

Summary of the May 18, 2004 Nutrient Work Group Meeting

On May 18, 2004, the Nutrient Work Group (NWG) met at the EPA NYC offices. The purpose of the meeting was to review the System-wide Eutrophication Model (SWEM) based response matrix for the Long Island Sound (LIS) and discuss future SWEM component and simulation runs for the LIS and NY/NJ Harbor.

HydroQual presented the LIS response matrix. The presentation covered the development of the matrix, the input screens for the matrix, the trading ratio results for response region two and plots of the management zone "par values" (DO improvement/load eliminated) for all the response zones.

The following action items were recorded by Mark Tedesco.

- 1) HydroQual will prepare a map of I/J coordinates to identify the response region cells in the unit response matrix. The map and matrix spreadsheet will be provided to Mark Tedesco for distribution to the work group.
- 2) HydroQual will compare the unit response of DO to changes in TN from April to August (as was done for LIS 3.0) versus year round loadings. The result of this analysis will be forwarded along with the matrix to Mark Tedesco for distribution.
- 3) HydroQual will perform 10 component runs identified by the work group: 6 NYC East River STPs, the remainder of the NY PS in the LIS domain, CT PS, LIS coastal runoff and CSOs, LIS Tributaries. Each will be run for nitrogen and carbon.
- 4) HydroQual will perform a scenario run to calculate the nitrogen and carbon flux through the East River at the Battery, the Harlem River, and the Race.
- 5) Tedesco will identify the feasibility and timeline for USGS to employ SPARROW to support estimation of pastoral loads. USGS would review literature values for pastoral forested export, apply to SPARROW, and provide estimates of N, P, C as inputs for SWEM. The estimates would be reviewed by the work group for application to other areas of the SWEM domain as appropriate.
- 6) The work group discussed running the LIS TMDL, LOT, and future air deposition with CAA implementation scenarios. There was a question on whether the LIS TMDL scenario should be run with the LIS 3.0 loadings or updated to reflect changes in predicted carbon loadings. The run will not be performed until the question is resolved. For the LOT run, we will need to identify whether methanol addition would increase carbon loadings.
- 7) HydroQual will present the results of the component runs and the flux scenario at the August 18 SWNWG meeting. The LISS will also report on application of the matrix and development of pastoral loadings.

Subsequent to the meeting problems with the matrix were found that required more investigation and work on HydroQual's part. Therefore the deliverables mentioned above have been delayed and will hopefully be distributed at the August 18th meeting.

Discussion of HEP work was deferred to a meeting that was scheduled for June 3, 2004. However, the work group did request two simulations that were discussed at previous meetings. The simulations were the elimination of all point source and CSO sources of carbon and nitrogen. Subsequent to the meeting and at the request of EPA these simulations were put on hold. EPA will be submitting an alternative assessment approach.

Attendees:

Marzooq Al-Ebus	NJDEP
Mick DeGraeve	GLEC
Jim Fitzpatrick	HydroQual
John St. John	HydroQual
Robin Miller	HydroQual
Brian J Mitchell	IEC
Bob Nyman	USEPA-HEP
Kevin O'Brien	Hazen & Sawyer
Philip O'Brien	NYSDEC
Jane Rebhuhn	Great Neck WPCD
Mathew Schoen	USEPA
Paul Stacy	CTDEP
Mark Tedesco	EPA-LIS
Anthony Tseng	USEPA
Anne Witt	NJDEP