

AQUATIC COMMUNICATION IN THE WILLAMETTE RIVER BASIN: A CASE STUDY OF FEDERAL ENVIRONMENTAL OUTREACH

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PROGRAM ON THE ENVIRONMENT

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Background

- Government agencies have a responsibility to protect the environment and inform the public.
- Conservation and restoration are inseparable from public attitudes and opinions. The success of these projects hinge upon input, feedback and support from the public.
- But, scientific information is shared with a range of stakeholders of varying backgrounds, experiences and knowledge levels.
- Therefore, it is imperative to improve education and outreach to meet the needs of the future and address projected degradation.

Research Question

What are the best practices for environmental communication in the case of federal agencies?

Internship & Methods

I interned with NOAA Restoration Center to find outreach strategies for the Willamette River Basin (See Fig. 1).

I conducted interviews with site partners, analyzed NOAA publications, and reviewed literature on best practices in environmental communication.



Figure 1: The Willamette River Basin's relative size to the state of Oregon. Graphic by the U.S. Army Corps of Engineers.

Results

Best Practices in Environmental Communication



Figure 2: The four main best practices for environmental communications identified through literature reviews and supported by interview data.

Solution Oriented: Outreach should empower audiences by providing options for tangible action. How can they get involved and what difference does the action make?

"How much are we really making a difference by planting trees and removing trash knowing all the other barriers fish face?"
- Volunteer Program Manager

Connect to Values: Effective outreach entails knowing your audience and what they value. Connect scientific assessments to social values, share personal stories, and build trust.

"For me, communications are all about building trust and that's not going to happen over social media."
- Wildlife Conservation Biologist

Self-Paced Learning: Outreach mediums should allow for self-paced exploration and interactivity. Links to references and publications should be included so the audience may explore the topic further.

"Would like to know more ... in bite size information because it is complicated...there's so many links and pages." -Restoration Program Manager

Accessibility: avoiding nuanced language, technical jargon, and abbreviations for non-technical audiences. Consider mobile vs. desktop layout, options for multiple languages, and captions.

"We try to use the word habitat enhancement because the word restoration is confusing- restoring it to what? will it ever 'go back'?"
-Volunteer Program Manager

Significance & Next Steps

Environmental communication is an iterative process. Outreach should:

- Incorporate best practices into mediums and messaging strategies (See Fig. 3).
- Adapt to social and environmental changes
- Collaborate with educators, artists, journalists and communication professionals
- Continue to be researched and revised

Implementing Best Practices in Mediums & Messaging

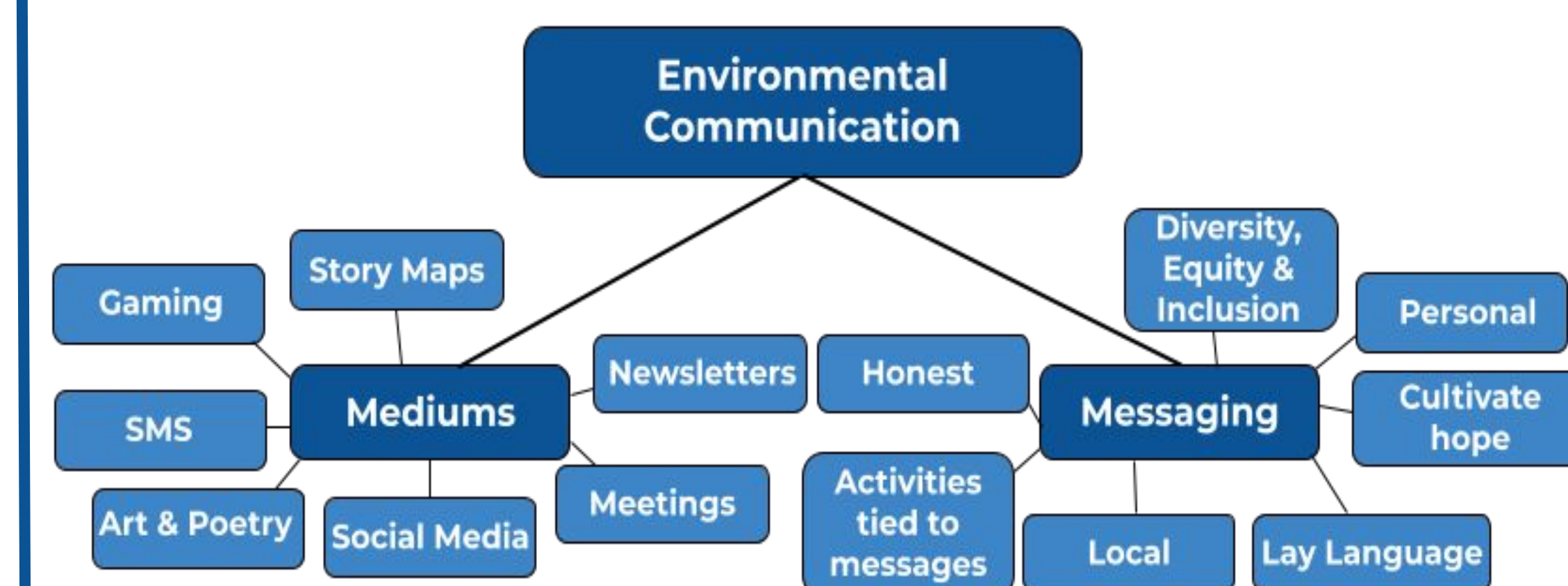


Figure 3: Outreach Strategies identified through literature reviews, interviews and internship responsibilities.

Future Research Opportunities: Agnotology, user data, changing social norms, demographics, audience preferences and emerging technologies

Following these communication strategies can:

- Raise awareness on environmental issues, foster stewardship and mobilize action
- Increase support and funding for local and federal projects by broadening engagement

Acknowledgements: I would like to thank everyone at NOAA Restoration Center for their guidance, mentorship, and feedback throughout my work. A special thanks to my site supervisor, Larissa Lee, as this would not be possible without her. I would also like to extend gratitude to my faculty advisor, Dr. Weng, for their assistance in my research. And finally, many thanks to my family for their support during these strange times.

