HAB Monitoring

Beginning October 5th, RIDEM increased the frequency of collection of phytoplankton and shellfish samples for plankton cell count enumeration and screening of phytoplankton and shellfish for the presence of domoic acid (the toxin that can be produced by Pseudo-nitzschia cells that causes Amnesic Shellfish Poisoning). Up until October 15th, efforts were initially focused on mid Narragansett Bay (between Jamestown and Prudence Island) and then expanded to include geographically targeted locations throughout the Narragansett Bay and the coastal salt ponds approved for shellfishing. During this time period, domoic acid screening was hampered by insufficient # of test kits resulting from difficulties encountered with delivery of the kits.

From October 17th through October 27th, DEM implemented comprehensive bi-weekly synoptic plankton sampling for cell count enumeration and toxicity testing at 24 stations located throughout the Bay, coastal salt ponds and in Rhode Island Sound (at mouth of the Bay) where shellfish harvesting is permitted. During this time period, DEM and DOH also collected shellfish (from targeted locations and from dealers) for domoic acid screening.

"Plankton sampling station 3W-21 data was provided by the URI Graduate School of Oceanography and collected at Station II of their long term weekly phytoplankton monitoring program.

1A-1
10/5 7931
10/7 7834
10/9 5000
10/14 0
10/14 tox Negative
10/17 160
10/17 tox Negative
10/20 0
10/24 0
10/27 0
11/1 0
11/14 164

1A-D10
Quahaugs
10/21 Negative

1A-2
10/7 61855
10/9 3013
10/14 12000
10/14 tox Negative
10/17 0
10/20 0
10/24 130
10/24 tox Negative
10/27 340
10/27 tox Negative

2-2
10/7 6306
10/9 750
10/12 66
10/17 140
10/17 tox Negative
10/20 240
10/20 tox Negative
10/24 0
10/27 0

1B-D9
Quahaugs
10/21 Negative

1B-3
10/7 38534
10/14 0
10/14 tox Negative
10/17 tox Negative

1B-D8
Quahaugs
10/21 Negative

2C-D11
Quahaugs
10/21 Negative

2-1
Quahaugs
10/7 Negative

1B-2
10/7 109298
10/9 9273
10/12 11952
10/14 1300
10/14 tox Negative
10/17 960
10/17 tox Negative
10/20 0
10/24 0
10/27 320
10/27 tox Negative
11/1 0
11/14 173

5A-1
10/7 21719
10/12 1217
10/17 390
10/17 tox Negative
10/20 680
10/20 tox Negative
10/24 0
11/1 0

3W-12
10/6 39287
10/7 90030
10/9 5893
10/17 130
10/17 tox Negative
10/20 0
10/24 0
10/27 175
10/27 tox Negative
11/1 0

3WN-D12
Quahaugs
10/24 Negative

1B-1
Quahaugs
10/6 Negative

4A-5
10/5 21156

4A-10
Oysters
10/21 Negative

5A-4
10/27 0

5A-3
10/7 48343

3W-4
Quahaugs
10/7 Negative

4A-8
10/7 85207
10/9 59167
10/12 11067
10/14 1300
10/14 tox Negative
10/17 3640
10/17 tox Positive
10/20 680
10/20 tox Negative
10/24 720
10/24 tox Negative
11/1 0

4A-D4
Quahaugs
10/19 Negative

4A-2
Quahaugs
10/7 Negative

5A-2
10/7 65508

3W-13
10/6 5976
10/12 37
10/14 360
10/14 tox Negative
10/17 0
10/20 0
10/24 0
10/27 0

3W-8
10/5 5349

5B-4
Quahaugs
10/19 Negative
Oysters
10/25 Negative

4A-11
Mussels
10/18 Negative
Quahaugs
10/18 Negative

4AN-D13
Quahaugs
10/25 Negative

4AN-D13
Surf Clams
10/26 Negative

3W-20
Quahaug
10/27 Negative

3W-14
Quahaugs
10/12 Negative

3W-21
(URI-GSO Station II)
9/26 30,000
10/3 23,000
10/11 240,000
10/17 23,000
10/24 2,000
10/31 4,000
11/7 71,000
11/14 6,000
11/21 8,000
11/29 3,000
12/5 3,000
12/12 0

5B-1
10/7 12217
10/12 719
10/17 750
10/17 tox Negative
10/20 0
10/25 0
11/1 0
11/15 52

