# Draft 2020 303(d) Public Meeting

Todays Agenda

- 1. Overview of the Assessment Process
- 2. Overview of the CALM
- 3. What Documents are Available
- 4. How to Access Assessment Data
- 5. Visit Example Waters
- 6. Discussion

If you are having audio problems try calling in (408) 650-3123, and use access code 110-541-061

# Draft 2020 303(d) Public Meeting

- Please mute yourself
- Please turn off your video
- Use the chat function to be recognized if you have a question
- This is an informational meeting only
  - It will not be used to capture formal comments verbally or through the chat function

If you are having audio problems try calling in (408) 650-3123, and use access code 110-541-061

# Draft 2020 303(d) Data Day/ Public Informational Meeting

## N.H. Department of Environmental Services October 27<sup>th</sup>, 2020





# Folks you will here from today





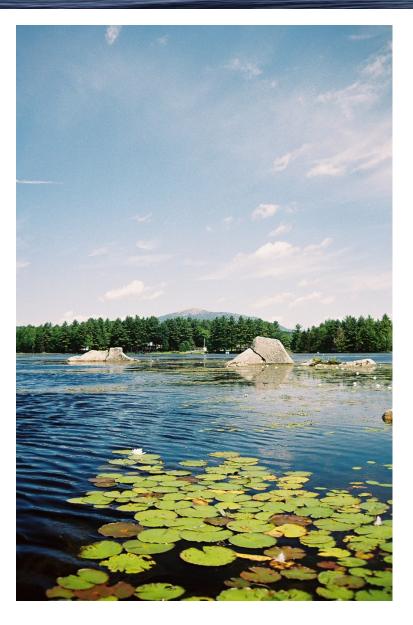
Matt Wood – NHDES, Water Quality Assessment Program Coordinator

### Ken Edwardson – NHDES, Senior Scientist



Ted Diers – NHDES, Watershed Management Bureau Administrator

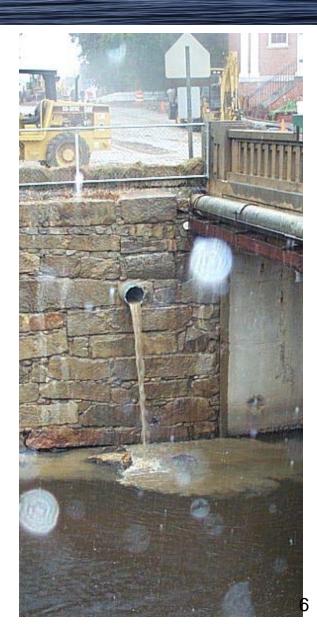
# **Topics for Today**



- Overview of the Assessment Process
- 2. Overview of the CALM
- 3. What Documents are Available
- 4. How to Access Assessment Data
- 5. Visit Example Waters
- 6. Discussion

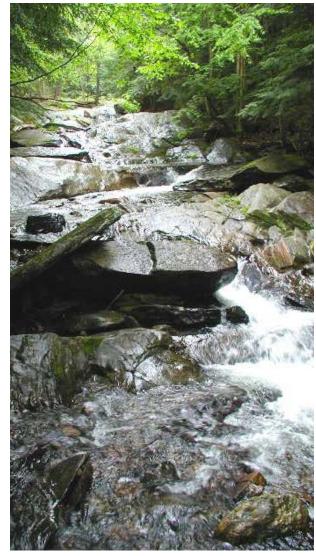
# Assessment Process

- Biennial report fulfills Federal & State requirements to assess water quality.
- Completed biennially on even years
   ..., 2016, 2018, 2020, etc.
- 305(b) = All assessments.
  - 303(d) = Impairments that need a TMDL.



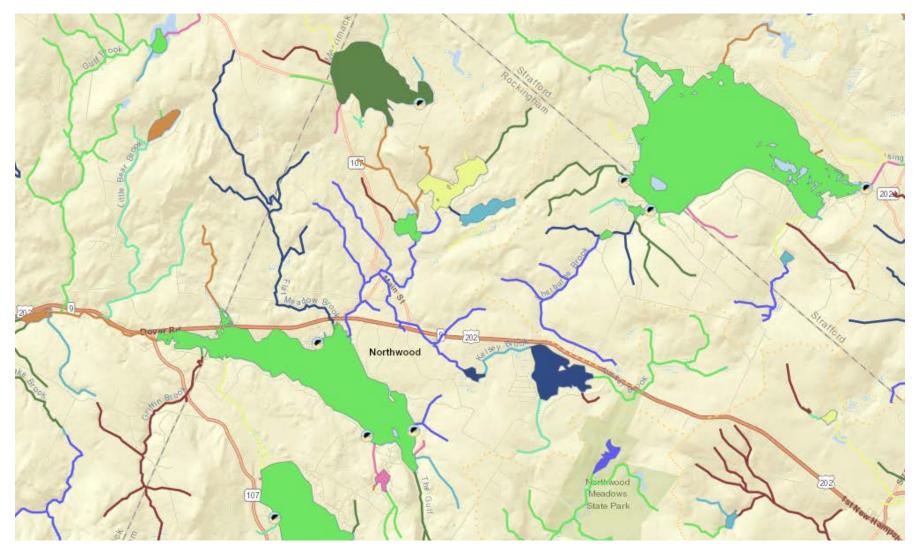
# Assessment Process

- Assessments are governed by the Water Quality Standards, Env-Wq 1700 & RSA 485-A:8.
  - Designated Uses
  - Criteria Numeric & Narrative
  - Antidegradation
- Consolidated Assessment & Listing Methodology (CALM) defines how we apply the Water Quality Standards to available data.



## Assessment Unit

• Spatial unit of record is the "Assessment Unit".



