

Exploring Research Needs re: Crude Oil Transport in Great Lakes Basin & Northern Watersheds

Crude oil travels through the Great Lakes Basin in unprecedented quantities. Domestic crude production has increased by 38% since 2009 (*Great Lakes Commission, 2015*). Crude oil production from North Dakota's Bakken oil fields and the Alberta tar sands has begun to outpace pipeline capacity, pressuring other forms of transportation: rail, truck and barge. Increased safety concerns related to these alternative transport modes, alongside aging and inadequate infrastructure, compound stress on the system.

New York Sea Grant (NYSG) research and extension initiated in 2014 is helping concerned stakeholders better understand the scope of the issues associated with the transport of crude oil in the Great Lakes, Lake Champlain and Hudson River watershed based on the best science and technology. This entails helping stakeholders think about the opportunities, risks and hazards within the complex world of the transportation of crude oil.

NYSG Responds

In 2015, diverse stakeholders from Canada and the US attended two international workshops organized by the Great Lakes Sea Grant Network (GLSGN), led by NYSG and Minnesota Sea Grant with funding support from multiple partners. Participants identified and linked issues and concerns related to oil transport within the Great Lakes Basin, the source of 20% of the world's fresh water, and developed a draft research agenda with the goal of providing information to help decision-makers look across transportation modes and equitably assess risks and benefits.

In 2016, the GLSGN hosted four webinars:

- Crude Oil Movement in the Great Lakes Basin: Properties and Pathways
- · Understanding Hazards, Risks and Security
- Spill Response Requirements and Regional Capacity: Regulations and Resources
- Regulatory Activity & Environmental Requirements: Tools for Addressing Multiple Objectives.

Funding has been received for a third international workshop (June 2017) to further explore the state of



Workshop participants map out the issues around crude oil transport in the Great Lakes system. Photo: K.Bunting-Howarth, NYSG

knowledge of oil transport-related environmental risks, and infrastructure and lessons from the Gulf region. This workshop is a partnership between the Sea Grant Network (Great Lakes and Gulf Oil Spill team), the Great Lakes Commission and International Joint Commission.

Partners:

- Council of the Great Lakes Region
- Enbridge Inc.
- Great Lakes Commission
- Great Lakes Sea Grant Network
- Gulf of Mexico Research Initiative,
- International Joint Commission
- Johnson Foundation
- Lintilhac Foundation
- NOAA and NOAA Great Lakes

The Sea Grant Focus Area for this project is New York Resilient Communities & Economies

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