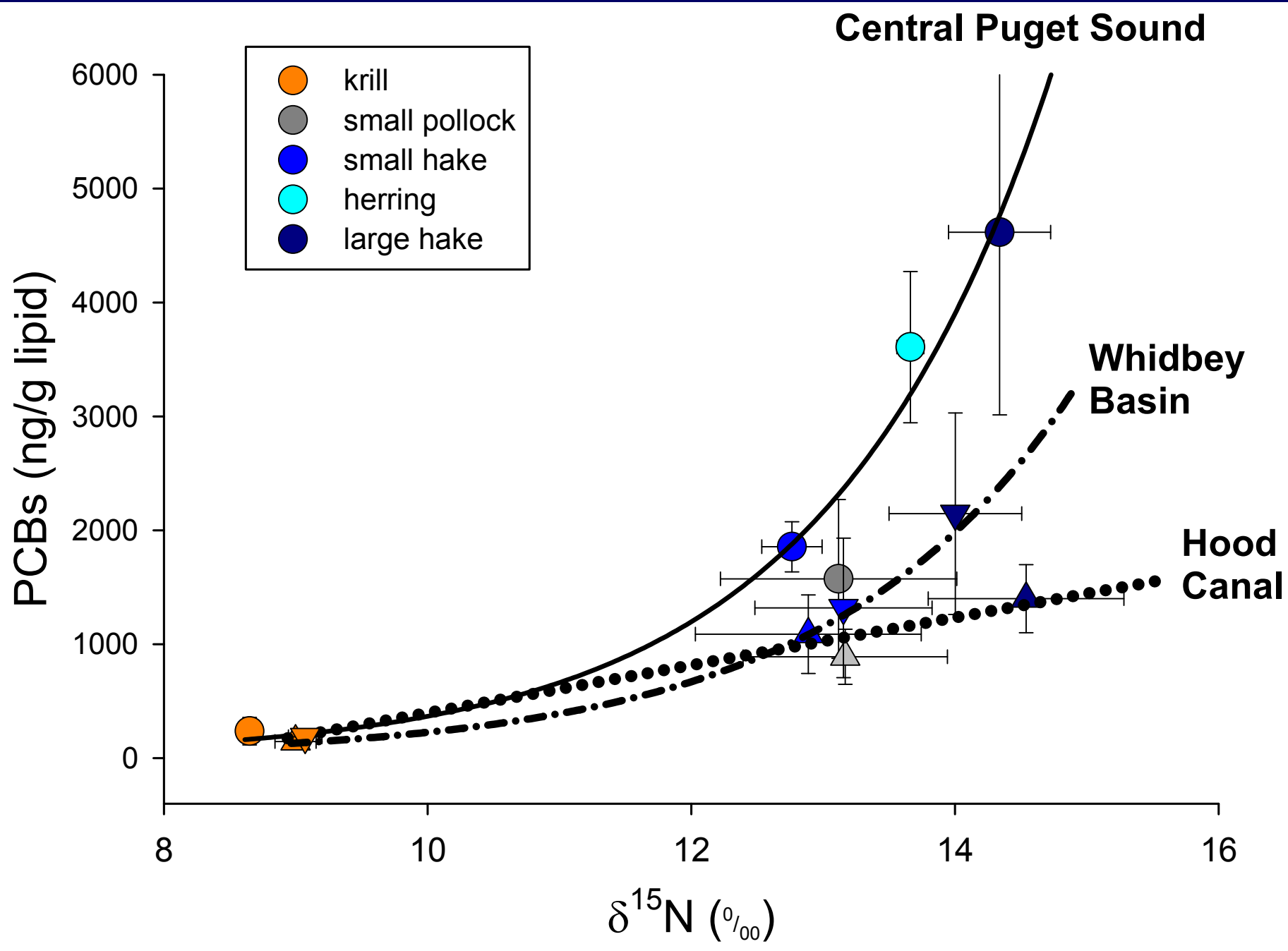
# Central Puget Sound



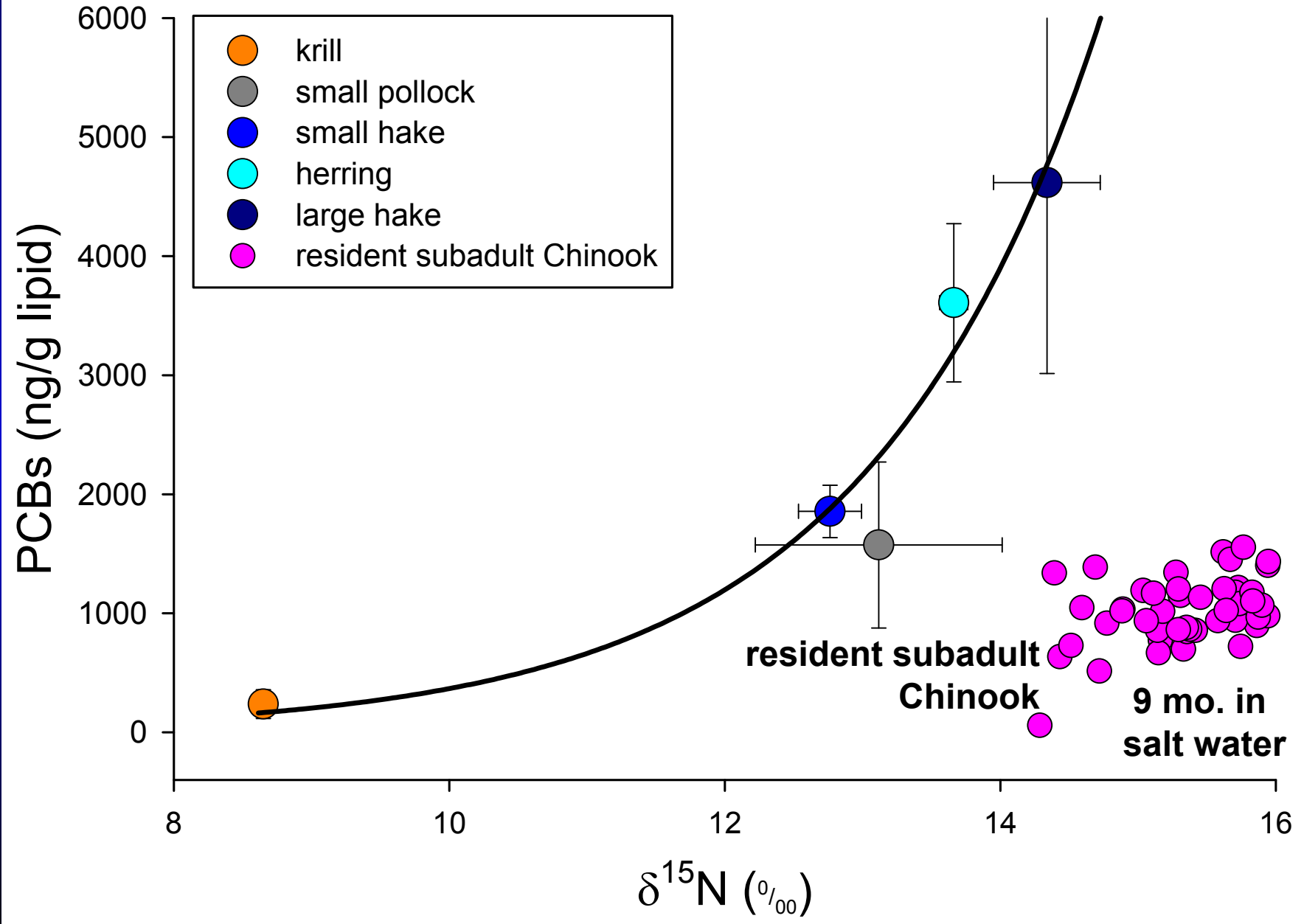
# Central Puget Sound



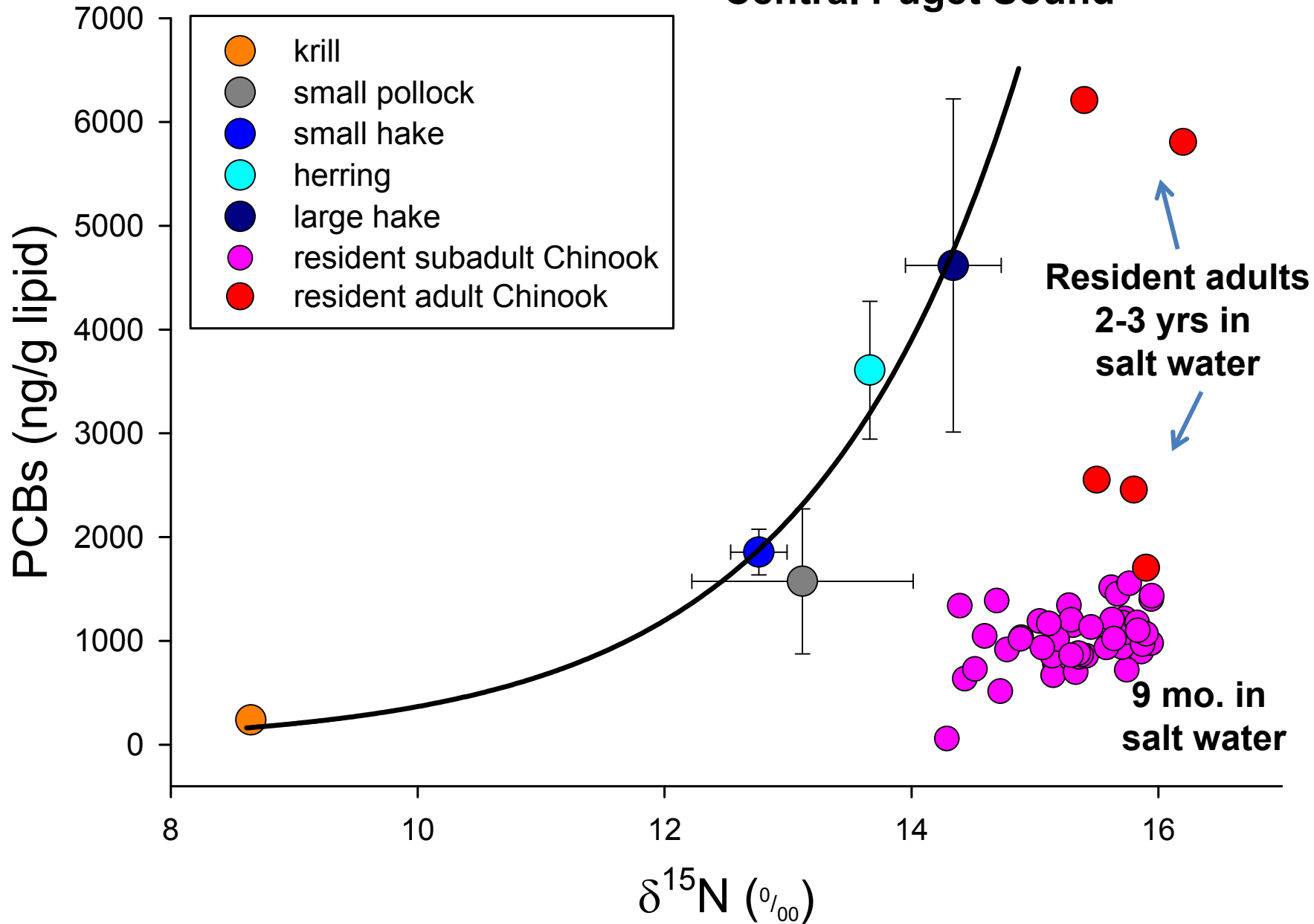




# Central Puget Sound



# Central Puget Sound



# Results

- Basin-specific bioaccumulation and magnification correlations
- Urban influence in low-trophic-level of the pelagic food web
- Three key factors highly correlated w/ PBTs
  - Residency (proximity to source)
  - exposure time
  - trophic level