BIOTOXIN UPDATE Friday, August 19, 2022

All shellfish except surf clams, ocean quahogs, and carnivorous snails were re-opened on Thursday July 21 in areas N1, and N3 through N14. The Merrimack River (N2) re-opened to the harvest for depuration of softshell clams on Monday August 1. A late season bloom of *Alexandrium* observed over 2 weeks ago in areas N2 Merrimack River and N4 Plum Island Sound has continued to subside with toxicity decreasing in both blue mussels and softshell clams.

A bloom of *Dinophysis* spp., the causative organism for the syndrome termed DSP (diarrhetic shellfish poisoning) resulted in the closure of the entire Nauset system on July 13. Shellfish samples collected on July 11 showed elevated levels of okadaic acid in excess of NSSP Action levels. Toxin analyses were conducted on quahogs, oysters and blue mussels by the U.S. FDA Center for Food Safety and Applied Nutrition laboratory. Toxins detected in oysters and quahogs were well below the mandatory closure threshold. Saturday August 13 the Nauset System reopened to the harvest of all shellfish except blue mussels and carnivorous snails. Toxins in blue mussels declined but remained well above the closure threshold last week. No *Dinophysis* cells were identified in Nauset phytoplankton samples this week. DMF is collecting mussel samples next week for toxin analyses at the FDA laboratory. With the latest information available, the below shellfish areas can be expected **to remain CLOSED to shellfish harvest** for the durations below <u>at a minimum</u>.

- Merrimack (N2) -closed to all species except softshell clams: Week ending August 26
- Eastham and Orleans (OC2-OC6)-closed to blue mussels and carnivorous: Week ending September 2