National Biological Assessment and Criteria Workshop

Advancing State and Tribal Programs



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Application of the Biocondition Gradient WITHIN Idaho's Cold Water Aquatic Life Use

Presented by Mike Edmondson Idaho Department of Environmental Quality

TALU 202

Idaho: An Application

- Idaho could readily adopt the Biocondition Gradient
- This action would not require a rulemaking
- This could be implemented prior to the next cycle of the Integrated Report (303(d) and 305(b))

Benefits to Idaho

- Furthers goals of Biological Monitoring and Assessment
- Gives substance to Idaho's Antidegradation Policy
- Could tie into EPA's Integrated Report
- Brings a finer resolution to those waters that are supporting uses and meeting standards

Idaho's Beneficial Uses

01. Aquatic Life. (7-1-93)

- a. Cold water (COLD): water quality appropriate for the protection and maintenance of a viable aquatic life community for cold water species. (4-5-00)
- b. Salmonid spawning (SS): waters which provide or could provide a habitat for active self-propagating populations of salmonid fishes. (7-1-93)
 - Most of Idaho's designated waters are Cold Water Aquatic Life Use

ALUs (continued)

- c. Seasonal cold water (SC): water quality appropriate for the protection and maintenance of a viable aquatic life community of cool and cold water species, where cold water aquatic life may be absent during, or tolerant of, seasonally warm temperatures. (4-5-00)
 - No waters are currently designated as Seasonal Cold
- d. Warm water (WARM): water quality appropriate for the protection and maintenance of a viable aquatic life community for warm water species. (4-5-00)
 - Only a handful of waters are designated as Warm, these are either highly modified systems e.g. run of the river reservoirs or highly anomalous features e.g. Bruneau Dunes ponds



ALUs (continued)

- e. Modified (MOD): water quality appropriate for an aquatic life community that is limited due to one (1) or more conditions set forth in 40 CFR 131.10(g) which preclude attainment of reference streams or conditions. (4-5-00)
 - No waters are currently designated as Modified

Overview of Idaho WQS: 2 Key Areas

- Water Quality Standards and Wastewater Treatment Requirements
 - 051. Antidegradation Policy– 053. Beneficial Use Support Status



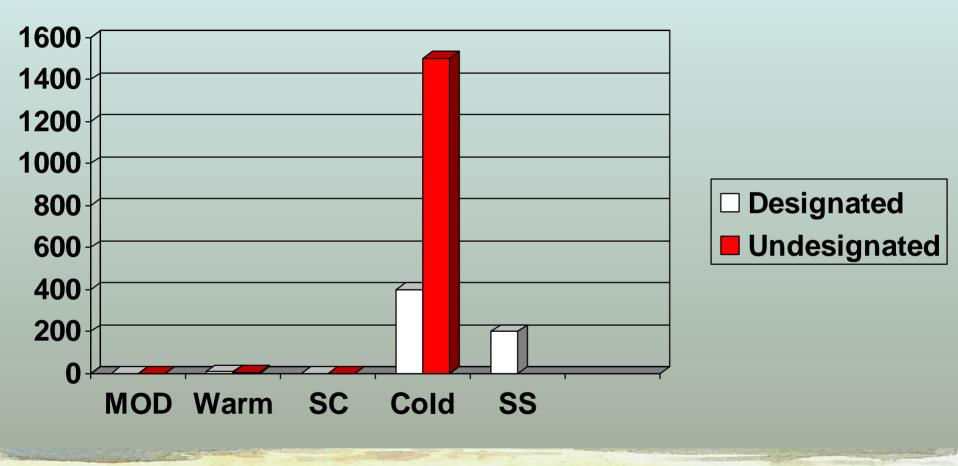
051. Antidegradation Policy

- A requirement of 40 CFR 1.131.12
- Idaho currently has 3 categories of water identified in the rule:
 - Outstanding Resource Waters
 - High Quality Waters
 - Maintenance of Existing Uses for All Waters
 - Note: these are not aquatic life uses

01. Maintenance of Existing Uses

- The existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected
 - Idaho presumes Cold Water Biota as existing for all undesignated water, unless shown otherwise
 - Idaho additionally presumes a contact recreation use

Tiered Aquatic Life Uses (or rather a lack of)



High Quality Waters

 Where the quality of water exceeds levels necessary to support protection and propagation...that water quality shall be maintained and protected

053.Beneficial Use Support Status

In determining whether a water body fully supports designated and existing beneficial uses, the Department shall determine whether all of the applicable water quality standards are being achieved, including any criteria developed pursuant to these rules, and whether a healthy, balanced biological community is present. *The Department* shall utilize biological and aquatic habitat parameters listed below and in the current version of the "Water Body Assessment Guidance", as published by the Idaho Department of Environmental Quality, as a guide to assist in the assessment of beneficial use status. Revisions to this guidance will be made after notice and an opportunity for public comment.

