Proposed Ballast Water Regulatory Approach

Great Lakes ANS Panel Meeting

May 15, 2019

Overview

- Canada needs new national *Ballast Water Control and Management Regulations* in order to:
  - further reduce the introduction and spread of aquatic invasive species,
  - give effect to the *International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004* (the Convention).
- Transport Canada's proposed regulatory approach would protect the environment while also reflecting the importance of Great Lakes shipping and the 78,000 Canadian and U.S. jobs it directly supports.
  - The approach would apply the Convention on the Great Lakes.
  - Great Lakes ships would need a Ballast Water Management System (BWMS) by 2024 to address the spread of invasive species.
  - However, the approach would exempt ships that transit through Canadian Great Lakes waters without loading or unloading ballast.

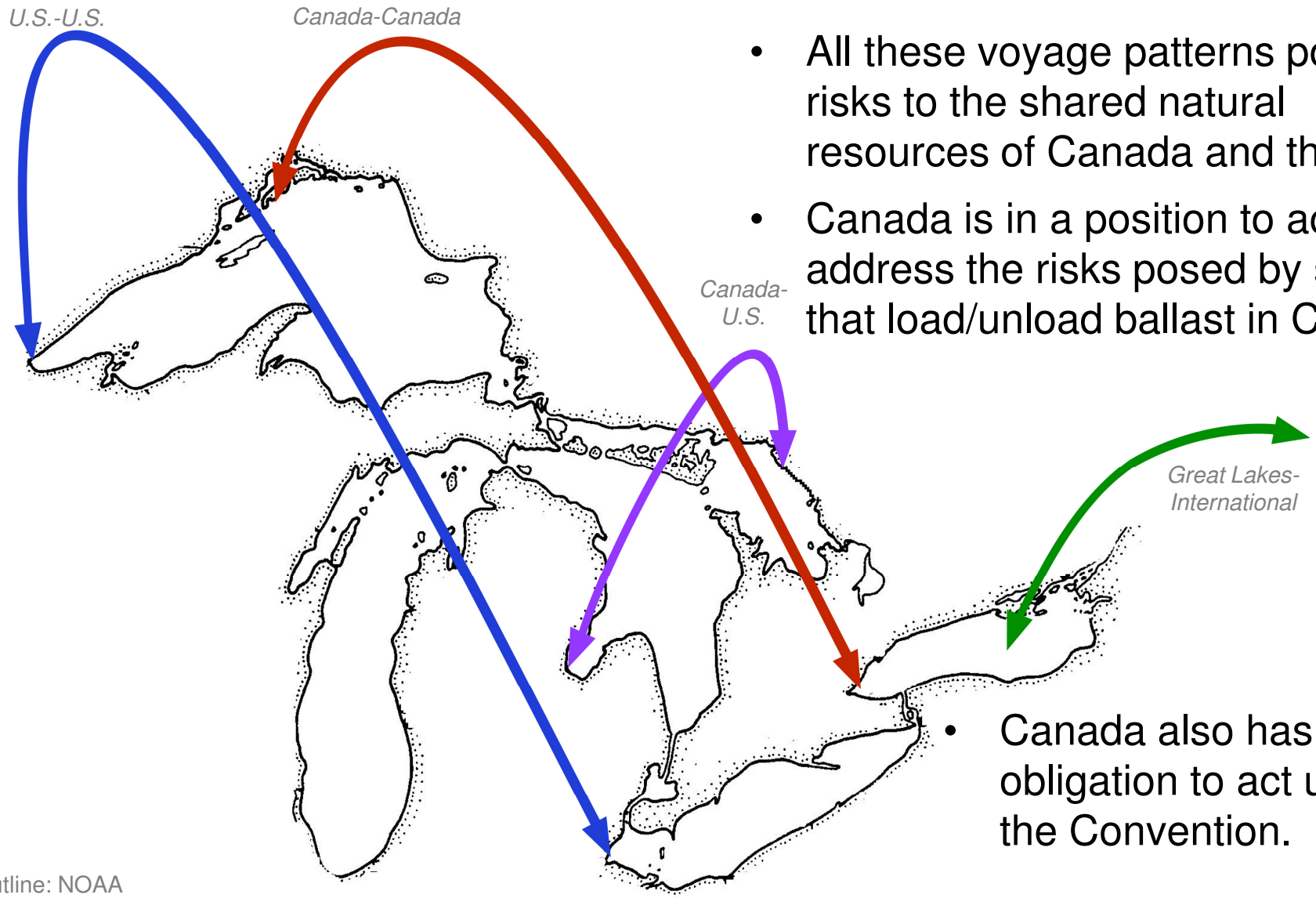
The Impact of Invasive Species

- Species invasions have costly impacts to our shared waters and the $6 trillion Great Lakes regional economy.
  - Zebra Mussels costs the U.S. roughly $1 billion per year.
  - The Ruffe, an invasive fish, causes over $300 million in annual damages to Great Lakes commercial and recreational fisheries.
- Action is needed to prevent irreversible species invasions that:
  - harm our plants and animals, and impair our fisheries;
  - facilitate algal blooms and degrade our beaches;
  - disrupt our infrastructure and lower our property values.

