Subject:2012 NJDEP Draft Integrated Report
Date: Fri, 20 Jul 2012 17:38:41 +0000
From: Barnegat Bay Partnership <bbp@ocean.edu>
To:undisclosed-recipients:;

TO: BARNEGAT BAY PARTNERSHIP SCIENCE AND TECHNICAL ADVISORY COMMITTEE

FROM: MARY JUDGE

The following are BBP comments to the EPA on the New Jersey Integrated Water Report, which Dr. Hales asked me to forward to the STAC.

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We are concerned that the Department is using the Barnegat Bay 2011 Monitoring data to remove impairments from the Integrated List at this stage but appears to be putting off using that same data to add any potential impairments until the new bay-specific methodology is established. Any delistings based on the 2011 data should occur after the new methodology is developed and more information is available to examine if conditions have indeed changed.

The timing of dissolved oxygen (D.O.) sample collection is also a concern. Minimum D.O. levels tend to occur in the early morning hours. Grab samples collected in the late morning to mid-day do not represent minimum D.O. conditions.

Barnegat Bay North has been delisted for D.O. based on new data from a number of grab samples, including three in the BB Monitoring Partnership. It is not clear if the data from the BBP/Monmouth University continuous data loggers was used. Given that the methods document states "where both grab sample and continuous monitoring data are available, the Department will give more weight to the continuous monitoring data," these data should be used to the maximum extent practicable. This is particularly true if the previous 2010 listing was based on continuous monitoring data that occurred within the last five years. Furthermore, it is unclear if the 2008-2010 samples also support the delisting. If the recent data does support delisting, we strongly request that the Department review the longer term dataset to determine if the bay should be listed as "threatened waters" based on the previous recent data that indicated the impairment.

There are a number of quarterly grab samples collected from 2009-2010 in the southern portion of the Bay that fall below the 4 mg/l DO threshold for SE-1 waters. It is not clear why these areas are not on the 303d list FO DO impairments. Is there substantial contravening evidence that suggests that these Assessment Units (AUs) should not be listed for DO impairment?

Do the 2008-2010 data for DO at Jake's Branch also meet the criteria, or was it delisted based only on the new 2011 samples? The 2012 methods document states that the Department will use "the most recent five years of readily available data to characterize

current conditions. Past assessments are considered valid until new data show that conditions have changed." If it did not meet the criteria during the assessment timeframe and there is only data from one year and no other explanations for the change are evident, it should be included on the 303(d) list.

On the Integrated List, Jakes Branch (NJ02040301080070-01) is shown as not supporting Aquatic Life – causes unknown, but it is not included on the 303(d) list or the delisting list. It should be placed on the 303(d) as causes unknown for consistency. Similar occurrences appear elsewhere (e.g. Metedeconk River NJ02040301020010-01 for Lead and Turbidity, NJ02040301020020-01 for Cause Unknown and Turbidity, NJ02040301020050-01 for Cause Unknown, and NJ02040301030010-01 for Lead). Yet, some of these same parameters appear as newly listed for 2012 on the 303(d) list for other assessment units in the same basin (e.g. NJ02040301020050-01 for Lead, NJ02040301030050-01 for Lead and Cause Unknown). Why in some cases are they listed on the 303(d) list and in others they are not?

In the delisting justification document (page 13) AU NJ02040301030010-01 lists stations that do not apply to this assessment unit.

The Toms River Lower (below Rt 166) (NJ02040301080090-01) delistings are confusing. In the reasons for removal they are noted as Category 5, "original basis for listing was incorrect." In the delisting justification document they are discussed with the Category 3 "reasons unspecified", but the text goes on to say results from station 13-TOM-1 can be used to show the AU meets the metals criteria. Station 13-TOM-1 does not show up on any of the tables as being included within the subwatershed. What data indicate that the conditions have changed and what are the reasons for the changes to the extent that they are known?

The following sites were listed on the 2010 303d list but are not on the 2012 303d list or the delisting list:

Barnegat Bay Cntrl (Rt 37- Brngt Inlet) (NJ02040301100030-01)
Barnegat Bay Cntrl (Toms R-Cedar Crk) (NJ02040301100040-01)
Barnegat Bay North (above Rt 37 bridge) (NJ02040301050050-01)

In 2010, these were listed as having TMDL schedules beyond 2012. These AUs were on the Integrated list and were reported as having completed TMDLs. On NJDEP's TMDL page, enterococci TMDLs for recreational uses were not found.1[1] There was a Total Coliform TMDL for Shellfishing for WMA 13 that had been approved in 2006 and the Total Maximum Daily Loads for Fecal Coliform to Address 31 Streams in the Atlantic Water Region approved in 2003. Are these TMDLs also supposed to address the enterococci impairments? Have new TMDLs been completed recently?

We are concerned about the continued pathogen impairments and the effectiveness of the TMDLs (and other TMDLs as well) in making load reductions in a timely manner and at all. Several of the TMDLs that were developed were done so before the MS4 program

1[1] http://www.nj.gov/dep/wms/bear/tmdls.html

was well established, and they do not place significant, or if any, additional regulatory requirements on stormwater plans and permits, or WQMPs, or other means to reduce non-point source loadings. How can the regulatory process be used to ensure reductions are indeed made? Are there time limits that AUs can be on sublist 4? How is sublist 4 prioritized with respect to the 303d list for additional action?

Another concern is in regard to the designation of Manahawkin Bay and Little Egg Harbor Bay as SE1 under the Surface Water Quality Standards (SWQS). While Manahawkin Bay and Little Egg Harbor Bay are named individually on the USGS quadrangle maps, there is no mention of them as separate waterbodies on the SWQS, while Barnegat Bay is listed as "all waters of the Bay." Further, the Integrated Report identifies the bay waters as Barnegat North, central, and south. It is therefore reasonable to assume that the original intent of the C1 listing was to include all portions of the bay under the more protective status. With our current understanding of the hydrological interconnectedness of the bay and the Department's increased efforts, it seems odd to hold different parts of the bay to different water quality standards given (1) the similarity of the designated uses, (2) the people and biota that use the bay, and (3) the federal and state priorities for the waterbody's protection do not differentiate between the segments.

Finally, although the assessment process requires segmenting waters into units for assessment purposes, a comprehensive and an integrated watershed and waters perspective and analyses are valuable and critical for management purposes. The AU impairments need to be examined, analyzed, and responded to collectively to see the big picture and ecosystem interconnections for informed ecosystem based management and decision-making.