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Trends in Suspended Sediment Quality in the St. Clair – Detroit River Corridor

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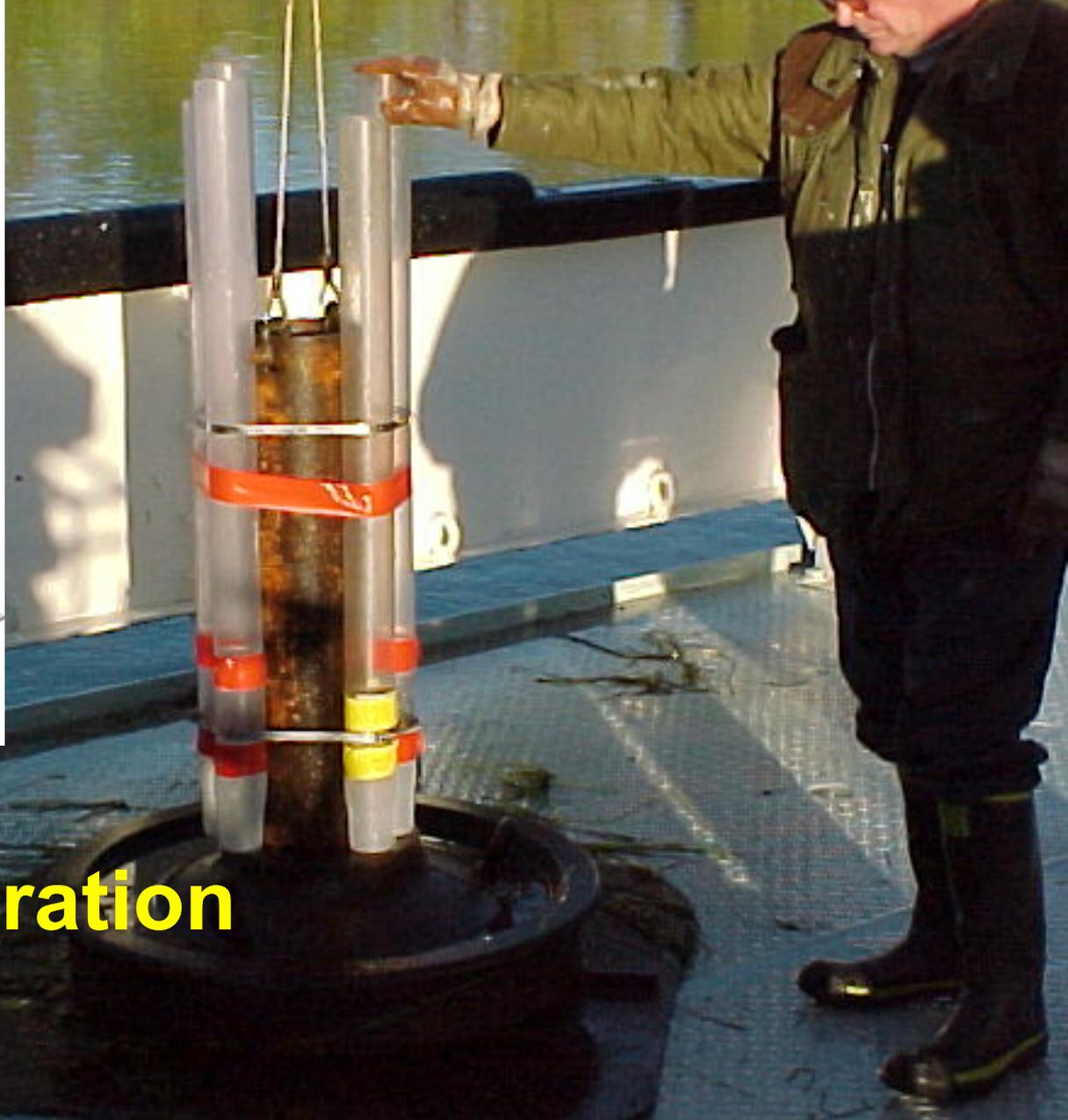
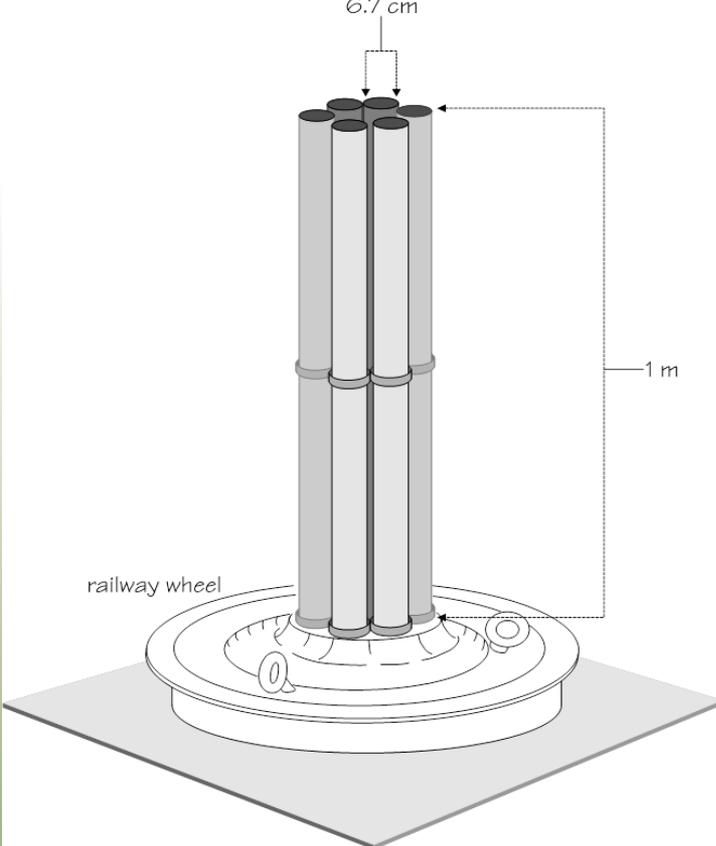
Water Science and
Technology Directorate

February 22nd, 2017

Contents

- Methodology
- Context (mercury)
- Regional Trends
- Targeted Studies
- Sources of contaminants



