



## WATER RESOURCES RESEARCH GRANT PROPOSAL

**Project ID:** IA1641

**Title:** Effect of Liquid Swine Manure Application on Water Quality from Soil Infiltration Areas and Wetlands

**Focus Categories:** Water Quality, Wetlands

**Keywords:** Manure, Animal waste, Subsurface drainage, Bacteria

**Start Date:** 03/01/2001

**End Date:** 02/28/2002

**Federal Funds:** \$3,000

**Non-Federal Matching Funds:** \$5,784

**Congressional District:** Iowa 3rd

**Principal Investigators:**

Jeffery Lorimor

Assistant Professor, Iowa State University

Larry J. Halverson

Assistant Professor, Iowa State University

**Abstract**

Recent research has shown that soil filtration of liquid swine manure through infiltration areas and subsequent wetland treatment of filtrate effluent from infiltration areas is very effective at removing waterborne nutrients. However bacterial movement to surface and groundwater from areas receiving manure applications is also of concern. This project will examine bacterial movement through the soil in manure application areas to determine whether the bacteria in effluent from application areas and wetlands used for treatment are from the applied manure, or from the soil itself.