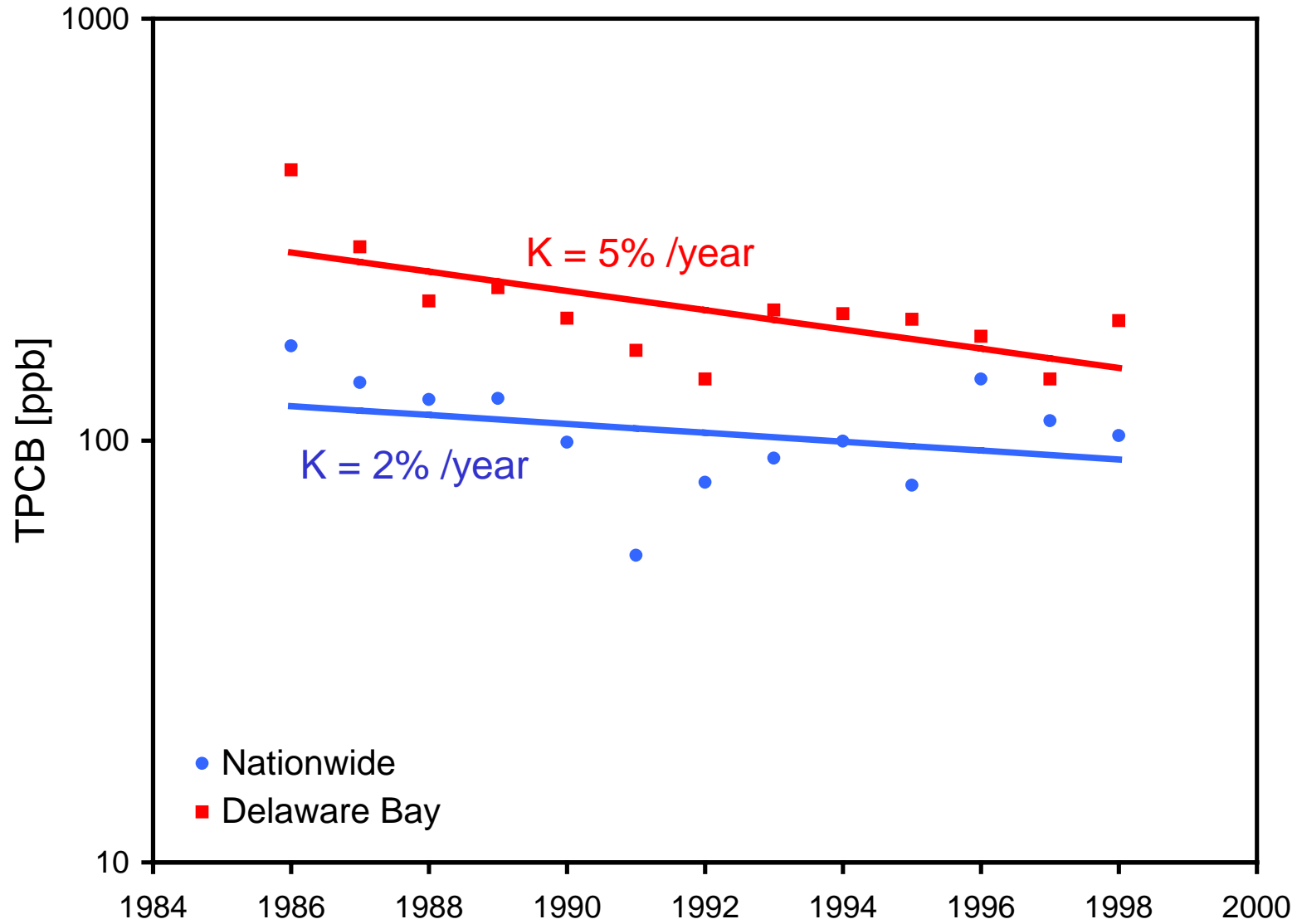


Decadal Scale Consistency Check – Historical PCB Data Trend Analysis

Ferdi Hellweger, Laurie De Rosa
and Dominic Di Toro
HydroQual

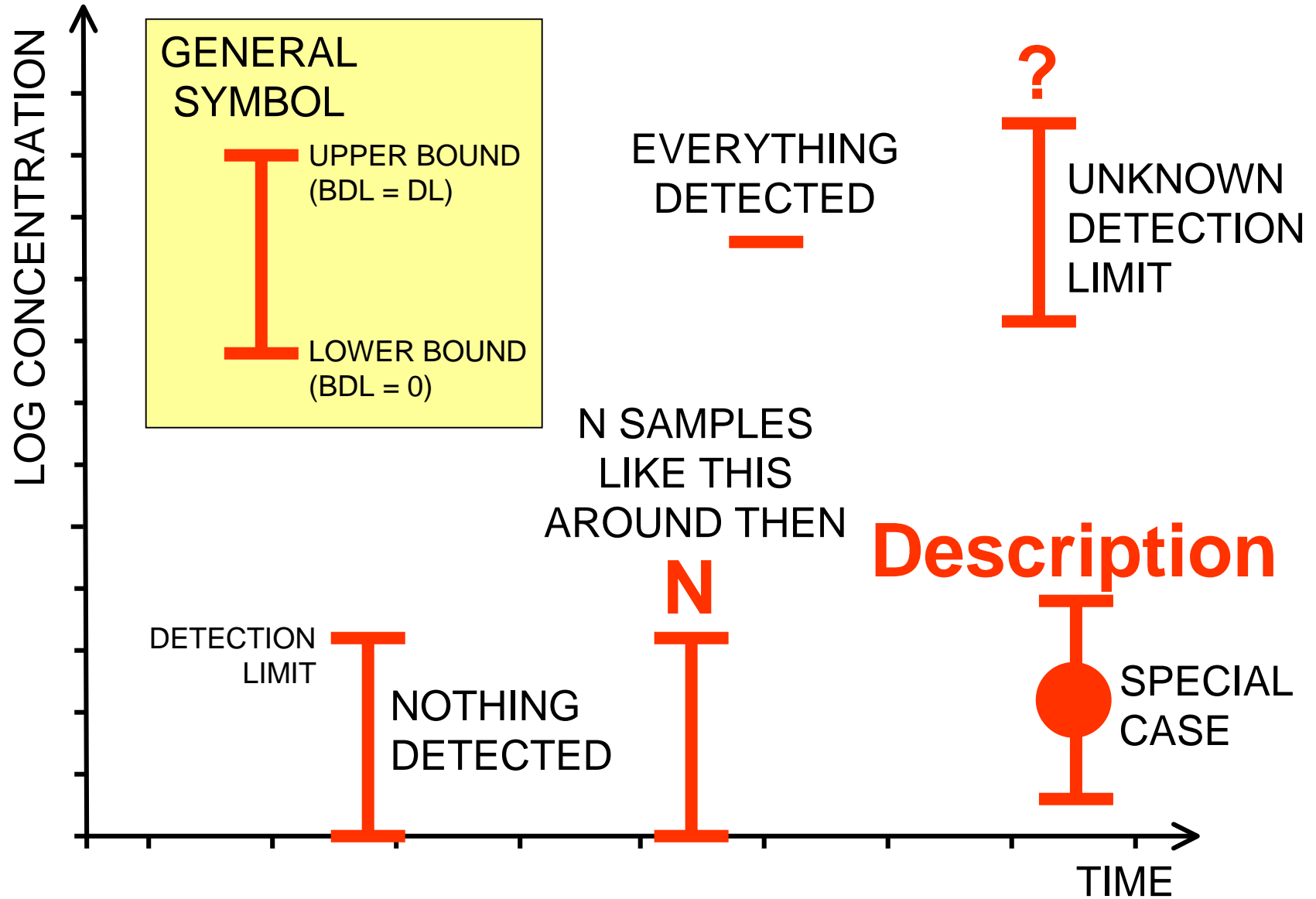
March 21, 2003

NOAA Mussel Watch Data - Mollusks

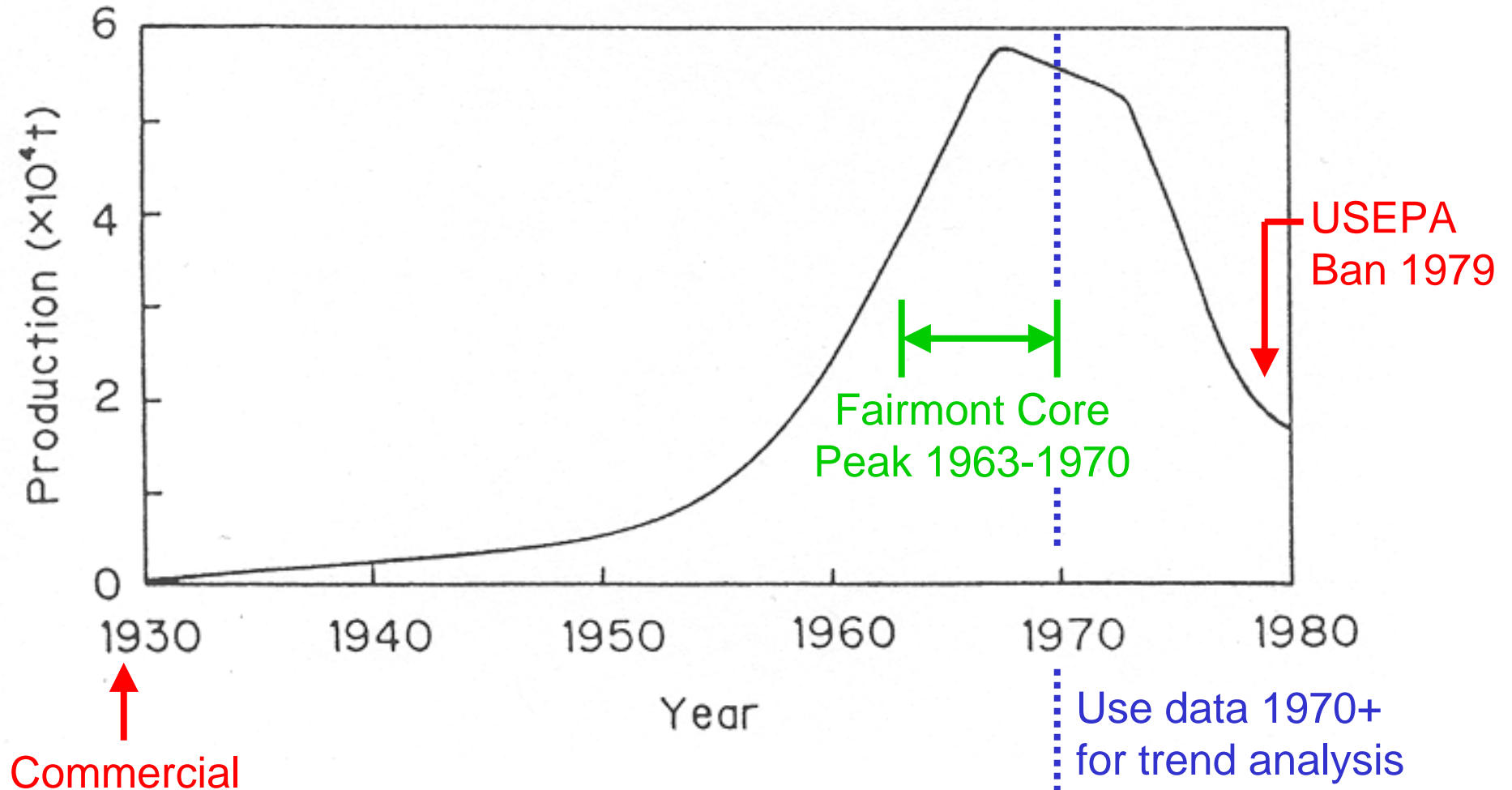


Geometric means.

Methodology



Estimated World Production of PCBs

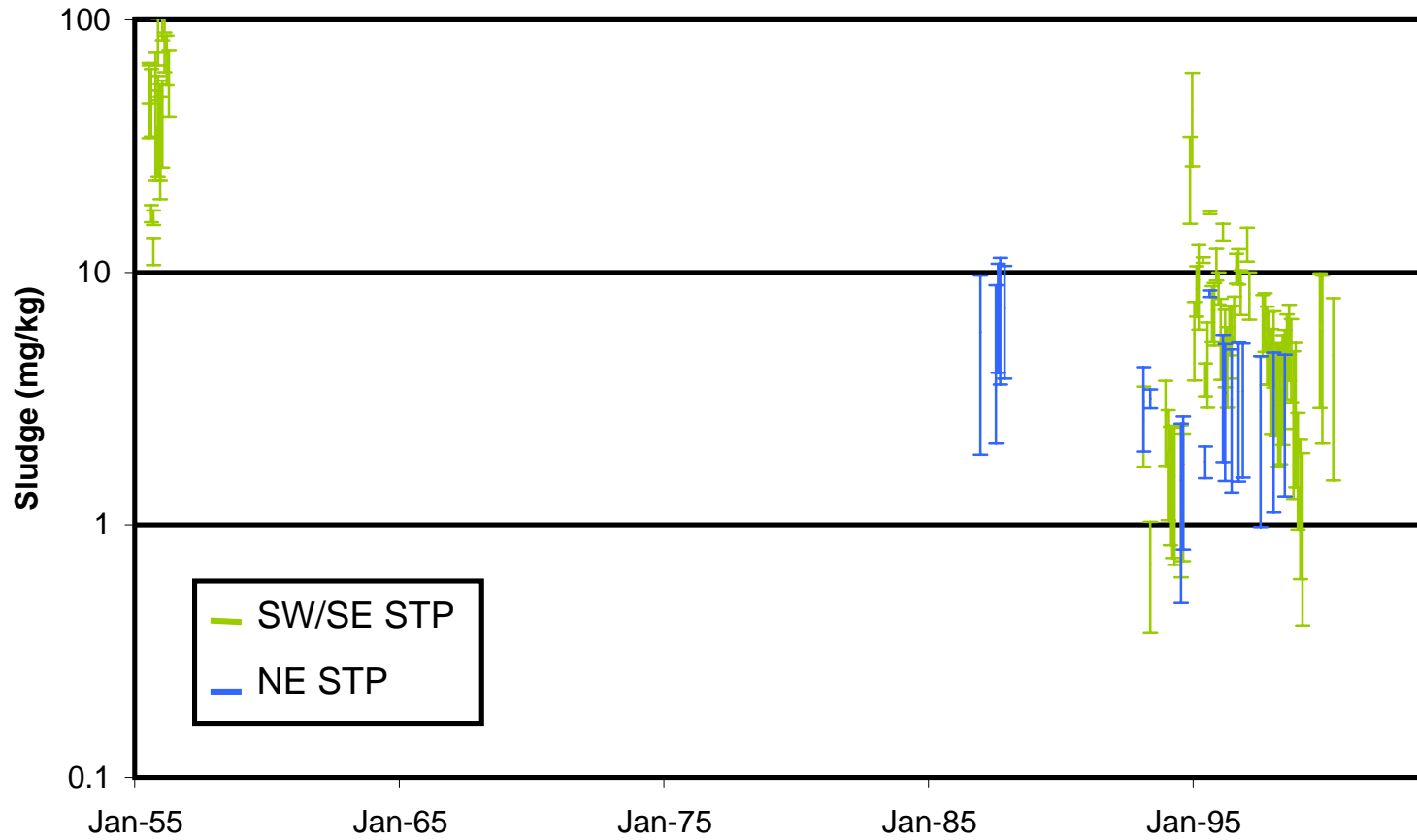


Tateya et al. (1988)

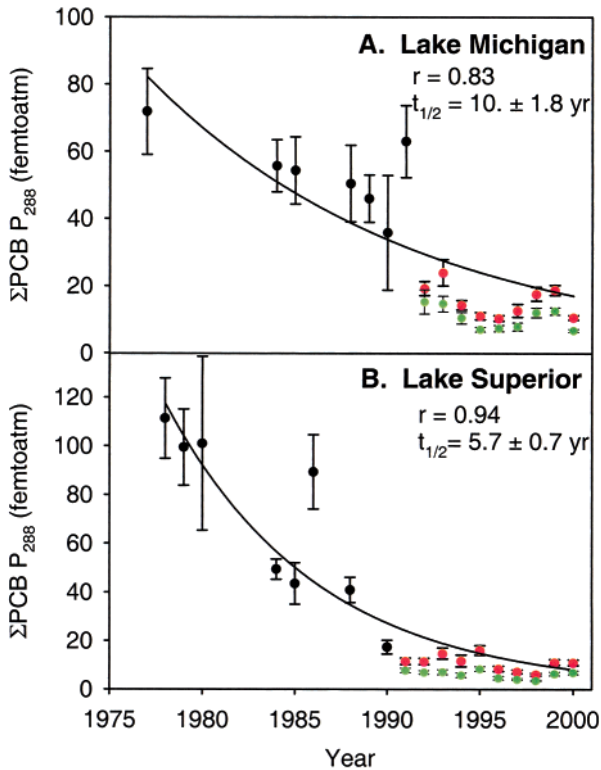
- Production \neq Release.
- In 1985 more than 2/3 of PCBs were still “in use”.
- Sommerfield cores could help out greatly here.
- ANS (1991) also used 1970+ data.

