Building resilience of coastal fishing communities to harmful algal blooms

Kathleen M. Moore
University of Washington, moorekat@uw.edu

Stephanie Moore
United States. National Oceanic and Atmospheric Administration, stephanie.moore@noaa.gov

Stacia Dreyer
University of Washington, sdreyer@uw.edu

Edward Allison
University of Washington, eha1@uw.edu

Sunny Jardine
University of Washington, jardine@uw.edu

See next page for additional authors

Follow this and additional works at: https://cedar.wwu.edu/ssec

Part of the Fresh Water Studies Commons, Marine Biology Commons, Natural Resources and Conservation Commons, and the Terrestrial and Aquatic Ecology Commons


This Event is brought to you for free and open access by the Conferences and Events at Western CEDAR. It has been accepted for inclusion in Salish Sea Ecosystem Conference by an authorized administrator of Western CEDAR. For more information, please contact westerncedar@wwu.edu.
Speaker
Kathleen M. Moore, Stephanie Moore, Stacia Dreyer, Edward Allison, Sunny Jardine, Terrie Klinger, Julia Ekstrom, Anna Varney, and Karma C. Norman

This event is available at Western CEDAR: https://cedar.wwu.edu/ssec/2018ssec/allsessions/178
Building socioeconomic resilience to harmful algal blooms in coastal communities

Kathleen Moore*, Eddie Allison, Stacia Dreyer, Julie Ekstrom, Sunny Jardine, Terrie Klinger, Stephanie Moore, Karma Norma

Research Motivation

Biggest-ever toxic algal bloom hits West Coast, shutting down shellfish industries - The Oregonian, June 16, 2015

- The 2015 HAB event was linked to anomalously warm ocean conditions (McCabe et al., 2016), which may worsen in the future.

Research objectives

1. Assess the social, cultural and economic impacts of the 2015 HAB event.
2. Identify factors that contribute to an individual’s ability to cope with HAB events.

Methods

- Mixed mode (mail and online) survey across 16 west coast fishing communities.

  - Mail survey recruited participants in shellfish/crab related business using InfoUSA and PacFIN databases.
  - Online survey advertised via state agency email lists with participants self-selecting.
  - N=381 (47% mail, 53% online; 41% WA, 24% OR, 35% CA; 55% fisheries jobs, 45% hospitality/other jobs).
  - Ordinal regression and multinomial logit models used to empirically test factors influencing an individual’s vulnerability to HAB events.

Preliminary Findings

HAB Exposure Index

- Lost fishing opportunities were calculated as the proportion of days a fishery was closed due to HAB toxins relative to the normal season length (Moore et al., in prep).

Socioeconomic Impacts

References:


Contact author: Kathleen Moore at moorekat@uw.edu

Acknowledgements: JPB Foundation funding. Photos credits NOAA, unless otherwise noted.