



To: Dr. Stephen Brandt (Chair of the Independent Science Board)

From: William D. Phillimore (Coalition for a Sustainable Delta and member Collaborative Science and Adaptive Management Program Policy Group)

Date: August 25, 2021

Re: The ISB monitoring enterprise review

I am writing to provide input to you and your fellow Board members on one of the agenda items covered at the Independent Science Board (ISB) meeting on August 20, understanding that the remote ISB meeting format and the during-meeting public comment convention do not allow for especially effective exchanges of information between the public and the science panel.

The Coalition for a Sustainable Delta* lauds the ISB for taking on the monitoring enterprise review and seeking outside consultant assistance by ESSA in cataloging the daunting array of data collection activities on-going in the Bay and Delta. The reports from the consultants offer a telling picture of lack of adherence to best professional standards of practice in design and implementation of environmental monitoring at extraordinary cost. We trust that the insights offered by the consultants in the closing section in the third of three reports -- Section 3.0 *Emerging insights and needs related to monitoring and adaptive management*, pages 84 to 98 -- will be translated in the pending ISB report into the strongest possible recommendation for the state and federal wildlife and water agencies to adopt an adaptive resource management framework. While the ISB has specifically undertaken a review of the Sacramento-San Joaquin Delta "monitoring enterprise," it is the necessary linkage between the broad multi-agency resource management agenda and programmatic monitoring and assessment that must be "reimagined" -- redesigned -- to enable Delta monitoring programs that can be effective, efficient, and accountable. Californians expect resource monitoring that delivers both the information necessary to document the numerical status of and trends in resources of conservation concern and to assess the performance of very expensive management actions targeting the state's imperiled species and their habitats. The Coalition wishes to add a couple observations to that end.

Despite the acknowledgments and appreciation offered to ISB from several Delta organizations that were read into the meeting record, new board members should understand that ISB in its 22nd year has had little demonstrable effect on the direction of the science enterprise and the input of science into natural resources policy and resource management agendas in the Bay and Delta. That is at least in part because in the Delta both policy makers and resource managers have not made sufficient strides toward adoption of transparent structured decision-making processes that need and use reliable knowledge accrued from scientific pursuits – research, modeling, and monitoring – frequently defaulting instead to decision-making informed by surmise or, at times, political expediency. The wildlife and water resources agencies, claiming otherwise, have consistently left ISB reports at the curb. But, given the fulsome debate over monitoring that has recently emerged in the Collaborative Science and Adaptive Management Program process, the ISB's review of monitoring in the Delta has

the potential to shake that history by strongly wording its findings and unequivocally clarifying that the current monitoring regimes are failing to deliver the information needed by decision makers and resource managers.

The ISB should understand that agency presentations at last week's meeting were far less revelatory than aspirational. The dissembling by the presenters that followed their assertions that adaptive management and rigorous monitoring are elements of the agencies' current agendas probably wasn't lost on the ISB's veteran panelists. New board members should be aware that, despite the de rigueur appearance of well-worn adaptive management cycle graphics co-opted from the Delta Stewardship Council's Delta Plan in agency presentations, plans, and reports, *there are no resource management actions being implemented at scale in adaptive frameworks anywhere in the Bay and Delta.*

Consistent with that fact, *there are no monitoring schemes in action or planned that are designed in an experimental framework that can deliver data from which the performance of directed management actions might be assessed.* Furthermore, the abundance and trends in numbers of the listed species that reside in the Delta are not known to a passable degree of accuracy.

The ISB should be aware that, limited by the sparse information derived from a half dozen standing "pelagic" fish surveys (described by presenters as fish monitoring programs), there is no reliable estimate of the size of the delta smelt population, the Delta's flagship species, nearly 30 years after its listing under the federal Endangered Species Act. Despite being data-limited by the footprint of those fish surveys, the State of California listed the longfin smelt, absent reliable estimates of its population size or an understanding of its distribution in the Bay and Delta. The same fish surveys have not provided and cannot provide information to help managers understand the magnitude of the effect of predation by non-native fishes, likely the dominant environmental stressor impacting those listed fishes. It can be fairly stated that the fish surveys in the upper San Francisco Estuary have raised a red flag over declines in the abundances of certain species, but the surveys have done little more than that to inform the necessary conservation agenda for them. The "monitoring" efforts touted by the agencies to the ISB last week are not designed to, and cannot, monitor the Delta's imperiled species.

Given the above, we urge the ISB to stick with the very strong recommendations issued by the consultants as conclusions to their report and in addition to make sure that those conclusions are widely dispersed and adopted. We believe that the work that the ISB has commissioned and will report is potentially game changing and should serve as a direction for all the monitoring and survey work being undertaken by all agencies in the Delta. We fear that this will not happen without considerable effort, but the current status quo has clearly failed. We all need to recognize that and move on.

The Coalition and its partners will do everything possible to help the ISB in its leadership in this effort.

*The Coalition is a California nonprofit corporation comprised of agricultural, municipal, and industrial water users, as well as individuals in the San Joaquin Valley. The Coalition is a founding member of the Collaborative Science and Adaptive Management Program; it has invested millions of dollars in efforts to protect at-risk fish native to the Delta, including the delta smelt, through legal action and scientific research.