The Amended Canada-United States Great Lakes Water Quality Agreement

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Lake Erie Millennium Network
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Image courtesy of the SeaWiFS Project, NASA/Goddard Space Flight Center, and ORBIMAGE

The amended Agreement – *signed September 7th, 2012*

PROTOCOL AMENDING THE AGREEMENT
BETWEEN CANADA AND THE UNITED STATES OF AMERICA
ON GREAT LAKES WATER QUALITY, 1978, AS AMENDED
ON OCTOBER 16, 1983 AND ON NOVEMBER 18, 1987

AGREEMENT BETWEEN CANADA AND THE UNITED STATES OF AMERICA ON GREAT LAKES WATER QUALITY, 2012

GLWQA Principles and Approaches

- Accountability
- Adaptive management
- Adequate treatment
- Anti-degradation
- Coordination
- Ecosystem approach
- Innovation
- “Polluter pays”
- Precaution
- Prevention
- Public engagement
- Science-based management
- Sustainability
- Tributary management
- Virtual elimination
- Zero discharge

General Objectives

- Safe, high-quality drinking water
- Allow for swimming and other recreational use
- Allow for consumption of fish and wildlife
- Free from pollutants that could be harmful to human health, wildlife, or aquatic organisms
- Healthy and productive wetlands and other habitats
- Free from nutrients in amounts interfere with aquatic ecosystem health or human use
- Free from invasives that adversely impact water quality
- Free from harmful impact of contaminated groundwater
- Free from substances, materials or conditions that may negatively impact chemical, physical or biological integrity

