

Towards a Joint National and State Partnership in Aquatic Resource Assessment Monitoring Survey Design

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Abstract

The USEPA is currently conducting national assessments of aquatic resources in the United States. Prior national assessments were completed for coastal waters and wadeable streams. National assessments are now underway for lakes, rivers and streams, coastal waters, and wetlands with the field work being completed in 2007, 2008-9, 2010, and 2011, respectively. Each assessment is based on a probability survey design which is structured to meet the objectives for the assessment. The National Hydrography Dataset (NHD) or NHD-Plus forms the basis for the GIS coverage used for the sample frame, with the exception of wetlands. Concurrently, many states are conducting state assessments, or plan to do so in the future. In many cases NHD, or an enhanced version, is used for the state sample frame. The objective of this paper is to propose how a joint partnership between the states and USEPA can result in improved integration of state and national assessments. Critical elements that must be addressed are (1) clarity in definition of the aquatic resource to interest, (2) integration of state sample frames and national sample frames, and (3) integration of state survey designs with national survey design. Conceptually, the process is straightforward. Achieving it requires partners who are committed to integrating state and national assessments. Institutionally, a structure must be put in place to complete the necessary tasks. The result will lead to improvements in the efficiency of both state and national assessments.

Keywords

National Hydrography Dataset (NHD), wadeable streams, joint national and state partnership, aquatic resource assessment monitoring survey design