



## WATER RESOURCES RESEARCH GRANT PROPOSAL

**Project ID:** 2002IA7B

**Title:** Effects of grazing management on sediment and phosphorus losses from pastures

**Project Type:** Research

**Focus Categories:** Nutrients, Surface Water, Solute Transport

**Keywords:** Grazing, pastures, riparian areas, water run-off, phosphorus

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

**End Date:** 02/28/2003

**Federal Funds:** \$14,500

**Non-Federal Matching Funds:** \$29,808

**Congressional District:** Iowa 3rd

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**Abstract**

The proposed project will benefit Iowa agriculture by quantifying phosphorus transport from paddocks under different grazing management practices. Thus, the results of the project will provide regulatory organizations with data necessary to develop TMDLs that consider the benefits of improved grazing practices on the prevention of nutrient losses in runoff water as well as improved forage yield and quality. Furthermore, determining the relationships of nutrient loss with soil and sward characteristics and modeling phosphorus intake, excretion, and runoff will allow the development of methods of monitoring and managing phosphorus losses from grazed and fallowed pastures. The relationships and models developed from this project will be tested in an associated project in which sediment and phosphorus loads in streams will be determined on 18 farms with different riparian grazing management strategies.