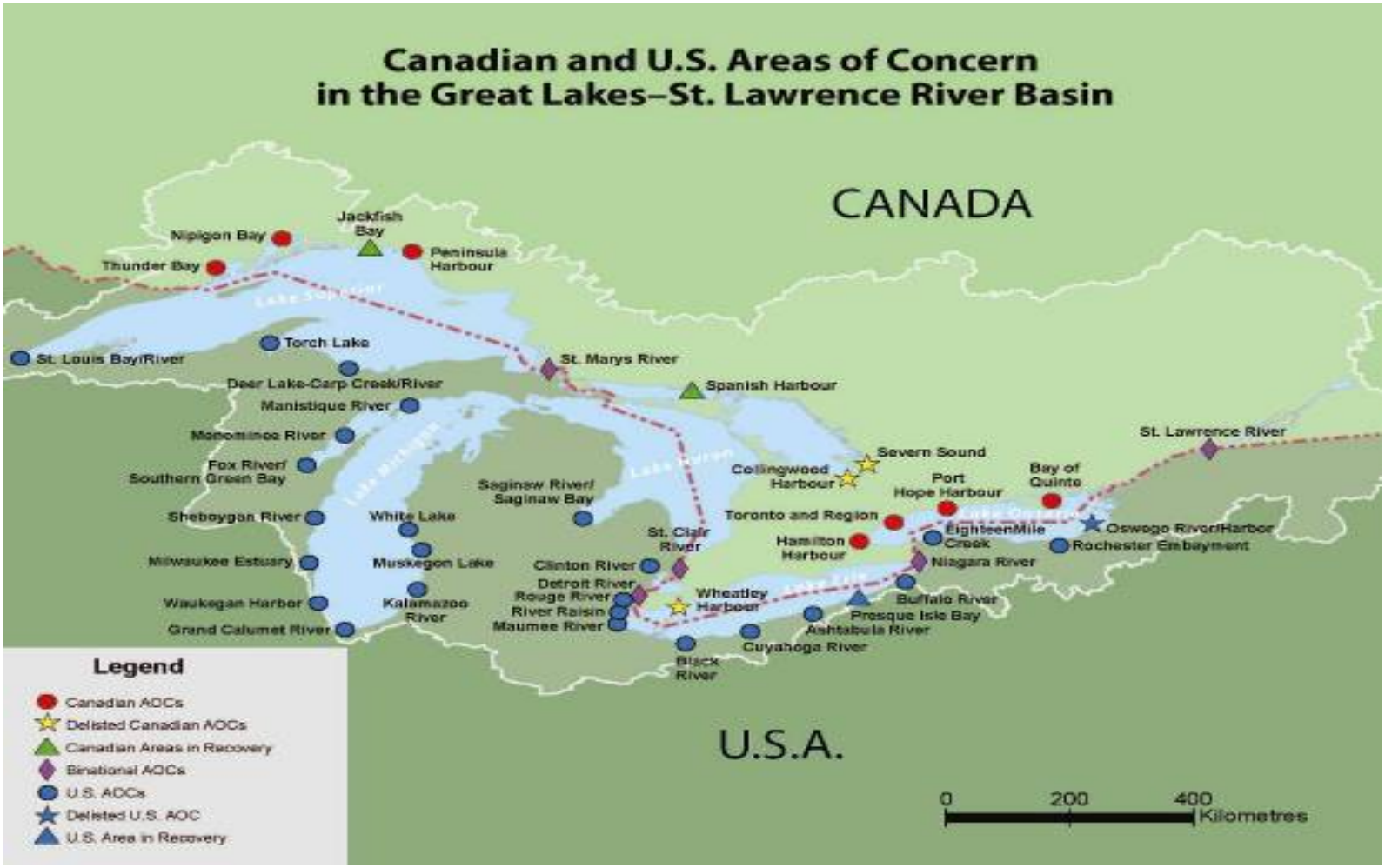
Specific Objectives of GLWQA

- Lake Ecosystem Objectives
- Substance Objectives

Annexes of the Agreement

1 : Areas of Concern
2 : Lakewide Action and Management Plans
3 : Chemicals of Mutual Concern
4 : Nutrients
5 : Discharges from Vessels
6 : Aquatic Invasive Species
7 : Habitat and Species
8 : Groundwater
9 : Climate Change Impacts
10 : Science

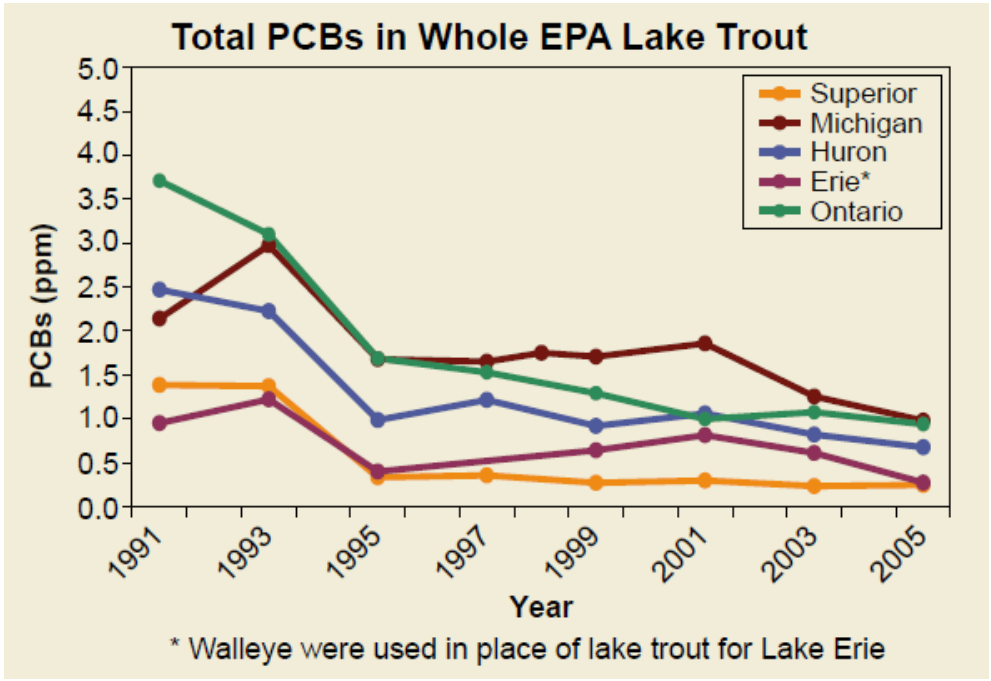
Annex 1: Areas of Concern



Annex 2: Lakewide Management

- Assess status of each Lake
- Actions to address threats to water quality
- Assess the nearshore waters and implement protection and restoration strategies

