

Guiding Recommendations on Collaborative Research Governance, Community Engagement, and Social Science for the ExOIS Project Office:

A Focus on the First 12 months of Field Trial Planning

ExOIS July Forum
July 21, 2025

Led by:

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Context and Motivations

- **Purpose of convening an external advisory board:** to inform the development of social science and governance planning for ExOIS field trials
- **Leverage early stages of the research lifecycle to support project operations and identify scholarly contributions**

Advisory Board at a Glance

Social Science Experts

1. **Rob Bellamy**, Department of Geography, University of Manchester
2. **Amanda Borth**, Consortium for Science, Policy & Outcomes, Arizona State University
3. **Harry Hilser**, Lestari Environmental Education Consultancy
4. **Eric Wade**, Department of Coastal Studies, East Carolina University
5. **Michael Weir**, Marine Policy Center, Woods Hole Oceanographic Institution

Governance Experts

1. **Neil Craik**, School of Environment, Enterprise and Development and the Balsillie School of International Affairs, University of Waterloo
2. **Jan McDonald**, University of Tasmania
3. **Alexander Proelss**, University of Hamburg

Board Expertise
Communications
Environmental Economics
Environmental Social Science
Fisheries
Human Geography
Environment, Climate, and International Law

Process Overview

- 3 working meetings: January, February, and March 2025
- **Ground Rules**
 - We welcome all views and perspectives. Skepticism and criticism is welcomed
 - Chatham House rule (ok to share general things discussed, but let's not externally attribute names to specific comments)
- **Questions: What is missing** from ExOIS' current planning for social science + governance research?
 - What **actions should the project take** over the **next 12 months** to advance field trial governance and engagement?
 - How can and should this research **contribute to larger bodies of scholarship** on social and governance considerations for OIF?
- **Guiding recommendations concept and content emerged organically; not an initial goal but developed through dialogue**

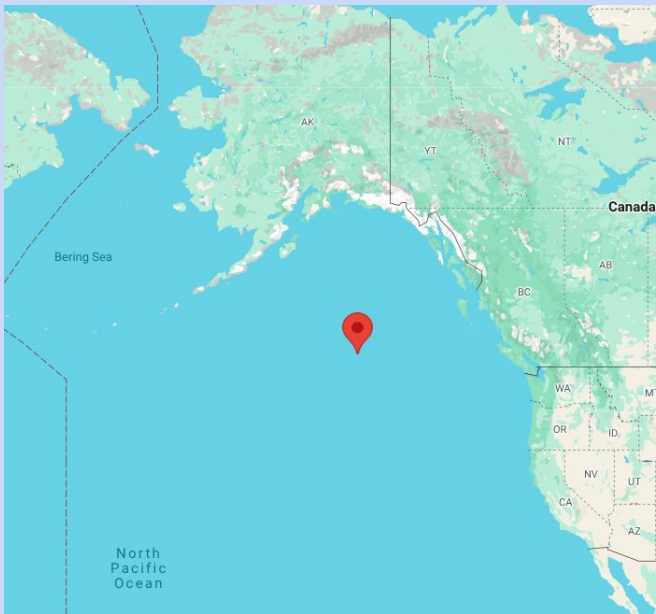
1. Collaborative Research Governance

Attention to the rights and sovereignty of place-based communities, including Indigenous communities, in project and data governance

- Related concepts: responsible innovation and knowledge co-production

Operationalized through

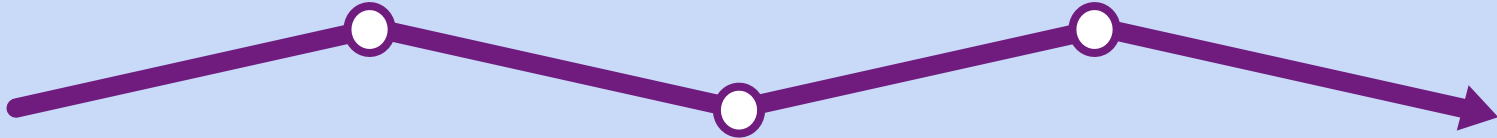
- Data governance:
 - Collective Benefit, Authority to Control, Responsibility, and Ethics (CARE)
 - Findable, Accessible, Interoperable, and Reusable (FAIR)
 - Ownership, Control, Access and Possession (OCAP)
- Risk management and Indigenous-led impact assessment