# Consolidated Assessment & Listing Methodology (CALM)

- Translator document for how the water quality data will be used to make surface water quality attainment decisions by designated use, consistent with state surface water quality standards
- Like the 303(d), the CALM is available for public comment







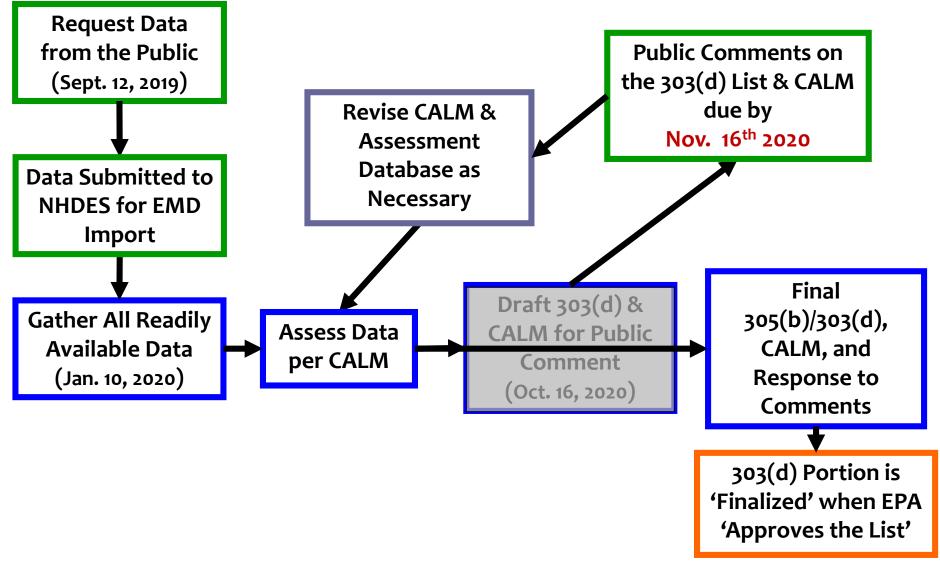
# **CALM** Overview

## What kinds of things are in the CALM?

- Core parameters for each use (i.e. bacteria for swimming use).
- Minimum number of samples.
- Maximum age of samples.
- How older data is treated.
- When samples must be taken
   (seasonality, time of day, flow, ...).
- Where samples are collected (depth profiles, to compare with older data, ...).
- How multiple samples will be treated.



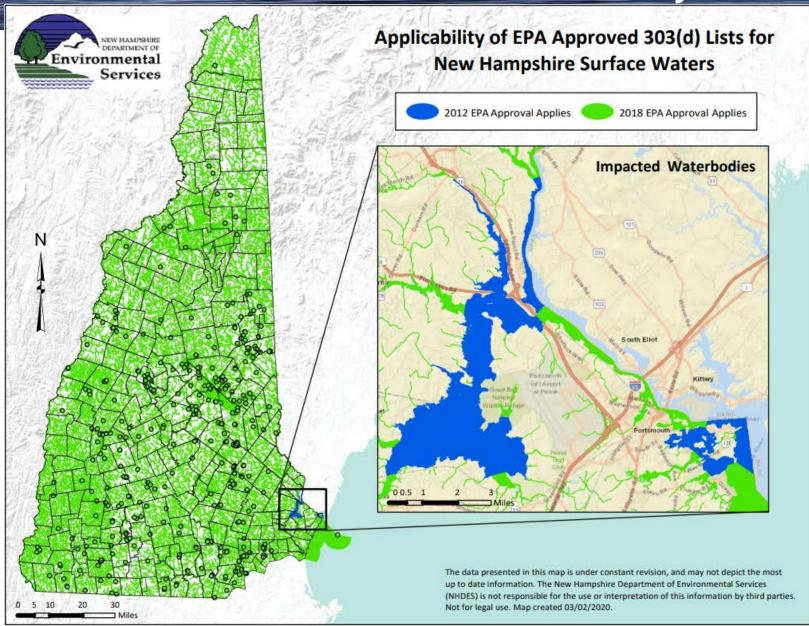
## Assessment Process



# Where Do We Stand Today

2012 – Full EPA Approval – September 24, 2015
2014 – Partial EPA Approval – March 16, 2018
2016 – Partial EPA Approval – June 22, 2018
2018 – EPA Approval, without 24 Estuarine AUs – February 25, 2019
2020 – Draft Out For Public Comment – October 16, 2020

# Where Do We Stand Today



# Lets Dig a Little Deeper

## What resources are available



# Draft 303(d) Document Availability

#### 2020, Draft 303(d) List



- 🛽 Technical Support Document for the Great Bay Estuary Aquatic Life Integrity Designated Use Assessments, 2020 Draft 305(b) Report/303(d) List 🖆
- GIS Layers for the 2020 Assessment <sup>2</sup>
- Impairments Removed Since the 2018 305(b) <sup>2</sup>
- Impairments Added to the 2020 305(b) <sup>2</sup>
- Surface Water Quality Assessment Viewer and Watershed Report Cards
- 2020, Draft Status of Each Assessment Unit

### https://www.des.nh.gov/organization/divisions/water/wmb/swqa/2020/index.htm

# Submitting Formal Comments

## SCHEDULE

Submit written comments by Monday, Nov. 16, 2020.



# Submitting Formal Comments

### WHAT TO SUBMIT

• General comments are useful but specific comments with supporting background information are preferred.

• Submittals should include the following contact information; Your Name and Organization, Mailing Address, E-mail, Phone number

• Your comments referenced to specific sections of the current CALM.

• Documentation supporting why you believe that a section of the CALM or 303(d) requires the changes suggested.

# Submitting Formal Comments

### HOW TO SEND COMMENTS TO NHDES

By mail: 2020, 303(d) Comments New Hampshire Department of Environmental Services Watershed Management Bureau 29 Hazen Drive, P.O. Box 95 Concord, New Hampshire 03302-0095 Attention: Matt Wood