Annex 3: Chemicals of Mutual Concern

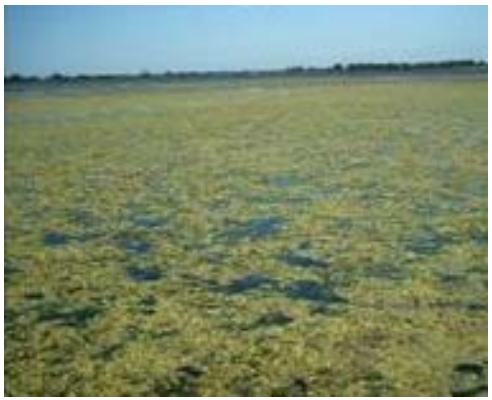


- Identify Chemicals of Mutual Concern and reduce risks
- Reduce use and release of Chemicals of Mutual Concern
- Monitor effectiveness of pollution prevention and control measures

Annex 4: Nutrients

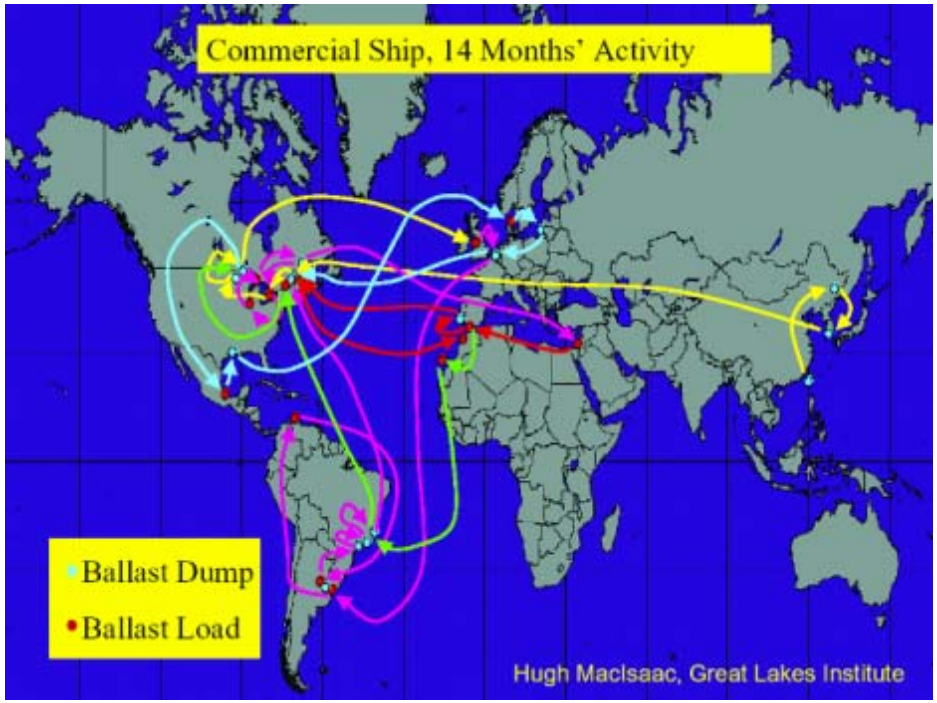
Phosphorus – *addressing toxic and nuisance algae*

Coordinate binational actions to manage phosphorus concentrations and loadings, and other nutrients if warranted, in the Waters of the Great Lakes



Annex 5: Discharges from Vessels

Prevent and control vessel discharges harmful to the quality of the Waters of the Great Lakes



