



## WATER RESOURCES RESEARCH GRANT PROPOSAL

**Project ID:** 2004RI23B

**Title:** Stream Stability and Scour Potential for Rhode Island Bridges

**Project Type:** Research

**Focus Categories:** Water Use, Sediments, Management and Planning

**Keywords:** bridge scour, water use, sediments

**Start Date:** 03/01/2004

**End Date:** 02/28/2005

**Federal Funds:** \$13,013

**Non-Federal Matching Funds:** \$25,310

**Congressional District:** 2

**Principal Investigator:**

George Tsiatas

### **Abstract**

Stream instability is a major cause of bridge failures by scouring bed material from around bridge foundations. The project is the first step towards developing a comprehensive model that looks at the relation between land development and scour potential in Rhode Island bridges. The proposed research will evaluate stream stability in Rhode Island streams and rivers and study how it may be affected by land use and other changes. Results will provide a) tools for decision making and planning in issues related to land development and bridge siting or rehabilitation and b) data for improved modeling of stream system and scour generation.