2. Community, Rightsholder, and Stakeholder Engagement

Project Office: Articulate Approach

- goals
 - intended extent of influence
 - ethical principles
 - opposition management
- for community, rightsholder, and stakeholder engagement



IAP2 Spectrum of Public Participation

IAP2's Spectrum of Public Participation was designed to assist with the selection of the level of participation that defines the public's role in any public participation process. The Spectrum is used internationally, and it is found in public participation plans around the world.

INCREASING IMPACT ON THE DECISION					
	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

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2. Community, Rightsholder, and Stakeholder Engagement

Project Office: Articulate Approach

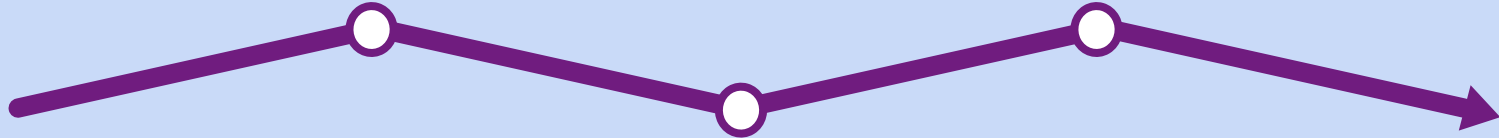
- goals
- intended extent of influence
- ethical principles
- opposition management for community, rightsholder, and stakeholder engagement



