



**Title:** Mississippi River Water, Agriculture, and Wetlands

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**Organization:** LSU AgCenter

**State:** LA      **Region:** Southern

**Year of Funding:**

**Theme:** Environmental Restoration

**Situation:** Increased human populations, some agriculture practices, and a growing industrial complex along the river has resulted in an associated rise in a variety of pollutants. Some decision makers and the general public perceive the river to be highly polluted and are concerned about its targeted re-introduction into coastal regions for wetlands enhancement.

**Objectives:** Educate policymakers and the public about the quality and suitability of Mississippi River water for re-introduction into Louisiana's coastal areas to facilitate large-scale coastal restoration and possibly reduce nutrient transport from the Mississippi River flood plain into the Gulf of Mexico.

**Methods:** Evaluates contaminants including nutrients, pesticides, bacteria, and chlorinated hydrocarbons. Potential for salinity reductions and fisheries displacement in coastal marshes affected by the outfall of freshwater diversions. Products produced include web and print publication entitled "Mississippi River Water Quality: Implications for Coastal Restoration". Many and on-going power point presentations and abstract publications on the above topic to scientific community and the public.

**Partnerships:** U. S. Geological Survey (data), Louisiana Department of Environmental Quality (data), Coastal Wetlands Planning, Protection, and Restoration Act (outreach and publication support), Louisiana Sea Grant College Program (outreach).

**Research:** Extension was instrumental in bringing to the attention of policymakers the publics lack of confidence that Mississippi River water was suitable for... This brought the research staff together with extension and outreach personnel to investigate the current scientific evidence available on the status of the Mississippi River water quality. The resulting publications and presentations are presented to policymakers and the general public in various venues including web pages.

**Resources:** LSU Agricultural Center (salaries), Louisiana Sea Grant College Program (salaries).

**Results:** A review of related literature suggest that the Mississippi River is currently cleaner than it has been in 20 years, and samples continue to show significant improvements for various chemical, biological, and physical parameters of water quality. Respective trade-offs between water quality risk and re-diversion benefits are presented. Information presented at public forums, scientific and technical meetings. Currently two major river diversions operating in Louisiana.



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