**Louisiana Department of Environmental Quality Office of Environmental Assessment Water Quality Trading** http://deq.louisiana.gov/page/water-quality-trading

October 9, 2018

# **Water Quality Trading**

Water quality trading (WQT) is an innovative, market-based, cost-effective mechanism to help achieve local water quality improvements (EPA, 2003). In WQT, sources with high costs of reducing pollution can purchase equal or greater pollution reductions from sources with lower costs. This cost difference provides an incentive for trading to occur.

### **WOT Program Development in Louisiana**

LDEQ is currently developing a WQT program, supported by state legislation and consistent with the Clean Water Act, and state and federal law, to facilitate trading among watershed stakeholders interested and eligible in participating in trading opportunities. This WQT program will allow participation by both point sources and nonpoint sources to help achieve water quality goals.

As announced in the Potpourri Notice 1712Pot1, LDEQ has made available for review a draft guidance document 'Louisiana Water Quality Trading Guidance Draft, December 20, 2017' on water quality trading program development in Louisiana. LDEQ is inviting the public to submit comments on any aspect that the department may consider in the development of a water trading program. Written comments may be submitted to LDEQ by February 28, 2018 (see 1712Pot1 for more details). Interested persons may also attend a stakeholder meeting at LDEQ on January 23, 2018 at 9:30 a.m. in the Galvez Building, Oliver Pollock Conference Room at 602 North Fifth Street, Baton Rouge, LA 70802.

### **Stakeholder Meetings**

October 4, 2018 - Water Quality Trading Stakeholder Meeting

- Meeting Record
- Agenda
- Presentation

#### September 20, 2018 - Water Quality Trading Stakeholder Meeting

- Meeting Record
- Agenda
- Presentation

#### August 27, 2018 - Water Quality Trading Stakeholder Meeting

- Meeting Record
- Agenda
- Presentation

- <u>Luling Wetland Carbon and Nutrient Pilot Project</u> Sarah K. Mack, PhD, President and CEO, Tierra Resources
- <u>US Business Council for Sustainable Development (US BCSD)-Restore the Earth Foundation (REF) Alliance Pointe aux Chenes Restoration Project as a WQT Pilot Edwin Pinero, Water Programs Director, US BCSD</u>
- Trading Scenario for Domestic Non-Point Source Reduction: Regionalization and Home Inspection Program for Unsewered Communities
   Brady Skaggs, PhD, Water Quality Program Director, Lake Pontchartrain Basin Foundation
- Louisiana Water Quality Trading: Agricultural Community Involvement Andrea Calvin, PhD, Chief Scientist, Adaptation Strategies
- <u>Science and Conservation to Support Water Quality Trading in Louisiana</u> <u>Bryan P. Piazza, PhD, Director, Freshwater and Marine Science, The Nature Conservancy</u>

#### July 10, 2018 - Water Quality Trading Stakeholder Meeting

- Meeting Record
- Agenda
- Presentation

#### June 13, 2018 - Water Quality Trading Stakeholder Meeting

- Meeting Record
- Agenda
- Presentation

#### January 23, 2018 - Water Quality Trading Stakeholder Kick-off Meeting

- Meeting Record
- Agenda
- Presentation

## **Basics of WQT**

According to the EPA Trading Policy (2003) and the EPA Water Quality Trading Assessment Handbook (2003), a buyer (e.g. a pollution source such as an industrial facility) purchases water quality improvements, or credits, from a seller (e.g. a farmer installing a buffer along a stream to capture sediment runoff or a facility installing technology that achieves reductions greater than established WQBEL requirements) that reduces pollutants. Both buyers and sellers will need to meet a minimum level, or baseline, before generating credits. The baseline for generating pollution reduction credits must be consistent with applicable water quality standards. In general, a credit is a reduction in pollutant loads beyond baseline conditions. More specifically, it is a measured or estimated unit of pollutant reduction per unit of time adjusted to account for applicable trading ratios. A seller generates excess load reductions by controlling its discharge beyond what is needed to meet its baseline through controlling its flow and/or its discharge concentrations. A buyer can then use the credits to meet a regulatory obligation.

