

EPA WATER QUALITY TRADING NEWS

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CONNECTICUT'S LONG ISLAND SOUND TRADING PROGRAM WINS FIRST EPA BLUE RIBBON AWARD

Connecticut Department of Environmental Protection's Nitrogen Credit Exchange Program won EPA's first Blue Ribbon Water Quality Trading Award. The program allows 79 publicly-owned treatment works to trade pounds of nitrogen in order to cost-effectively reduce hypoxia in the western end of the Long Island Sound.

"Connecticut has done a remarkable job working to reduce nitrogen to Long Island Sound," said Robert Varney, regional administrator of EPA's New England office. "Their hard work will result in a healthier ecosystem in the Sound for millions of residents to enjoy."

The Conn. program was selected over other finalists from across the country. The EPA award highlights programs which have achieved environmental and economic benefits and also showcases programs that align well with EPA's Water Quality Trading Policy.

"EPA applauds Connecticut's national leadership on water quality trading, which is the wave of the future. Our blue ribbon winner is setting a shining example for reducing pollution, restoring ecosystems, and saving money," remarked Benjamin H. Grumbles, EPA's

Assistant Administrator for Water.

In 2001, EPA along with both the State of Conn. and State of New York, set aggressive new targets to significantly reduce the amount of nitrogen that can be discharged to Long Island Sound without impairing the health of the Sound. Through 2006, the point source nitrogen load to the Sound (from 106 sewage treatment plants in N.Y. and Conn.) was reduced by nearly 25 percent.

One of Connecticut's management strategies to reduce nitrogen loading was to develop an innovative nitrogen-trading program. Through the Nitrogen Credit Exchange, established in 2002, the Conn. program has a goal of reducing nitrogen discharges by 58.5 percent by 2014.

"We have made great strides in reducing nitrogen loading to Long Island Sound through our innovative Nitrogen Credit Trading Program" said DEP Commissioner Gina McCarthy. "Municipal participation is a key to successful trading, and their cooperation and interest has been exceptional. We appreciate EPA's recognition of this proactive program and look forward to continuing this incredibly important work with our federal partners."

Trading provides significant cost savings compared to the state issuing a permit to each facility individually. Trading also provides municipalities with flexibility to make decisions about whether to upgrade and market any credits they earn or to buy credits to meet their permit limit. Nitrogen trading has accelerated the State's schedule to meet the nitrogen targets.

The use of geographically-based trading ratios provides an economic incentive, encouraging action toward the most cost effective and environmentally beneficial projects.

The third year of the Nitrogen Credit Exchange resulted in 28 sewage treatment plants discharging below their assigned permit limits, enabling them to sell nitrogen credits valued at \$1.31 million to sewage treatment plants in the State that are not upgrading or otherwise require purchasing credits.



PHOTO: Lynne Hamblan

EPA Region 1 Administrator Robert Varney presents the Blue Ribbon Award to CTDEP Commissioner Gina McCarthy. Representatives from CTDEP, the State Treasurer's office and the Nitrogen Credit Trading Advisory Board stand by.

DEVELOPING STATE TRADING PROGRAM UPDATES

WEST VIRGINIA: Through a grant from NRCS, West Virginia is working with the Water Research Institute to develop a framework for a nutrient trading program. They're moving down a path to develop a program for point and non-point source trading. The Water Research Institute website (<http://www.wri.nrcce.wvu.edu/>) tracks their progress and meeting minutes.

WV also recently received a Chesapeake Bay Targeted Watershed Grant to develop a nutrient and sediment trading framework for Rockymarsh Run.

MARYLAND: Maryland is currently developing a trading policy.

MINNESOTA: Minnesota is on schedule to complete drafting water quality trade rules by June 2008. However, the rule making adoption process may take up to an additional year. The statewide rules will pertain to water quality trading between point sources, between point and non-point sources and potentially between non-point sources. Minnesota is working with a water quality trading stakeholder group composed of government entities, academia, agriculture, construction, environmental advocates, industry, construction and wastewater treatment operators. The Water Quality Trading Advisory Group has met five times so far and has been making good progress. Meeting summaries and materials are available on the MPCA website at the following URL: <http://www.pca.state.mn.us/water/wqtrading/index.html>

FLORIDA: Last year, the Florida Department of Environmental Protection completed a report entitled "Water Quality Credit Trading, A Report to the Governor and Legislature." The report provided recommendations for the statutory and rule changes necessary to promote an effective trading program.

The Department did get initial approval from the Governor's office to include a trading bill in the 2008 legislative session, pending review of the draft. The Department of Environmental Protection also plans to include trading provisions in its Basin Management Action Plan implementing the nutrient TMDL for the Lower St. Johns River.



