



## WATER RESOURCES RESEARCH GRANT PROPOSAL

**Project ID:** 2004ME28B

**Title:** Integrating Biological and Streams Data into PEARL

**Project Type:** Information Transfer

**Focus Categories:** Education, Management and Planning

**Keywords:** web, data access, database design, data quality assurance, environmental

**Start Date:** 04/01/2004

**End Date:** 03/31/2005

**Federal Funds:** \$7,626

**Non-Federal Matching Funds:** \$92,833

**Congressional District:** 2

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**Abstract**

Lakes and streams are an abundant and valuable natural resource in Maine, currently being managed and researched by a range of natural resource agencies at both state and federal levels, as well as by academic institutions, non-profit organizations and private individuals. Ready access to both historical and contemporary information collected by these researchers is essential for ensuring full use of existing data, refining existing monitoring programs and designing new surveys. Currently, there is no central location, either physical or electronic, from which to effectively search and access the full range of information available for freshwater resources in Maine. Information not only needs to be readily available to users, it must also be available at a level of detail determined by the individual user. We propose to expand an existing website (PEARL.maine.edu) to provide a forum for accessing and integrating a multidisciplinary array of data pertaining to lake and stream systems in Maine. PEARL will be expanded in three ways. First, the site will be re-designed to permit the incorporation of stream-based data. Second, a broad range of biological data, already compiled by a separate project, will be uploaded to

PEARL. Third, two new information interfaces will be designed specifically for two target user-groups: educators/students, and anglers. In addition, a data submission feature, currently in beta-mode for lake water chemistry data, will be upgraded to permit direct uploading by data providers of their stream-based and biological data sets. We anticipate that the enhanced version of PEARL being proposed here will serve as a valuable model for future efforts designed to improve access to both terrestrial- and marine-based information in Maine and in other states. This is another step as part of creating the environmental database for Maine via PEARL.