3W-D15
Quahaug
10/6 Negative

4A-1
Mussels
10/7 Negative
10/14 Negative
10/20 Negative

4A-D6
Quahaugs
10/21 Negative

4A-9
10/9 444000

3W-D3
Quahaugs
10/18 Negative

3W-3
Mussels
10/7 Negative

3W-9
10/6 1254405
10/9 126094

4A-6
10/5 195175
10/5 Tox Positive
10/12 29511
10/12 tox Negative
10/17 13020
10/17 tox Negative
10/20 250
10/20 tox Negative
10/24 7350
10/24 tox Negative
11/1 0
11/9 570

5B-5
Oyster
10/26 Negative

3W-3
Oysters
10/26 Negative
10/27 Negative

4A-12
Oysters
10/17 Negative

3W-16
10/9 42302

5B-3
Whelk
10/24 Negative

3W-2
Mussels
10/7 Negative

5B-2
10/7 9539
10/17 975
10/17 tox Negative
10/20 155229
10/20 tox Negative
10/24 9000
10/24 tox Negative
10/27 510
10/27 tox Negative
11/1 885
11/15 8

3W-19
Quahaug
10/27 Negative

4A-4
Quahaugs
10/6 Negative
10/27 Negative

3W-10
10/6 27113
10/17 0
10/20 47613
10/20 tox Negative
10/24 175
10/24 tox Negative
10/27 60
10/27 tox Negative
11/1 0
11/17 11

3W-17
Oysters
10/26 Negative
10/27 Negative

3W-D2
Quahaugs
10/19 Negative

3W-11
10/6 15032
10/12 25066
10/12 tox Negative
10/14 15450
10/14 tox Negative
10/17 1955
10/17 tox Negative
10/20 122130
10/20 tox Negative
10/24 8700
10/24 tox Negative
10/27 650
10/27 tox Negative
11/1 420
11/17 46

6-8
11/9 3,040

3W-D14
Oysters
10/7 Negative

4A-7
9/26 28731
10/12 61973
10/12 tox Negative
10/17 37920
10/17 tox Negative
10/20 492591
10/20 tox Negative
10/24 2250
10/24 tox Negative
10/27 3290
10/27 tox Negative
11/1 1170
11/9 810

3W-18
Mussels
10/27 Negative

4A-3
Mussels
10/7 Tox Inconclusive
10/7 HPLC 0
10/20 Positive
10/20 HPLC 3.2
10/26 Tox Negative
11/1 Tox Negative

5C-2
Whelk
10/24 Negative

3W-D1
Whelk
10/7 Negative

5C-1
Quahaugs
10/19 Positive
10/20 Positive
10/20 HPLC 6.2
10/27 Negative

3W-15
Mussels
10/14 Negative

3W-15
Surf Clams
10/20 Negative

14E-8
10/12 265378
10/12 tox Negative
10/17 91000
10/17 tox Negative
10/20 494892
10/20 tox Negative
10/24 3000
10/24 tox Negative
10/27 2200
10/27 tox Negative
11/1 2720
11/1 tox Negative
11/9 160

14E-7
10/12 53083
10/12 tox Positive
10/14 28350
10/14 tox Negative
10/17 82555
10/17 tox Negative
10/20 138945
10/20 tox Negative
10/24 3850
10/24 tox Negative
10/27 1120
10/27 tox Negative
11/1 500
11/17 8

14E-5
10/11 28788
10/17 300000
10/17 tox Negative
10/20 1404318
10/20 tox Positive
10/24 14800
10/24 tox Negative
10/27 1360
10/27 tox Negative
11/1 708

14E-3
10/11 40513

14E-4
10/11 73725
10/11 tox Negative
10/17 232540
10/17 tox Positive
10/20 2011782
10/20 tox Positive
10/24 44760
10/24 tox Negative
10/27 3060
10/27 tox Negative
11/1 4956
11/1 tox Negative

14E-1
10/11 47600

14E-2
10/11 16450

Plankton Toxicity
- Negative
- Positive

Plankton Cell Count
- 0 - 1,000
- 1,001 - 5,000
- 5,001 - 10,000
- 10,001 - 100,000
- 100,001 - 500,000
- 500,001 - 2,011,782

Shellfish Toxicity
- Negative
- Positive

Shellfish Test - Source
- Dealer (location approx.)
- Direct

About the labels:

4A-D6 (Shellfish Sample ID)
Quahaugs (Species Sampled)
10/21 (Sample Date)
10/21 Negative (Toxicity Detected?)
10/21 HPLC 3.2 (Damoic Acid ppb)

4A-7 (Plankton Sample Station)
10/12 (Sample Date)
10/12 61973 (Cells / liter)
10/12 tox Negative (Toxicity Detected?)

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community