

STEEP Community Engagement Core: Evaluating & Communicating PFAS Contamination with Tribal Communities on Cape Cod

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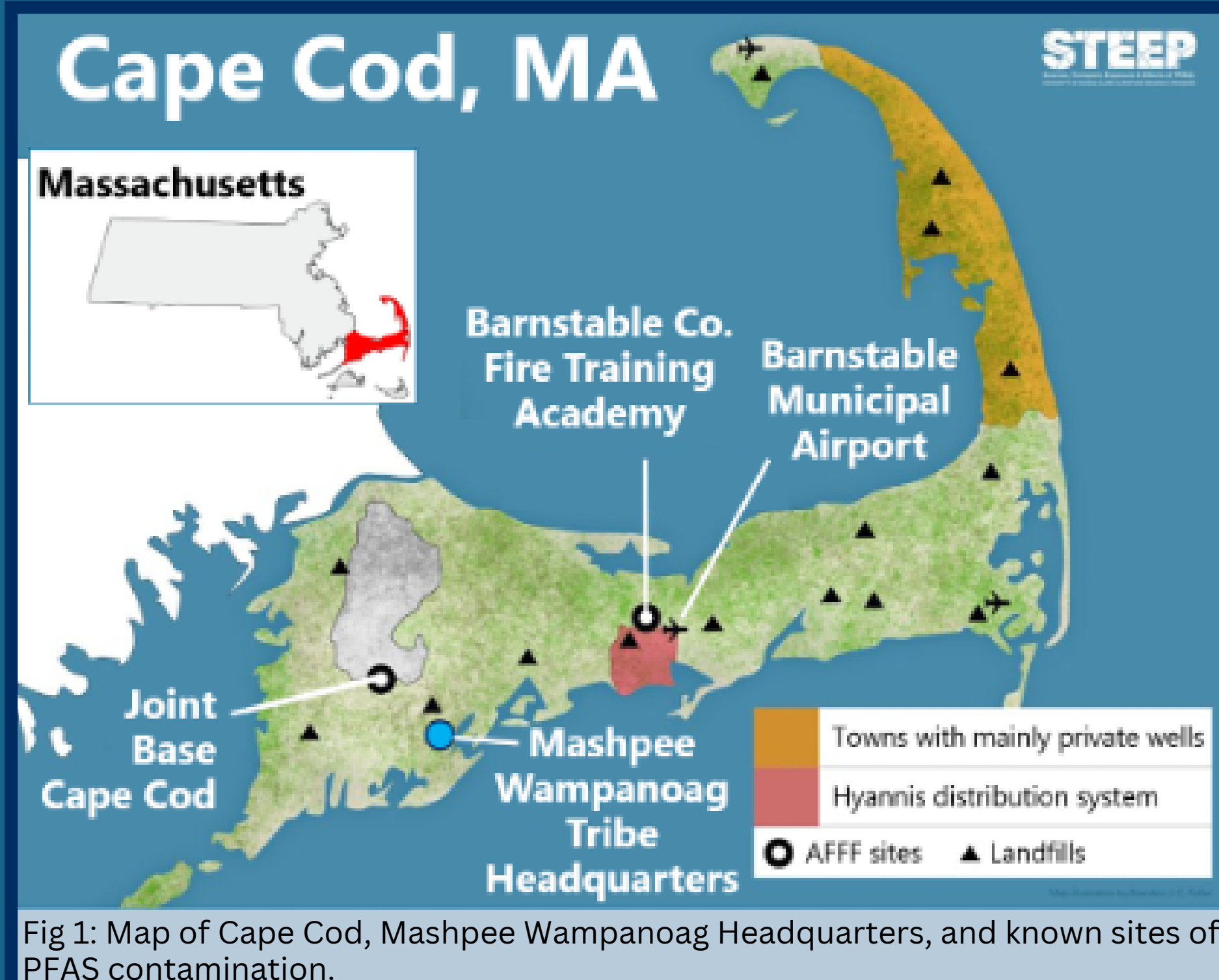
Project Objectives

- Develop bidirectional engagement strategies to understand and communicate PFAS exposure risk to Tribal community.
- Analyze PFAS levels in local fish and shellfish to understand potential exposure pathways.
- Co-design risk communication strategies to respect and acknowledge tribal identities and cultural practices while mitigating exposure risks from PFAS.

Background

- PFAS are a group of chemicals that pose a significant public health challenge.
- The Mashpee Wampanoag Tribe has concerns about PFAS community exposure due to their proximity to several known sources of PFAS-contaminated groundwater.
- Tribal members' traditional reliance on fish and shellfish harvesting from local waterways may make the community more susceptible to exposure to biomagnifying chemicals such as PFAS or mercury.

“We were raised eating shellfish, eating plants, eating animals, eating what was provided by the creator, and once we get away from that, we have lost our sovereignty over our foods.”

