From: Windham-Myers, Lisamarie@DeltaCouncil <lisamarie.windham-myers@deltacouncil.ca.gov>
Sent: Wednesday, November 27, 2024 1:40 PM
To: Delta Council ISB <DeltaCouncilISB@deltacouncil.ca.gov>

Subject: Comments on draft prospectus for Emerging Climate Science Symposium

Dear Delta Independent Science Board,

The Delta Science Program would like to provide feedback on the Delta ISB's prospectus for the Emerging Climate Research Symposium and would also like to share feedback we have heard from others working in the region. In general, the proposed symposium was met with excitement and enthusiasm. Below I have summarized the suggestions and recommendations that emerged from email correspondence.

The Delta Science Program suggests the Delta ISB:

- Acknowledge the Science Action Agenda (SAA) in the prospectus. A stronger connection ensures management applicability of the Delta ISB's work, considering the SAA's collaborative and interagency development process, and helps us effectively track progress on the science actions and management needs

- For Question 1b in the prospectus, "What changes in the drivers of regional impacts are expected under future climate change?" provide a specific the time frame for future climate change

- For Question 5, "How reliable are current downscaled climate products for regional application in the Delta region?" specify which climate products will be considered

- Do targeted invites to interested parties and decision-makers in the Delta to attend the symposium and receive deliverables

Clesi Bennet, who works in Climate Change Programs of the California Natural Resources Agency, suggested coordinating with efforts around California's Fifth Climate Change Assessment. Separately, Elea Becker Lowe, the Program Manager for the Fifth Climate Change Assessment from the Governor's Office of Land Use and Climate Innovation reached out to the Delta Science Program. Elea commented that they are very interested in learning more and have a couple of initiatives underway that could be relevant to the Delta ISB's effort, including:

- the Fifth Climate Change Assessment Regional Synthesis Reports (three of which include Delta issues) and,

- the development of the Vulnerable Communities Platform (this will include various Sea Level Rise and flooding data resources to inform the tool development, including delta-specific information).

Jake Weltzin, Senior Science Advisor of the Ecosystems Mission Area at the US Geological Survey, provided comments which included:

- The first overarching goal to understand climate projects and uncertainty for the Delta seems well-met from the set of questions.

- Consider including a focus on how the human communities of the Delta would be affected. A socioecological perspective could help understand how communities (i.e. farmers, rural landowners, Tribes, etc.) are susceptible to both indirect and direct drivers.

- Look at the nexus of compounding or interactive effects of non-climate drivers on direct or indirect effects of climate, such as the role of dams (retention, release), seismicity, erosion, land-use change, invasive species, etc., that could magnify or attenuate climate impacts.

- It is currently unclear how this work specifically builds on related work in the Delta, such as the Interagency Ecological Program Project Work Team on climate change, the Delta Stewardship Council's Climate Change Vulnerability Assessment, and the 2023 symposium described in the prospectus.

- A manuscript or other ways to disseminate the findings beyond the Delta ISB would be beneficial.

Richard Niswonger, Research Hydrologist in the Water Resources Mission Area of the US Geological Survey, brought up the following comments:

- Is the scope broad enough to include problems such as the occurrence of harmful algal blooms (HABs) and wind-driven storm surges that can affect coastal watersheds?

- Climate and weather drivers have a strong focus. Clarifying the impacts of these drivers could help the discussion to management implications.

- Reconsider the need for a distinction between atmospheric rivers and extreme precipitation events.

Additional suggestions on leveraging USGS-led investments include discussion of the CASCaDE modeling approach(Computational Assessments of Scenarios of Change in

the Delta Ecosystem), which includes downscaled climate projections and operational drivers to quantitatively integrate watershed responses and uncertainties through nested integrated models (e.g. from climate to clams). Partners in this work span global to local expertise.

Lastly, we heard from Letitia Grenier, director of the Public Policy Institute of California Water Policy Center, who offered these comments:

- To increase the impact of the symposium, add a final question to take the information beyond decision support models and directly connect to policy and funding changes that are needed.

-Elaborate more in Q4 on addressing how climate projections interact with each other to produce impacts. For example, understanding combined flooding (sea level rise, storm surge, riverine flooding and groundwater rise) may be more important than simply considering precipitation events alone for future extreme flooding.

-Consider sequencing of extreme events as part of climate projections, including earthquake and precipitation leading to flooding.

-To ensure that the climate projections are translated into realistic impacts, consider specifying that interactions of climate and management should be addressed. For example, how will projected climate impacts to salmonid populations impact regulation of diversions in the Delta?

-Note the newly released report titled Priorities for California's Water: Are we ready for climate change? which proposes adaptation pathways to help California increase resiliency to the impacts of projected climate changes.

Please let me know if you have any questions.

Sincerely,

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Delta Lead Scientist