Town of Plymouth Pond and Lake Atlas

Update 1 – 2015 Data Collection

May 2016

Prepared by:

Town of Plymouth
Department of Marine & Environmental Affairs

Laboratory and Data Analysis:

Coastal Systems Program,
School for Marine Science and Technology
University of Massachusetts Dartmouth

Eduard M. Eichner, Water Scientist/Project Manager
Brian L. Howes, Ph.D., Director CSP
Sara Sampieri Horvet, Senior Technical Associate

Special Note:
This update has been developed by the Town of Plymouth Department of Marine and Environmental Affairs with Professional Data Analysis and Laboratory Analysis from the Coastal Systems School of Marine Science and Technology as noted in Summary.

Please refer to the Town of Plymouth Pond and Lake Atlas, Final Report, June 2015 for full report and additional water quality information. This document is an addition to the Final Report for water quality sampling collected in the summer of 2015.

The Town of Plymouth Department of Marine and Environmental Affairs funded additional pond sampling in 2015 as part of the ongoing Ponds and Lake Stewardship Program. On the following ponds samples were collected and analyzed by the School of Marine Science and Technology with snapshot data sheets attached hereto:

- Boot Pond
- Cooks Pond
- Great Island Pond
- Gunners Exchange Pond
- Hoyts Pond
- Island Pond
- Little Sandy Pond
- Lout Pond
- Triangle Pond

In addition, with the assistance of volunteers field samples were collected from the following ponds and included in the data results spreadsheet:

- Bartlett Pond
- Bloody Pond
- Clear Pond
- Fresh Pond
- Gallows Pond
- Great Herring Pond
- Halfway Pond
- Little Herring Pond
- Little Long Pond
- Long Pond
- Micajah Pond (water quality samples collected)
- Round Pond
- Saby's Pond
- Savery Pond

Boot Pond

PALS Pond Number: 165
MassDEP PALIS Number: 94016

Area (acres): 71
Bathymetry: 2010 contour map
Maximum Depth (m): 11.0
2014 Secchi Depth (m):
Lake Association: Boot Pond Homeowners Association

PALS Sampling	8/20/14	[9/14/15]	
Parameter	Pond	Standard/ Limit	Standard Source
Secchi	7 [1.8] m		
Total Depth	10.3 [9.6] m		
Surface pH	6.57 [6.65]	6.5 – 8.3	MassDEP
Deepest DO	0.34 [3.02] mg/L	5.0 mg/L	MassDEP
Shallow temperature	24.4 [23.89]°C	28.3°C	MassDEP
Surface Chlorophyll-a	1.1 [12.93] µg/L	1.7 µg/L	CCC
Surface TP	- [15.8] µg/L	10 µg/L	CCC
Surface TN	- [0.92] mg/L	0.31 mg/L	CCC
TP ratio (deep/shallow)	- [6.59]		

OVERVIEW

Boot Pond is located just west of College Pond Road and near a number of other ponds, including: Great South Pond, Hoyt Pond, Orchard Pond, and Ingalls Pond. The pond has a small outlet flow to Great South Pond and a connection to a small (8 ac) historic cranberry bog. Eastern and northern shorelines are generally developed with single family residences, while the western and southern shorelines are sparsely developed or undeveloped. There is no formal public access.

Water quality samples were collected from the pond once as part of 1970s-era baseline pond survey (1) and DO, pH, temperature, and specific conductivity profile readings were collected in April 2010 (2). The 1970s-era sampling run was accompanied by aquatic plant and phytoplankton surveys and similar surveys were also completed in June 2010 (3). No other pond sampling appears to have been completed until the 2014 and 2015 PALS Snapshots.

WATER QUALITY

Boot Pond is relatively deep with some loss of clarity at the time of the 2014 PALS Snapshot and much more loss during the 2015 Snapshot. Temperatures readings showed some stratification beginning between 7 and 8 m depth in 2014 and 7.5 and 8 m in 2015. Dissolved oxygen at 8 m and deeper was less than MassDEP minimum in both years, which suggest significant sediment oxygen demand. Total phosphorus and total nitrogen analyses were only available in 2015 and confirmed sediment nutrient regeneration. The surface chlorophyll-a concentrations show the variability of single snapshot samples: 2014 suggests that nutrient regeneration was not significantly impacting surface waters, but 2015 showed very high concentrations generally confirmed by TP and TN and consistent with an algal bloom. The 1970's era plant survey indicated a significant Fanwort density in the "toe" of the boot (1), while the 2010 survey also indicated significant plant density in this area, but identified the primary plants as Water-starwort, Water-milfoil, and Bladderwort (3).

Based on the available information, Boot Pond is impaired. Additional monitoring and synthesis of available information would be required to evaluate and refine the extent of this impairment, the nutrient sources contributing to the pond, and evaluate potential water quality management strategies, including potential export of nutrients to Great South Pond.

Cooks Pond

PALS Pond Number: 85
MassDEP PALIS Number: 94027

Area (acres): 23.5
Bathymetry: none
Maximum Depth (m):
Lake Association:

PALS Sampling	9/17/15		
Parameter	Pond	Standard/ Limit	Standard Source
Secchi	1.5 m		
Total Depth	3.7 m		
Surface pH	6.12	6.5 – 8.3	MassDEP
Deepest DO	2.05 mg/L	5.0 mg/L	MassDEP
Shallow temperature	23.1°C	28.3°C	MassDEP
Surface Chlorophyll-a	3.92 µg/L	1.7 µg/L	CCC
Surface TP	28.1 µg/L	10 µg/L	CCC
Surface TN	0.62 mg/L	0.31 mg/L	CCC
TP ratio (deep/shallow)	1.12		

OVERVIEW

Cooks Pond is located west of Town Forest Road and within the MassDFW Harlow/Cooks Pond Natural Resource Area. The shoreline is largely undeveloped except for a cranberry bog adjacent to the southern end of the pond. There is informal public access via a path through MassDFW lands. No bathymetric map was found during the collection and review of historic ponds reports.

Review of available historic reports also suggest that water quality samples collected during the 2015 PALS Snapshot appear to be the first samples collected from the pond.

WATER QUALITY

Cooks Pond is relatively shallow with significant loss of clarity at the time of the 2015 PALS Snapshot. Temperatures showed a relatively well-mixed water column with significant loss of dissolved oxygen with depth. DO concentrations at 2 m and deeper were below the MassDEP minimum and saturation levels were depressed throughout the water column. Chlorophyll-*a*, total phosphorus, and total nitrogen readings at both shallow and deep sampling depths had concentrations above respective ecoregion thresholds. Review of nitrogen to phosphorus ratios show that phosphorus control will determine the water quality conditions in this pond. Review of historic aerial maps seems to show extensive macrophyte growth in the southern portion of the pond.

Based on the available information, Cooks Pond is impaired. This finding is generally based on DO concentrations below MassDEP regulatory minimums, phosphorus, chlorophyll, and nitrogen concentrations above their respective ecoregion thresholds, and significant loss of clarity. Additional monitoring and synthesis of available information would be required to evaluate and refine the extent of this impairment, identify and evaluate the nutrient sources contributing to the pond, and evaluate potential water quality management strategies.

Great Island Pond

PALS Pond Number: 210
MassDEP PALIS Number: 94075

Area (acres): 81.6
Bathymetry: none
Maximum Depth (m):
Lake Association:

PALS Sampling	9/17/15		
Parameter	Pond	Standard/ Limit	Standard Source
Secchi	4.2 m		
Total Depth	4.7 m		
Surface pH	6.72	6.5 – 8.3	MassDEP
Deepest DO	7.94 mg/L	5.0 mg/L	MassDEP
Shallow temperature	23.5°C	28.3°C	MassDEP
Surface Chlorophyll-a	2.29 µg/L	1.7 µg/L	CCC
Surface TP	8.45 µg/L	10 µg/L	CCC
Surface TN	0.34 mg/L	0.31 mg/L	CCC
TP ratio (deep/shallow)	1.0		

OVERVIEW

Great Island Pond (aka Island Pond) is located in the eastern portion of The Pinehills development and south of Little Island Pond. Shoreline development is limited to 3 houses; the adjacent Pinehills development is fairly dense, but most of the buildings are more than 100 feet from the shoreline. There is no formal public access, but there are at least four informal launch areas along the shoreline. No bathymetric map was found during the collection and review of historic ponds reports.

Review of available historic reports also suggest that water quality samples collected during the 2015 PALS Snapshot appear to be the first samples collected from the pond.

WATER QUALITY

Great Island Pond is relatively shallow with little loss in clarity at the time of the 2015 PALS Snapshot. Temperatures and dissolved oxygen readings showed a well-mixed water column with no significant loss of DO near the sediments and near-atmospheric saturation levels throughout the water column. Shallow chlorophyll-*a* and total nitrogen concentrations were slightly elevated above ecoregion thresholds, but the shallow total phosphorus concentration was below its threshold. Shallow and deep total phosphorus concentrations were the same, indicating no noticeable sediment regeneration. Review of nitrogen to phosphorus ratios show that phosphorus control will determine the water quality conditions in this pond.

Based on the available information, Great Island Pond is not impaired. Additional monitoring would be required to confirm this assessment. Most of the readings do not suggest areas of significant water quality concern, but available monitoring is insufficient to definitively resolve the need for any management options.

Gunners Exchange Pond

PALS Pond Number: 325
MassDEP PALIS Number: 94055

Area (acres): 26.9
Bathymetry: 1970s spot depths
Maximum Depth (m): 7.6
2014 Secchi Depth (m):
Lake Association:

PALS Sampling	8/20/14	[9/14/15]	
Parameter	Pond	Standard/ Limit	Standard Source
Secchi	6.4 [5.5] m		
Total Depth	8.85 [7.9] m		
Surface pH	6.70 [5.96]	6.5 – 8.3	MassDEP
Deepest DO	0.22 [6.70] mg/L	5.0 mg/L	MassDEP
Shallow temperature	24.8 [23.5]°C	28.3°C	MassDEP
Surface Chlorophyll-a	0.83 [0.08] µg/L	1.7 µg/L	CCC
Surface TP	- [8.45] µg/L	10 µg/L	CCC
Surface TN	- [0.56] µg/L	0.31 mg/L	CCC
TP ratio (deep/shallow)	- [1.38]		

OVERVIEW

Gunners Exchange Pond is the southern basin of two connected ponds; the northern basin is Hoyt Pond. Gunners Exchange Pond is located to the east of Snake Pond Road in an area with numerous other ponds, including Ingalls Pond, Orchard Pond, Boot Pond, and Turtle Pond. It has no surface water connections other than to Hoyt Pond (1) and is located within the Eel River watershed (2). Most of the shoreline is undeveloped with large lots for the existing residential shoreline development. There is no formal public access to the pond and it is not regularly stocked by MassDFW.

Water quality samples were collected from the pond once as part of 1970s-era baseline pond survey, which also include macrophyte and phytoplankton surveys (1). No other pond sampling appears to have been completed until the 2014 and 2015 PALS Snapshots.

WATER QUALITY

Gunners Exchange Pond is relatively deep with only a slight loss of clarity at the time of both PALS Snapshots; the PALS Secchi readings are deeper than the 1970s-era Secchi reading of 4 m (1). Temperatures readings showed some stratification beginning around 7 m depth in the August 2014 PALS; dissolved oxygen at 7 m and deeper was anoxic (<1 mg/L) and less than MassDEP minimum. The September 2015 profile shows relatively consistent temperature and dissolved oxygen throughout the water column; comparison to 2014 suggests that lower temperature and the later sampling date had allowed water column turnover to occur. 2014 deep dissolved oxygen conditions suggest significant sediment oxygen demand. Total phosphorus and total nitrogen analyses were only available in 2015 and generally show little impairment, but the conditions in the pond during the two Snapshots was different, so assessment of "usual" conditions is not possible. Low surface chlorophyll-a concentrations in both Snapshots suggest that nutrient regeneration was not significantly impacting surface waters, but the 2015 Snapshot had high phaeophytin concentrations potentially indicating a large bloom shortly before samples were collected (similar readings were measured in Hoyts Pond).. The 1970's era plant survey indicated a significant Water Milfoil (*Myriophyllum sp.*) density in the shallower northern portion of the pond with epiphytic blue-green algae on the bottom. Bladderwort (*Utricularia sp.*) had a fairly dense ring around the southern deep basin. Fanwort density in the "toe" of the boot

(1), while the 2010 survey also indicated significant plant density in this area, but identified the primary plants as Water-starwort, Water-milfoil, and Bladderwort (3).

Based on the available information, Gunners Exchange Pond is impaired based largely on the 2014 dissolved oxygen concentrations below MassDEP regulatory minimum and the dense macrophyte population. The 2015 Snapshot shows these conditions can be ameliorated when turnover occurs, but available monitoring does not clarify how long during the summer impaired conditions are sustained. Additional monitoring and synthesis of available information would be required to evaluate and refine the extent of this impairment, the nutrient sources contributing to the pond, and evaluate potential water quality management strategies, including potential export of nutrients to Hoyt Pond.

