UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

AUG 01 2012

Ms. Debra Hammond, Chief
Bureau of Water Quality Standards and Assessment
P.O. Box 420
401 East State Street
Trenton, New Jersey 08625-0420

Dear Ms. Hammond:

The New Jersey Department of Environmental Protection (NJDEP) published its draft 2012 303(d) List of Water Quality Limited Waters, Including Priority Ranking and the Delisting Justification Document for public comment on July 2, 2012. Enclosed are the United States Environmental Protection Agency's comments on the NJDEP draft 2012 303(d) List, as well as comments on the Delisting Justification Document and the data NJDEP provided to support the delistings. As part of our review of New Jersey's 2012 Clean Water Act Section 303(d) submittal via Assessment Database (ADB), please respond to the enclosed request for data and information as soon as possible.

EPA's objectives for regional review are to make sure that the methods provide scientifically correct ways to determine if the state's surface water quality standards are attained; the state has used all data which meet its data requirements; the state has made a correct determination for listing, delisting or not listing any water; and the public had adequate opportunity to participate in 303(d) list development.

NJDEP's submission has significant data gaps, which must be addressed as indicated in the enclosed comments. We believe that the enclosed summarizes the most important items to be addressed. We will evaluate the additional information that you submit in response to this request. As we continue our review, additional items may arise. If you have any questions regarding this request, please do not hesitate to telephone me at 212-637-3779 or Brent Gaylord our Regional 303(d) Coordinator at 212-637-3868.

Sincerely,

Seth Ausubel, Acting Chief
Watershed Management Branch
Clean Water Division

Enc.

USEPA Region 2 Comments on NJDEP Draft 2012 303(d) List of Water Quality Limited Waters

Enclosure 1:

Request for Data and Information

General questions regarding NJDEP's listing decisions:

- Did the Department de-list any waters for phosphorus because the water demonstrated that the narrative nutrient criteria was met?
- Did the Department use best professional judgment to determine that the weight of evidence demonstrated support or non-support of the designated use?
- Did the Department use results obtained through a water quality model or dynamic model to assess use support and/or remove an assessment unit/pollutant combination from the 303(d) list?
- If the grab sample data and the continuous monitoring data were contradictory, did the Department decide to give more weight to the continuous monitoring data?
- When the data set was very large, did the Department use its best professional judgment to determine if the data represented non-support of the designated use?
- Did the Department consider a dataset insufficient due to censored values exceeding 50 percent of the data?
- During an excursion, did the Department determine it was not an exceedance of the Surface Water Quality Standards due to a transient event or below design flow condition?
- Did the Department use data from an adjacent monitoring station to determine de-listing of an impaired adjacent Assessment unit? If so, can you provide the de-listing justification?
- Did the Department determine that there was sufficient information to determine if a water is threatened and the Department listed the water as impaired due to the trend assessments?
- Please provide the data that was received during the data solicitation period and justification for data received that the Department did not use.

Waterbodies that are not proposed for listing with data that may support the listing:

- Please refer to Enclosure 2, Table 1 and Figure 1, which show that Passaic R Lwr (4th Street Br to Second R) NJ 02030103150040-01 and Passaic R Lwr (Nwk Bay to 4th St Brdg) NJ02030103150050-01 should be listed as impaired for Entero and that these segments are not meeting their designated uses for Secondary Contact Recreation. This data was used in support of the pathogen TMDL efforts. Please provide justification for not listing.
- Please list Hackensack R (Ft Lee Rd to Oradell gage) NJ02030103180030-01 on the 303(d) list for Dissolved Oxygen (DO). Please refer to the New Jersey Harbor Dischargers Group Water Quality Report, (on page 14, Figure 19 titled, "% DO samples below standards – Hackensack and Hudson Rivers ")(http://www.nj.gov/pvsc/pdf/2008_NJHDG_WQ_Report.pdf). If NJDEP does not agree with listing this segment, please provide justification for not listing.

TMDL priority waters/2 year TMDL schedule:

For several listing cycles, NJDEP identified a large number of high priority waters on its 2-year schedule for TMDL development. EPA strongly encourages NJDEP to complete these TMDLs and submit them to EPA before the next listing cycle.

