



Office of Teaching and Learning

Greaxing STEM Stewards

Overview

The Greaxing STEM Stewards Grant is a two-year partnership between Livingston Parish Public Schools (LPS), [Louisiana Sea Grant](#), Louisiana State University, the [Gulf Research Program](#), and the Louisiana Department of Education (LDOE). The initiative expands hands-on STEM learning through aquacultural and environmental education grounded in Louisiana's ecosystems and communities.

Through project-based learning and real-world applications, students explore sustainable agriculture, environmental systems, and stewardship while strengthening STEM knowledge and skills.

Project Implementation

The grant supports the development of a Controlled Environmental Agriculture (CEA) learning site at [Westside Junior High School](#). A greenhouse with environmental controls and two aquaponics systems serves as a living laboratory for interdisciplinary STEM learning.

Students engage in hands-on investigations focused on plant physiology, nutrient cycles, aquatic ecosystems, and the role of humans within the biosphere while applying scientific inquiry and engineering practices.

Educator Collaboration

The grant also supports a community of practice for participating Louisiana educators, providing opportunities for professional learning, collaboration, and the development of place-based instructional approaches connected to Louisiana environments.

Grant Outcomes

The outcomes of this grant are

- a model location for CEA visits and replication;
- a year-long, open educational resource curriculum* for grades 6 through 8 on aquaculture;
- a community of practice for participating Louisiana teachers; and
- a set of place-based learning lessons* specific to Louisiana.

*For more information about the Greaxing STEM Stewards grant or curriculum, please contact STEM@la.gov.

NATIONAL ACADEMIES *Sciences
Engineering
Medicine*

GULF RESEARCH PROGRAM


Sea Grant
LOUISIANA