

## CAP Summary for “Voices of Science” by Callyan Lacio

### Overview

The main goal of my Climate Action Project is to empower and amplify Indigenous voices while highlighting the coexistence of Traditional Ecological Knowledge (TEK) with contemporary science. Initially focused on creating an education day for the Wampanoag tribe’s Preserving Our Homelands (POH) camp, the project has since expanded significantly while maintaining its core mission. It now includes monthly meetings between the tribe and external organizations, outreach to integrate the tribe into local community conversations, and the development of a workshop on revitalizing seal subsistence hunting. The project has also led to valuable collaborations with non-profits, the National Park Service, and tribal leaders. The ultimate goal is to establish sustainable, community-driven initiatives that the tribe can manage independently, ensuring they have the resources to continue amplifying their voices. With the momentum from our work and growing partnerships, the potential for lasting impact is immense.

### Reflection

#### Goals

My CAP journey thus far has been one of the most rejuvenating and rewarding experiences of my life and it’s been a privilege to watch the project evolve. Initially, my goals were to (a) add a new module to the Preserving Our Homelands camp, (b) help students integrate cultural knowledge with STEM, (c) encourage students to see themselves as scientists, and (d) provide hands-on research opportunities. As the project progressed, we expanded to include new goals: (e) facilitate monthly meetings between the tribe and external organizations, (f) develop outreach to normalize the tribe in conversations with local community members, (g) initiate discussions on cultural practices and subsistence hunting, and (h) foster intergenerational dialogues on knowledge revitalization.

#### Challenges

Two main challenges arose during this process. First, timely communication was difficult due to tribe members’ multiple responsibilities. To address this, we set meeting dates in advance and used phone calls for quicker communication when needed. Second, funding became an issue due to changes in governmental priorities, particularly around DEI initiatives, resulting in cuts to funding for educational walks and a research assistant position which were removed from my CAP. This funding also cut the job of someone associated with the project as a park service employee and tribal liaison. Although the funding setback was challenging, it sparked valuable conversations with the tribe about adapting to changes together, ultimately strengthening our collaboration and the work we’re doing.

#### Timeline/Process:

From **November to December**, initial meetings at Pleasant Bay Community Boating Center with tribal representatives and partners focused on integrating science, cultural education, and water-based experiences. We established monthly meetings at both non-profit and tribal locations, including on the solar-powered pontoon boat, "The Friend". In **January and February**, we refined the Preserving Our Homelands camp curriculum, incorporating my research on Wampanoag non-human relatives (seals), providing hands-on research opportunities, and addressing biases in science. From **February to April**, we developed "The Friend" as a floating classroom for adult education programs and began creating a three-

part workshop on revitalizing seal subsistence hunting, with plans to engage tribal leaders for approval and refinement starting in May.

Key Learnings:

The biggest thing I learned from this project is that building trust with marginalized communities takes time. These ongoing open dialogues, however, have allowed us to create meaningful, culturally relevant educational experiences. I've also learned that being flexible is key in responding to changes in things like communication and funding. These challenges even strengthened our partnership and ideas grew from them.

Impact and Outcomes:

The hands-on, community-driven approach has ensured that all tribal members, from youth to elders, can engage in learning that honors their cultural heritage. Our projects, set to launch this summer, are expected to have a significant positive impact. Unexpectedly, our partnerships have expanded beyond my initial involvement with two tribal members to include two non-profits (Pleasant Bay Community Boating and the Center for Coastal Studies), the National Park Service, tribal chiefs and elders, and the tribe's Natural Resource and Education Departments. This growth has led to exciting new projects, such as eelgrass research, beyond the original scope.

Potential for Ongoing Impact:

The potential for ongoing impact through *Voices of Science* is immense. This experiential approach strengthens the community's connection to the environment and ensures the transmission of traditional knowledge to future generations. While we've only scratched the surface, this summer marks the full implementation of our plans. From there, we'll refine and expand these initiatives. Our ultimate goal is to establish sustainable projects that the tribe can run independently, while also fostering collaborations with community members. We want to ensure the tribe has the resources and support to achieve their goals and amplify their voices. With the partnerships we've already built, the possibilities for expansion are endless, and this is a cause I'm committed to dedicating my life to.

**Most proud of from my CAP**

What I'm most proud of from my CAP experience is the deep connection I was able to foster with the Wampanoag tribe. From the very beginning, my intention was to listen, to be present, and to create a space where meaningful conversations could unfold. I aimed to support and facilitate activities that were guided by their needs and voices, and I truly believe I've succeeded in this. I'm incredibly proud of the trust the tribe placed in me, allowing me to be part of sensitive discussions on topics like cultural revitalization, cultural practices, and youth education. It's not always easy to navigate the space between science and culture, and I've often found that the scientific community can feel cold or unapproachable. But I'm proud that, through this work, I've been able to show the Wampanoag tribe that there are those of us in the science community who value their traditions, listen with empathy, and are open to collaboration. Being invited into their community and having the privilege to be a part of these important conversations has been an incredibly humbling and rewarding experience. It's something I'll always carry with me.