Hoyts Pond

PALS Pond Number: 390
MassDEP PALIS Number: 94070

Area (acres): 18.4
Bathymetry: 1970s spot depths
Maximum Depth (m): 5.5
2014 Secchi Depth (m):
Lake Association:

PALS Sampling	8/20/14	[9/14/15]	
Parameter	Pond	Standard/ Limit	Standard Source
Secchi	4.7 [3.5] m		
Total Depth	5.25 [4.2] m		
Surface pH	6.76 [5.95]	6.5 – 8.3	MassDEP
Deepest DO	6.82 [7.96] mg/L	5.0 mg/L	MassDEP
Shallow temperature	24.0 [23.2]°C	28.3°C	MassDEP
Surface Chlorophyll-a	1.11 [0.81] µg/L	1.7 µg/L	CCC
Surface TP	- [10.6] µg/L	10 µg/L	CCC
Surface TN	- [0.46] mg/L	0.31 mg/L	CCC
TP ratio (deep/shallow)	- [0.8]		

OVERVIEW

Hoyts Pond is the northern basin of two connected ponds; the southern basin is Gunners Exchange Pond. Hoyts Pond is located to the east of College Pond Road in an area with numerous other ponds, including Ingalls Pond, Orchard Pond, Boot Pond, and Turtle Pond. It has no surface water connections other than to Gunners Exchange Pond (1) and is located within the Eel River watershed (2). Most of the shoreline is undeveloped with large lots for the existing residential shoreline development. There is no formal public access to the pond and it is not regularly stocked by MassDFW.

Water quality samples were collected from the pond once as part of 1970s-era baseline pond survey, which also include macrophyte and phytoplankton surveys (1). No other pond sampling appears to have been completed until the 2014 and 2015 PALS Snapshots.

WATER QUALITY

Hoyts Pond is somewhat shallow with only a slight loss of clarity at the time of the 2014 and 2015 PALS Snapshots; the PALS Secchi readings are deeper than the 1970s-era Secchi reading of 2.4 m (1). 2014 and 2015 temperatures and dissolved oxygen readings generally show a well-mixed water column, but in 2014 there was some loss of DO with increasing depth and slightly below saturation throughout the water column; the 2015 profiles did not show this, which might be related to the sampling occurring later in the year. Low surface chlorophyll-a concentration suggests that nutrient regeneration was not significantly impacting surface waters, but 2015 samples also had relatively high phaeophytin concentrations which may be indicative of a large bloom shortly before samples were collected (similar readings were measured in Gunners Exchange Pond). Total phosphorus and total nitrogen analyses were only available in 2015 and generally show little impairment, but the conditions in the pond during the two Snapshots was different, so assessment of "usual" conditions is not possible. The 1970's era plant survey indicated a significant Water Milfoil (*Myriophyllum sp.*) density throughout the pond out to a 2.4 m depth. A large, dense macrophyte population would tend to incorporate available nutrients and keep phytoplankton populations low and clarity high.

Based on the available information, Hoyts Pond is not impaired based largely on the dissolved oxygen concentrations above MassDEP regulatory minimum and low phytoplankton population.

However, an extensive rooted aquatic plant (*i.e.*, macrophyte) population generally indicates a high amount of available nutrients within this ecoregion and high 2015 phaeophytin concentrations suggest the system may have occasional algal blooms. Additional monitoring and synthesis of available information would be required to evaluate and refine the extent of this impairment, the nutrient sources contributing to the pond, and evaluate potential water quality management strategies, including potential export of nutrients to Gunners Exchange Pond.

Island Pond

PALS Pond Number: 83
MassDEP PALIS Number: 94074

Area (acres): 51.8
Bathymetry: none
Maximum Depth (m):
Lake Association:

PALS Sampling	9/16/15		
Parameter	Pond	Standard/ Limit	Standard Source
Secchi	3.2 m		
Total Depth	7 m		
Surface pH	6.87	6.5 – 8.3	MassDEP
Deepest DO	6.85 mg/L	5.0 mg/L	MassDEP
Shallow temperature	24.15°C	28.3°C	MassDEP
Surface Chlorophyll-a	1.26 µg/L	1.7 µg/L	CCC
Surface TP	8.45 µg/L	10 µg/L	CCC
Surface TN	0.69 mg/L	0.31 mg/L	CCC
TP ratio (deep/shallow)	1.0		

OVERVIEW

Island Pond is located to the northwest of Great Herring Pond and north of Little Sandy Pond Road. Shoreline development is moderate, mostly residential houses, and generally concentrated along the southern half of the shoreline. Many houses are located within 100 feet of the shoreline and many have docks/piers. There is no formal public access. No bathymetric map was found during the collection and review of historic ponds reports.

Review of available historic reports also suggest that water quality samples collected during the 2015 PALS Snapshot appear to be the first samples collected from the pond.

WATER QUALITY

Island Pond is moderately shallow with significant loss of clarity at the time of the 2015 PALS Snapshot. Temperatures and dissolved oxygen readings generally showed a well-mixed water column with some loss of DO near the sediments (80% saturation at 6.5 m). Shallow chlorophyll-*a* and total phosphorus concentrations were both below their respective ecoregion thresholds, but the shallow total nitrogen concentration was more than double its threshold. Shallow and deep total phosphorus concentrations were the same, indicating no noticeable sediment regeneration. Review of nitrogen to phosphorus ratios show that phosphorus control will determine the water quality conditions in this pond.

Based on the available information, Island Pond is not impaired, but there are some measures that warrant additional sampling (*i.e.*, clarity, TN, deep low DO). Additional monitoring would be required to confirm this assessment. Available monitoring is insufficient to definitively resolve the need for any management options.

Little Sandy Pond

PALS Pond Number: 229
MassDEP PALIS Number: 95092

Area (acres): 33.3
Bathymetry: DFW map
Maximum Depth (m): 3
Lake Association:

PALS Sampling	9/16/15		
Parameter	Pond	Standard/ Limit	Standard Source
Secchi	3 m		
Total Depth	3 m		
Surface pH	6.05	6.5 – 8.3	MassDEP
Deepest DO	7.59 mg/L	5.0 mg/L	MassDEP
Shallow temperature	22.85°C	28.3°C	MassDEP
Surface Chlorophyll-a	0.7 µg/L	1.7 µg/L	CCC
Surface TP	6.34 µg/L	10 µg/L	CCC
Surface TN	0.38 mg/L	0.31 mg/L	CCC
TP ratio (deep/shallow)	1.3		

OVERVIEW

Little Sandy Pond is located in southwestern Plymouth, north of Little Sandy Pond Road and south of Lunn's Way. Shoreline development is fairly dense along the northern two-thirds of the shoreline mostly with residences on lots of 0.5 acre or less; the southern third of the shoreline is largely undeveloped. There is no formal public access, but there an informal access point off of Little Sandy Pond Road.

Fish population is not actively managed by MassDFW; last fish survey was in 1982 (1). This survey found five species of fish: chain pickerel, yellow perch, brown bullhead, pumpkinseed and tessellated darter.

Review of available historic reports also suggest that water quality samples collected during the 2015 PALS Snapshot appear to be the first samples collected from the pond.

WATER QUALITY

Little Sandy Pond is shallow with no loss in clarity at the time of the 2015 PALS Snapshot. Temperatures and dissolved oxygen readings show a well-mixed water column with no significant loss of DO near the sediments and saturation levels generally ~90% throughout the water column. Shallow chlorophyll-*a* and total phosphorus concentrations are below ecoregion thresholds, but the shallow total nitrogen concentration is slightly above its threshold. The deep total phosphorus concentration was slightly elevated above the shallow concentration, which indicates slight sediment regeneration of nutrients. Review of nitrogen to phosphorus ratios show that phosphorus control will determine the water quality conditions in this pond.

Based on the available information, Little Sandy Pond is not impaired. Additional monitoring would be required to confirm this assessment. Most of the readings do not suggest areas of significant water quality concern, but available monitoring is insufficient to definitively resolve the need for any management options.

Lout Pond

PALS Pond Number: 234
MassDEP PALIS Number: 94090

Area (acres): 18.7
Bathymetry: DFW map
Maximum Depth (m): 11
Lake Association:

PALS Sampling	9/24/15		
Parameter	Pond	Standard/ Limit	Standard Source
Secchi	5 m		
Total Depth	10.5 m		
Surface pH	6.2	6.5 – 8.3	MassDEP
Deepest DO	3.52 mg/L	5.0 mg/L	MassDEP
Shallow temperature	21.5°C	28.3°C	MassDEP
Surface Chlorophyll-a	1.05 µg/L	1.7 µg/L	CCC
Surface TP	6.34 µg/L	10 µg/L	CCC
Surface TN	0.38 mg/L	0.31 mg/L	CCC
TP ratio (deep/shallow)	82.6		

OVERVIEW

Lout Pond is located east of the Billington Sea and west of Billington Street. Shoreline development is sparse; most residences are on large lots and other portions of the shoreline are undeveloped. Most of the houses are located beyond 100 ft of the shoreline and aerial photographs do not show any docks/piers. There is no formal public access. According to MassDFW, the pond was formerly used as a town water supply and an old brick pump house still exists on the northeast side of the pond; a water department building is located across the street (1). A cranberry bog used to exist between the pond and Billington Sea (2) and the hydrologic connection appears to still exist. There is no formal public access; town bylaw allows only electric motors on the pond.

Fish population is actively managed by MassDFW, including four "reclamations" for trout management in 1960, 1961, 1962, and 1968. Fish killed during the first reclamation included 900 pounds of largemouth bass, chain pickerel, yellow perch, brown bullhead, pumpkinseeds and alewifes. The last reclamation killed 3,300 pounds of fish with 95% being yellow perch, brown bullhead and golden shiner. In 1988, a fish survey found brown trout, rainbow trout, largemouth bass, smallmouth bass, bluegill, pumpkinseed, brown bullhead, chain pickerel, American eel, yellow perch and banded killifish. Lout Pond is stocked every spring with brook, brown and rainbow trout (1). The pond was also treated limestone in 1974, 1986 and 1991 to try to raise its pH.

Water quality samples were collected from the pond once as part of 1970s-era baseline pond survey (2) and DO, pH, temperature, and specific conductivity profile readings were collected in May 2010 (3). Both previous sampling runs were also accompanied by aquatic plant and phytoplankton surveys. No other pond sampling appears to have been completed until the 2015 PALS Snapshot.

WATER QUALITY

The 2015 temperature profile shows a distinct cold water layer at 7 m and deeper with a metaliminion between 5 and 7 m. This temperature profile is similar, but slightly deeper, than the May 2010 profile as would be expected given the different times of the year. The 2015 dissolved oxygen profile showed that the cold water layer is significantly impaired; sediment oxygen demand had reduced dissolved oxygen concentrations throughout the layer with only the

7 m depth attaining the MassDEP 5 mg/L minimum. In the May 2010 profile, DO was only below the MassDEP minimum at 10 m and deeper (3). Comparison of shallow and deep nutrient concentrations measured in 2015 at depth also showed regeneration of sediment nutrients (*e.g.*, deep total phosphorus concentrations are 83 times higher than shallow concentrations). However, surface TP and chlorophyll concentrations were less than their respective ecoregion thresholds indicating that transfer of sediment loads from the cold water layer to the surface are limited during the summer. Clarity in all readings was restricted, but the 2010 and 2015 readings were essentially the same as the 1970's-era reading.

Based on the available information, Lout Pond is impaired. Additional monitoring and synthesis of available information would be required to evaluate and refine the extent of this impairment, the nutrient sources contributing to the pond, and evaluate potential water quality management strategies.

Triangle Pond

PALS Pond Number: 240
MassDEP PALIS Number: 94160

Area (acres): 14.9
Bathymetry: none
Maximum Depth (m):
Lake Association:

PALS Sampling	9/16/15		
Parameter	Pond	Standard/ Limit	Standard Source
Secchi	4.63 m		
Total Depth	5 m		
Surface pH	6.09	6.5 – 8.3	MassDEP
Deepest DO	6.60 mg/L	5.0 mg/L	MassDEP
Shallow temperature	23.0°C	28.3°C	MassDEP
Surface Chlorophyll-a	1.05 µg/L	1.7 µg/L	CCC
Surface TP	11.6 µg/L	10 µg/L	CCC
Surface TN	0.46 mg/L	0.31 mg/L	CCC
TP ratio (deep/shallow)	1.6		

OVERVIEW

Triangle Pond is located in southern Plymouth, west of Little Herring Pond and north of Island Pond. Shoreline development is fairly sparse with eight houses around its shoreline with most of these located along the southern shore. There are a string of what appear to be untended cranberry bogs (Google Earth aerials show shrub growth on the bogs beginning between 2005 and 2007). There is no formal public access.

Review of available historic reports also suggest that water quality samples collected during the 2015 PALS Snapshot appear to be the first samples collected from the pond.

WATER QUALITY

Triangle Pond is relatively shallow with only a little loss in clarity at the time of the 2015 PALS Snapshot. Temperatures and dissolved oxygen readings showed a well-mixed water column with some loss of DO near the sediments; surface saturation level was 87%, while 4.5 m depth level was 77%. Shallow total phosphorus concentration was just above the ecoregion threshold, while the shallow chlorophyll-a concentration was just below its threshold. Shallow total nitrogen concentration was above its threshold. The deep total phosphorus concentrations was slightly elevated above the shallow concentration, which indicated some sediment regeneration of nutrients. Review of nitrogen to phosphorus ratios show that phosphorus control will determine the water quality conditions in this pond.

Based on the available information, Triangle Pond is not impaired, but most of the measures indicate that additional monitoring is warranted. Additional monitoring would be required to confirm this assessment. Available monitoring is insufficient to definitively resolve the need for any management options.

References for Plymouth Ponds Atlas Pond Sheets:

Bartlett

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume I. Westwood, MA.
2. Memo: Pond Monitoring Program: Results for April 2010. April 28, 2010. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth.