By fax: 2020, 303(d) Comments (603) 271-7894

By Email: 303dComment@des.nh.gov

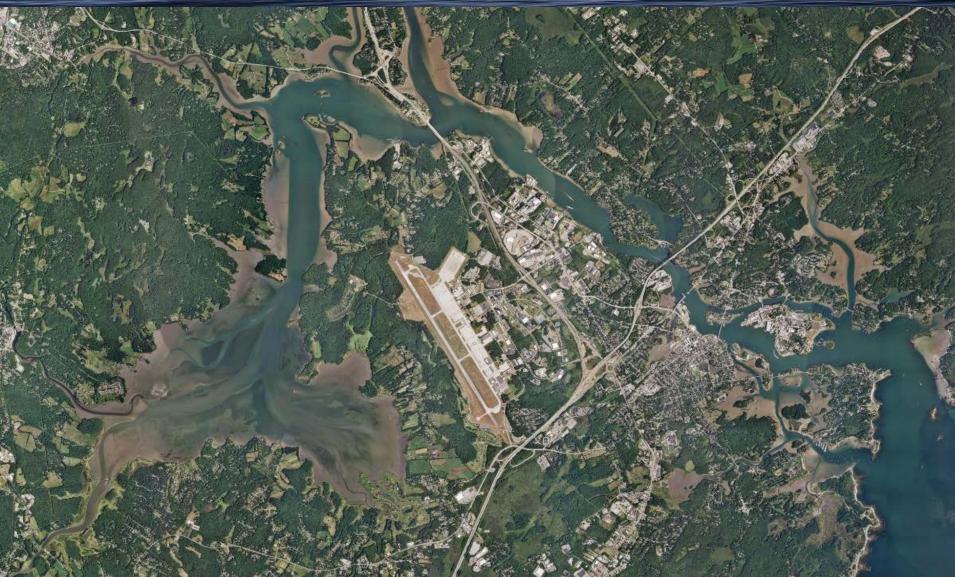


**QUESTIONS?** Please email Matt Wood at <u>matthew.wood@des.nh.gov</u>

# Example Waters



# Changes in the Great Bay Estuary



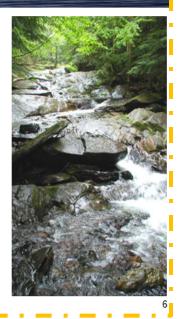
# Total Nitrogen Section of the CALM

### Slight Rewording

- Criteria
- Thresholds
- Measures

#### Assessment Process

- Assessments are governed by the Water Quality Standards, Env-Wq 1700 & RSA 485-A:8.
  - Designated Uses
  - Criteria Numeric & Narrative
  - Antidegradation
- Consolidated Assessment & Listing Methodology (CALM) defines how we apply the Water Quality Standards to available data.



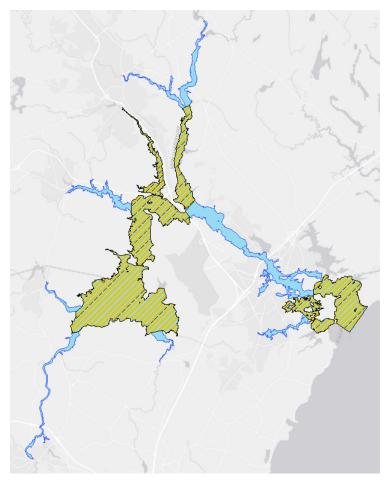
# GBE Withdrawn from 2018 Assessment

#### Which Waters?

- Great Bay
- Bellamy River
- Little Bay
- Upper Piscataqua River
- Portsmouth Harbor
- Little Harbor/Back Channel

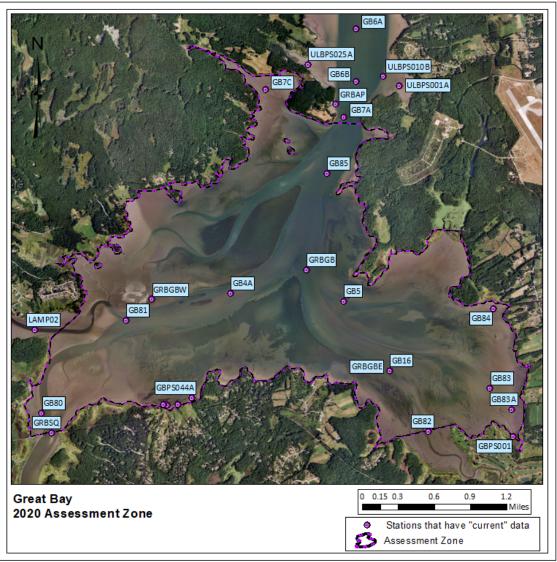
#### **Total Nitrogen History**

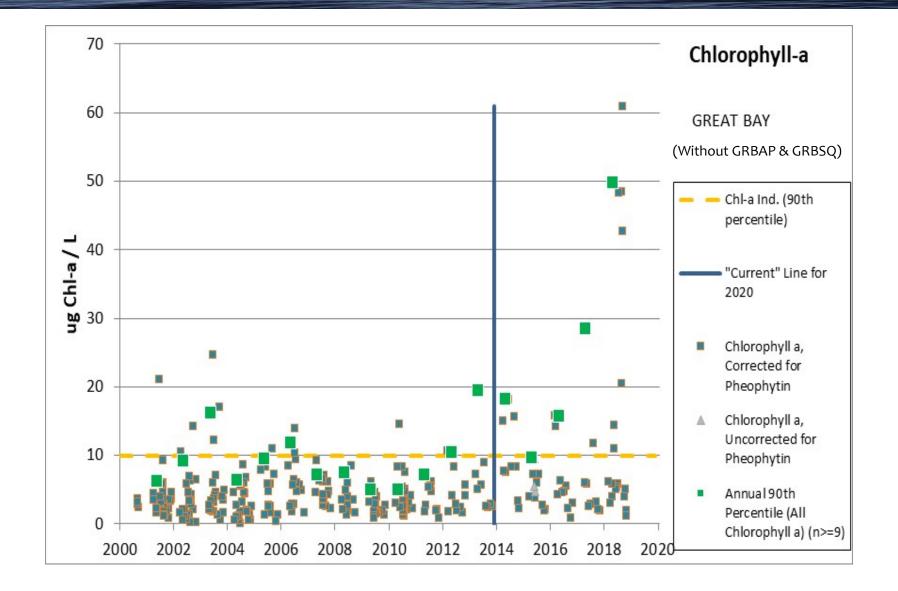
- 2008 First Impaired for TN, EPA Approved
- 2010 TN Impaired, EPA Approved
- 2012 TN Impaired, EPA Approved
- 2014 Removed TN Impairment, EPA Deferred
- 2016 TN Not Impaired, EPA Deferred
- 2018 TN Not Impaired → Retracted from Assessment
- 2020 Now in Draft

