Office of Research and Sponsored Program projects that impact SWLA

Stella Miller – CPPJ – MOU buy UP Ward Bound eligible students calculators with Federal CSBG Funds. These funds augment US DOED Upward Bound funds

Dr. Jay Uppot

- working with local company, LA ASH – "NISCO Fly Ash Pellets for use in Road Base and Aggregate Road Construction
  Scope: To test and analyze the suitability of Nisco Fly Ash Pellets OPF1/2" for use in road base and aggregate road construction.

- working with local company LA ASH – "Plasticity, Swelling and Unconfined Compressive Strength of Houma Clay Stabilized with Several Stabilizing Agents"
  Scope: To study the plasticity, swelling and strength characteristics of Houma clay stabilized with several stabilizing agents. The stabilizing agents are: Lime, Rain cn ash. NISCO ash modified with and without calcium chloride.

Dr. Ning Zhang – LA BOR Industrial Ties Research – Research on A Comprehensive Hydrodynamic and Sediment Study for Calcasieu Ship Channel and Surrounding Water Systems. This grant partners with two local companies- LA Ash and Lonnie Harper and Associates, Inc. The proposed research focuses on improving the environmental system in Southwest Louisiana where McNeese State University is located, to enhance the economic development potential. It benefits the state and the country. The goal of this project is to develop a numerical model to simulate sediment transport in Calcasieu Ship Channel and surrounding area to identify the sources of its excessive sediments, which is the first step towards helping a private company, Lonnie Harper and Associates, Inc, and the port of Lake Charles, to design and construct sediment prevention mechanism. There are four possible sources: the upstream input from rivers and waterways, the downstream Gulf of Mexico, the bank erosion, and the land loss from surrounding wetlands. It is impossible to identify the sources of sediments in the ship channel without fully understanding the sources and total quantities of sediment discharges from each source. Indeed, the numerical simulation model also requires the input of sediment discharge amount from each source. This leads to proposed research on two of the sources, bank erosion, and the land loss of wetlands. The study of bank erosion will help a private company LA Ash Inc. to design erosion resistant bank, levee and coastal highways using its green materials. The wetland loss research will benefit the wetland restoration efforts from the state of Louisiana.

Dr. Christos Douvris –Partnered with SASOL North America Inc. – Research on Oligomerization of Simple Alkenes Using Aluminum Catalysis. A student working on a Master's degree is committed to this research project. The student will be working both at McNeese and at Sasol for one year, and he/she will finally write part of his/her thesis based on the results of the study and he will be supervised by both McNeese and Sasol.

Dr. Nikos Kiritsis – Partnership with Axiall Nature Lab

- To Increase the usage of the Naturelab facility by having the IIEC accompany and instruct naturelab guests (E.g. school/scouting groups)
- To Assist Axial in maintaining Wildlife Habitat Council (WHC) certifications for wildlife habitat and nature education programs
- To create goodwill in the community by encouraging the IIEC and McNeese to perform wildlife/habitat-related research on the Property, which includes diverse ecosystems (natural marsh, created marsh, pine and hardwood forests, etc.) and
- To provide Science, Technology, Engineering and Mathematics (STEM) outreach to Students

Dr. Mark Merchant – Working with the City of Lake Charles and the Tourism Bureau to host an international gator/crocodile (IUCN-SSC Crocodile Specialist Group Meeting) conference in Lake Charles which will bring guests from all over the world which will bring business to the local economy.

Dr. Dees – partners with the Calcasieu Parish Mosquito Control Department to conduct research and investigation into reducing mosquito populations. Mosquito studies provide undergraduate students the opportunity to investigate organisms of medical importance that play a significant role in Southwest Louisiana (SWLA) ecosystems. These investigations provide information for use in scientific presentations and enable students to study issues relevant to mosquito control in Louisiana. Project studies will introduce undergraduates to the field of medical entomology. More importantly, findings from these studies will provide background information for future investigations related to mosquitoes.

Dr. Wayne Fetter – LA Board of Regents - The goal is for state agencies to work collaboratively with two- and four-year colleges to successfully implement the **Common Core State Standards (CCSS) and the Partnership of the Assessment of Readiness for College and Careers (PARCC) Assessments. K-12 educators**, arts/science faculty, education faculty, other education leaders, and local communities will be jointly involved. The objectives are to develop:

1. A statewide definition of "college readiness";
2. K-12/postsecondary alignment to Common Core State Standards in:
    - Academic courses/sequences
    - Data and accountability
    - Teacher Development

Janet Woolman- LERC partnered with the Louisiana Native Seed Company to assist with the establishment of a native seed ecosystem.

Janet Woolman- LERC partners with the Port of Lake Charles to assist with understanding and addressing bank erosion and sediment deposition in the Ship Channel and the SWLA waterways.

Janet Woolman- LERC partners with the State of Louisiana Coastal Protection and Restoration Authority and Calcasieu Parish to address issues of concern to SWLA residents that can be included in sustainability measures for coastal areas of Cameron and Calcasieu Parish. This has resulted in 1.1 billion dollars allocated to SWLA in the recent release of the Masterplan for a Sustainable Coast that was not previously dedicated.

Janet Woolman- LERC has partnered with the Calcasieu Parish Police Jury to develop a Calcasieu area model to complement the Louisiana Coastal Master Plan. This collaboration resulted in a cooperative endeavor for $25,000 which will benefit the constituents of SWLA.

Janet Woolman- LERC has also partnered with the City of Lake Charles through a contract for $6,935.64 to complete a public tree inventory of selected areas and develop an Urban Forestry Management Plan that will improve the city community forestry program.

Janet Woolman – partnered with SWLA Economic Development Alliance for LBIA grant to establish a student incubator that will grow the economy and provide a pipeline of potential clients to the chamber operated community incubator.

Janet Woolman- Partnership with EDA, Entergy, and the Chamber to provide assistance to local business and create a hub for innovation in SWLA.

Janet Woolman- Partnership with EDA and the Chamber to construct the SEED Center to establish a one-stop shop for economic development in the region.

Janet Woolman- Partnership with SBA and the Chamber to construct and furnish the SEED Center