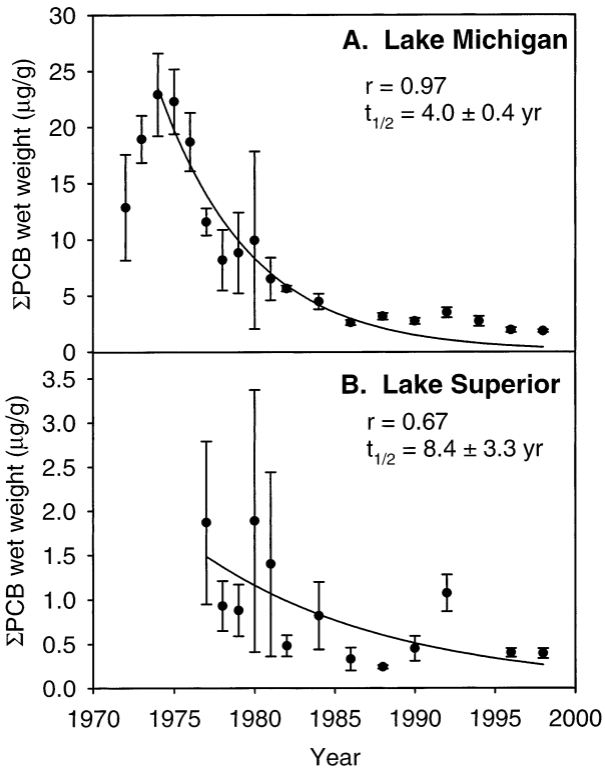
Philadelphia SW/SE & NE STP Historic Sludge Data

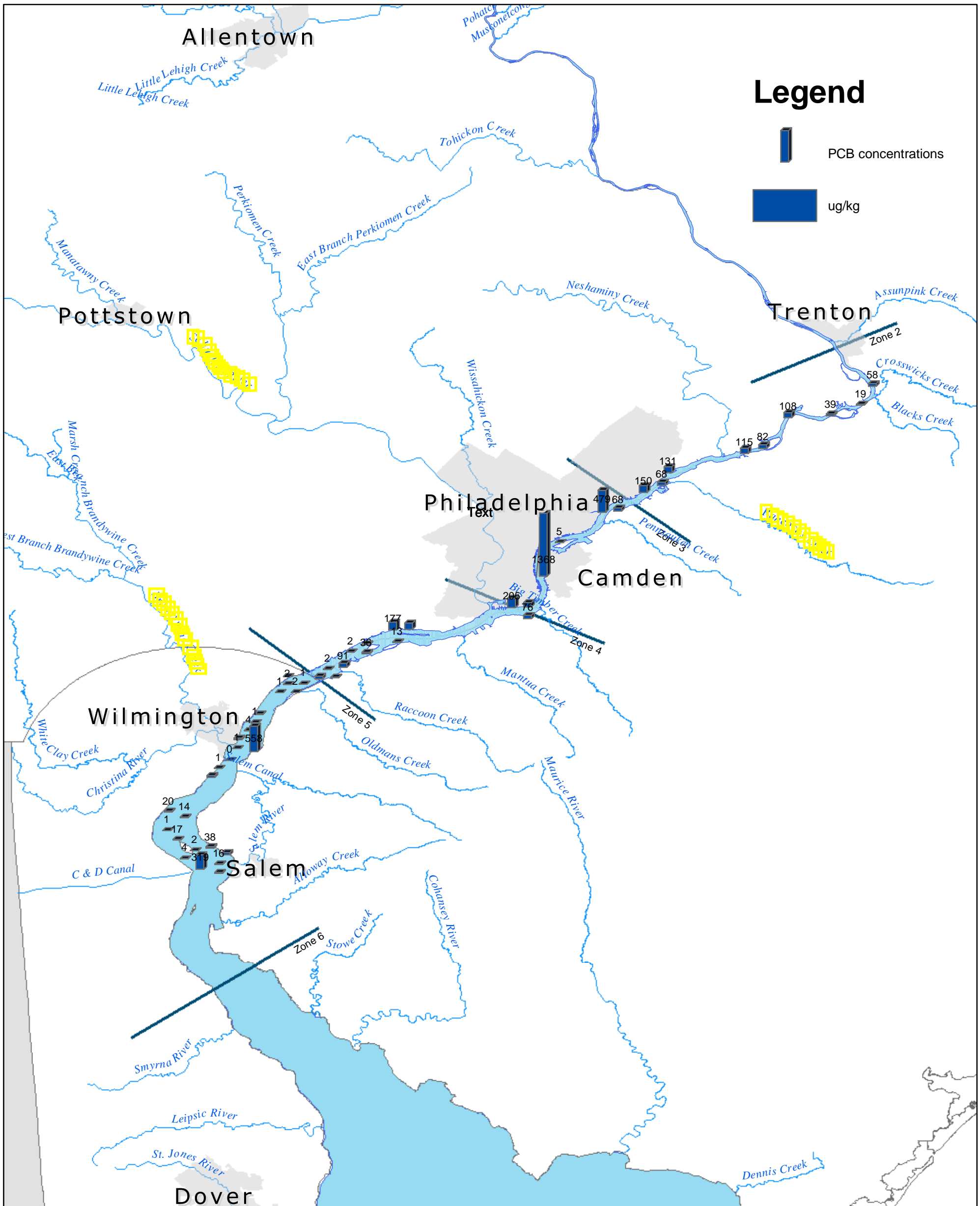
Zones 3 & 4



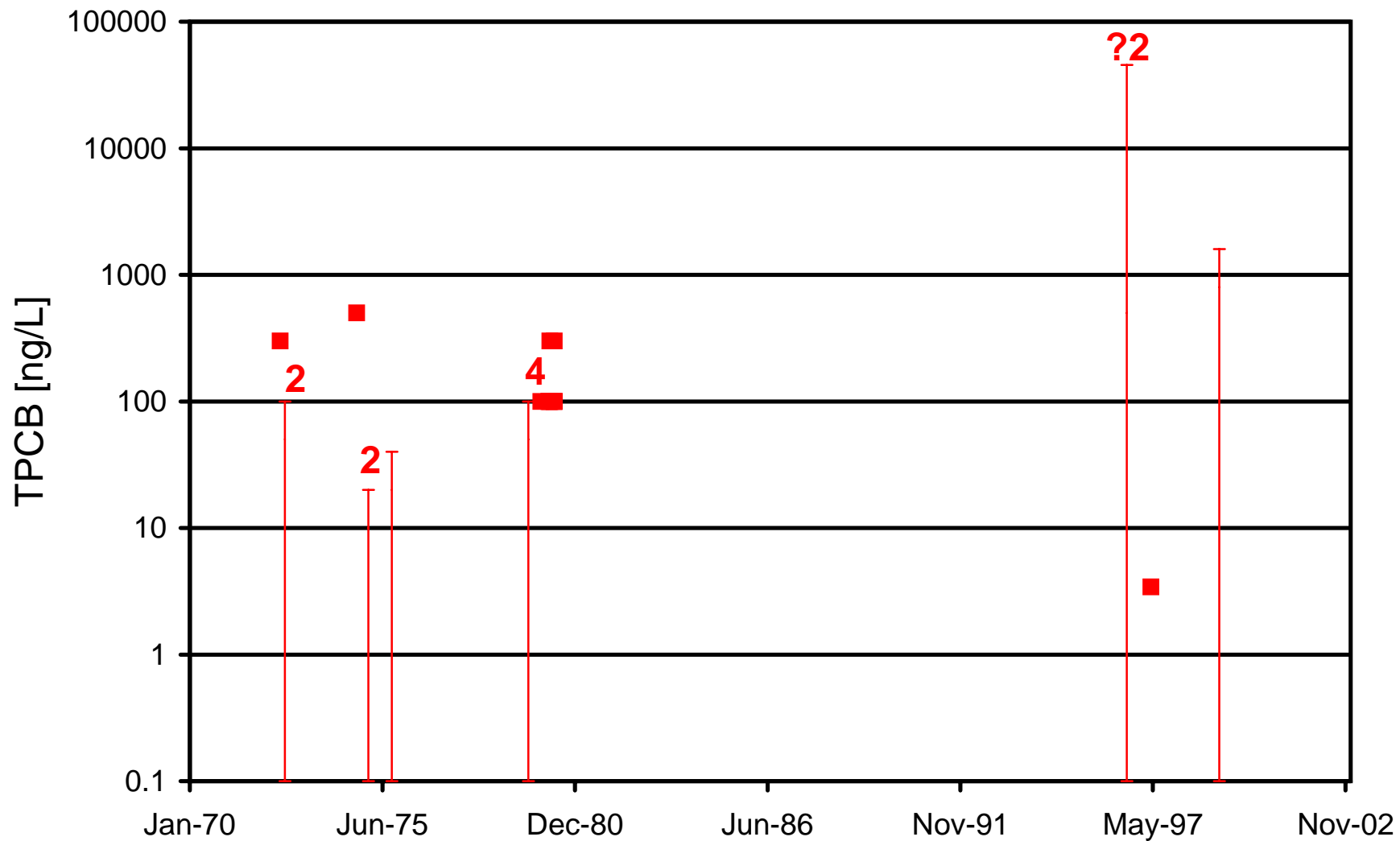
Each bar is one sample (N=1) of sum of Aroclors
1016, 1221, 1232, 1242, 1248, 1254, 1260.