NRCS/EPA Nitrogen Trading Tool: Partnering with USDA/NRCS to Increase Farmer Participation in Water Quality Trading

The USDA has begun investigating the use of market driven mechanisms to give farmers economic incentives to adopt more environmentally friendly practices. One of the market-based initiatives that USDA is interested in is Water Quality Trading (WQT). In October 2006, USDA-NRCS and EPA Office of Water signed a Partnership Agreement to collaborate on encouraging farmers to participate in WQT programs.

One of the barriers, identified by both USDA and EPA, to farmer participation in WQT programs is the inability of farmers to readily estimate changes in Nitrogen (N) load, and therefore potential returns from selling credits. This is critical information for farmers to know when considering business and land use decisions. The NRCS has developed a prototype online technology tool to help farmers determine how many potential nitrogen (N) credits they can generate on their farming operation. The Nitrogen Trading Tool (NTT) allows farmers to enter geographic, agronomic and land use information to estimate baseline N loadings, and then enter land use changes and/or BMP information to calculate N load reductions.

Field level changes in N loading are an important first step in determining the amount of credits that could be generated. However, depending on the site-specific situations, two other factors: overland attenuation between the edge of field and edge of stream, and in-stream attenuation need to be taken into account as well. The NRCS is committed to "getting the science right" and has expressed a further interest in working with EPA to estimate these two additional factors. This year EPA is working with NRCS to further develop the NTT prototype so that its load estimates take into account attenuation of nitrogen from edge of field to edge of stream and in-stream attenuation. EPA collaboration with NRCS on this tool provides EPA with an important opportunity to:

- ✦ ensure the credit calculation method is based on sound science and is acceptable under EPA's National Water Quality Trading Policy;
- ✦ influence the design of the tool so that it is more likely to be used by States implementing WQT programs; and,
- ✦ explore other potential uses for the tool, such as TMDL assessments and implementation parameters.

As part of the Partnership Agreement, the two agencies have made a commitment to work together on a WQT pilot project within the Chesapeake Bay watershed. Cecil County, Maryland is anticipating a sizable increase in population as a result of the Base Realignment and Closure (BRAC) being undertaken by the military. Therefore, the wastewater treatment plant (WWTP) serving the county will need to discharge significantly higher volumes of wastewater. The state of Maryland is considering a water quality trading program to offset the increase in discharges from the WWTP and has recently been selected by NRCS to receive a Conservation Innovation Grant (CIG) to explore this possibility. Cecil County, located where the Susquehanna River empties into the Chesapeake Bay, is in close proximity to both Pennsylvania and Delaware. This creates a unique opportunity for water quality trading with upstream farmers across State boundaries, which has not been attempted before. Both USDA and EPA believe the pilot project will provide an excellent opportunity to demonstrate the NTT and receive feedback from the State of Maryland and members of the farming community within the watershed.

★ For more information, please contact Shaun McKinney at (503) 273-2413 or Shaun.Mckinney@por.usda.gov

ANNOUNCEMENTS

- ✦ **NEW GUIDANCE:** The Water Quality Trading Toolkit for Permit Writers was issued in August 2007. The Toolkit is EPA's first how-to manual on designing and implementing trading programs. It is available at the following address: <http://www.epa.gov/waterqualitytrading/WQTToolkit.html>
- ✦ **ONSITES:** EPA will be adding an appendix to the Water Quality Trading Toolkit for Permit Writers on trading with onsite systems. The appendix includes real and hypothetical examples and is expected to be released in early 2008.
- ✦ **NEW REGION 4 WEBSITE:** Region 4 just launched a new website for water quality trading in their region. The website can be accessed at the following address: <http://www.epa.gov/region4/water/WQtrading/index.html>
- ✦ **MAPS:** EPA's new water quality trading maps are now live on the web! EPA has created two trading maps: the first map shows trading programs that have traded at least once as well as state level trading programs. The second map shows trading programs that received EPA funding. Each map is clickable - just click on the state in which you are interested and it will take you to more information on that state's trading programs. The maps are located on EPA's Water Quality Trading website at: <http://www.epa.gov/waterqualitytrading/tradingmap.html>

TRADING TRAININGS ACROSS THE U.S.

EPA has held 3 one-day water quality trading trainings sessions in 2007. The Bellevue, WA session on June 24 was a pre-conference workshop for WEF's TMDL 2007 conference. The Kansas City, KS session on October 23 was held at EPA's Region 7 office and featured guest speaker, John Leatherman from Kansas State University. Dr. Leatherman discussed KSU's work on the feasibility of trading in Kansas funded by a grant from EPA R7. The Washington, DC session on December 5 was held at USDA Headquarters. The 3 sessions were attended by over 100 people in total. The trainings covered the basics of trading as well as cutting edge topics including wet weather trading with MS4s.

★ If you are interested in holding a Water Quality Trading Training Session in your area, please contact Ginny Kibler at (202)564-0596 or kibler.virginia@epa.gov