Project Area:
Nearshore Health and Nonpoint Source Pollution/Beach Sanitary Surveys – Northern Wisconsin Project

Project Title:
Comprehensive Sanitary Survey Project for High Risk Wisconsin beaches.

Project Applicant:
WI DNR, UW-Oshkosh, and City of Racine

Contact Person:
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Project Location:
Entire Lake Superior and Lake Michigan shoreline. This is proposal/project #1 of 2 for this integrated and coordinated effort. This effort covers approximately 1.2 of the State of Wisconsin and coupled with its allied project will cover the entire Great Lakes shoreline of Wisconsin.

Problem Statement:
The Great Lakes are the recreational outlet for millions of individuals and the need to close beaches should be kept to a minimum. The Great Lakes Regional Collaboration has as a goal the 90 – 95% reduction in chemical, algal, and bacterial contamination through the identification of nonpoint source pollution, implicated as a major source of contamination to the recreational waters of WI. Pollution of the nearshore waters of Lake Michigan and Lake Superior not only poses a threat to public health, but also to the economic well-being and quality of life for WI residents. Pollution of nearshore water quality also has ramifications for ecosystem health.

Proposed Work:
In years one and two of this project sanitary surveys (SS) will be conducted at all Wisconsin beaches listed (and proposed) on the 303d list. These beaches are located on the shores of Lakes Michigan and Superior, encompassing both rural and urban settings and various stages within the investigative process (none to fairly extensive monitoring with/without mitigation measures). The US EPA Sanitary Survey tool (routine and annual) will be used to conduct site assessments for the purpose of determining probable pollutant sources and suggesting mitigation measures. Data collected as part of the sanitary survey process with be entered into and archived within the WI "Beachhealth" website such that they are accessible for the construction of predictive models. Additionally, in year three of the study, the SS data would be used to help in the redesign approximately 10-15 beaches to prevent microbial contamination (number dependent on funding level). This redesign would likely be targeted at pollution mitigation in the form of stormwater treatment, and

identified non-point sources. These redesigns would include all engineering and would be presented as construction ready projects to the local municipality. Thus, sources of contamination would be identified, a remediation plan would be developed, and data generated suitable for the development of predictive models and/or health-risk approaches to managing surface waters. Water quality improvements and the protection of public health would be achieved.
Remediating contamination sources responsible for indirect pollution water quality failures will reduce human health risks, increase availability/access to Great Lakes recreation, improve ecosystem health, promote sustainable practices, decrease economic loss (millions of dollars are lost each year due to beach closures), and increase commercial benefits (GLRC 2005).

Collaboration with others:
The project will include collaboration with all counties that border the Great Lakes. In particular, county Health Departments and Soil and Water Conservation Departments will be involved in this project. Additionally, coordination of this project will occur between the State of WI (DNR), local university's (UW-Oshkosh and Northland College), and local units of government (City of Racine). Throughout this project regular meetings and information dissemination will occur with local partners so that there is a free and open exchange of information throughout the project. Finally, numerous local NGO's will be involved in results dissemination and remedial plans for alleviating the point source pollution sources identified.

Describe what existing plan(s) this work will forward the goals of:

This work will forward the goals and recommendations of the Great Lakes Regional Collaboration, WI Great Lakes Strategy, and priorities of the Council of Great Lakes Governors.

Project Cost:

$250,000 (3 year project)

Federal dollars would cover the cost of BEACH Act monitoring. It is likely that other federal or non-federal matches will be available.

Alignment with identified project priorities:

One unique aspect of this project is that it will meet ALL the priorities listed by the WI Office of Great Lakes. For example, this project will demonstrate measureable outcomes, clearly impact the nearshore water, quality, will build upon existing partnerships and collaborations, is located in all three geographic focus areas (Milwaukee River Basin, Fox River and Green Bay, and Chequamegon Bay), will work toward delisting locations, contains a significant match (and leveraging resources with other programs), and is ready to be implemented by investigators with significant experience with these projects.