Summary of Stakeholder Comments on December 2014 Draft of

Wadeable Streams Science Plan

May 15, 2015

Two types of comments were made by the SAG on the Science Plan:

1) Direct edits to the Science Plan
2) General comments

General comments are summarized below, in three major categories: 1) overarching comments, 2) comments on indicator selection and 3) comments on science supporting assessment endpoints and nutrient targets.

OVERARCHING GENERAL COMMENTS
Most notably, the Draft Science Plan seems to heavily emphasize the establishment of nutrient objectives and numeric limits to support the implementation of those objectives. The Draft Science Plan also appears to be steering the overall nutrient policy development process in the direction of numeric objectives which will be unattainable in many water bodies, and which will ultimately form a bright line defining the attainment (or impairment) of beneficial uses. Taken as a whole, CASA's markups to the Draft Science Plan attempt to avoid the establishment of that bright line prior to development of essential information and consideration of substantive policy issues. While we understand that the development of numeric metrics (articulated as "threshold values", "targets" or "biological endpoints") is one component of the process, ultimately the nutrient policy must contain the flexibility to allow the State Water Board, regulated community and other stakeholders within a watershed to evaluate and determine appropriate endpoints for specific water bodies, taking attainability into account. CASA.
The heart of our concern with the Draft Science Plan is that the approach is geared almost exclusively toward numeric nutrient objectives as opposed to management and implementation strategies designed to control nutrients. For example, we believe the Draft Science Plan (Page 2) should shift its focus from terminology that references "science to support objectives" to instead focus on "science to support the development of nutrient policy and management strategies" for the State Water Board. As noted above, CASA has provided suggested markups on the State Water Board's technical workplan to convey these same concepts, and our proposed edits to the Draft Science Plan are consistent in nature. CASA believes that the State Water Board's nutrient policy effort must incorporate the ability to manage to a range of outcomes in terms of stream condition, biological endpoints, and other factors. The overall effort includes the activities described in the Draft Science Plan, and thus the plan should include the development of this information to support the evaluation of management strategies. The implementation of narrative nutrient objectives should include science elements to ensure that essential management-based information is included in the nutrient policy development effort. CASA
We have a number of tasks that we would like added for consideration as part of Element 2.

1. The development of guidance or minimum acceptable criteria for site-specific models and management plan development.
2. The development of a white paper on wet season/wet weather policy.
3. Procedures for evaluating or considering the impact of non-anthropogenic sources and air deposition.
4. Application of "default" objectives in relationship to monitoring protocols to address the potential discrepancy between science based on data collection that does not target algal bloom cycles and targeted algae monitoring protocols that may capture different conditions than those on which the "default" science is based. CASQA

Evaluation of modified channels will require that a distinction be made between natural and modified channels. Stakeholder input on stream categorization should be solicited to arrive at an agreeable classification scheme in the early stages. LACSD

COMMENTS ON INDICATOR SELECTION

The focus should be on the BEST and most direct indicators. There are significant challenges associated with biological community relationships and the lack of stressor specificity of biological condition indicators that may result in these being too challenging to address as part of the NNE. Therefore, I don't think we should limit the focus on taxonomic impacts at the expense of things like abundance and DO. These may be the best, most reliable thresholds that will actually be achievable and really make a significant difference. LACSD

Discussing the lack of thresholds in the biointegrity policy and directly following that up with discussion of the BCG creates the impression that this work will be used to develop the biointegrity thresholds. While the information may be considered in that process, this is a nutrient objective setting process and the information is only being developed in that context. CASQA

In the workshop discussion on element 1.3, there was presentation of information about categorization of streams and development of various target scenarios relating information on site-specific factors to nutrients and algal biomass. It would be helpful if the proposed work provided more information on the types of site-specific and landscape factors that will be evaluated and specifically note that modified channels will be considered as a stream category in the analysis. Additionally, it would be helpful if this work were developed in a way to allow modeling to evaluate the impacts of different management strategies if possible. CASQA

Documentation will be needed to describe the stream type classification process/criteria. LACSD

Regarding the BCG, algal abundance should be evaluated as both a stressor and a response indicator. Along with DO and pH, it may be a more reliable link to beneficial uses and source of thresholds than community response. LACSD

Suggested footnote on dataset: "There are certain limitations of the available statewide dataset, which could result in uncertainty, and may lead to a range of results from the analyses.

Circumstances in which such limitations or data gaps should be considered when developing the objectives will be noted, as needed, in any reports on the results." CASQA
The second general comment is that in the discussion of models on page 4, it would be helpful if the discussion made it clear that reach or watershed specific models and analysis are preferred over regional or statewide statistical models where feasible. CASQA
COMMENTS ABOUT SCIENCE SUPPORTING DECISIONS ON ASSESSMENT ENDPOINTS AND NUTRIENT TARGETS
Through an expert panel process, thresholds for algal biomass have also been identified that would represent a direct link to beneficial use impacts (referring to Tetra Tech 2006). LACSD
Although algal abundance can be viewed as a stressor (x-axis), it should also be evaluated as a response indicator as well (y-axis). While the community threshold may end up being more limiting, I think from a reliability and a clear and direct link to beneficial uses, things like abundance and pH and DO need to be evaluated, thresholds proposed using the same "expert opinion" approach being considered for community. In addition to these possibly being more reliable in terms of linkage to beneficial uses, they may also represent a "reasonable" and enforceable target applicable to at least some watersheds where community condition is not as valuable. LACSD
DO and pH are known to be linked to beneficial uses and should be used as factors in development of models. They need to be included in all considerations of response indicators in this document. LACSD
Should focus on those indicators that more directly and specifically linked to nutrient impacts. LACSD
Indicators do not necessarily need to have a causal relationship to nutrients. Any significant indicators that most directly address beneficial uses (like D.O. and pH) should be included, whether or not they have causal relationships with nutrients. LACSD
H20 was found to be inferior for statewide application. Also, seems more correlative than causative. LACSD
"Statistical models" should not be the main approach for setting default nutrient targets. The BCG study and expert opinion are better suited for setting initial default values, with some existing data and statistics being used as a reality check to back up the BCG conclusions. LACSD
MISCELLANEOUS COMMENTS
The final general comment is that not all relevant terms are included in the definitions in the front of the document. For example, on page 7, new terms (levels and thresholds) are used that are not defined. Please include definitions for terms like thresholds and levels in the front of the document and make sure all the various terms are used consistently throughout the document.