The Need to Manage Ballast Water

- Lakers move non-indigenous species (NIS) (which may become invasive) from the St. Lawrence River into the Great Lakes.
  (Adebayo et al. 2014)
- Lakers continue to move new NIS from the lower four Great Lakes to Lake Superior.
  (Cangelosi et al. 2018)
- Multiple vectors of NIS and the changing climate will perpetuate the potential for Laker spread of NIS for the foreseeable future.
  (Cangelosi et al. 2018)
- Lakers pose a high risk of spreading NIS compared to the risk of introductions by international ships.
  (Fisheries and Oceans Canada 2014)
- Ballast Water Treatment to the D-2 standard would dramatically reduce transportation of organisms by all ships.
  (Fisheries and Oceans Canada 2014)

Which Ballast Water Needs Management



- All these voyage patterns pose risks to the shared natural resources of Canada and the U.S.
- Canada is in a position to act to address the risks posed by ships that load/unload ballast in Canada.
- Canada also has an obligation to act under the Convention.

Outline: NOAA

Transport Canada Would Regulate Most Ships

- Transport Canada's proposed approach would:
  - apply to all Canadian ships and all foreign ships while in waters under Canadian jurisdiction;
  - exempt Great Lakes ships that do not load or unload ballast water in Canada.
- Although transiting U.S. ships still pose risks to Canada through our shared Great Lakes environment, it would be better left to the U.S. to regulate these ships.

A New, Feasible Approach

- Canada recognizes the challenges of managing ballast water in the Great Lakes but waiting for the perfect technology is not an option.
- Transport Canada is proposing an approach based on extensive dialogue with industry, scientists, engineers, federal and state officials, and international partners.
- It would apply the Convention to the Great Lakes while addressing two key issues for shipowners:
    1. BWMS may face technical challenges treating the cold, fresh, murky water on the Great Lakes.
    2. Ships need to install BWMS approved both by the U.S. Coast Guard and under the Convention.

Challenge 1: BWMS Performance

- Rapid ballasting of the cold, fresh, sometimes murky water of the Great Lakes and St. Lawrence River will put BWMS to the test.
  - Canada understands that there may be challenges with BWMS on ships operating in the Great Lakes.
  - However, the use of BWMS in this region is still expected to result in substantial decreases in environmental risk.
- To address this, the proposed approach would deem ships to have met the performance standard if an approved BWMS is installed, maintained and operated correctly.
  - This would apply to any ship treating Great Lakes and St. Lawrence River ballast water using a BWMS installed prior to September 8, 2024.

Challenge 2: BWMS Approval

- Great Lakes ships have been particularly delayed in selecting, piloting and installing BWMS due to their need to use BWMS approved by the U.S. and under the Convention.
  - The U.S. has recently begun to approve selected internationally-approved BWMS, which can be installed on Great Lakes ships.[1] The Vessel Incidental Discharge Act allows the approval of even more.
- Transport Canada's proposed approach recognizes that more time will be needed for ships to comply with the performance standard.
  - The compliance date would be September 8, 2024 for any ship that operates only in Canada and, if applicable, on the high seas or in the U.S. waters of the Great Lakes or the St. Lawrence River.

[1] Transport Canada (2015) *Transactions on ballast water treatment systems for the Great Lakes.* https://tinyurl.com/o9r4x5p

Convention Requirements

- Canada has a responsibility to prevent the spread of invasive species on the Great Lakes. The Convention offers a fair approach.
- All parties to the Convention have agreed to apply its requirements to non-party ships. These requirements include:
  - keeping a ballast water record book;
  - following a ballast water management plan approved by their flag;
  - meeting the performance standard once required to do so; and
  - carrying a flag document certifying that the ship has been surveyed and that its ballast water management complies with the Convention.
- The proposed approach would require non-party ships to comply with the Convention if they load or unload ballast water in Canada.
  - This would apply everywhere in Canada, regardless of flag, except for ships that only transit through Canadian Great Lakes waters.
  - The Convention only allows retention for permanent ballast water in sealed tanks.

Ballast Water Exchange Plus Treatment

- In addition to compliance with the Convention, Canada would require vessels to continue performing ballast water exchange if they are travelling to Canadian freshwater ports* from outside Canada's exclusive economic zone.
- This requirement would apply until September 8, 2024 in order to provide time for scientific research to determine if BWMS are performing well.
- Should experience demonstrate ongoing challenges in treating ballast water being discharged at these ports, the requirement to continue doing exchange could be reconsidered (i.e. in time, or in geographic area) at a future date.

* The following ports are Canadian freshwater ports: Kitimat, Stewart, Fraser River ports, Saguenay River ports, St. Lawrence River ports upstream of Ile d'Orleans, and ports in the Great Lakes Basin.

