

National Biological Assessment
and Criteria Workshop

Advancing State and Tribal Programs



Coeur d'Alene, Idaho
31 March – 4 April, 2003

TALU 101

USING BIOLOGICAL ASSESSMENTS TO REFINE DESIGNATED AQUATIC LIFE USES: THE BIOLOGICAL CONDITION GRADIENT

Course Instructors and Contributors

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Using Biological Assessments to Refine Designated Aquatic Life Uses: Introduction

Presented by
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Using Biological Assessments to Refine Designated Aquatic Life Uses

Long Term EPA Goal: All States & Tribes have refined aquatic life uses and biological criteria in their water quality standards

Program Priority: Guidance on Use of Biological Assessments and Criteria to Refine Aquatic Life Uses in WQ Standards

Using Biological Assessments to Refine Designated Aquatic Life Uses

Draft Water Quality Standards Strategy:

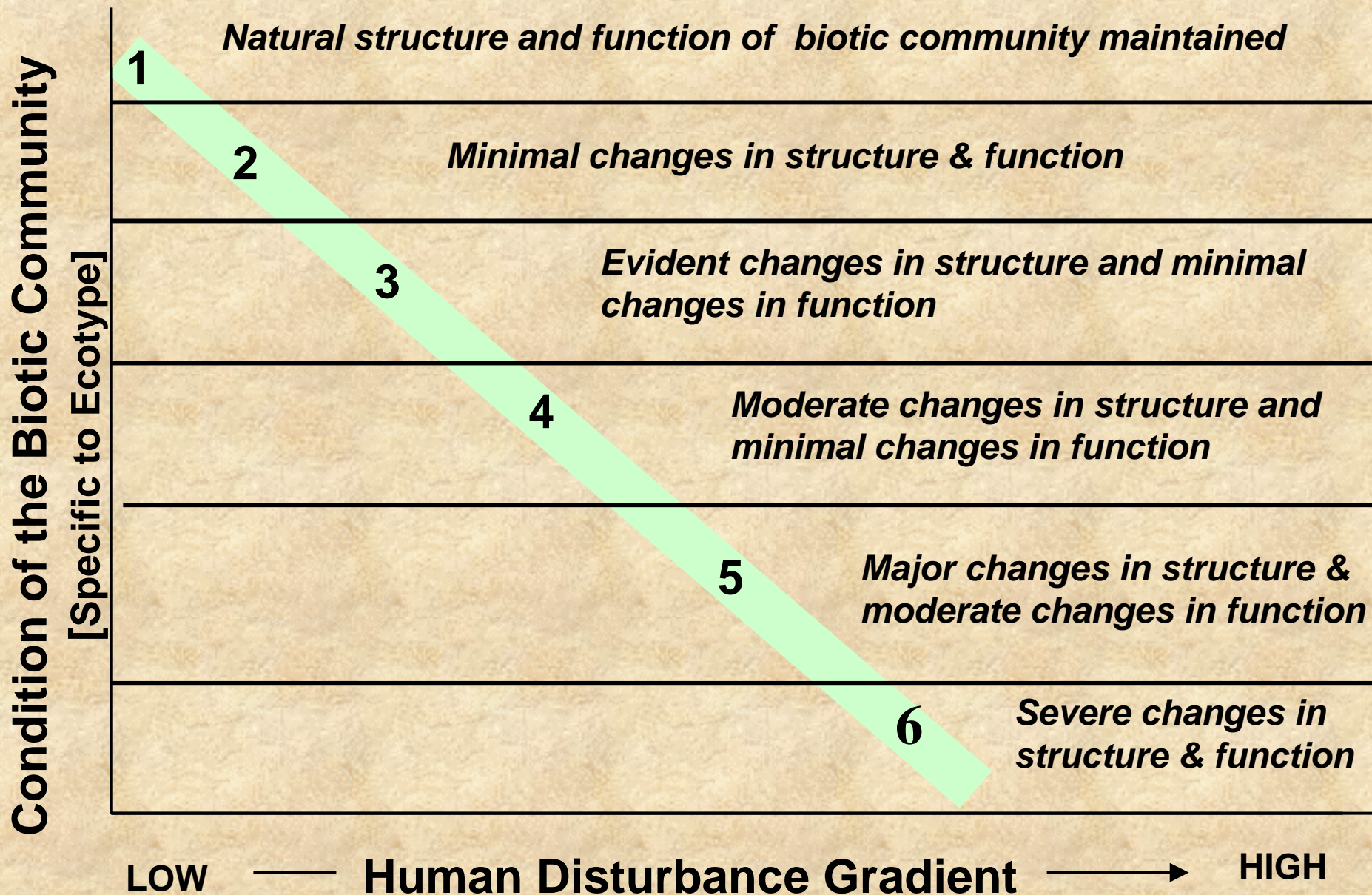
“All waters of the U.S. will have water quality standards that include the highest attainable use....”

EPA/State Workgroup: Objectives

First Task:

- ◆ **Develop national framework for use of biological assessments and criteria to help refine designated aquatic life uses (quality gradient);**
- ◆ **Propose ways to apply to existing State & Tribal WQS programs;**
- ◆ **Identify pitfalls and barriers to implementation;**
- ◆ **Problem solve and propose solutions.**

TALU Conceptual Model: Biological Condition Gradient



TALU 101: Session Objectives

Students will be able to understand the intent and scientific basis for the draft biological condition (BCG) and it's application.

Students will have opportunity to provide feedback to EPA on the draft model.

TALU 101: Session Outline

BCG Nuts and Bolts: Susan Davies, Maine

Case Example: Bob Angelo, Kansas

**Data Exercise: To make it real, gotta play
with some data**

Case Example: Greg Pond, Kentucky

5 Key Points to Emphasize:

#1: The framework is conceptual

#2: Number of tiers to be determined by State or Tribe

#3: “Best Fit” approach recommended

5 Key Points to Emphasize:

#4: The framework may be quantitatively defined by many possible methods

#5: A quality gradient - not classification

REMINDER: Workgroup Recommendations
Going Forward to EPA This Spring

- 1. Draft Conceptual Model (BCG and HDG)**
- 2. Implementation Options**
- 3. Technical Underpinnings:**
 - relationship between BCG and WQC
 - critical elements of a biological assessment program
 - strengths of current model and areas of uncertainty
- 4. Case Examples: Different Places and Types of Waterbodies (streams, rivers, wetlands, estuaries)**

REMINDER: Workgroup Recommendations
Going Forward to EPA This Spring

1. **Draft Conceptual Model (BCG and HDG)**
2. **Implementation Options**
3. **Technical Underpinnings:**
 - relationship between BCG and WQC
 - critical elements of a biological assessment program
 - strengths of current model and areas of uncertainty
4. **Case Examples: Different Places and Types of Waterbodies (streams, rivers, wetlands, estuaries)**

REMINDER: Workgroup Recommendations **Going Forward to EPA This Spring**

1. Draft Conceptual Model: BCG

- Paper for peer review journal
- Discussion paper and briefing materials for EPA
 - a. workgroup consensus recommendations
 - b. outstanding issues, reasons why and options
- Workgroup statement: strengths of current model and areas of uncertainty
- Case examples

One last thing to remember:

This is a work in progress!