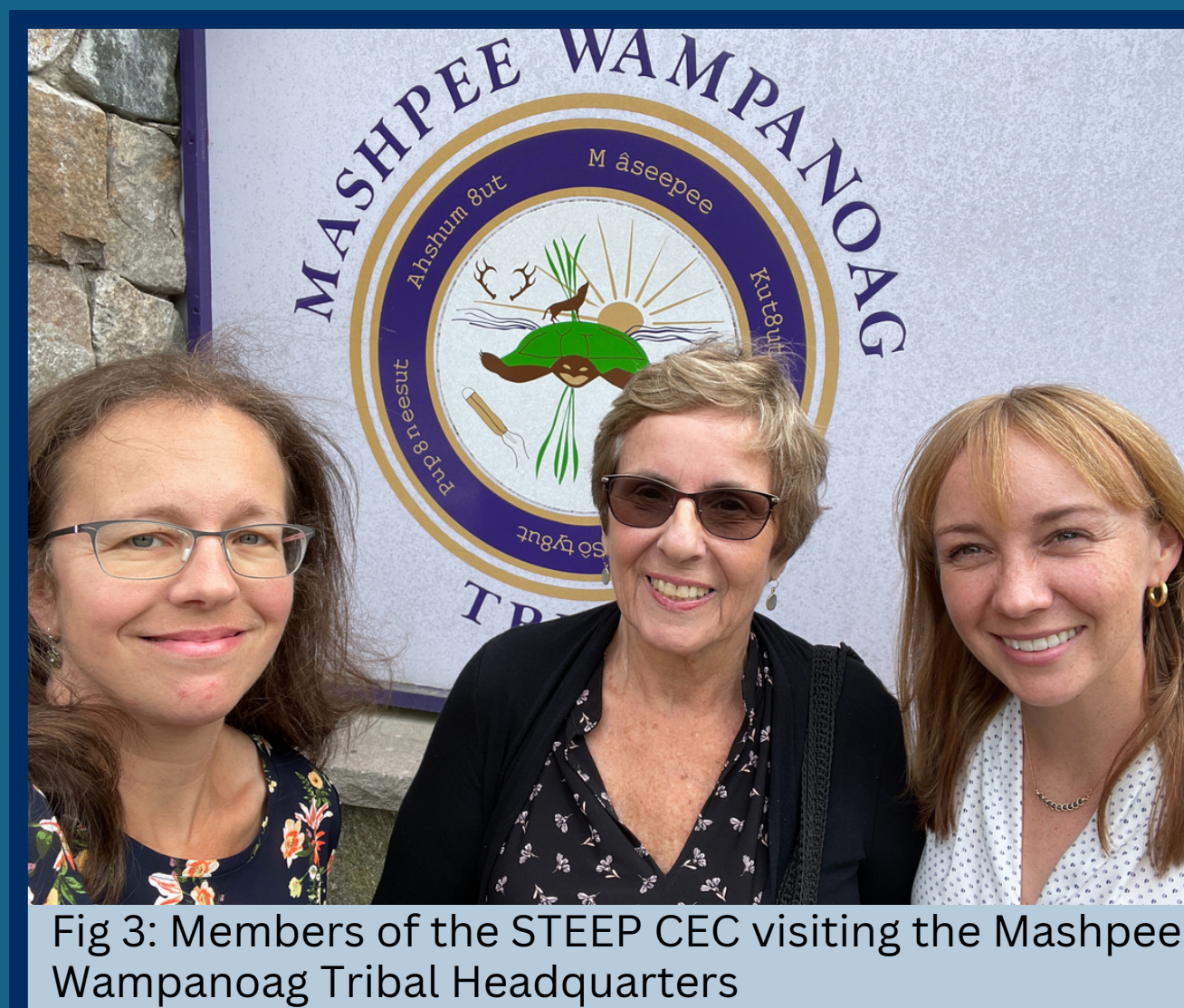


Bidirectional Tribal Engagement

- Co-design study based on Tribal priorities and preferences
- Establish and compensate a Tribal Liaison to serve as connection between STEEP and the Tribal community.
- Establish Data Sharing Agreement to assert rights to all data collected from Tribal members as property of the Tribe.

Project Activities

- Evaluate changes in Tribal risk perceptions and knowledge of PFAS through focus groups, interviews, and surveys
- Collect and analyze fish and shellfish for contaminants in locally important waterways.
- Work with Tribal leadership to prepare a community-level report-back of results (audience determined by Tribe).
- Collaborate with Tribal leadership to develop, test, and disseminate outreach messages about reducing PFAS risks.
- Host outreach events with Tribal community, including film screenings, information booths at events such as powwows, and presentations to high school students.



Expected Outcomes

- Increased awareness about PFAS contamination risks among Tribal community.
- Development of culturally-grounded communication strategies for tribal groups to guide future engagement and communication.
- Tribal community empowered to be full participants in decisions around reducing PFAS exposures and preventing potential adverse health outcomes.

Pilot Study

In 2021 we conducted initial focus groups with Tribal members (n=12) to gain a baseline understanding of the connection between Tribal cultural identities and local fishing/shellfishing, communication preferences, and perceptions of PFAS risk.

“It’s something that we’ve done forever, and it’s something that we should continue to do. It’s a part of our identity.”

Preliminary Results:

- Most tribal members consume local fish/shellfish multiple times per week, and cultural traditions center on local fish and shellfish.
- Losing access to local fishing and shellfishing viewed as a threat to Tribal cultural identity.

“People don’t understand, who haven’t been a part of a hunter-gatherer culture, that [accessing healthy and safe natural resources] is a part of our being.”

- Participants recognized contamination threats in local waterways but had minimal awareness of PFAS.
- Word of mouth from local fishers and the Tribal newsletter seen as most trusted communication channels.

Discussion & Next Steps

- Traditional public health communication strategies (e.g. closing fishing areas, avoiding consumption of certain species) can conflict with tribal cultural identities and practices.
- The Communication Theory of Identity (CTI) offers a potential strategy to communicate with frames that are not only sensitive to tribal identity, but that may help strengthen it over time.¹
- In 2023, we will conduct additional interviews and surveys to support co-development of risk communication strategies.

¹ Hecht, M. L., Warren, J. R., Jung, E., & Krieger, J. L. (2005). The Communication Theory of Identity: Development, Theoretical Perspective, and Future Directions. In W. B. Gudykunst (Ed.), *Theorizing about Intercultural Communication*. Sage Publications, Inc.

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