

## South River BFC Efforts

### Updates:

- Fine Grain Mud Deposits
- Coarse Grain Gravel Deposits

### Path Forward:

- Wetlands Study
- "Concentrated" Study
- Redeployment at studied locations



### Surface Water Hg Concentrations

- THg: 0.53/0.66 ng/L
- MeHg: 0.027/0.039 ng/L

### Sediment Hg Concentrations

- N/A

### Dissolved Oxygen

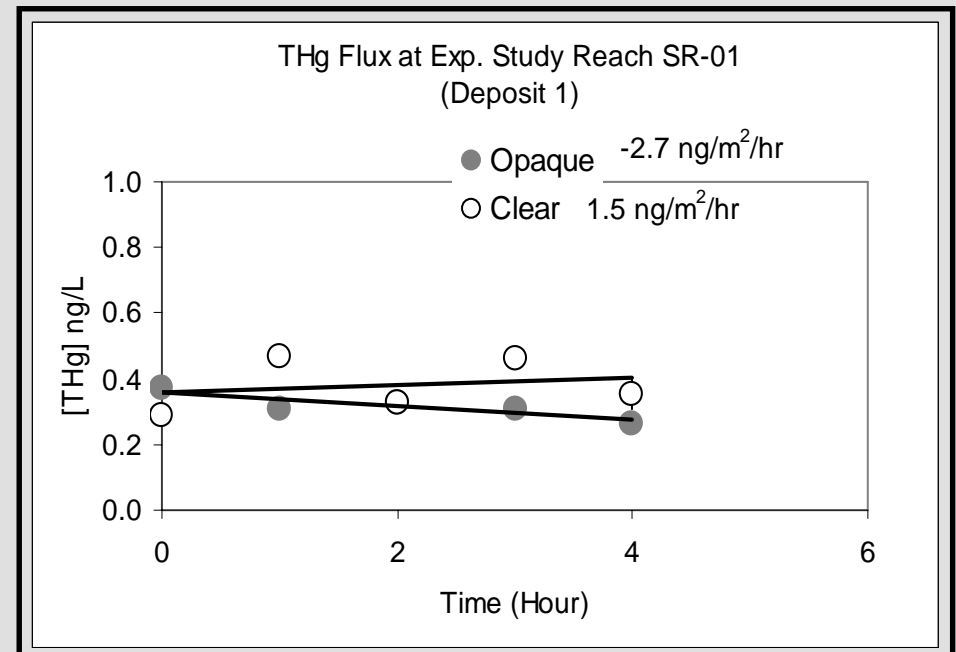
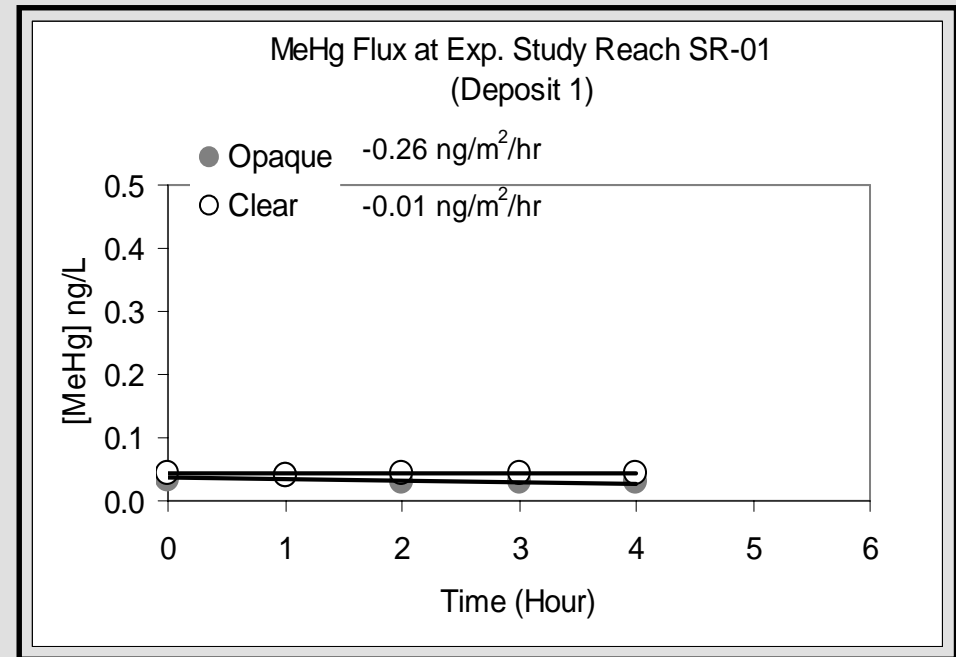
- Relatively steady in the river
- Slightly decreasing in the clear BFC
- Decreasing in the opaque BFC