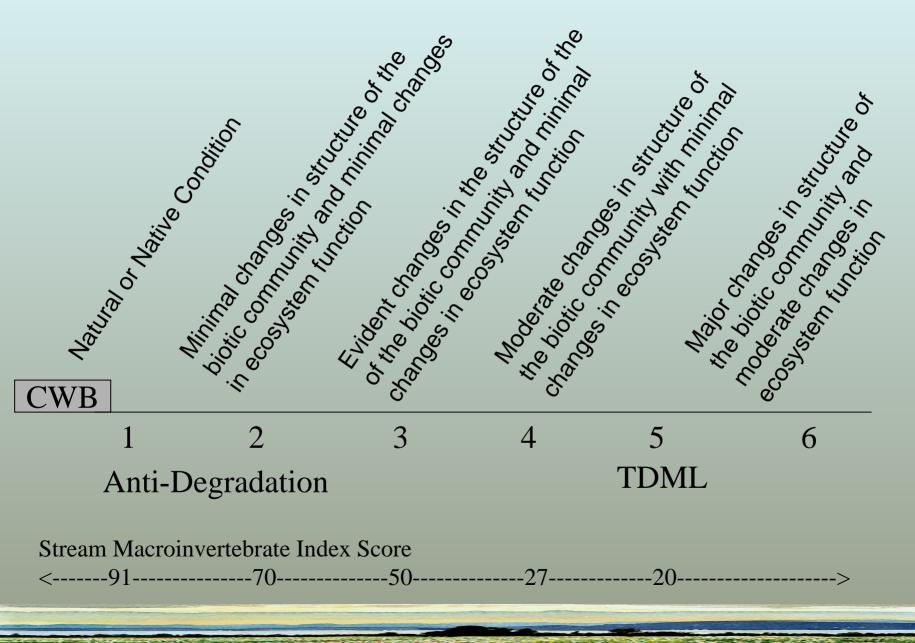
Biocriteria

- There are no numerical biocriteria standards in Idaho
- The numeric scoring of Idaho's biological indices put fourth in WBAG are relative to the reference condition
 - Currently 3 Tiers based on a departure from reference

Adoption of Biocondition Gradient within WBAG

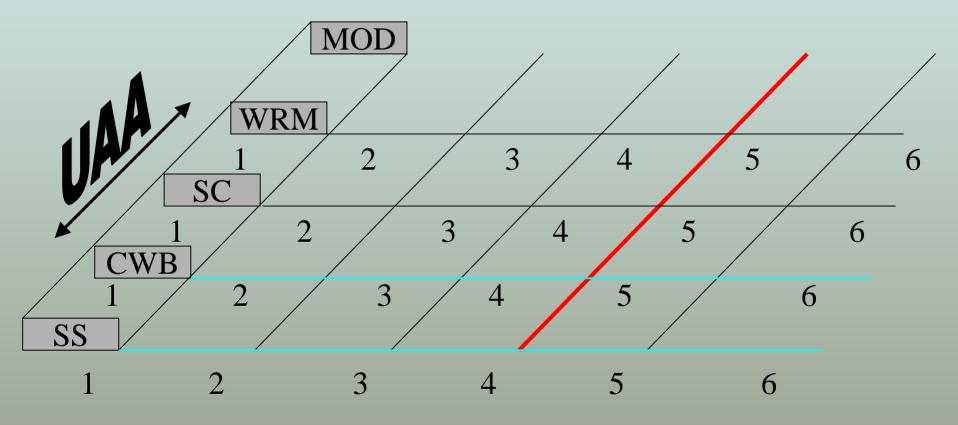
- Revise WBAG
- Define Tiers 1-6 or as appropriate
- Define Assessment Tools in terms of Tiers
 - Conceptually a good fit with current WBAG and Tools: SMI, SHI, SFI
 - Currently targeted to identify waters failing to support uses

CWB ALU and the Biocondition Gradient WITHIN a Bioregion



TALU and an Absolute Scale

Antidegradation <----->TMDL



Biocondition Gradient Application

- Antidegradation
 - 1: Outstanding Resource Waters (Or Reference)
 - 2: Special Resource Waters
 - 3: High Quality Waters
 - 4: Maintenance of Existing Uses for All Waters
- Impaired Waters
 - 4-5 is still viewed as the protection/propagation threshold in Idaho's discussions
 - lower levels: 5 and 6 could be a guide to prioritize TMDLs, Implementation, and funding e.g. 319