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Sent: Wednesday, June 21, 2023 12:11 PM
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Subject: Re: Inventory and Synthesis of Scenarios in the Delta

Hi again. Remembered one more:

[DredgeFest California \(2016\)](http://dredgeresearchcollaborative.org/dredgefest/White%20paper/): [http://dredgeresearchcollaborative.org/dredgefest/White paper:](http://dredgeresearchcollaborative.org/dredgefest/White%20paper/) <https://dredgeresearchcollaborative.org/works/dredgefest-california-white-paper/>

The weeklong transdisciplinary scenario planning workshops for this event were focused on sediment supply and climate change adaptation. There were three interrelated tracks: one focused on SF Bay, one on the Delta, and one on the larger By-Delta watershed/sedimentshed.

There were a wide number of public agency representatives involved in this event, including a DISB member (full listing if you scroll down under the white paper link).

Again, hope this is helpful.

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Hi Kristine,

Thanks for getting in touch. I'm very happy to see the DISB looking into this kind of research.

In terms of additional Delta scenario planning work for your Appendix, I have a couple things.

A few years back I worked on a project/grant called [Wicked Ecologies](http://grahamfoundation.org/grantees/5287-wicked-ecologies): <http://grahamfoundation.org/grantees/5287-wicked-ecologies>. For that project, we used an exploratory scenario planning methodology to investigate what the Delta might become in 50 years. *Delta earthworks, wicked problems and speculative design scenarios* is a conference paper we developed from this work (attached), which was going to be

expanded into a book chapter with other research from that conference, but unfortunately the organizers didn't end up following through. I touched on the outcomes of that work in an Urban Planning Journal (*Evolving the Evolving*, attached). Unfortunately I never got around to publishing the work in a more thorough manner.

I mention that work as I am bringing some of those finding and methods into a new UC MRPI grant I and many others will be working on for the next four years: [Just Transitions In Large Socioecological Systems: Drought, Sea-level Rise & Salinity In the Delta](https://www.ucop.edu/research-initiatives/programs/mrpi/files/MRPI-Abstracts.pdf). You can access a project abstract here: <https://www.ucop.edu/research-initiatives/programs/mrpi/files/MRPI-Abstracts.pdf>. I will also paste it below. For this project we will be using a participatory scenario planning methodology.

Hope this helpful. I will see if I can think of any other related research I know of. I will also try to fully review your prospectus.

Cheers,

Just Transitions In Large Socioecological Systems: Drought, Sea-level Rise & Salinity In the Delta

This research project addresses one of the most challenging, complex, and controversial issues in the management of the California Bay-Delta: how to balance nationally significant agricultural and fisheries interests, statewide water supply reliability interests, federally and state-protected ecological interests, and local recreational, cultural-historical, and subsistence interests in the management of salinity, an increasing challenge in the face of extended drought and sea-level rise. Through a participatory scenario-based approach, we use state-of-the-art computing, coupled with locally sourced knowledge, to build holistic understanding of the multifaceted tradeoffs associated with alternative nature-based, regulatory, demand-based, and engineering scenarios for salinity management while building social capital and information-sharing networks through extended public engagement and open-science technologies. Throughout, we test how the components of this approach (e.g., stakeholder workshops, technological resources) change stakeholders' perceptions of the issues and the acceptability of potential management strategies, their trust in science, policy, and other stakeholders, and their understanding of complex scientific issues. Research outcomes include: 1) quantitative understanding of how nature-based, policy-based, and engineering strategies may function independently or in combination to mitigate future salinity challenges—with applications to other estuaries such as the Chesapeake Bay, where salinity intrusion is a growing concern; 2) new understanding of how a topically focused, participatory, scenario-based approach may promote a “just transition” in science-informed governance for resilience of large socio-ecological systems with deep histories of conflict; and 3) open cyberinfrastructure tools and enhanced social capital that lay a foundation for addressing other “wicked problems” (e.g.,

harmful algal blooms, species recovery) in the Bay-Delta. Training—for undergraduate and graduate students and public agency scientists—is integrated into the research program through new curricula, a Summer Institute, formal mentorship, and capstone/incubator projects. Trainees will develop games, tools, and visualizations that will enhance stakeholder engagement and will work directly with data generated from the project.

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