Science Advisory Group Summary and Response October 20-21, 2010

Their Meeting Agenda

- Why the State wants biological objectives
- Role and charge to the Group
- History of bioassessment in California
- Workplan Overview
- Workplan specifics

- Task by task detailed descriptions

The Science Advisory Group

- Chuck Hawkins (Utah State Univ) Chair
- **David Buchwalter** (Univ of North Carolina)
- Rick Hafele (State of Oregon)
- Chris Konrad (US Geological Survey/ The Nature Conservancy)
- **Dan Mosley** (Pyramid Lake Tribe)
- LeRoy Poff (Colorado State Univ)
- John Van Sickle (US EPA Office of Research & Development)
- Lester Yuan (US EPA Office of Standards and Technology)

THE CHARGE

- Provide independent technical review of policy development products
 - Includes the workplan and individual tasks
- Provide critical scientific insight
 - Data gaps, alternative approaches, limits of interpretation
 - Potential management implications
- Provide guidance for science team and the State
 - Thought process, feasibility of application, alert to unforeseen roadblocks

CHALLENGE FOR THE DAY

- Review the workplan
- Did we use a sound technical approach?
- Are the technical activities appropriate to achieve the stated goals?
- Are there additional tasks we need to consider?

Workplan Overview

- Reference condition
- Stressor response models
- Waterbody classification and scoring Elements
- Stressor identification
- Information management
- Implementation Plan Development
- Rulemaking
- Outreach
- Training and standardization

Workplan Summary

TASK	GOAL
Reference Condition	Identify biogeographic regions, set biological expectations for reference sites
Stressor-Response Model	Set biological expectations for non-reference sites
Waterbody Classification	Assign biological expectations to every waterbody
Stressor Identification	Provide guidance for when bio-objectives are not achieved
Information Management	Transparent and standardized way to submit, store, access, and analyze bioassessment data

Developing biological objectives for perennial wadeable streams in the State of California

> Review of Workplan Scientific Advisory Group 21 October 2010

Overall Comments

Science team is to be commended for this effort to advance biocriteria development.

General comments on approach

- Explicit recognition of policy context for science team decisions in approach
 - suggest more interaction between science team and policy and stakeholder groups (e.g., to clarify objectives and to anticipate implementation issues).
- Clarify language/definition of terms to facilitate communication within team and between groups
- Identify specific goals for establishing biological criteria and how this approach will attain those goals
 - e.g., describe how criteria will protect high quality streams and set reasonable expectations for degraded systems

Comments on Task 1 (Reference Conditions)

- Continue to refine reference network to capture natural gradients within and among regions.
- Clarify screening process for reference sites and work towards greater objectivity.
- Define "reference" condition and use consistently

Comments on Task 2 (Stressor-Response Models)

- Change the name of this task to represent goal (e.g. best attainable conditions given human landscape)
- Check with regulatory group about variable criteria for single designated uses.
- Consider using this approach to inform traditional criteria setting (i.e., percentiles of reference)
- *A priori* selection of variables for non-controllable human effect axis with input from stakeholders and regulators.
- Identify pros and cons of binning *vs*. continuous models
- Choose biological variables that are important for programmatic goals rather than on statistical criteria
- Many questions about using this approach, use a pilot study to demonstrate its feasibility

Comments on Task 3 (Waterbody Classification)

- Regionalization scheme
- Many questions that will probably be answered as part of Task 2
- Pros and cons binning

For the Next Science Advisory Group Meeting

- Presentation of reference condition assessment
- Progress report on Pilot Study
 - Reference gradients
 - Assess stressor response modeling approaches
 - Evaluation of waterbody classification schemes
- Methods standardization