NJDEP's De-listing Justification Document:

NJDEP is proposing to de-list tidal waterbodies that were previously listed as impaired for Total Phosphorus. NJDEP is claiming that the numeric criteria for Total Phosphorus does not apply to tidal river segments, only freshwater segments. This is due to the most recent rulemaking in December of 2010 when NJDEP adopted revisions to restrict the application of the numeric phosphorus criterion of 0.1 mg/L at N.J.A.C. 7:9B-1.14(d)4ii(1) to non-tidal streams. However, EPA did not approve this particular revision (along with other numeric nutrient criteria revisions adopted at that time by NJDEP). Thus, until the WQS revisions are approved by EPA, the numeric nutrient criteria for TP of 0.1 mg/L remains applicable to all streams. The following segments cannot be de-listed for Total Phosphorus based on NJDEP's justification that the numeric criteria does not apply for saline waters:

- NJ02030104020030-01 Elizabeth R (below Elizabeth CORP BDY)
- NJ02040301170060-01 Mullica River (Rt 563 to Batsto River)
- NJ02040301170080-01 Mullica River (Lower Bank Rd to Rt 563)
- NJ02030105120170-01 Raritan R Lwr (Lawrence Bk to Mile Run)
- NJ02040202080020-01 Rancocas Creek (Martins Beach to NB/SB)
- NJ02040202120090-01 Newton Creek (LDRV-Kaighn Ave to LT Ck)

Section II. Applicable WQS Attained; According to New Method

Metals Based on NY/NJ Harbor Toxics Modeling

- Please include the below reference to the modeling work that was done, which shows that the assessment units are not exceeding the water quality criteria:
    - http://www.harborestuary.org/pdf/HydroQual-DevelTMDLsHarbor_1995.pdf
    - http://www.harborestuary.org/reports/toxics/NY-NJ-1994-Copper_etal-NY-NJ_Harbor.pdf

- Please provide the specific documentation that shows that Elizabeth River and Berrys Creek are included within the modeling reports. EPA believes these tributaries were not covered under the 1990's or 2000's Metal and toxics work that was done by HydroQual.

Natural Conditions – Arsenic

We understand that natural background levels of arsenic exceed the State's human health criteria, and this is not only an issue in NJ but also around the country. However, EPA's national policy (excerpt below) does not allow human health-based criteria to be modified based on natural conditions.

"For human health uses, where the natural background concentration is documented, this new information should result in, at a minimum, a re-evaluation of the human health use designation. Where the new background information documents that the natural background concentration does not support a human health use previously believed attained, it may be prudent for the State or Tribe to change the human health use to one that natural background concentration will support (e.g., from drinking water supply to drinking water supply only after treatment). (http://water.epa.gov/scitech/swguidance/standards/upload/2009_01_29_criteria_naturalback.pdf)

Thus, these segments cannot be de-listed until the human health use designation is re-evaluated in New Jersey's Water Quality Standards.

Natural Conditions – pH

Please document, as required within Section 3.2 of the NJDEP 2012 Methods Document, that there are no anthropogenic sources or causes for pH in any of the following Assessment units:

- Pohatcong Ck (Brass Castle Ck to Rt 31) (NJ02040105140020-01);
- Pohatcong Ck (Edison Rd-Brass Castle Ck) (NJ02040105140030-01);
- Pohatcong Ck (Merrill Ck to Edison Rd) (NJ02040105140050-01);
- Indian Branch (Scotland Run) (NJ02040206130030-01);
- Mullica River (Rt 563 to Batsto River) (NJ02040301170060-01); and
- Mullica River (Lower Bank Rd to Rt 563) (NJ02040301170080-01).

Natural Conditions – Temperature

Please document, as required within Section 3.2 of the NJDEP 2012 Methods Document, that there are no anthropogenic sources or causes for Temperature in the following Assessment unit:

- Raritan R SB (LongValley br to 74d44m15s) (NJ02030105010050-01).

Section III. WQS Attained; Reason for Recovery Unspecified

Pollutants

- NJ Surface Water Quality Standards apply to Chromium III and $^{+}6$. Please respond with supporting documentation that justifies the de-listing for Total Chromium for the following 2 segments:
    - NJ02030103110020-01 Pompton River- Total Chromium
    - NJ02040301080060-01 Toms R Lwr (Rt 166 to Oak Ridge Pkwy)- Total Chromium

- The following segment/pollutant combinations are not showing as being removed in the electronic 303(d) assessment database (ADB):

    - NJ02040202110040-01 Cooper R (Wallworth gage to Evesham Rd) – Turbidity
    - NJ02040302030040-01 GEHR (Broad Lane road to AC Expressway) – Zinc

- DEP provided only two data samples to support de-listing for Assessment unit NJ02040301170020-01 Hammonton Creek (Columbia Rd to 74d43m) for Copper to EPA , and one sample appears to exceed the SWQS's. Please provide further de-listing justification or return this segment to the 303(d) list.

- Data for NJ02030104060060-01 Pews Creek to Shrewsbury River show two exceedances of the DO standard in 2010. Please provide further de-listing justification or return this segment to the 303(d) list.

- Data for NJ02030104070110-01 Navesink R (Below Rt 35)/LowerShrewsbury show two exceedances of the DO standard in 2009 and 2010. Please provide further de-listing justification or return this segment to the 303(d) list.