Big Sandy

1. Massachusetts Division of Fisheries and Wildlife Pond Sheet: Big Sandy Pond; December 21, 2007 update. Available at: http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwsandy.pdf (accessed 9/30/14)
2. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume V. Westwood, MA.
3. Lyons-Skwarto Associates. 1982. Big Sandy Pond. Westwood, MA.
4. Memo: Pond Monitoring Program: Results for May 2010. June 5, 2010. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Big West

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume V. Westwood, MA.

Billington Sea

1. Eichner, E.M., B.L. Howes, and R. Samimy. July 2013. Final Report/Technical Memorandum for Task 1B (of 8): Cumulative Nitrogen Loading Determination. Massachusetts Estuaries Project Partnership for Nitrogen Management of the Plymouth Harbor - Duxbury Bay - Kingston Bay Estuarine System. Coastal Systems Program, School for Marine Science and Technology, University of Massachusetts – Dartmouth.
2. Massachusetts Division of Fisheries and Wildlife Pond Sheet: Billington Sea; March 7, 2007 update. Available at: http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwbill.pdf (accessed 9/30/14)
3. Massachusetts Division of Fisheries and Wildlife Pond Sheet. Eighty-fourth Annual Report. 1949-1960. Available at: https://archive.org/details/annualreportofdi00mass_1 (accessed 2/27/15).
4. Lyons-Skwarto Associates. 1970. A Study of Billington Sea, Plymouth, Massachusetts with Guidelines for Rehabilitation. Westwood, MA.
5. New England Research, Inc. 1982. Water Quality Studies for Plymouth, Massachusetts: Part III: Final Report. Worcester, MA.
6. Gale Associates, Inc. and K-V Associates, Inc. 1990. Billington Sea Diagnostic/Feasiblity Study. Prepared for Town of Plymouth and Massachusetts Division of Water Pollution Control, Clean Lakes Program. Weymouth, MA and Falmouth, MA.

7. Memo: Pond Monitoring Program: Results for July 2008. July 24, 2008. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Bloody Pond

1. Massachusetts Division of Fisheries and Wildlife Pond Sheet: Bloody Pond; March 7, 2007 update. Available at: http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwbloo.pdf (accessed 9/30/14)
2. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume I. Westwood, MA.

Boot Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume I. Westwood, MA.
2. Memo: Pond Monitoring Program: Results for April 2010. April 28, 2010. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.
3. Memo: Pond Monitoring Program: Results for June 2010. June 30, 2010. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Clam Pudding Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for 8 Ponds in Plymouth, Massachusetts. Westwood, MA.

Clear Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume I. Westwood, MA.
2. Memo: Pond Monitoring Program: Results for April 2010. April 28, 2010. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.
3. Memo: Pond Monitoring Program: Results for June 2010. June 30, 2010. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Cooks Pond

No references

Deer Pond

1. Eichner, E., B. Howes, and C. DeMoranville. 2012. White Island Pond Water Quality and Management Options Assessment. Completed for the Cape Cod Cranberry Growers Association. Coastal Systems Program, School of Marine Science and Technology, University of Massachusetts Dartmouth. 108 pp.

2. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for 8 Ponds in Plymouth, Massachusetts. Westwood, MA.

Ezekiel Pond

1. Massachusetts Division of Fisheries and Wildlife Pond Sheet: Ezekiel Pond; February 16, 2007 update. Available at: http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwezek.pdf (accessed 10/6/14)
2. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume I. Westwood, MA.

Forge Pond

1. Eichner, E.M., B.L. Howes, and R. Samimy. July 2013. Final Report/Technical Memorandum for Task 1B (of 8): Cumulative Nitrogen Loading Determination. Massachusetts Estuaries Project Partnership for Nitrogen Management of the Plymouth Harbor - Duxbury Bay - Kingston Bay Estuarine System. Coastal Systems Program, School for Marine Science and Technology, University of Massachusetts – Dartmouth.
2. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume I. Westwood, MA.

Fresh Meadow Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume I. Westwood, MA.

Fresh Pond

1. Massachusetts Division of Fisheries and Wildlife Pond Sheet: Fresh Pond; March 8, 2007 update. Available at: http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwfres.pdf (accessed 10/6/14)
2. Lyons-Skwarto Associates. 1970. A Study of Fresh Pond, Plymouth, Massachusetts with Guidelines for Rehabilitation. Westwood, MA.
3. Memo: Pond Monitoring Program: Results for April 2010. April 28, 2010. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.
4. Memo: Pond Monitoring Program: Results for June 2010. June 30, 2010. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Gallows Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume II. Westwood, MA.
2. Living Lakes, Inc. 1992. Living Lakes Program, Final Report, Gallows Pond. Prepared for Plymouth Conservation Commission. Greenbelt, MD.

Great Island Pond

No references

Great Herring Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume II. Westwood, MA.
2. Massachusetts Division of Fisheries and Wildlife Pond Sheet: Great Herring Pond; March 23, 2007 update. http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwgrea.pdf (accessed 9/30/14)
3. Massachusetts Department of Public Health. Public Health Fish Consumption Advisory. http://webapps.ehs.state.ma.us/dph_fishadvisory/SearchTown.aspx?Town=Plymouth (accessed 9/30/14)
4. Memo: Pond Monitoring Program: Results for August 2008. August 27, 2008. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.
5. Memo: Great Herring Pond and Little Herring Pond Monitoring Program. June 29, 2011. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.
6. Memo: Pond Monitoring Program: Results for April 2009. May 5, 2009. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Great South Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume II. Westwood, MA.
2. Eichner, E.M., B.L. Howes, and R. Samimy. July 2013. Final Report/Technical Memorandum for Task 1B (of 8): Cumulative Nitrogen Loading Determination. Massachusetts Estuaries Project Partnership for Nitrogen Management of the Plymouth Harbor - Duxbury Bay - Kingston Bay Estuarine System. Coastal Systems Program, School for Marine Science and Technology, University of Massachusetts – Dartmouth.
3. Massachusetts Department of Public Health. Public Health Fish Consumption Advisory. http://webapps.ehs.state.ma.us/dph_fishadvisory/SearchTown.aspx?Town=Plymouth (accessed 10/3/14)
4. Lyons-Skwarto Associates. 1981. A Study of Great South Pond, Plymouth, Massachusetts with Guidelines for Rehabilitation. Westwood, MA.
5. Memo: Pond Monitoring Program: Results for August 2008. August 27, 2008. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.
6. Memo: Pond Monitoring Program: Results for April 2009. May 5, 2009. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Gunner Exchange Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume II. Westwood, MA.

2. Eichner, E.M., B.L. Howes, and R. Samimy. July 2013. Final Report/Technical Memorandum for Task 1B (of 8): Cumulative Nitrogen Loading Determination. Massachusetts Estuaries Project Partnership for Nitrogen Management of the Plymouth Harbor - Duxbury Bay - Kingston Bay Estuarine System. Coastal Systems Program, School for Marine Science and Technology, University of Massachusetts – Dartmouth.

Halfway Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume II. Westwood, MA.
2. Howes B.L., R.I. Samimy, E.M. Eichner, S.W. Kelley, J.S. Ramsey, D.R. Schlezinger (2013). Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the Wareham River, Broad Marsh and Mark's Cove Embayment System, Wareham, Massachusetts, SMAST/DEP Massachusetts Estuaries Project, Massachusetts Department of Environmental Protection. Boston, MA.
3. Massachusetts Division of Fisheries and Wildlife Pond Sheet: Halfway Pond; March 7, 2007 update. http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwhalf.pdf (accessed 10/3/14)

Hedges Pond

No references

Hoyts Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume II. Westwood, MA.
2. Eichner, E.M., B.L. Howes, and R. Samimy. July 2013. Final Report/Technical Memorandum for Task 1B (of 8): Cumulative Nitrogen Loading Determination. Massachusetts Estuaries Project Partnership for Nitrogen Management of the Plymouth Harbor - Duxbury Bay - Kingston Bay Estuarine System. Coastal Systems Program, School for Marine Science and Technology, University of Massachusetts – Dartmouth.

Island Pond

No references

Little Pond

1. Massachusetts Division of Fisheries and Wildlife. Pond Maps-Southeast District: Little Pond; March 8, 2007 update. http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwlitpo.pdf (accessed 10/6/14)
2. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume III. Westwood, MA.
3. New England Research, Inc. 1982. Water Quality Studies for Plymouth, Massachusetts: Part III: Final Report. Worcester, MA.
4. Memo: Monitoring of Little Pond Conducted on October 28, 2007. November 7, 2007. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

5. Memo: Pond Monitoring Program: Results for July 2008. July 24, 2008. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.
6. Memo: Pond Monitoring Program: Results for October 2008. November 10, 2008. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Little Herring Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume IV. Westwood, MA.
2. Massachusetts Division of Fisheries and Wildlife. Pond Maps-Southeast District: Little Herring Pond; March 8, 2007 update. http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwlithe.pdf (accessed 10/3/14)
3. Lyons-Skwarto Associates. 1970. A Study of Little Herring Pond, Plymouth, Massachusetts with Guidelines for Rehabilitation. Westwood, MA.
4. Memo: Great Herring Pond and Little Herring Pond Monitoring Program. June 29, 2011. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Little Long Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume III. Westwood, MA.
2. Massachusetts Division of Fisheries and Wildlife. Pond Maps-Southeast District: Long Pond; March 8, 2007 update. http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwlongp.pdf (accessed 10/6/14).
3. Lyons-Skwarto Associates. 1981. A Study of Little Long Pond, Plymouth, Massachusetts with Guidelines for Rehabilitation. Westwood, MA.
4. Memo: Pond Monitoring Program: Results for July 2008. July 24, 2008. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.
5. Memo: Pond Monitoring Program: Results for October 2008. November 10, 2008. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist

Little Sandy Pond

1. Massachusetts Division of Fisheries and Wildlife. Pond Maps-Southeast District: Little Sandy Pond; March 1993 update. http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwlitsa.pdf (accessed 1/22/16).

Little South Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume IV. Westwood, MA.

2. Massachusetts Division of Fisheries and Wildlife. Plymouth Town Forest , Wildlife Conservation Easement. http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-wma/southeast/plymouth-town-forest-wce.pdf (accessed 10/6/14).
3. Memo: Pond Monitoring Program: Results for May 2010. June 5, 2010. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Little West Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume IV. Westwood, MA.

Long Island Pond (aka Little Island Pond)

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume IV. Westwood, MA.

Long Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume IV. Westwood, MA.
2. Memo: Pond Monitoring Program: Results for October 2008. November 10, 2008. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist
3. Massachusetts Division of Fisheries and Wildlife. Pond Maps-Southeast District: Long Pond; March 8, 2007 update. http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwlongp.pdf (accessed 10/9/14).
4. Lyons-Skwarto Associates. 1981. A Study of Long Pond, Plymouth, Massachusetts with Guidelines for Rehabilitation. Westwood, MA.
5. Memo: Pond Monitoring Program: Results for July 2008. July 24, 2008. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist

Lout Pond

1. Massachusetts Division of Fisheries and Wildlife. Pond Maps-Southeast District: Lout Pond; March 9, 2007 update. http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwloutp.pdf (accessed 1/22/16).
2. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for 8 Ponds in Plymouth, Massachusetts. Westwood, MA.
3. Memo: Pond Monitoring Program: Results for May 2010. June 5, 2010. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist.

Micajah Pond

1. Eichner, E.M., B.L. Howes, and R. Samimy. July 2013. Final Report/Technical Memorandum for Task 1B (of 8): Cumulative Nitrogen Loading Determination. Massachusetts Estuaries Project Partnership for Nitrogen Management of the Plymouth

Harbor - Duxbury Bay - Kingston Bay Estuarine System. Coastal Systems Program, School for Marine Science and Technology, University of Massachusetts – Dartmouth.
2. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume IV. Westwood, MA.
3. Massachusetts Division of Fisheries and Wildlife. Pond Maps-Southeast District: Micajah Pond; no date. http://www.mass.gov/eea/docs/dfg/dfw/habitat/maps-ponds/dfwlongp.pdf (accessed 10/10/14).
4. Massachusetts Division of Fisheries and Wildlife Pond Sheet. Eighty-fourth Annual Report. 1949-1960. Available at: https://archive.org/details/annualreportofdi00mass_1 (accessed 2/27/15).

Morey's Pond (aka Morey's Hole)
1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume IV. Westwood, MA.

North Triangle Pond
1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume IV. Westwood, MA.

Round Pond
1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume IV. Westwood, MA.
2. Living Lakes, Inc. 1992. Living Lakes Program, Final Report, Round Pond. Prepared for Plymouth Conservation Commission. Greenbelt, MD.
3. Memo: Pond Monitoring Program: Results for June 2009. July 24, 2008. To: David Gould and Kim Michaelis, DPW Environmental Management, Town of Plymouth. From: David Worden, Limnologist/Biologist

Russell Mill Pond
1. Inter-Fluve, Inc. 2007. Eel River, MA Restoration Project Concept Design Report. Prepared for David Gould, Town of Plymouth. Madison, WI.
2. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume V. Westwood, MA.
3. Lyons-Skwarto Associates. 1981. A Study of Long Pond, Plymouth, Massachusetts with Guidelines for Rehabilitation. Westwood, MA.

Savery Pond
1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume V. Westwood, MA.

Shallow Pond
1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for 8 Ponds in Plymouth, Massachusetts. Westwood, MA.

Ship Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume V. Westwood, MA.

Triangle Pond

No references

Wall Pond

1. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume V. Westwood, MA.