Annex 6: Aquatic Invasive Species

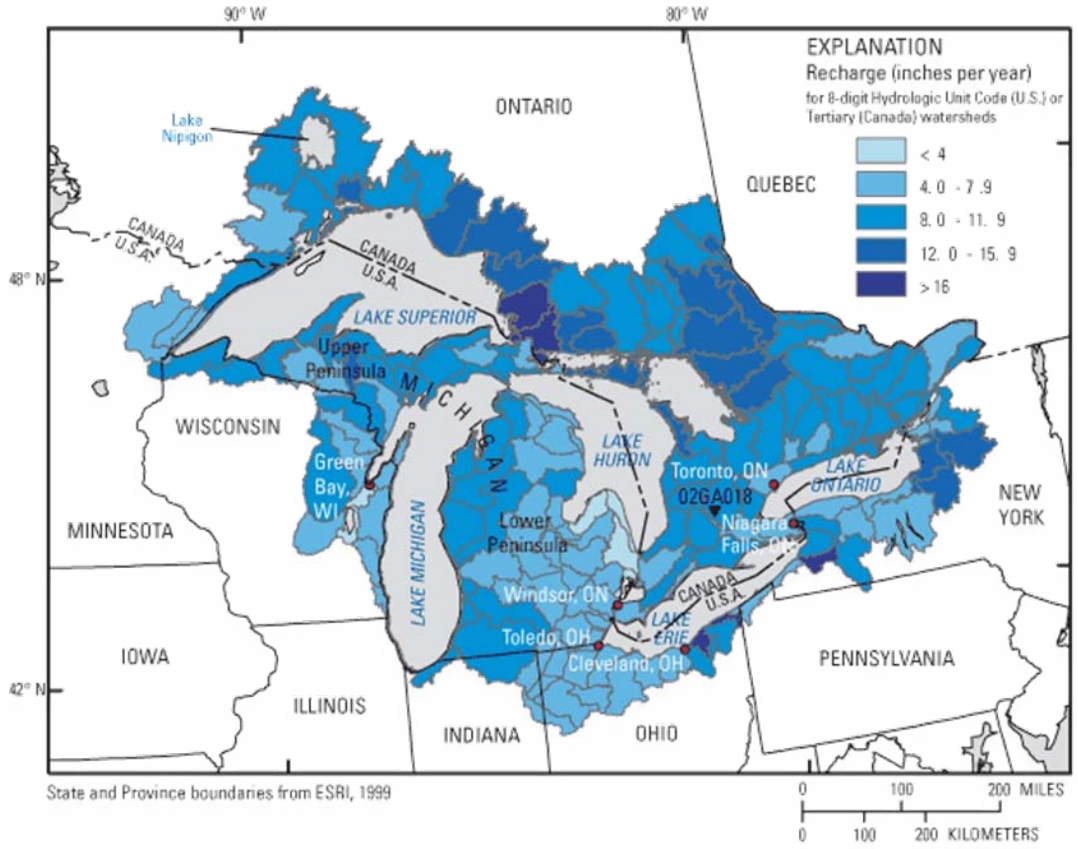
Prevent the introduction of AIS, control or reduce the spread of existing AIS, and eradicate existing AIS where feasible

Annex 7: Habitat and Species

Conserve, protect, maintain, restore and enhance the resilience of native species and their habitat