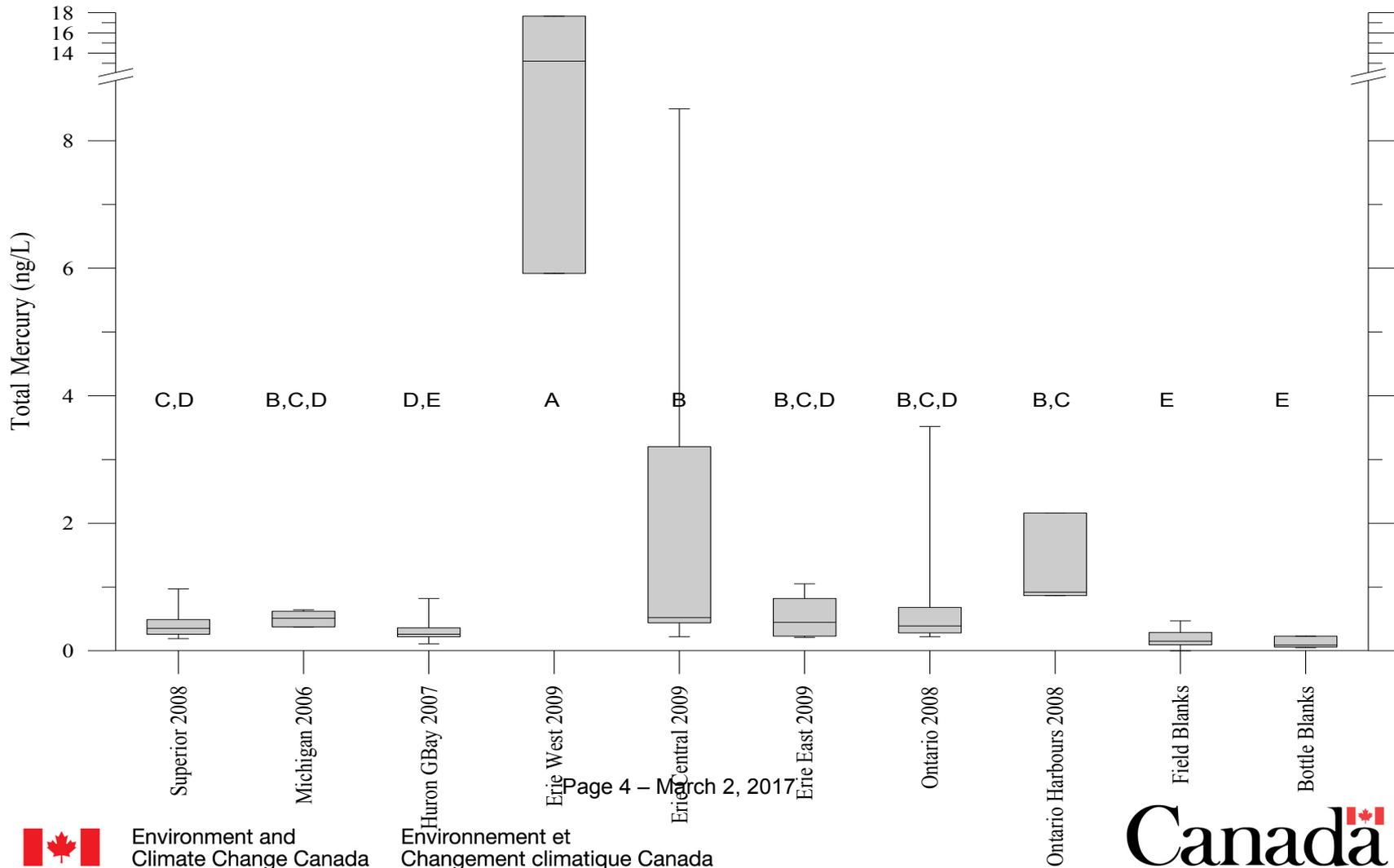


- Time integration
- Mobility

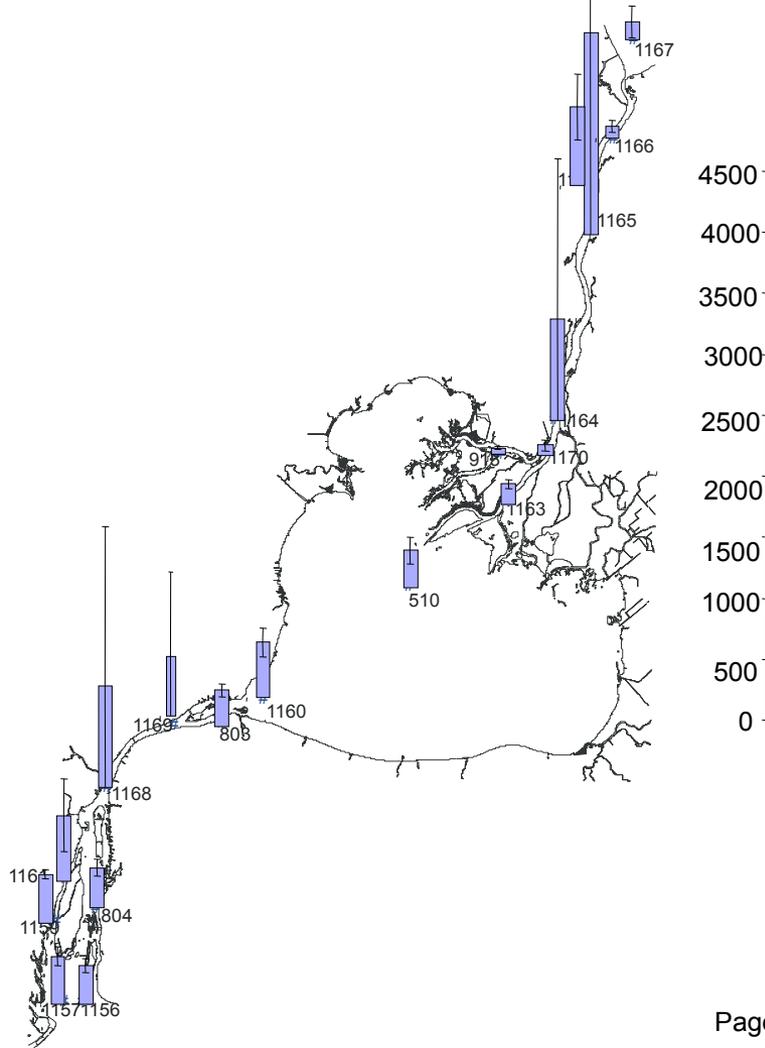


