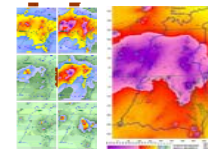


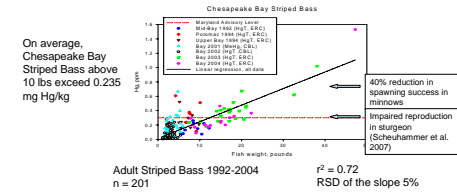
There are fish consumption advisories for all fresh water impoundments in Maryland. These advisories are linked to the inputs of mercury by atmospheric deposition. Establishing the current baseline of deposition and mercury in selected target species will allow the efficacy of emission controls efforts to be assessed.

# Status of Mercury Monitoring in Maryland

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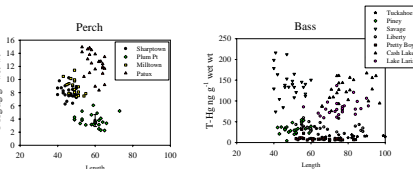
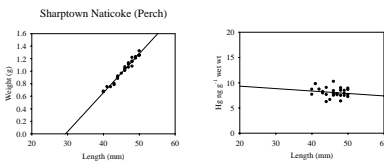
Modeled loading to the Chesapeake Bay



## YoY Survey

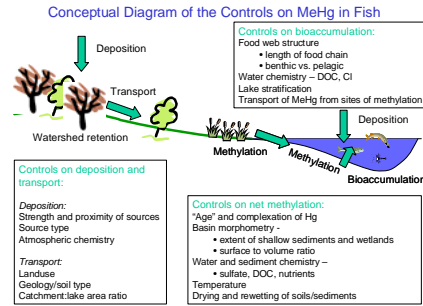
The annual Young of the Year survey by Maryland fishers is used for stock assessment and to set catch limits. The beach seine catch is subsampled and individuals are analyzed for total mercury. The first samples were collected in 2008. This is a simple and cost effective approach to look for trends in body burden in individuals that have not yet accumulated mercury from the food chain.

Sampling Sites



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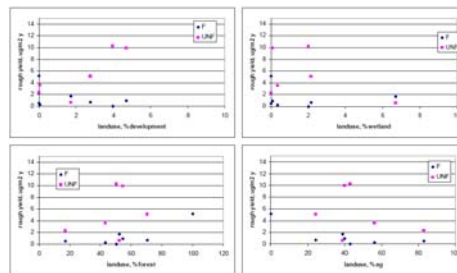
## Watershed Studies



### SERC Study Design

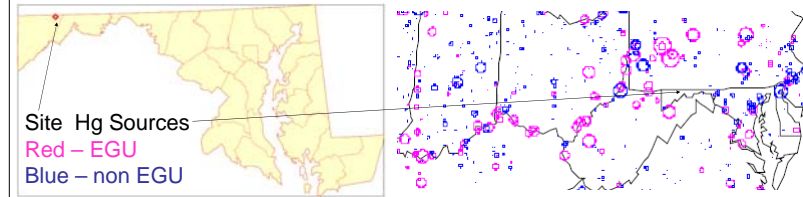
- o Characterize the flux of Hg and MeHg from the Rhode River watershed to the Rhode River
- o Characterize the importance of landuse on yield of Hg and MeHg
- o Understand the flow of Hg through the watershed
- o Understand the influence of tides on Hg and MeHg flux through coastal wetlands
- o A long-term data base of key mercury indicators in the system: wet deposition; Hg and MeHg flux from watersheds; MeHg bioaccumulation in yearling fish

### Effect of land use on watershed yield



Contact:  
Cindy Gilmour  
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## Ambient Monitoring



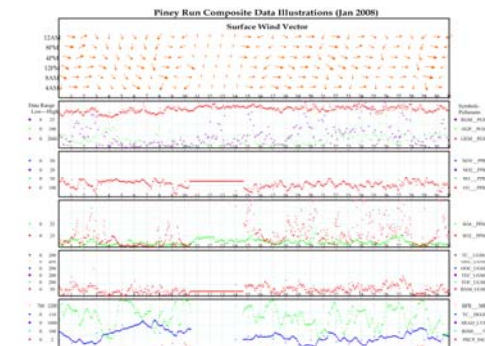
Long term air quality monitoring site. A broad range of chemical and physical parameters are monitored. Also the site for new initiatives in dry deposition and soil flux measurements.



Parameter	Method
Aerosol	IMPROVE
Ammonia	IMPROVE
EC/OC	IMPROVE
PM – speciation	IMPROVE
PM2.5 (BAM)	IMPROVE
PM10	IMPROVE
SO <sub>2</sub>	IMPROVE
SO <sub>4</sub>	IMPROVE
CO	State/EPA
NO	State/EPA
NO <sub>2</sub>	State/EPA
NO <sub>y</sub>	State/EPA
O <sub>3</sub>	State/EPA
RAS	State
Hg	NADP
Major Ions	NADP
Speciated Hg	State
Temp/Pressure/Humidity	State/EPA
Solar Radiation	State/EPA
Wind Direction/Speed	State/EPA
Precipitation	NADP

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Example data summary

See Mark's poster for more details