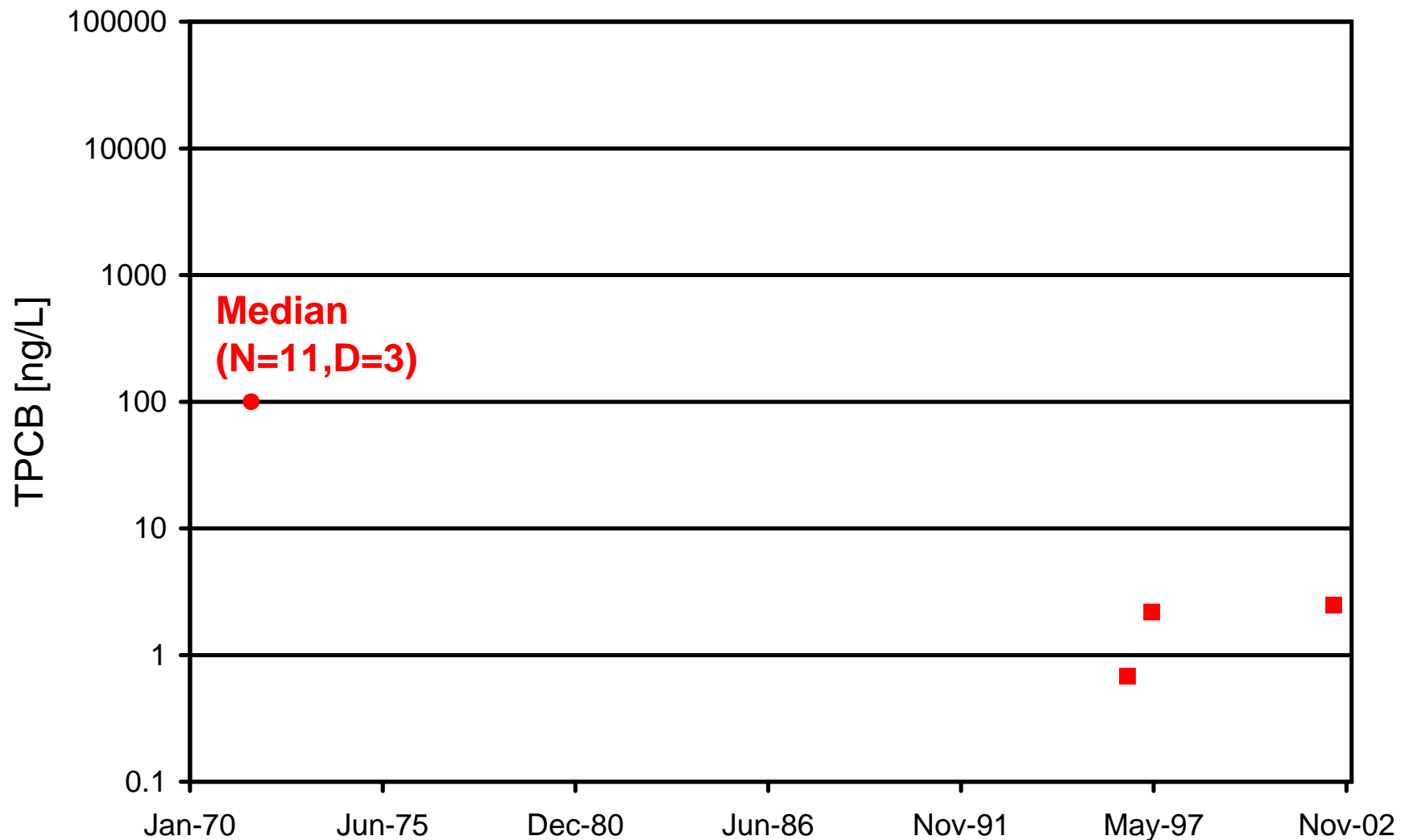




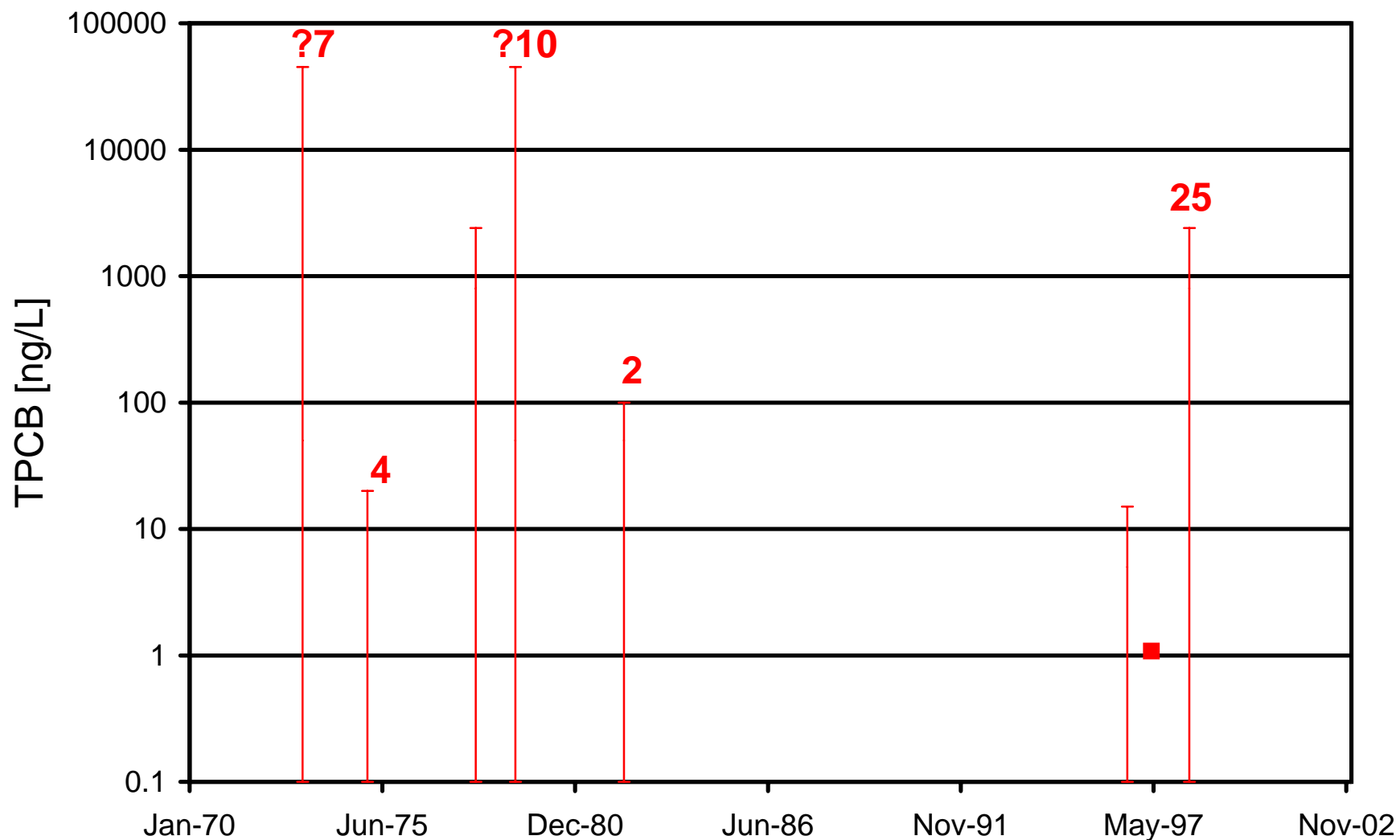
Water - Schuylkill River



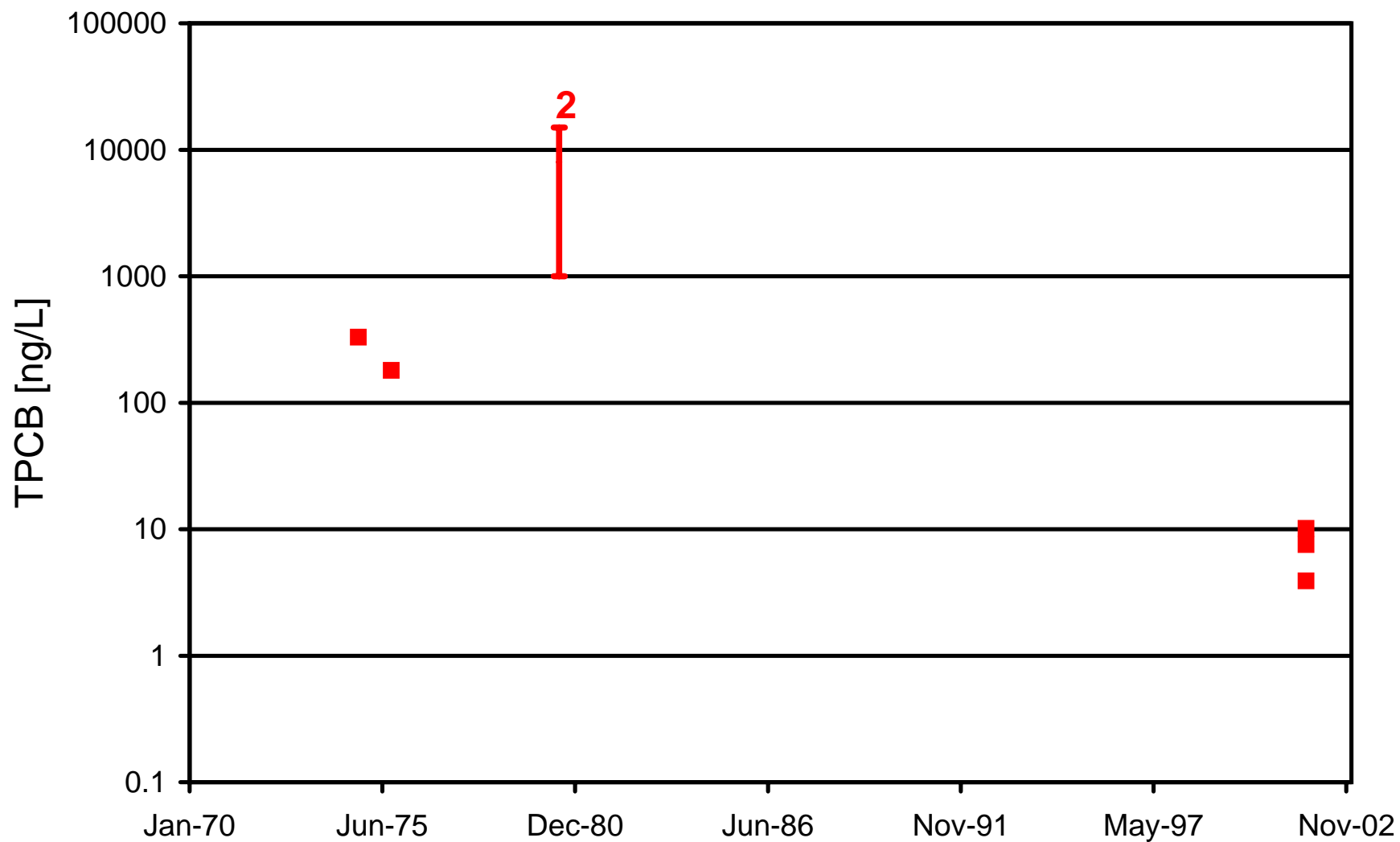
Water - Rancocas Creek



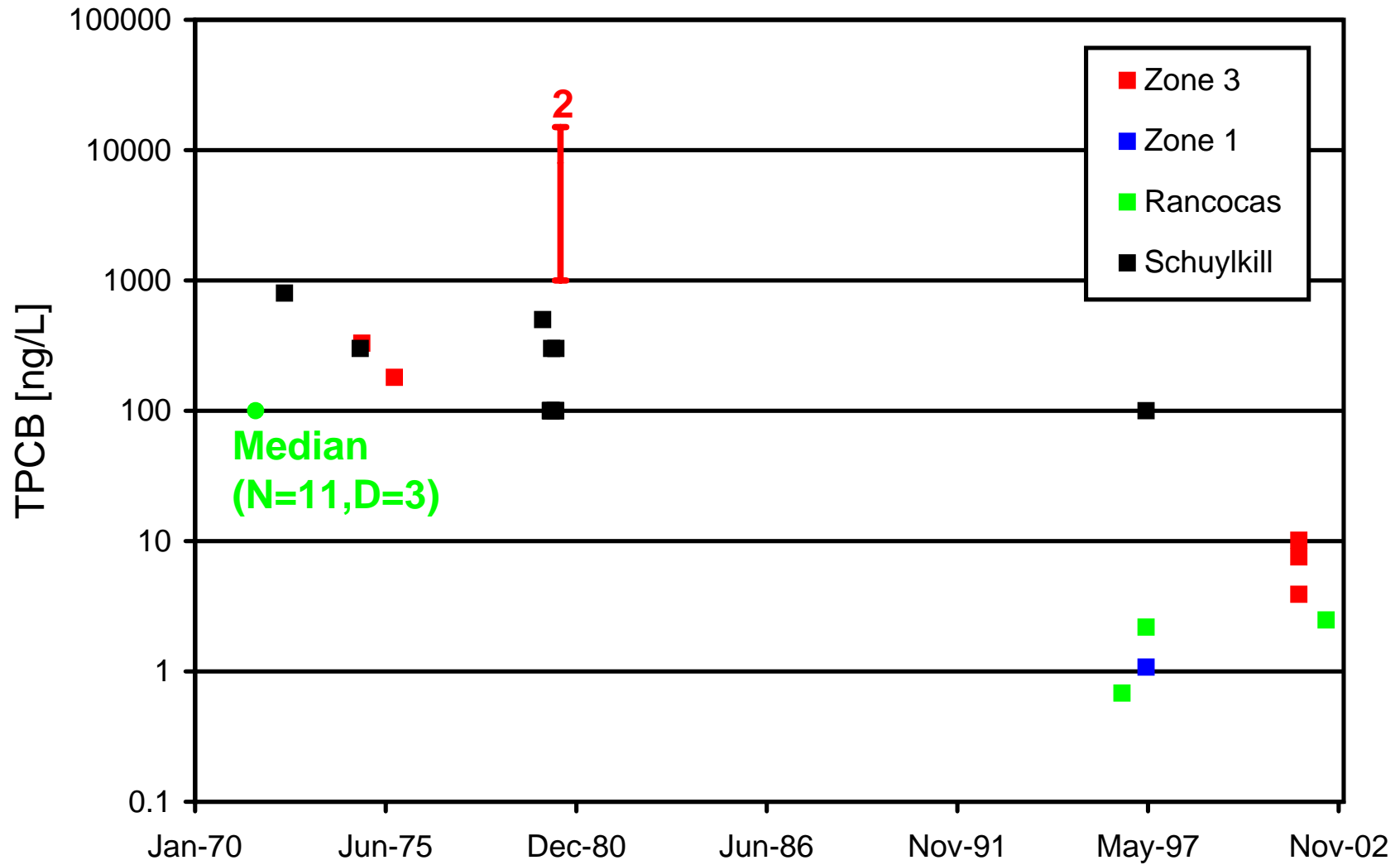
Water - Delaware River Zone 1



