

**NC State - Aquaculture Research - \$400,000**

North Carolina State University

Raleigh, NC 27695

Aquaculture involves the raising of farmed fish and shellfish, and NC State serves as a leader in developing environmentally sustainable practices in the industry. NC State is seeking federal funding to facilitate research into experimental techniques for farming oysters, breeding of high-demand fish species, and waste and disease management.

Advanced aquaculture promotes economic development by enabling farmers to undertake a new and potentially lucrative form of agriculture and provides an environmental benefit by helping prevent over-fishing and restore depleted fisheries. Federal funding for aquaculture research is consistent with USDA's missions to protect natural resources and promote agricultural products.

**State of North Carolina - Beaver Management Assistance Program -\$300,000**

State of North Carolina Wildlife Resources Commission

1751 Varsity Drive

Raleigh, NC 27606

Beaver activities in North Carolina cause millions of dollars in damage annually due to flooding and destruction of highways and bridges, agriculture and forestlands, drainage systems, railroad trestles, sewer systems, water treatment facilities and other property. The North Carolina Beaver Management Assistance Program (BMAP) was created by the North Carolina General Assembly to address these problems. BMAP is primarily funded by the state government, and also is supported by participating counties and private landowners.

In 2008, BMAP saved state and municipal governments and landowners approximately \$4.75 million in resources from prevented beaver damage. Federal funding for BMAP is consistent with USDA's missions to protect natural resources, promote sound land management, and promote agricultural products.

### **NC State - Crop Pathogen Research - \$500,000**

North Carolina State University

Raleigh, NC 27695

Introduced pathogens (that is, germs or other agents to which crops are intentionally or accidentally exposed) pose a significant risk to crops, and therefore to the food supply. NC State is seeking federal funding for crop pathogen protection research to detect and prevent crop damage from introduced pathogens, including potential weapons of bioterrorism. Much of the research will focus on genomic mapping, which is essential to our ability to respond successfully to an accidental pathogen introduction and to understand the threat of agricultural bioterrorism.

Continuing research on crop pathogens helps protect both consumers' food supply and the viability of a major national economic sector, and federal funding is consistent with USDA's

missions to enhance food safety and promote agricultural products.

**State of North Carolina – Multihazard Threat Database - \$333,440**

North Carolina Department of Agriculture and Consumer Services

2 West Edenton Street

Raleigh, NC 27601

The North Carolina Department of Agriculture and Consumer Services maintains a state-of-the-art emergency response system that can mitigate the impact of animal disease outbreaks, natural disasters, bioterrorism attacks, and other threats to the state's agricultural sector. Federal funding will support continued development and expansion of the system. The Multi-Hazard Threat Database (MHTD) is a Web-based mapping tool that integrates agricultural production data, topography and water tables, quarantine areas, escape routes and other information critical to emergency response.

The MHTD helps protect both consumers' food supply and the viability of one of North Carolina's most important economic sectors. Federal funding for MHTD is consistent with USDA's missions to enhance food safety and promote agricultural products.

**NC State - Forest Biotechnology Research - \$500,000**

North Carolina State University

Raleigh, NC 27695

North Carolina State University is seeking federal funding for its Forest Biotechnology Initiative, which carries out research on making native tree species resistant to invasive pests, improving productivity for timber products, and developing new wood-based biomass technologies for green energy production. This research significantly advances the U.S. capacity to deploy sustainable and economical wood-based bio-energy. Renewable sources of energy can reduce our national reliance on foreign oil and reduce environmental damage in the process.

The development of renewable sources of energy and improvement of timber is consistent with USDA's missions to promote agricultural products and sound land management.

**NC State - Swine and Animal Waste Management Research - \$500,000**

North Carolina State University

Raleigh, NC 27695

North Carolina State University is seeking federal funding for the work of its Animal and Poultry Waste Management Center. The Center conducts research to identify and develop cost-effective technologies for environmentally sustainable livestock production. The Center is a national leader in unbiased science-based research and education programs for managing livestock waste. The university program also provides assistance for complying with national, state, and local animal production and waste management regulations, including equipment

evaluation, system verification, and improved management practices at all levels of the system.