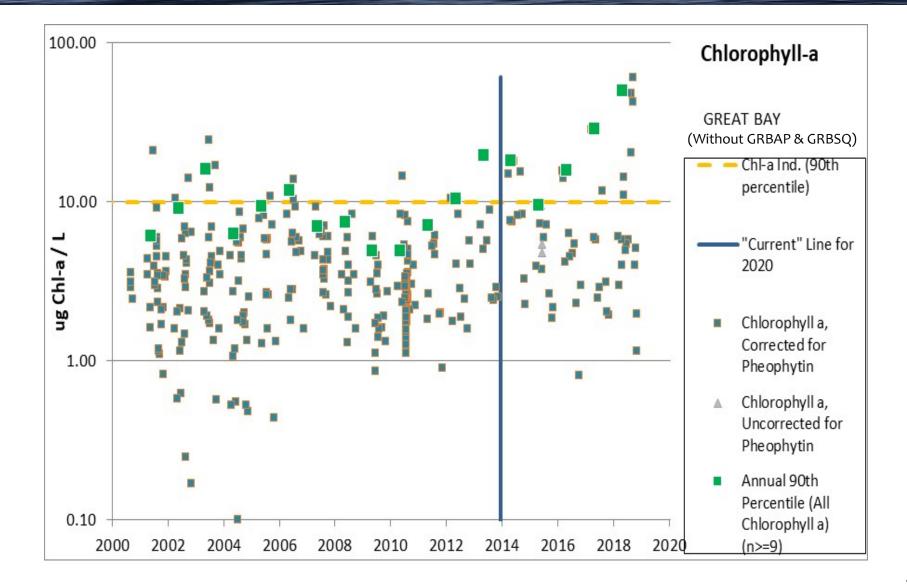


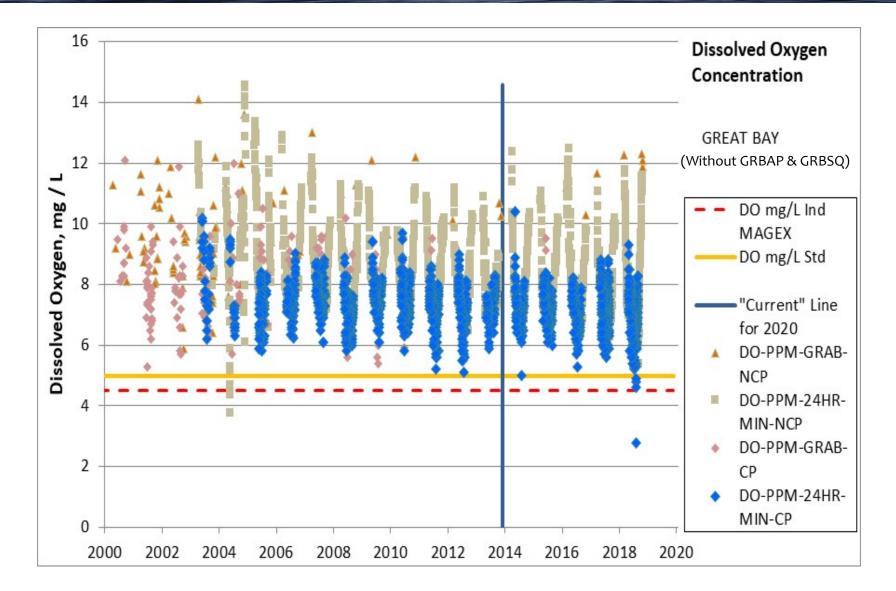
### Great Bay –

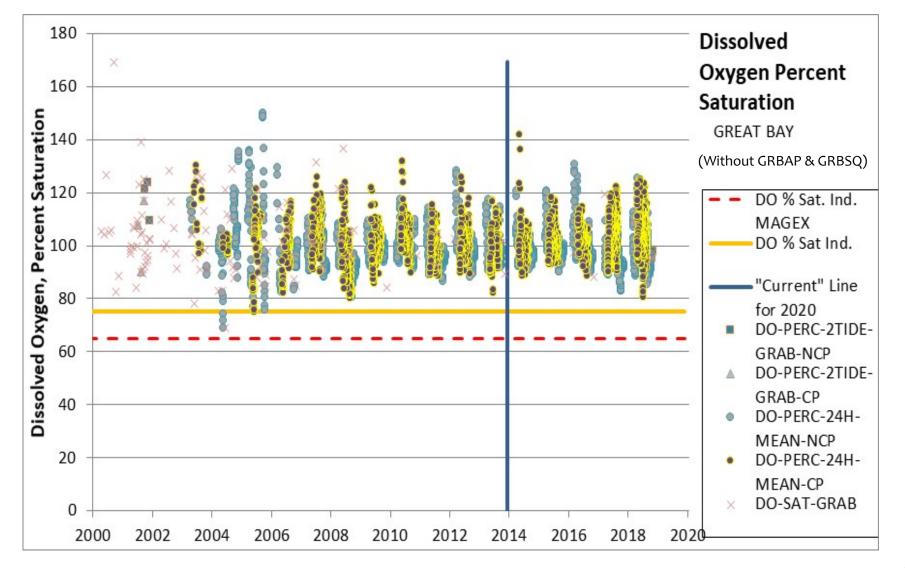
- Added
  - Chlorophyll-a
  - Nitrogen (Total)
- Existing Impairments
  - Eelgrass (2008)
  - Light Attenuation (2008)



