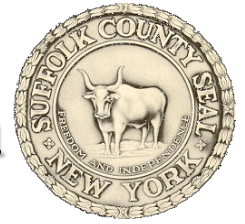


Suffolk County HAB Action Plan Development & Major Findings



2018 SUFFOLK COUNTY HAB SYMPOSIUM
16 MAY 2018
BILL WISE, NEW YORK SEA GRANT

Suffolk County Harmful Algal Bloom Action Plan



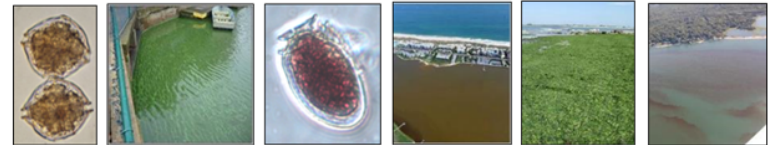
Prepared by William Wise, New York Sea Grant Director



Steven Bellone, Suffolk County Executive

- The only current encyclopedic reference of all HABs plaguing Suffolk County
- To be updated periodically as part of the HAB Management Work Group

HISTORICAL OCCURRENCE AND CURRENT STATUS OF HARMFUL
ALGAL BLOOMS IN SUFFOLK COUNTY, NY, USA

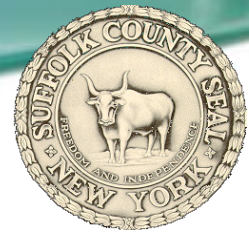


TERESA K. HATTENRATH-LEHMANN AND CHRISTOPHER J. GOBLER



Stony Brook University
School of Marine and
Atmospheric Sciences

DECEMBER, 2016



The HAB Action Plan Project

- Public Symposium (May of 2016 at Timber Point Country Club).
 - Introduced the project to various stakeholders
- Full-day Workshop (day following Symposium held at SUNY Stony Brook)
 - Attended by invited HAB experts from across the US and key personnel and managers from various agencies.
 - Determine the bounds of what we do know and what we do *not* know.
- Establishment of Steering Committee
 - SCDHS, SCDEDP, SUNY SB, PEP
 - Biweekly conference calls and/or in-person meetings to guide project
- Establishment of an Advisory Group
 - NYSDEC, NYSDOH, SCDHS, SCDEDP, USEPA, USGS, SSER, PEP, SUNY SB,
 - Electronic communication and in-person meeting(s) to review and comment on numerous drafts of Plan
- Synthesis Document
 - Information pertinent to HABs that plague SC waters
 - Prepared by Drs. Chris Gobler and Theresa Hattenrath-Lehman from SUNY Stony Brook).
- HAB Action Plan (Sept. 2017)



HAB Public Symposium “Take-Homes”

- HAB frequency/diversity/intensity appear to be increasing in Suffolk County
- Reducing human-derived N inputs should be the foundation of a HAB Management Plan
- Continued monitoring is essential
 - Detect changing conditions
 - Detect impact of management measures
- HAB organisms (and related toxins) are dynamic in a dynamic environment; they can be gone today and here tomorrow → adaptive monitoring/management
- HAB Management Plan should reach across and embrace multiple governmental jurisdictions, clearly defining roles/responsibilities



HAB Action Plan Workshop

- HAB Action Plan Advisory Group:
 - The Nature Conservancy
 - NYS Department of Health
 - NYS Department of Environmental Conservation
 - NYS Department of State
 - USEPA
 - SBU, School of Marine & Atmospheric Sciences
 - Suffolk County Dept. of Economic Development/Planning
 - US Geological Survey
- Invited HAB Experts
 - Dr. Quay Dortch – Director, NOAA EcoHab Program
 - Dr. Rafael Kudela, Univ. California/Santa Cruz
 - Dr. Margaret Mulholland, Old Dominion Univ.
 - Dr. Tim Davis, NOAA Great Lakes Environmental Lab



HAB Action Plan Principal Findings

- HABs in Suffolk County appear to be increasing in frequency and diversity
“*may have reached a level unprecedented elsewhere in the United States*”
- Suffolk County HABs warrant an *increased, proactive* response
- Suffolk County should *act now* to forestall future HAB problems
- *Reducing nutrient inputs to surface waters, especially via groundwater inputs*, are the actions that will have a significant effect on HABs in Suffolk County
- *Climate variability* is likely to accelerate and exacerbate the HAB issue
- An ongoing and coordinated HAB *monitoring/research program* is a necessary foundation for the County’s adaptive and evolving HAB Action Plan
- *Continued water quality (and other ecosystem parameter) monitoring* is key to assessing the success of HAB management interventions and to detect changing conditions in surface waters that might impact future HABs
- Significant reduction in the frequency scope, and extent of ecosystem/human health impacts of future HABs in Suffolk County *is achievable*