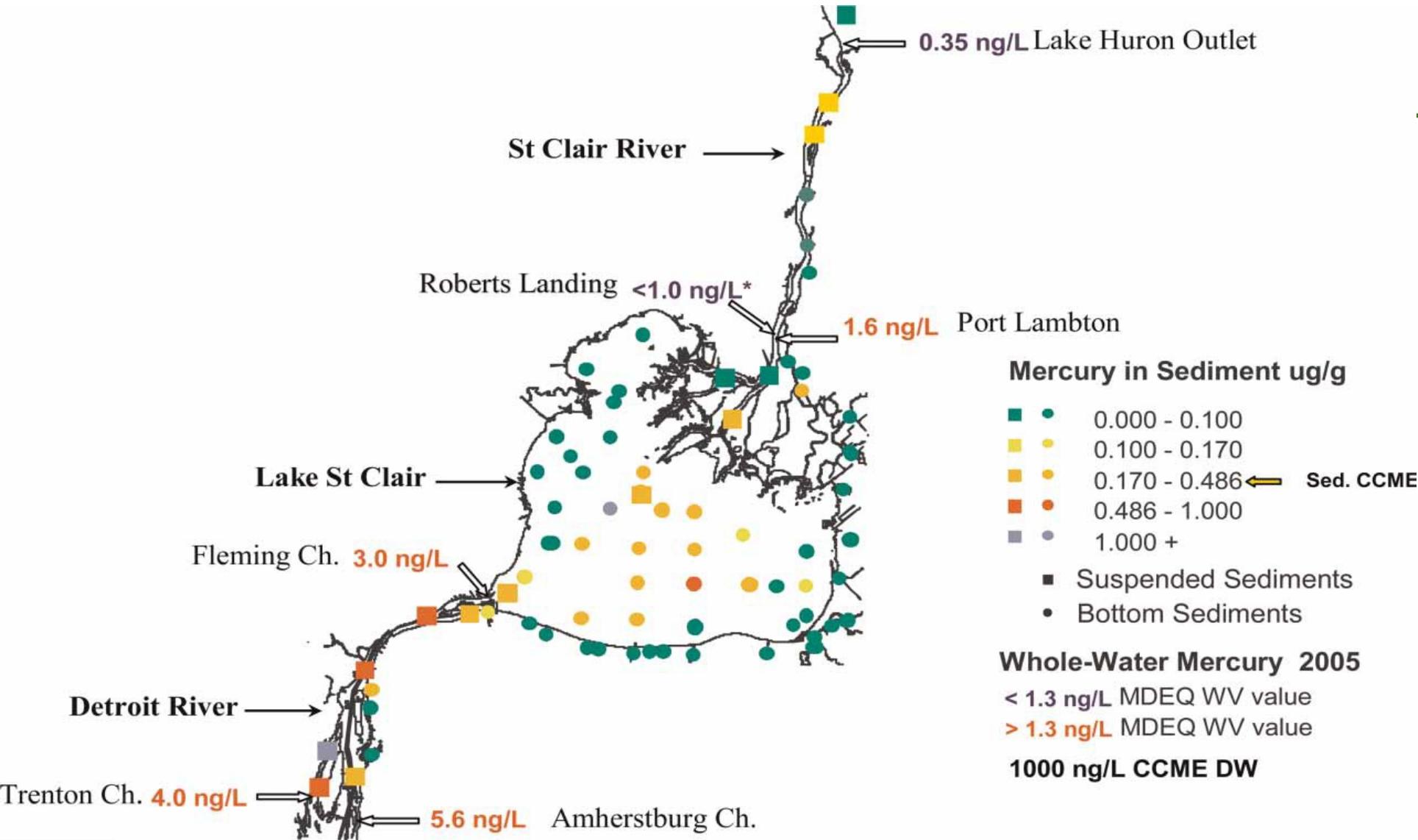
Whole Water Mercury in the Great Lakes

Levels not connected by same letter are significantly different