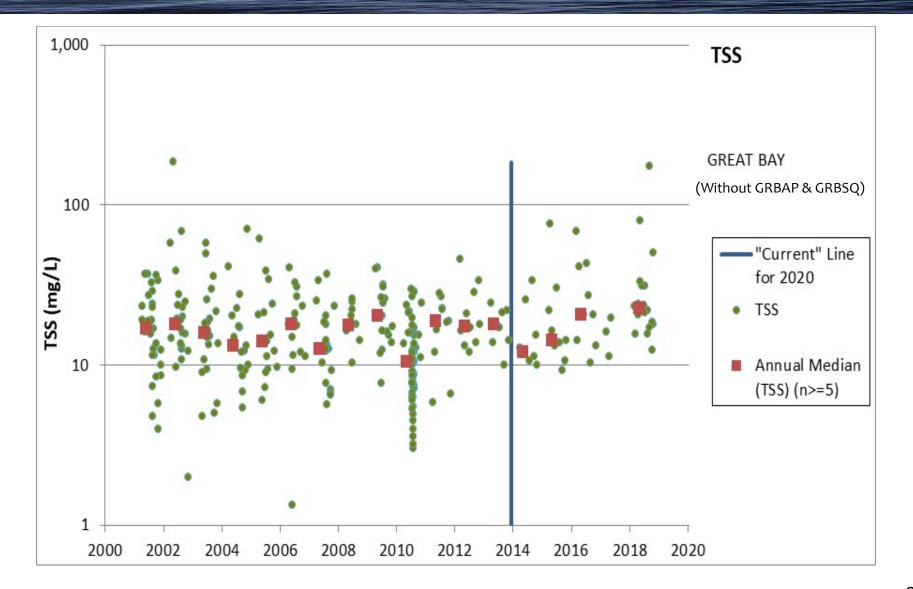




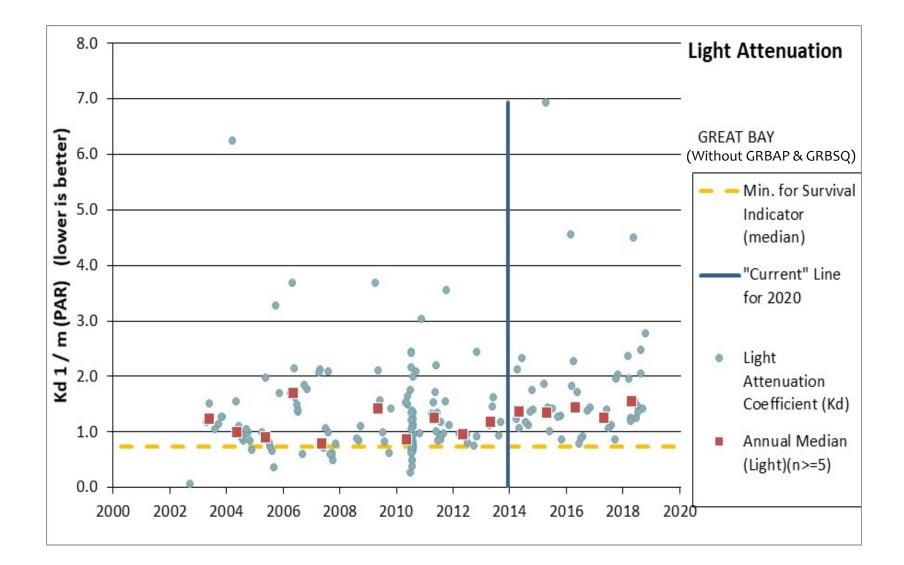


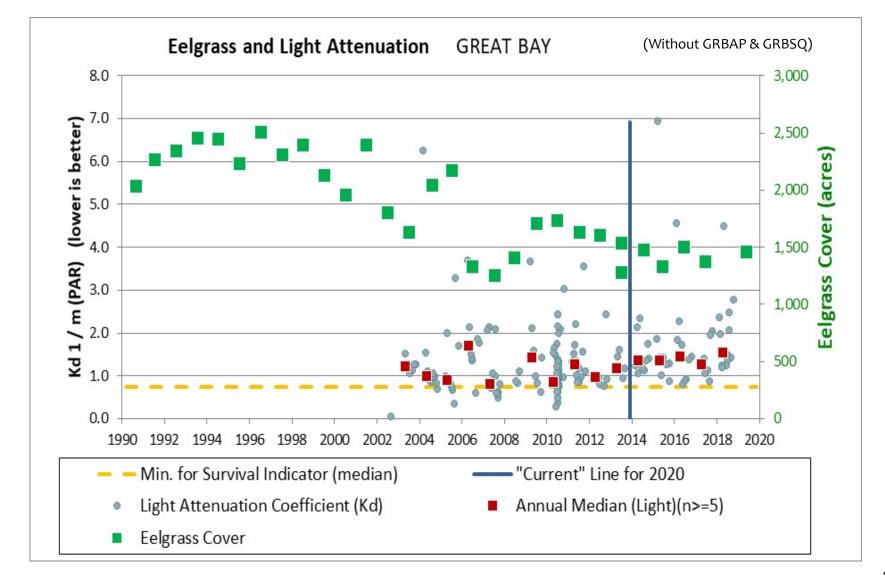




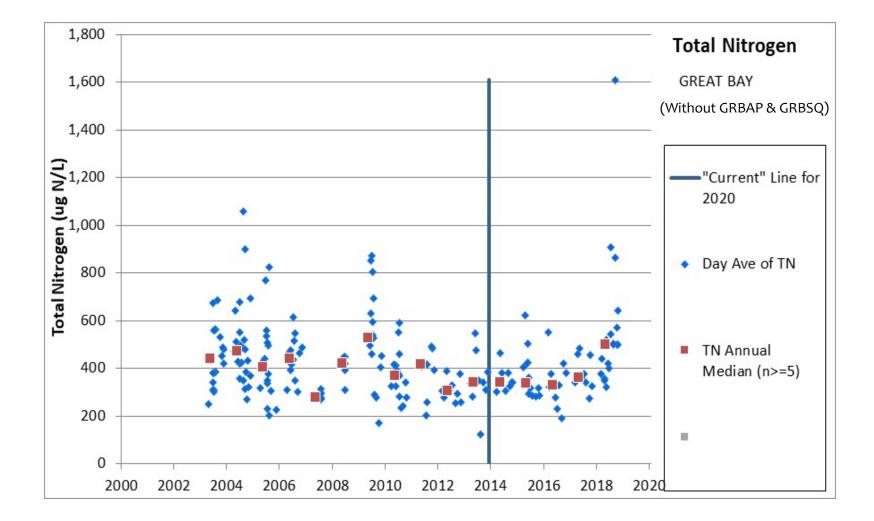








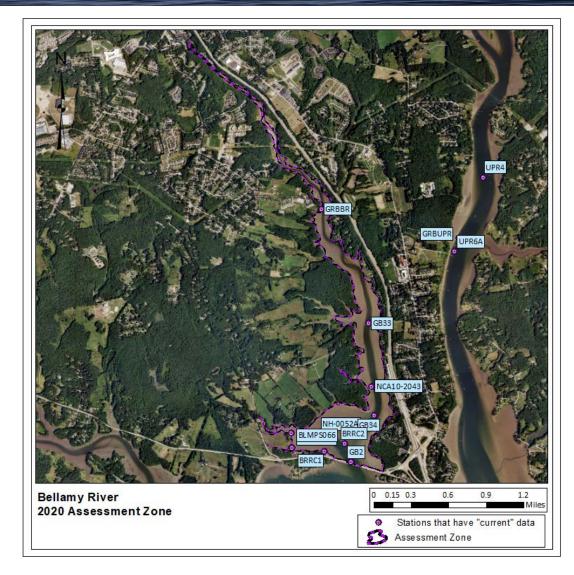




# Bellamy River

#### Bellamy River –

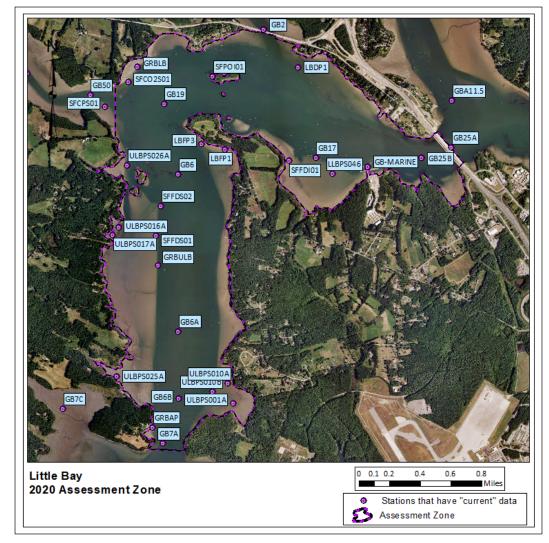
- Added
  - Chlorophyll-a
  - Light Attenuation
  - Nitrogen (Total)
  - DO (mg/L)
- Existing Impairments
  - Eelgrass (2008)