### Dissolved Manganese

- Slightly decreasing in the clear BFC
- Slightly decreasing in the opaque BFC

### Iron

- Increasing in the clear BFC
- Increasing in the opaque BFC





RRM 2.0

### Surface Water Hg Concentrations

- THg: 5.38/5.55 ng/L
- MeHg: 0.345/0.358 ng/L

### Sediment Hg Concentrations

- THg: 5.5 ug/g dry basis
- MeHg: 17.56 ng/g dry basis
- LOI: 1.45%

### Dissolved Oxygen

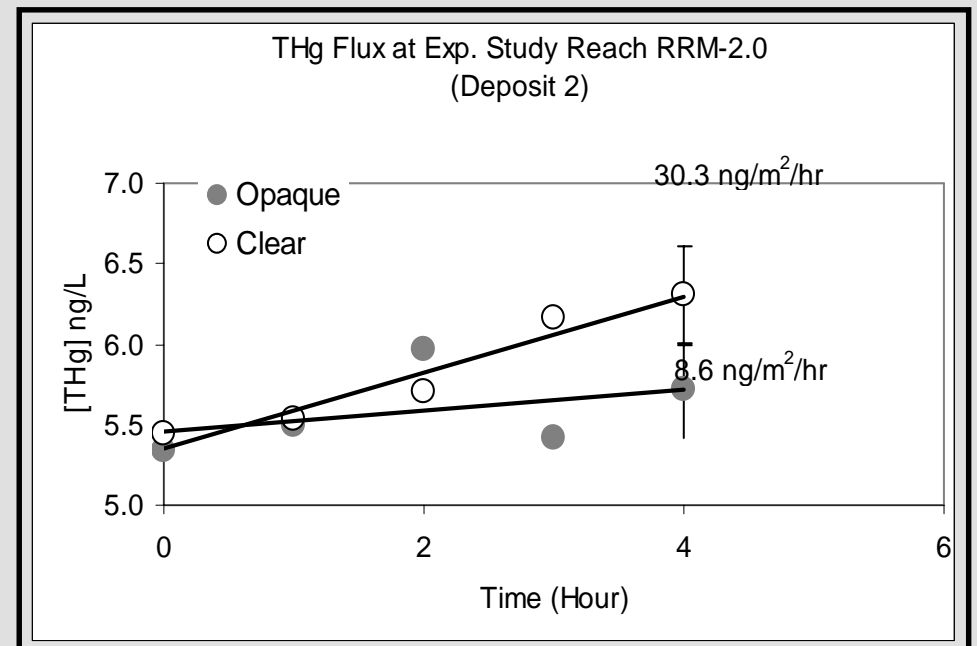
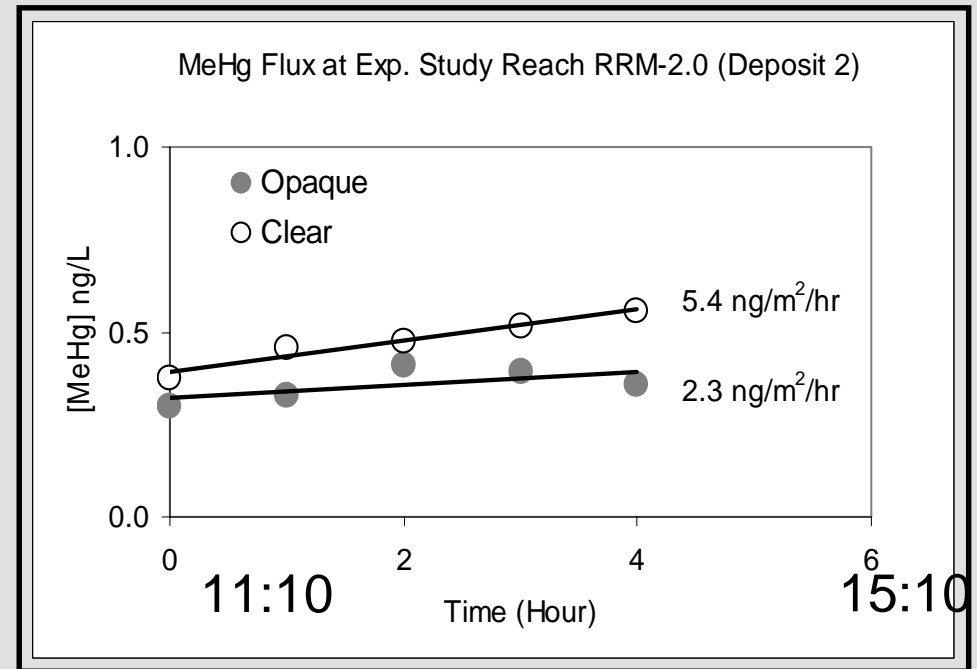
- Increasing in the river
- Relatively steady in the clear BFC
- Slightly increasing in the opaque BFC

