

Regional Climate Science Consortium: an overview

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What is the RCSC?

- Collaborative initiative designed to advance innovative, nature-based shoreline adaptation approaches not yet used in SF Bay
- Convenes at the Estuary & Ocean Science Center, to promote in-person collaboration at one centralized location in SF Bay (where the science of nature-based solutions has been a focus for >15 yr)
- Two-year pilot program funded by the State Coastal Conservancy
- A demonstration of a process, to be evaluated and iterated, for future use locally (with additional funding) and in other regions
- The impetus for a new biennial State of Adaptation Science workshop

Why do we need it?

Conceived in response to regional planning efforts:

- Bay Conservation and Development Commission's Bay Adapt Joint Platform ([Action 4](#))
- San Francisco Estuary Partnership's San Francisco Estuary Blueprint ([Task 1-5](#))
- San Francisco Bay Joint Venture Implementation Strategy

These identified the need for a dedicated lead entity and place to coordinate the development of science knowledge that can be translated to regional guidance for sea level rise and coastal adaptation-related challenges.

What distinguishes it?

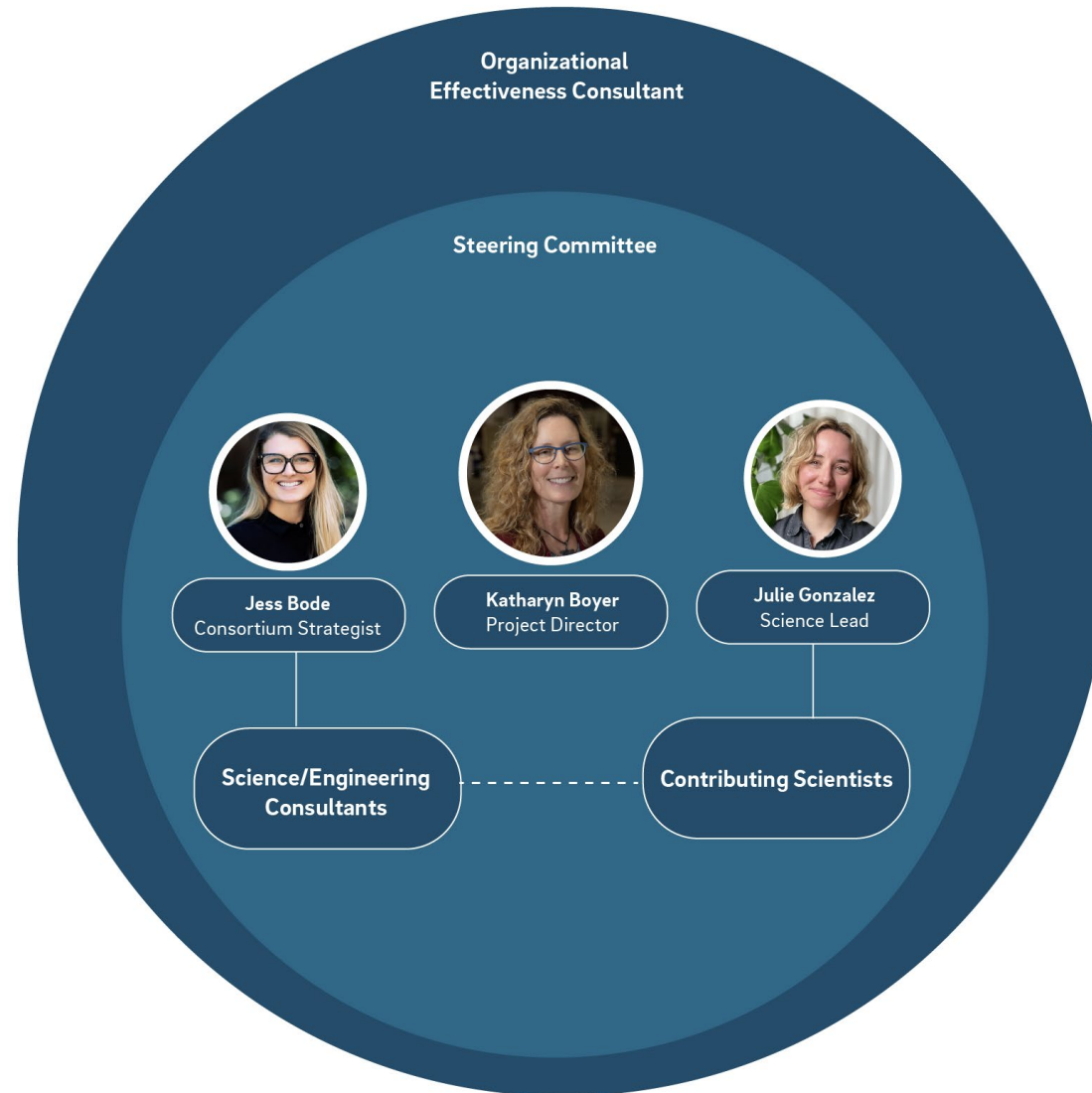
- Focus on novel approaches not yet implemented in SF Bay
- Focus on evaluating science gaps and identifying ways to fill those gaps
- If there is enough information on an approach to write design guidance, not novel enough to need the RCSC

The four pillars of the RCSC

- 1) Advancing understanding of adaptation science approaches novel to the Bay
- 2) Coordinating with agencies and practitioners to guide policy and practice with science lessons
- 3) Building regional collaboration and engagement
- 4) Creating a durable hub and process for advancing the science of nature-based strategies

These pillars establish a framework for implementable research, science translation, inclusive engagement, and long-term adaptive management.

Structure



Roles

Contributing Scientists

- Dive deeply into the science needs and data gaps associated with selected nature-based shoreline adaptation methods, and develop strategies to address those needs
- Meet monthly in-person at EOS Center, supported by remote collaboration
- Identify critical knowledge gaps, synthesize lessons from existing studies, and contribute to the production of white papers and peer-reviewed publications
- Collaborate with the Steering Committee and Science/Engineering Consultants to ensure that outputs are aligned with broader project objectives

Roles

Science/Engineering Consultants

- Provide expert guidance to facilitate rigorous, relevant, and comprehensive scientific interpretations
- Meet quarterly to support Contributing Scientists by advising on methodologies, reviewing outputs, and identifying additional knowledge gaps
- May conduct short-term studies or analyses aligned with their expertise
- Ensure that the Consortium's outputs are scientifically robust

Roles

Steering Committee

- Ensures that the Consortium's work aligns with regional management priorities
- Meets two to three times per year
- Helps guide the selection and implementation of adaptation approaches, reviews progress, and provides feedback on draft outputs to ensure they are actionable and relevant to regional needs

Roles

Organizational Effectiveness Consultant

- Advises on internal processes and adaptive management
- By reviewing governance structures, coordination approaches, and organizational capacity, the OEC ensures that the Consortium operates effectively and adaptively
- Recommends a process for ongoing science-informed advancement of nature-based strategies locally and as a model for other regions in California and beyond

Possible Approaches

Two broad categories being considered:

- Habitat enhancements for hard structure along urbanized estuary edges
- Sediment manipulation in and along wetlands

Within those, likely several novel approaches will be pursued

Consortium members currently debating