White Island Pond

1. Eichner, E., B. Howes, and C. DeMoranville. 2012. White Island Pond Water Quality and Management Options Assessment. Completed for the Cape Cod Cranberry Growers Association. Coastal Systems Program, School of Marine Science and Technology, University of Massachusetts Dartmouth. 108 pp.
2. Massachusetts Department of Environmental Protection. 2013. Massachusetts Year 2012 Integrated List of Waters. Final Listing of the Condition of Massachusetts' Waters Pursuant to Sections 305(b), 314 and 303(d) of the Clean Water Act. CN: 400.1. Worcester, MA.
3. Massachusetts Department of Environmental Protection. April 13, 2010. Final Total Maximum Daily Load of Total Phosphorus for White Island Pond Plymouth/Wareham, MA. MassDEP, DWM TMDL Report MA95166-201009-1 CN 330.2.
4. Lyons-Skwarto Associates. 1970. A Base Line Survey and Modified Eutrophication Index for Forty-One Ponds in Plymouth, Massachusetts. Volume V. Westwood, MA.
5. Massachusetts Department of Environmental Quality Engineering. 1980. White Island Pond Water Quality Study, August 1976-May 1978. Water Quality and Research Section, Westborough, MA.

Plymouth Ponds and Lakes Stewardship Program Data 2014-2015

Data collected by the Town DMEA and volunteers. Analytical samples analyzed by School of Marine Science and Technology in New Bedford, MA.
Note: In Plants/Notes -blank if less than 1% or NONE, otherwise noted

Key
ND = No Data Available
NS = No Sample Taken
FD= Field Duplicate

Town	Pond	DEP WB ID	Depth (m)	Date	QC	Number of Samples	Total Depth (m)	Secchi Depth (m)	% Secchi	Temp C	DO (mg/L)	pH	Alk (mg $CaCO_3$/L)	CHLA (ug/L)	Phaeo (ug/L)	TP (ug)	TP (mg/L)	TN (uM)	TN (ug/L)	TN (mg/L)	Water Colo	Weather	Wind	Plants	Notes
Plymouth	Bartlett	MA 94005	0.5	9/4/14		2	1.1	1.1	100%	22.4	ND	6.97	14.3	2.33	2.48	1.04	32.10	0.03	22.44	694.99	0.69	BROWN	LOUDLES	SHT BREEZ	LILIES, FIS	698 W70 33.449
Plymouth	Bartlett		1	9/4/14						22.6	ND	6.96	13.8	11.24	3.87	1.60	49.45	0.05	29.47	912.70	0.91					
Plymouth	Bartlett		1.5	9/4/14						ND	ND	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big Sandy	MA 95011	0.5	8/28/14	Sample	4	11.2	5.5	49%	24.4	7.78	6.11	2.7	6.59	0.14	<0.05			20.06	621.22	0.62	UE / GREE	RTY CLOU	TEADY WIN	NONE	'42.9" W 70 36'20.8
Plymouth	Big Sandy		0.5	8/28/14	FD					24.4	7.66	6.41	2.7	0.92	0.21	<0.05			22.47	695.89	0.70					
Plymouth	Big Sandy		1	8/28/14						24.4	7.59	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big Sandy		2	8/28/14						24.4	7.8	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big Sandy		3	8/28/14						24.4	7.82	6.36	2.6	1.10	0.14	0.10	3.09	0.00	20.06	621.22	0.62					
Plymouth	Big Sandy		4	8/28/14						24.4	7.85	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big Sandy		5	8/28/14						24.3	7.59	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big Sandy		6	8/28/14						24.3	7.62	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big Sandy		7	8/28/14						24.7	6.79	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big Sandy		8	8/28/14						23.5	4.74	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big Sandy		9	8/28/14						22.7	4.74	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big Sandy		10	8/28/14						17.5	2.14	5.89	6.0	24.33	10.86	1.29	39.91	0.04	64.03	1983.26	1.98					
Plymouth	Big Sandy		11	8/28/14						14.5	1.78	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big West	MA 95012	0.5	8/26/14		2	4.8	3.15	66%	25.6	8.65	6.95	7.1	1.21	0.17	0.05	1.65	0.00	31.50	975.68	0.98	GREEN	LOUDLES	CALM	NONE	
Plymouth	Big West		1	8/26/14						25.4	8.64	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big West		2	8/26/14						24.2	8.52	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big West		3	8/26/14						23.8	8.52	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Big West		3.8	8/26/14						ND	ND	6.83	7.6	2.81	0.56	0.12	3.71	0.00	27.90	864.12	0.86					
Plymouth	Big West		4	8/26/14						23.5	7.89	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ngton Sea E	MA 94007	0.5	8/25/14	FD					24.2	10.24	9.22	15.8	13.78	<0.05	0.65	20.00	0.02	49.22	1524.45	1.52					
Plymouth	ngton Sea East		0.5	8/25/14	Sample	3.3	1.5			24.2	10.24	9.22	15.9	15.59	<0.05	0.74	22.78	0.02	49.22	1524.45	1.52	GREEN	LOUDLES	SHT BREEZ	NONE	56.5 W 70 41' 00.9"
Plymouth	ngton Sea East		1	8/25/14						24.0	10.51	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ngton Sea East		1.5	8/25/14						23.9	10.6	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ngton Sea East		2	8/25/14						23.8	10.66	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ngton Sea East		2.3	8/25/14						ND	ND	9.21	15.7	14.03	<0.05	0.81	25.16	0.03	51.83	1605.41	1.61					
Plymouth	ngton Sea East		2.5	8/25/14						23.7	10.9	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ngton Sea East		3	8/25/14						22.9	10.1	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ngton Sea V	MA 94007	0.5	8/25/14	Sample	3	2	1.75	88%	24.0	10.1	8.80	15.6	9.47	<0.05	0.49	15.05	0.02	64.32	1992.25	1.99	GREEN	LOUDLES	SHT BREEZ	ND	'08.1" W 70 41'41.8"
Plymouth	ngton Sea West		0.5	8/25/14	FD					24.0	10.1	8.78	15.2	7.38	<0.05	0.84	26.03	0.03	64.32	1992.25	1.99					
Plymouth	ngton Sea West		1	8/25/14						23.9	10.44	8.80	15.5	9.31	<0.05	0.74	22.78	0.02	68.39	2118.20	2.12					
Plymouth	ngton Sea West		1.5	8/25/14						23.8	10.52	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ngton Sea West		2	8/25/14						21.1	11.86	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ngton Sea West		2.5	8/25/14						20.6	9.96	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Bloody	MA 94015	0.5	9/10/14		4	9.5	8.85	93%	24.2	8.52	7.24	4.8	6.30	1.43	0.27	8.25	0.01	26.53	821.84	0.82	GREEN	OVERCAST	OVERCAST	TEADY WIND	
Plymouth	Bloody		1	9/10/14						24.2	8.47	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Bloody		2	9/10/14						24.3	8.43	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Bloody		3	9/10/14						24.3	8.41	6.79	3.8	0.93	0.11	0.56	17.32	0.02	16.77	519.57	0.52					
Plymouth	Bloody		4	9/10/14						24.3	8.83	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Bloody		5	9/10/14						24.3	8.36	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Bloody		6	9/10/14						24.3	8.33	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Bloody		7	9/10/14						24.3	8.31	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Bloody		8	9/10/14						24.2	8.32	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Bloody		9	9/10/14						24.2	8.31	6.78	3.7	0.86	0.20	0.14	4.33	0.00	16.45	509.67	0.51					
Plymouth	Bloody		10	9/10/14						24.2	8.3	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Bloody		10.6	9/10/14						ND	ND	5.96	5.0	2.11	1.31	0.69	21.44	0.02	22.26	689.60	0.69					
Plymouth	Boot	MA 94016	0.5	8/20/14		4	10.3	7	68%	24.4	8.68	6.57	4.2	1.10	0.28	ND			ND	NS	NS	BLUE	T. CLOUD	SHT BREEZ	NONE	3 776 N 70 39.665
Plymouth	Boot		1	8/20/14						24.3	8.66	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Boot		2	8/20/14						24.3	8.62	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Boot		3	8/20/14						24.3	8.6	6.95	4.3	1.39	0.37	ND			ND	NS	NS					
Plymouth	Boot		4	8/20/14						24.3	8.58	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Boot		5	8/20/14						24.2	8.5	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Boot		6	8/20/14						24.1	8.38	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Boot		7	8/20/14						23.6	8.23	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Boot		8	8/20/14						21.6	1.03	7.02	4.3	1.25	0.23	ND			ND	NS	NS					
Plymouth	Boot		9	8/20/14						16.7	0.41	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Boot		9.5	8/20/14						ND	ND	6.34	20.1	6.34	18.63	ND			ND	NS	NS					
Plymouth	Boot		10	8/20/14						15.3	0.34	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	lam Puddin	MA 94025	0.5	9/15/14		2	5.8	3	52%	22.9	8.11	5.58	1.3	0.62	0.25	0.31	9.48	0.01	19.33	598.73	0.60	EAR/BROW	RTLY CLO	GHT BREEZ	RASSES	C43.5" W70 35' 09.5"
Plymouth	lam Pudding		1	9/15/14						23.0	8.36	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	lam Pudding		2	9/15/14						22.9	8.57	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	lam Pudding		3	9/15/14						22.9	8.24	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	lam Pudding		4	9/15/14						22.9	8.31	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	lam Pudding		4.8	9/15/14						ND	ND	5.58	1.4	0.51	0.26	0.26	8.04	0.01	16.89	523.17	0.52					
Plymouth	lam Pudding		5	9/15/14						22.9	8.25	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Clear	MA 95028	0.5	8/26/14		2	7	2.1	30%	24.4	8.68	7.75	13.1	5.03	<0.05	0.21	6.60	0.01	29.47	912.70	0.91	BROWN	LOUDLES	SHT BREEZ	NONE	'0.22" W 70 43'46.6
Plymouth	Clear		1	8/26/14						24.2	8.5	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Clear		2	8/26/14						24.1	8.66	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Clear		3	8/26/14						24.0	8.6	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Clear		4	8/26/14						23.4	8.36	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Clear		5	8/26/14						18.6	3.4	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Clear		6	8/26/14						13.9	2.5	6.45	18.0	4.76	0.49	0.27	8.25	0.01	21.57	668.01	0.67					
Plymouth	Clear		7	8/26/14						11.9	2.3	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Deer	MA 95036	0.5	8/26/14		2	5.5	3.6	65%	24.1	8.11	5.81	1.7	1.97	0.25	0.15	4.54	0.00	21.97	680.60	0.68	LUE/ROW	ND	ND	LILIES, EM	831 W 70 37' 29.621
Plymouth	Deer		1	8/26/14						24.0	8.13	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Deer		2	8/26/14						23.8	7.93	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Deer		3	8/26/14						23.5	6.62	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Deer		3.5	8/26/14						ND	ND	5.61	1.8	2.52	0.40	0.24	7.42	0.01	22.84	707.59	0.71					
Plymouth	Deer		4	8/26/14						23.2	4.55	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Deer		5	8/26/14						23.0	4.34	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Ezekiel	MA 95051	0.5	8/25/14		2	5	3.1	62%	24.5	8.96	6.70	4.5	4.78	<0.05	0.21	6.60	0.01	24.01	743.57	0.74	CLEAR	LOUDLES	SHT BREEZ	WATERLILIES	
Plymouth	Ezekiel		1	8/25/14						24.2	8.98	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Ezekiel		1.5	8/25/14						23.9	8.79	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Ezekiel		2	8/25/14						23.9	8.87	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Ezekiel		2.5	8/25/14						23.8	8.69	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Ezekiel		3	8/25/14						23.7	8.66	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Ezekiel		3.5	8/25/14						23.7	6.64	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Ezekiel		4	8/25/14						23.7	8.79	6.59	4.6	4.44	0.48	0.13	4.12	0.00	23.22	719.28	0.72					
Plymouth	Ezekiel		4.5	8/25/14						23.4	7.6	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Forges	MA 94036	0.5	9/4/14		2	3	3	100%	25.7	9.55	4.21	10.7	0.79	0.26	0.11	3.50	0.00	13.78	426.91	0.43	CLEAR	LOUDLES	SHT BREEZ	%: FANWA	L176 W 70 36.667
Plymouth	Forges		1	9/4/14						23.4	10.42	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Forges		1.5	9/4/14						22.5	11.36	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Forges		2	9/4/14						21.3	11.85	7.00	10.3	5.82	0.12	0.39	12.16	0.01	20.49	634.72	0.63					
Plymouth	Forges		2.5	9/4/14						19.8	9.58	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Fresh	MA 94040	0.5	8/26/14	FD					25.1	8.76	6.89	7.9	1.09	0.17	0.08	2.47	0.00	30.63	948.69	0.95					
Plymouth	Fresh		0.5	8/26/14	Sample	4	10	3.6	36%	25.1	8.76	6.97	7.6	1.19	0.20	0.09	2.89	0.00	34.99	1083.63	1.08	ND	LOUDLES	SHT BREEZ	WATERLIL	11.8" W 70 33'21.1"
Plymouth	Fresh		1	8/26/14						24.1	8.63	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Fresh		2	8/26/14						24.8	8.62	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Fresh		3	8/26/14						24.6	8.66	6.89	7.6	1.77	0.15	0.16	4.95	0.00	27.84	862.32	0.86					
Plymouth	Fresh		4	8/26/14						24.2	8.56	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Fresh		5	8/26/14						23.1	8.24	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Fresh		6	8/26/14						23.3	7.15	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Fresh		7	8/26/14						20.0	4.76	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Fresh		8	8/26/14						15.3	3.83	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Fresh		9	8/26/14						13.0	3.37	6.18	9.0	11.69	0.37	0.38	11.75	0.01	26.13	809.25	0.81					
Plymouth	Fresh		10	8/26/14						12.8	3.02	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	resh Meado	MA 95174	0.5	9/10/14		2	2.9	1.4	48%	22.0	8.03	6.79	16.2	8.72	1.01	0.53	16.29	0.02	26.43	818.69	0.82	ND	ND	ND	%: WATERLILIES	
Plymouth	resh Meadow		1	9/10/14						22.0	7.72	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	resh Meadow		1.5	9/10/14						22.0	7.71	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	resh Meadow		1.9	9/10/14						22.0	7.85	6.83	16.1	5.82	2.38	1.13	35.14	0.04	31.21	966.68	0.97					
Plymouth	resh Meadow		2	9/10/14						21.1	4.41	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	resh Meadow		2.5	9/10/14						ND	ND	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Gallows	MA 95059	0.5	9/10/14		3	8	4.85	61%	24.0	8	6.25	2.2	1.02	0.38	0.87	26.90	0.03	16.11	498.88	0.50	GREEN	OVERCAST	TEADY WIN	NONE	
Plymouth	Gallows		1	9/10/14						24.2	7.9	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Gallows		2	9/10/14						24.3	7.92	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Gallows		3	9/10/14						24.2	7.93	6.23	2.2	0.80	0.31	0.12	3.71	0.00	16.45	509.67	0.51					
Plymouth	Gallows		4	9/10/14						24.2	7.91	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Gallows		5	9/10/14						24.2	9.94	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Gallows		6	9/10/14						24.2	7.94	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Gallows		7	9/10/14						24.1	7.86	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Gallows		8	9/10/14						24.1	7.8	6.21	2.1	0.87	0.57	0.23	7.22	0.01	18.26	565.45	0.57					
Plymouth	Gallows		9	9/10/14						24.1	7.35	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Gallows		10	9/10/14						24.0	0.32	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	reat Herrin	MA 94050	0.5	8/19/14		4	12.6	2	16%	ND	ND	6.80	6.8	5.03	1.15	0.51	15.87	0.02	22.73	703.99	0.70	CLEAR	LOUDLES	SHT BREEZ	NONE	
Plymouth	reat Herring		3	8/19/14						ND	ND	6.78	6.9	7.45	0.96	0.83	25.59	0.03	22.29	690.50	0.69					
Plymouth	reat Herring		9	8/19/14						ND	ND	6.75	6.9	3.72	1.19	1.51	46.84	0.05	20.41	632.02	0.63					
Plymouth	reat Herring		11.5	8/19/14						ND	ND	6.94	10.6	6.50	2.46	0.68	21.03	0.02	23.05	713.89	0.71					
Plymouth	Great South	MA 94054	0.5	8/27/14						ND	ND	6.71	4.0	1.13	<0.05	0.07	2.27	0.00	28.48	882.12	0.88					
Plymouth	Great South		3	8/27/14						ND	ND	6.66	3.9	0.81	<0.05	0.17	5.36	0.01	20.06	621.22	0.62					
Plymouth	Great South		9	8/27/14						ND	ND	6.58	4.1	2.39	0.10	0.15	4.54	0.00	29.47	912.70	0.91					
Plymouth	Great South		13	8/27/14						ND	ND	6.71	4.2	1.74	0.10	0.19	5.98	0.01	18.75	580.74	0.58					
Plymouth	Great South		0.5 FEET	8/27/14		4	14.93	5.1	34%	23.7	7.4	NS	NS	NS	NS	NS			NS	NS	NS	BLUE	ND	SHT BREEZ	NONE	4.263 W70 40.063
Plymouth	Great South		1 FEET	8/27/14						23.8	7.5	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		10 FEET	8/27/14						20.8	5.5	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		11 FEET	8/27/14						20.5	6.6	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		12 FEET	8/27/14						18.1	3.8	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		13 FEET	8/27/14						15.4	3	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		14 FEET	8/27/14						13.9	3.3	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		15 FEET	8/27/14						13.0	3.4	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		16 FEET	8/27/14						12.7	3.1	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		17 FEET	8/27/14						12.6	2.9	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		18 FEET	8/27/14						12.6	2.7	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		19 FEET	8/27/14						12.5	2.6	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		2 FEET	8/27/14						23.8	7.4	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		20 FEET	8/27/14						15.5	2.5	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		21 FEET	8/27/14						ND	ND	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		3 FEET	8/27/14						23.8	7.3	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		4 FEET	8/27/14						23.7	7.4	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		5 FEET	8/27/14						23.7	7.3	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		6 FEET	8/27/14						23.7	7.2	NS	NS	NS	NS	NS			NS	NS	NS					