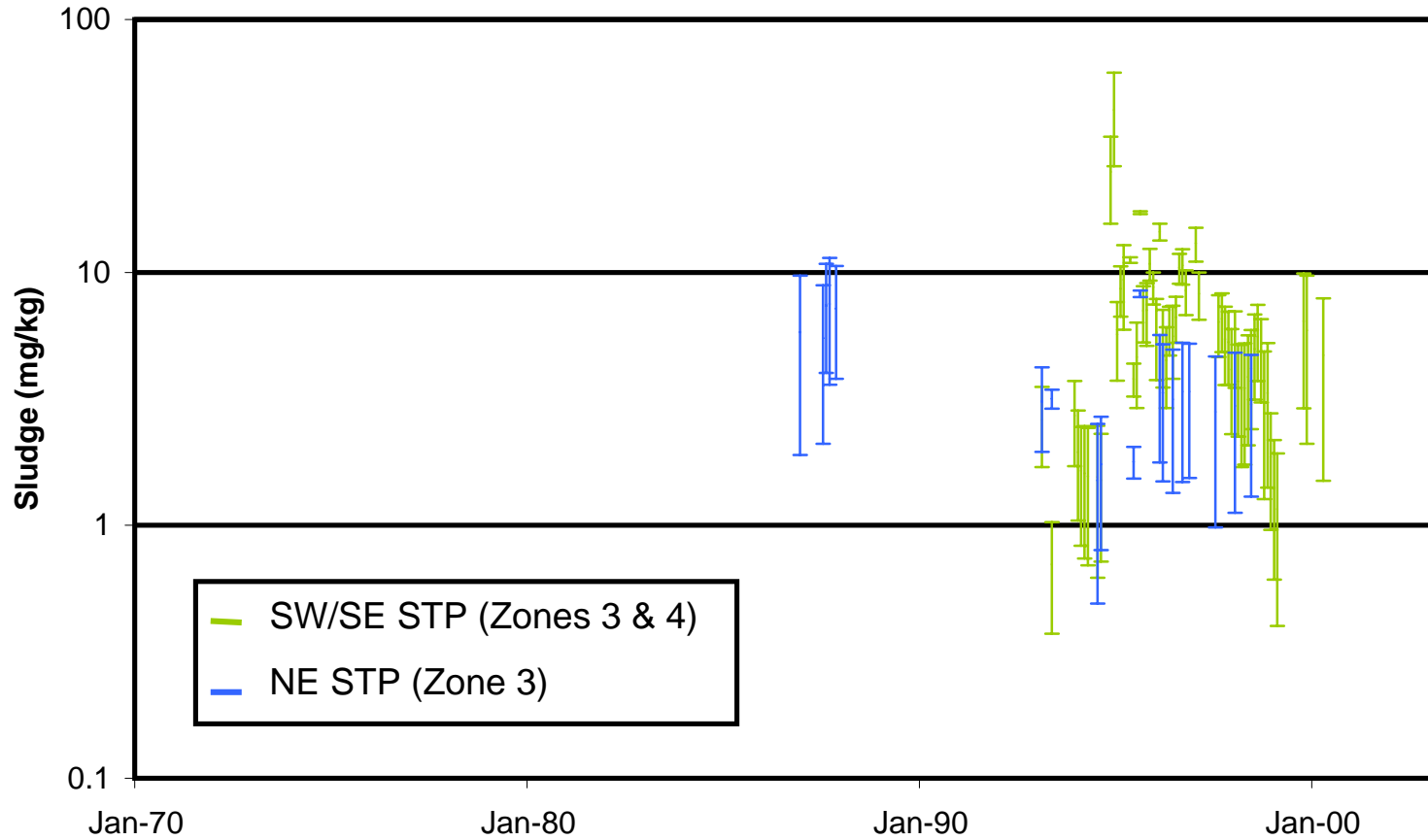
Water - Delaware Estuary Zone 3



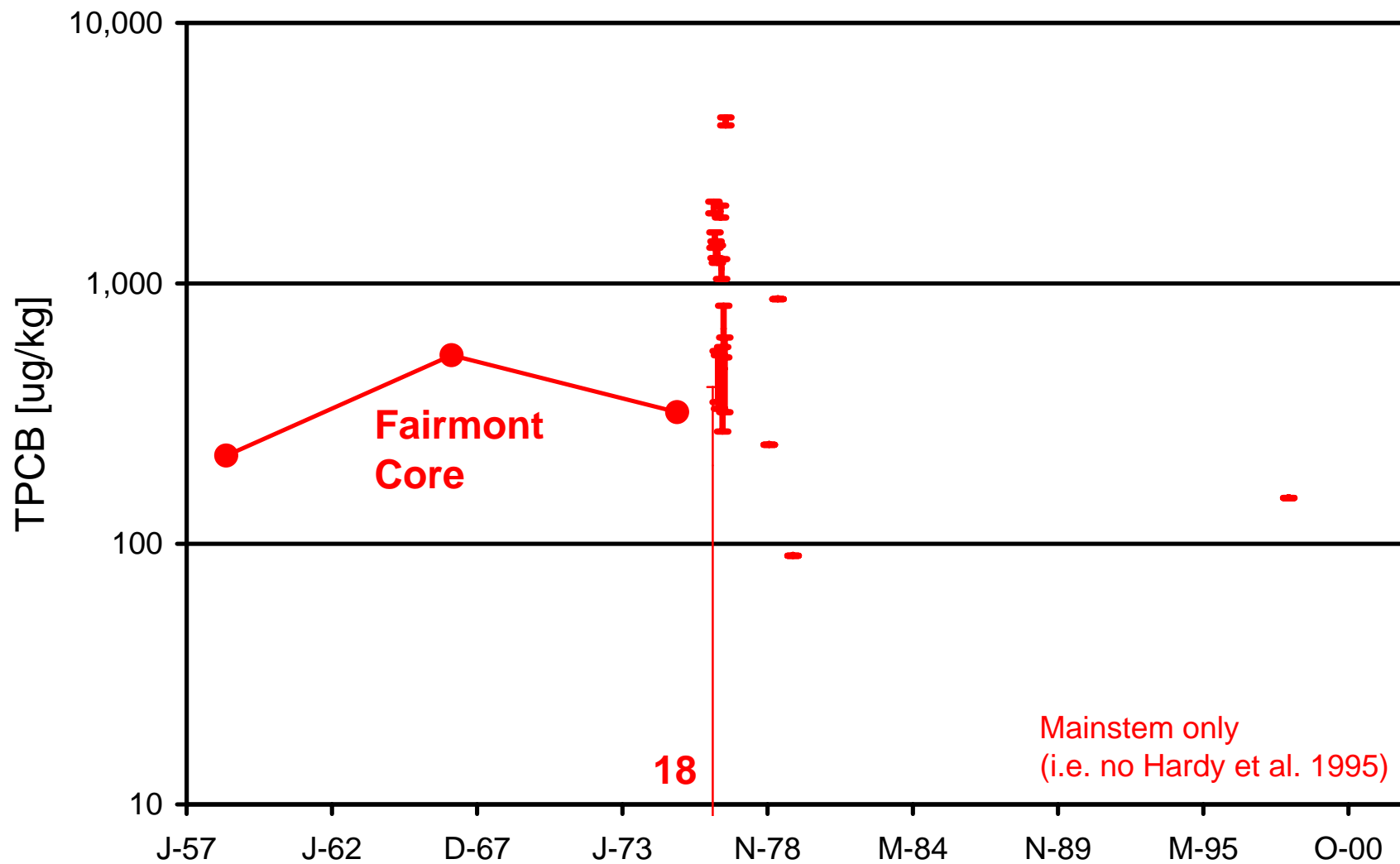
Water - Delaware



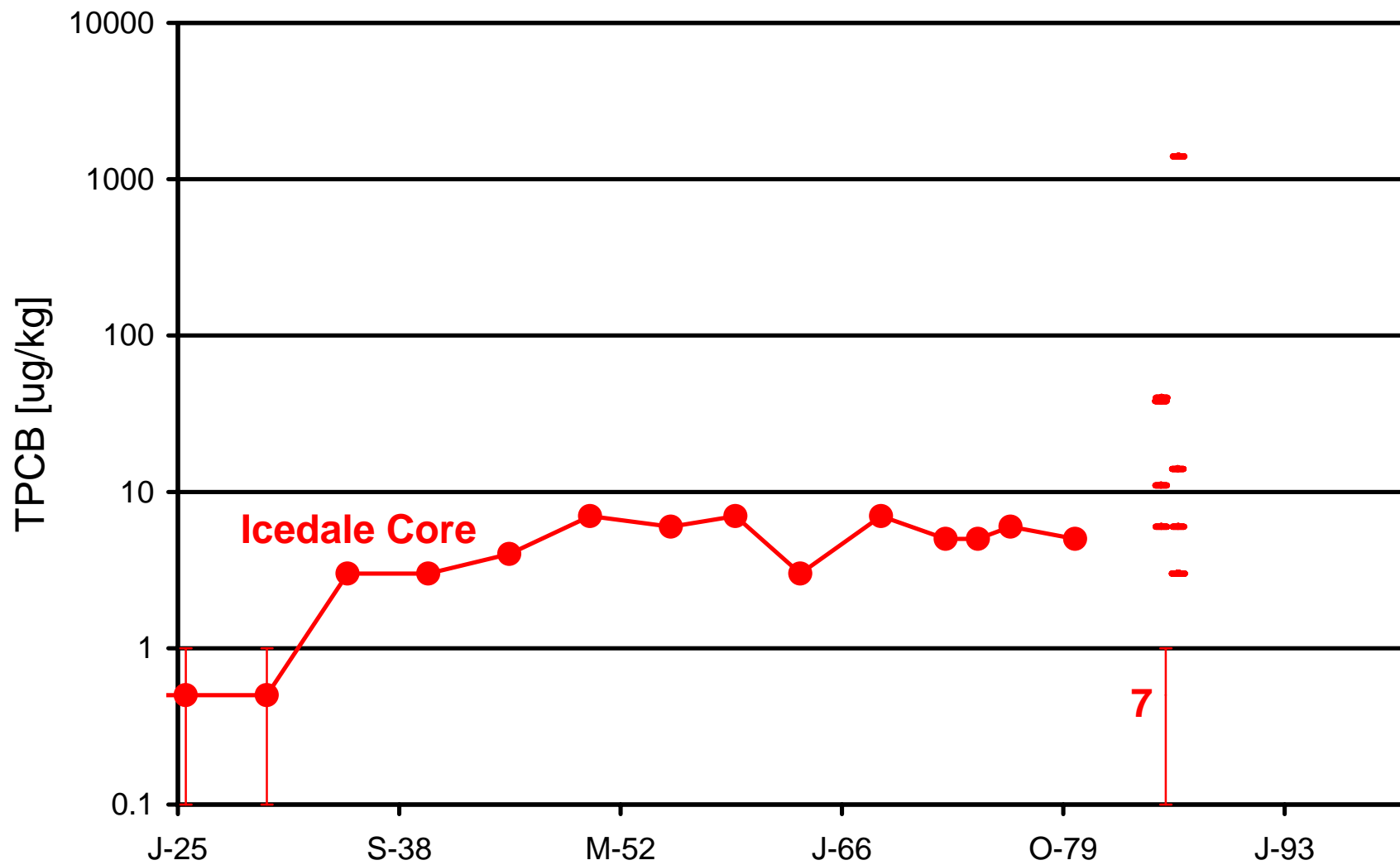
Philadelphia SW/SE & NE STP Historic Sludge Data



