Mind the Gap: How to Connect Scientists & Stakeholders Through Climate Communication

Siobhan Moreno, Program on the Environment, University of Washington
Site Supervisor: **Kirstin Holsman**, NOAA Alaska Fisheries Science Center
Faculty Advisor: **John Meyer**, College of the Environment, University of Washington
@samoreno8

BACKGROUND

Effective science communication is vital to inform decision-making & doing so can guide climate adaptation strategies

Communication methods can frame information that conflicts with an audience's worldview, values, and perspectives, limiting acceptance of information and messages

Informing resource management & stakeholders must assess social elements to effectively communicate and create solutions

The Alaska Climate Integrated Modeling (ACLIM) project works directly with stakeholders but further connection through these elements is needed to determine information needs & perspectives (see Fig. 1)

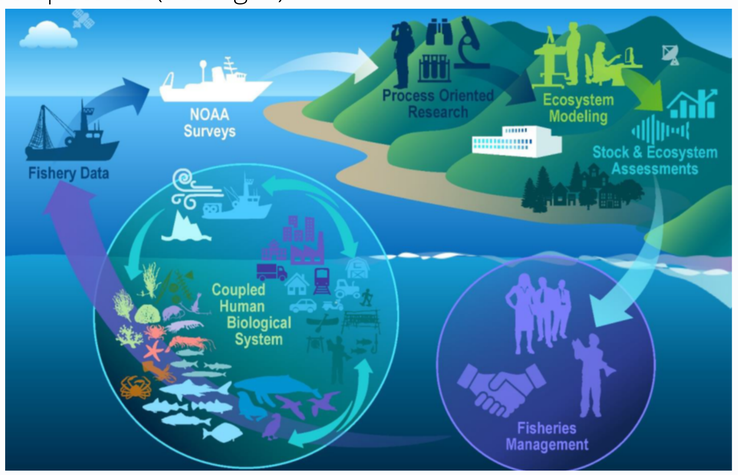

Fig. 1: ACLIM's interdisciplinary framework evaluates climate impacts and solutions across professions, but complex information has to first flow through varying groups of knowledge before solutions can be implemented. ***Credit:*** *Rebecca White, NOAA Fisheries*

RESEARCH QUESTIONS

I. What scientific information do stakeholders want to see as it pertains to them and their values?
II. What are the preferred methods of scientist to stakeholder communication?

INTERNSHIP & METHODS

NOAA Alaska Fisheries Science Center

Stakeholder Interviews

ACLIM Research Team

Literature Review

RESULTS

Values

what do stakeholders value about ACLIM?

Stakeholder Involvement

Technology

Collaborative Framework

> "as [ACLIM] brings in ***human dimensions***, it adds more value to people who are being affected by climate change but aren't as plugged into the mathematical or computational models as [scientists] are"
>
> NOAA AFFILIATE

Needs

what do stakeholders need from ACLIM?

Conversation

Targeted Topics

Interorganizational Communication

Platforms

what communication methods do stakeholders want to see?