Town	Pond	DEP WB ID	Depth (m)	Date	QC	Number of Samples	Total Depth (m)	Secchi Depth (m)	% Secchi	Temp C	DO (mg/L)	pH	Alk (mg CaCO3/L)	CHLA (ug/L)	Phaeo (ug/L)	TP (uM)	TP (µg/L)	TP (mg/L)	TN (uM)	TN (ug/L)	TN (mg/L)	Water Colo	Weather	Wind	Plants	Notes
Plymouth	Great South		7 FEET	8/27/14						23.7	7.2	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		8 FEET	8/27/14						23.7	7.1	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Great South		9 FEET	8/27/14						23.7	7	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ners Exchar	MA 94055	0.5	8/20/14		3	8.85	6.4	72%	24.8	6.98	6.70	3.1	0.83	0.24	ND			ND	ND	ND	LUE/GREE	LOUDLES	CALM	LILIES, EMERGENT GRASSES	
Plymouth	ners Exchange		1	8/20/14						24.5	6.79	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ners Exchange		2	8/20/14						24.3	6.91	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ners Exchange		3	8/20/14						24.2	6.83	6.73	3.2	1.29	0.53	ND			ND	ND	ND					
Plymouth	ners Exchange		4	8/20/14						24.1	6.81	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ners Exchange		5	8/20/14						24.0	6.51	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ners Exchange		6	8/20/14						23.5	5.02	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ners Exchange		6.85	8/20/14						ND	ND	5.93	4.9	2.69	1.97	ND			ND	ND	ND					
Plymouth	ners Exchange		7	8/20/14						19.9	0.64	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ners Exchange		7.5	8/20/14						17.5	0.22	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Halfway	MA 95178	0.5	9/10/14		2	4	2	50%	23.2	8.35	6.80	5.0	2.61	0.78	0.60	18.55	0.02	21.01	650.91	0.65	GREEN	RTY CLOU	RONG WIN	NONE	
Plymouth	Halfway		1	9/10/14						23.2	8.33	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Halfway		2	9/10/14						23.3	8.32	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Halfway		3	9/10/14						22.8	8.4	6.79	4.6	22.66	19.00	3.16	97.97	0.10	69.26	2145.19	2.15					
Plymouth	Halfway		4	9/10/14						23.0	8.2	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Hedges	MA 94065	0.5	9/11/14		2	4.25	3.1	73%	24.1	9.13	5.73	1.4	1.90	0.32	0.28	8.66	0.01	15.32	474.59	0.47	ND	RTLY CLOU	GHT BREEZ	ERIA ON S	38.4" W 70 33'50.5"
Plymouth	Hedges		1	9/11/14						24.0	8.9	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Hedges		2	9/11/14						24.0	8.8	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Hedges		2.5	9/11/14						24.0	8.72	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Hedges		3	9/11/14						23.9	8.75	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Hedges		3.5	9/11/14						ND	ND	5.69	1.3	1.97	0.25	0.24	7.42	0.01	14.31	443.10	0.44					confirmed b
Plymouth	Hoyts	MA 94070	0.5	8/20/14		2	5.25	4.7	90%	25.5	7.48	6.76	3.0	1.11	0.82	ND			ND	ND	ND	LUE/GREE	LOUDLES	GHT BREEZ	EMERGENT GRASSES	
Plymouth	Hoyts		1	8/20/14						24.7	7.69	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Hoyts		2	8/20/14						24.3	7.44	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Hoyts		3	8/20/14						24.1	6.86	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Hoyts		4	8/20/14						24.0	6.87	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Hoyts		4.25	8/20/14						ND	ND	6.63	2.9	1.53	0.90	ND			ND	ND	ND					
Plymouth	Hoyts		5	8/20/14						24.0	6.82	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Jakes	MA 95077	0.5	9/11/14		2	3.5	2.5	71%	24.1	8.29	5.99	2.4	0.95	0.95	0.37	11.54	0.01	30.63	948.69	0.95	BROWN	ND	ND	UP TO 10%: EMERGENT GRASSE	
Plymouth	Jakes		1	9/11/14						23.8	8.46	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Jakes		1.5	9/11/14						23.5	8.19	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Jakes		2	9/11/14						23.4	8.15	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Jakes		2.5	9/11/14						23.4	7.99	5.95	2.3	1.06	0.66	0.36	11.13	0.01	26.53	821.84	0.82					
Plymouth	Jakes		3	9/11/14						23.4	7.94	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little	MA 94182	0.5	9/9/14		4	12.5	6.4	51%	24.8	8.47	6.70	4.2	0.80	0.33	0.05	1.65	0.00	21.33	660.81	0.66	CLEAR	RTLY CLOU	CALM	NONE	32.7" W70 41'02.5"
Plymouth	Little		1	9/9/14						24.8	8.43	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little		2	9/9/14						24.8	8.35	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little		3	9/9/14						24.8	8.35	6.75	4.1	0.67	0.42	<0.05			21.97	680.60	0.68					
Plymouth	Little		4	9/9/14						24.8	8.1	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little		5	9/9/14						24.8	8.17	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little		6	9/9/14						24.5	8.35	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little		7	9/9/14						21.6	10.37	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little		8	9/9/14						15.8	11.58	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little		9	9/9/14						13.7	11.47	6.42	4.6	1.54	0.93	<0.05			22.66	701.74	0.70					
Plymouth	Little		10	9/9/14						11.4	9.04	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little		11	9/9/14						10.1	6.73	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little		11.5	9/9/14						ND	ND	5.95	5.2	1.62	1.90	0.05	1.65	0.00	18.02	558.25	0.56					
Plymouth	ittle Herring	MA 94082	0.5	8/19/14	FD					ND	ND	6.97	10.9	9.54	1.72	1.35	41.86	0.04	44.86	1389.50	1.39					
Plymouth	ittle Herring		0.5	8/19/14	Sample	2	ND	ND	ND	ND	ND	6.90	10.8	8.07	2.05	1.35	41.86	0.04	52.99	1641.40	1.64	EEN/BROV	LOUDLES	CALM	LILIES, EMERGENT G	confirmed b
Plymouth	(aka Long I	MA 94088	0.5	8/28/14		2	5	2.75	55%	24.5	7.91	7.24	15.2	1.42	0.33	<0.05			35.28	1092.63	1.09	BROWN	ND	ND	: WATERLI	40.2" W 70 34' 34.6
Plymouth	(aka Long Island Pond)		1	8/28/14						24.4	8.03	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	(aka Long Island Pond)		2	8/28/14						24.4	8.1	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	(aka Long Island Pond)		3	8/28/14						24.3	8.07	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	(aka Long Island Pond)		4	8/28/14						22.5	5.14	6.70	19.2	3.01	2.23	0.15	4.74	0.00	52.12	1614.41	1.61					
Plymouth	(aka Long Island Pond)		5	8/28/14						22.0	3.2	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little Long	MA 95088	0.5	8/19/14		2	2.1	1.55	74%	23.2	12.5	6.97	7.6	4.64	0.51	0.61	18.97	0.02	37.89	1173.59	1.17	GREEN	LOUDLES	GHT BREEZ	NONE	
Plymouth	Little Long		1	8/19/14						22.5	13.9	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little Long		1.4	8/19/14						ND	ND	6.91	6.7	4.10	0.98	0.85	26.46	0.03	37.89	1173.59	1.17					
Plymouth	Little Long		1.5	8/19/14						22.1	12.8	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little Long		2	8/19/14						17.1	12.4	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little South	MA 94087	0.5	9/9/14	Sample	3	5.5	4.9	89%	24.9	8.77	6.47	2.8	0.80	0.29	0.14	4.33	0.00	20.03	620.33	0.62	BROWN	RTY CLOU	GHT BREEZ	NONE	57.7" W70 40'31.7"
Plymouth	Little South		0.5	9/9/14	FD					24.9	8.77	6.53	3.0	0.90	0.22	0.16	4.95	0.00	21.77	674.30	0.67					
Plymouth	Little South		1	9/9/14						24.9	8.69	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little South		2	9/9/14						24.9	8.75	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little South		3	9/9/14						24.9	8.57	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little South		4	9/9/14						24.9	8.63	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little South		4.5	9/9/14						ND	ND	6.52	2.8	0.98	0.26	0.56	17.32	0.02	18.05	559.15	0.56					
Plymouth	Little South		5	9/9/14						24.9	8.71	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little West	MA 95093	0.5	8/26/14		2	4.8	2.6	54%	25.8	8.75	7.00	6.3	3.19	0.17	0.32	9.90	0.01	37.60	1164.60	1.16	GREEN	LOUDLES	CALM	NONE	14 22 W 70 42 22
Plymouth	Little West		1	8/26/14						25.6	8.77	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little West		2	8/26/14						24.6	8.81	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little West		3	8/26/14						24.2	8.68	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Little West		3.8	8/26/14						ND	ND	6.89	6.2	5.57	0.66	0.37	11.34	0.01	31.79	984.67	0.98					
Plymouth	Little West		4	8/26/14						23.7	7.99	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long	MA 95096	0.5	8/19/14		4	28.2	2.5	9%	24.5	11.2	8.43	6.9	2.13	<0.05	0.42	12.99	0.01	39.34	1218.58	1.22	GREEN	LOUDLES	CALM	NONE	
Plymouth	Long		1	8/19/14						24.3	11.3	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		2	8/19/14						24.2	11.4	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		3	8/19/14						24.0	11.4	8.84	7.2	2.27	<0.05	0.40	12.37	0.01	24.06	745.37	0.75					
Plymouth	Long		4	8/19/14						23.0	11.4	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		5	8/19/14						23.9	11.5	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		6	8/19/14						23.9	11.3	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		7	8/19/14						23.8	11.3	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		8	8/19/14						23.7	11.6	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		9	8/19/14						23.3	12.4	9.55	7.1	10.97	<0.05	0.53	16.49	0.02	34.11	1056.64	1.06					
Plymouth	Long		10	8/19/14						16.7	13.4	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		11	8/19/14						16.7	19.6	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		12	8/19/14						13.0	19.7	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		13	8/19/14						8.4	19.1	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		14	8/19/14						7.8	5.8	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		15	8/19/14						7.3	3.2	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		16	8/19/14						7.2	4.9	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		17	8/19/14						6.5	2.9	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		18	8/19/14						6.6	1.3	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		19	8/19/14						6.5	1.4	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		20	8/19/14						6.2	0.7	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		21	8/19/14						6.5	0.9	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		22	8/19/14						6.3	0.9	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		23	8/19/14						6.3	0.7	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Long		28.4	8/19/14						ND	ND	6.18	8.0	0.82	1.57	1.85	57.26	0.06	53.86	1668.39	1.67					estimated b
Plymouth	Micajah	MA 95102	0.5	8/28/14		2	8	3	38%	25.0	8.89	7.00	6.1	1.53	0.31	<0.05			38.47	1191.59	1.19	LUE/GREE	RTY CLOU	EADY WIN	NONE	.703 W 70 41.831
Plymouth	Micajah		1	8/28/14						24.9	8.89	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Micajah		2	8/28/14						24.9	8.88	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Micajah		3	8/28/14						24.8	8.89	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Micajah		4	8/28/14						24.8	8.87	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Micajah		5	8/28/14						24.7	8.92	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Micajah		6	8/28/14						24.4	9.06	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Micajah		7	8/28/14						24.2	7.33	6.95	6.2	2.06	1.34	0.29	9.07	0.01	51.54	1596.42	1.60					
Plymouth	Micajah		8	8/28/14						23.8	4.83	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Morey's Hole	MA 94102	0.5	8/21/14	Sample	3	3.9	3.85	99%	24.6	7.88	6.60	6.5	1.23	0.22	0.27	8.25	0.01	23.31	721.98	0.72	BROWN	ND	ND	,G, CATTAILS, WATER LILIES	
Plymouth	Morey's Hole		0.5	8/21/14	FD					24.6	7.88	6.70	6.6	1.02	0.13	0.31	9.48	0.01	23.03	713.44	0.71					
Plymouth	Morey's Hole		1	8/21/14						24.4	7.85	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Morey's Hole		2	8/21/14						24.2	7.79	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Morey's Hole		2.5	8/21/14						24.0	7.74	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Morey's Hole		2.9	8/21/14						ND	ND	6.61	6.5	1.40	0.56	0.27	8.45	0.01	23.40	724.68	0.72					
Plymouth	Morey's Hole		3	8/21/14						23.9	7.35	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Morey's Hole		3.5	8/21/14						24.1	0.5	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	orth Triangl	MA 94110	0.5	9/9/14	FD					24.3	7.19	6.16	3.7	1.38	0.84	0.11	3.50	0.00	56.77	1758.35	1.76					
Plymouth	orth Triangle		0.5	9/9/14	Sample	3	2.5	2.5	100%	24.3	7.19	6.16	3.8	1.56	0.75	0.12	3.71	0.00	54.16	1677.38	1.68	BROWN	RTY CLOU	GHT BREEZ	-50%: WA	57.6, W 70 42' 03.9"
Plymouth	orth Triangle		1	9/9/14						24.3	7.15	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	orth Triangle		1.5	9/9/14						24.0	7.12	6.18	3.5	0.93	1.18	0.53	16.49	0.02	50.23	1555.94	1.56					
Plymouth	orth Triangle		2	9/9/14						23.9	6.75	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Round	MA 95123	0.5	9/10/14		2	8	3.65	46%	24.6	7.86	6.19	2.1	7.32	1.77	0.18	5.57	0.01	12.96	401.27	0.40	GREEN	OVERCAST	ND	NONE	
Plymouth	Round		1	9/10/14						24.6	7.83	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Round		2	9/10/14						24.6	7.81	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Round		3	9/10/14						24.5	7.82	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Round		4	9/10/14						24.5	7.83	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Round		5	9/10/14						24.5	7.71	6.16	1.9	1.61	0.20	0.33	10.31	0.01	13.26	410.71	0.41					
Plymouth	Round		6	9/10/14						24.3	7.82	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Round		7	9/10/14						24.4	0.37	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Russell Mills	MA 94132	0.5	8/19/14		2	6.4	1.425	22%	20.6	8.56	7.08	9.2	8.93	0.40	0.59	18.35	0.02	25.18	780.01	0.78	BROWN	LOUNDLES	CALM	LL CATEG	5'2", W 70 37' 39"
Plymouth	Russell Mills		1	8/19/14						20.3	8.29	NS	NS	NS	NS	NS	NS	NS	NS	#VALUE!	#VALUE!					
Plymouth	Russell Mills		2	8/19/14						18.9	4.75	NS	NS	NS	NS	NS	NS	NS	NS	#VALUE!	#VALUE!					
Plymouth	Russell Mills		3	8/19/14						16.8	0.23	NS	NS	NS	NS	NS	NS	NS	NS	#VALUE!	#VALUE!					
Plymouth	Russell Mills		4	8/19/14						15.5	0.04	NS	NS	NS	NS	NS	NS	NS	NS	#VALUE!	#VALUE!					
Plymouth	Russell Mills		5	8/19/14						13.7	0.04	NS	NS	NS	NS	NS	NS	NS	NS	#VALUE!	#VALUE!					
Plymouth	Russell Mills		5.4	8/19/14						ND	ND	6.37	40.3	62.13	37.54	3.34	103.38	0.10	52.12	1614.41	1.61					
Plymouth	Russell Mills		6	8/19/14						12.4	0.04	NS	NS	NS	NS	NS	NS	NS	NS	#VALUE!	#VALUE!					datasheet s
Plymouth	Saby	MA 95050	0.5	9/11/14		2	5	3.76	75%	24.0	8.26	6.25	2.4	1.21	0.51	0.22	6.80	0.01	19.76	612.00	0.61	CLEAR	RTLY CLOU	GHT BREEZ	NONE	6.5" W 70 42' 42.1"
Plymouth	Saby		1	9/11/14						24.0	8.19	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Saby		1.5	9/11/14						23.9	8.11	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Saby		2	9/11/14						24.0	8.09	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Saby		2.5	9/11/14						24.0	8.19	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Saby		3	9/11/14						23.9	8.16	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Saby		3.5	9/11/14						23.9	7.91	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Saby		4	9/11/14						23.9	7.94	6.24	2.6	1.43	0.45	0.12	3.71	0.00	18.34	568.15	0.57					
Plymouth	Saby		4.5	9/11/14						23.9	7.89	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Savery	MA 94136	0.5	8/18/14		2	3.5	1.4	40%	23.8	2.5	6.51	5.8	14.61	1.23	3.51	108.67	0.11	66.35	2055.23	2.06	EEN/BROV	LOUDLES	STEADY	NONE	.852 W 70 32.763
Plymouth	Savery		1	8/18/14						23.6	2.53	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Savery		2	8/18/14						23.0	1.4	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Savery		2.5	8/18/14						ND	ND	6.36	5.7	14.57	1.49	1.67	51.62	0.05	67.81	2100.21	2.10					
Plymouth	Savery		3	8/18/14						2.5	0.25	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Shallow	MA 94140	0.5	9/4/14		1	1.25	1.25	100%	28.1	8.43	4.62	BLD	1.65	1.37	0.16	4.95	0.00	57.64	1785.34	1.79	LEAR/BLU	LOUDLES	GHT BREEZ	UP TO 10%	21.1" W 70 33' 12.9"
Plymouth	Shallow		1	9/4/14						26.7	7.71	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Ship	MA 94142	0.5	9/4/14		1	1	1	100%	25.9	8.57	7.08	22.6	2.72	1.20	0.65	20.20	0.02	42.83	1326.53	1.33	BROWN	LOUDLES	GHT BREEZ	, FRAGMI	T 15.1 W 70 32' 006"
Plymouth	Ship		1	9/4/14						25.2	8.78	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Wall	Ma 95155	0.5	9/11/14		2	5.5	2	36%	24.0	8.63	6.49	3.9	1.54	1.18	0.21	6.60	0.01	31.50	975.68	0.98	ND	ND	ND	LS ALONG	32.0" W 70 36'06.3"

