



Water Quality Trading: Research Findings

The Georgia Water Planning and Policy Center has been researching water quality trading since 2001. We have taken a multi-disciplinary approach to evaluating water quality trading for Georgia watersheds. We have used the expertise of economists, scientists, and lawyers to complete this work. A summary of our research findings follows.

- We identified six watersheds in Georgia where water quality trading would be most appropriate: Chattahoochee, Coosa, Oconee, Ocmulgee, Savannah, and Flint. Water quality trading could be possible in other watersheds, but probably on a more limited scale.
- We completed a legal analysis that considered how Georgia's laws and policies would support or hinder water quality trading. While there are no current legal barriers to water quality trading in Georgia, legal challenges under the Clean Water Act are possible.
- We completed an in-depth legal review of how Clean Water Act antidegradation requirements could affect water quality trading and how the Hughey vs. Gwinnett County case related to the legal climate for water quality trading.
- We developed a watershed model to support the evaluation of water quality trading scenarios in Georgia watersheds.
- We completed an economic analysis focusing on the demand for water quality trading from point sources (in collaboration with M. Bruce Beck, University of Georgia Warnell School of Forest Resources). Our results show that water quality trading requires a strict level of regulatory pressure. Specifically, interest in trading is weak above discharge limits of 1mg/L phosphorus. The economic driver is missing in *most* Georgia watersheds *at this time*.
- Our economic analysis provides a probable explanation for the lack of trading activity in existing water quality trading programs elsewhere, and it has generated national interest.
- New nutrient limits and implementation of TMDLs are likely to increase interest in water quality trading – nationally and in Georgia.

Summary

Several watersheds in Georgia have conditions that will likely support water quality trading in the coming years. Increased regulation of nutrients is expected on a national scale, and it will lead to increased interest in water quality trading. Although the economic driver for water quality trading is lacking in most watersheds at this time, now is the time to begin planning for future water quality trading initiatives in Georgia and considering pilot trades for approval. Success with water quality trading will bring the benefits of cost savings and flexibility, but it will require the involvement of all stakeholders in the development process.