

Water Quality Indicators

The use of indicators to measure progress toward water quality goals, milestones or objectives is gaining acceptance and growing in application. Indicators provide information on environmental and ecosystem quality or give evidence of trends in quality. Their development and use are particularly important, given their effectiveness in educating the public.

The need for better methods to measure water quality progress in a manner that is concise and understandable to the public is particularly critical for the Ohio Valley due to its multi-state nature and the keen aware-

ness and concern of the public regarding water quality issues. This concern, in part emanates from state agency issued fish consumption and recreation advisories and the interstate impacts of spills.

Indicators are only as good as the quality of the measurements that support them. Reliable measurements have been developed for biological health for wadeable streams, lakes and estuaries, but not for large inland streams such as the Ohio and its tributaries.

Examples of Research Needs:

- Biological examination of the health of aquatic communities toward the development of criteria for the assessment of aquatic life
- Examination of sediment quality toward the development of criteria to assess contamination
- Development of appropriate microbiological indexes for use in assessing the suitability of water for recreation and swimming
- Development of biomarkers as an indication of aquatic community status