Partnership-Building and Identification of Collaborative Tidal Marsh Adaptation Projects

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Climate Resiliency Workgroup Meeting

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Climate Resiliency Watershed Agreement Outcomes

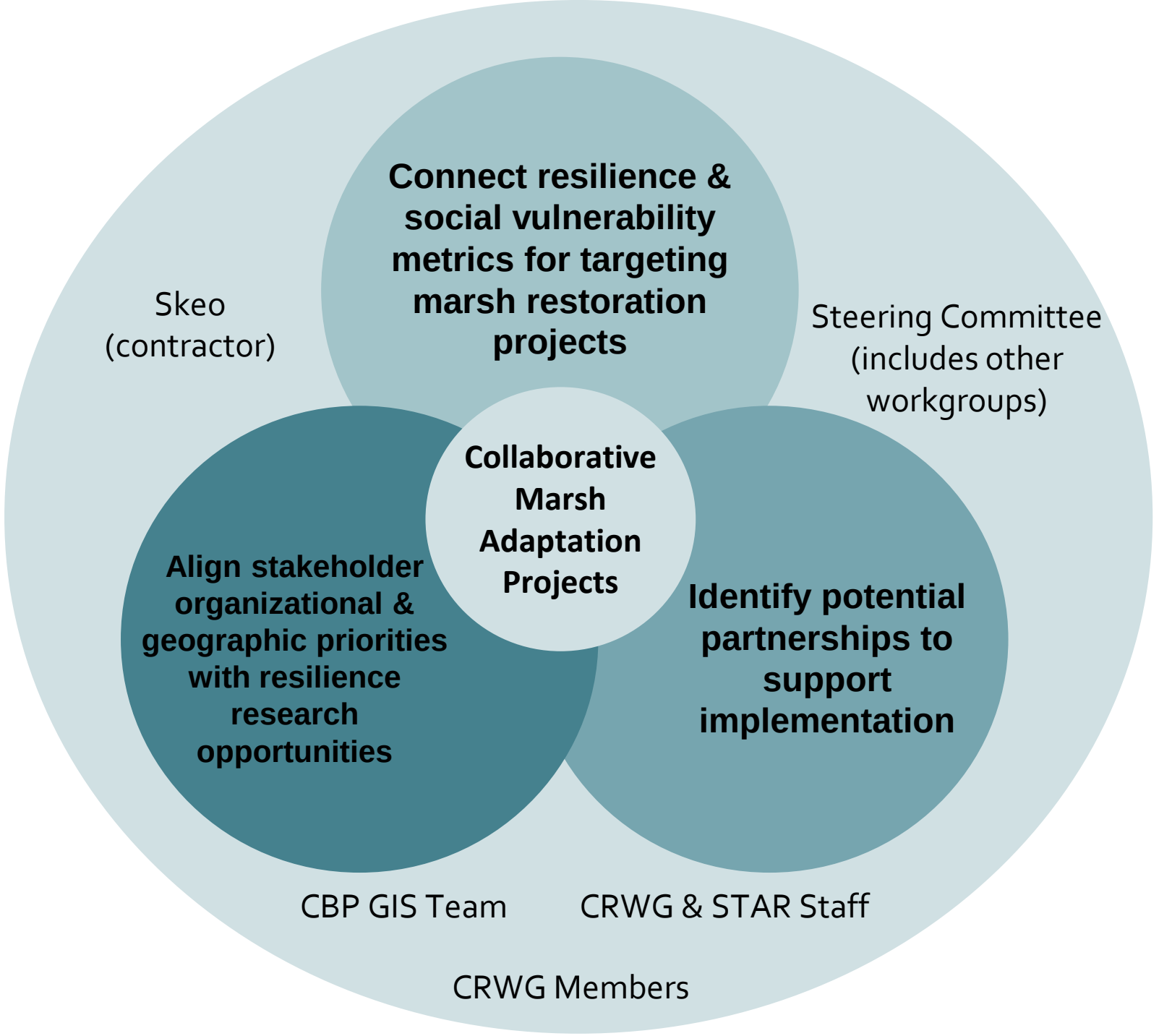
Climate Monitoring

- Monitor and assess trends and likely impacts of changing climate and sea level rise on the Chesapeake Bay ecosystem, including the effectiveness of restoration and protection policies, programs, and projects.