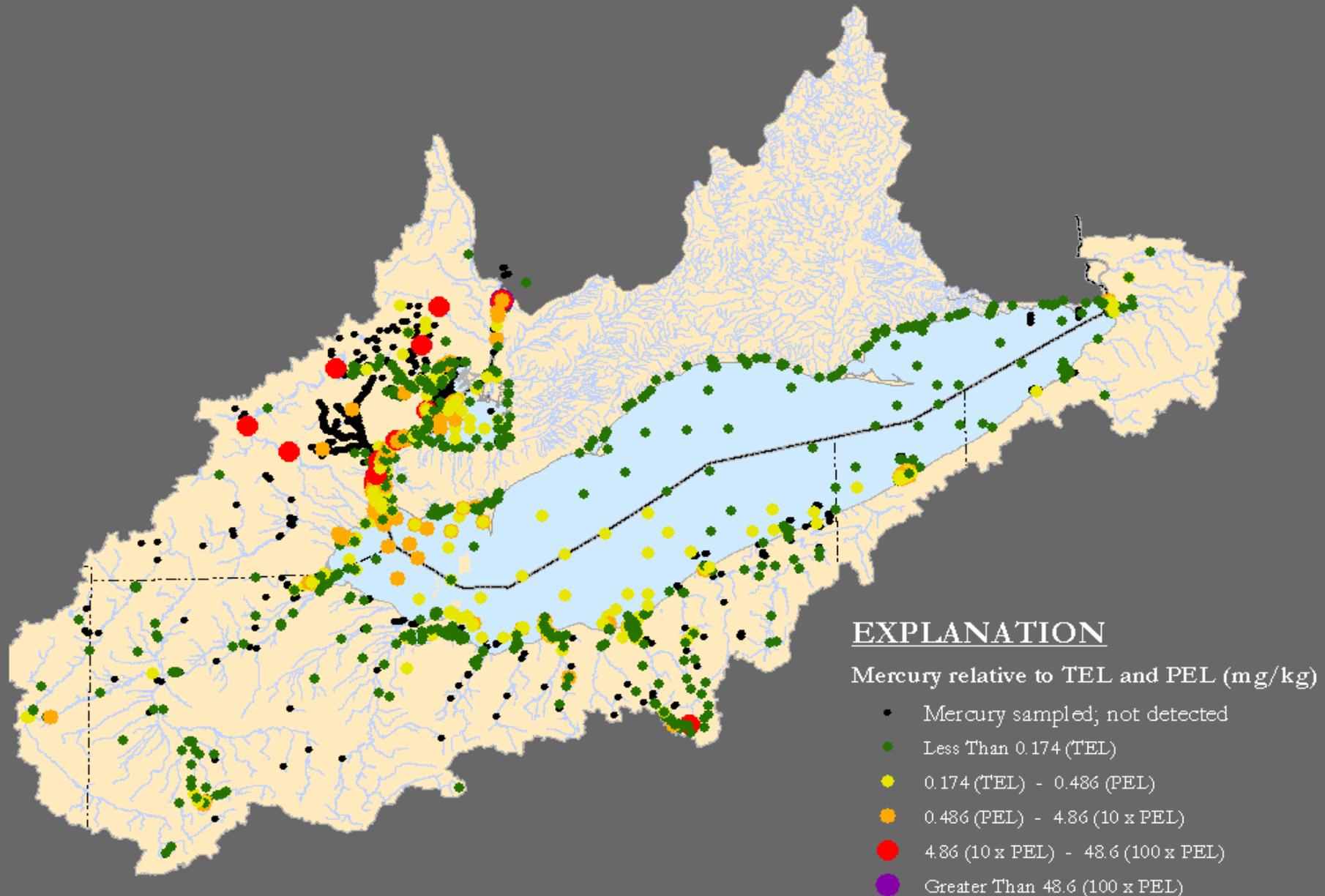


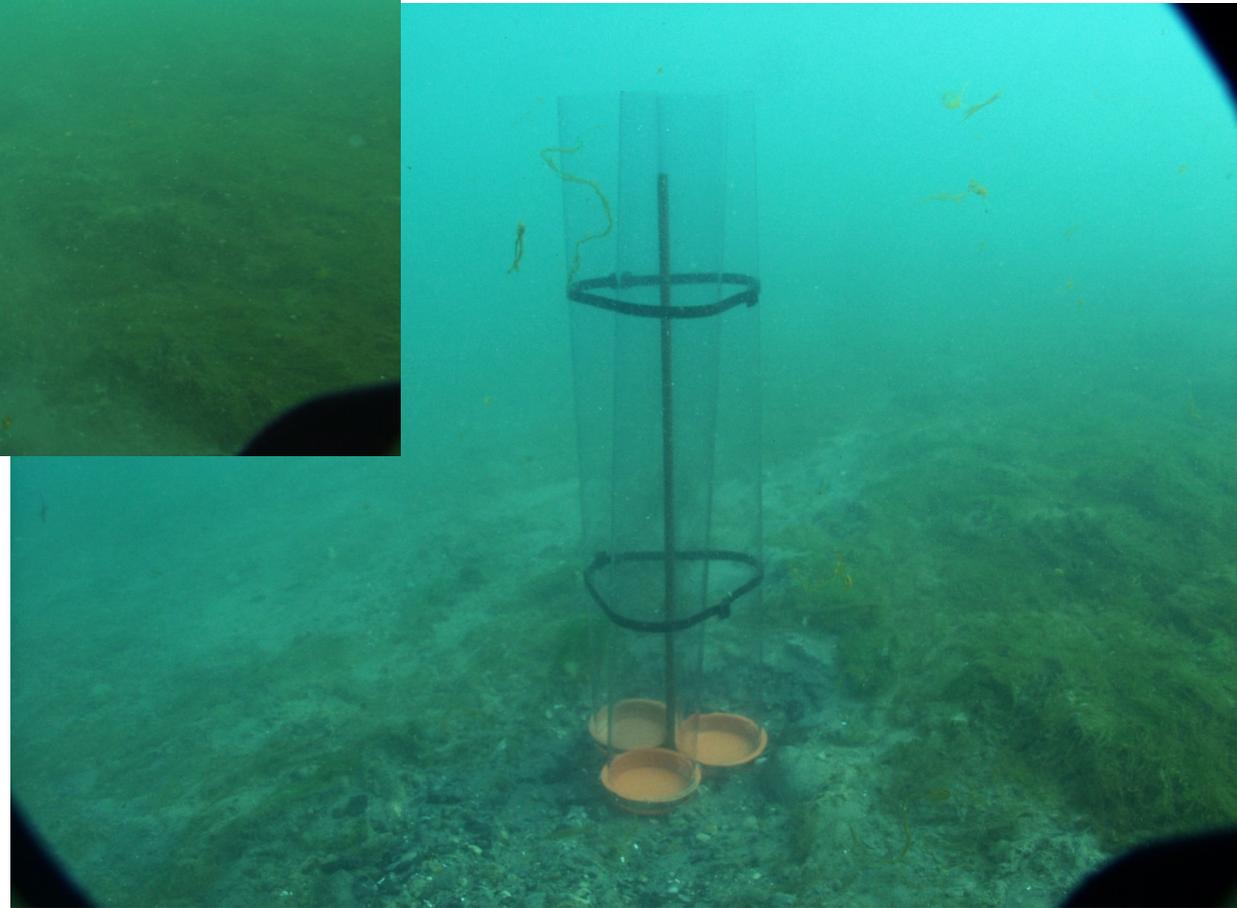
Mean Annual Mercury in Suspended Sediments (ng/g dry wt.)





