**Eutrophication Subcommittee Conference Call - November 23, 2011**

**Participants:**

Levi Cliché (CARP)

Chris Deacutis (URI)

Angie Dubois (Maine DEP)

Jim Latimer (US EPA)

Matt Liebman (US EPA)

Christine Tilburg (GOMC - ESIP)

Phil Trowbridge (NH DES)

Paul Stacey (Great Bay NERR)

**Background Information/Reminders**

Jim Latimer spent the first portion of the call reminding subcommittee members of the process the subcommittee has begun for the priority indicators. He mentioned that the loading and dissolved oxygen indicators have been discussed and that the current call is meant to focus on the chlorophyll a and water clarity data. He also mentioned that other data has been brought into the database including nutrient concentrations, salinity and temperature. In addition, Jim stated that the following restrictions have been placed on data. Samples with associated salinity less than 10 psu are excluded. Samples are only included if taken between June 1 and September 30.

The group then discussed the total chlorophyll a samples. Paul Stacey had a question regarding taking samples from any depth. Jim believed that taking the maximum for any depth was agreed upon due to the complexity of the data and the desire not to exclude data. See, for reference, the September 2011 call: "*Jim stated that he is inclined to just use the surface waters as they should be most sensitive to the phytoplankton presence. Phil stated that it is important to use each depth duplicate as its own sample. The group discussed utilizing the maximum value at any depth. There was concern that determining a "surface" depth might exclude maximum values that were lower due to geography or conditions at the specific site.* ***Therefore the group agreed to use the maximum value at any depth for the station. Michele Dionne noted that it is important to discuss the ecological reasons behind these decisions in the fact sheet."***

Paul stated that he does have concerns with looking at the max chlorophyll. Jim agreed to try to do the analysis at the 90th percentile for comparison. ***(Action to be taken: Do 90th percentile calculations).***

**Nutrient Loading Slides (Slides 2-3)**

Chris Deacutis stated that he finds the Boston Harbor loading estimates surprisingly low. Paul commented that in the beginning SPARROW often didn't do a good job estimating point sources. **The group agreed that the text of the fact sheet should reflect this.** Paul also commented that for Great Bay the number of septic systems in the watershed is growing.

*Input from Rich Moore (USGS) e-mail to Latimer and Tilburg 11/23: SPARROW only estimates the loads delivered to the coast and not the large Boston treatment plant that discharges off of the coast into Boston Harbor.*

Jim stated that one thing that does stand out is that the Kennebec loading is quite large. Phil Trowbridge wondered if perhaps the loading data should be shown as mass/area? ***(Action to be taken: Work the data as mass/area values).***

**Chlorophyll a and Water Clarity**

The group then discussed the use of total chlorophyll. (Question from Christine: is total chlorophyll composed of only chlorophyll a?) Matt Liebman wondered if total chlorophyll is the most commonly measured parameter for chlorophyll. Christine thought that it was. There was some discussion on how this information should be captured in the metadata: **how many stations and samples are represented in the figures and how frequently those stations are sampled.** Angie Dubois stated that it would be helpful to have sample size incorporated.

The group also discussed the secchi data as presented in slides 7 - 8. Jim thought that most of the data in the database was secchi (as opposed to turbidity).

**Dataset In General**

Jim pointed out that there is extreme variability in the number of stations that are represented for each estuary. Christine thought that different symbols could be used for different estuary tags in the final figures which would denote frequency of sampling. **Christine also thought that it would be good to mention in the fact sheet that the understanding of some estuaries (ex. Blue Hill) reflects local institutes or groups expending effort with local monitoring.**

Angie mentioned some concerns with the representativeness of the data. For example, one of the sample sites for Wells NERR (Inlet) has fluctuations in dissolved oxygen that occur due to resuspension of sediments due to placement of the sonde close to the bottom. She worried that readers might misinterpret the data. The group agreed that a **textual note** might be important to include for issues such as this.

**Next Steps**

The group agreed to come together in December to finish up discussion of these two indicator datasets. A call in January will discuss figures and the outline for the fact sheet.