

Water Quality Trading Pilot



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US BCSD + Restore the Earth Strategic Alliance

- The United State Business Council for Sustainable Development established the Louisiana Water Synergy Platform in 2012
 - A group of 22 companies, and a number of key stakeholders and partners with a presence and interest along the Baton Rouge to Gulf Mexico corridor
- Restore the Earth Foundation is a member; REF is a private non-profit organization committed to restore 1 million acres of forest along the Lower Mississippi River Valley
- Entered into a formal alliance to create the Collaborative Fund that provides an avenue for member companies to invest in the restoration and realize a variety of co-benefits
- One benefit is quantified nutrient reductions to the Gulf due to the restoration



Proposed WQT Pilot Project- Pointe aux Chenes

- Restoration of 4,000 acres of freshwater forested wetland in the Pointe-aux-Chenes Wildlife Management Area
- Re-establishing and stabilizing bald cypress forested wetlands
- Part of Restore the Earth Foundation's goal of restoring 1 million acres along the Lower Mississippi River Valley ("North America's Amazon")
- Phase I, first 1,000 acres completed, planning for Phase II underway
- Outcomes are quantified and monetized using Restore the Earth's EcoMetrics



Pointe-aux-Chenes Location



Restoration Outcomes

- Enhance coastal wetland and watershed systems by re-establishing and stabilizing a critical bald cypress forested wetland area.
- Protect 200,000+ residents of local communities and indigenous nations/tribes from risks associated with storm surge and flood events, therefore enhancing their resilience.
- Restore native wildlife and fisheries, **improve water quality**, expand recreational areas, trap carbon dioxide and provide for community protection and resilience.
- Support sustainable hunting, fishing, and wildlife watching, supporting and rebuilding economic opportunities generated by recreation and tourism.
- Create local jobs, to implement the project; contracting with local nurseries and businesses.



The Water Institute of the Gulf- Measurement of Nutrient Reductions

REF retained The Water Institute of the Gulf to assess the improvements from restoration via raw data collection and using credible and validated methods to quantify benefits:

- Measure baseline and post-construction site conditions
- Assess current water quality conditions via univariate, multivariate and spatial statistics on nonpoint (e.g., runoff) and point sources (e.g., pumps)
- Assess current and future conditions with computer simulations utilizing the Soil and Water Assessment Tool (SWAT) and the Nutrient Tracking Tool (NTT) of the non-point sources and the receiving basin or water body
- Assess current and future conditions with computer simulations via Delft3D models and Integrated Compartment Model of the point sources and the receiving basin or water body
- Deliver technical reports summarizing the key findings

- Originally created by Restore the Earth Foundation to document the value of their Gulf of Mexico coastal restoration efforts. Now also a stand-alone offering for organizations and companies interested in integrated metrics
- A proprietary approach that quantifies and monetizes co-benefits from ecosystem and natural infrastructure projects
- Captures the full value of a project's environmental, social and economic impacts, and is fully documented, 3rd party verified, and ready for audit

Status and Next Steps

- Project is live and underway; ready to immediately test concepts and calculate nutrient reductions
- Actual on the ground restoration
- Submitted to LDEQ for acceptance as a pilot as well as long term acceptable location to generate credits
- Replicable process that can be applied elsewhere
- Reports with quantified results for Phase I available online
- Contact US BCSD (pinero@usbcsd.org) for more information and to participate