

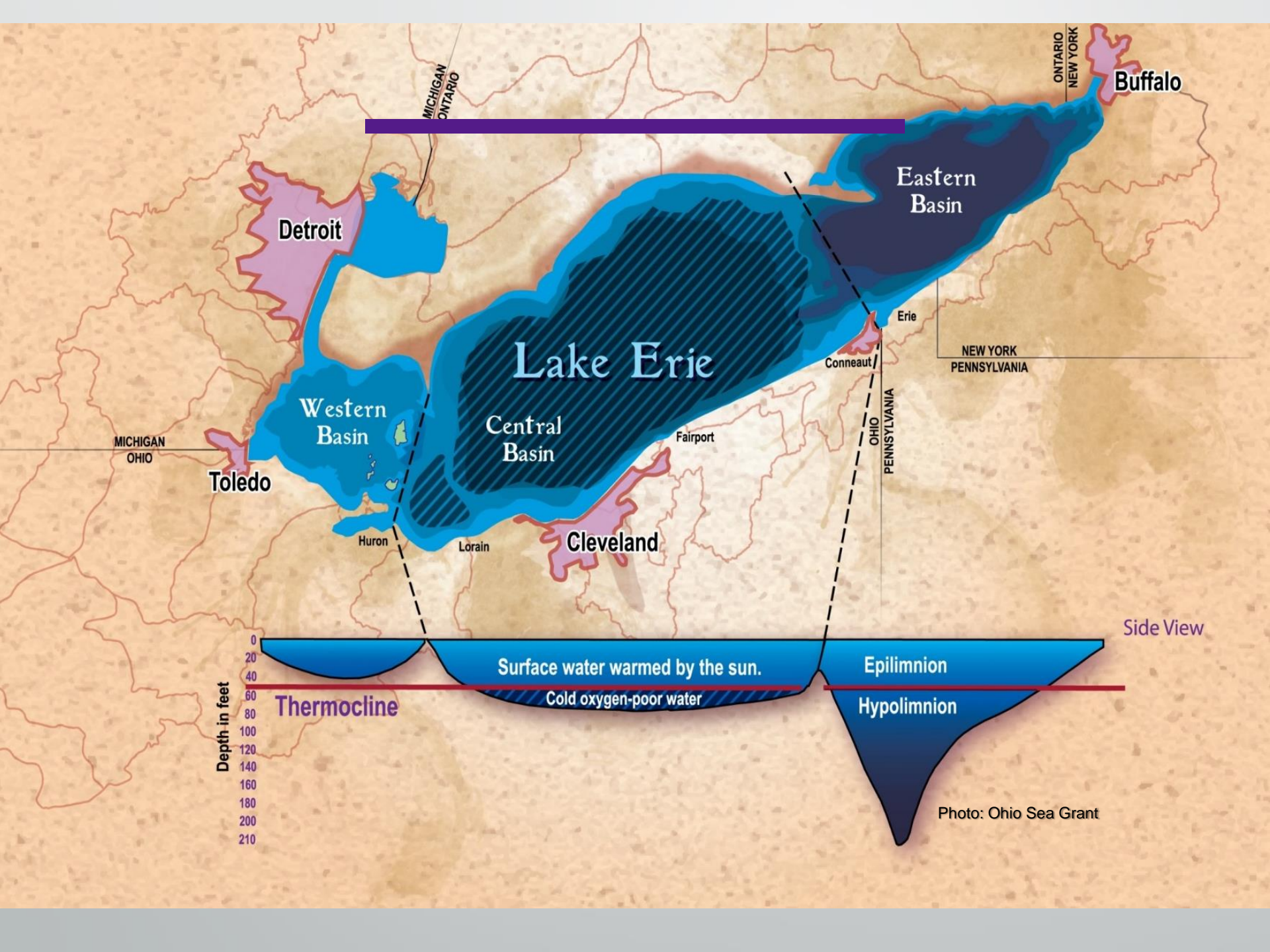


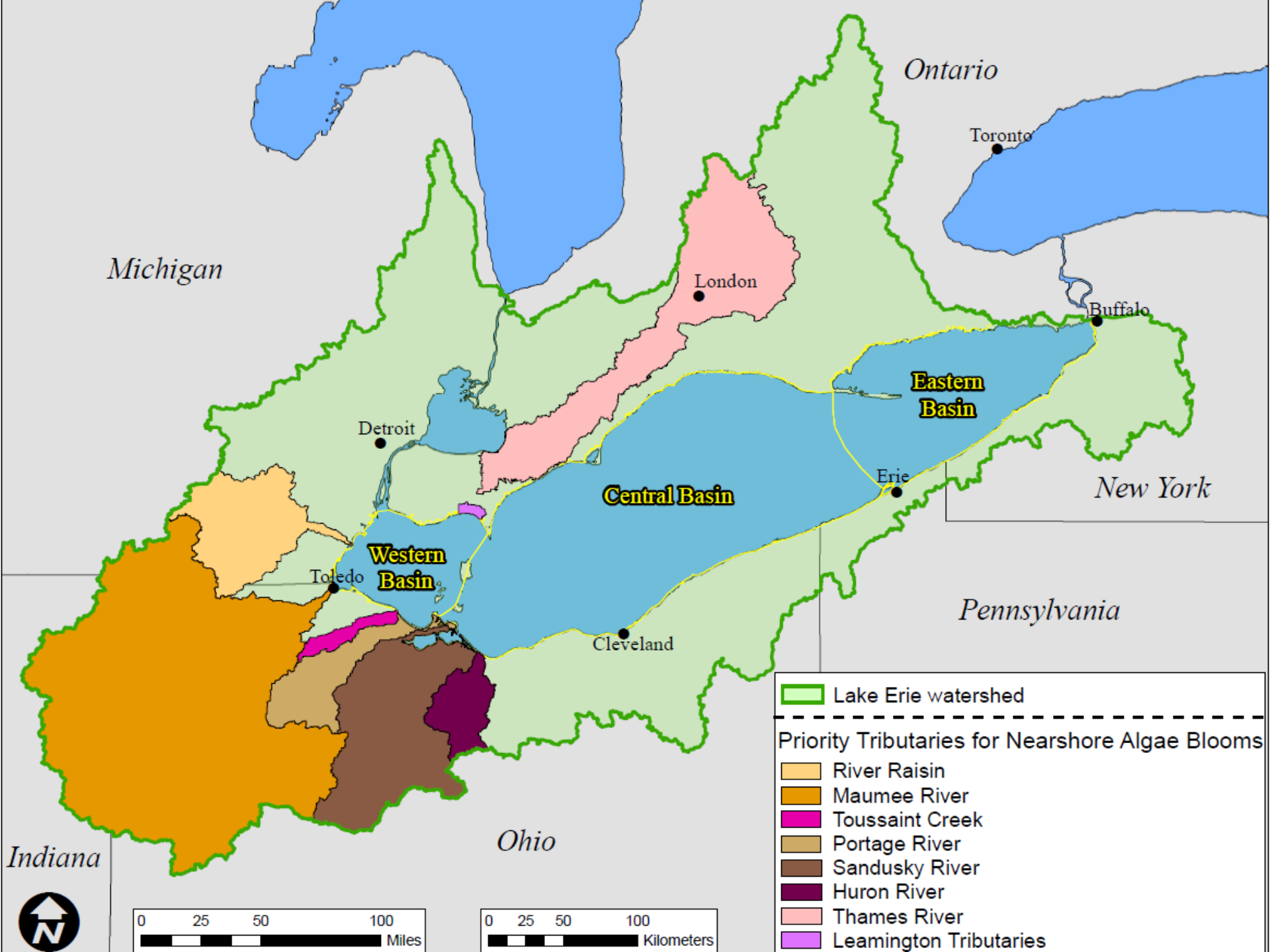
Lake Erie HABs

Gail Hesse

National Wildlife Federation









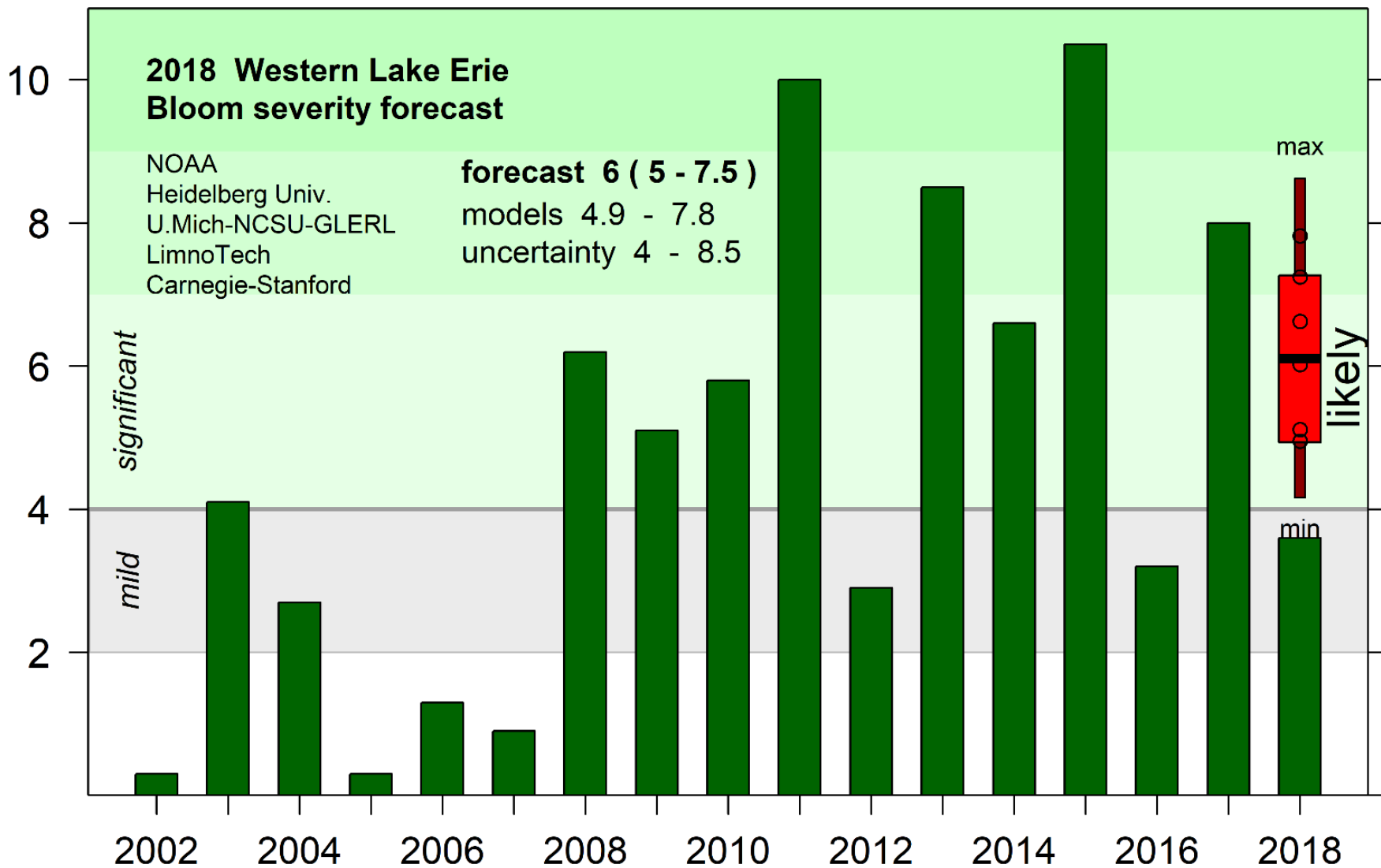
09/03/2011



October 9, 2011

Photo: NOAA Satellite Image









09/03/2011



08/30/2012

Nutrient Sources

- Comprehensive analysis of possible sources
 - Majority of the load is delivered in the spring
 - Point sources have remained relatively constant, not a driver of blooms
 - Agriculture is the prevailing source
 - Management of land application of fertilizer is key (*how it is applied: timing and placement*)
 - Exacerbated by changing weather patterns, more frequent, intense rain events
- Affirmed by numerous studies, models

