



# **LEMN and GLRRIN New Investigators Meeting**

**Canada Centre for Inland Waters, Burlington, ON  
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# Overview

- IJC Origins and Role
- Structure of IJC
  - Boards and Work Groups
- Current Priorities (2012-2015)
- Questions, etc.



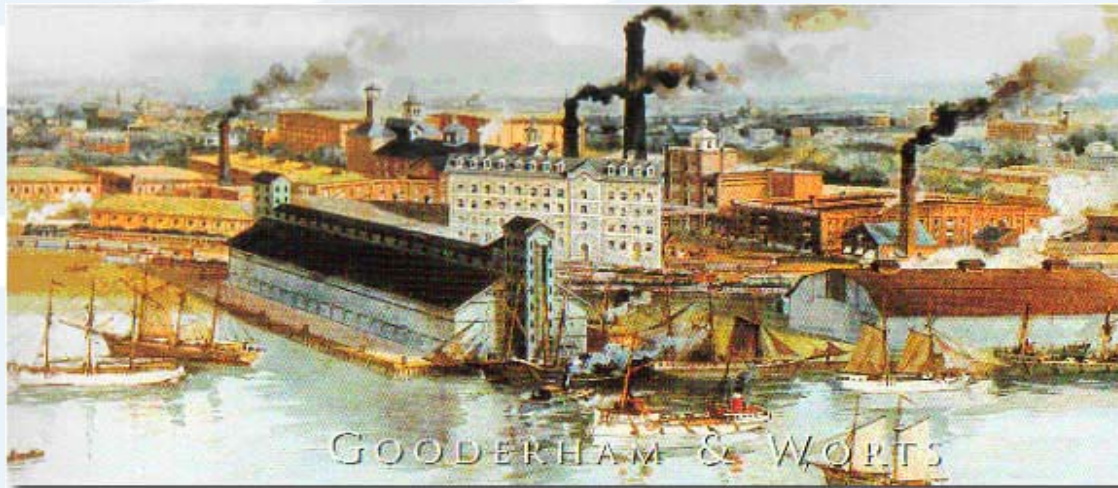
# An Era of Transboundary Pollution Impacts



**Cleveland  
Ohio Water  
Works Plant,  
July 4, 1903**



**The Hamilton  
Ontario Steel &  
Iron Company,  
1900**



**Toronto, Ontario 1896**



# Boundary Waters Treaty of 1909

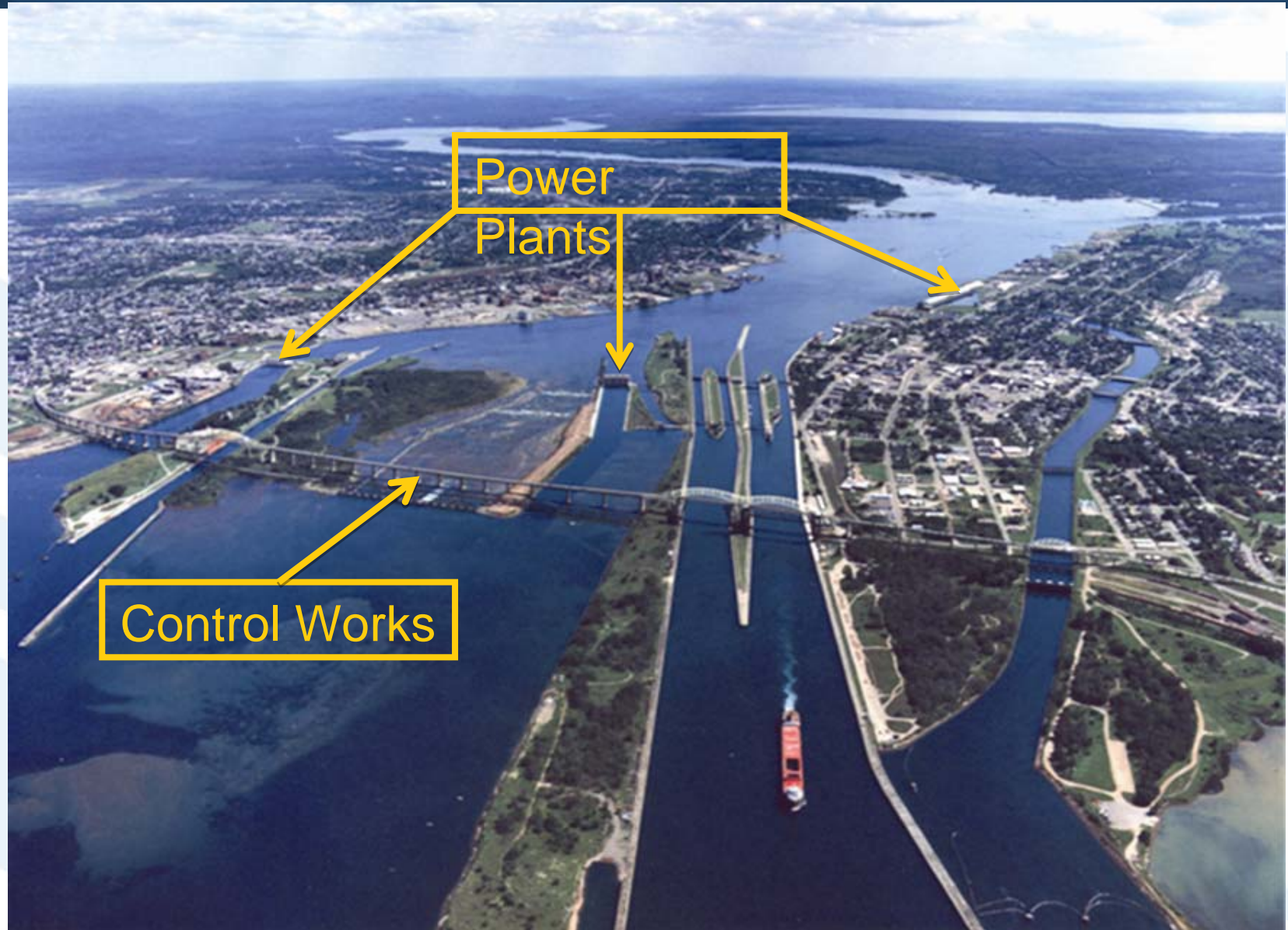
**“It is further agreed that the waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other”.**



