

Summary of the December 17, 2002 Nutrient Work Group Meeting

On December 17, 2002, the Nutrient Work Group (NWG) met at EPA's NYC office. The purpose of the meeting was to review the results a 24-month SWEM simulation of the baseline conditions and choose a simulation period for future SWEM simulations.

HydroQual presented regional probability distributions of the simulated minimum daily average dissolved oxygen values for each of the summer months (June- September) for both 1988 and 1989. The twelve regions displayed were the following:

Shared Waters	Arthur Kill and Kill Van Kull Raritan Bay Hudson River (below Piermont) Upper NY Bay
New Jersey Waters	Hackensack River Passaic River Newark Bay Raritan River
New York Waters	Lower NY Bay Lower East River Upper East River Western Long Island Sound

Duration data was also presented for the critical model cell (the cell exhibiting the lowest DO concentrations) in each of the regions. A matrix showed the number of days the DO values, for these cells, were below a range of DO concentrations (0.5 to 6 mg/l at .5 intervals).

HydroQual also presented a series of "frequency maps" for each year (1988 and 1989). These maps showed the percentage of the summer (June through September) that a given criterion was not met. The information was presented using a color scale with 10 color intervals and white for areas where the criterion was never violated. The criteria plotted are the following:

24-hour average DO of 4.8 mg/l
24-hour average DO of 2.3 mg/l
Instantaneous DO of 5.0 mg/l
Instantaneous DO of 4.0 mg/l
Instantaneous DO of 3.0 mg/l

The information was very interesting but not conducive to choosing a critical 12 month period from the 24 month simulation. The critical summer changed not only from region to region but

also from month to month in some regions.

After viewing the data the NWG concurred with HydroQual's recommendation that a 24-month period be used for all the simulations. 24-month simulations will provide the critical conditions for all areas of the Harbor. If a 12-month period is chosen, the predictions will not be critical in all the areas of the Harbor and information will be sacrificed. There will be an increased cost associated with the increased simulation period but it will not be a doubling of the cost.

Investigating and using the 24-month simulation period and the additional simulations requested by the Policy Committee has changed HydroQual's scope of work. The NWG has asked HydroQual for revised costs related to these changes. After looking for cost sharing with the Long Island Sound Study (LISS), the NWG will use the revised costs for the basis of its fund request from the HEP FFY 03-04 budget.

The NWG gave HydroQual the go ahead on three additional model simulations; a carbon vs. nitrogen simulation, a limit of technology simulation and the 2009 loading simulation. Data on the New Jersey dischargers is still needed for the 2009 simulation.

The NWG has scheduled two meetings Tuesday February 4, 2003 and March 28, 2003. The February 4th meeting will be used to discuss various topics; cost sharing, FFY 03-04 budget request, LISS simulations and post simulation processing of the data. The March meeting will be used to review the out puts of the additional three simulations mentioned above.

Attendees:

Mick DeGraeve	GLEC/NJHDG
Alan Fuchs	NYSDEC
Veronica Hurst	PVSC
Robin Landeck Miller	HydroQual
Brian Mitchell	IEC
Bob Nyman	USEPA
Philip O'Brien	NYSDEC
Morton Orentlicher	CAC
Dave Rosenblatt	NJDEP
Paul Stacey	CTDEP
John St. John	HydroQual
Mark Tedesco	EPA-LISO
Antony Tseng	USEPA
Chris Villari	NYCDEP
Naj Yao	NYCDEP