# Little Bay

### Little Bay –

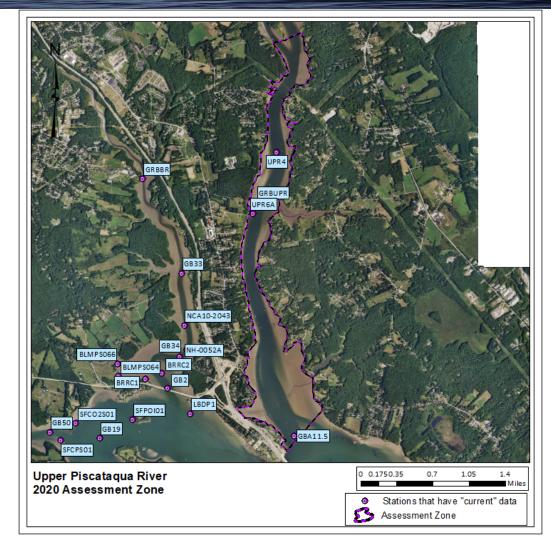
- Added
  - -None-
- Existing Impairments
  - Eelgrass (2008)
  - Light Attenuation (2008)



# Upper Piscataqua River

### Upper Piscataqua River –

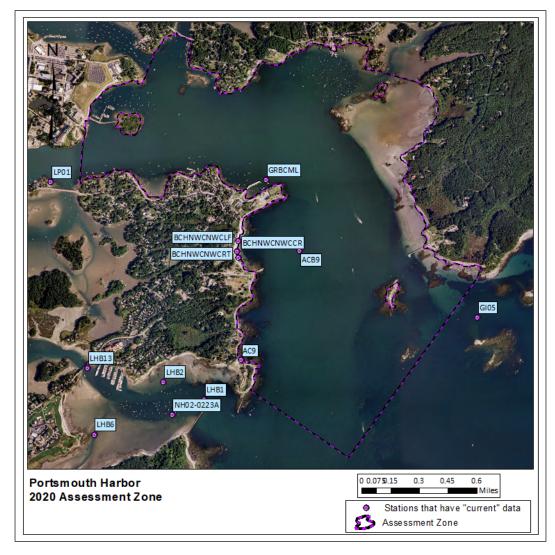
- Added
  - -None-
- Existing Impairments
  - Eelgrass (2008)
  - Light Attenuation (2008)



# Portsmouth Harbor

### Portsmouth Harbor –

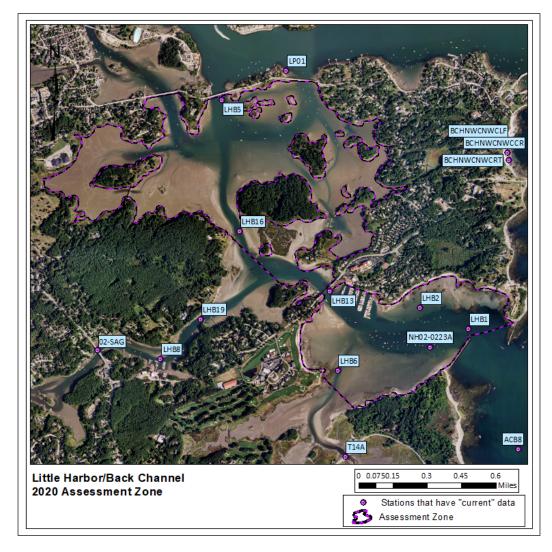
- Added
  - -None-
- Existing Impairments
  - Eelgrass (2008)
  - Light Attenuation (2008)



# Little Harbor / Back Channel

### Little Harbor / Back Channel –

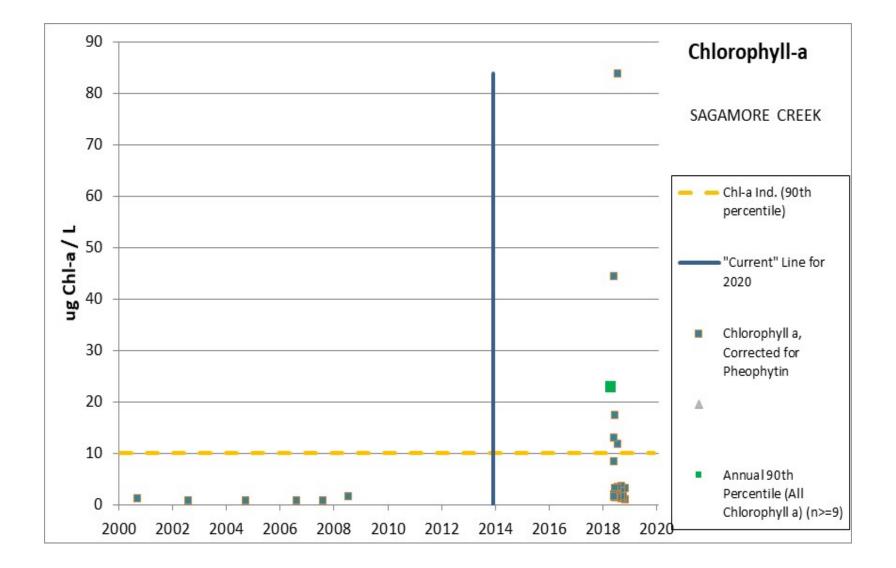
- Added
  - -None-
- Existing Impairments
  - Eelgrass (2008)
  - Light Attenuation (2008)