Climate Adaptation

- Pursue, design, and construct restoration and protection projects to enhance the resiliency of the Bay and aquatic ecosystems from the impact of:
  - Coastal erosion
  - Coastal flooding
  - Sea level rise
  - More frequent intense storms

Overall Project Goals and Support



Addressing CRWG work plan actions and climate resilience science needs

- Action 2.2. Assist with capacity-building activities that support the implementation of priority climate **adaptation** projects.
  - Assist in preparing for federal infrastructure funding opportunities
- Action 1.3 Increase capacity to better understand sea level rise impacts to habitats and their ecosystem services.
  - Compiling marsh resilience metrics/data
- Science Need: Better understanding of sea level rise and subsidence impacts related to wetland loss, marsh migration, and adjacent land use considerations
  - Support decisions on short and long-term project and research needs

Connections to Past, Present & Future Wetland Discussions

- 2019 Marsh Resilience Summit
- 2021- Aug 2022 GIT-funded "Synthesis of Shoreline, Sea Level Rise and Marsh Migration Data for Wetland Restoration Targeting"
- May 2022 EPA Resilient Coastal Wetlands and Communities Workshop
- Aug 2022 CBP Habitat GIT Wetland Outcome Attainability Workshop
- Fall 2022 Maryland Sea Grant Tidal Wetland Proposal Workshop

Why is this work important?

- If we can manage marshes to be resilient to sea level rise, marshes will continue to provide valuable ecosystem services, including mitigation to climate change by sequestering carbon.
- We have an opportunity to implement large-scale restoration strategies with cross-goal benefits. Yet, much restoration remains opportunistic and disconnected.
- Conversations needed to identify overlapping geographical and organizational priorities and siting criteria.

Project Outcomes

- Identify **common criteria** for targeting tidal marsh projects by compiling resilience and social vulnerability metrics, geographic priorities, and organizational goals across stakeholder groups.
- Identify **partners and projects** within **two focus areas** (MD, VA, or tribal lands) that could support large-scale tidal marsh restoration using common criteria as a guide.
- Identify **data gaps and research needs** to inform on-the-ground tidal marsh management and adaptation at regional scales.
- Identify potential **marsh research opportunities** that could coincide with tidal marsh restoration efforts to increase understanding of the success of climate resilience strategies.
- Identify **short and long-term funding opportunities** for proposed collaborative tidal marsh restoration and research projects.

Project components

Jun 2022-Jan 2023

Phase 1

- Review existing partner resilience and social vulnerability metrics (GIS mapping)
- Perform partner outreach survey to identify priorities
- Overlay partner metric and priority maps to select two regional focus areas for in depth workshop conversations

Feb-Apr 2023

Phase 2

- Design 2-day workshop for MD, VA, and/or tribal stakeholders
- Discuss common criteria and research needs
- Identify large-scale marsh restoration and research projects and supporting partnerships

May-Sep 2023

Phase 3

- Prepare project report and stand-alone communication documents on metrics, identified projects, and supporting partner networks
- Link prioritized projects with list of potential funding opportunities
- Identify challenges to collaborations

Diversity Equity Inclusion and Justice

- Reviewing and incorporating social vulnerability metrics in informing selection of focus areas.
- Identify organization representatives assisting underrepresented communities to participate in survey to understand their priorities.
- Reserved budget for compensating the participation of underrepresented groups in stakeholder engagement activities.

Addressing Chesapeake Bay Watershed Agreement Outcomes

Climate Goal

- Increase the resiliency of the Chesapeake Bay watershed, including its living resources, habitats, public infrastructure and communities, to withstand the adverse impacts from changing environmental and climate conditions.

Vital Habitats Goal

- Restore, enhance and protect a network of land and water habitats to support fish and wildlife and to afford other public benefits, including water quality, recreational uses and scenic value across the watershed.

Stewardship Goal

- Increase the number and the diversity of local citizen stewards and local governments that actively support and carry out the conservation and restoration activities that achieve healthy local streams, rivers and a vibrant Chesapeake Bay.

We need your help identifying and connecting with partners

- Does your organization plan and/or implement marsh restoration projects or conduct marsh resilience research?
- Does your organization use datasets to target resilience efforts?
- Do you know of other organizations in MD, VA, or tribal lands that we should reach out to for participation in this project?
- Interested in being on the steering committee?