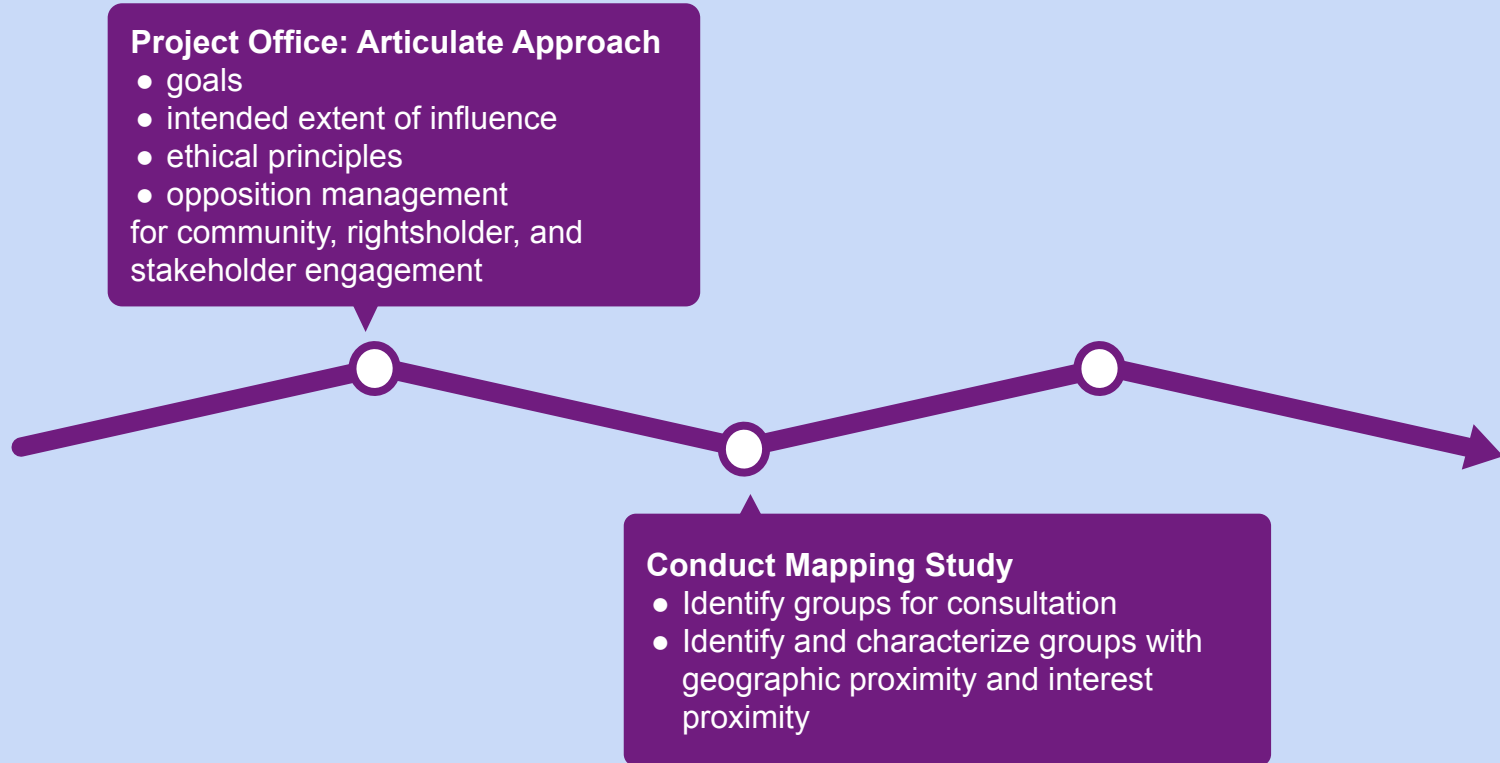
THE PROBLEM POTENTIAL SOLUTIONS OUR PLAN WHO WE ARE NEWS & EVENTS SUPPORT US

Guiding Principles

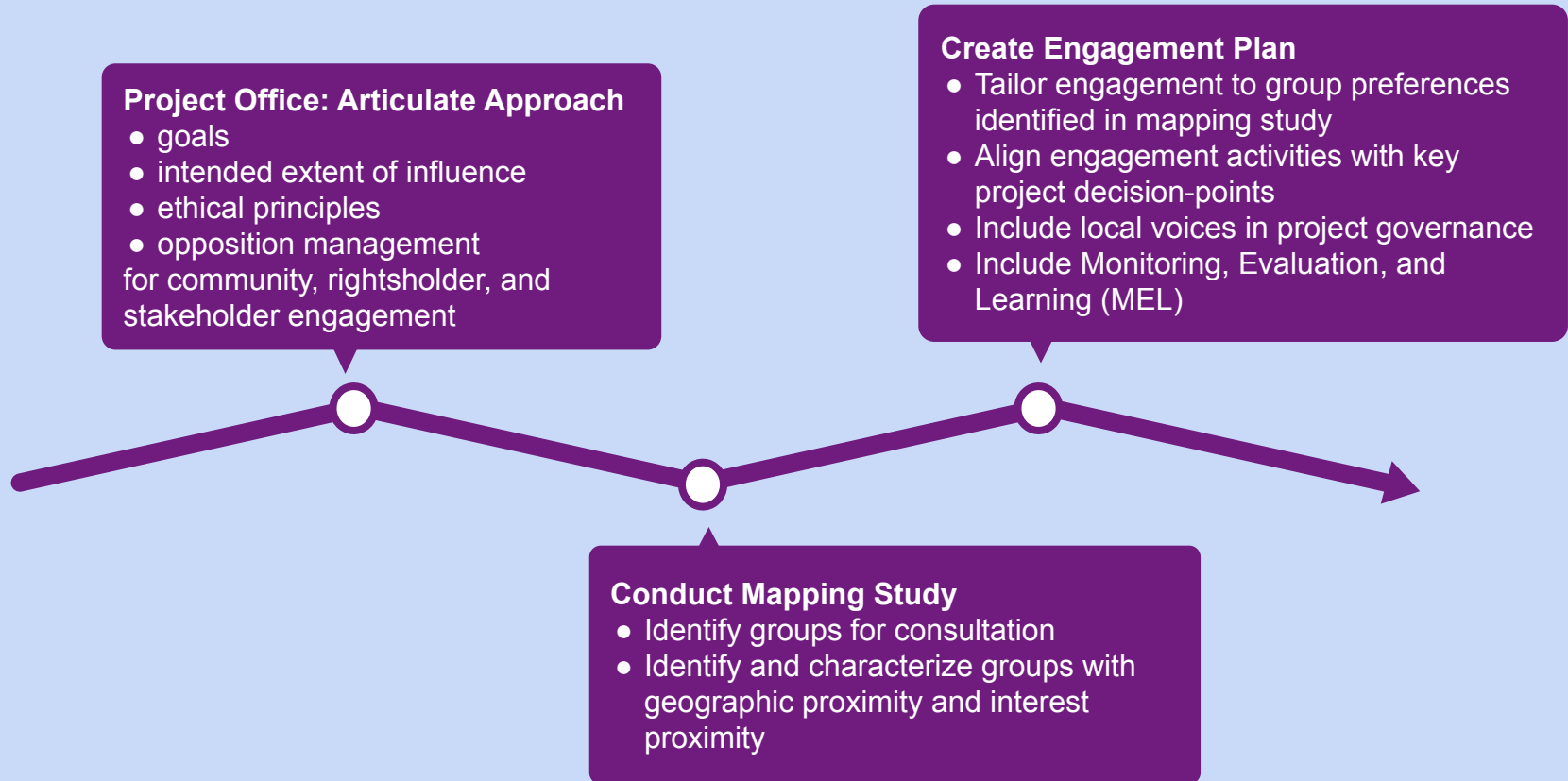
Guiding principles for ocean carbon dioxide removal studies*



