

TWRI Mills Scholarship Application

Applicant

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Research Description: Grazing Land BMP Demonstration

The overarching goal of this project is to reduce bacteria contamination caused by grazing livestock in Texas waterbodies. Evaluation and demonstration of BMP effectiveness in reducing bacteria contamination from grazing lands will be conducted to provide the scientific-basis for the Lone Star Healthy Streams (LSHS) education program. Specifically, five best management practices, or BMPs, will be evaluated including grazing management practices, alternative water sources, shade pavilions, rip-rap, and concrete water crossings. Each BMP will be implemented with the intention of reducing the total amount of bacterial runoff entering the waterbody by altering the behavior patterns of grazing livestock. These BMPs will provide stakeholders such as farmers, ranchers, and dairy operators a cost efficient approach to reduce their livestock's bacterial contamination contribution in Texas waterbodies.

Applicants Academic Qualifications:

Bachelors of Science Degree in Hydrology, Tarleton State University

Courses Taken: Physics I & II, Organic Chemistry, Soil Mechanics, Fluid Mechanics, Groundwater Hydrology, Water Resources Engineering, Calculus III, Crystallography and Mineralogy, Geomorphology, Geographical Information Systems, Stratigraphy and Sedimentology, Municipal and Industrial Water Supply, Texas Water Resource Management, Environmental Systems Modeling, Basic Hydrology, Internship: (Determining Fecal Coliform and E. Coli Concentrations in Drinking Water, A Site Study of Wa Die District, Southeast China), Undergraduate Research Project: (Determining Sampling Frequencies for Routine Water Quality Monitoring)

GPA

GPR

Any scholarship money received, will be utilized to pay for A&M University fees and living expenses such as room and board.

Career Path

I desire to pursue a career path that will ensure a high standard for water quality for years to come. Moreover, it is my desire to see the implementation of water conservation practices at the federal, state, and even local levels. I believe this can and should be accomplished without encroaching on the stakeholder's right to use their own private property. I desire to assist stakeholders by providing them with effective and cost efficient management practices that will protect Texas waterbodies from contamination and which will increase the overall productiveness of their property.