### Dissolved Manganese

- Steady in the clear BFC
- Decreasing in the opaque BFC

### Iron

- Data was not well behaved?





### Surface Water Hg Concentrations

- THg: 7.92/8.68 ng/L
- MeHg: 0.764 ng/L

### Sediment Hg Concentrations

- THg: 18.2 ug/g dry basis
- MeHg: 112.7 ng/g dry basis
- LOI: 16.90%

### Dissolved Oxygen

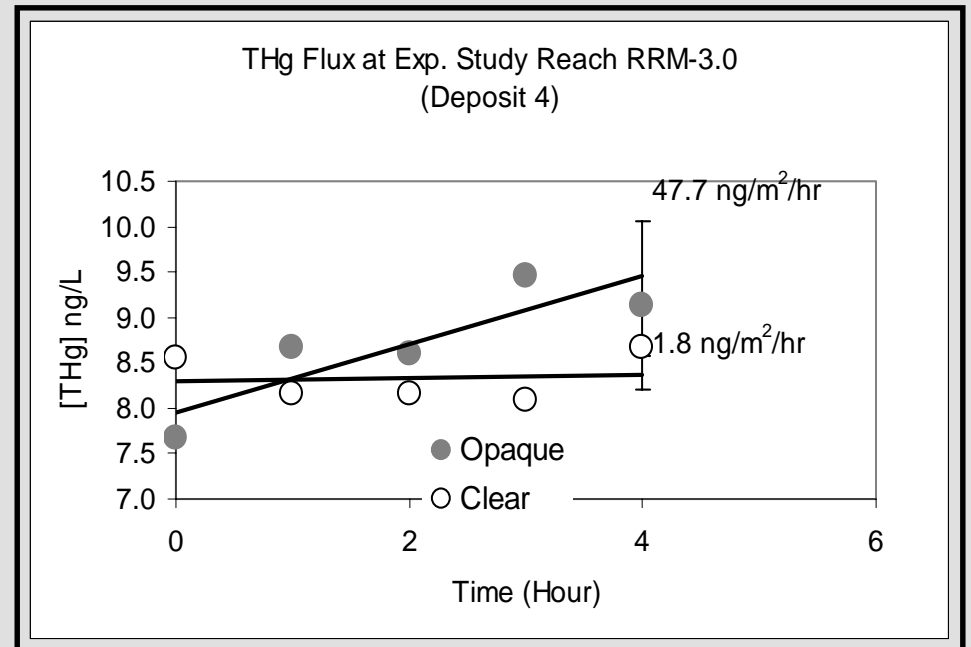
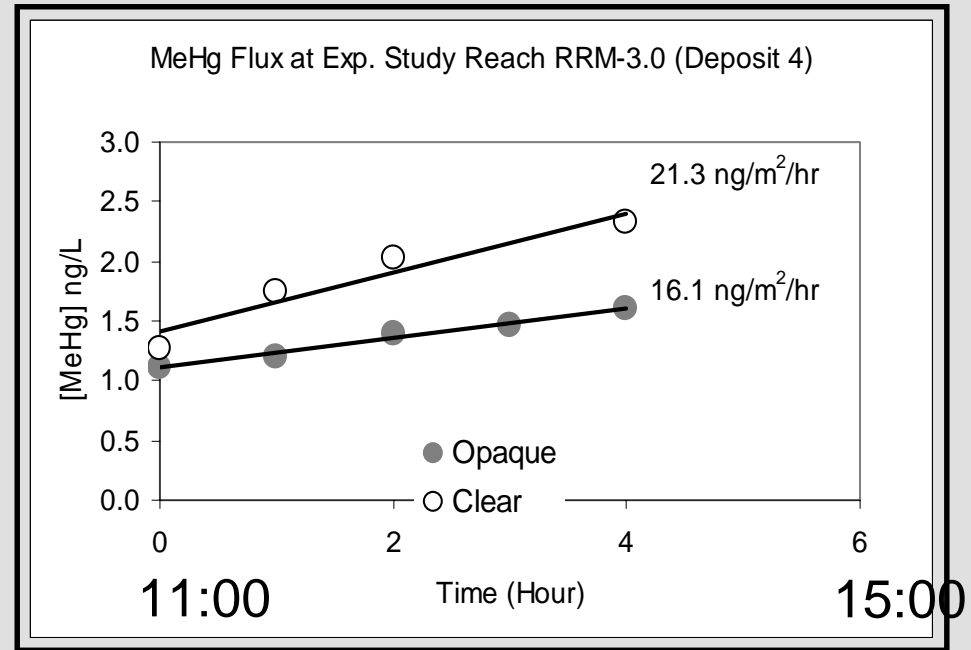
- Steady in the river
- Decreasing in the clear BFC
- Decreasing in the opaque BFC