MERCURY in recently deposited bed sediments - Lake Erie Basin 1990-2001





Page 8 – March 2, 2017

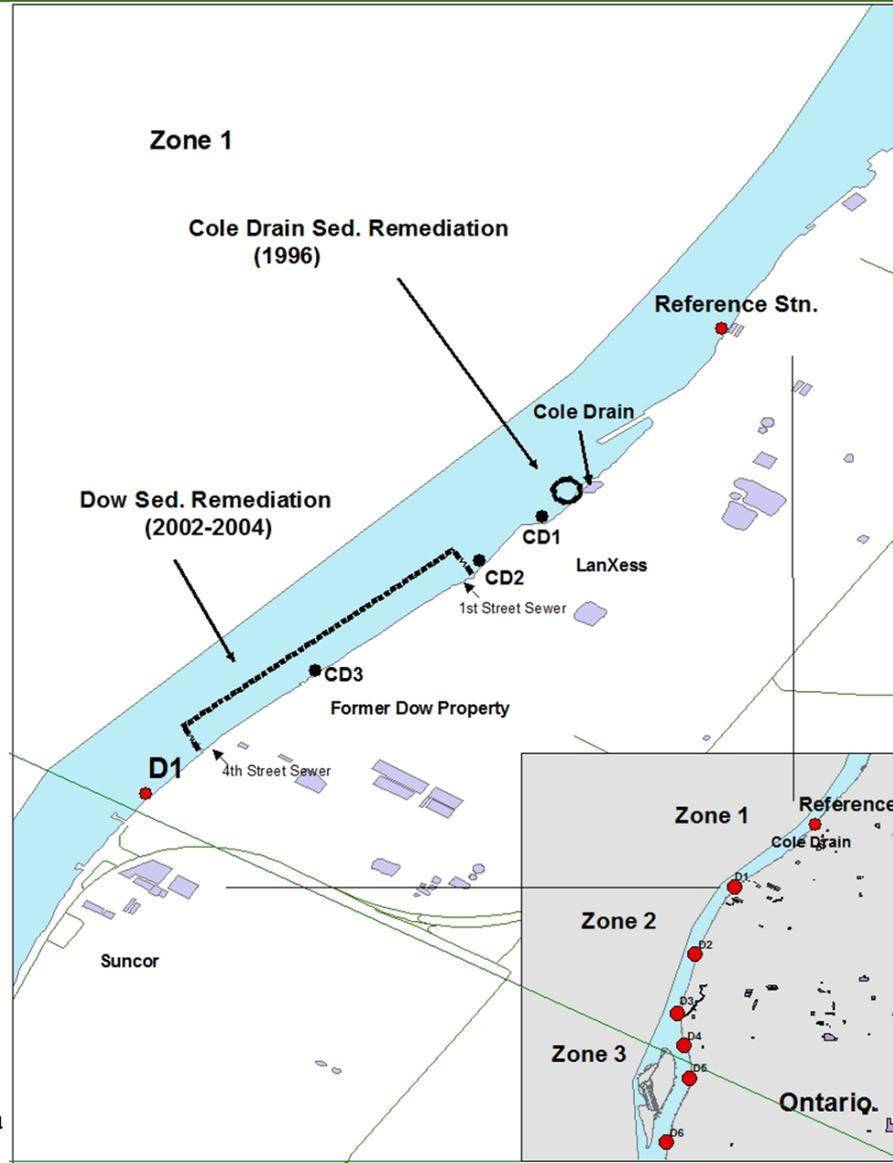


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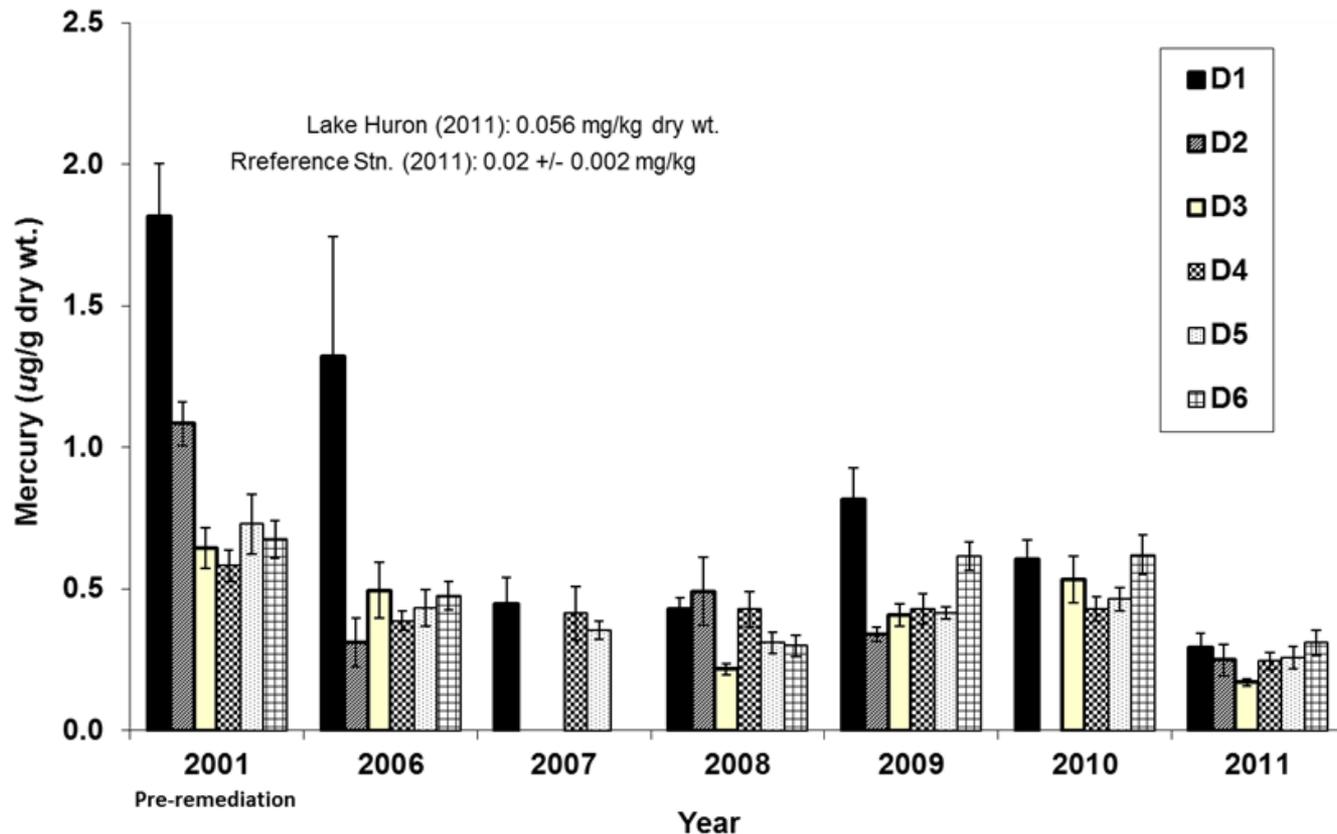
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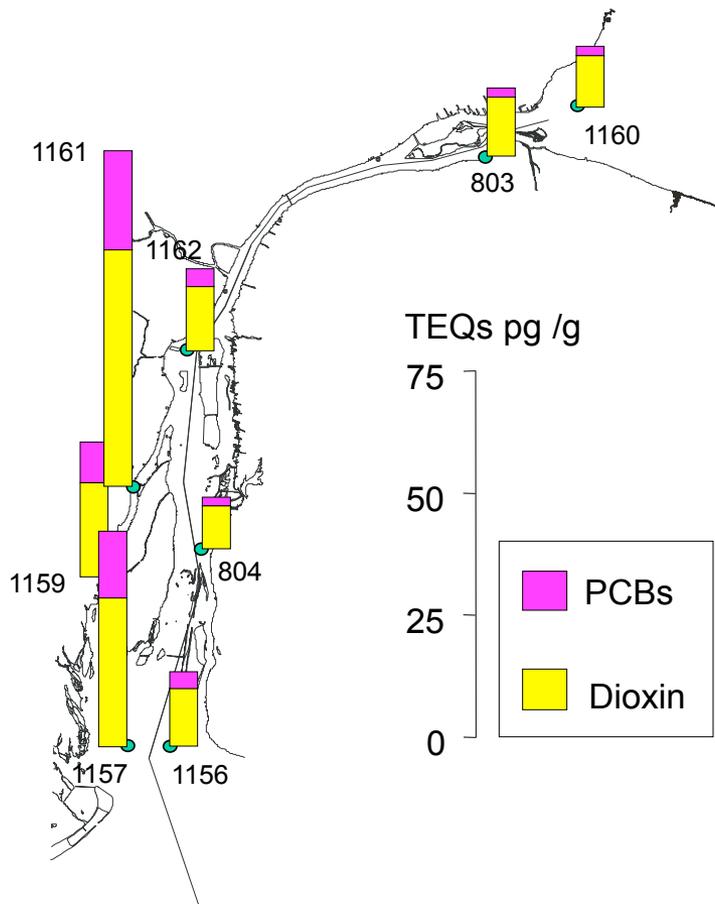
Upper St. Clair River (Diver installed)