Town	Pond	DEP WB ID	Depth (m)	Date	QC	Number of Samples	Total Depth (m)	Secchi Depth (m)	% Secchi	Temp C	DO (mg/L)	pH	Alk (mg CaCO3/L)	CHLA (ug/L)	Phaeo (ug/L)	TP (µM)	TP (µg/L)	TP (mg/L)	TN (uM)	TN (ug/L)	TN (mg/L)	Water Colo	Weather	Wind	Plants	Notes
Plymouth	Wall		1	9/11/14						24.0	8.83	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Wall		1.5	9/11/14						23.0	8.67	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Wall		2	9/11/14						23.8	8.77	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Wall		2.5	9/11/14						23.8	8.65	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Wall		3	9/11/14						23.7	8.63	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Wall		3.5	9/11/14						23.7	8.55	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Wall		4	9/11/14						23.7	7.92	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Wall		4.5	9/11/14						23.6	7.72	6.28	3.9	1.16	1.51	0.25	7.83	0.01	27.70	857.83	0.86					
Plymouth	ite Island E	MA 95173	0.5	8/25/14	FD					24.0	8.31	6.68	6.9	2.79	0.27	0.24	7.42	0.01	24.79	767.86	0.77					
Plymouth	ite Island East		0.5	8/25/14	Sample	3	4.7	2.1	45%	24.0	8.31	6.68	6.8	2.47	0.38	0.27	8.25	0.01	25.49	789.45	0.79	GREEN	LOUDLESS	HT BREE	NONE	'27.4" W70 36'56.7"
Plymouth	ite Island East		1	8/25/14						23.9	8.29	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island East		1.5	8/25/14						23.9	8.33	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island East		2	8/25/14						23.9	8.2	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island East		2.5	8/25/14						23.8	8.2	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island East		3	8/25/14						23.8	8.11	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island East		3.5	8/25/14						23.8	7.77	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island East		3.7	8/25/14						ND	ND	6.82	6.9	3.44	0.21	0.29	8.86	0.01	27.00	836.24	0.84					
Plymouth	ite Island East		4	8/25/14						23.7	8.17	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island East		4.5	8/25/14						23.6	8.14	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island W	MA 95173	0.5	8/25/14		2	4.5	1.7	38%	24.4	8.72	6.94	6.0	3.33	1.16	0.41	12.78	0.01	34.40	1065.64	1.07					
Plymouth	ite Island West		1	8/25/14						24.2	8.67	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island West		1.5	8/25/14						24.1	8.72	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island West		2	8/25/14						24.1	8.71	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island West		2.5	8/25/14						24.1	8.71	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island West		3	8/25/14						24.0	8.72	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island West		3.5	8/25/14						24.0	8.71	7.07	6.2	3.44	1.42	0.50	15.46	0.02	35.57	1101.62	1.10					
Plymouth	ite Island West		4	8/25/14						24.0	8.35	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	ite Island West		4.5	8/25/14						24.0	7.77	NS	NS	NS	NS	NS			NS	NS	NS					
Plymouth	Bartlett	MA 94005	0.5	9/8/15						21.7	8.27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bartlett		1	9/8/15						21.5	8.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody	MA 94015	0.5	7/17/15			10.1	6.78	67%	25.6	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	LUE/GREE	T CLOUD	GHT BREEZE		
Plymouth	Bloody		1	7/17/15						25.5	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		2	7/17/15						25.4	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		3	7/17/15						25.2	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		4	7/17/15						25.1	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		5	7/17/15						25.0	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		6	7/17/15						24.7	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		7	7/17/15						20.8	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		8	7/17/15						17.8	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		9	7/17/15						15.1	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		10	7/17/15						13.0	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody	MA 94015	0.5	8/15/15			11.3	5.66	50%	25.9	13.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	LUE/GREE	T CLOUD	GHT BREEZE		
Plymouth	Bloody		1	8/15/15						25.7	13.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		2	8/15/15						25.4	13.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		3	8/15/15						25.4	14.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		4	8/15/15						25.4	13.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		5	8/15/15						25.3	13.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		6	8/15/15						25.3	14.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		7	8/15/15						24.7	14.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		8	8/15/15						21.2	17.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		9	8/15/15						17.2	20.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		10	8/15/15						14.8	21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		11	8/15/15						13.6	14.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody	MA 94015	0.5	9/15/15			10.2	5.07	50%	24.1	8.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		1	9/15/15						23.8	8.71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		2	9/15/15						23.8	8.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		3	9/15/15						23.8	8.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		4	9/15/15						23.7	8.48	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		5	9/15/15						23.7	8.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		6	9/15/15						23.7	8.44	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		7	9/15/15						23.7	8.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		8	9/15/15						23.5	8.27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		9	9/15/15						19.8	9.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Bloody		10	9/15/15						16.4	3.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot	MA 94016	0.5	9/14/2015	SAMPLE	4	9.6	1.8	19%	23.89	7.88	6.65	6.80	12.93	<0.05	0.51	15.84	0.02	65.50	2028.709	2.028709	brown/green	partly cloud	steady wind	% emergent grasses	
Plymouth	Boot		0.5	9/14/2015	FD					23.89	7.88	6.59	7.10	15.18	<0.05	0.55	16.90	0.02	51.46	1593.994	1.593994					
Plymouth	Boot		1	9/14/2015						23.91	8.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		1.5	9/14/2015						23.90	7.97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		2	9/14/2015						23.90	7.94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		2.5	9/14/2015						23.90	8.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		3	9/14/2015						23.89	8.09	6.61	7.20	6.71	9.75	0.55	16.90	0.02	67.50	2090.811	2.090811					
Plymouth	Boot		3.5	9/14/2015						23.90	8.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		4	9/14/2015						23.89	8.26	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		4.5	9/14/2015						23.89	8.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		5	9/14/2015						23.88	8.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		5.5	9/14/2015						23.85	8.11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		6	9/14/2015						23.87	8.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		6.5	9/14/2015						23.89	8.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		7	9/14/2015						23.74	7.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		7.5	9/14/2015						23.35	4.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		8	9/14/2015						18.10	3.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Boot		8.5	9/14/2015						15.43	3.40	6.19	24.70	17.13	38.55	3.37	104.40	0.10	48.60	1505.276	1.505276					
Plymouth	Boot		9	9/14/2015						14.70	3.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear	MA 95028	0.5	9/26/2015			7.3	2.525	35%	20.90	7.84	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		OWN/GRE	LOUDLESS	TEADY WIND	
Plymouth	Clear		1	9/26/2015						20.90	8.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		2	9/26/2015						20.90	8.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		3	9/26/2015						20.90	8.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		4	9/26/2015						20.90	7.88	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		5	9/26/2015						20.70	7.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		6	9/26/2015						19.10	3.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		6.5	9/26/2015						15.70	3.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear	MA 95028	0.5	9/27/2015			7.2	3.25	45%	20.50	7.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		OWN/GRE	LOUDLES	CALM	
Plymouth	Clear		1	9/27/2015						20.30	7.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		2	9/27/2015						20.20	7.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		3	9/27/2015						20.20	8.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		4	9/27/2015						20.20	7.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		5	9/27/2015						20.10	7.84	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		6	9/27/2015						16.90	1.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Clear		6.5	9/27/2015						15.00	1.88	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	COOKS	MA 94027	0.5	9/17/2015		2	3.7	1.5	41%	23.13	7.04	6.12	7.60	3.92	0.51	0.91	28.07	0.03	44.02	1363.328	1.363328	BROWN	RTLY CLOU	GHT BREEZ	% WATER LILLIES	
Plymouth	COOKS		1	9/17/2015						22.22	6.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	COOKS		1.5	9/17/2015						21.93	5.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	COOKS		2	9/17/2015						21.49	4.44	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	COOKS		2.5	9/17/2015						21.23	3.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	COOKS		2.7	9/17/2015						ND	ND	5.97	7.30	3.41	3.36	1.01	31.43	0.03	78.67	2436.809	2.436809					
Plymouth	COOKS		3	9/17/2015						21.03	2.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	COOKS		3.5	9/17/2015						20.09	2.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH	MA 94040	0.5	8/20/2015			9.14	5.63	62%	27.60	7.07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	LUE/GREE	LOUDLESS	HT BREEZE		
Plymouth	FRESH		1	8/20/2015						27.60	7.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		1.5	8/20/2015						27.60	7.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		2	8/20/2015						27.60	7.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		2.5	8/20/2015						27.50	7.30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		3	8/20/2015						27.50	7.30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		3.5	8/20/2015						27.10	7.42	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		4	8/20/2015						26.80	7.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		4.5	8/20/2015						26.50	7.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		5	8/20/2015						25.70	6.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		5.5	8/20/2015						24.50	6.02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		6	8/20/2015						22.50	4.27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		6.5	8/20/2015						20.90	4.22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		7	8/20/2015						18.80	4.64	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		7.5	8/20/2015						15.50	4.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		8	8/20/2015						15.10	4.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	FRESH		8.5	8/20/2015						12.30	5.22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows	MA 95059	0.5	7/17/2015			9.1	5.68	62%	25.60	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	LUE/GREE	T CLOUD	GHT BREEZE		
Plymouth	Gallows		1	7/17/2015						25.60	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		2	7/17/2015						25.50	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		3	7/17/2015						25.20	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		4	7/17/2015						25.10	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		5	7/17/2015						25.00	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		6	7/17/2015						23.90	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		7	7/17/2015						20.60	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		8	7/17/2015						18.50	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		9	7/17/2015						16.80	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows	MA 95059	0.5	8/17/2015			9.2	6.7	73%	26.40	9.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		CLOUDLESS	HT BREEZE		
Plymouth	Gallows		1	8/17/2015						26.40	8.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		2	8/17/2015						26.40	8.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		3	8/17/2015						26.20	8.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		4	8/17/2015						26.10	8.57	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		5	8/17/2015						25.80	8.57	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		6	8/17/2015						25.50	8.60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		7	8/17/2015						24.40	8.62	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		8	8/17/2015						21.20	4.87	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		9	8/17/2015						18.30	2.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows	MA 95059	0.5	9/15/2015			9.3	7.1	76%	23.60	7.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	LUE/GREE	LOUDLESS	HT BREEZE		
Plymouth	Gallows		1	9/15/2015						23.60	7.59	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		2	9/15/2015						23.60	7.62	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		3	9/15/2015						23.70	7.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		4	9/15/2015						23.70	7.80	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		5	9/15/2015						23.70	7.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		6	9/15/2015						23.70	7.69	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		7	9/15/2015						23.60	7.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		8	9/15/2015						23.60	7.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Gallows		9	9/15/2015						19.50	1.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Great Herrin	MA 94050	0.5	8/19/2015	SAMPLE	5	13	2.2	17%	26.30	8.84	6.85	12.70	3.95	0.09	0.64	19.81	0.02	59.77	1851.274	1.851274	clear/brown	partly cloud	light breeze	ng algae at southern edge	
Plymouth	Great Herring		0.5	8/19/2015	FD					26.30	8.84	6.91	13.90	4.19	<0.05	0.64	19.81	0.02	25.08	776.9058	0.776906					
Plymouth	Great Herring		1	8/19/2015						26.40	8.86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Great Herring		2	8/19/2015						26.30	8.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					

