Criteria Assessment Protocols Workgroup

August 9th, 2016

USGS Baltimore Water Science Center

Conference Line: 866-299-3188   code: 267-985-6222
Adobe Connect: http://epawebconferencing.acms.com/star/

Agenda

10:00 AM Welcome (Peter Tango USGS@CBPO, Chair - Criteria Assessment Protocol Workgroup)

10:10AM Review of our charge and overview of our process. (Peter Tango).

We are charged with providing recommendations on any adjustments to the existing CHLA criteria assessment protocols that provide decision rules for measuring water quality standards attainment in the tidal waters of Chesapeake Bay.

- The Chesapeake Bay Program (CBP) has recently charged the CBP Scientific Technical Assessment and Reporting Team (STAR) for reconvening the CAP WG with the short-term task of 1) critically reviewing the existing tidal waters chlorophyll *a* assessment procedures and 2) providing consensus recommendations on any alternatives to consider in revision of the existing procedures by **mid-September 2016**.
- The charge references the urgent need as: "*These recommended procedures would need to be presented to Virginia DEQ's James River Chlorophyll Criteria Re-evaluation Regulatory Advisory Panel (RAP) at their September meeting. Virginia is following regulatory promulgation process which has strict deadlines within a clearly defined overall schedule. In order for Virginia DEQ to make needed decisions by the December timeframe, there is a need for their RAP membership to hear the CAP Workgroup's recommendations in September*."
- We need to develop statements of support on the following issues:
    i. The sampling protocols supporting chla assessments.
    ii. The averaging period for the data collections in the assessment,
    iii. The interpolator operations
    iv. The application of the CFD for supporting attainment decisions
    v. Decision rule(s) on impairment status

10:30AM Alternatives for CHLA Assessment – Presentation by Tish Robertson, VADEQ.

Reference documents attached:

1. Presentation on Alternatives for CHLA Assessment
2. Critical Review of the CHLA Protocol Assessment.

Noon. Lunch. (Bring your own, or, within short walking distance and reasonably quick service is a Subway sandwich shop. There is a café nearby too but they tend to be a little slow when you want to be a little fast for a lunch order. USGS also has a beverage and snack machine.).

12:30-3PM Afternoon. Lightning round. 30 minutes per issue. 5 issues. First thoughts toward consensus statements.

i.   The sampling protocols supporting chla assessments.
ii.   The averaging period for the data collections in the assessment.
iii.   The interpolator operations.
iv.   The application of the CFD for supporting CHLA standards attainment decisions.
v.   Decision rule(s) on impairment status.

3:00 PM Summary

3:13:30 PM Adjourn ;-).

Additional notes: Issues within each topic for consideration during our discussions over the next 6 weeks include but may not be limited to the following:

   i.   **The sampling protocols supporting chla assessments.**
        1.   Long term fixed site only?
        2.   DATAFLOW?
        3.   modified DATAFLOW?
        4.   use of fixed-station ConMon?
        5.   Citizen Monitoring support?
        6.   Surface vs. Depth integrated?
   ii. **The averaging period for the data collections in the assessment**,
        1.   3 year assessments versus some other assessment period?
        2.   Stay with seasonal average, move to monthly average, or instantaneous basis for the assessments?
   iii. **The interpolator operations**
        1.   IDW has default settings.
             a.   Interpolations with only 2 stations in a segment do not appear to average anything but assign one value or the other to an interpolation cell. Problem?
             b.   Alternatively, with DATAFLOW/modified DATAFLOW, there appears to be is a decision-rule to use the 4 closest data points, apparently it is no matter their distribution in space. Is this the kind of weighting that best represents the values for an unmeasured location?
        2.   IDW has an octant option to distribute the search for data points limiting the influence of all data coming from one tangent. Is this a more appropriate option for interpolations?
        3.   Is there another alternative interpolation approach to consider?

iv. The application of the CFD for supporting attainment decisions
1. CFD application pending the sampling protocol.
    a. Pros and cons of CFD with fixed station long term.
    b. Pros and cons of CFD with higher spatial resolution sampling.
    c. Discuss

       Any progress on confidence intervals for the CFD assessment?
       Any option to bias correct for small sample size effects?
       Do we consider any flow-adjusted method of assessment?
       Do we consider the effect of different averaging periods or instantaneous level assessment?

v. Decision rule(s) on impairment status
1. Is there a CFD breakdown point used with seasonal means creating only a 3-sample assessment?
    a. Does a waterway have a status associated with insufficient information if we have to depend on the long term fixed station network for CHLA assessment?
2. CFD has the 10% allowable exceedance
    a. Bioreference curve developments versus the 10% curve for assessment?
3. If we recommend an option other than the CFD, what is the decision-rule for attainment associated with that option?