EPA lists trading objectives for economic, social, and environmental benefits. These benefits include:

Economic	<ul> <li>Reduces the total cost of achieving water quality goals.</li> <li>Provides a cost-effective method for achieving compliance with water quality standards.</li> <li>Provides incentives for innovations in pollution-reduction technology.</li> </ul>
Environmental	<ul> <li>Achieves equal or greater reduction of pollution at equal or lower cost.</li> <li>Creates an economic incentive for dischargers to go beyond minimum pollution reduction.</li> <li>Offsets new or increased discharges resulting from urban growth.</li> <li>Reduces cumulative pollutant loading, improves water quality and prevents future environmental degradation.</li> <li>Provides ancillary environmental benefits such as carbon sinks, flood retention, riparian improvement, and habitat.</li> </ul>
Social	Encourages dialogue among stakeholders and fosters concerted and holistic solutions for watersheds with multiple sources of water quality impairment.

### **Additional WQT Resources**

Louisiana Revised Statute R.S. 30:2074.B.(9)(a) (http://www.legis.la.gov/Legis/Law.aspx?d=87135)

Louisiana State Legislature, Act 371, 2017 Regular Session, Effective June 23, 2017(http://www.legis.la.gov/Legis/BillInfo.aspx?s=17RS&b=ACT371&sbi=y)

National Network on Water Quality Trading publication *Building a Water Quality Trading Program: Options and Considerations*, 2015 (http://willamettepartnership.org/publications/)

Association of Clean Water Administrators (ACWA) Water Quality Trading Toolkit, 2016 (https://www.acwa-us.org/toolkits/water-quality-trading-toolkit/)

Water Quality Trading Case Studies through ACWA - <a href="https://www.acwa-us.org/water-quality-trading-case-studies/">https://www.acwa-us.org/water-quality-trading-case-studies/</a>

#### **References from Draft Guidance Document**

Byron K. Williams, Robert C. Szaro, & Carl D. Shapiro, *Adaptive Management: The U.S. Department of the Interior Technical Guide*, pp. v & 1 (U.S. Department of Interior, 2009), *available at* <a href="http://www.usgs.gov/sdc/doc/DOI-%20Adaptive%20ManagementTechGuide.pdf">http://www.usgs.gov/sdc/doc/DOI-%20Adaptive%20ManagementTechGuide.pdf</a>.

EPA, A Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program, (2013), available

at <a href="https://www.epa.gov/sites/production/files/2015-07/documents/vision\_303d\_program\_dec\_2013.pdf">https://www.epa.gov/sites/production/files/2015-07/documents/vision\_303d\_program\_dec\_2013.pdf</a>.

EPA, *Nonpoint Source Program and Grants Guidelines for States and Territories*, p. 7, note 2 (2013), *available at* <a href="https://www.epa.gov/sites/production/files/2015-10/documents/319-guidelines-fy14.pdf">https://www.epa.gov/sites/production/files/2015-10/documents/319-guidelines-fy14.pdf</a>.

EPA, Office of Water, *NPDES Permit Writer's Manual*, Ch.9, pp.1 (Sept 2010), available at <a href="https://www.epa.gov/sites/production/files/2015-09/documents/pwm\_chapt\_09.pdf">https://www.epa.gov/sites/production/files/2015-09/documents/pwm\_chapt\_09.pdf</a>

EPA, Office of Wetlands, Oceans and Watersheds, *Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act*, Section 5, (2005), available at <a href="https://archive.epa.gov/water/archive/web/pdf/2005\_08\_11\_tmdl\_2006irg\_report\_2006irg\_sec5.pdf">https://archive.epa.gov/water/archive/web/pdf/2005\_08\_11\_tmdl\_2006irg\_report\_2006irg\_sec5.pdf</a>.

EPA, Water Quality Trading Policy, 68 Fed. Reg. 1608, p. 1609 (Jan. 13, 2003), available at <a href="http://www.gpo.gov/fdsys/pkg/FR-2003-01-13/pdf/03-620.pdf">http://www.gpo.gov/fdsys/pkg/FR-2003-01-13/pdf/03-620.pdf</a>

LDEQ Water Quality Management Plan is available at: <a href="http://deq.louisiana.gov/page/water-quality-management">http://deq.louisiana.gov/page/water-quality-management</a>.

Louisiana Coastal Master Plan can be found at <a href="http://coastal.la.gov/our-plan/">http://coastal.la.gov/our-plan/</a>.

Natural Resources Conservation Service, *Conservation Practice Standard: Nutrient Management, Code 590*, pp. 6-7 (2012), *available at*http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb1046896.pdf.
United States Department of Agriculture-Natural Resources Conservation Service (USDANRSC) Field Office Technical Guide (FOTG) found at <a href="http://efotg.sc.egov.usda.gov">http://efotg.sc.egov.usda.gov</a>