Annex 8: Groundwater

Coordinate groundwater science and management actions



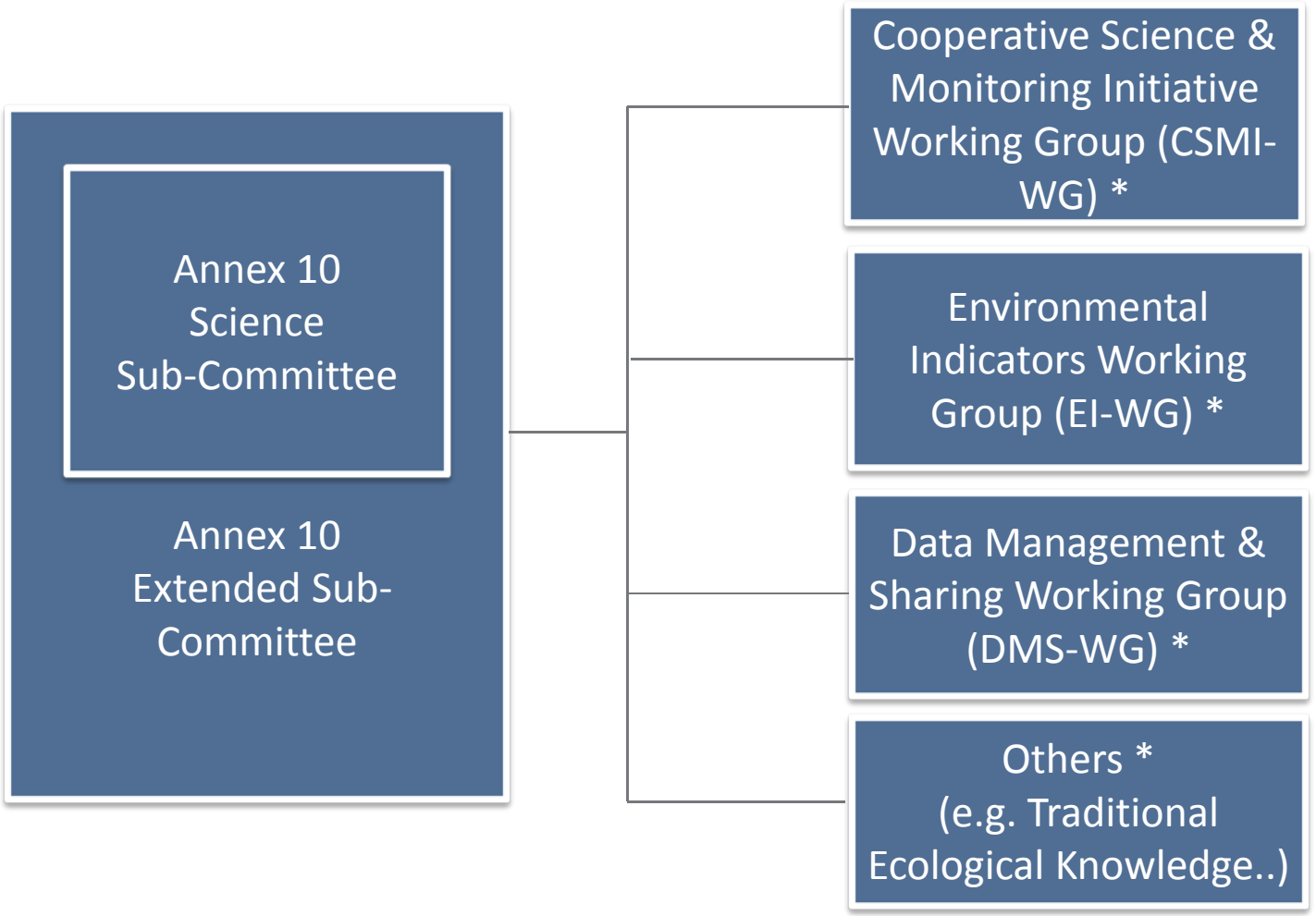
Annex 9: Climate Change Impacts

- Coordinate efforts to identify, quantify, understand and predict climate change impacts
- Share information with Great Lakes resource managers

Annex 10: Science

Enhance coordination, integration, synthesis, and assessment of science activities

