

NYSDEC Hudson River Baseline PCB Air Monitoring Study

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Hudson River Community Advisory Group Meeting

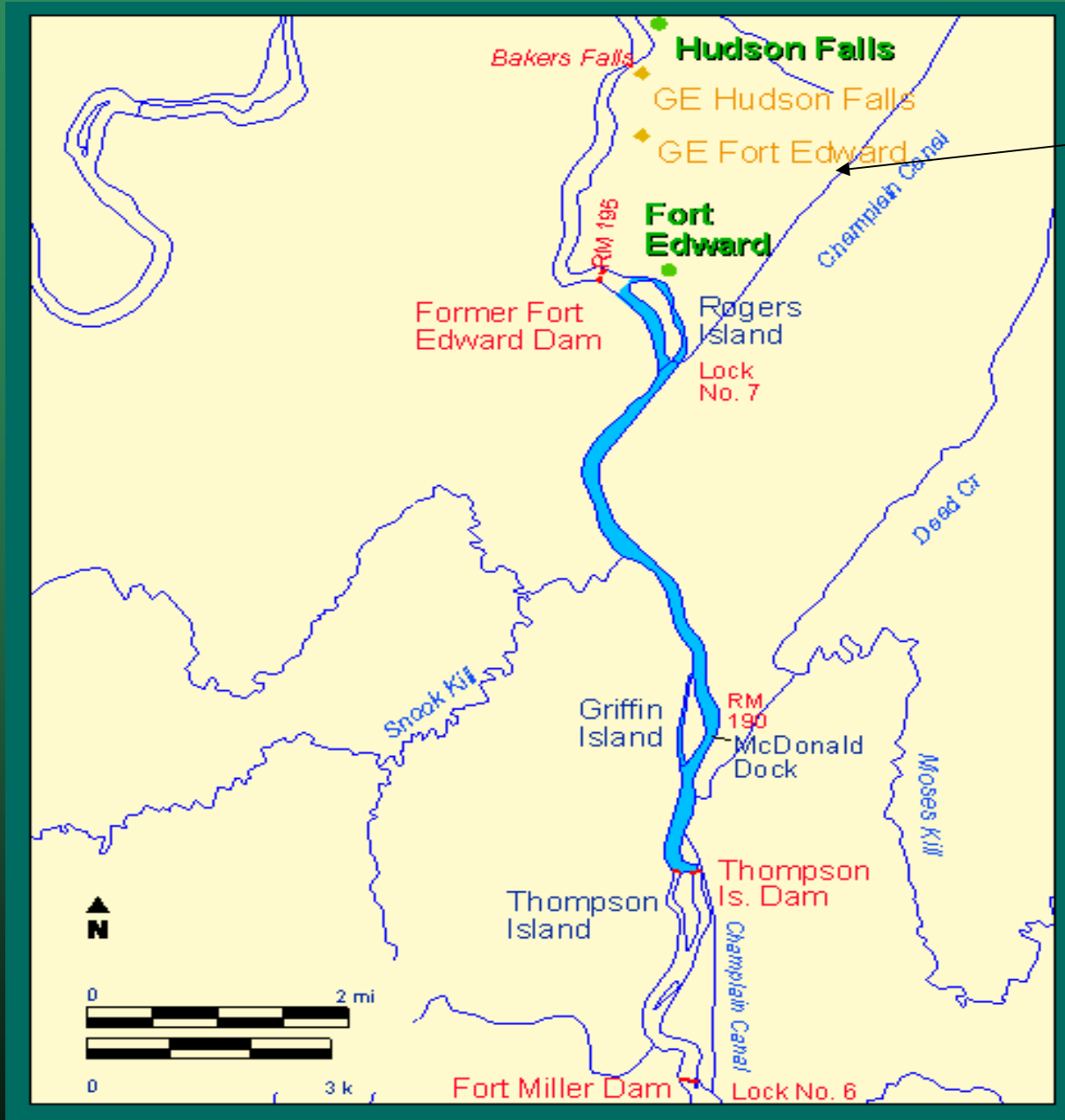
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Ambient Air Monitoring Study Overview and Purpose

- Collected one year of ambient air data (November 2005 to November 2006) at three sampling sites along the Hudson River (Lock 6, 7 and 8); 41 sampling days.
- Methods of analysis included Aroclor method and Congener method (high and low resolution sampling).
- Purpose: Establishes baseline concentrations of total PCBs prior to dredging and handling of PCB contaminated sediments in the Phase 1 area.





