**Eutrophication Subcommittee Conference Call - September 6, 2011**

**Participants:**

Chris Deacutis (URI)

Michele Dionne (Wells NERR)

Jim Latimer (US EPA)

Christine Tilburg (GOMC - ESIP)

Phil Trowbridge (NH DES)

Barbara Warren (Salem Sound Coast Watch)

**NCA Data**

The conference call was initiated at Jim Latimer's request due to some questions that he has regarding the grab sample data he is working through. Jim provided a series of slides that were utilized for the discussion. At the beginning of the call Jim went through what the various symbols mean on the whisker plots used in Slides 2-6. He mentioned that a lot of data can be summarized in this type of plot including: median (full hash mark), mean (partitioned hash mark), 25th and 75th percentiles (ends of boxes), and 90th and 10th percentile (whiskers).

The group discussed how the NCA data sampling is conducted. Phil Trowbridge stated that sites are randomly selected at different places within estuaries.

**Specific Questions (last slide):**

**1. Should low salinity stations be excluded?** The group agreed that low salinity samples would imply that the sample is riverine and not estuarine. Phil stated that data will be skewed if a salinity cut-off is not selected. Jim agreed that he would prefer to remove the low salinity samples. The group discussed a potential 18 PSU cut-off for salinity. Chris Deacutis stated that at least for Rhode Island many of the low oxygen events occur at low salinities. He worries about removing this potential data with a 18 PSU threshold. Phil stated that *mesohaline* is defined as 5-18 PSU. *Polyhaline* is defined as 18-30 PSU. Phil stated that it is important to take the average salinity for a station and then determining if the station should be removed (as opposed to only removing data points associated with a specific salinity). **The group agreed to utilize a value of 10 PSUs for the cut-off.**

**2. For the chlorophyll a 90th percentile calculations - should the entire water column be utilized or only the surface waters?** 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.**

**3. For dissolved oxygen should all depths be considered or only surface samples?** Dissolved oxygen is not being handled with the grab samples.

**4. Are different time scales being combined? How?** Jim stated that the NCA data is quite "easy" to compare stations. However, things become difficult when looking at the datasets being delivered by other groups (such as PREP, Salem Sound, etc). His concern is that there might only be one NCA station for a given embayment for a year but 2 or 3 stations sampled over several months for a different dataset. The group agreed that for the fact sheet all of the data will have to be brought together. Chris stated that there is value in only using data for a specific index period (though there is a risk in throwing out a lot of data). Michele suggested looking at the summer season as the index period (June - August) and then see what falls outside the index period.

**The group also discussed the importance of using different symbols within the Indicator Reporting Tool to note if a station is sample 1/year, 2-3 times/year, etc.**

**5. Should data from different sources be combined?** In general the feeling was that for the fact sheet the data from different sources will need to be combined. However, for the **Indicator Reporting Tool it was decided that there is a need to keep the sampling organization information present in the tool (Ex. NCA, PREP, etc.)**

**Next Steps**

Christine and Jim have scheduled a call for the afternoon of 9/7 to discuss further data handling issues. Christine will try to get all the other organization data into a template format for easier handling by Jim once he's back in the laboratory (10/3).