Proposed Annex 10 Governance Structure



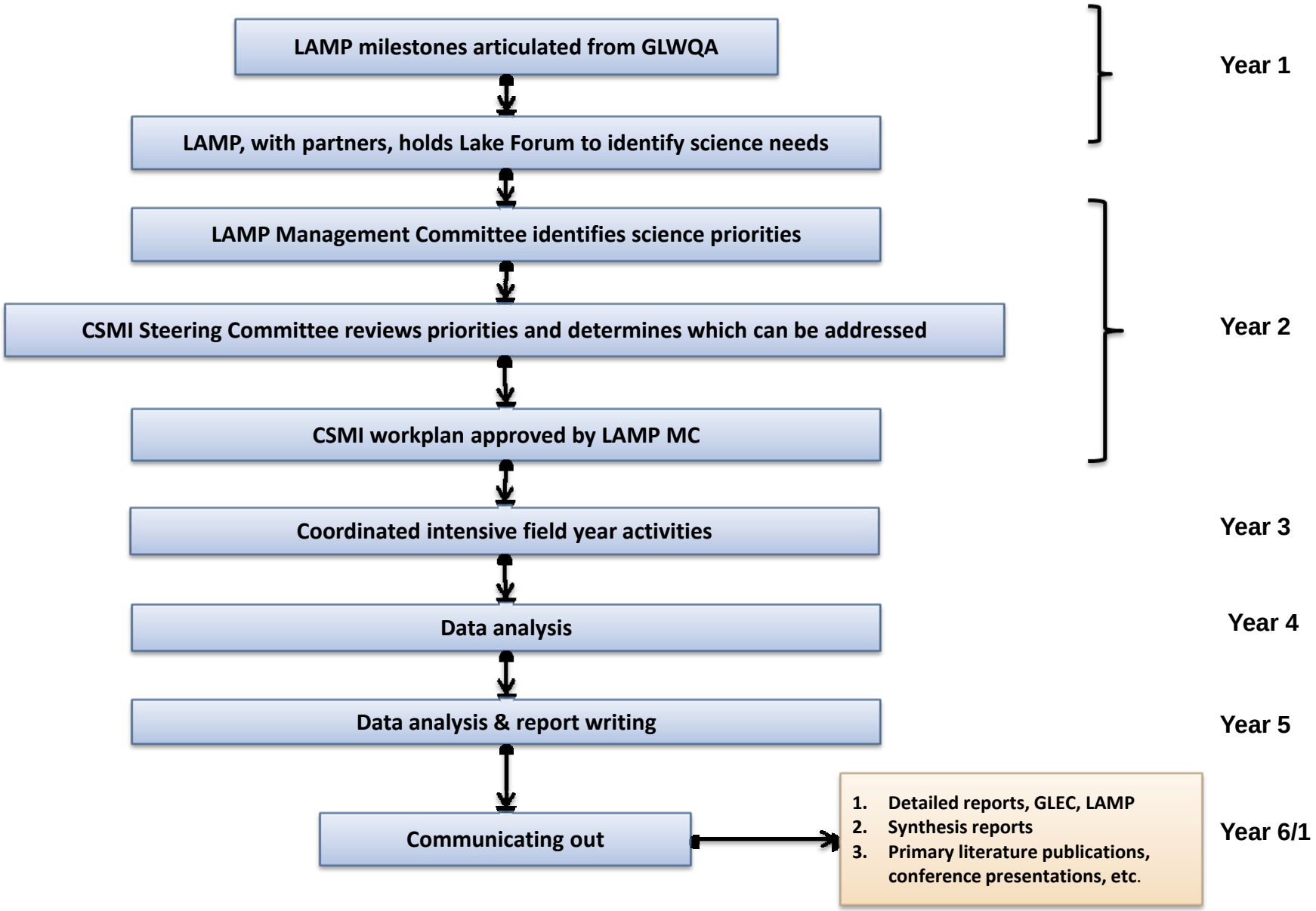
* Potential Working Groups, represent preliminary Co-leads thinking


Thank you
Image courtesy of the Image Science & Analysis Laboratory, NASA Johnson Space Center