Lock
No. 8
Monitoring
Site



Lock 6 Monitoring Site



Lock 7 Monitoring Site



Lock 8 Monitoring Site

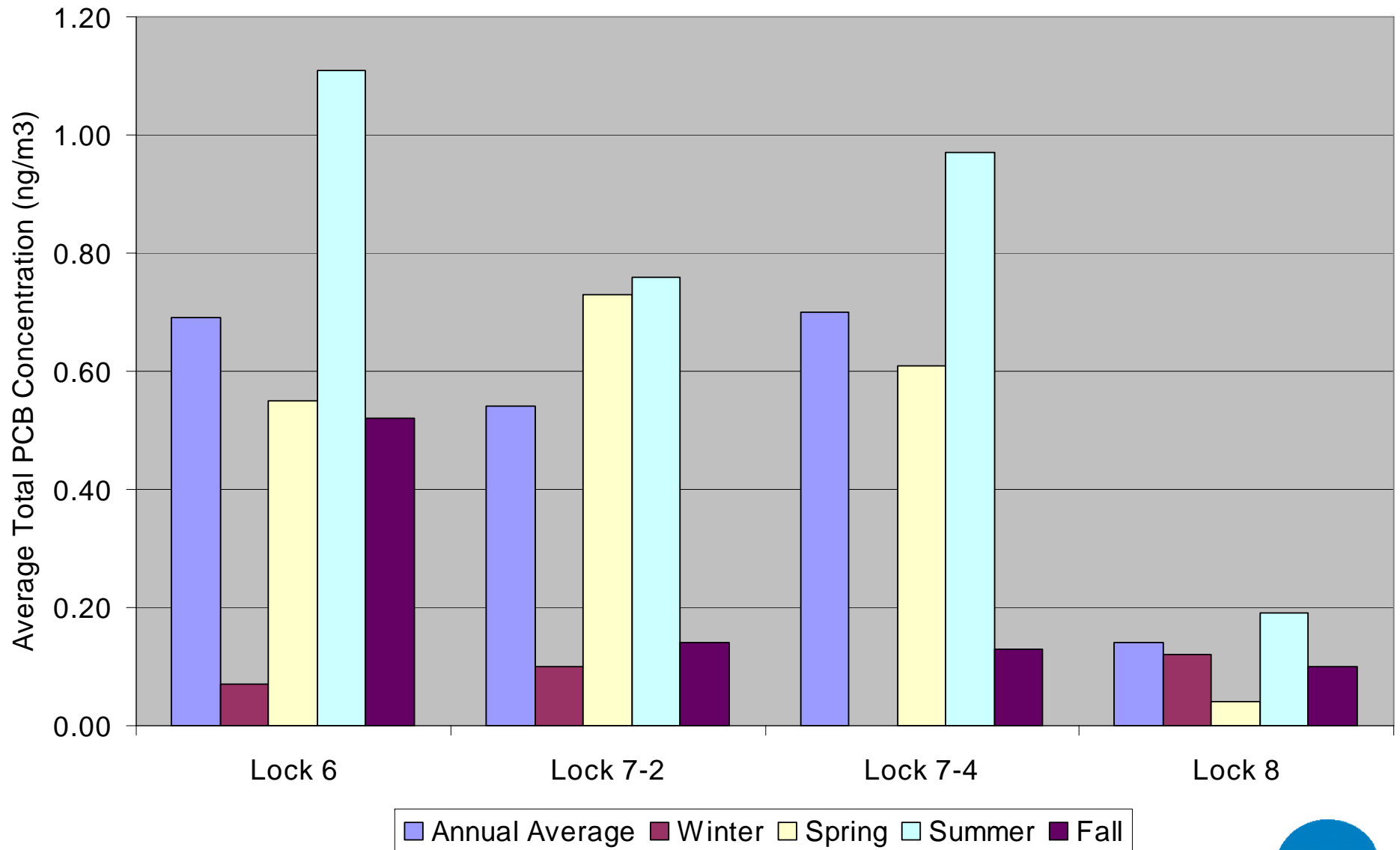


Preliminary Ambient Air Monitoring Results

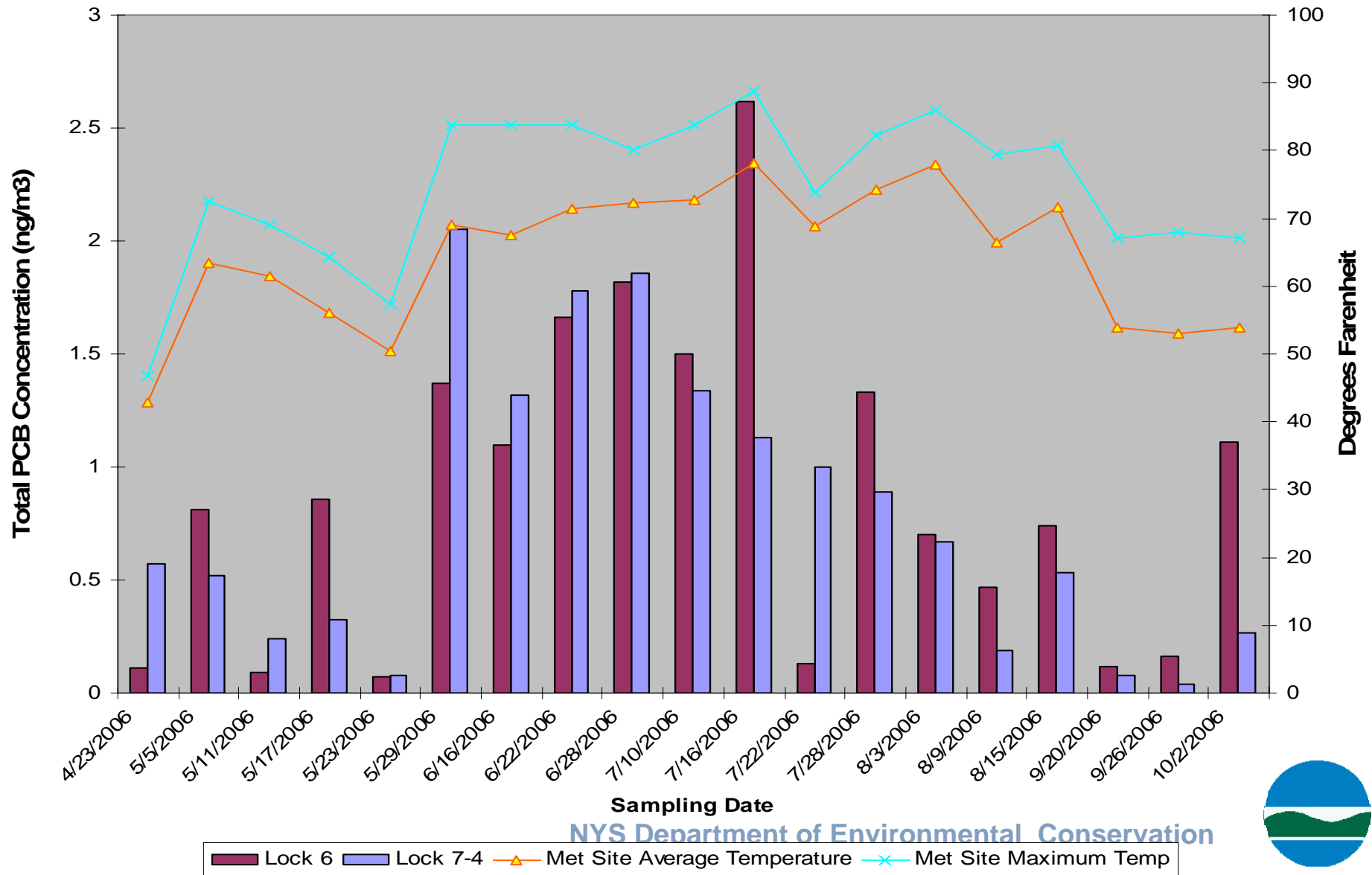
- Most samples analyzed as Aroclors showed nondetectable concentrations, our results reflect the low resolution congener method of analysis;
- The total PCB concentrations (ng/m³) ranged from 0.03 to 2.8 ng/m³. (A nanogram is one billionth of a gram.);
- Overall average total PCB concentration: 0.60 ng/m³; median concentration: 0.34 ng/m³;
- Seasonal variations in PCB concentrations were observed;
- Total PCB concentrations were lowest at Lock 8.



Annual Average and Average Total PCB Concentration (ng/m3) by Season



Lock 6 and Lock 7-4 Comparison of Total PCB Concentrations (ng/m³) and Average and Maximum Ambient Temperatures



Preliminary Conclusions

- Baseline PCB concentrations are well-below EPA's Quality of Life Performance Standard (QoLPS) of 110 ng/m³.
- Ambient air concentrations are comparable to previous ambient air concentrations measured by the NYS DOH in the Fort Edward and Hudson Falls areas as part of the PCBs and Health: The Hudson River Community Project.
- Ambient air concentrations of PCBs exhibit seasonality with increasing air temperature, therefore, PCB concentrations are higher in the summer. Other variables such as surface water concentrations, wind speed, water temperature and water turbulence may also influence ambient air concentrations.



Acknowledgements

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