



March 9, 2022

Via email

Stephen Brandt, Chair, and members
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Re: Assessment of the Value and Impact of the Delta ISB

Dear Chair Brandt and Delta Independent Science Board members,

We wanted to thank the Delta Science Program staff for their efforts on the Assessment of the Value and Impact of the Delta Independent Science Board. There are many parts of the assessment that are relevant and useful. However, we have some general concerns about the interview design for the assessment, and the recommendations that came out of the stakeholder interviews. We also have concerns about balance in the discussion in the section on “relevant recommendations and the issue of values in science.”

Lack of breadth in stakeholder interviews

We appreciate the survey of stakeholders used in the assessment but have concerns about the lack of breadth in the interviews. Peter Gluckman is Chair of the International Network of Government Science Advice and President-Elect of the International Science Council. In *Brokerage at the science–policy interface: from conceptual framework to practical guidance*, Gluckman et. al. wrote¹:

¹ Gluckman, P.D., Bardsley, A. & Kaiser, M. *Brokerage at the science–policy interface: from conceptual framework to practical guidance*. *Humanit Soc Sci Commun* 8, 84 (2021).
<https://doi.org/10.1057/s41599-021-00756-3>

We posit that, as a core principle, effective brokerage needs to engage a range of stakeholders in the provision of knowledge and formulation of options—first using evidence synthesis as a form of second-order knowledge co-production. Brokering this knowledge into the policy process requires trust, transparency and integrity.

The “26 knowledgeable stakeholders” that were selected for interviews did not include any NGO stakeholders. The assessment states,

Findings reported in this chapter are primarily based on interviews with 26 knowledgeable stakeholders who were selected based on their past and current engagement with the Delta ISB to share in-depth and informed views about the Board and its products. (Appendix 2, p. 147.)

We respectfully point out that there are NGO stakeholders that have “in-depth and informed views” about the Board and its products and have had past and/or current engagement with the Delta ISB.

Export contractors interviewed by the Delta Science Program staff included Metropolitan Water District, the State Water Contractors, and the Santa Clara Valley Water District. While the Central Delta Water Agency was included, there was a much broader group of Delta interests that was not interviewed.

The assessment considered the Delta ISB’s “overall recommendation ... to establish an ongoing research program on the Delta as an evolving place,” and also considered outreach issues for the Delta ISB, but the local Delta stakeholders who were central to this component of the review were not interviewed. This is an unfortunate omission.

Interviews with Delta Stewardship Council staff

As a further consideration, while the report states that Delta Stewardship Council staff were interviewed, the identity of the interviewees and the potential supervisory relationship to the interviewers were not disclosed. Garrard et. al.² noted:

Qualitative researchers have established guidelines for the disclosure of relevant personal values and beliefs. In the social sciences, this involves revealing one’s relationship to the participants being studied, including potentially hidden power relationships that may affect data collection and/or final results.

These power dynamics should be disclosed and addressed in the Delta Science Program’s products, including the review of the Delta Independent Science Board.

² Garrard, G., Fidler, F. Wintle, B., Chee, Y.E., & Bekessy, S. 2016. Beyond Advocacy: Making Space for Conservation Scientists in Public Debate, *Conservation Letters* 9(3).
https://www.nespthreatenedspecies.edu.au/media/gdfjf4q3/project-6-3_2016_garrard_et_al-beyond-advocacy-pdf.pdf.

Power dynamics with respect to the Delta ISB funding crisis

We are also concerned about the power dynamics of the timing of the interviews with stakeholders for the Delta ISB assessment. The report states that the interviews were conducted from November 2020 to December 2020. (Appendix 2, p. 147.) We note that this was the period of crisis for the Delta Independent Science Board, because the Board had just learned that their compensation was reduced to \$100 per diem.

