Definition of Concepts


See also three responses to this paper:


Regionalization and Classification


**Assessment**


PCAST (President’s Committee of Advisers on Science and Technology). 1998. *Teaming with life: investing in science to understand and use America’s living capital.* President’s Committee of Advisers on Science and Technology, Washington, DC.


### State of Environment Reports


LaRoe, E. T., G. S. Farris, C. E. Puckett, P. D. Doran, and M. J. Mac, editors. 1995. Our living resources: A report to the nation on the distribution, abundance, and health of...
of U. S. plants, animals, and ecosystems. Department of the Interior, Washington, DC.


Millennium Ecosystem Assessment. A major new international effort to assess the condition of Earth’s ecosystems. For more details see: http://www.ma-secretariat.org/en/about/index.htm


Statistics and Analyses
First a few general introductions to statistical issues and concepts:

The USEPA bioindicators web site (http://www.epa.gov/bioindicators/index.html) has an excellent primer on statistics and statistical concepts in monitoring. See: (http://www.epa.gov/bioindicators/primer/html/primer.html)


**Federal and State Manuals and Web Sites**

Many guidance and technical documents from USEPA (with links to USGS and state agencies) can be found at the following site:

http://www.epa.gov/bioindicators/html/publications.html

Biological Indicators of Watershed Health. Available on line at

http://www.epa.gov/bioindicators/html/about.html

Bioassessment and Biocriteria website on line at

http://www.epa.gov/ost/biocriteria/index.html


http://cleanwater.gov/coastalresearch/index.html


http://www.epa.gov/owow/monitoring/tech/lakes.html


http://www.epa.gov/ost/biocriteria/stressors/stressorfacts.html


Books


**Special Journal Issues**


BIBLIOGRAPHY: TYPES OF ENVIRONMENTS
BIOLOGICAL MONITORING AND ASSESSMENT
Selected Bibliography; FISH/BIOL 438
University of Washington, June 2002
Professor: James R. Karr

Streams
Chasan, D. J. 2000. *The rusted shield: government’s failure to enforce—or obey—our system of environmental law threatens the recovery of Puget Sound’s wild salmon.* Report to Bullitt Foundation, Seattle, WA.


Sanders, R. E., editor. *A guide to Ohio streams*. Streams Committee, Ohio Chapter, American Fisheries Society, Columbus, Ohio.


**Wetlands and Riparian Areas**

EPA websites:

Methods for Evaluating Wetland Condition.

[http://www.epa.gov/waterscience/criteria/wetlands/](http://www.epa.gov/waterscience/criteria/wetlands/)

Biological Assessment of Wetlands Working Group


### Lakes and Ponds
Ohio EPA. 1998(?). *Biological criteria for the protection of aquatic life: Volume IV: Fish and macroinvertebrates indices for Ohio’s Lake Erie nearshore waters, harbors, and lacustuaries*. Division of Surface Waters, Ecological Assessment Unit, Ohio EPA, Columbus, Ohio.

Ohio EPA. 1996(?). *Development of biological indices using macroinvertebrates in Ohio nearshore waters, harbors, and lacustuaries of Lake Erie in order to evaluate water quality*. Division of Surface Waters, Ecological Assessment Unit, Ohio EPA, Columbus, Ohio.


### Coastal and Marine


Stream Invertebrates


Fish


**Algae and Diatoms**


**Birds**


**Amphibians and Reptiles**


Micacchion, M. 2002. Amphibian Index of Biotic Integrity (AmphIBI) for Wetlands. Final Report to USEPA Grant No. CD985875-01. Wetland Ecology Group, Division of Water, Ohio Environmental Protection Agency, Columbus, Ohio. Available at: http://www.epa.state.oh.us/dsw/wetlands/wetland_bioasses.html

**Terrestrial Invertebrates**


**Plants**