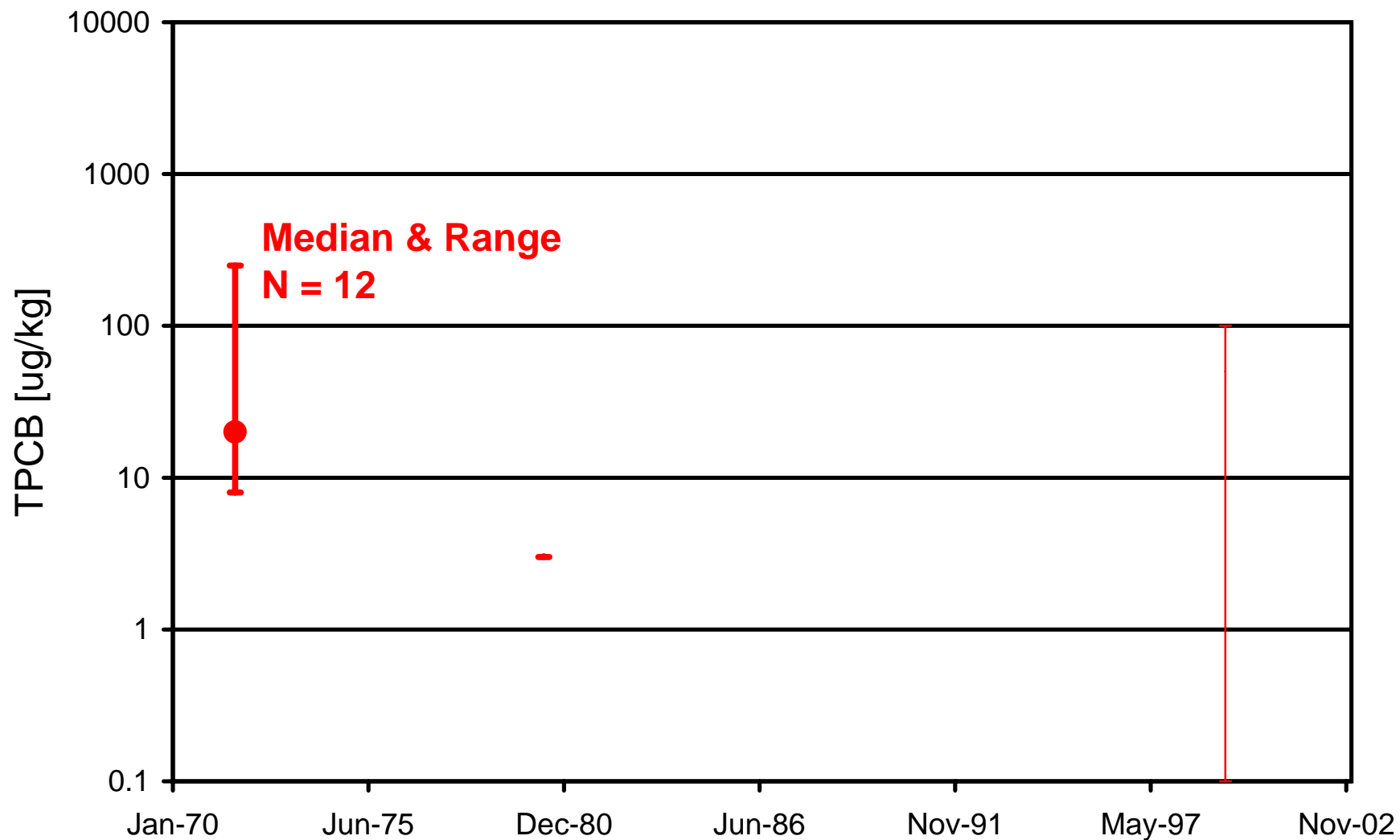
Sediments - Schuylkill River



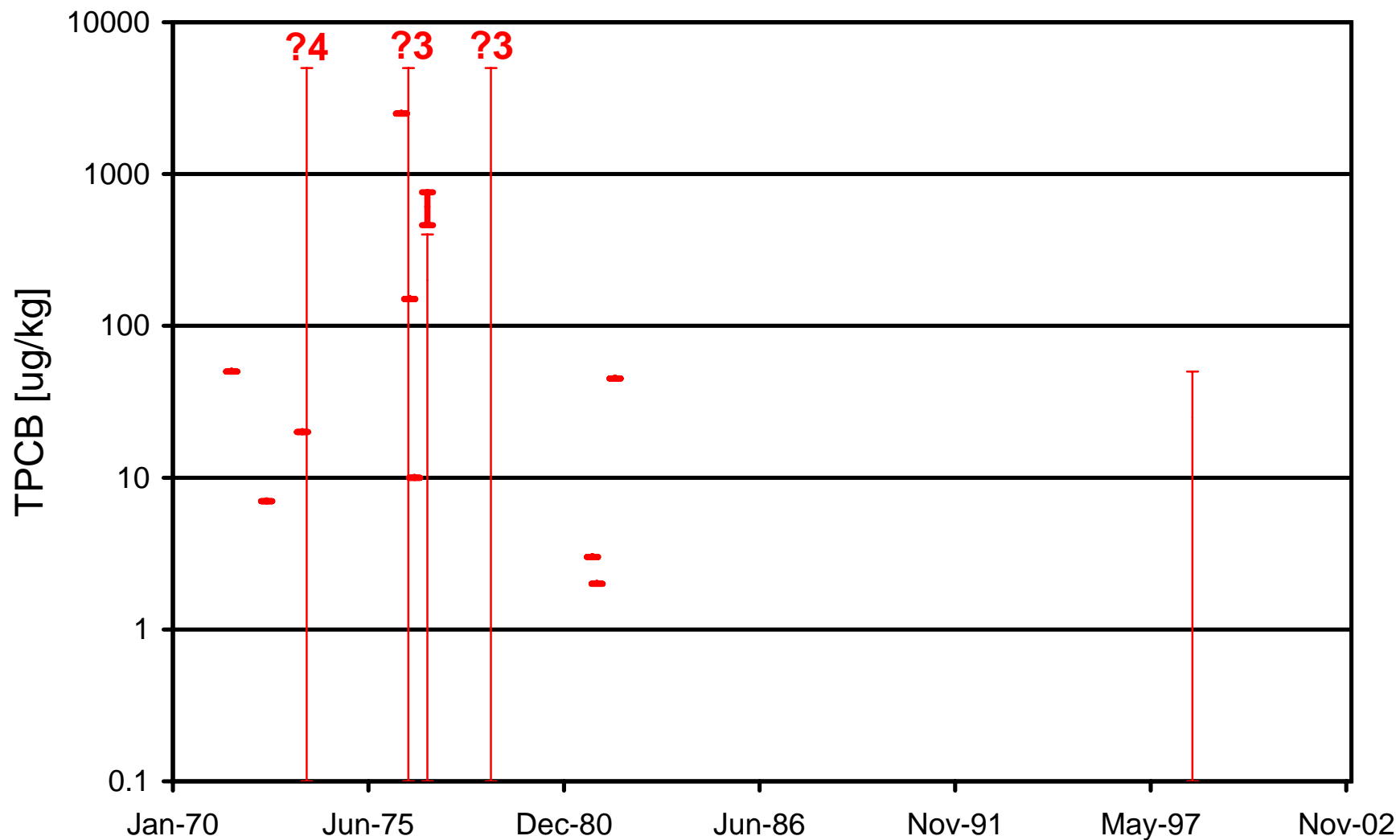
Sediments - Brandywine Creek



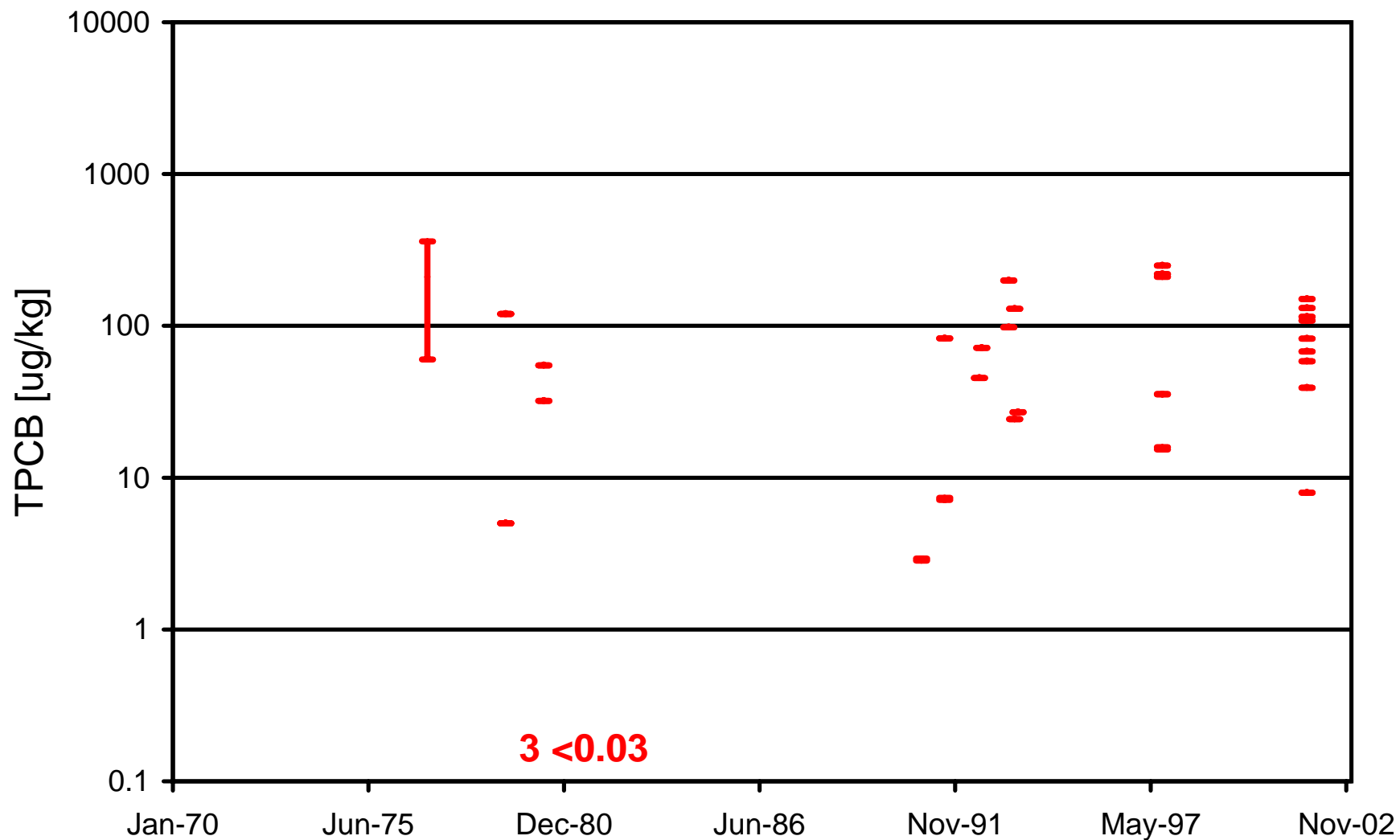
Sediments - Rancocas Creek



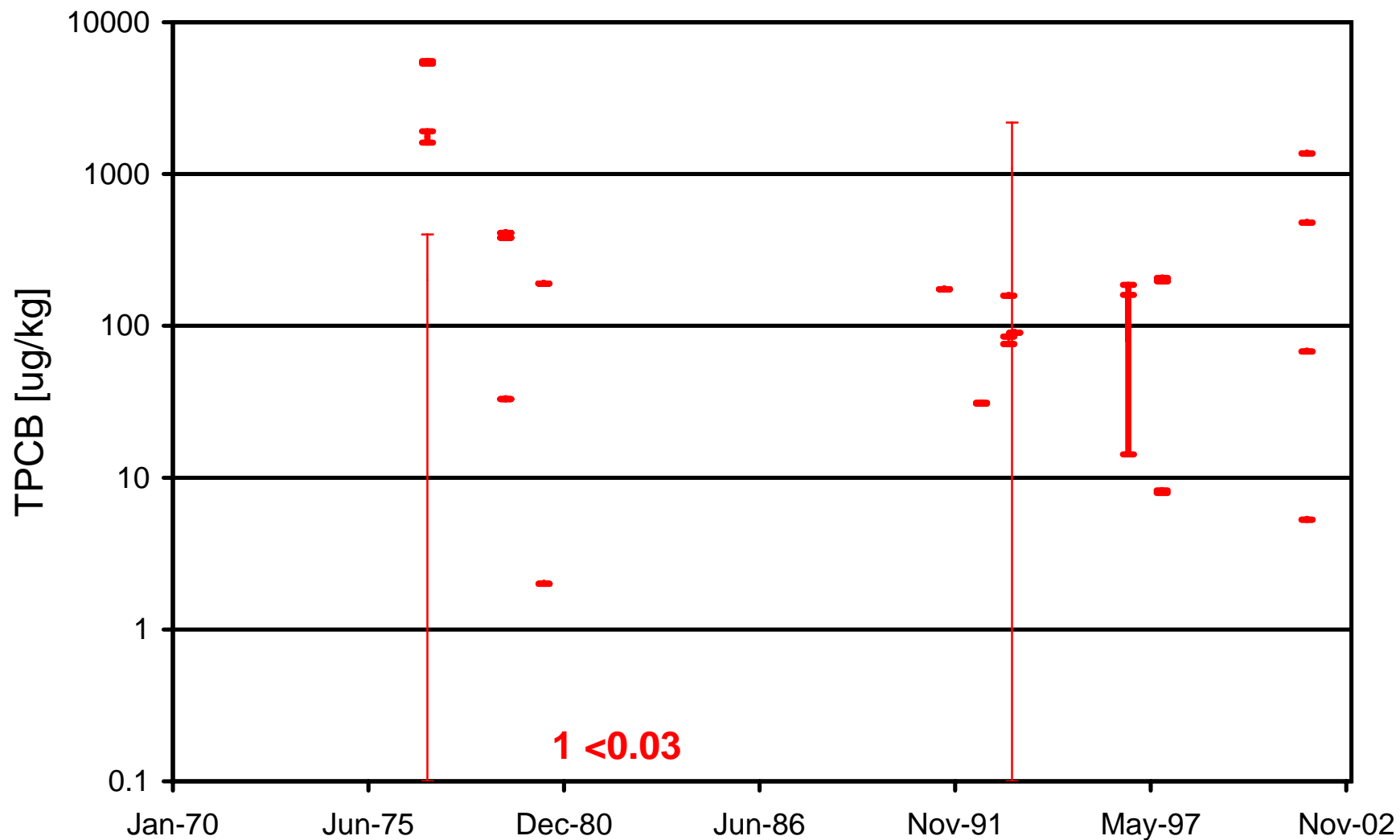
Sediments - Delaware River Zone 1



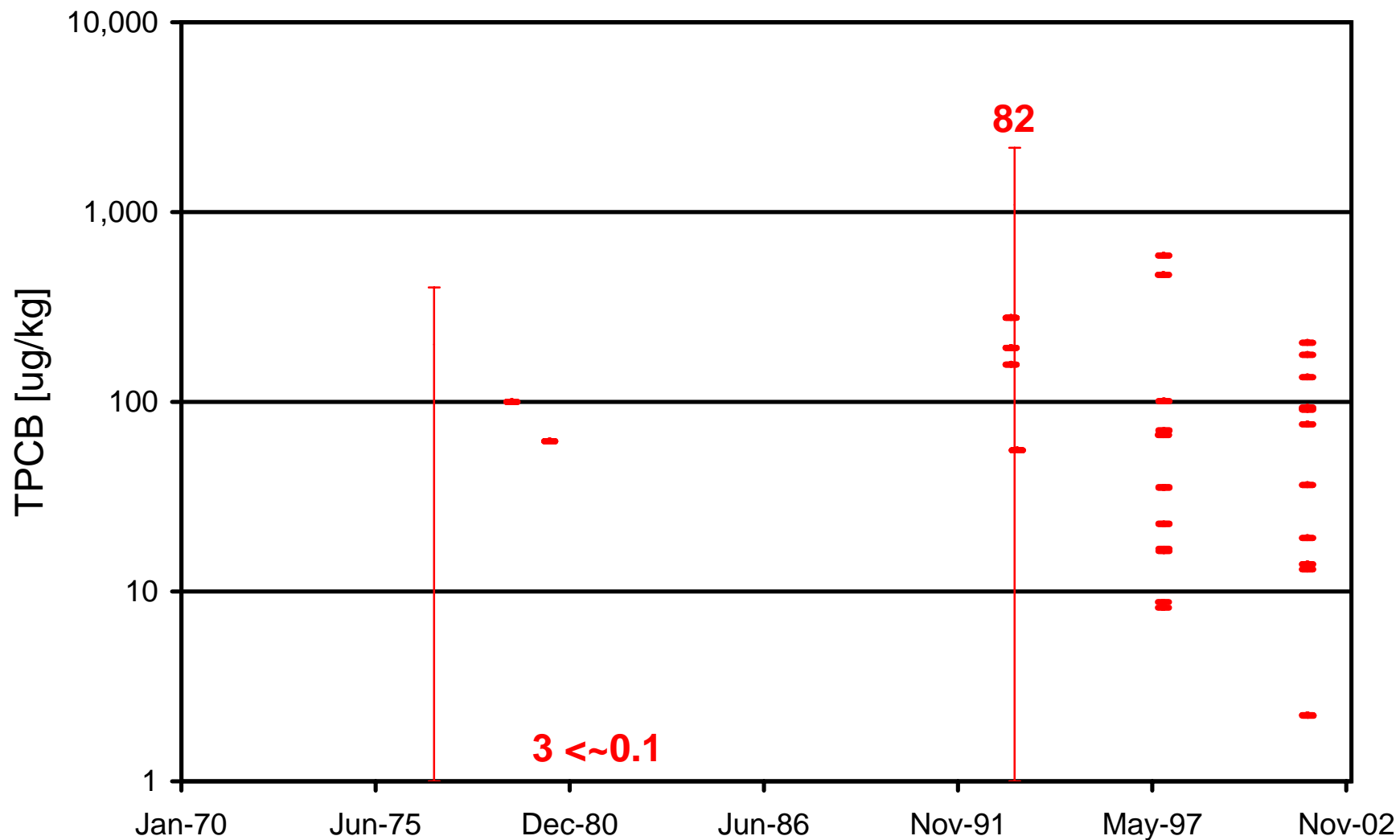
Sediments - Delaware Estuary Zone 2



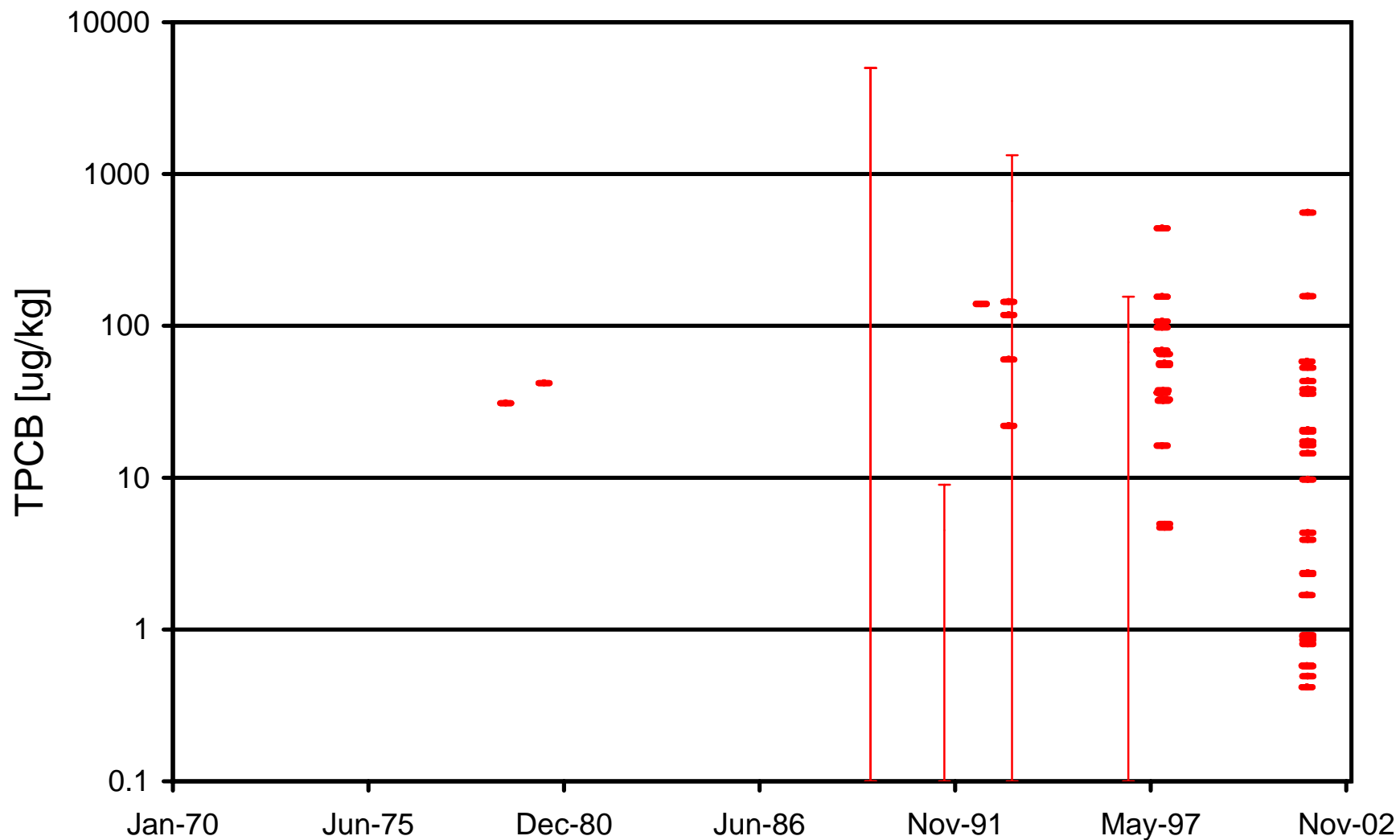
