

Monitoring and Decision Making

Chris Mebane
230 Collins Rd
Boise, ID 83706
Telephone: 208-387-1308
Email: cmebane@usgs.gov

Water quality monitoring and biomonitoring are widely called for as a means to inform adaptive management in various environmental frameworks in the USA, including effluent permits under the Clean Water Act, evaluating the effectiveness of measures to minimize harm to threatened or endangered species, and to evaluate the effectiveness of Superfund Cleanups. However, the regulatory specifications for biomonitoring may be imprecise, leaving the details to be worked out on a case-by-case basis. This presentation will discuss the pros and cons of several potential decision criteria for assessing biomonitoring data under different interpretive constructs. Examples will include taxonomic completeness, metrics, and “trout chow” objectives that interpret benthic communities from the perspective of providing sufficient forage base to valued fish populations.