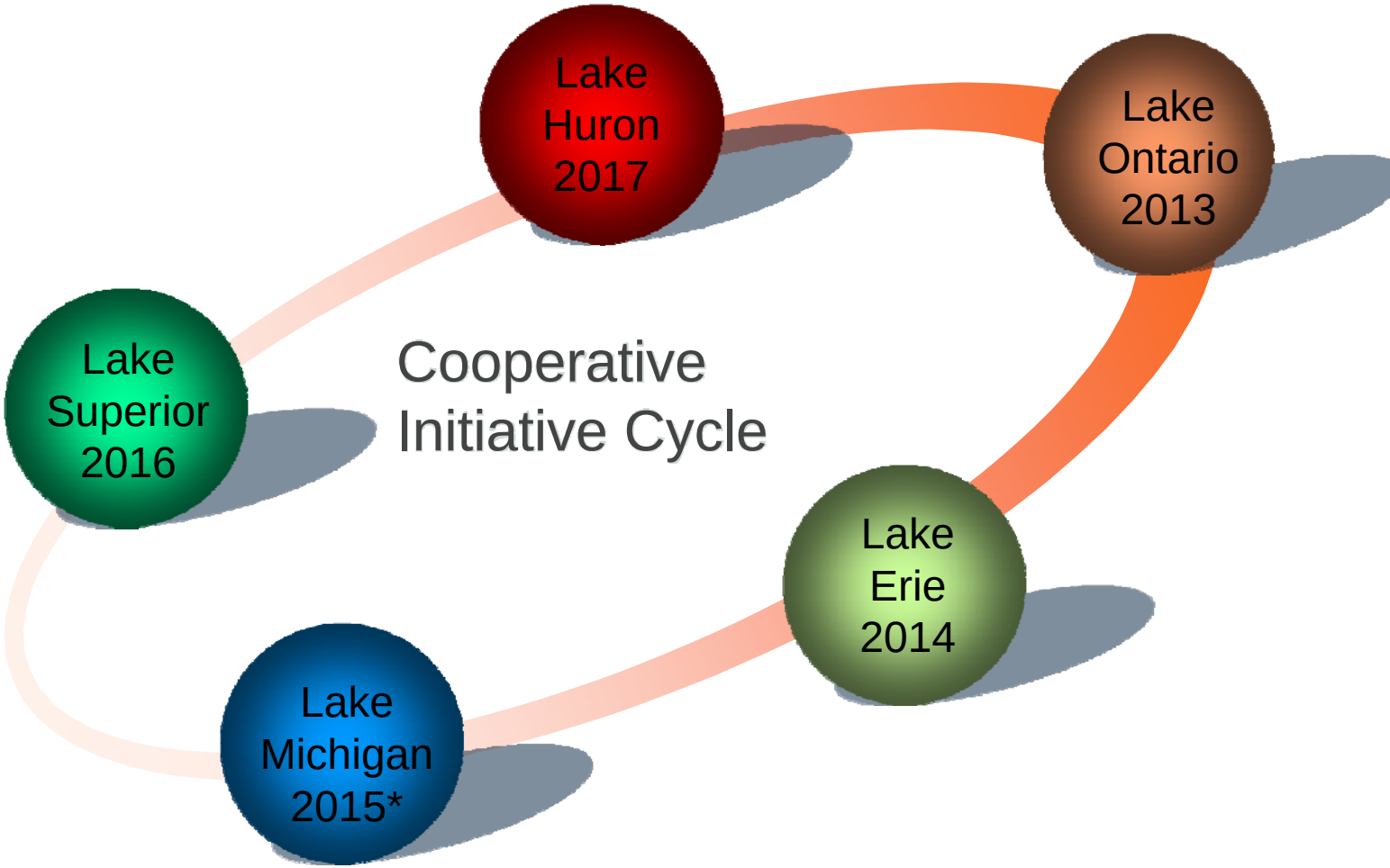
CSMI: Background

- Cooperative Monitoring Initiative (CMI) started in 2002 to coordinate monitoring
- Expanded mandate of CMI to include research coordination resulted in CSMI in 2006
- In 2009, connecting channels (including St. Lawrence) were added to CSMI process
- CSMI follows a 5 year rotational cycle
- **CSMI does NOT set priorities**

Cooperative Science & Monitoring Initiative Flowchart



CSMI Rotational Cycle



* Canada will participate in another lake

What is going on in 2013?

- **Lake Ontario** – Intensive field year
- **Lake Erie** – Planning for 2014 field year
- **Lake Superior** – Reporting workshop
- **Lake Huron** – Data analysis from 2012 field year
- **Lake Michigan** – Planning for 2015 field year