Summary From
The Science Advisory Group
Meeting on 20 April 2011

Some Overarching Themes

- **Impressive!**
  - Doing good work in California
- **Play the process all the way through**
  - Both technical and regulatory aspects provide perspective
- **Simple and clear communication will be key**

Agenda From 20 April 2011

- **Regulatory update**
- **Reference condition assessment**
- **Pilot study progress report**
  - Alternative approaches to stressor modeling
- **California's monitoring infrastructure**
- **Response from the Stakeholder Advisory Group**

Regulatory Update Topics

- **What we are doing……**
  - Goal and philosophy of biological objectives
- **What we have done so far…….**
  - Itemized chronology of activities
- **Where we are going…..**
  - Started discussion of CEQA Scoping

Regulatory Update: Committee Response

- More specific discussion/description of how biocriteria have been and could be implemented, both from point and non-point sources

- How will multiple criteria (e.g., different taxonomic groups, metrics) be used and how will independent applicability be addressed?

- How do you see anti-degradation policy being implemented?

Reference Condition Topics

- **Background**
- **Development process**
  - Assemble data set, Screening metrics, Screening thresholds
- **Evaluating performance**
  - Gradients, data gaps, alternate approaches
- **Feedback questions**

Better communicate that the reference condition represents the range of natural variation

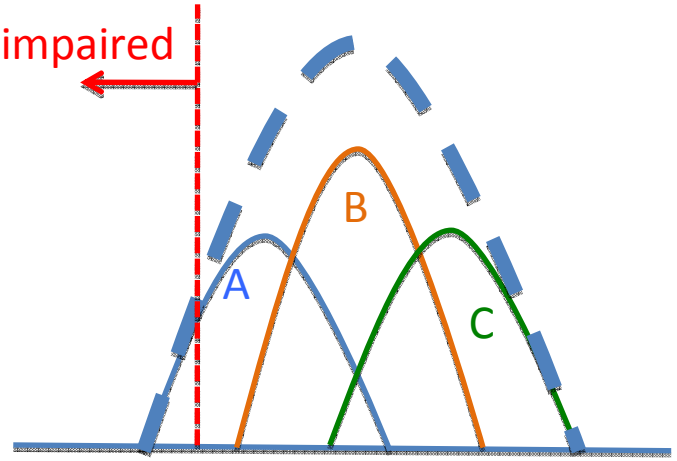
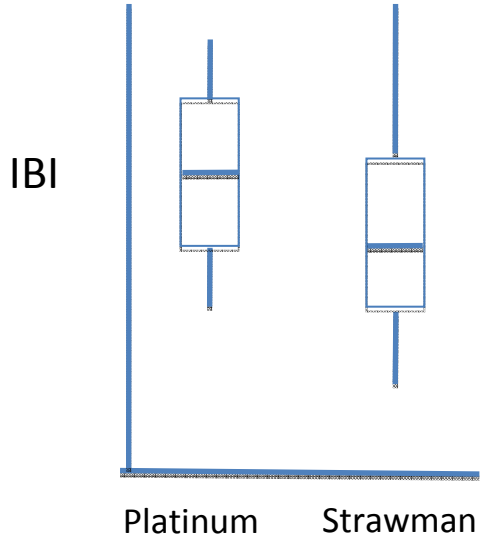


Figure 1. Blue dotted line = distribution of IBI scores for reference sites across state.
A,B,C are individual sites that vary over time, or could also be distribution of IBI scores within 3 regions.

Reference Condition: Committee Response

- **Are you satisfied with our metric selection process?**
  - Yes, but consider other potential stressors, e.g., conductivity
  - Check for remnant anthropogenic signal in your strawman reference sites (see Figure 2)
- **Which approach (es) do you recommend for combining the reference screening metrics?**
  - Single filters, multivariate [multi-metric] check
- **What are the most important factors for selecting screening thresholds?**
  - Generally OK
- **How should we adjust strawman thresholds?**
  - Regionally as needed using sensitivity analysis, anchored to platinum reference sites.

Communicate tradeoffs associated with reference site quality (platinum) and coverage (strawman)



[fake data] Box plots of IBI scores for platinum and strawman reference sites.

Reference Condition: Committee Response

- **How should we prioritize statewide consistency versus regional flexibility?**
  - Go with statewide consistency as long as coverage satisfactory and lack of anthropogenic signal within reference sites
- **Are our performance measures adequate? Are there better ones for us to try?**
  - Can't say until final scoring tools are developed and evaluated
- **Will our reference process be adequate for scoring tool development?**
  - yes

Pilot Study Progress Topics

- **Conceptual framework**
  - Reference condition, Stressor-response modeling, waterbody classification
- **Begin applying the framework in our pilot region**
  - Test alternative approaches and options
  - Empirical *vs.* Modeled approaches
- **Feedback guidance on preferred options**

Modeling – Classification: Committee Response

- **Which approach is better … and … Recommended improvements on preferred approach?**
  - Keep it simple and run it to the end and see if it can be communicated
  - No scientific basis for selecting binning over continuous
- **What are some outcomes you would like to see at our next meeting?**
  - Completed pilot, through implementation
  - Joint meeting between technical team and regulatory team

What's Next For the Science Advisory Group?

- **October 12-13, 2011**
- **Review initial products**
  - Reference condition assessment
- **Pilot Study findings**
  - First stab at: Biological expectation thresholds, waterbody classification maps, compliance assessment
- **Plans for the Stressor Identification task**