- Please provide the data justification for the following 3 de-listings:

    - NJ02040301030010-01 Metedeconk R SB (above I-195 exit 21 rd) for Oxygen, Dissolved
    - NJ02030105080030-01 Raritan R Lwr (Millstone to Rt 206) - Total Suspended Solids
    - NJ02040301170020-01 Hammonton Creek (Columbia Rd to 74d43m) for Zinc

- In order to understand the rationale for the proposed de-listing of Barnegat Bay North (Above Rt 37 Bridge) NJ02040301050050-01 Assessment unit for Dissolved Oxygen, please provide all continuous monitoring data taken by NJDEP and all entities, including the Barnegat Bay Partnership and Monmouth University.

Metals Listings Carried over from 1998

- Pages 15-16 does not show Assessment unit NJ02040302030010-01 being removed from the 303(d) list for Cadmium, Chromium or Lead.

- Assessment unit NJ02040302050130-01 is being proposed for de-listing in the de-listing justification document. However, the proposed Mercury delisting is not removed from the electronic 303(d) list in the assessment database (ADB).

- Assessment units NJ02040302040080-01 and NJ02040302040090-01 are proposed for de-listing in the de-listing justification document. However, the proposed 6 metals are not removed in the electronic 303(d) list in the assessment database (ADB).

Section IV. WQS Attained – Original Listing Incorrect

Dissolved Oxygen (DO)

4) Please provide all DO data at monitoring stations NJHDG-5 and Passaic-8 for the FW2-NT criterion for DO for NJ02030103120090-01Passaic R Lwr (Saddle R to Dundee Dam).

Metals

1)NJDEP report states: "In addition, total chromium attains WQS (see III.D)." Section III.D. does not exist. The correct reference should be section III.B.

7) NJ Surface Water Quality Standards apply to Chromium III and $^{+}6$. Please provide supporting documentation that justifies the de-listing for Total Chromium for NJ02040202100060-01 Pennsauken Ck (below NB.SB) for this segment.

9) Section III.C.1 does not provide justification that NJ02040302050060-01 GEHR (Miry Run to Lake Lenape) is not exceeding the WQS for Arsenic. Please provide the supporting data to justify the de-listing of Arsenic for this segment.

Section VI. Delisted Under TMDLs (Still Impaired)

Pathogens

Please provide supporting documentation which states that the TMDL target of 330 CFu/100ml and Geomean of 70 CFU/100ml for total coliform will assure that the SWQS for SE1 waters (the Entero Geomean of 35/100ml or single max of 104/100ml) will be met.

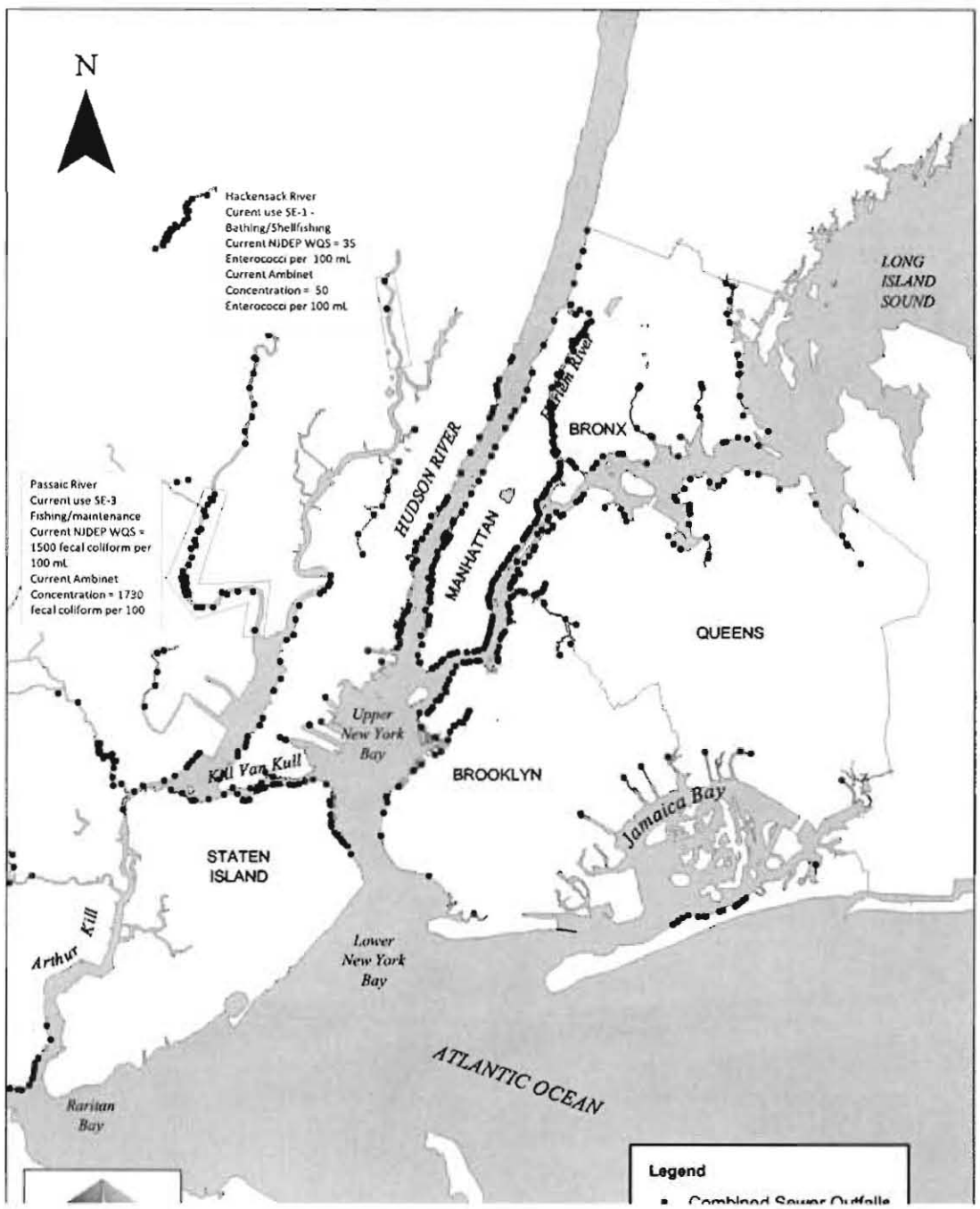
In Assessment unit NJ02040202110060-01 Cooper River (below Rt 130) Escherichia coli is not being removed as a cause in ADB. Please update ADB to reflect the de-listing justification document.