The livestock industry generates over \$900 billion in revenue to the U.S. economy, and maintaining cost-effective means to manage waste and ensure animal health is critical to sustaining its competitiveness. Better research in livestock waste management also would improve public health, benefit the environment, and assist farmers. This initiative is consistent with the USDA's missions to protect natural resources, promote sound land management, and promote agricultural products.

**State of North Carolina - Technical Assistance to Livestock & Poultry Farmers - \$500,000**

North Carolina Department of Environment and Natural Resources

4001 Carya Drive

Raleigh, NC

Pork producers traditionally have utilized lagoons to manage animal waste, but this practice has significant negative effects on the environment, particularly with respect to groundwater. Federal funding will enable USDA's Natural Resource Conservation Service, in partnership with the State of North Carolina, to assist farmers seeking to convert open-air waste lagoon operations to environmentally sound technologies. The program providing this assistance was created in 2007 by the North Carolina General Assembly in conjunction with legislation banning lagoons on new or expanding hog farms, and is primarily funded by the State. The previous moratorium on new lagoon construction was established after lagoons caused major environmental contamination during the flooding associated with Hurricane Floyd in 1998.

The conversion of waste lagoons will improve public health, benefit the environment, assist

farmers, and help ensure the long-term sustainability of the U.S. agricultural sector. Federal funding for this effort is consistent with the USDA's missions to protect natural resources, promote sound land management, and promote agricultural products.

**NC State - Wood Utilization Research - \$7,100,000**

North Carolina State University

Raleigh, NC 27695

The Wood Utilization Consortium, a partnership of NC State and nine other universities across the country, conducts research and provides technical and engineering support to help develop wood products. NC State's share of the funding will support the research efforts of the Sustainable Wood Housing Innovations Program (SWHIP). The SWHIP develops methods to make housing more durable, affordable, and resistant to natural disasters as well as enabling manufacturers of housing components to better utilize and conserve wood, a natural resource. The development of better uses of wood products is consistent with USDA's missions to promote agricultural products and sound land management.

**NC State - Regional Grains Genotyping Lab - \$400,000**

North Carolina State University

Raleigh, NC 27695

The Regional Grains Genotyping Lab works to facilitate the application of genomics and DNA molecular marker information to improve small grains breeding programs throughout the country, particular for oats, wheat, and barley. Federal funding for this research has been particularly important in recent years due to highly virulent cereal diseases that have appeared in other parts of the world and could threaten U.S. grain production.

Continued efforts to strengthen the genetic resistance of cereal grains help protect both consumers' food supply and the viability of a major national economic sector, and federal funding is consistent with USDA's missions to enhance food safety and promote agricultural products.

### **SouthEast Climate Consortium - \$500,000**

North Carolina State University

Raleigh, NC 27695

The SouthEast Climate Consortium (SECC) provides information and resources to farmers so that they can make better and well-informed decisions relating to climate changes that impact the production of food and fiber. SECC activities address complex issues that require collaboration and coordination among agricultural and climate researchers, extension specialists, educators, and social scientists. With support from USDA, SECC has helped farmers apply cutting edge research findings to real-life problems arising from variable rainfall, temperature, and wildfires.

Federal funding of SECC is consistent with USDA's missions to protect natural resources, promote sound land management, and promote agricultural products.

**Human Nutrition Center - \$1,000,000**

UNC General Administration

Chapel Hill, 27514

The Human Nutrition Center at the North Carolina Research Campus (NCRC) in Kannapolis, NC focuses on using cutting edge biotechnology to develop innovative approaches to designing healthier agriculture products and to understanding the role of diet and activity in normal brain development, preventing cancer and preventing obesity. The vision for the NCRC is to become the world's epicenter for the convergence of agriculture, nutrition, and disease research, in collaboration with public universities, private industry, and other stakeholders throughout the state of North Carolina.

Federal funding is consistent with USDA's missions to enhance nutrition, protect food safety, and promote agricultural products.