Coastal Wetlands

produce transport bioaccumulate

Hg MeHg MeHg (Methylmercury)
79% of US coast has fish Hg advisories.
San Francisco Bay Delta and Watershed

Total Hg in surface sediment

Data from Western North America Mercury Synthesis (Fleck et al.)
San Francisco Bay Delta and Watershed

MeHg in surface sediment

Data from Western North America Mercury Synthesis (Fleck et al.)
San Francisco Bay Delta and Watershed

%MeHg of Hg in surface sediment

Data from Western North America Mercury Synthesis (Fleck et al.)
San Francisco Bay Delta and Watershed

Methylmercury production is high in wetlands.

organic matter wetting / drying

%MeHg (% of THg)

MeHg Production Potential (pg/g dry wt/d)
Reduce MeHg production by reducing organic matter
Cosumnes River Preserve, CA Delta

Increase MeHg removal via settling and sunlight

Seasonal Wetlands
Reducing MeHg Exposure: the next phase

Monitoring AND Mitigating

Net Production

Net Transport

Bioaccumulation

Suisun Bay, CA. Fichot et al 2016. ES&T
Thank you.