

Delta Independent Science Board

Memo to the Delta Stewardship Council

Lessons from the recent National Research Council report, *Sustainable Water and Environmental Management in the California Bay-Delta*¹

This report offers an insightful, often eloquent examination of difficulties inherent in the co-equal goals, causes of declines in native fish species, likely impacts of climate change on Delta management, and weaknesses of current governance structure, policy making, and scientific efforts.

The NRC had been asked, by Congress and the Department of Interior, to review of the scientific basis of actions that could be taken for California to achieve the co-equal goals of environmental sustainability of the Bay-Delta ecosystem and a reliable water supply. The report concludes the NRC's response to this request.

The Council has already made use of the report in its April 18 comments to the State Water Resources Control Board. The Delta Independent Science Board encourages the Council to refer again to the NRC report on several topics:

1. **Managing scarce water.** The report recommends principles for that may help define the co-equal goals in terms of workable policies for managing scarcity. (chapter 2, p. 38-43)
2. **Ranking stressors.** As noted in the Council's April 18 comments, the NRC committee report's authors—like most agency and university scientists, including this board—are unable to describe a hierarchy of stressors that, in effect, “ranks” them in relative importance. (chapter 3)
3. **Thinking long-term.** The report anticipates changes in climate, changes in the landscape through levee failure, changes in flows, changes in ecosystems, changes in water scarcity. It advocates development of adaptive strategies for managing change. (chapter 4)
4. **Water governance.** “A comprehensive vision for governance of California's water policy has yet to be laid out, but is critically needed if progress is to be made.” (chapter 5, p. 167-172)
5. **Adversarial science.** The report commends the Delta Science Program for fostering constructive scientific dialog. It also illustrates approaches to avoiding paralysis in the face of uncertainty. (chapter 5, p. 173-177; appendix F)

¹ Prepublication version at http://www.nap.edu/catalog.php?record_id=13394, 220 pp.