

**Water Quality Trading in the Non-Tidal Passaic River Watershed**  
**Update for Project Partners**  
**November 2006**

The project team has transitioned from the stage of data collection and compilation, and moved onto the stage of applying our findings towards designing a viable trading framework that addresses all the watershed-specific issues of the Non-Tidal Passaic River Basin. We have formulated two options for a trading framework, and are in the process of presenting these options to key stakeholders to solicit feedback. Our goal is to have the trading framework design as completed as possible by the time the TMDL is published. This will allow immediate implementation of the TMDL via the trading project.

Milestone updates

1. Completed literature reviews on: phosphorus removal technologies; feasibility analysis of trading between WWTPs and MS4s in the watershed; phosphorus TMDLs in other water quality trading programs; and opportunities for nonpoint source trades to reduce fecal coliform loads which would provide ancillary benefits to phosphorus reduction. A draft literature review on the economic aspects of water quality trading has been completed. A literature review of the legal and policy aspects of water quality trading is in progress.
2. Completed survey of the phosphorus removal processes used by all 24 major WWTPs in the watershed.
3. Developed a matrix of trading ratios based on planning level attenuation coefficients received from the water quality modeling team. The development of trading ratios is critical to protecting water quality and understanding cost impacts.
4. The Cornell University economics team has completed a preliminary economic trading model based on the Phase I TMDL allocations and aforementioned trading ratios. A key finding is that the market will more likely take the form of multi-year bilateral trades rather than an annual exchange of large volume credits. A phased in TMDL cap could increase economic opportunities and cost savings, because the phase-in period acknowledges that various dischargers are at different stages of their respective investment cycles, thereby providing the necessary flexibility to support coordinated, multi-year bilateral trades.
5. Continued to refine the designs for two alternative trading frameworks. When a TMDL is completed, one of the frameworks will be selected.
6. Presented at EPA / USDA 2<sup>nd</sup> National Water Quality Trading Conference (May 2006), New Jersey Water Environment Association 91<sup>st</sup> Annual Conference (May 2006), and Second Passaic River Symposium (October 2006).

7. Once the TMDL allocations are established, we can proceed to simulate various trading scenarios based on the frameworks and trading ratios we have developed. Water quality impacts of each scenario will be evaluated, along with economic impacts based on updated cost data. The optimal permitting system to support trading will also be recommended.

<p>More information is available at <a href="http://www.water.rutgers.edu/Projects/trading/WQTrading.htm">http://www.water.rutgers.edu/Projects/trading/WQTrading.htm</a></p>
---