

Point of Contact:

Dr. Kari St. Laurent
Branch Chief
Harmful Algal Bloom Forecasting
NOAA, NCCOS
Email: kari.stlaurent@noaa.gov

Contact Us!

HAB@noaa.gov

More Information:

[NOAA NCCOS HAB Science](#)
[NOAA NCCOS HAB Monitoring](#)
[NOAA NCCOS HAB Forecasting](#)



1305 East West Hwy, Rm 8110
Silver Spring, Maryland 20910
coastalscience.noaa.gov

   [noaacoastalsci](#) |  [noaa.coastal.sci](#)

Harmful Algal Bloom Forecasting

Forecasting to Protect Coastal
Communities

SCIENCE SERVING COASTAL COMMUNITIES

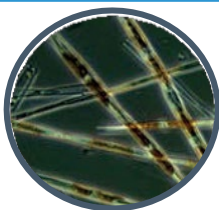
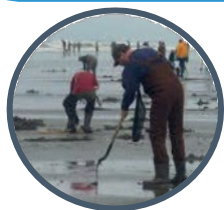
Regional Harmful Algal Bloom Forecasts on a National Scale

NOAA's Harmful Algal Bloom (HAB) forecasts are developed for individual regions and help coastal managers mitigate the impacts of toxic or nuisance HABs. Short-term (once or twice weekly) nowcasts and forecasts identify HAB location, intensity, and potential movement. Longer-term, seasonal forecasts predict HAB severity for the bloom season. Forecasts provide health officials, environmental managers, and water treatment facility operators with information to guide sample collection, beach and shellfish bed closures, and drinking water quality treatment. HAB forecasts also give end-users advanced warning to prepare and potentially mitigate the risks and economic impacts of HABs.

Pacific Northwest HAB Bulletin

Provided by NANOOS

Uses observations to ID HABs (*Pseudo-nitzschia*) and models to track the transport of blooms to beaches and shellfish beds for coastal managers.



California-Harmful Algae Risk Mapping (C-HARM)

Provided by SCCOOS

Predicts the probability of HABs (*Pseudo-nitzschia*) and their toxins to help the public make informed decisions to reduce potential HAB exposure.



Lake Erie HAB Forecast

Provided by NCCOS

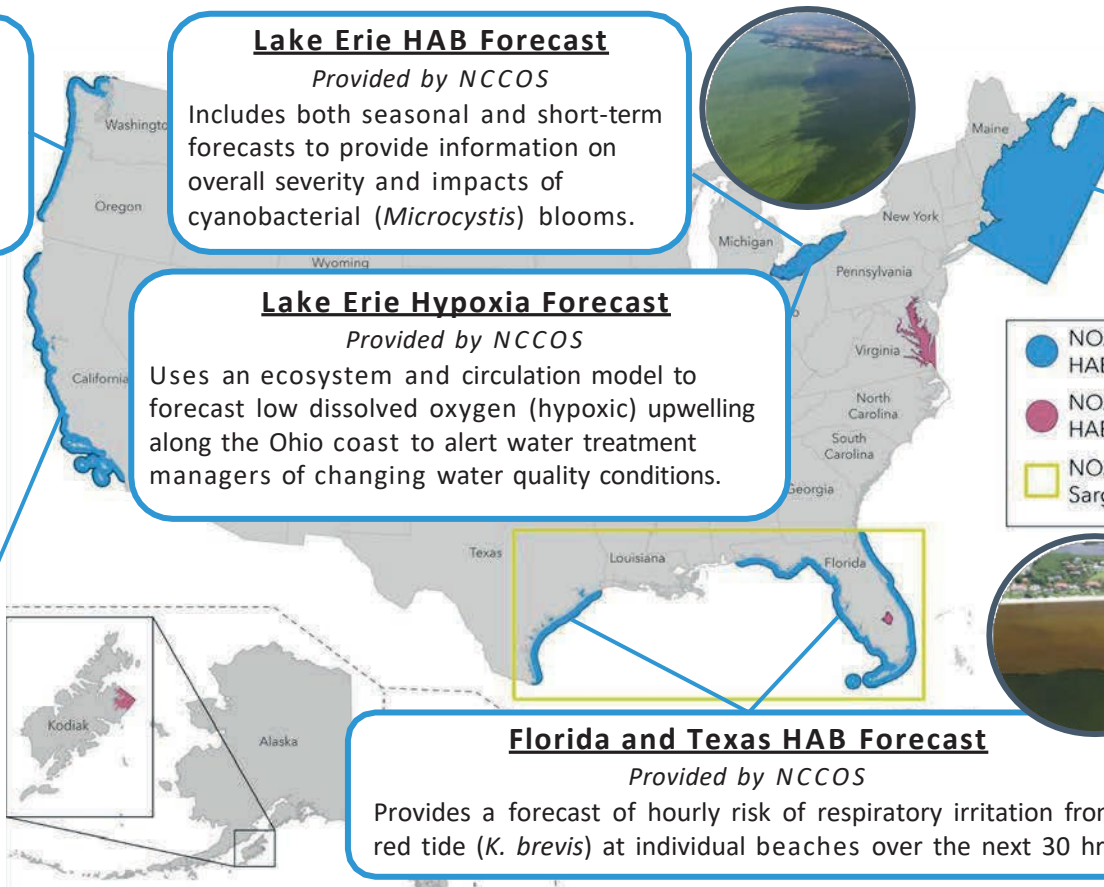
Includes both seasonal and short-term forecasts to provide information on overall severity and impacts of cyanobacterial (*Microcystis*) blooms.



Lake Erie Hypoxia Forecast

Provided by NCCOS

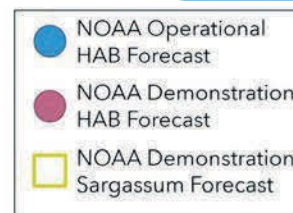
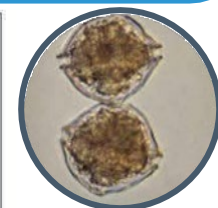
Uses an ecosystem and circulation model to forecast low dissolved oxygen (hypoxic) upwelling along the Ohio coast to alert water treatment managers of changing water quality conditions.



Gulf of Maine HAB Forecast

Provided by NCCOS

Includes forecasts and models to predict HABs (*A. catenella*) and associated shellfish toxicity to minimize impacts to public health and coastal economies.



Florida and Texas HAB Forecast

Provided by NCCOS

Provides a forecast of hourly risk of respiratory irritation from red tide (*K. brevis*) at individual beaches over the next 30 hrs.



NCCOS

NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

Generating HAB Forecasts to Meet Regional End-User Needs

Forecast Inputs

Field Observations

Satellite Remote Sensing

Weather Observations & Forecasts

Hydrodynamic Model Input

Forecast Generation

NOAA Operational
HAB or Hypoxia
Forecast System

Forecast Outputs

Webpage

Email Bulletin

NWS Alerts

Forecast End-Users

State Resource and Health Depts.

County Officials

Beachgoers, Fishers, and Tourists

Water Treatment Plant Operators