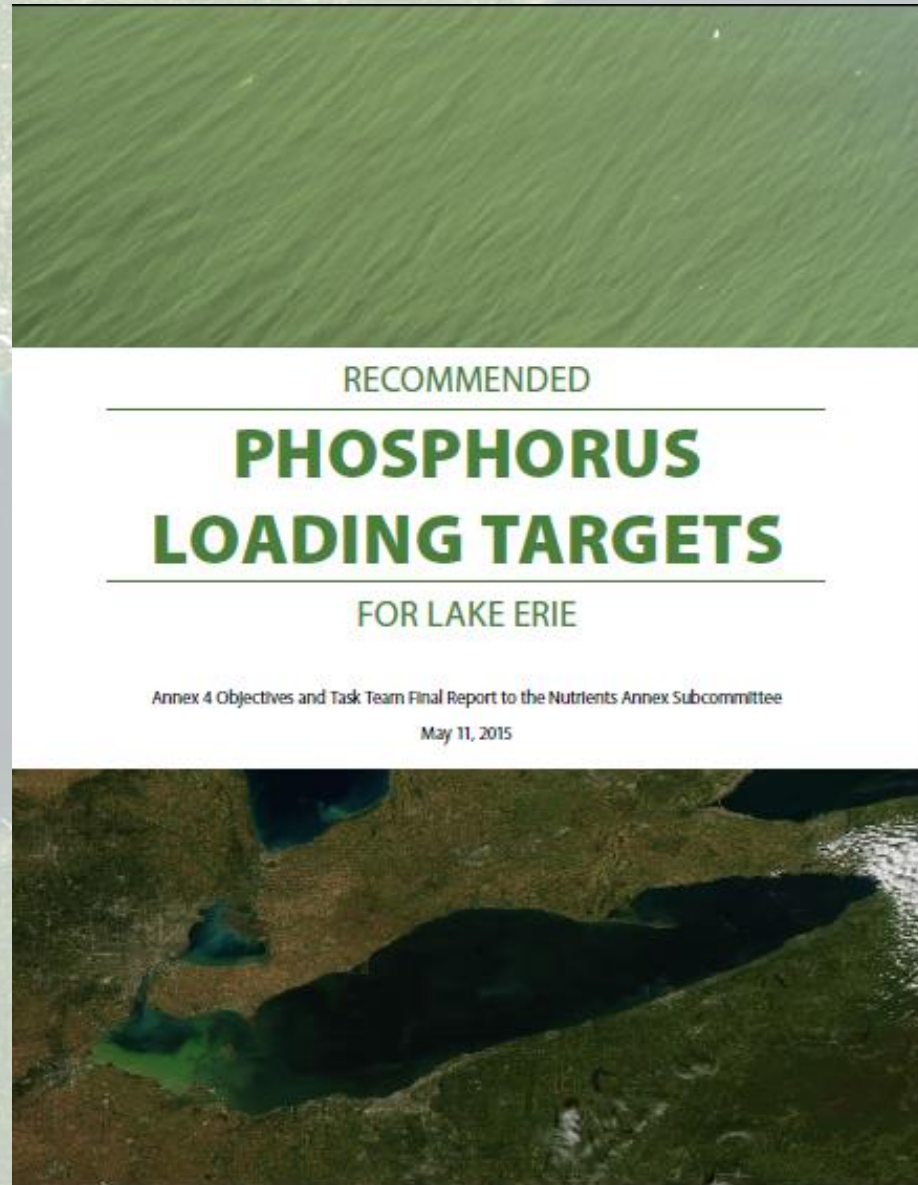
Great Lakes Water Quality Agreement

*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*

*Signed September 7, 2012
Entered into force February 12, 2013*



Canada



RECOMMENDED

PHOSPHORUS LOADING TARGETS

FOR LAKE ERIE

Annex 4 Objectives and Task Team Final Report to the Nutrients Annex Subcommittee

May 11, 2015

Summary of Findings and Strategies to Move Toward a 40% Phosphorus Reduction

A White Paper¹

By

Kristen Fussell, Gail Hesse, Laura Johnson, Kevin King, Greg LaBarge, Jay Martin, Jeffrey Reutter, Robyn Wilson, and Christopher Winslow