Intended Regulatory Timeline

Consultation of Stakeholders	Ongoing
Publication in the Canada Gazette Part 1 (Draft Regulation)	Spring 2019
Formal Public Comment Period	Summer 2019
Publication in the Canada Gazette Part 2 (Final Rule)	Winter 2020
Compliance with Performance Standard	September 8, 2024

More Information

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MODERNIZING CANADA'S BALLAST WATER RULES ON THE GREAT LAKES

Canada is preparing updated rules to address the spread of invasive species in the Great Lakes by requiring ships to install ballast water management systems (BWMS) by 2024. These rules would prevent costly impacts to our shared waters and the $6 trillion regional economy, while also providing certainty and fairness to Canadian, U.S. and international ships.

INVASIVE SPECIES HARM THE REGIONAL ECONOMY

The U.S. Coast Guard estimates that the invasion of Zebra Mussels directly costs the U.S. roughly $1 billion per year. The Ruffe, an invasive fish, causes over $300 million in annual damages to Great Lakes commercial and recreational fisheries. Action is needed to prevent irreversible species invasions that harm our plants and animals, facilitate algal blooms, degrade beaches, impair fisheries, disrupt infrastructure, lower property values, and create prevention and control expenses.

AN INFORMED APPROACH

Canada will seek public comment in spring 2019 on a proposed rule, based on years of dialogue with industry, scientists, engineers, federal and state officials, and international partners. The proposed approach will reflect the importance of shipping in the Great Lakes-Seaway system, and the 78,000 jobs it supports in the U.S. and Canada. Ships on the Great Lakes can harm the environment by unintentionally spreading invasive species through ballast water, and new rules will address Canada's obligations under the International Ballast Water Convention.

NEW, FEASIBLE, AND EFFECTIVE

While Canada recognizes the challenges of managing ballast water in the Great Lakes, waiting for the perfect technology is not an option. Canada's practical approach responds to shipowner concerns and provides the earliest environmental protection for the Great Lakes by:

- Accepting Great Lakes ballast water managed by approved BWMS; and
- Allowing sufficient time for Great Lakes shipowners to comply by 2024.

Canada would not regulate U.S. ships that transit through Canadian Great Lakes waters without loading or unloading ballast water.

A STEP FORWARD FOR THE GREAT LAKES

The International Joint Commission has called on Canada and the U.S. to address the spread of invasive species by Great Lakes ships. Canada's approach provides a basis for further binational alignment. Countering the spread of invasive species in our shared waters will require action by all Great Lakes ships.

January 2019

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Overview Paper

Proposed Approach for Amending the Ballast Water Control and Management Regulations

Objective

In amending the Ballast Water Control and Management Regulations, Transport Canada (TC) seeks to further reduce the introduction and spread of aquatic invasive species by vessels and to give effect in Canada to the *International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004* (the Convention).

The purpose of this document is to provide information on a proposed TC approach to key elements of the amendments prior to the development of formal regulatory text. TC is working towards publication of the complete draft regulations in the Canada Gazette Part I for public comment in spring 2019.

Application

TC proposes to apply the regulations to domestic and foreign vessels, including those operating in the Great Lakes Basin (i.e. upstream of St. Lambert lock). TC would propose to not regulate a Great Lakes vessel of a non-party that transits through Canadian waters, provided that the vessel does not load or discharge ballast water in Canada.

More specifically:

1. The Regulations would apply in respect of the following vessels:
   a. Canadian vessels everywhere, and
   b. Vessels that are not Canadian vessels and are in waters under Canadian jurisdiction.
2. The Regulations would not apply in respect of the following vessels:
   a. A vessel of a non-party to the Convention that operates exclusively in the Great Lakes Basin, provided that the vessel never loads or discharges ballast water in waters under Canadian jurisdiction;
   b. A vessel that is owned and operated by a state and used only in government non-commercial service;
   c. A vessel that is not designed or constructed to carry ballast water; and
   d. A vessel that carries only permanent ballast water in sealed tanks such that it is not subject to release.

Compliance Timeline

TC proposes to phase-in the performance standard on the Convention timeline (i.e. the timeline of Regulation B-3, as adopted on April 13, 2018).

In the case of Great Lakes vessels, TC would propose to extend the compliance timeline to September 8, 2024. These vessels have been particularly delayed in selecting, piloting and installing ballast water management systems (BWMS) due to their frequent operations in the U.S. The U.S. has established differing requirements, and has only recently begun to type-approve BWMS.

TC also proposes to establish September 8, 2024 as the date for compliance by vessels that operate exclusively in waters under Canadian jurisdiction (or there and on the high seas).

More specifically:

3. a. A vessel constructed before September 8, 2017 that operates exclusively in waters under Canadian jurisdiction, the U.S. waters of the Great Lakes and St. Lawrence River, or in such waters and on the high seas, shall conduct ballast water management that at least meets the standard described in Regulation D-2 of the Convention no later than September 8, 2024.

Transport Canada - January 30, 2019

Information Paper

Questions

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