Polychlorinated Biphenyls (PCBs)

With regard to proposed delistings to Category 4a for waters identified as covered under the Delaware Estuary PCB TMDLs (Zones 2-5 and 6), only waters where allocations will result in meeting water quality standards for PCBs can be delisted. EPA, NJDEP, and DRBC have had several discussions regarding which waters are covered by the TMDLs, and it has become clear that many of these waters extend beyond the scope of the PCB TMDLs. NJDEP should prepare a TMDL amendment identifying the waters that are covered by the TMDLs and provide the justification that the allocations will result in meeting water quality standards in these waters. The amendment should be prepared in consultation with EPA and Delaware River Basin Commission. NJDEP must provide public notice on the amendment, respond to public comments and then submit it to EPA for review and approval. The public notice can occur in conjunction with the 303(d) list public notice.

Enclosure 2:

COMPLIANCE WITH BEACH ACT SEASONAL GEO. MEAN AND CURRENT PATHOGEN CRITERIA

WATERBODY	NY & NJ BEACH ACT		CURRENT PATHOGEN CRITERIA							
	# Entero. per 100 mL Seasonal Geo Mean 3 yr. Int.	Attains 35 Entero. per 100 mL Seasonal Geo Mean	# Fecal Coliform Max 30 day Geo Mean 3 yr. Int.		NY Class	NY Standard	Attains NY Std.	NJ Class	NJ Standard	Attains NJ Std.
			New York	New Jersey						
EAST RIVER	9	YES	203		I	2000	YES	N/A		
HUDSON RIVER - LOWER	6	YES	107		I	2000	YES	SE2	770	YES
HUDSON RIVER - UPPER	4	YES	11		SB	200	YES	SE1	35	YES
HARLEM RIVER	9	YES	197		I	2000	YES	N/A		
UPPER BAY	7	YES	136		I	2000	YES	SE2	770	YES
LOWER BAY	3	YES	51		SB	200	YES	N/A		
Kill Van Kull	10	YES	272		SD	NONE	n/a	SE3	1500	YES
Arthur Kill - Lower	10	YES	233		I	2000	YES	SE2	770	YES
Arthur Kill - Upper	17	YES	565		SD	NONE	n/a	SE3	1500	YES
Aurther Kill	20	YES	528		SD	NONE	n/a	SE3	1500	YES
Passaic River - Lower	**78**	**NO**		**1730**	N/A			**SE3**	**1500**	**NO**
Passaic River - Upper	**58**	**NO**		557				SE2	770	YES
Hackensack River	**50**	**NO**		n/a	N/A			**SE1**	**35**	**NO**
Newark Bay	21	YES		747	N/A			SE3	1500	YES
Raritan River	21	YES	91	n/a	SB	200	YES	SE1	35	YES
Raritan Bay	9	YES		n/a	N/A			SE1	35	YES

Sections of the Passaic and Hackensack Rivers That Exceed Current Water Quality Standards. The dots are CSO outfalls