2. Community, Rightsholder, and Stakeholder Engagement



2. Community, Rightsholder, and Stakeholder Engagement



3. Social Science Research Priorities

- **Public perceptions:** support and acceptability across geographies, scales, and technical configurations
- **Trade-off analysis:** multidimensional (social, environmental, relational, and temporal, among others) benefits and costs
- **Surveys, experimental studies, and qualitative work**

4. Recommended Staffing & Resourcing

Staff/Item	Recommended Experience Level	Recommendations Addressed	Recommended Resourcing
Engagement Director	mid-career scholar or professional and Indigenous engagement expert with <u>extensive experience and connections to Indigenous communities in British Columbia and/or Alaska</u>	The Engagement Director would lead the work described in Sections A1-3 and B1-3. They would support the work described in Section C.	1 FTE throughout years 1-5
Social Science Research Director	early-to mid-career scholar or academically oriented professional with experience in carbon dioxide removal, novel environmental technologies, marine resource management, or other topic areas, and with expertise that includes public perceptions, science and technology studies, human geography, political ecology, judgment and decision making, or related fields	The Social Science Research Director would lead the work described in Section C. They would support the work described in Section B2.	1 FTE throughout years 1-5
Community engagement support staff	early-to mid-career professionals with formal academic training who have experience designing and undertaking community engagement and/or participatory research activities on novel technologies, environmental or marine resource issues, infrastructure projects, and/or other topics	Community engagement support staff would support the work described in Sections B2-3 and Section C.	1 FTE in year 1, and then 2 FTE in years 2-5
Social science research support staff	early- to mid-career scholars (or, as appropriate, <u>postdoctoral fellows or graduate students</u>) with experience designing and undertaking participatory social science research and with substantive knowledge of novel technologies, environmental or marine resource issues, infrastructure projects, and/or other topics	Social science research support staff would support the work described in Section C and, as needed, Section B2-3.	1 FTE in year 1, and then 2 FTE in years 2-5
Engagement-related travel, conference fees, etc.	Not applicable	These additional expenses would support the work described in Sections B2-3 and in Section C during years 2-5.	\$60k in year 1 for one-time, up-front costs such as supplies and software licenses, as needed, and then \$50k per year in years 2-5

Acknowledgements

The Advisory Board gratefully acknowledges the ExOIS Social Science and Governance Working Group, whose input helped shape the direction of this guidance.

