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Determining the Aquatic Health of Langston Lake (OK) Through Water Quality Monitoring and Service-Learning

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Abstract Text:

Protecting and enhancing the quality and quantity of water has become a high priority across the United States and the State of Oklahoma as well. To address these needs, Langston University has determined that university students should be engaged in volunteer water quality monitoring as a service-learning effort – "designed to develop students with strong ethics and a commitment to community service and research. Hence, Langston University has collaborated with the Oklahoma Water Watch Program, a volunteer monitoring program of the Oklahoma Water Resources Board that engages university students to become certified water quality monitors at Langston Lake, studying physical, chemical and nutrient parameters affecting the lake's health. Thi results of their monitoring efforts coincide with the state Beneficial Use Monitoring Program that supplies data for local, state and national water decisions, policy and legislation, such as those sanctioned under the CSREES Regional Water Quality Program efforts, the USDA's Strategic Plan which focuses on protecting and enhancing the nation's natural resource base and environment, and the goals of the CSREES National Facilitation Project (NFP) and focus on implementing a Water Quality Education and Outreach Program designed to enhance students' knowledge-base and hands-on competencies, strengthen water resources curricula, and provide experiential activities that reinforce classroom learning.

Impact Statement:

The impact of initiating this service-learning project for fifteen Langston University students through a partnership with the Oklahoma Water Resources Board has been mutually beneficial. These new volunteer monitors help lower costs for state personnel to provide mandated ongoing monitoring efforts at Langston Lake and allows students to sharpen their research skills outside the classroom, as well as protect the state's surface water resources.