### Dissolved Manganese

- Increasing in the clear BFC
- Increasing in the opaque BFC

### Iron

- Slightly increasing in the clear BFC
- Slightly increasing in the opaque BFC





### Surface Water Hg Concentrations

- THg: 11.71/11.87 ng/L
- MeHg: 1.216/1.240 ng/L

### Sediment Hg Concentrations

- THg: 5.3/6.3 ug/g dry basis
- MeHg: 9.91 ng/g dry basis
- LOI: 1.85%

### Dissolved Oxygen

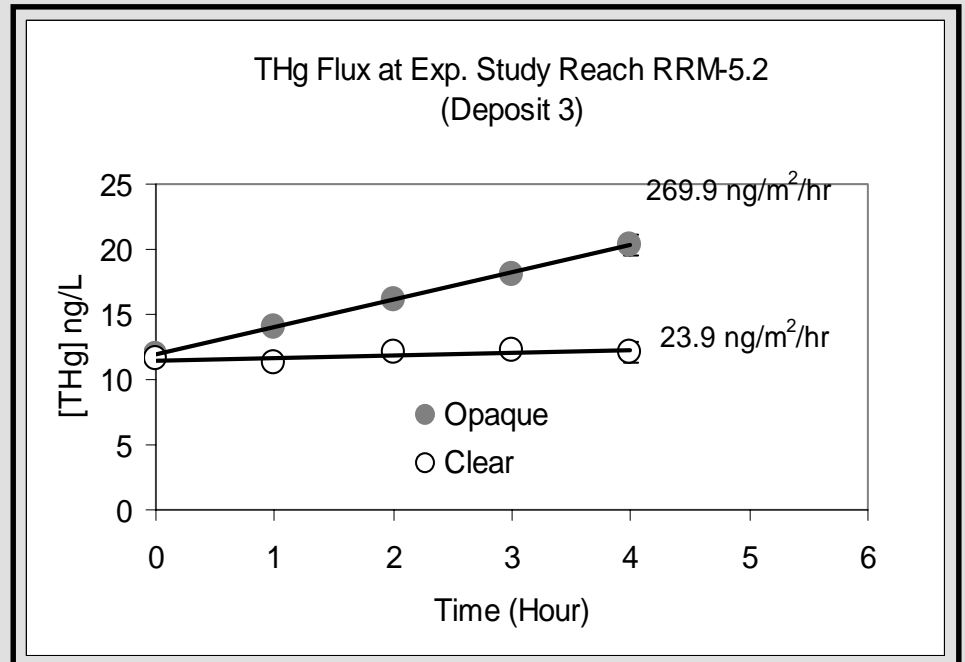
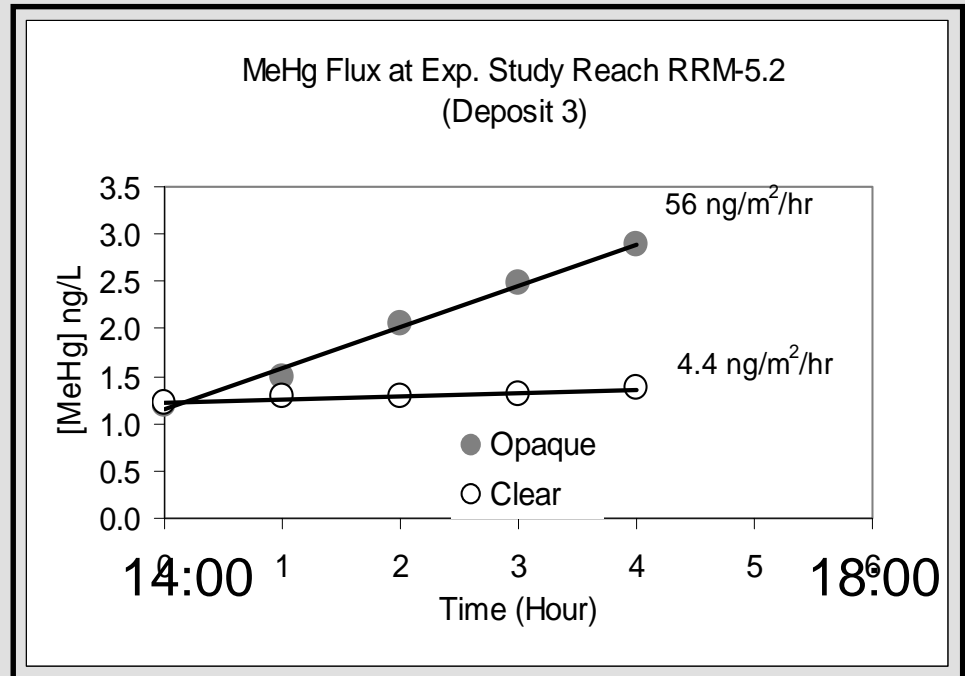
- Increasing in the river
- Slightly increasing in the clear BFC
- Decreasing in the opaque BFC