In particular, we are troubled by the power dynamics of the following recommendation in the context of the defunding of the Delta ISB:

First, some interviewees suggested a more thorough orientation at onboarding to acquaint Delta ISB members with the Delta context – especially management and regulatory processes – so they understand the system and have a clearer understanding of whom to involve when they formulate recommendations. Second, several interviewees suggested the Board should be proactive in approaching and engaging with entities it considers responsible for implementing its recommendations. (p. 74)

There were clearly power dynamics in conducting interviews with the agencies that are reviewed by the Delta ISB during the height of the Delta ISB funding crisis and these power dynamics should have been acknowledged in the assessment. The assessment notes that:

The main organizations involved in implementing Delta ISB recommendations are the Council (78%, n=14), Collaborative Adaptive Management Team (17%, n=3) and the State of California (5%, n=1).
(p. 36)

We note that there were also lapses in Delta Stewardship Council reports to the Delta ISB during the time of the interviews. At the December 2020 Delta ISB meeting, with respect to planning future meetings, Chair Stephen Brandt stated that the Delta Stewardship Chair and Executive Officer had not been making reports at the Delta ISB meetings, nor had the science lead for the Council³:

We haven't heard from the Delta Stewardship Council Chair or Executive Officer recently. So have them give a presentation on what their upcoming plans for the year are, and particularly if there's anything in any request they may have from the board for the new board members. Normally we have the science lead in the Council present at every one of our meetings, but we haven't heard from them in a while.

We do wonder why the priority for the Delta Science Program in November 2020 and December 2020 was conducting structured interviews with Delta Stewardship Council staff and other agencies that the Delta ISB oversees about the “impact and value” of the Delta ISB, rather than supporting the Delta ISB during the crisis.

³ Delta Independent Science Board, December 11, 2020 meeting video at 1:46. <https://cal-span.org/unipage/?site=cal-span&owner=DISB&date=2020-12-11>.

Discussion of the issue of values in science

Our other concerns have to do with the recommendations by the Delta Science Program staff in “Box 1: Relevant recommendations and the issue of values in science” on p. 75-76. While we give an “E” for effort to this discussion, we believe the discussion needs better context and balance. We respectfully offer the following observations.

The discussion on the issues of values in science states in part:

Modern Western science has conventionally espoused a value-free ideal, in which value neutrality (i.e., the idea that science is not influenced by social, moral, or political values) is viewed as a hallmark of scientific knowledge and a pillar of scientific credibility and trust (Douglas 2009).

This sentence fails to accurately represent the opinions in the cited text, *Science, Policy, and the Value-Free Ideal*.⁴ In a review of the book, Fagan wrote:⁵

Douglas gives the old argument a new twist by treating acceptance of the value-free ideal itself as a moral question: should scientists attempt to follow the value-free ideal? The answer is no: the value-free ideal conflicts with our general responsibility to consider the consequences of error in deciding what to do, and there is no good reason to exempt scientists from this general responsibility. The value-free ideal therefore must be rejected on moral grounds... The main achievement of this chapter, and indeed of the book as a whole, is to reconceive the scientist as an active agent with an authoritative voice in our society, rather than an idealized epistemic agent assessing evidential support for hypotheses (70-73).

As explained below, the Delta Reform Act created the Delta Independent Science Board to exercise oversight of science in the Delta, a role closer to Douglas’ concept of the scientist as an active agent with an authoritative voice.

Douglas’ book was also published before the major changes to the social landscape of science in the United States under the Trump administration, including rejection of sound science on the COVID pandemic, unprecedented rollbacks of environmental protections, and interference with scientific integrity in federal agencies. Any discussion of the role of values in science is incomplete without consideration of this new landscape.

The discussion of the “value-free ideal” also cites Wilhere,⁶ who criticized the peer review of the 2008 Northern Spotted Owl recovery plan as “inadvertent advocacy.” The peer review stated that “[g]iven that the [spotted owl] has been experiencing about a 4% annual rate of population

⁴ Douglas, H. E. 2009. *Science, Policy, and the Value-Free Ideal*. University of Pittsburgh Press.