Sediments - Delaware Estuary Zone 3



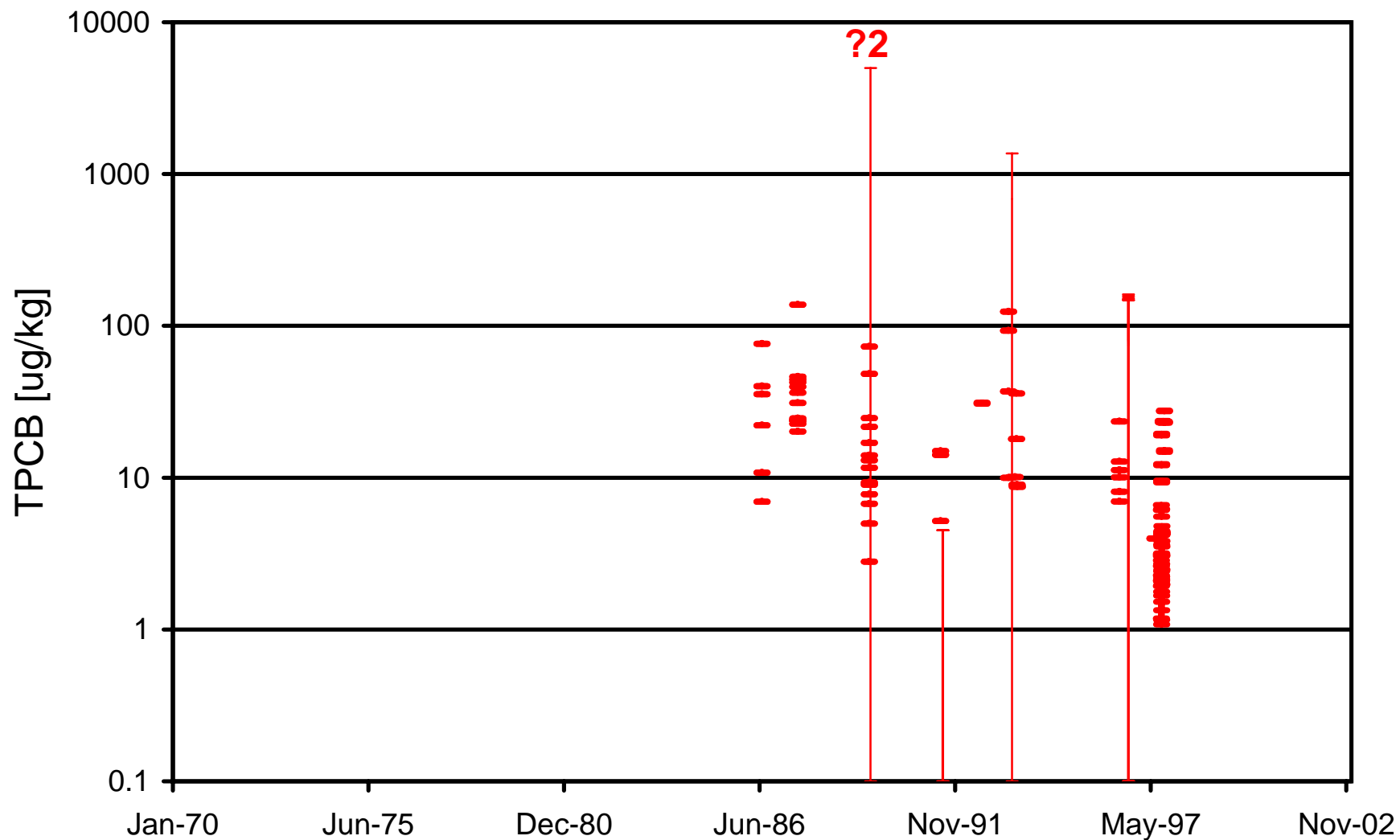
Sediments - Delaware Estuary Zone 4



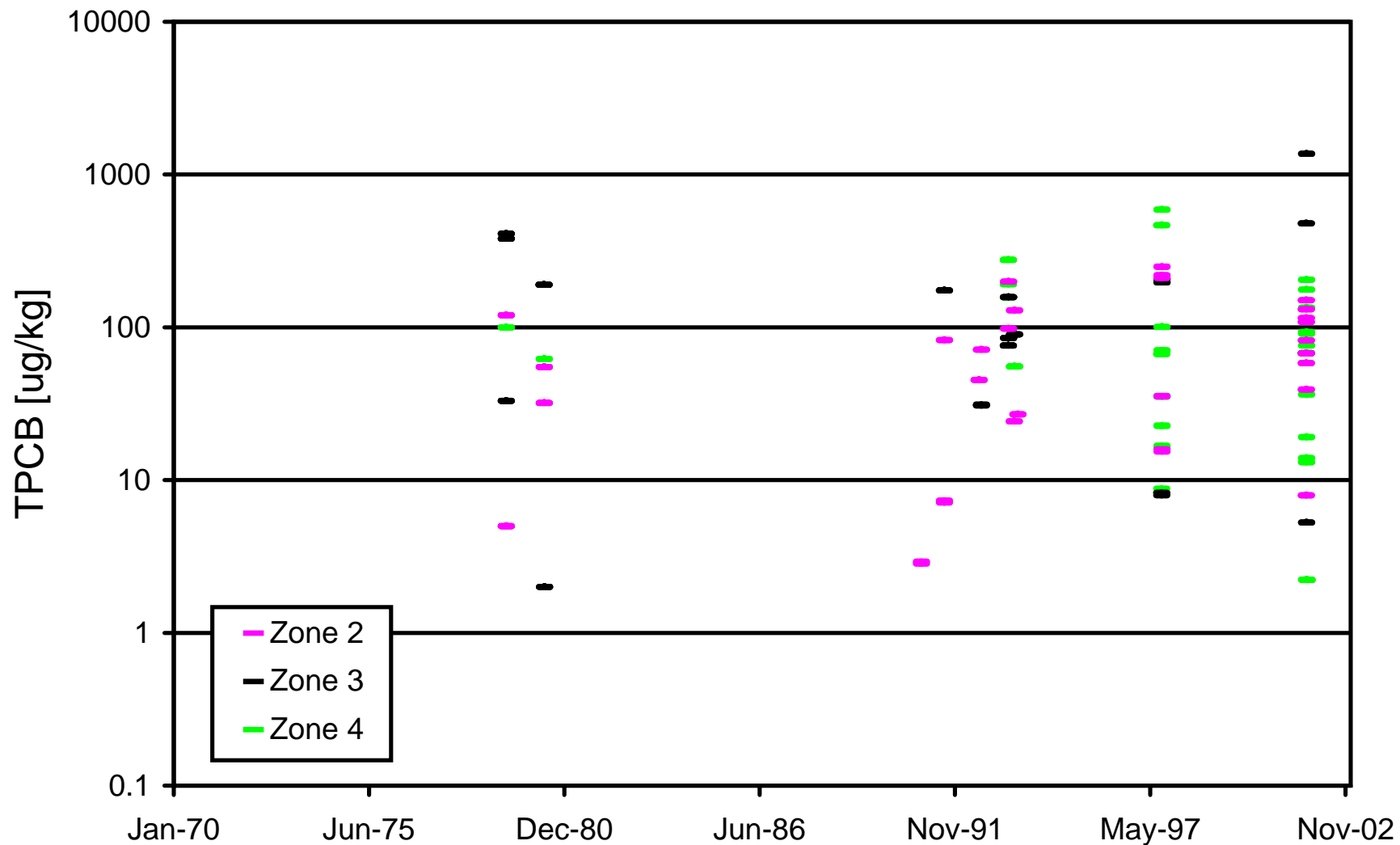
Sediments - Delaware Estuary Zone 5



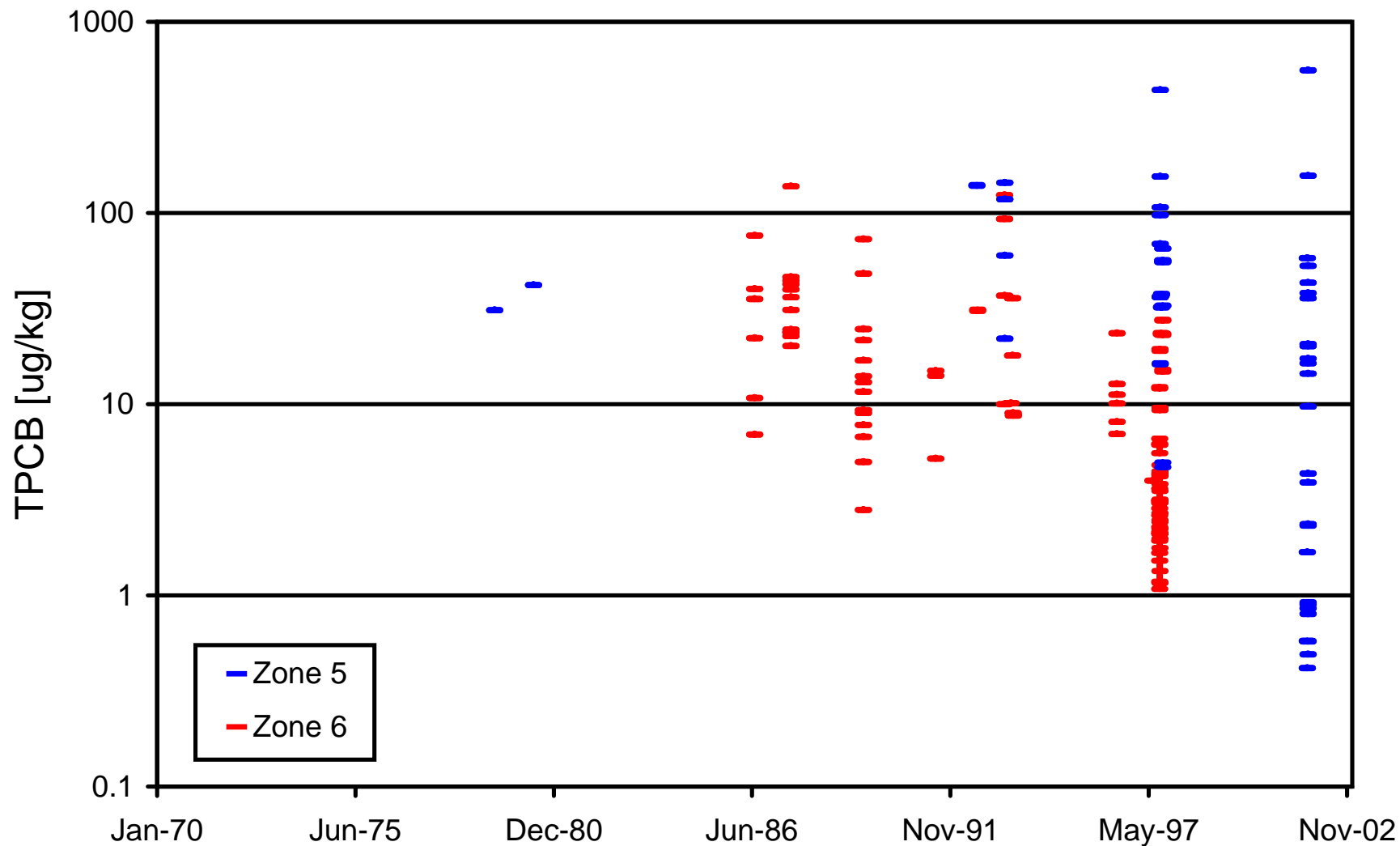
Sediments - Delaware Estuary Zone 6



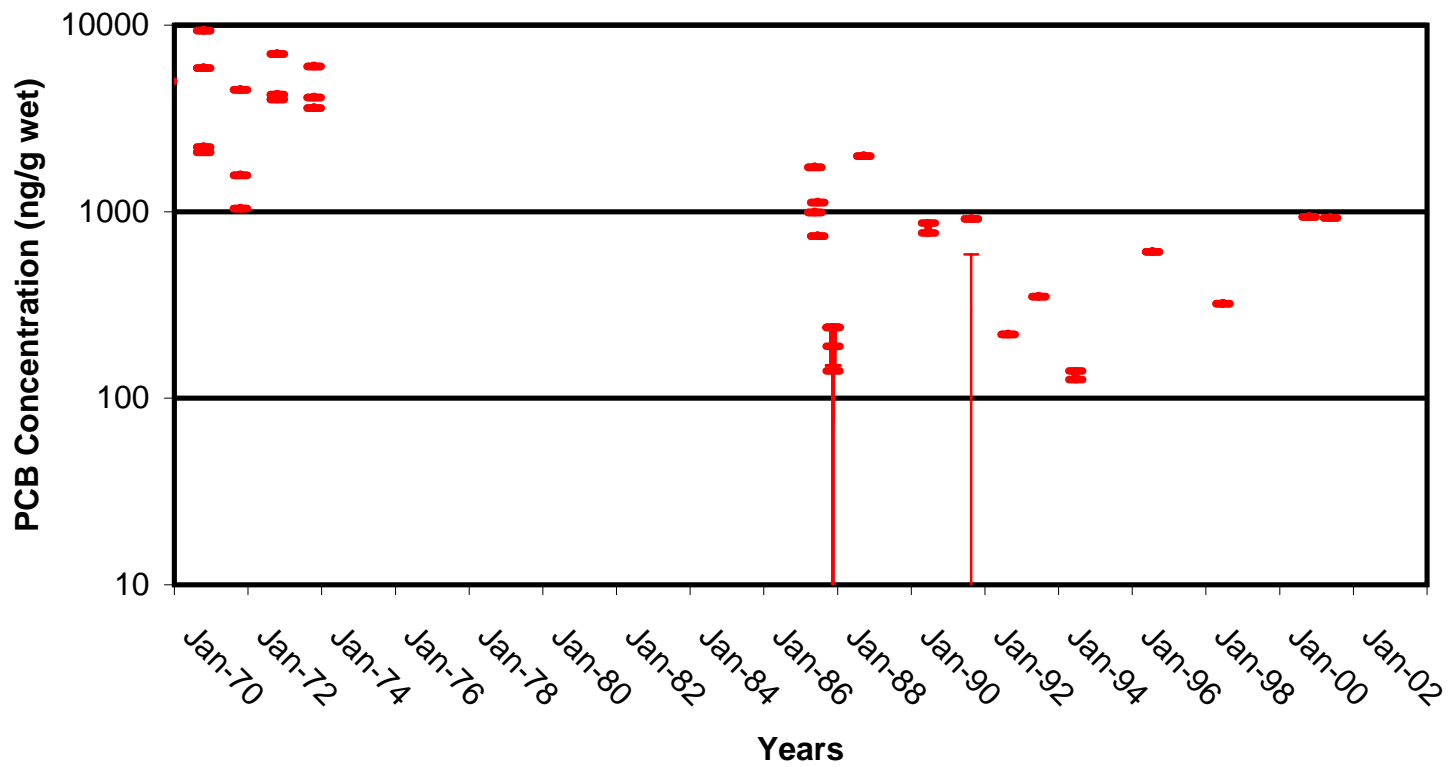
Sediments - Delaware Estuary Zones 2, 3 & 4



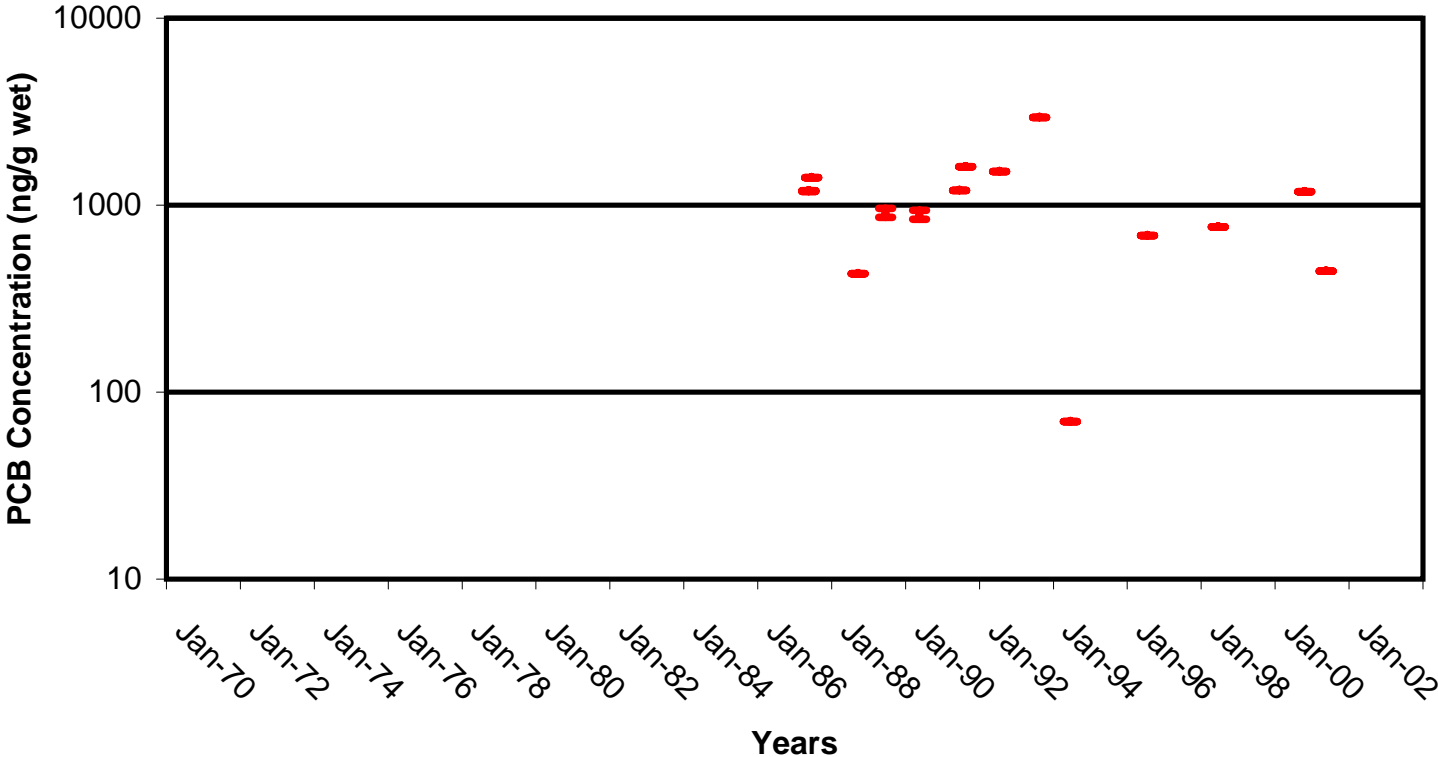
Sediments - Delaware Estuary Zones 5 & 6



