

Monitoring Priorities for Lake Michigan Beaches

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ABSTRACT

Local beach managers identified the top ten highest monitoring priorities for Lake Michigan beaches. These priorities were shared with the United States Geological Survey Great Lakes Science Center, the USGS Water Science Centers in Indiana, Michigan, Ohio, and Wisconsin, the United States Environmental Protection Agency, the National Oceanic and Atmospheric Administration Center for Great Lakes Environmental Research Laboratory, and members of the Great Lakes Beach Association during the 2005 and 2007 State of the Lake Michigan Conferences. There have been 32 actions initiated or completed by local, state, and federal agencies and members of the Great Lakes Beach Association in response to these priorities. Lessons learned from these actions are easily transferable and have resulted in significant improvements to beach monitoring programs. However, to develop progressive monitoring strategies, limited funding for routine monitoring programs may need to be redirected towards start up costs associated with improved technology. Management options have to be carefully considered as funding for routine monitoring programs are sacrificed to achieve long-term improvements.

Issues

The top ten, highest priority issues for monitoring beaches:

1. Affordable rapid test methods
2. Predictive models
3. Better access to real-time data
4. Source tracking tools (e.g., for nonpoint sources and storm water)
5. Epidemiological data that relates health risk to indicators and/or pathogens
6. Training for new staff, especially in communication skills that inform the public and the media on beach health issues.
7. Standardized beach sanitary surveys
8. Standardized monitoring protocols
9. Better communication among local, state, and federal agencies for data management
10. Assistance with the determination of the health risks at beaches from natural elements (algae), diseased wildlife, and nuisance/exotic species.

KEYWORDS

Beach Monitoring, Beach Management, Beach Health Issues, Beach Sanitary Surveys, Predictive Models for Beach Closure