An Update on the Activities of The Great Lakes Ballast Water Collaborative

Ann Arbor, MI
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Saint Lawrence Seaway Development Corporation - U.S. Department of Transportation

The Situation

In a region of multiple jurisdictions where ballast water regulatory authority is now widely dispersed and information and knowledge are limited…

Government Agency	BW Discharge Standard for New	BW Discharge Standard for Existing
Transport Canada	IMO D-1 and D-2	IMO D-1 and D-2
USCG, USEPA	BWE/BMPs	BWE/BMPs
SLSMC, SLSDC	BWE (30 ppt salinity), SWF	BWE (30 ppt salinity) SWF
Michigan	Technology	Technology
Illinois, Minnesota, Pennsylvania*	IMO in 2012	IMO by 2016
Ohio	IMO in 2016	NA
New York	1000x IMO in 2013	100x IMO by 2012
Wisconsin	100x IMO by 2012	100x IMO by 2014

Chart courtesy of Jeff Stollenwerk, Minnesota Pollution Control Agency

How to respond?

- **Build new relationships and partnerships.**
- **Create a forum for candid and unbiased discussion.**
- **Exchange relevant and substantive information and data among senior decision makers.**
- **Emphasize inclusive participation *("round table")*.**
- **Strive for flexibility and informality.**

The Great Lakes Ballast Water Collaborative

Comprised of:

- **Government Regulators (State/Provincial and Federal)**
- **Commercial Maritime Representatives**
- **Scientists and Researchers**
- **Non-Governmental Organizations**

--sharing relevant information, fostering better communication, and partnering to reduce the risk of introduction and spread of ANS.

Main Objective: ***Bring U.S. Great Lakes State representatives together with the marine industry and respected Canadian and U.S. scientists and researchers.***

High-Level Participation is Key

Over 100 individuals and organizations have been actively participating in the GL BWC, including:

FEDERAL AGENCIES

U.S. EPA
U.S. Coast Guard
Transport Canada
Fisheries and Oceans Canada
International Joint Commission
U.S. Maritime Administration
National Oceanographic Atmospheric Administration
National Park Service
U.S. Geological Survey
U.S. Saint Lawrence Seaway Development Corporation
Canadian St. Lawrence Seaway Management Corporation

High-Level Participation is Key

COMMERCIAL NAVIGATION

American Steamship Co.
Canadian Shipowners Assoc.
Seaway Marine Transport
Canada Steamship Lines
Shipping Federation of Canada
Am. Great Lakes Ports Assoc.
Fednav, Ltd.
Canfornav, Ltd.
Interlake Steamship Co.
Key Lakes, Inc.
U.S. Lake Carriers Assoc.

OTHER ENTITIES

Minnesota Sea Grant
Northeast Midwest Institute
Great Lakes Commission
Great Lakes United
Minn. Env. Partnership

High-Level Participation is Key

STATES AND PROVINCES

Minnesota Pollution and Control Agency
Wisconsin Department of Natural Resources
New York Department of Environmental Conservation
California State Lands Commission
Ministère des Transports du Québec
Ontario Ministry of Natural Resources

SCIENTISTS & RESEARCHERS

Chris Wiley
Dr. Lisa Drake
Dr. David Reid
Dr. Mario Tamburri
Dr. Nicole Dobroski
Allegra Cangelosi
Dr. Hugh MacIsaac
Dr. Sarah Bailey
Dr. Carolyn Junemann
Maurya Falkner

Gather at a "Round" Table

- **The non-hierarchal and informal nature of the Collaborative is critical to its effectiveness as a forum for relationship building and information exchange.**

- **A willingness to meet frequently has allowed beneficial relationships and substantive proposals to develop:**

  - September 2009 in Detroit, Mich.
  - December 2009 in Ann Arbor, Mich.
  - January 2010 in Toronto, Ont.
  - May 2010 in Montreal, Que.
  - July 2010 in Duluth/Superior, Minn. Wis.
  - January 2011 in Toronto, Ont.

- ***Informational reports from the Great Lakes Ballast Water Collaborative's meetings can be downloaded at:***

www. greatlakes-seaway.com

Recent activities

- **Jan 2010 Toronto – meeting of BWC Steering committee: initial request from WIDNR.**
- **May 2010, Montreal and July 2010, Duluth/Superior - Assisted the Wisconsin Dept. of Nat. Resources in its assessment of treatment technology availability, by broadening understanding around the following questions:**
  - **Identifying "commercially available" treatment systems "rated" to meet or exceed a standard beyond the IMO (D-2) standard for fresh water environments.**
  - **Evaluating factors affecting the installation of specific ballast water treatment systems on the applicable fleets and vessels transiting the Great Lakes.**
  - **Assess current verification capabilities for treatment systems to comply with a discharge standard of 100x the IMO (D-2) standard.**

Upcoming activities

- **Next Ballast Water Collaborative Meeting Jan 19th, 2011 Toronto:**
  - **Share information on the current tools and statistical approaches to ballast water treatment system validation and verification tools and strategies.**
  - **Establishment of a Working Group to explore measures to further mitigate the risk of spreading AIS with existing domestic vessels.**

Thank You !

Many of the reports and other data sources mentioned in this presentation can be found on the Seaway's binational website under the tab labeled "*The Environment*" at:

www.greatlakes-seaway.com

GREAT LAKES ST. LAWRENCE SEAWAY SYSTEM
LE RESEAU GRANDS LACS VOIE MARITIME DU SAINT-LAURENT

QUESTIONS?

Ballast Water Collaborative Project

Exploring Measures to Further Reduce Risk of Spread

December 9, 2010
Ann Arbor, MI

Working Group Proposal

- Proposal for a fourth working group to better understand potential risk of spread and explore measures to further reduce risk of spread posed by existing vessels in the Great Lakes system.
- The proposal is to be tabled at the next BWC meeting (January 19 2011)

Working Group Objectives

- The objectives of the working group will be to:
  1. Better understand what trade patterns and species present the greatest risk, and the consequences of such risks; for example, is it more important to slow the spread of micro-organisms or certain species of fish?
  2. Prioritize the risk/consequences that we are trying to address.
  3. Determine improvements to ballasting protocols and best practices that can address these risks.
  4. Determine what cost effective and feasible technological investments can best reduce these risks.
  5. Establish pilot projects to test the most promising technologies and modifications to ballasting systems (e.g. raise intakes, finer screens, filtration system).

Risk Assessment Project

- Leading up to the next BWC meeting, the CSA and other carriers are undertaking a preliminary risk assessment project.

    1. Trade route data and ballast water inventories have been aggregated for participating CSA and US carrier fleets
    2. Relative potential risk level posed by domestic trade routes is to be assessed using the preliminary risk model
    3. Existing ballast water best management practices and potential for risk mitigation to be assessed relative to the outputs of the risk model

- Preliminary results and a proposed work plan to be presented to the Ballast Water Collaborative

Next Steps

- Leading up to the Ballast Water Collaborative meeting, we propose the following next steps:
  - Expand the risk assessment elements and incorporate additional data in the model (including environmental similarity analysis)
  - Undertake the risk assessment using the expanded model and the aggregated fleet-wide ballast water inventories
  - Develop preliminary conclusions documenting the highest level of risk (which routes, which species, which ports, seasonal variations, etc.)
  - Develop a draft work plan to propose to the Ballast Water Collaborative to further expand model and explore solutions to reduce potential risk

Thank you

- Azin Moradhassel
- Canadian Shipowners Assocation