OPTIMIZATION OF STATUS AND TRENDS

Proposal for Water, Sediment and Bivalves

Water

- Every 2 years
  - Copper and Cyanide - SSO
  - Selenium TMDL – Monitor to assure no degradation
  - Ancillary (SSC, NO3, NH3, Chlorophyll, etc.)
- Every 8 years
  - PCBs, PAHs, Pesticides, Hg & MeHg
- Every 10 years
  - CTR

Water

- Copper - Power to detect 1 ug/L Cu difference p=0.05, (H0: $\mu \leq$ Threshold, HA: $\mu >$ Threshold)
  - What is an acceptable time frame to achieve N?

N=	3	4	5	6	8	10	15
LSB	39	56	70	79	91	96	100
CB	76	94	99	100	100	100	100
SB	59	80	91	96	99	100	100
SPB	75	93	98	100	100	100	100
SU	94	100	100	100	100	100	100

Water Decisions

- MeHg biennial?
  - Pro: Possible value in understanding MeHg cycling and trends
  - Con: Slightly increased cost

Sediment

- Drop to 27 sites (20 random and 7 historic)
- Every 4 years
  - Dredging – PAH, PCBs, Hg
  - PBDE track PBDE declines
- Every 8 years
  - Metals, Se/Ar, Pesticides, Benthos, and Toxicity

Sediment Decisions

- Continue alternate dry and wet season?
  - Pro: can capture wet season phenomena, can bin with dry data if not different
  - Con: eight years between wet season samplings not that informative, possibly reduced power to see long-term trend in dry season
- PBDE 209 quadrennial?
  - Pro: much less expensive
  - Con: long time to see effect of 209 phaseout in 2013

Bivalves

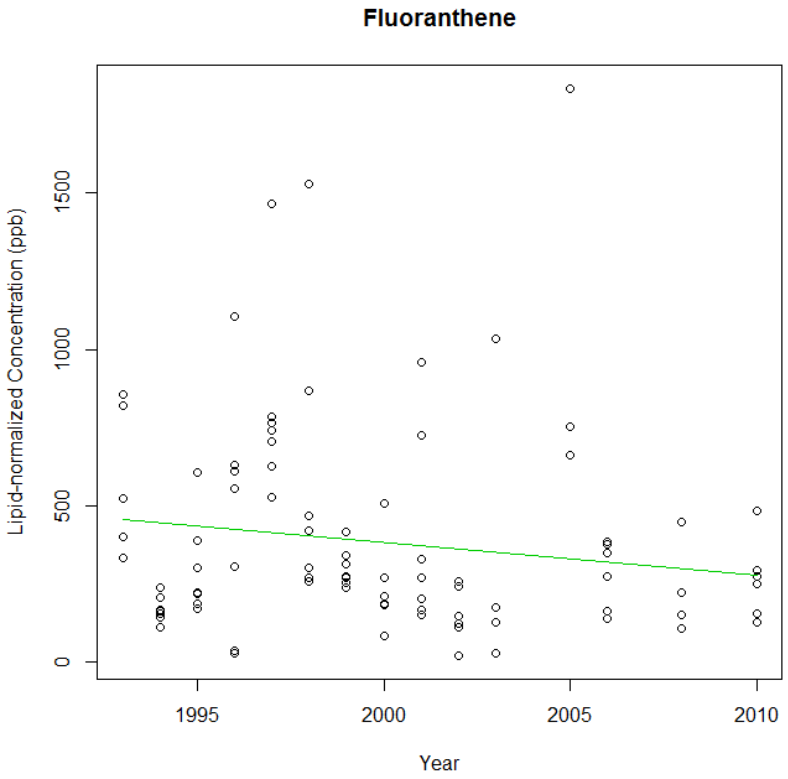
- Drop to 6 sites
- Every 2 years
  - PAHs
- Every 4 years
  - Metals, pesticides, PCBs, PBDEs, and Se/As

Bivalve Power for PAHs

Years required to achieve desired power, 7 stations.

	Annual	Biennial	Quadrennial
80%	7	10	16
90%	14	24	40
99%	31	54	96

2 year interval:
Pro: Higher frequency platform if we do CECs in biota
Con: Increased cost if no other bivalve drivers on same frequency



END