Message

From: Heather Stoffel [stoffel@uri.edu]
Sent: 5/1/2017 3:18:04 PM
To: Carey, Richard (DEP) [Richard.Carey@massmail.state.ma.us]
CC: Thursby, Glen [Thursby.Glen@epa.gov]; Groff, Kimberly (DEP) [kimberly.groff@state.ma.us]; richard.f.chase@state.ma.us
Subject: Re: DO Criteria

I am happy to send you any data from any of the buoys that have been QA/QCd. Let me know what stations and years you are looking for. In addition, we have daily averages and seasonal averages for most stations. I am happy to share the data we have.
Sincerely,
Heather

On Mon, May 1, 2017 at 10:51 AM, Carey, Richard (DEP) <Richard.Carey@massmail.state.ma.us> wrote:

Glen,

Heather operates a water quality monitoring network in the Narragansett Bay with multiple years of data. Heather also deployed two MassDEP buoys in Mount Hope Bay from September to November, 2016, that recorded continuous DO data. Please see the attached spreadsheet that Heather sent with preliminary DO data from one of the MassDEP buoys in Mount Hope Bay. The preliminary DO data from the Mount Hope Bay buoys have not yet been approved for inclusion in any MassDEP reporting of data or analysis.

Heather may also have been referring to DO data from the Narragansett Bay network in her email. If you would like additional DO data from the monitoring network, please follow up with Heather to get a copy of that data.

Let me know if you have any additional questions!

Thanks,

Richard O. Carey, Ph.D.

Massachusetts Department of Environmental Protection

Division of Watershed Management, Watershed Planning Program

Surface Water Quality Standards Section

Central Regional Office, 8 New Bond Street, Worcester, MA 01606

Richard.Carey@state.ma.us | (508) 767-2894

From: Thursby, Glen [mailto:Thursby.Glen@epa.gov]
Sent: Monday, May 01, 2017 8:17 AM
To: Carey, Richard (DEP)
Subject: RE: DO Criteria

Richard,

Would it be possible for me to get a copy of the DO data used by Heather?

Glen

Glen B. Thursby, Ph.D.

Chief, Watershed Diagnostics Branch

US Environmental Protection Agency

Atlantic Ecology Division, NHEERL, ORD

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Narragansett, RI 02882

Ph: 401-782-3178

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From: Carey, Richard (DEP) [mailto:Richard.Carey@MassMail.State.MA.US]
Sent: Friday, April 28, 2017 3:14 PM
To: Flippin, Jennifer <Jennifer.Flippin@tetratech.com>; Logan, John (FWE) <john.logan@state.ma.us>; Jane Sawyers <Jane.Sawyers@DEM.RI.GOV>; Benjamin Jessup <benjamin.jessup@tetratech.com>; todd.callaghan@state.ma.us; coviatt@uri.edu; stoffelh@hotmail.com; Paul.Stacey@wildlife.nh.gov; Stover, Toby <Stover.Toby@epa.gov>; ptango@chesapeakebay.net; Thursby, Glen <Thursby.Glen@epa.gov>; Voorhees, Jeanne <voorhees.jeanne@epa.gov>; heidi.travers@dem.ri.gov; Dave Secor <secor@cbl.umces.edu>; Colarusso, Phil <colarusso.phil@epa.gov>
Cc: Rebecca.Weidman@state.ma.us; Groff, Kimberly (DEP) <kimberly.groff@state.ma.us>; Murphy, Bob <Bob.Murphy@tetratech.com>; hstewart@normandeau.com; Meehan, Clair <Clair.Meehan@tetratech.com>; drutecki@normandeau.com; DHenry@donahue.umassp.edu
Subject: FW: DO Criteria

Hello,

Heather Stoffel from URI contacted me today and provided some additional comments on DO criteria. Please see Heather's comments below.

Thanks,

Richard O. Carey, Ph.D.

Massachusetts Department of Environmental Protection

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I also had some comments on the emails going around for the TAC group for DO criteria. Please feel free to share these comments with the group:

1. Based on the daily average approach to a criteria: We have seen in our data that daily averages are not representative conditions in areas >3-3.5m deep. Because these area are shallow and light can reach the bottom easily, we see a diel pattern in oxygen (day-night readings can range from 6-0 mg/L). A daily average of these area would make it appear to be better than it actually is. Therefore, if time series information is not available for these areas, then a criteria based on night or early morning condition could be applied to assess the worst possible conditions.

2. Data/assessments: If a duration of time below a certain threshold approach is taken with the state's criteria, then time series data is needed to evaluate or assess an area. It is also beneficial to have an understanding on how the selected criteria will be used in assessments with the different types of monitoring strategies (ie grab/spot sampling, time series, etc). For example, how many spot check readings do you need to list an area as impaired or how long is an area allowed listed as unassessed in these spot check areas before action is needed? If an area is showing signs of a problem through spot checks, but there are no funds for time series monitoring, how can you properly evaluate these areas with the data that is available?

I may not make the next meeting because of the buoy preparation and deployment schedule. Let me know if I can clarify any points or provide any additional information.

Sincerely,

Heather