Town	Pond	DEP WB I	Depth (m)	Date	QC	Number of Samples	Total Depth (m)	Secchi Depth (m)	% Secchi	Temp C	DO (mg/L)	pH	Alk (mg CaCO3/L)	CHLA (ug/L)	Phaeo (ug/L)	TP (uM)	TP (µg/L)	TP (mg/L)	TN (uM)	TN (ug/L)	TN (mg/L)	Water Colo	Weather	Wind	Plants	Notes
Plymouth	Great Herring		3	8/19/2015						26.20	8.66	6.91	12.80	5.17	0.33	0.64	19.81	0.02	22.05	682.8654	0.682865					
Plymouth	Great Herring		4	8/19/2015						26.10	8.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Great Herring		5	8/19/2015						26.00	8.07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Great Herring		6	8/19/2015						25.80	9.36	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Great Herring		7	8/19/2015						25.30	5.98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Great Herring		8	8/19/2015						24.70	2.38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Great Herring		9	8/19/2015						24.40	1.55	6.23	14.40	8.50	2.15	1.01	31.22	0.03	25.63	793.7622	0.793762					
Plymouth	Great Herring		10	8/19/2015						24.30	0.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Great Herring		11	8/19/2015						24.20	0.31	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Great Herring		12	8/19/2015						24.20	0.23	6.23	16.00	6.80	2.69	2.05	63.49	0.06	37.71	1168.15	1.16815					
Plymouth	Great Herring		12.5	8/19/2015						24.10	0.17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	GREAT ISLAN	MA 94075	0.5	9/17/2015		2	4.7	4.2	89%	23.49	8.04	6.72	15.70	2.29	<0.05	0.27	8.45	0.01	24.17	748.5163	0.748516	OWN/ GRE	RTLY CLOL	GHT BREE	NT GRASSES/ SEDGES ON BAN	
Plymouth	GREAT ISLAND		1	9/17/2015						23.42	8.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	GREAT ISLAND		1.5	9/17/2015						23.35	8.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	GREAT ISLAND		2	9/17/2015						23.37	8.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	GREAT ISLAND		2.5	9/17/2015						23.36	8.01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	GREAT ISLAND		3	9/17/2015						23.29	8.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	GREAT ISLAND		3.5	9/17/2015						23.06	7.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	GREAT ISLAND		3.7	9/17/2015						ND	ND	7.02	15.20	2.46	<0.05	0.27	8.45	0.01	27.37	847.8798	0.84788					
Plymouth	GREAT ISLAND		4	9/17/2015						23.07	7.94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchar	MA 94055	0.5	9/14/2015		2	7.9	5.5	70%	23.53	7.96	5.96	2.90	0.08	4.79	0.27	8.45	0.01	39.72	1230.252	1.230252	clear	partly cloudy	steady wind	lilies on northern edge	
Plymouth	ners Exchange		1	9/14/2015						23.53	7.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		1.5	9/14/2015						23.53	7.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		2	9/14/2015						23.53	7.87	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		2.5	9/14/2015						23.52	7.80	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		3	9/14/2015						23.52	7.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		3.5	9/14/2015						23.51	7.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		4	9/14/2015						23.52	7.75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		4.5	9/14/2015						23.50	7.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		5	9/14/2015						23.51	7.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		5.5	9/14/2015						23.46	7.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		6	9/14/2015						23.31	6.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		6.5	9/14/2015						23.31	6.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	ners Exchange		7	9/14/2015						23.39	6.75	5.83	4.00	1.38	2.96	0.38	11.62	0.01	24.88	770.6956	0.770696					
Plymouth	ners Exchange		7.5	9/14/2015						23.12	6.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway	MA 95178	0.5	7/17/2015			3.6	3.31	92%	24.50	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	LUE/GREE	LOUDLES	CALM		
Plymouth	Halfway		1	7/17/2015						24.60	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway		2	7/17/2015						24.50	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway		3	7/17/2015						24.40	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway	MA 95178	0.5	8/15/2015			3.6	3.01	84%	24.50	14.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	BROWN	PT CLOUD	CALM		
Plymouth	Halfway		1	8/15/2015						24.40	13.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway		2	8/15/2015						24.30	13.88	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway		3	8/15/2015						24.20	13.82	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway	MA 95178	0.5	9/16/2015			3.6	2.75	76%	23.80	10.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	BLUE	LOUDLESS	HT BREEZE		
Plymouth	Halfway		1	9/16/2015						23.70	9.54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway		1.5	9/16/2015						23.70	9.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway		2	9/16/2015						23.70	9.35	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway		2.5	9/16/2015						22.60	9.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway		3	9/16/2015						22.30	9.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Halfway		3.5	9/16/2015						22.30	8.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Hoyts	MA 94070	0.5	9/14/2015		2	4.2	3.5	83%	23.16	5.80	5.95	2.70	0.81	4.72	0.34	10.56	0.01	32.99	1021.766	1.021766	clear	partly cloudy	steady wind	% emergent grasses	
Plymouth	Hoyts		1	9/14/2015						23.17	8.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Hoyts		1.5	9/14/2015						23.17	8.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Hoyts		2	9/14/2015						23.17	8.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Hoyts		2.5	9/14/2015						23.16	8.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Hoyts		3	9/14/2015						23.16	8.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Hoyts		3.2	9/14/2015						ND	ND	6.04	2.80	1.05	3.80	0.27	8.45	0.01	51.18	1585.122	1.585122					
Plymouth	Hoyts		3.5	9/14/2015						23.16	8.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Hoyts		4	9/14/2015						23.17	7.96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LAND PON	MA 94074	0.5	9/16/2015		2	7	3.2	46%	24.15	7.96	6.87	13.90	1.26	0.95	0.27	8.45	0.01	49.17	1523.02	1.52302	GREEN	LOUDLESS	HT BREEZE		
Plymouth	LAND POND		1	9/16/2015						23.63	8.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LAND POND		2	9/16/2015						23.32	7.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LAND POND		3	9/16/2015						23.39	7.83	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LAND POND		4	9/16/2015						23.27	7.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LAND POND		5	9/16/2015						23.20	7.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LAND POND		6	9/16/2015						23.12	7.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LAND POND		6.5	9/16/2015						23.07	6.85	6.80	13.90	1.55	0.78	0.27	8.45	0.01	35.14	1088.304	1.088304					
Plymouth	TTLE SANI	MA 95092	0.5	9/16/2015		2	3	3	100%	22.85	7.80	6.05	2.50	0.70	0.67	0.20	6.34	0.01	26.94	834.5725	0.834573	CLEAR	LOUDLES	CALM	% emergent grasses	
Plymouth	TTLE SANDY		1	9/16/2015						22.73	7.71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TTLE SANDY		1.5	9/16/2015						22.67	7.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TTLE SANDY		2	9/16/2015						22.59	7.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TTLE SANDY		2.5	9/16/2015						22.30	7.59	6.02	2.50	1.88	0.81	0.27	8.45	0.01	37.43	1159.278	1.159278					
Plymouth	ttle Herring	MA 94082	0.5	8/19/2015	SAMPLE	2	1.1	1.1	100%	26.50	9.67	6.84	20.70	2.96	0.53	0.60	18.71	0.02	42.87	1327.841	1.327841	brown	partly cloudy	light breeze	emergent grasses, 25-50% fanwor	
Plymouth	ttle Herring		0.5	8/19/2015	FD		1.1	1.1	100%	26.50	9.67	6.99	20.70	2.35	0.71	0.60	18.71	0.02	44.59	1381.072	1.381072	brown	partly cloudy	light breeze	emergent grasses, 25-50% fanwor	
Plymouth	Little Long	MA 95088	0.5	7/14/2015			2.26	2.25	100%	26.10	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	GREEN	OVERCAST	HT BREEZE		
Plymouth	Little Long		1	7/14/2015						26.10	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Little Long		2	7/14/2015						25.80	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Little Long	MA 95088	0.5	9/15/2015			2.3	2.1	91%	21.00	9.51	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	LUE/GREE	LOUDLES	HT BREEZE		
Plymouth	Little Long		1	9/15/2015						20.70	9.44	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Little Long		1.5	9/15/2015						20.60	9.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Little Long		2	9/15/2015						20.60	9.97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG	MA 95096	0.5	7/17/2015			29	5.35	18%	25.30	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	LUE/GREE	LOUDLES	CALM		
Plymouth	LONG		1	7/17/2015						25.10	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		2	7/17/2015						25.80	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		3	7/17/2015						24.90	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		4	7/17/2015						24.80	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		5	7/17/2015						24.70	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		6	7/17/2015						23.30	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		7	7/17/2015						20.30	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		8	7/17/2015						15.20	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		9	7/17/2015						12.00	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		10	7/17/2015						9.90	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		11	7/17/2015						8.80	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		12	7/17/2015						7.50	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		13	7/17/2015						6.80	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		14	7/17/2015						6.20	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		15	7/17/2015						5.90	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		16	7/17/2015						5.80	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		17	7/17/2015						5.70	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		18	7/17/2015						5.60	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		19	7/17/2015						5.50	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		20	7/17/2015						5.40	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		21	7/17/2015						5.40	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		22	7/17/2015						5.40	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		23	7/17/2015						5.40	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		24	7/17/2015						5.30	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		25	7/17/2015						5.30	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		26	7/17/2015						5.30	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		27	7/17/2015						5.30	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		28	7/17/2015						5.40	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		29	7/17/2015						5.40	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG	MA 95096	0.5	8/15/2015			29.8	4.65	16%	26.50	9.60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	GREEN	PT CLOUD	steady wind		
Plymouth	LONG		1	8/15/2015						26.40	9.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		2	8/15/2015						26.30	9.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		3	8/15/2015						26.20	9.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		4	8/15/2015						25.60	9.75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		5	8/15/2015						25.30	9.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		6	8/15/2015						25.30	9.88	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		7	8/15/2015						24.70	10.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		8	8/15/2015						20.10	17.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		9	8/15/2015						14.90	19.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		10	8/15/2015						11.50	20.12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		11	8/15/2015						9.40	20.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		12	8/15/2015						9.20	19.81	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		13	8/15/2015						6.80	15.26	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		14	8/15/2015						6.40	12.30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		15	8/15/2015						7.10	14.80	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		16	8/15/2015						5.80	7.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		17	8/15/2015						5.80	7.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		18	8/15/2015						5.70	7.11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		19	8/15/2015						5.70	7.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		20	8/15/2015						5.70	6.85	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		21	8/15/2015						5.60	6.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		22	8/15/2015						5.60	6.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		23	8/15/2015						5.60	6.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		24	8/15/2015						5.50	6.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		25	8/15/2015						5.50	4.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		26	8/15/2015						5.50	4.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		27	8/15/2015						5.50	4.14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		28	8/15/2015						5.50	4.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		29	8/15/2015						5.50	4.07	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG	MA 95096	0.5	9/16/2015			30.2	5.85	19%	24.20	9.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	BLUE	LOUDLESS	HT BREEZE		
Plymouth	LONG		1	9/16/2015						23.90	9.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		1.5	9/16/2015						23.80	9.60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		2	9/16/2015						23.80	9.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		2.5	9/16/2015						23.70	9.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		3	9/16/2015						23.70	9.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		3.5	9/16/2015						23.70	9.08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		4	9/16/2015						23.60	9.08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		4.5	9/16/2015						23.60	9.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		5	9/16/2015						23.60	8.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		6	9/16/2015						23.60	9.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		7	9/16/2015						23.50	9.12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		8	9/16/2015						22.80	10.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		9	9/16/2015						17.20	17.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		10	9/16/2015						13.90	18.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		11	9/16/2015						11.30	18.80	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					