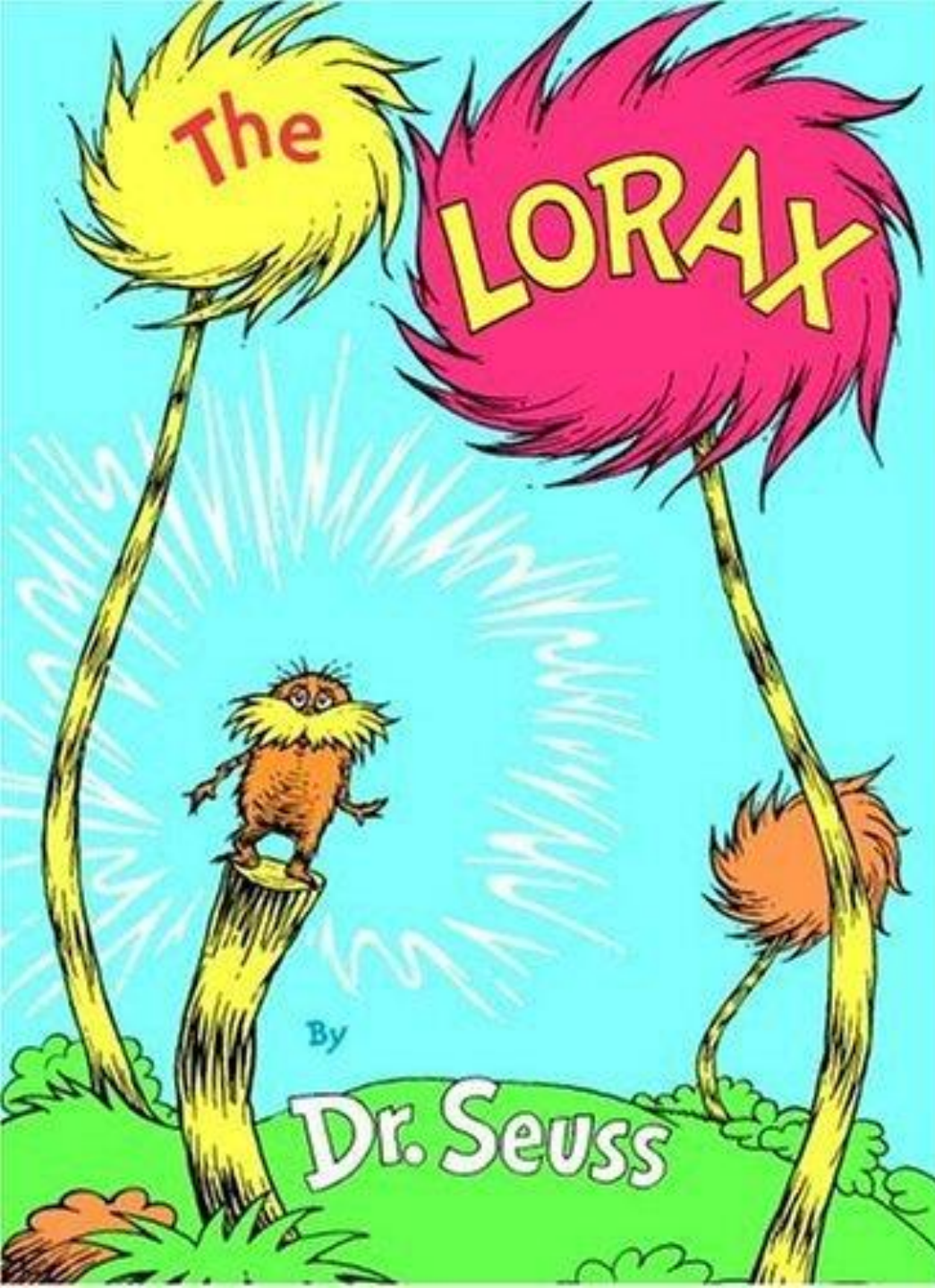
25 September 2017

Introduction and Goal

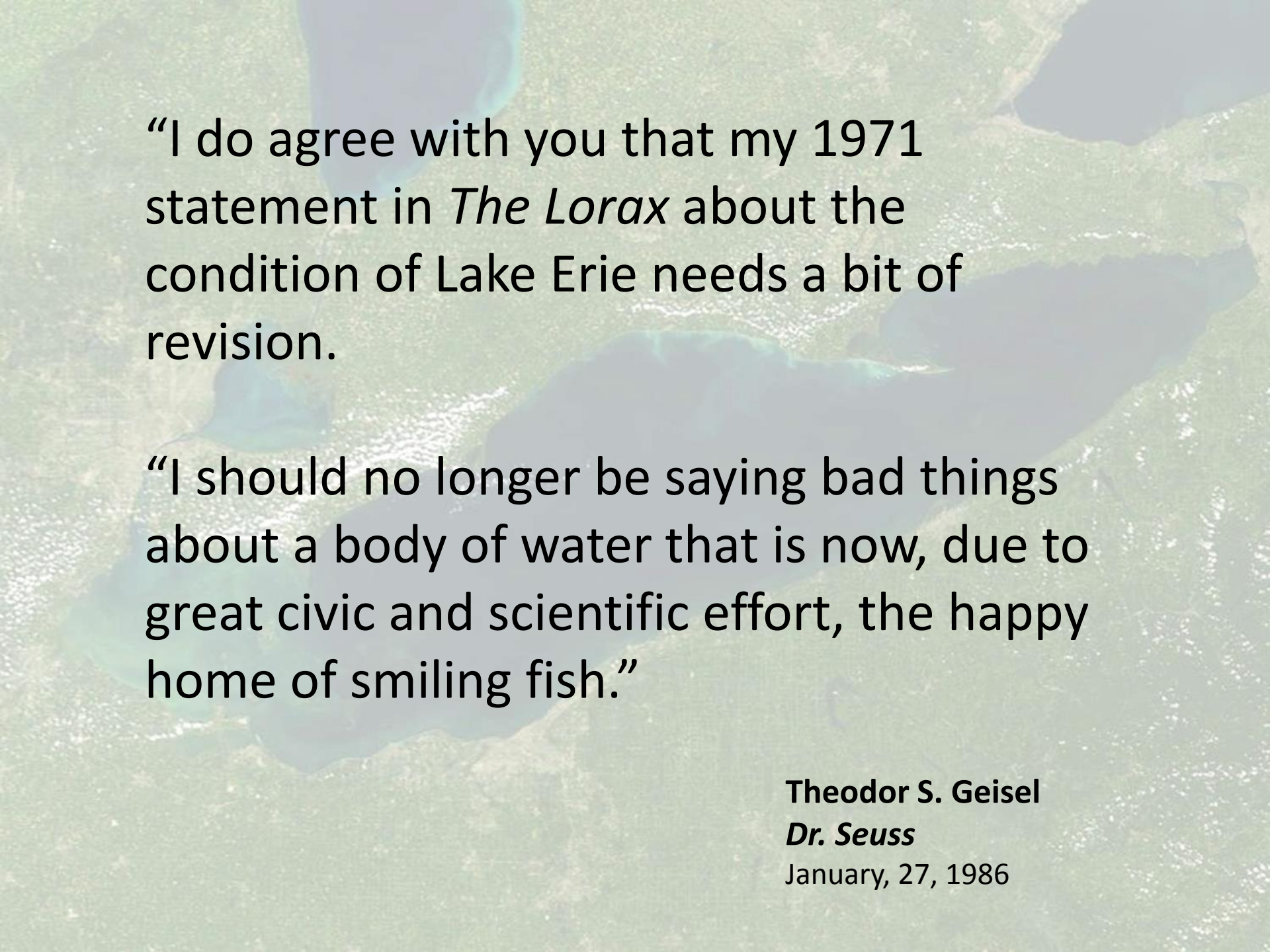
A 40% Reduction in Phosphorus Loading. In March 2013, the Ohio Phosphorus Task Force recommended a 40% reduction in phosphorus (P) loading from the Maumee River and Western Basin tributaries to Lake Erie to address Harmful Algal Blooms (HABs) in the Western Basin. In October 2013, the International Joint Commission

What's Needed

- Agricultural practices
 - Subsurface placement
 - Soil test informed application rates
 - Erosion control and water management
- Remove barriers for practice adoption, real and perceived
- Research and monitoring
- Framework for accountability; tie funding to data



“They’ll walk on their fins and get woefully weary in search of some water that isn’t so smeary. I hear things are just as bad up in Lake Erie.”

An aerial photograph of Lake Erie, showing the water's surface and surrounding land. A semi-transparent rectangular box is overlaid on the image, containing two paragraphs of text.

“I do agree with you that my 1971 statement in *The Lorax* about the condition of Lake Erie needs a bit of revision.

“I should no longer be saying bad things about a body of water that is now, due to great civic and scientific effort, the happy home of smiling fish.”

Theodor S. Geisel

Dr. Seuss

January, 27, 1986