# Transboundary Basins



# IJC's Regulatory Role



# References

- IJC looks into issues as asked to by the governments of Canada and U.S.
- IJC replies with an independent report and make recommendations to the governments on these issues that are often followed.
- One of the first references regarding pollution of boundary waters and the final report was published in 1918



# 1960s Reference on Great Lakes Water Quality



*The Cuyahoga River on fire in 1969.*



*Severe Eutrophication of Lake Erie*



# Great Lakes Water Quality Agreement

The purpose of the Agreement is “to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes basin ecosystem”



*President Richard Nixon and Prime Minister Pierre Trudeau signing the Great Lakes Water Quality Agreement (1972)*



*EPA Administrator Lisa Jackson and Minister of Environment Peter Kent sign Agreement Protocol (2012)*



# Evolution of Agreement

- 1972 – First generation; set water quality objectives and design/implement programs
- 1978 – shift emphasis to ‘Great Lakes Basin Ecosystem’; include toxic and hazardous polluting substances; IJC GLRO established
- 1983 – Phosphorus load supplement
- 1987 – Established Remedial Action Plans (RAPs) and Lakewide Management Plans (LAMPs)
- 2012 – Broadening of ecosystem approach; new Annexes (AIS, groundwater, habitat and species); emphasis on nearshore

# IJC Structure

- Led by 6 appointed Commissioners
- Section offices since 1909 – Ottawa and Washington, D.C.
- Great Lakes Regional Office since 1978 – Windsor
  - Almost exclusive focus on GLWQA
  - 1 Director, 7 Scientists, plus support staff
  - Binational office
  - Advise to Parties:
    - Triennial reporting on progress of Parties
    - Additional reports and activities approved by Commission
  - Secretarial support for Boards and Work Groups
  - Public information and outreach

# IJC Structure (continued)

## Heavy reliance on 4 Boards for Great Lakes work

- Binational, volunteer membership
- Work groups established as required
- Support from GLRO staff
- Interact directly with Commission

### 1) Water Quality Board

- Principal advisor to Commission
- Policy focus – multidisciplinary, Agency staff

### 2) Science Advisory Board

- Advice on science to Commission and WQB
- Primarily Faculty members

# IJC Structure (continued)

## 3) Council of Great Lakes Research Managers

- Leadership, support and evaluation of Great Lakes research
- Research program managers – Agency, Academe, Industry

## 4) Health Professionals Advisory Board

- Transboundary focus
- Public health issues in area of environmental health
- Communication of environmental health knowledge

# 2012-15 Priorities

## 1) Lake Erie Ecosystem Priority

- Phosphorus and algal bloom reduction focus
- Develop a better understanding of causes and controls
- Advise governments on Plan to reduce loadings
- Currently synthesizing science findings based February workshop
- SAB – Taking Action on Lake Erie (TAcLE) Work Group
  - Internal and external loads of total phosphorus (TP)/dissolved reactive phosphorus (DRP) to Lake Erie
  - Climate change implications on TP/DRP loadings and harmful algal blooms in Lake Erie
  - Response of key indicators to nutrient loadings
  - Beneficial Management Practices (BMP) for reducing TP/DRP loadings from agricultural and urban landscapes

# 2012-15 Priorities

## 2) Assessment of Progress toward Restoring the Great Lakes

- Examine both human health and environmental indicators
- Monitoring program gaps
- Develop framework for assessing program effectiveness

## 3) Strengthening Capacity to Deliver Science and Information

- Assess binational capacity
- Identify common portal to human health and environmental data

# Some Suggestions

- Use recommendations in IJC reports to give binational 'clout' to your proposed research
- Be cognizant of linking your research to resource management and policy needs
- Keep aware of IJC References and ongoing Priority Cycle work as a potential source of funding
- Consider IJC workshops and events as opportunities to learn and network



# Thank You

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