

IMPROVING WATER QUALITY AT GREAT LAKES BEACHES THROUGH SUSTAINED INTERDISCIPLINARY RESEARCH & STAKEHOLDER ENGAGEMENT

Jane Harrison, North Carolina Sea Grant

Great Lakes beaches suffer from chronic water quality impairments caused by localized runoff, excess nutrients, stormwater discharges, and gull fecal waste, among other sources. Potential visitors avoid these unhealthy beaches, diminishing the economic returns of recreational opportunities in Great Lakes coastal communities. For example South Shore Beach in Milwaukee, Wisconsin experiences water quality advisories and closures 25% to nearly 50% of the swimming season, severely curtailing local use and enjoyment.

In response to pervasive water quality issues, integrated environmental health and economics research was undertaken to determine the causes of pollution at specific Wisconsin beaches and the economic costs and benefits to improving water quality. In addition to research, partnerships with beach managers and other beach stakeholders were developed to translate the natural and social science research into action.

This effort led to significant investments to mitigate water quality issues at South Shore Beach, and may lead to water quality improvements at other Great Lakes beaches. It must be noted that science alone was not sufficient to affect change. Sustained stakeholder engagement is a critical element to improving beach health.