

Turning research into reality

**Federal grant + state funding + private dollars =
\$750,000 investment in a cleaner future for North Carolina hog farming**

Background

The Natural Resources Conservation Service, a program within the U.S. Department of Agriculture (USDA), has awarded \$375,000 to NC State University (NCSU) to support an innovative project that will support development of byproducts from swine waste produced from two alternative hog waste technologies. The project also will evaluate the economic potential of these byproducts to determine the extent to which they can offset the cost of using the proven systems. The project lays the foundation for conversion of traditional open-air lagoons to new waste systems that meet strict environmental standards. The grant from the federal government, plus a matching \$375,000 from North Carolina public and private groups, confirms that North Carolina has a solid plan for clean, profitable hog farming, as outlined in a bill introduced by Rep. Carolyn Justice. The bill will create a task force to guide the voluntary installation of new systems on farms through an Early Adoption Program, an approach that will ultimately make clean technologies affordable for all hog farmers.

Public-private dollars: A jump start for the future of NC hog farmers

The USDA grant is matched with funds from a public-private partnership spearheaded by Environmental Defense that doubles the total funding to \$750,000. Working with Frontline Farmers, Environmental Defense identified USDA as a source of funding and then secured commitments for in-kind and cash contributions from the NC Department of Environment and Natural Resources, NC Department of Transportation, NC Division of Soil and Water Conservation, NatureWorks Organics, NCSU, Nicholas Institute for Environmental Policy Solutions at Duke University and Super Soil Systems. Dr. Mike Williams of NCSU will serve as the project director.

Innovative project turns research into reality

Hog waste has traditionally been managed in open-air lagoons. Supported with a \$17.1 million grant, NCSU led six years of research on better ways to treat massive amounts of hog waste and identified five “environmentally superior” treatment systems. The new \$750,000 project will support the development and evaluate the economic potential of value-added products from two of the most promising new technologies now operating on NC farms, thereby turning years of research into reality. Viable markets for byproducts will generate income that can offset the cost of implementing new technologies, a critical factor in making the cleaner systems affordable.

New systems for waste treatment, new markets for byproducts

There is general agreement that byproducts from new waste systems are useful and can generate profits. The new public-private project will provide solid evidence of the market opportunities for value-added swine waste products and determine the economic potential of new technologies. In addition, the findings will help hog producers and policy makers identify the actual costs of these technological innovations and the financial mechanisms to make them affordable for hog farmers across the state.

Two cleaner systems, many benefits

The science is clear: new systems for treating hog waste do a better job of protecting public health and the environment. But alternative systems must also be affordable. In addition to developing markets for byproducts, the project will evaluate reductions in fossil fuel usage and global warming emissions associated with innovative technologies.

- *Super Soils Systems* treats hog waste without a lagoon and generates various types of compost and related products. The NC Department of Transportation will apply Super Soils byproducts on roadside landscaping and stabilization projects.
- *NatureWorks Organics* uses worms to turn waste solids into rich compost that will be sold at retail outlets.

A step forward to big results

The new public-private project will help to put years of research on cleaner waste treatment technologies into practice on working farms in North Carolina. The project underscores the need for legislation and paves the way for widespread adoption of alternative systems that do a better job of protecting the environment, communities and the economic future of farmers. The project also marks a major endorsement in North Carolina's efforts from the USDA.

For more information, contact:

Dan Whittle, Senior Attorney, North Carolina Office of Environmental Defense, 919-881-2914

Joe Rudek, Senior Scientist, North Carolina Office of Environmental Defense, 919-881-2913