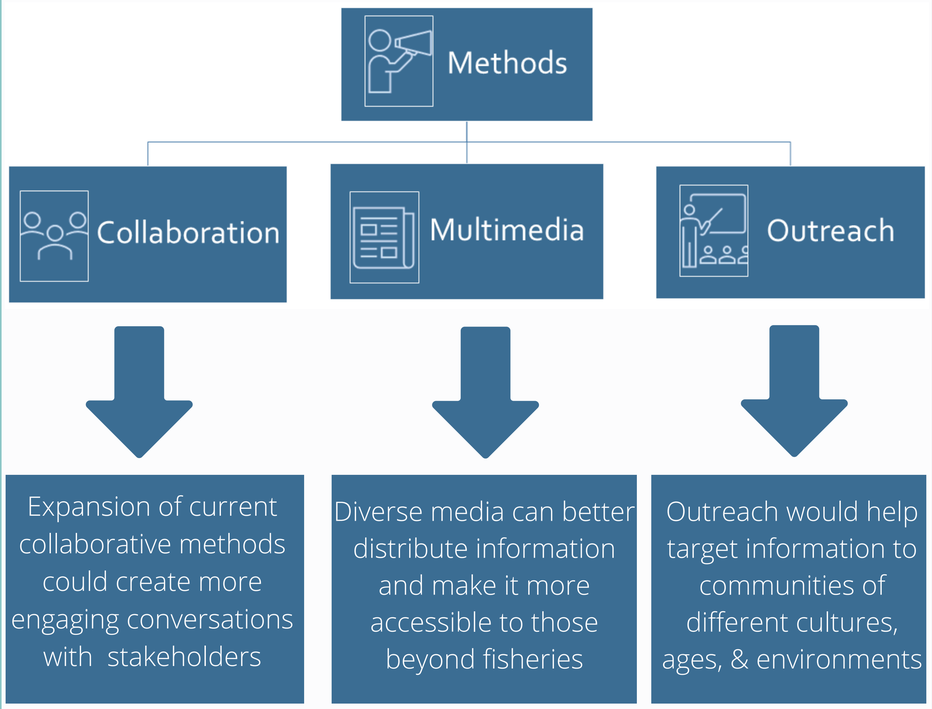

Fig. 2: Three avenues of communication suggested by stakeholders include expanding current collaborative efforts, using different types of media, and educational outreach to communities not directly associated with ACLIM or NOAA. These methods were emphasized based on the need for accessible, diverse platforms for varying Alaskan communities.

IMPLICATIONS

Key Takeaways

Prioritizing collaboration can create space for decision-makers to better assess adaptation strategies in an uncertain and complex future

Identifying the values and assessing social elements of audiences can enhance communal connections to their environment & incite change

Next Steps

Expand time, frequency, & structure of collaboration with stakeholders to engage in conversation

Further develop online & offline tools to target and connect varying audiences

Engage partners to understand interactions between climate change and non-climate stressors (see Fig. 3)

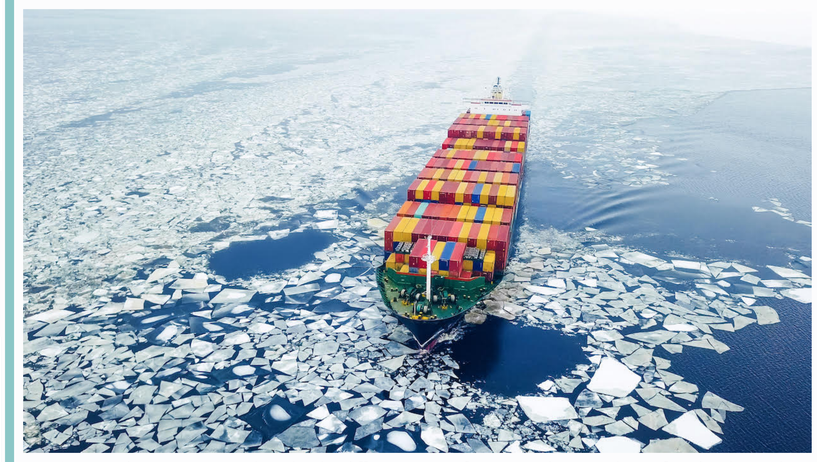

Fig. 3: Non-climate stressors describe the different types of stressors that people are faced with to adapt to the impacts of climate change. These include infrastructure, development, and land use, and their impact through climate. As the arctic becomes increasingly ice-free, cargo shipping is increasing and the impacts are unknown. ***Credit:*** *a_medvedkov - Adobe Stock*

ACKNOWLEDGEMENTS

I'd like to thank to Kirstin, John, Maggie, and the ACLIM team for the support and guidance of this research and my project. Never-ending thanks to my friends and family for the encouragement during this process.