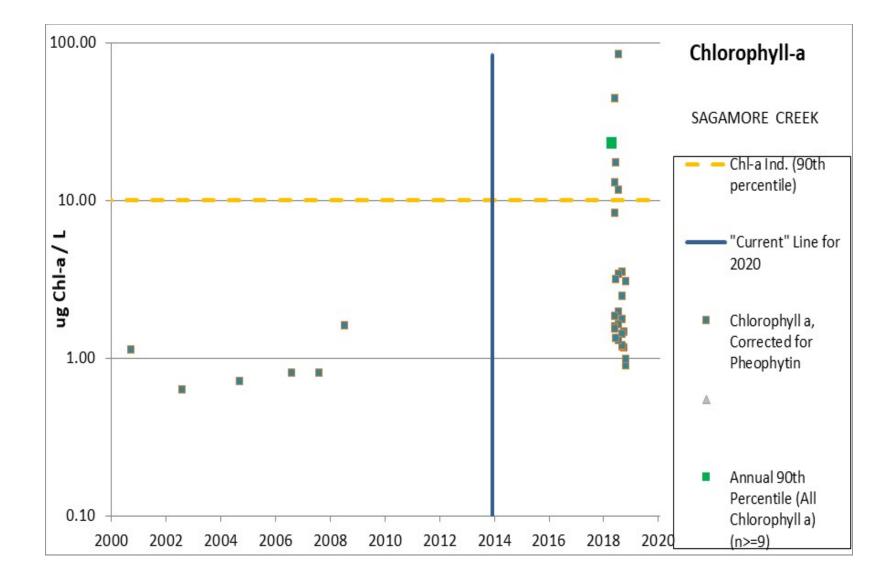


## New GBE Impairment

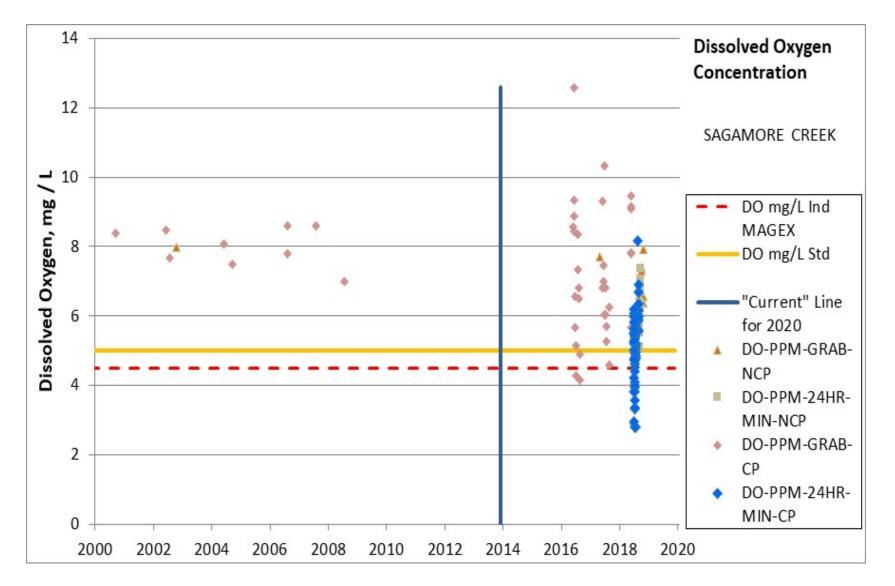
- Added
  - Chlorophyll-a
  - Nitrogen (Total)
- Existing Impairments
  - DO (mg/L) (2018)
  - Eelgrass (2008)