Town	Pond	DEP WB I	Depth (m)	Date	QC	Number of Samples	Total Depth (m)	Secchi Depth (m)	% Secchi	Temp C	DO (mg/L)	pH	Alk (mg CaCO3/L)	CHLA (ug/L)	Phaeo (ug/L)	TP (uM)	TP (µg/L)	TP (mg/L)	TN (uM)	TN (ug/L)	TN (mg/L)	Water Colo	Weather	Wind	Plants	Notes
Plymouth	LONG		12	9/16/2015						8.80	16.69	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		13	9/16/2015						7.30	11.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		14	9/16/2015						6.60	7.37	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		15	9/16/2015						6.20	4.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		16	9/16/2015						5.90	2.45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		17	9/16/2015						5.80	1.15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		18	9/16/2015						5.70	1.53	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		19	9/16/2015						5.70	1.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		20	9/16/2015						5.60	1.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		21	9/16/2015						5.60	1.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		22	9/16/2015						5.60	1.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		23	9/16/2015						5.60	1.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		24	9/16/2015						5.60	1.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		25	9/16/2015						5.60	2.09	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		26	9/16/2015						5.60	1.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		27	9/16/2015						5.60	1.77	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		28	9/16/2015						5.60	1.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		29	9/16/2015						5.60	1.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LONG		30	9/16/2015						5.60	1.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LOUT	MA 94090	0.5	9/24/2015		4	10.5	5	48%	21.50	8.15	6.20	4.00	1.05	0.14	0.20	6.34	0.01	27.03	837.2332	0.837233	CLEAR	LOUDLESS	HT BREEZE		
Plymouth	LOUT		1	9/24/2015						21.40	8.08	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LOUT		2	9/24/2015						21.40	7.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LOUT		3	9/24/2015						21.40	8.07	6.18	3.80	1.18	0.09	0.34	10.56	0.01	26.37	816.8287	0.816829					
Plymouth	LOUT		4	9/24/2015						21.20	8.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LOUT		5	9/24/2015						17.00	8.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LOUT		6	9/24/2015						11.20	7.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LOUT		7	9/24/2015						6.90	5.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LOUT		8	9/24/2015						6.10	4.42	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	LOUT		9	9/24/2015						5.70	3.67	6.25	39.40	2.59	40.64	16.91	523.63	0.52	134.37	4161.9	4.1619					
Plymouth	LOUT		9.8	9/24/2015						ND	ND	6.27	40.30	1.21	16.58	13.52	418.86	0.42	137.21	4250.01	4.25001					
Plymouth	LOUT		10	9/24/2015						5.50	3.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Micajah	MA 95102	0.5	8/24/2015		2	8.1	4	49%	26.50	8.19	6.93	12.70	ND	ND	0.24	7.39	0.01	78.96	2445.681	2.445681	blue/green	overcast	light breeze	none	
Plymouth	Micajah		1	8/24/2015						26.50	8.24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Micajah		2	8/24/2015						26.40	8.17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Micajah		3	8/24/2015						26.40	8.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Micajah		4	8/24/2015						26.30	8.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Micajah		5	8/24/2015						26.30	7.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Micajah		6	8/24/2015						26.20	8.28	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Micajah		7	8/24/2015						25.40	6.28	6.70	13.40	ND	ND	0.34	10.56	0.01	57.76	1789.172	1.789172					
Plymouth	Round	MA 95123	0.5	7/13/2015			5.7	5.33	94%	27.10	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	LUE/GREE	artly cloudy	HT BREEZE		
Plymouth	Round		1	7/13/2015						26.90	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		2	7/13/2015						26.80	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		3	7/13/2015						26.30	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		4	7/13/2015						26.10	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		5	7/13/2015						25.50	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round	MA 95123	0.5	8/15/2015			6	3.12	52%	26.70	9.71	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	LUE/GREE	T CLOUDY	HT BREEZE		
Plymouth	Round		1	8/15/2015						26.60	9.46	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		2	8/15/2015						26.10	9.27	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		3	8/15/2015						25.90	9.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		4	8/15/2015						25.80	9.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		5	8/15/2015						25.80	9.17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		6	8/15/2015						25.70	9.12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round	MA 95123	0.5	9/16/2015			5.7	5.7	100%	23.80	7.32	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	green	LOUDLES	CALM		
Plymouth	Round		1	9/16/2015						23.70	7.36	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		1.5	9/16/2015						23.70	7.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		2	9/16/2015						23.70	7.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		2.5	9/16/2015						23.70	7.65	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		3	9/16/2015						23.70	7.10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		3.5	9/16/2015						23.70	7.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		4	9/16/2015						23.70	7.40	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		4.5	9/16/2015						23.60	7.00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		5	9/16/2015						23.60	6.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	Round		5.5	9/16/2015						23.60	6.70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SABY'S	MA 95050	0.5	9/20/2015			6.5	4.9	75%	24.20	96.8%	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	REEN/BLU	overcast	steady wind		
Plymouth	SABY'S		1	9/20/2015						24.20	95.5%	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SABY'S		2	9/20/2015						24.10	94.5%	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SABY'S		3	9/20/2015						24.10	92.9%	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SABY'S		4	9/20/2015						23.90	90.5%	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SABY'S		5	9/20/2015						23.70	79.3%	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY	MA 94136	0.5	7/24/2015			3.4	1.075	32%	26.70	8.26	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		1	7/24/2015						26.40	8.18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		2	7/24/2015						24.30	3.79	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		3	7/24/2015						21.80	1.43	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY	MA 94136	0.5	7/31/2015			3.4	1.225	36%	27.00	8.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		1	7/31/2015						26.80	7.75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		2	7/31/2015						25.40	6.17	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		3	7/31/2015						22.50	2.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY	MA 94136	0.5	8/6/2015		ND	ND	ND	ND	ND	ND	6.38	9.50	10.79	4.97	1.34	41.54	0.04	56.62	1753.685	1.753685	ND	ND	ND	ND	
Plymouth	SAVERY		2.4	8/6/2015						ND	ND	5.94	9.80	60.24	15.29	6.42	198.77	0.20	83.69	2592.064	2.592064					
Plymouth	SAVERY	MA 94136	0.5	8/12/2015			3.4	1.4	41%	24.7	11.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		1	8/12/2015						23.9	11.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		2	8/12/2015						23.3	9.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		3	8/12/2015						23	8.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY	MA 94136	0.5	9/15/2015	SAMPLE	3	3.5	2	57%	21.63	7.45	6.49	9.30	2.43	7.24	0.83	25.82	0.03	47.17	1460.917	1.460917	BROWN	RTY CLOU	CALM	% WATER LILLES	
Plymouth	SAVERY		0.5	9/15/2015	FD					21.63	7.45	6.41	9.20	2.89	5.97	1.01	31.43	0.03	51.18	1585.122	1.585122					
Plymouth	SAVERY		1	9/15/2015						21.61	7.38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		1.5	9/15/2015						21.60	7.23	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		2	9/15/2015						21.58	7.25	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		2.5	9/15/2015						21.57	7.21	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		3	9/15/2015						21.56	7.20	6.50	8.80	4.14	4.24	0.87	26.94	0.03	73.23	2268.246	2.268246					
Plymouth	SAVERY	MA 94136	0.5	10/7/2015			3.4	3.4	100%	15.70	14.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	BLUE	LOUDLES	CALM		
Plymouth	SAVERY		1	10/7/2015						14.90	14.52	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		2	10/7/2015						14.70	13.61	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	SAVERY		3	10/7/2015						14.90	10.60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TRIANGLE	MA 94160	0.5	9/16/2015		2	5	4.63	93%	23.00	7.47	6.09	3.90	1.05	0.95	0.38	11.62	0.01	33.13	1026.202	1.026202	BROWN	LOUDLESS	HT BREEZE		
Plymouth	TRIANGLE		1	9/16/2015						23.51	7.24	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TRIANGLE		1.5	9/16/2015						23.39	7.33	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TRIANGLE		2	9/16/2015						23.35	7.33	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TRIANGLE		2.5	9/16/2015						23.31	7.22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TRIANGLE		3	9/16/2015						23.24	7.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TRIANGLE		3.5	9/16/2015						23.21	6.89	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TRIANGLE		4	9/16/2015						23.18	6.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS					
Plymouth	TRIANGLE		4.5	9/16/2015						23.20	6.60	6.08	3.70	2.31	2.10	0.61	19.01	0.02	47.02	1456.482	1.456482					

ıy Kim T; no readings collected

ES

ıy Kim T; no readings collected

ıy Kim T (10/23/14 email)

ıupplied by Kim T (10/23/14)

KS

t
t