⁵ Fagan, M.B. 2009. *Science, Policy, and the Value-Free Ideal*, Notre Dame Philosophical Reviews. <https://ndpr.nd.edu/reviews/science-policy-and-the-value-free-ideal/>

⁶ Wilhere, G. F. 2012. Inadvertent advocacy. *Conservation Biology* 26:39–46. <https://doi.org/10.1111/j.1523-1739.2011.01805.x>

decline for the last 15 years, any reductions from current levels of habitat protection cannot be justified.” Wilhere commented, “[t]he reviewers failed to recognize a legitimate justification for reducing the current levels of habitat protection—a different attitude toward risk—and tolerating a greater extinction risk allowed a reduction in habitat protection.”

Wilhere failed to consider the very serious political interference in the Northern Spotted Owl recovery plan. Carroll et. al. reviewed Wilhere’s essay, and commented:⁷

The Department of the Interior (DOI) inspector general ultimately confirmed reviewers’ concerns when he concluded that Julie MacDonald, a high-level political appointee, spurred efforts to make the new recovery plan less protective of the owl and its habitat. Rather than encouraging open discussion of the appropriate level of risk to guide owl recovery, Mac-Donald used methods such as refusing to include leading scientists with expertise in owl ecology as members of the team drafting the new recovery plan and creating a Washington Oversight Committee that explicitly discouraged habitat protections (USDI 2008). Due to these and similar actions, DOI subsequently developed a scientific integrity policy to prevent such interference in agency decision making (USDI 2011).

As California Water Research previously discussed with the Delta Independent Science Board, there have been major concerns about loss of scientific integrity in the process for developing the Biological Opinion for the Long Term Operation of the Central Valley Project and State Water Project.⁸ In July of 2019, the Trump administration removed most of the scientists working on the biological opinion and established a team of lawyers and scientists from Reclamation and other agencies to review and revise the biological opinion, deeming the July version a "draft" in need of improvement. There were huge concerns about the unprecedented political interference in agency science.⁹ The operations of the Central Valley Project under the new Biological Opinion decimated Winter-run salmon in 2021,¹⁰ and threaten to do so in 2022.¹¹

⁷ Carroll, C. Daniel J. Rohlf, D. Noon, B., Reed, J.M. 2012. Scientific Integrity in Recovery Planning and Risk Assessment: Comment on Wilhere. *Conservation Biology*, 26(4):743-45. <https://doi.org/10.1111/j.1523-1739.2012.01875.x>.

⁸ Deirdre Des Jardins. 2021. Letter to the White House Scientific Integrity Fast-Track Action Committee, Re: Comments on scientific integrity in federal agency decisions regarding water management by Reclamation’s Central Valley Project. <https://cah2oresearch.com/wp-content/uploads/2021/08/SI-FTAC-comments-Reclamation-Central-Valley-Project.pdf>.

⁹ Congress member Jared Huffman. 2021. Trump’s California Water Plan Troubled Federal Biologists. They Were Sidelined Exclusive: Although Scientists Recommended Otherwise, Trump Officials Favored Political Allies Over Endangered Wildlife, Internal Emails Show. Congressional website. <https://huffman.house.gov/media-center/in-the-news/trumps-california-water-plan-troubled-federal-biologists-they-were-sidelined>.

¹⁰ NOAA Southwest Fisheries Science Center. 2021. Water Year 2021 Winter-Run Chinook Temperature-Dependent Mortality Estimate. <https://www.courthousenews.com/wp-content/uploads/2021/11/Mortality-Estimate.pdf>.

¹¹ Doug Obegi. 2021. Agencies Planning a Disaster for CA Salmon if 2022 Is Dry. NRDC expert blog. <https://www.nrdc.org/experts/doug-obegi/agencies-planning-disaster-ca-salmon-if-2022-dry>.

Given the salmon crisis, we are troubled by the assessment’s citation of Wilhere and the discussion of “inadvertent advocacy” in the section on the “issue of values in science.” A more appropriate framework was suggested by Carroll et. al.:

The objective of peer reviews appropriately encompasses both the underlying science and the context in which science is used to inform policy... Scientists and scientific societies have the responsibility to identify when recovery plans deviate from Congressional intent and past agency practice and to suggest revisions that better achieve the goals of the ESA and other conservation statutes. (p. 745.)