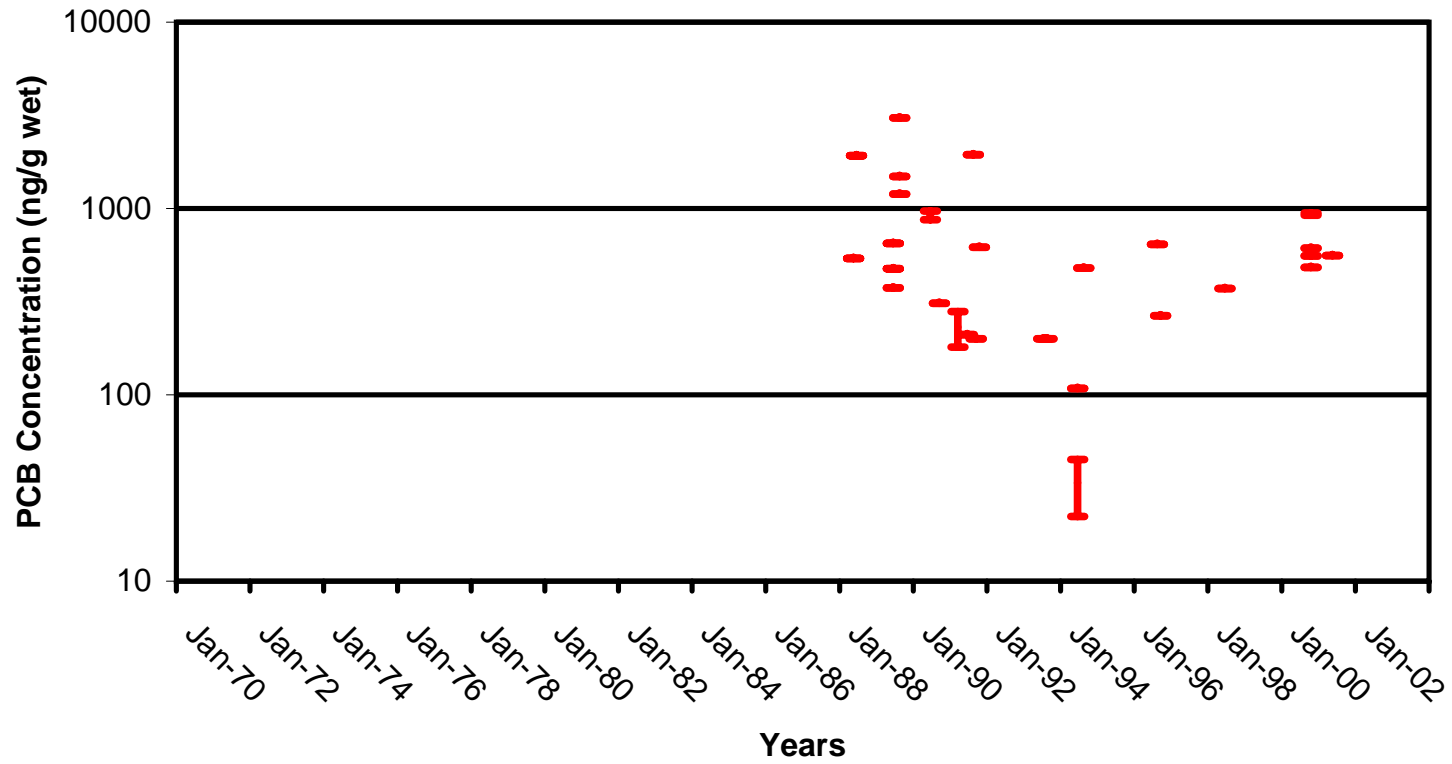
White Perch Historical Data Zone 3



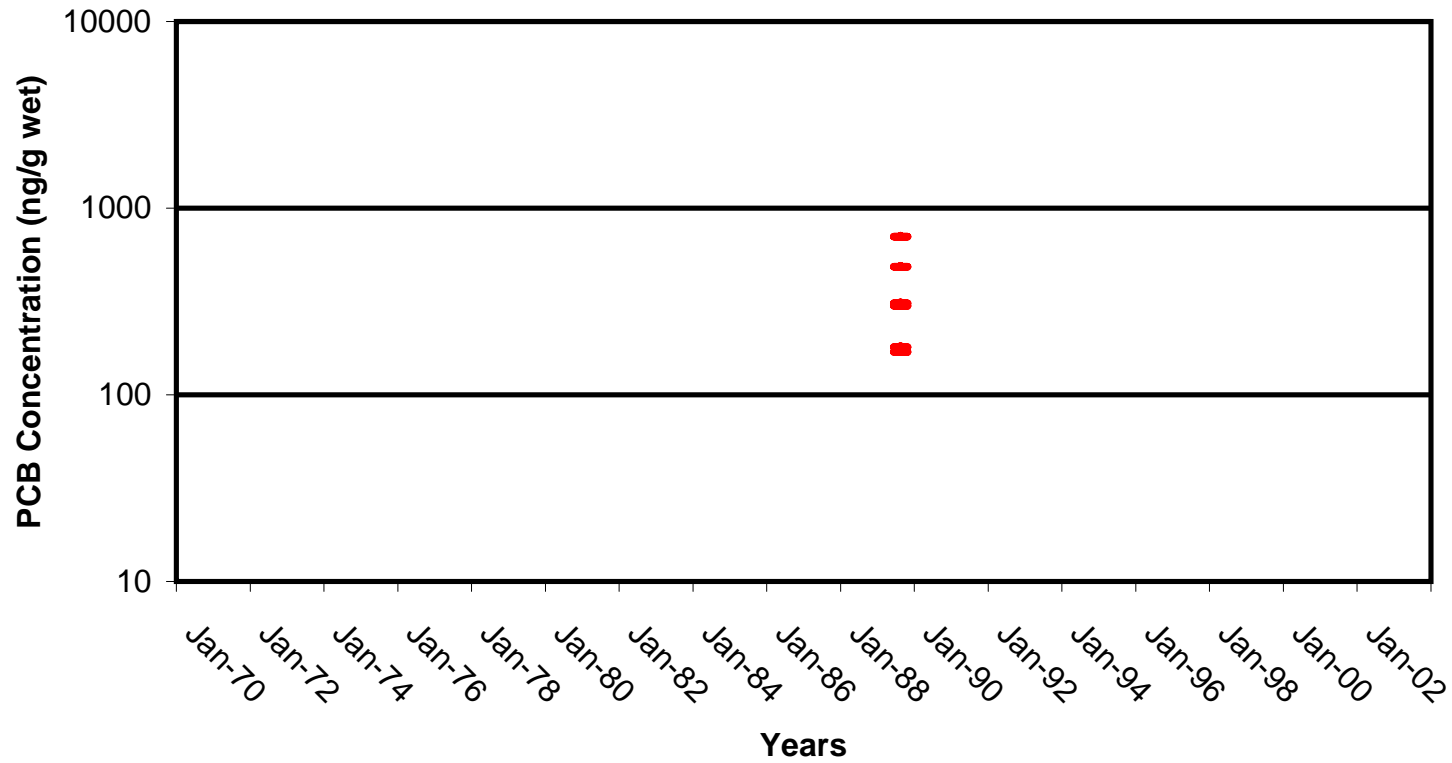
White Perch Historical Data Zone 4



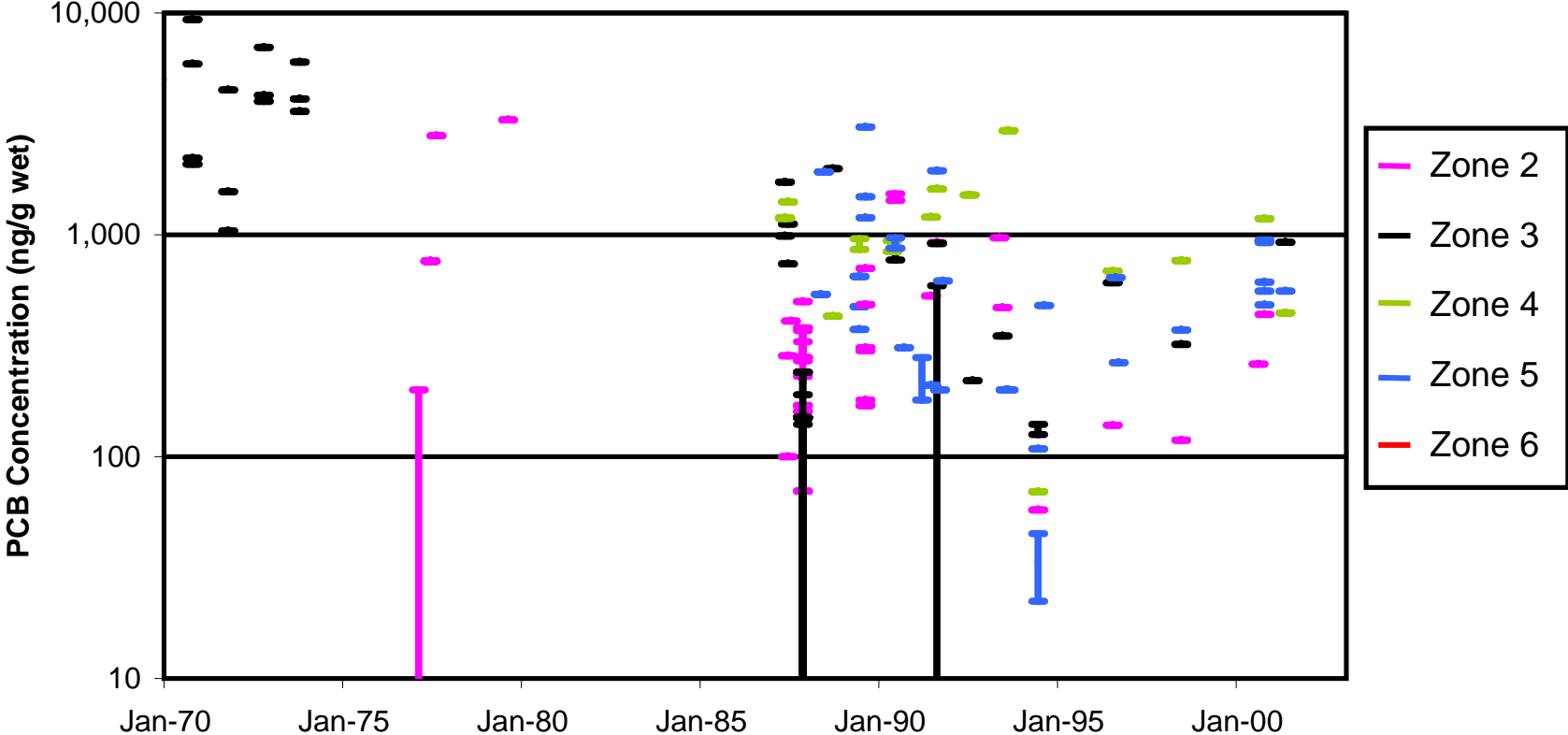
White Perch Historical Data Zone 5



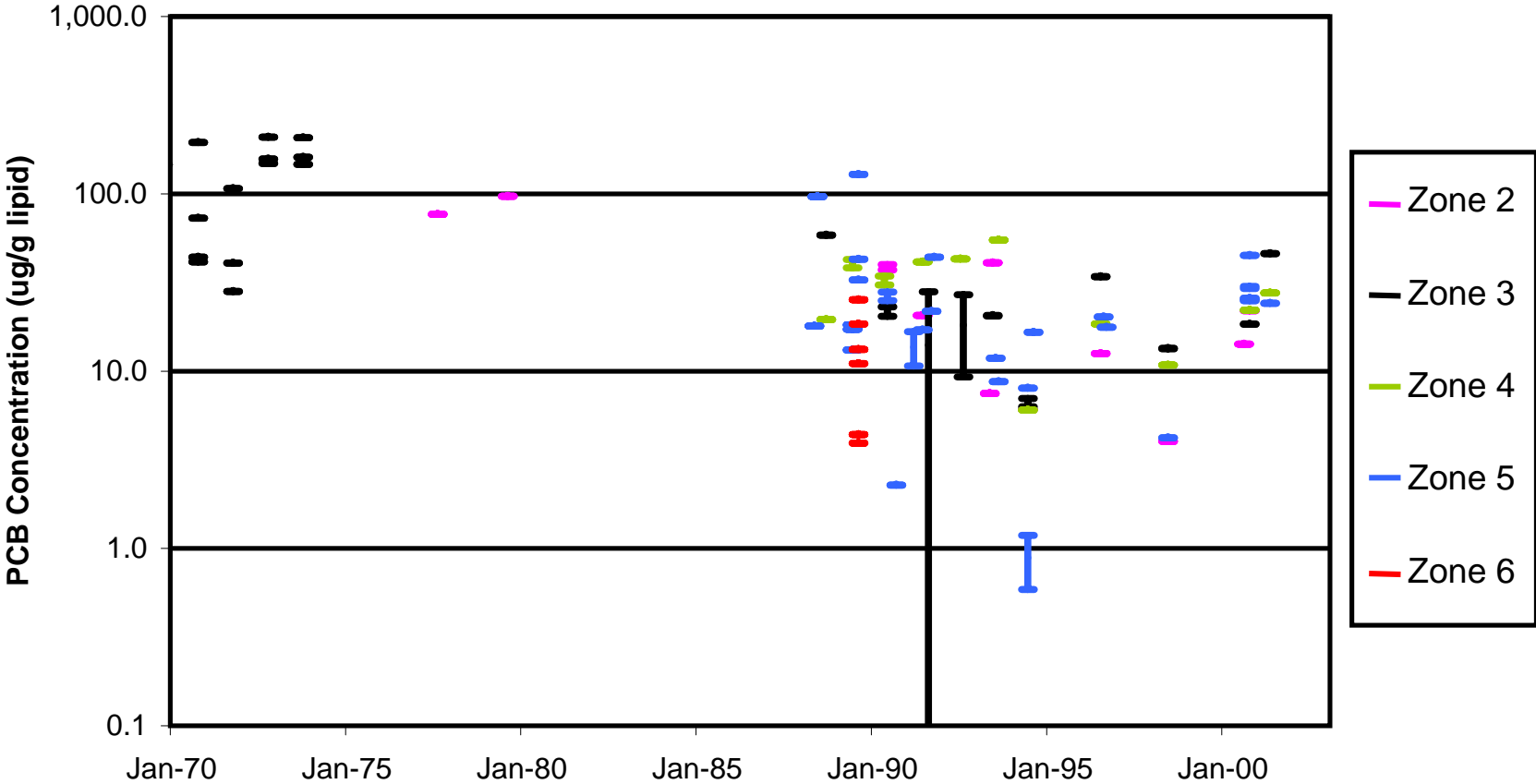
White Perch Historical Data Zone 6



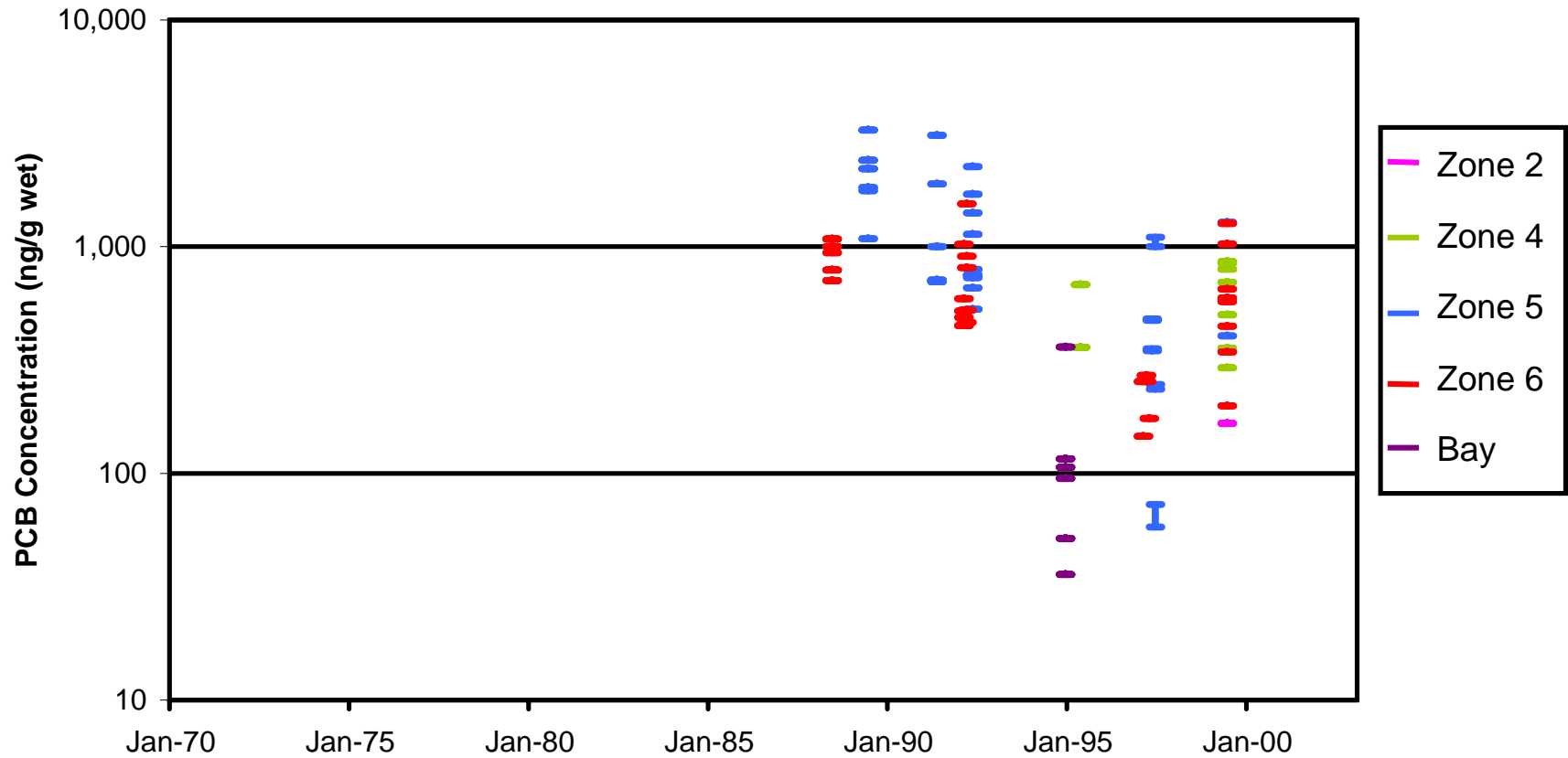
White Perch Historical Data All Zones



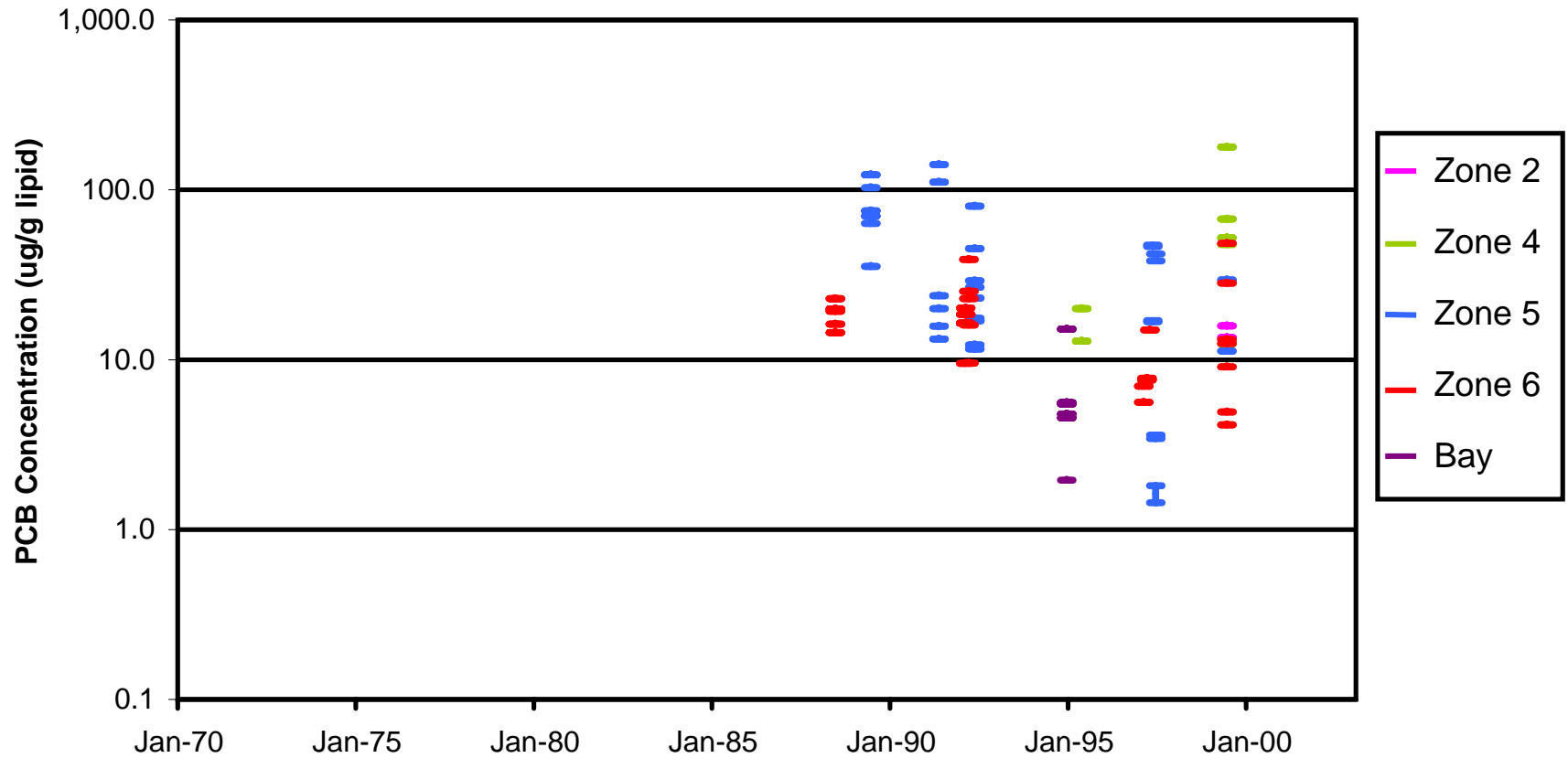
White Perch Historical Data All Zones - Lipid Normalized



