

Great Lakes Workshop Series on Remote Sensing of Water Quality

Lana Pollack, Chair U.S. Section, International Joint Commission

May 7-8 2014



Canada-USA Trans-boundary Drainage Basins

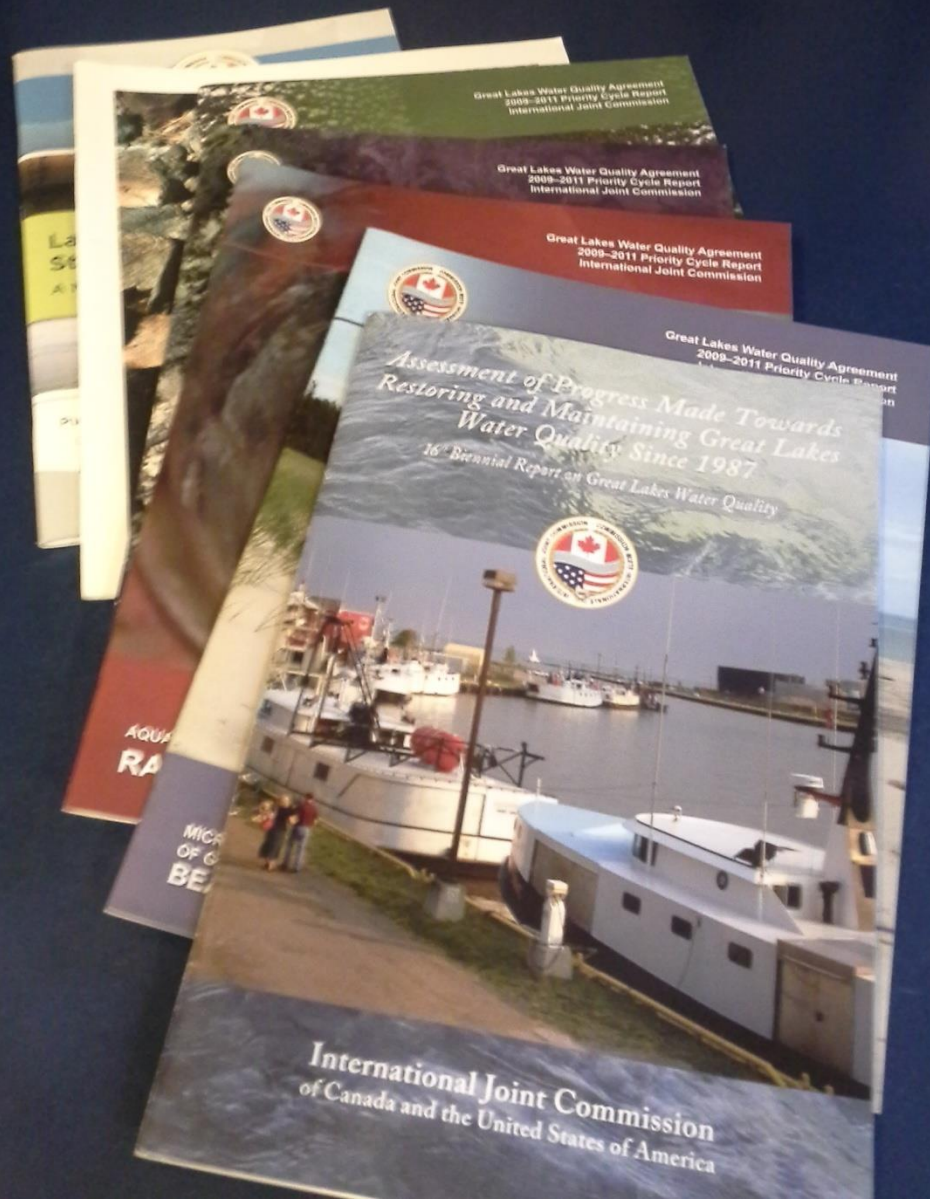
Great Lakes Water Quality Agreement



President Nixon and Prime Minister
Trudeau, April 1972

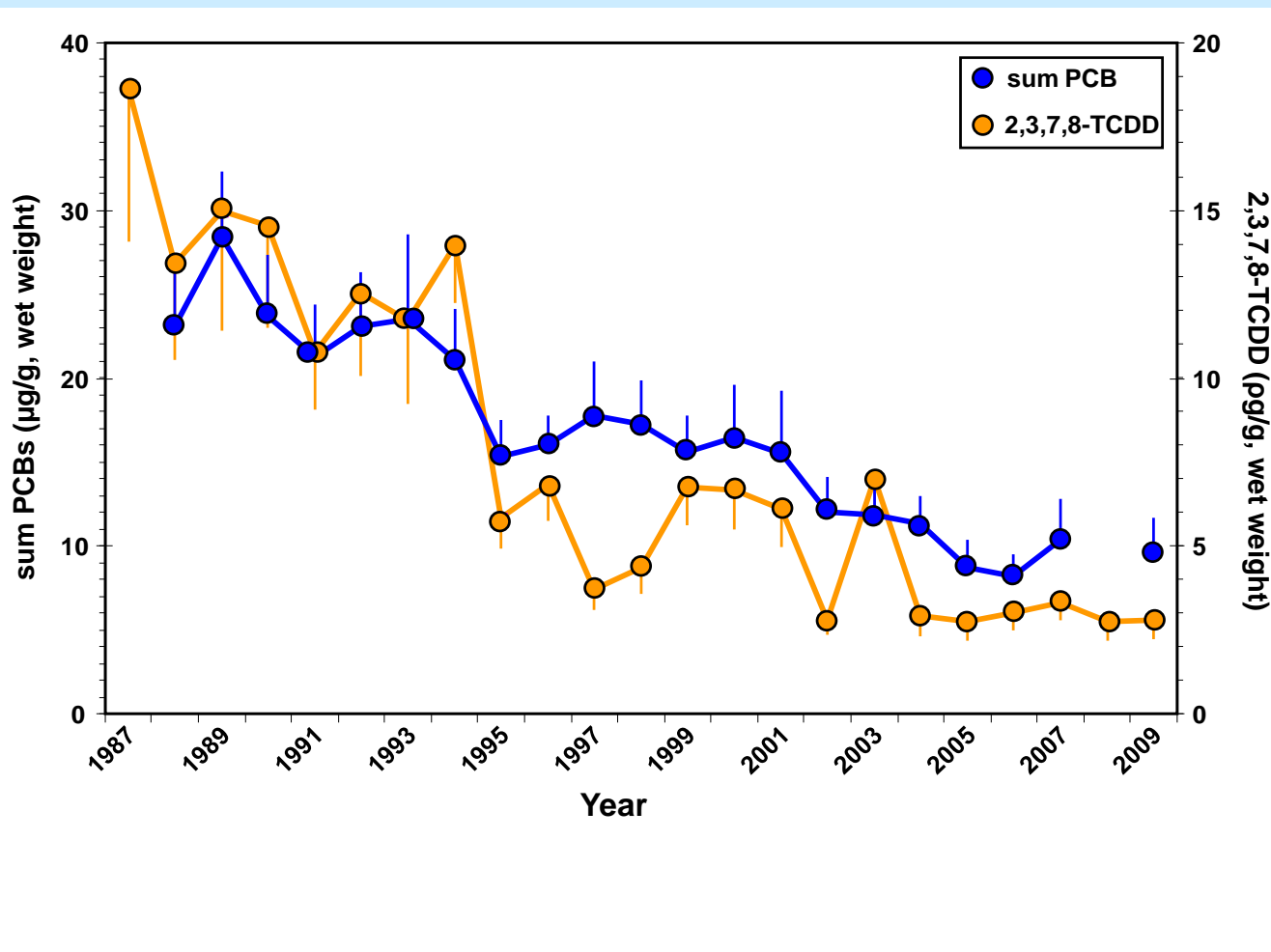


Environment Canada Minister
Peter Kent and U.S. EPA Administrator
Lisa Jackson, September 2012





PCB and Dioxin levels in Herring gull eggs





A Balanced Diet for Lake Erie

Reducing Phosphorus Loadings and Harmful Algal Blooms

A Report of the Lake Erie Ecosystem Priority
February 2014

http://www.ijc.org/en_/news?news_id=428

LEEP Recommendations -- Targets:

- * 37% reduction in TP and 41% reduction in DRP from Maumee River and west basin tributaries to reduce HABs to no/mild conditions
- * 46% reduction in TP and 78% reduction in DRP from WB and CB tributaries to reduce hypoxic area by half



LEEP Recommendations -- Policy

Incentive-based programs:

- Expand focus to include DRP and TP
- Focus on critical March-June period
- Focus on priority watersheds
- Protection and restoration of natural lands

Regulatory

- Mandatory certification standards for applicators
- Link crop insurance with conservation
- Ban applications on frozen ground
- Mandatory septic system inspections

Indicators for Which Data Could Potentially be Collected Using Satellites

IJC Indicators

- Nutrients - In-lake Phosphorus Concentrations;
- Land Cover Conversion and Fragmentation Index;
- Coastal Habitat – Shoreline Alteration;
- Water Level;
- Water Temperature/Ice cover;

- Extent, Composition, and Quality of Coastal Wetlands;
- Harmful and Nuisance Algae;
- Adapting to Climate Change;
- Conservation of habitat and species;

SOLEC Indicators

- Phytoplankton (Chlorophyll-*a*);
- Water Clarity;

For more information, visit:



www.ijc.org



More than a century of cooperation protecting shared waters