Legislative intent in the Delta Reform Act

The mandate by the legislature for the Delta Science Program is quoted in the foreword to the assessment (Wat. Code § 85280(b)(4)):

The mission of the Delta Science Program shall be to provide the best possible unbiased scientific information to inform water and environmental decisionmaking in the Delta.

The Delta Reform Act thus states that the mission of the Delta Science Program shall be to provide the “best possible unbiased scientific information,” *not* value-free scientific information.

Both the Delta Science Program and the Delta Independent Science Board should carefully consider the distinction between unbiased scientific information and value-free scientific information. The Delta Reform Act provides clear and explicit direction on state water management policy. Water Code section 85023 states that “[t]he longstanding constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the Delta.”

California Water Impact Network, California Sportfishing Protection Alliance, and AquAlliance recently had a landmark settlement in a lawsuit against the State Water Resources Control Board over the Board’s failure to comply with the public trust doctrine in its decisions. The settlement required that the Board include transparent evaluation of public trust doctrine factors in its analysis of the Bay-Delta Water Quality Control Plan.¹² We argue that the Delta Science Program and the Delta Independent Science Board should do the same.

In considering the influence of moral and social values on its reviews, the Delta Science Program staff suggested the following option for the Delta Independent Science Board:

A second option would reflect a value transparency approach, which would allow the Board to work with stakeholders, but would also involve explicitly identifying non-

¹² California Water Impact Network, 2020. Landmark Pattern & Practice Public Trust Case Reaches Settlement: Enforceable Transparency and Analysis to Replace Years of Failure to Comply with Existing Water Quality and Flow Standards, California Water Impact Network blog. <https://www.c-win.org/blog/2020/7/21/landmark-pattern-amp-practice-public-trust-case-reaches-settlement>.

scientific considerations (including values) underpinning the resulting recommendations. (p. 76.)

It would be a significant improvement to Board reviews if there was explicit consideration of the constitutional principles of reasonable use and the public trust doctrine. The Delta Reform Act of 2009 further charges the Delta Independent Science Board with “oversight of the scientific research, monitoring, and assessment programs that support adaptive management of the Delta...” (Wat. Code § 85280(a)(3).) We believe this gives the Board both the authority and the responsibility to consider reasonable use and the public trust.

Further, rather than the Delta Independent Science Board’s oversight being “value-free”, we argue that it should be informed by the policies adopted by the legislature in the Delta Reform Act. The Delta Reform Act stated that “[t]he policy of the State of California is to achieve the following objectives that the Legislature declares are inherent in the coequal goals for management of the Delta:

- (c) Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.
- (d) Promote statewide water conservation, water use efficiency, and sustainable water use.
- (e) Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta.

To the extent that these statutorily mandated policies are controversial for some stakeholders, the disagreement should not be embedded in science in a non-transparent way, but explicitly considered.

We are also concerned about the proposed limits on the Delta ISB. The discussion on the issue of values in science states:

If the Delta ISB aims to exert influence in any way, it is over the usage, conduct, or coordination of science, rather than resource management policies or decisions. However, decisions about science and science governance are inevitably linked with broader social and political values and interests.

We believe this does not accurately characterize prior Delta ISB reviews. Further, such a limitation on the scope of the Delta ISB’s reviews would gut oversight of the use of “best available science” in meeting the goals in the Delta Reform Act, as well as weakening accountability in environmental governance of the Delta.

In the Delta Science Program’s March 1, 2022 brown bag webinar, Carl Wilcox, former Delta Advisor for the California Department of Fish and Wildlife, stated that the Delta Plan consistency requirements and the Delta Independent Science Board are the top two processes or institutions that provide accountability. This is the slide from Wilcox’ presentation:

In the Delta, what processes or institutions create accountability

- Delta Plan consistency requirements likely provides the greatest level of accountability related to projects proposed for implementation.
- Independent Science Board.
- CEQA
- Regulatory processes
- Courts



A more balanced discussion of the issue of values in science, as applied to the Delta Independent Science Board would consider the constitutional principles of reasonable use and the public trust and the legislatively mandated policies in the Delta Reform Act. We argue that these principles should be explicitly and transparently considered in all Delta Science Program and Delta Independent Science Board products.

Thank you for your consideration of these comments,

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