Members include:

Anton Alferness (Paradigm Climate)

Ken Buesseler (Woods Hole Oceanographic Institution)

Jessica Drysdale (Woods Hole Oceanographic Institution)

Kenneth Kostel (Woods Hole Oceanographic Institution)

Paul Morris (Woods Hole Oceanographic Institution)

Ashwin Murthy (Sabin Center for Climate Change Law, Columbia University)

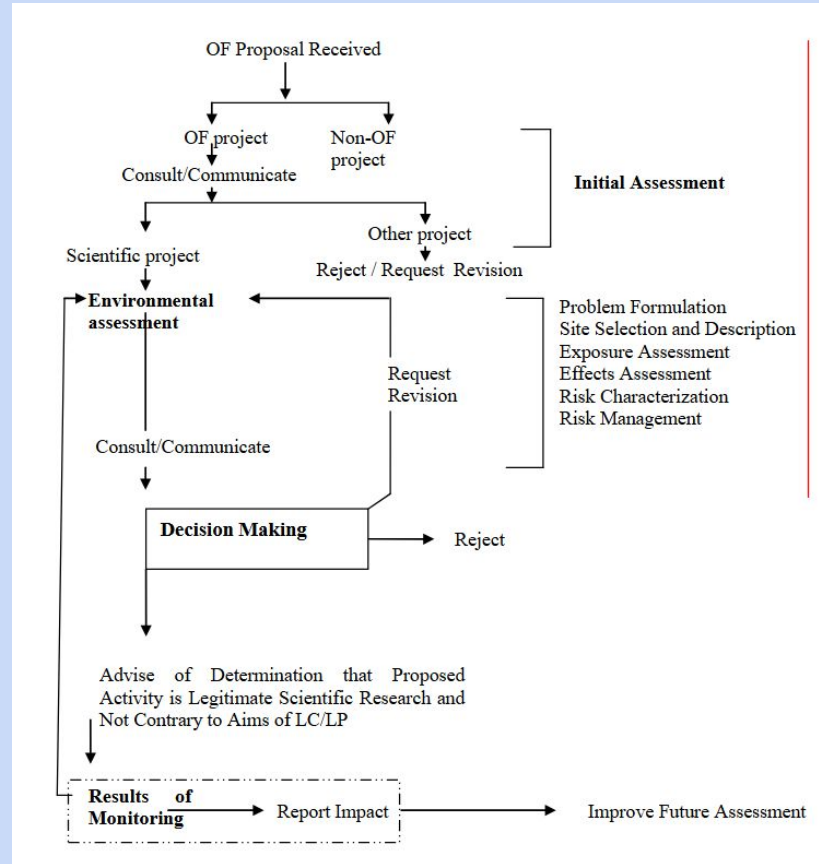
Kilaparti Ramakrishna (Woods Hole Oceanographic Institution)

Emily Seelen (College of Fisheries and Ocean Sciences, University of Alaska Fairbanks)

Sarah Smith (Moss Landing Marine Laboratories, San José State University)

Brad Warren (Global Ocean Health)

Next Steps - Governance



Open feedback

Questions

- Are there examples from your work or experience that could inform how we operationalize this guidance?
- What additional supports (people, funding, partnerships, framing) would help bring these recommendations to life?
- What concerns or challenges do you anticipate in implementing these recommendations?
- Which recommendations feel most urgent to operationalize in the next 6–12 months?
- How might we ensure that the engagement and governance strategies evolve with the project over time?