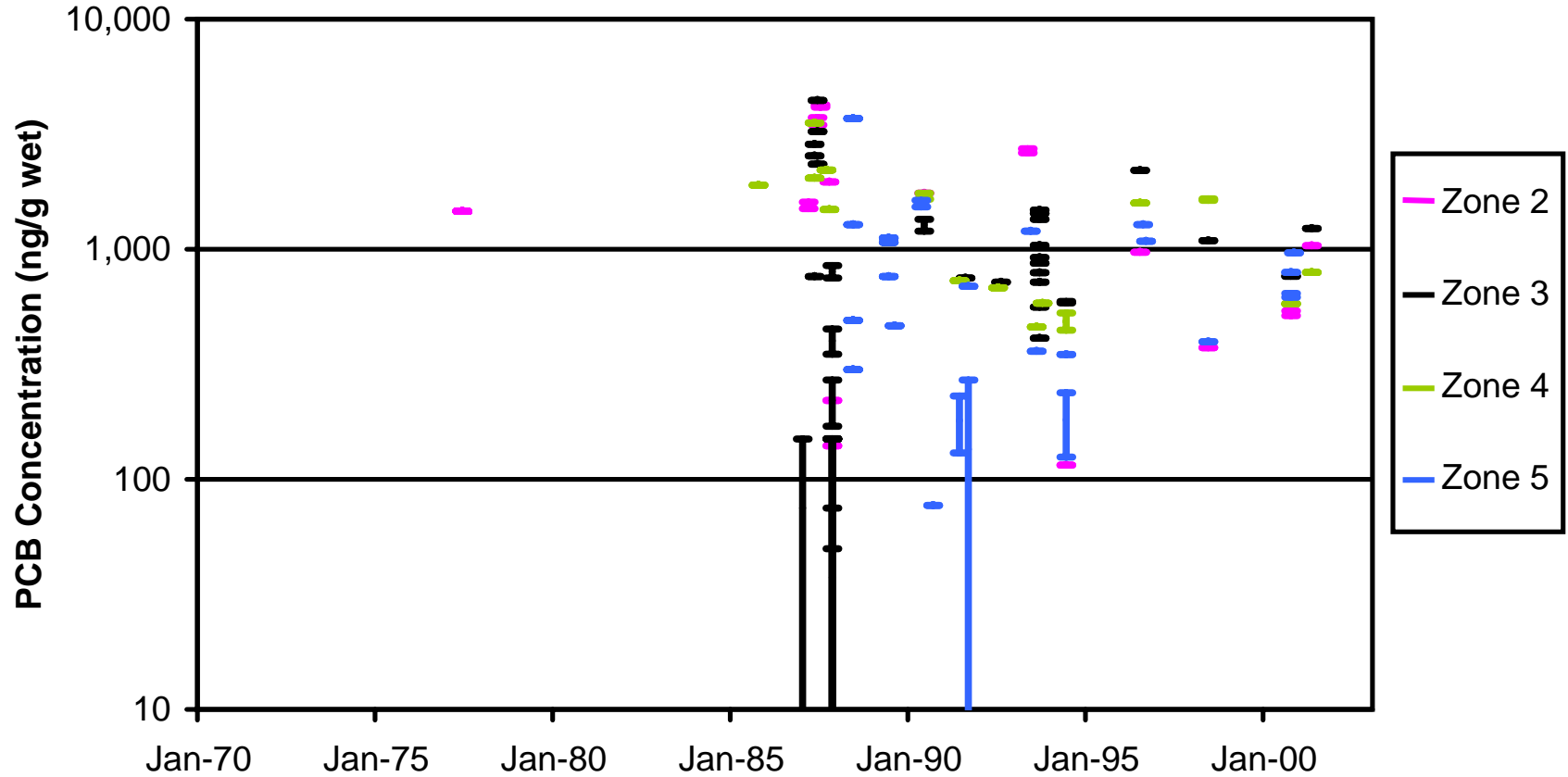
Striped Bass Historical Data All Zones



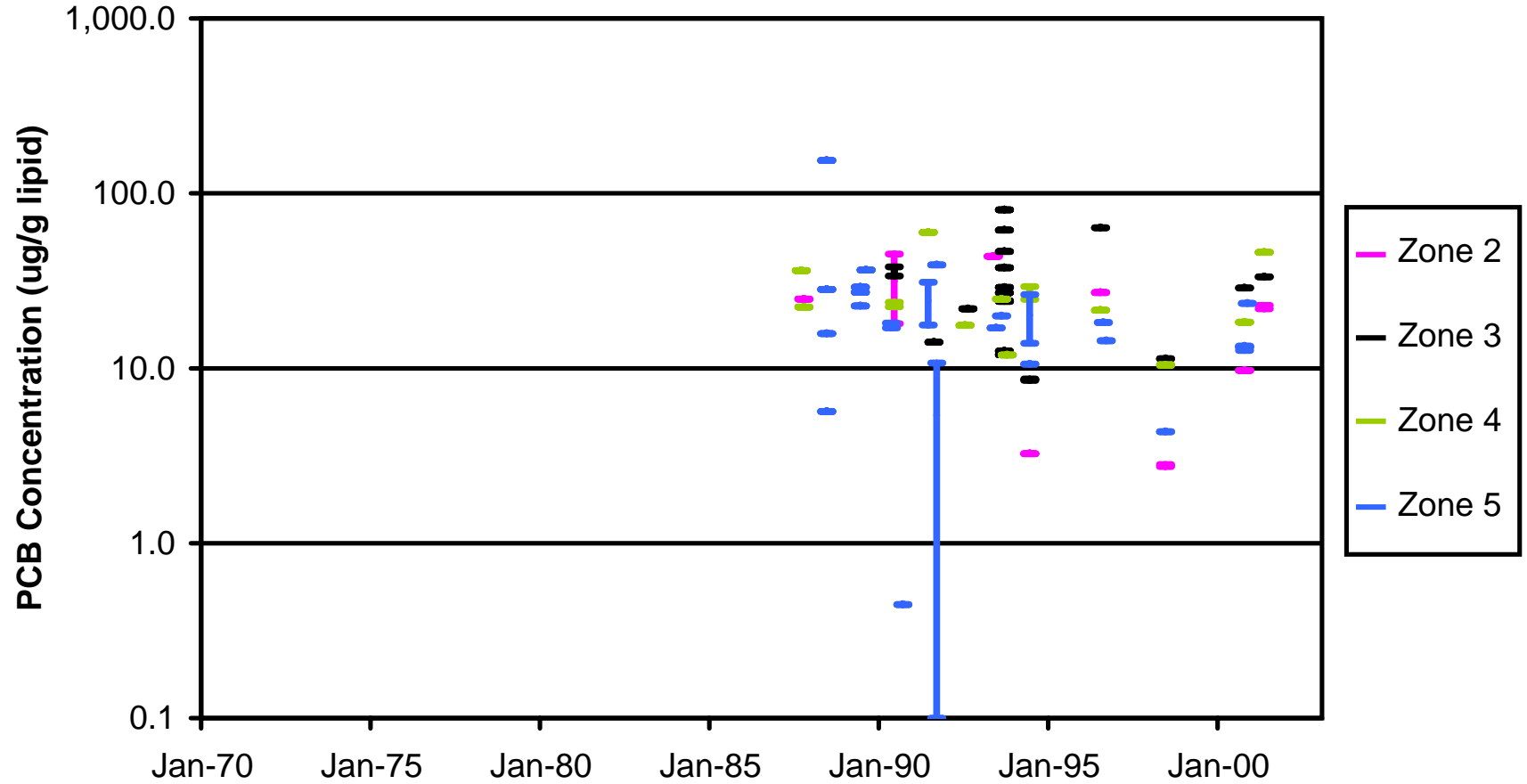
Striped Bass Historical Data
All Zones - Lipid Normalized



Channel/White Catfish Historical Data All Zones

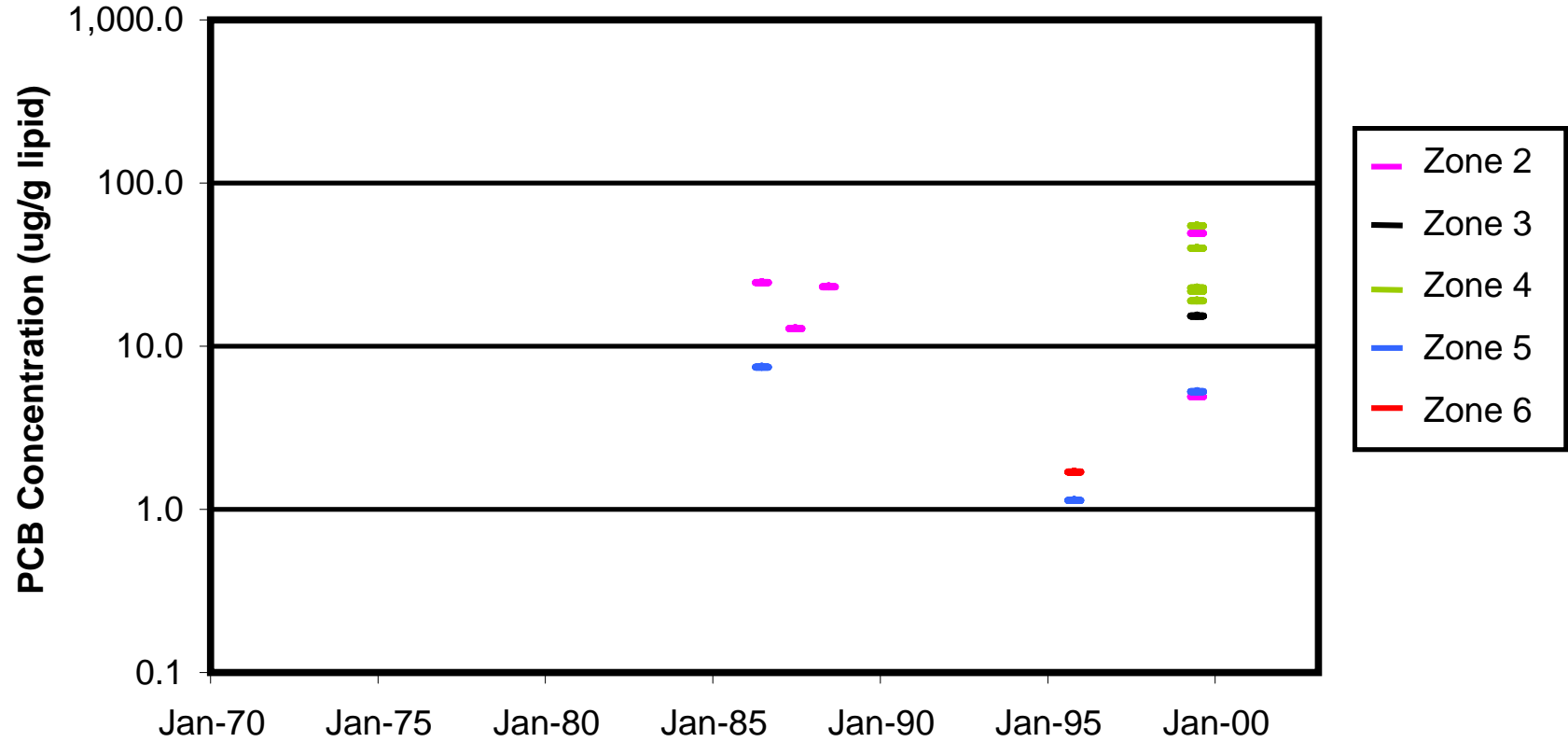


Channel/White Catfish Historical Data All Zones - Lipid Normalized

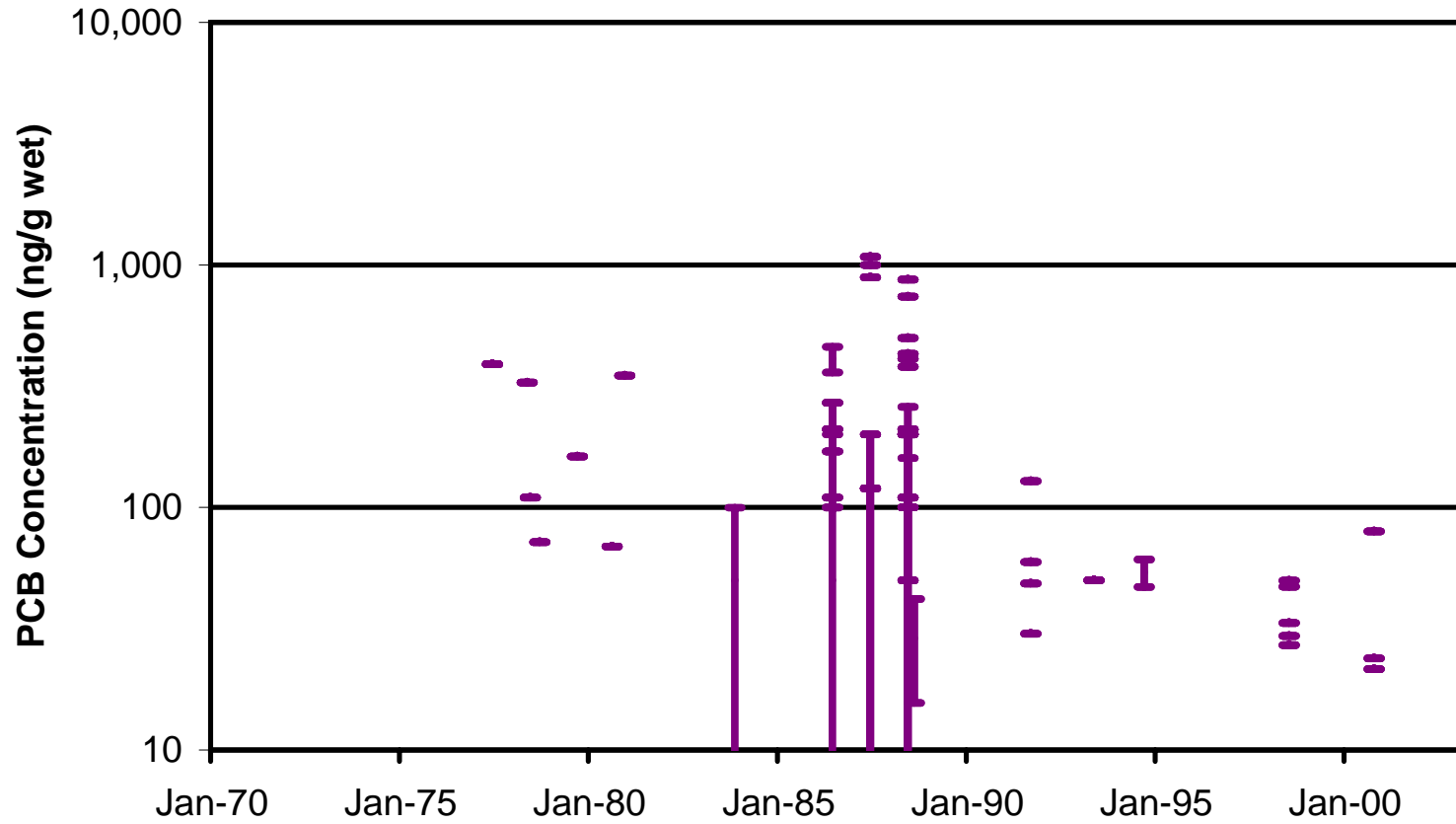


American Eel Historical Data

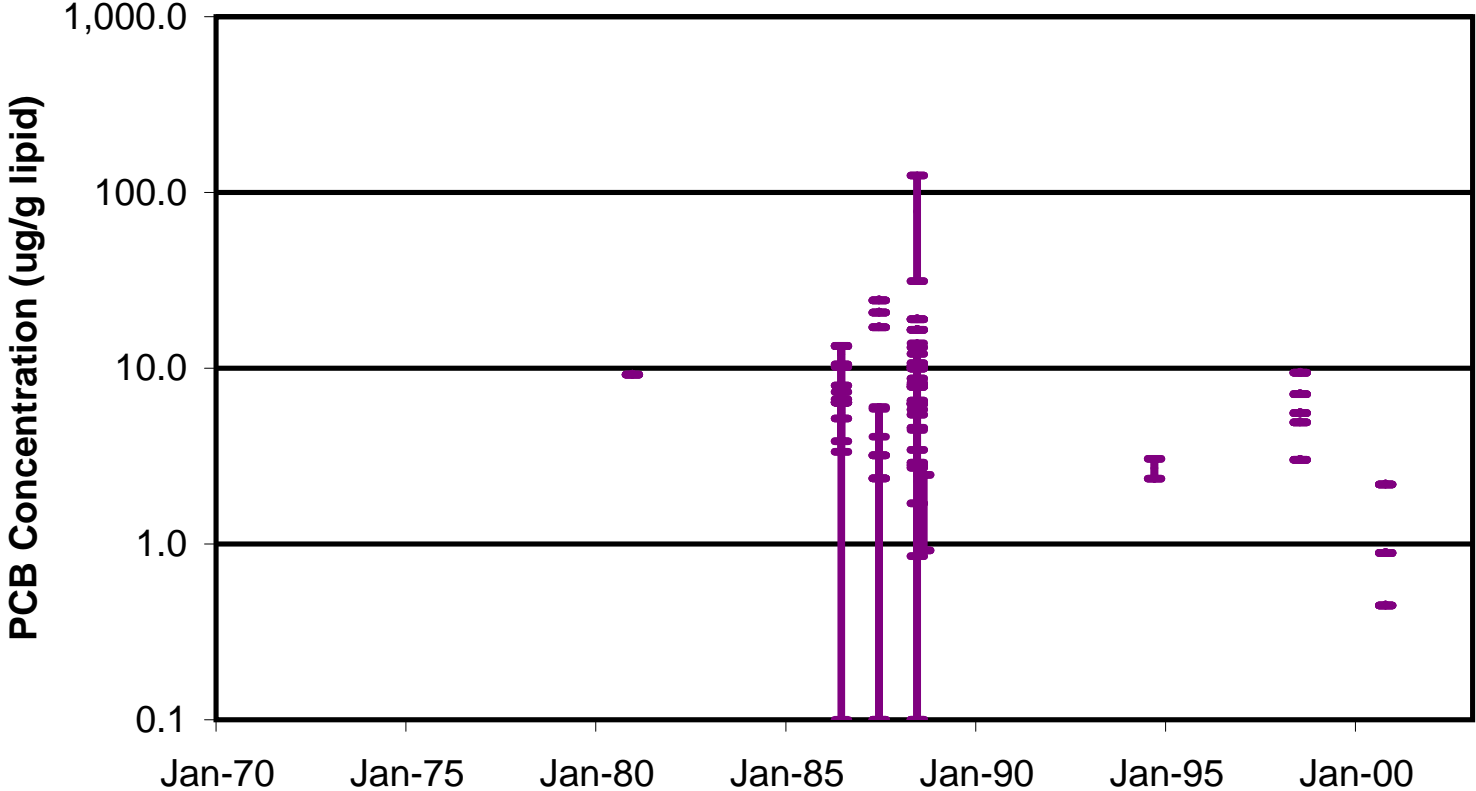
All Zones - Lipid Normalized



Weakfish Historical Data Delaware Bay



Weakfish Historical Data Delaware Bay - Lipid Normalized



Biota - Osprey Eggs - Delaware Estuary Zone 6