### Dissolved Manganese

- Steady in the clear BFC
- Increasing in the opaque BFC

### Iron

- Steady in the clear BFC
- Increasing in the opaque BFC





RRM-13.1

Surface Water Hg Concentrations

- THg: 20.48/21.10 ng/L
- MeHg: 2.433/2.311 ng/L

Sediment Hg Concentrations

- THg: 4.5 ug/g dry basis
- MeHg: 29.79 ng/g dry basis
- LOI: 2.77%

Dissolved Oxygen

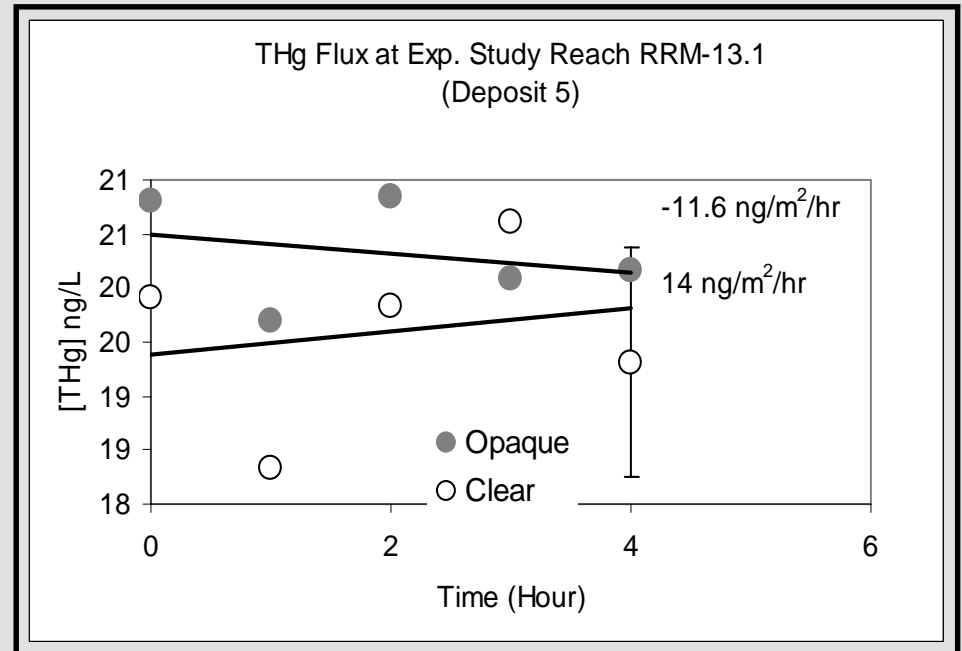
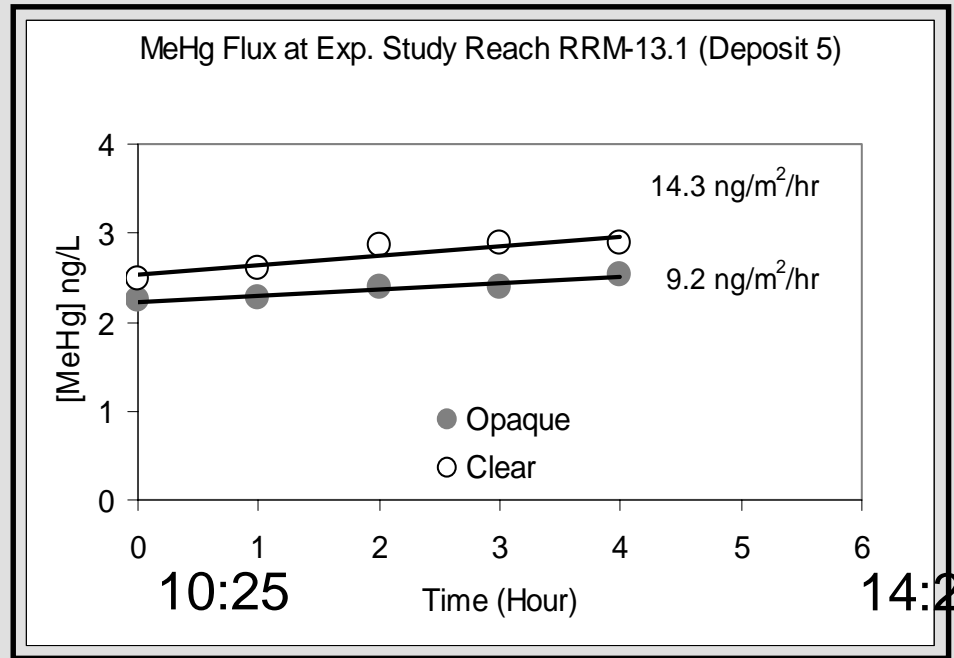
- Relatively steady in the river
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Dissolved Manganese

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Iron

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- Increasing in the opaque BFC



## Update - Coarse Grain Gravel Study

- Rock substrate plates were deployed in late July
- Study location were the same as mud deposits
- The rocks trapped sediment
- Periphyton grew on the rocks nicely
- BFCs were deployed in late September
- Water samples and sediment samples are out for analysis

## South River BFC Efforts - Path Forward

- Wetland Study:
  - Up to 5 locations based upon Eco Study data, inundation frequency, logistical issues, water depth, etc.
- "Concentrated" Study:
  - Location will be a fine grained mud deposit
  - Location will be selected based upon Eco Study data
  - Up to 5 sub-locations will be studied
- Possibly conduct 2006 studies again earlier next year to measure early season impacts