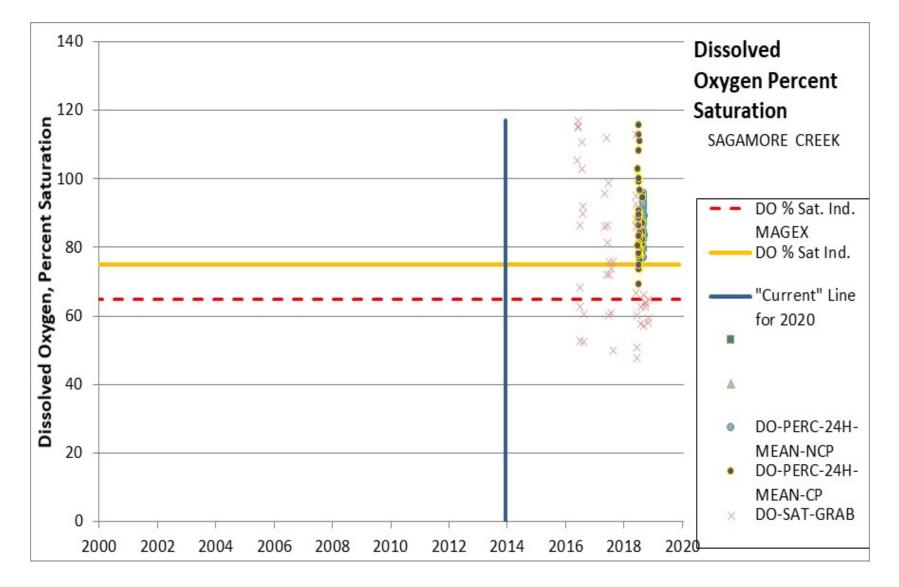


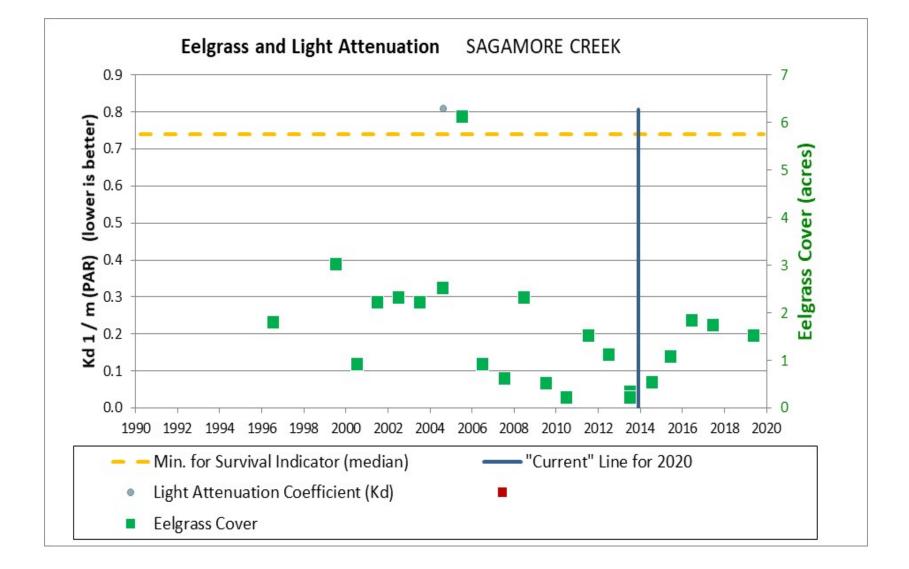


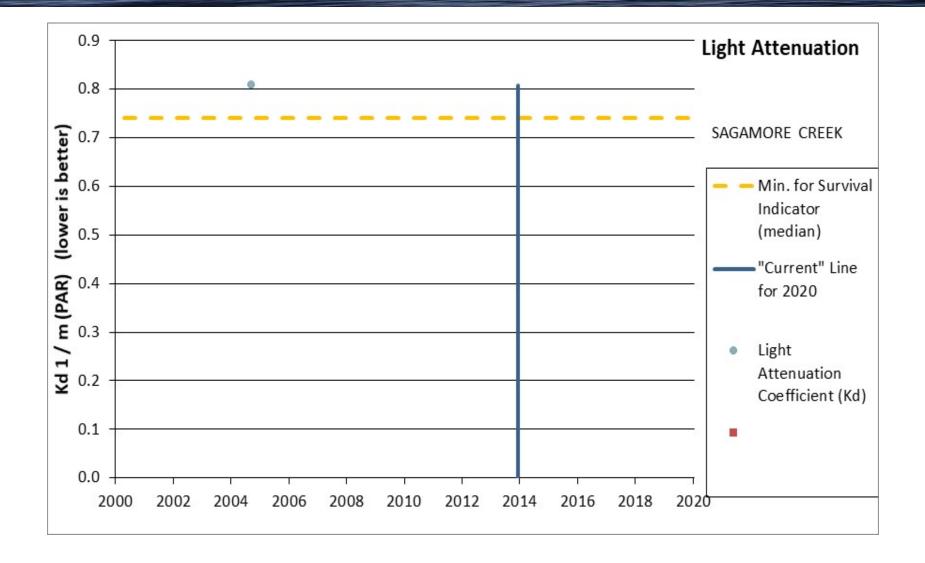


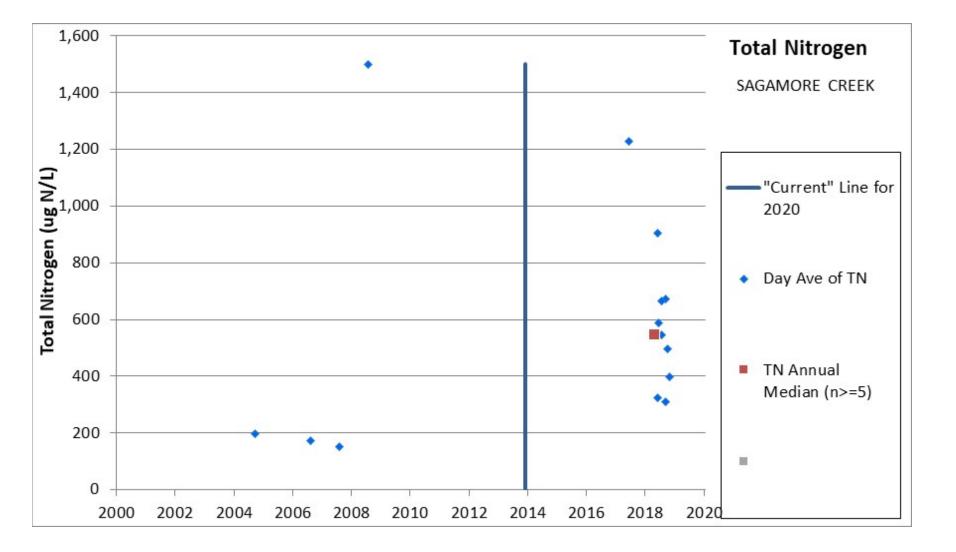












# **GBE Zones with New TN Impairments**

### Great Bay –

- Added
  - Chlorophyll-a
  - Nitrogen (Total)
- Existing Impairments
  - Eelgrass (2008)
  - Light Attenuation (2008)

### Bellamy River –

- Added
  - Chlorophyll-a
  - Light Attenuation
  - Nitrogen (Total)
  - DO (mg/L)
- Existing Impairments
- Eelgrass (2008)

- Added
  - Chlorophyll-a
  - Nitrogen (Total)
- Existing Impairments
  - DO (mg/L) (2018)
  - Eelgrass (2008)

# **GBE Zones without TN Impairments**

### Little Bay –

- Existing Impairments
  - Eelgrass (2008)
  - Light Attenuation (2008)

#### Upper Piscataqua River –

- Existing Impairments
  - Eelgrass (2008)
  - Light Attenuation (2008)

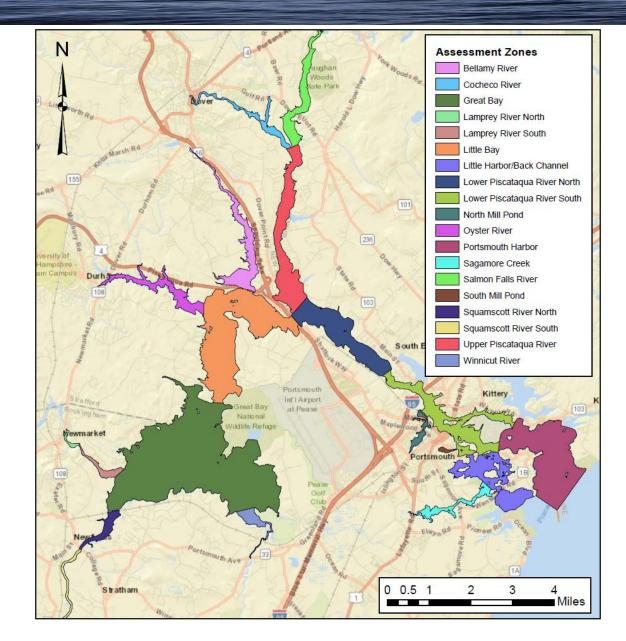
### Portsmouth Harbor –

- Existing Impairments
  - Eelgrass (2008)
  - Light Attenuation (2008)

### Little Harbor Back Channel –

- Existing Impairments
  - Eelgrass (2008)
  - Light Attenuation (2008)

## Discussion





### Matt Wood, NHDES Water Quality Assessment Program Coordinator Matthew.Wood@des.nh.gov

### Ken Edwardson, NHDES Senior Scientist Kenneth.Edwardson@des.nh.gov

http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm

