



USDA-CSREES 2005 National Water Quality Conference

Development of a Stormwater Best Management Practices Research and Training Center at the Rutgers University Equine Science Center of New Brunswick, New Jersey

Abstract: Although almost all of the horse farms in NJ are not classified as Concentrated Animal Feed Operations (CAFOs) and are not required to obtain a NJ Department of Environmental Protection (NJDEP) stormwater permit to control their stormwater runoff, the NJ Department of Agriculture (NJDA) is currently proposing regulations to require small animal feed operations (AFOs), which includes most of the horse farms in the State, to implement environmental management practices.

In response to these proposed regulations, students from the Bioresource Engineering program, as part of their senior design project and under the guidance of the Rutgers Cooperative Extension Water Resources Program (WRP), designed a series of environmental management practices for the Rutgers University Equine Science Center. The WRP has currently secured funding to begin implementing these environmental management practices to control and treat stormwater runoff primarily from nonpoint source pollutants at the Equine Science Center as a demonstration project for all horse operations in NJ that will be confronted with the AFO regulations.

The WRP is working with the Equine Science Center, the NJDA, and US EPA to develop an outreach and education program for horse owners based at the Equine Science Center. The Equine Science Center will serve as a showcase for NJ, combining both agricultural and environmental engineering principles. An outreach and education program will be centered on the newly constructed environmental management practices at the Equine Science Center. Horse owners, as well as farmers that may be subject to the AFO regulations, will be invited to the Equine Science Center for workshops that will focus on designing and constructing cost-effective best management practices (BMPs) to minimize the water quality impacts from equine and/or small animal operations. The program will provide students, faculty, horse owners, and farmers a site where agricultural stormwater BMPs can be extensively studied and evaluated.

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