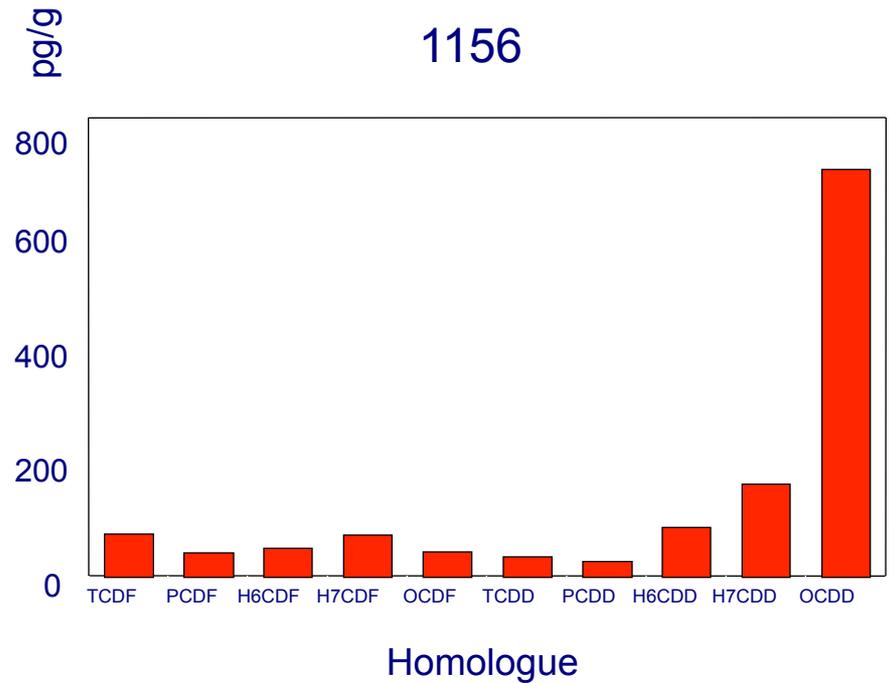
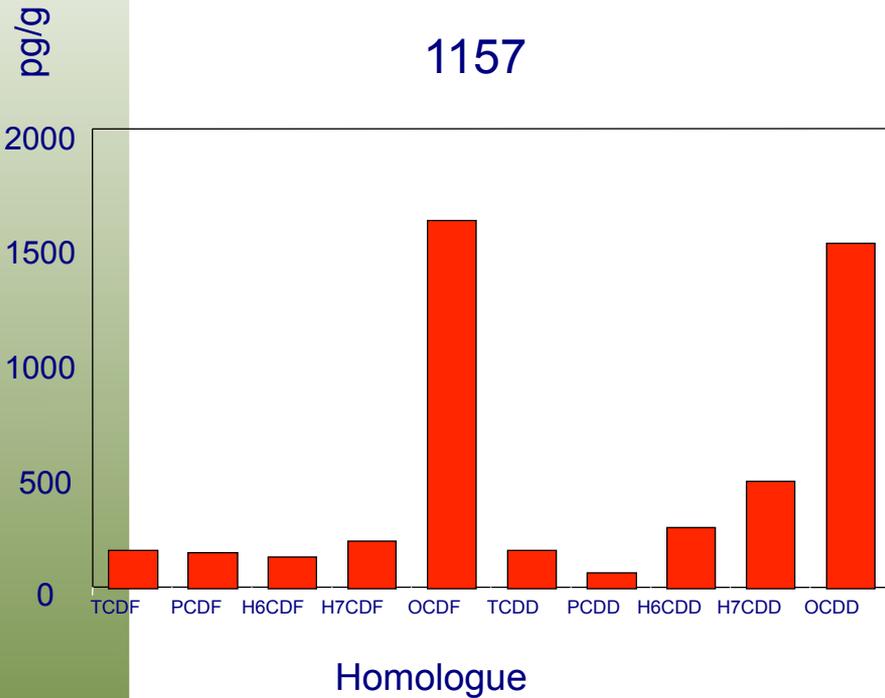
Temporal trends in mercury in suspended sediments in the upper St. Clair River

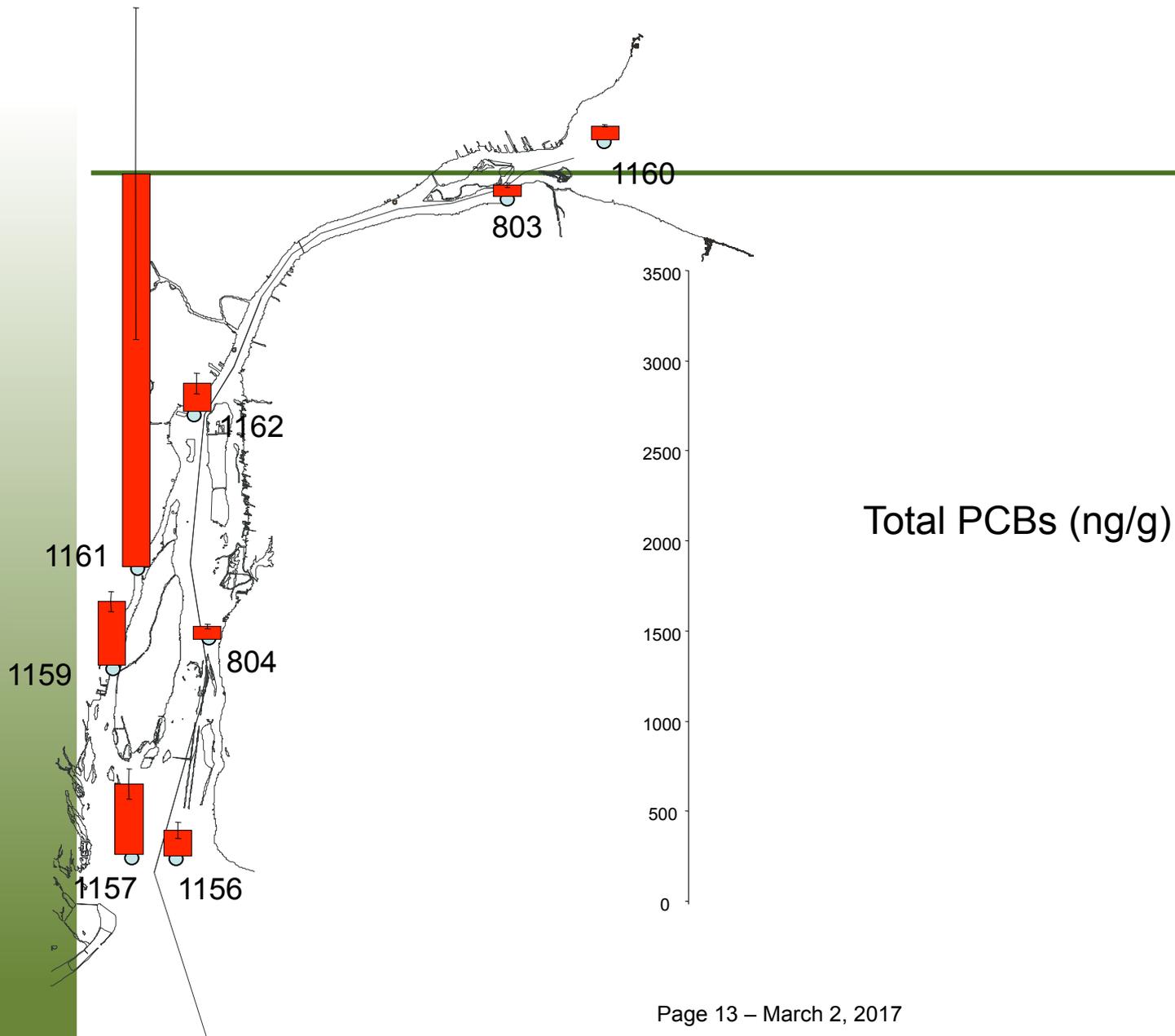


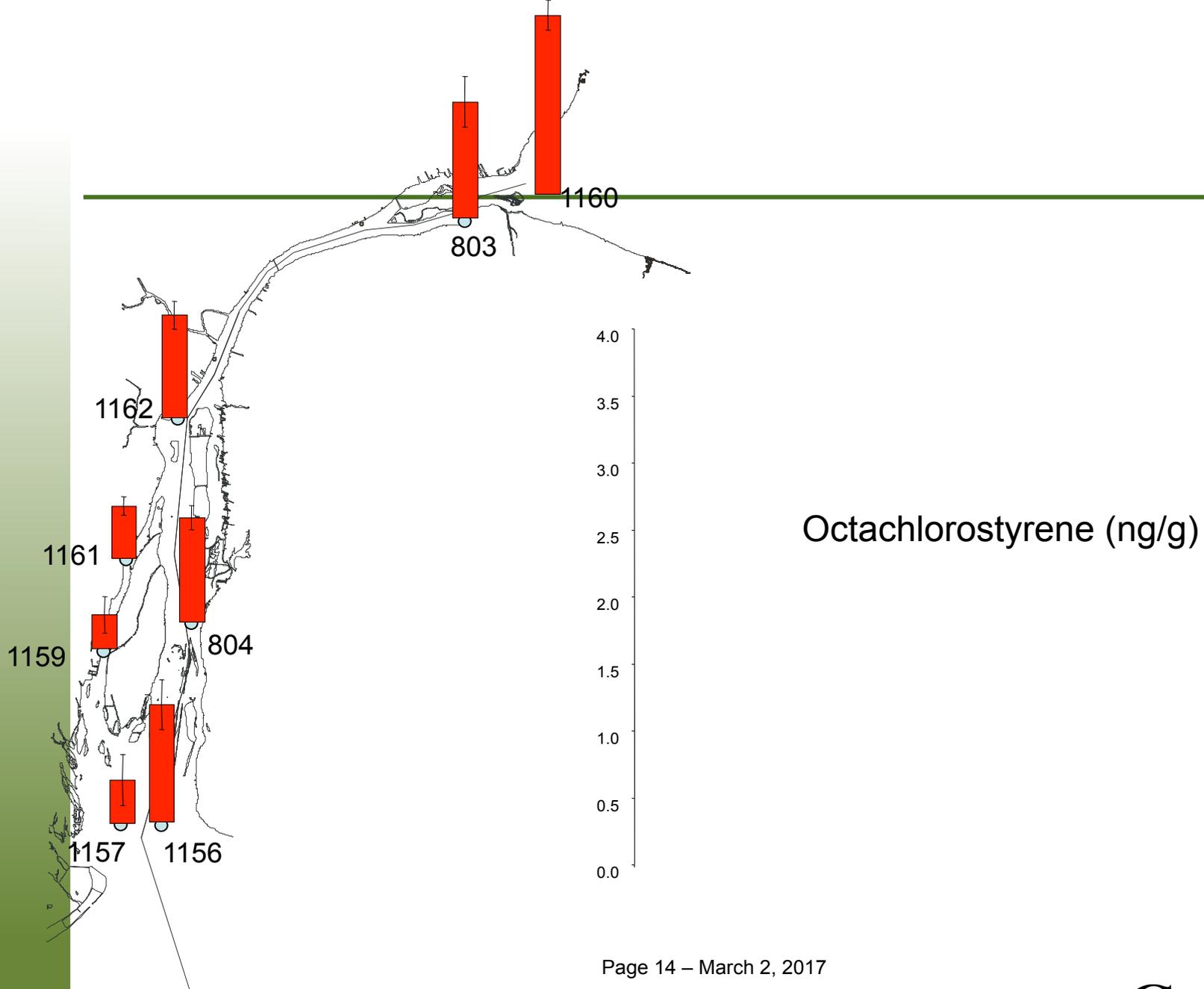
PCDD/PCDF and DLPCB TEQs in Detroit River Suspended Seds



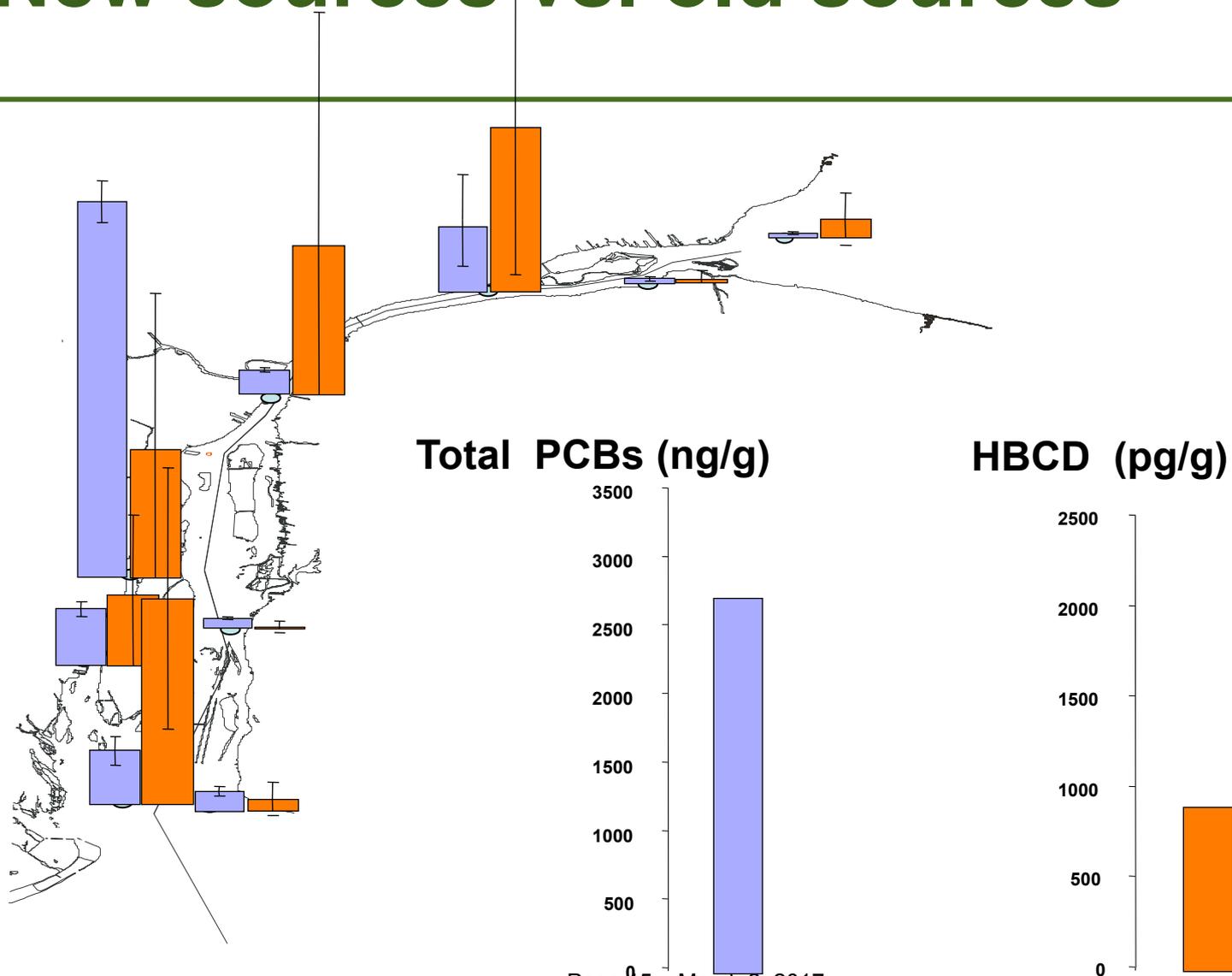
Dioxin and Furan Homologue Profiles for Detroit River Stations 1156 (Livingstone Channel) and 1157 (Trenton Channel)







New sources vs. old sources





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