

# Principles and Practices for Ethical Socially Engaged Research

Climate Assessment for the Southwest (CLIMAS)

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## Introduction

The CLIMAS program is a partnership between the National Oceanic and Atmospheric Administration, the University of Arizona, New Mexico State University, and the Inter Tribal Council of Arizona. We are a collective of staff, faculty, and community partners whose primary goal is to provide useful knowledge for addressing complex environmental and societal problems related to climate variability and climate change in the Southwest. Our work aims to be use-inspired, transdisciplinary<sup>1</sup>, and collaboratively developed with community partners<sup>2</sup>. Our partners include representatives from state, federal, and tribal government agencies, non-profit organizations, businesses, and grassroots organizations.

We are keenly aware that the risks, challenges, and burdens of climate variability and climate change are not equally distributed. Frontline communities—those who are disproportionately impacted by climate risks and the consequences of climate change—tend to face systemic social, political, and economic barriers that create and exacerbate vulnerable conditions. The members of the CLIMAS team, therefore, are committed to ensuring that our work includes these communities and that our research supports their efforts to reduce their climate risks and increase their long-term resilience. In order to follow through on this commitment we recognize that we must carefully confront a set of ethical issues and challenges that arise from doing research that relies on directly engaging with a spectrum of perspectives, knowledges, experiences, and histories. Therefore we have developed five ethical principles to guide our engaged research: **transparency, representation, autonomy, reciprocity, and respect for diverse knowledges**.<sup>3</sup> For each of the principles we provide a brief description, a set of questions to help us align our work with the principle, and a set of potential actions to implement the principle in practice. Following our articulation of the five ethical principles we then describe how we strive to be change agents for making institutional progress to reduce barriers to the types of engaged research approaches we collectively believe are critical to having substantive impact on complex problems like climate change.

We acknowledge that we as individuals and the CLIMAS program are works in progress, so we strive for continual learning and improvement as we work to implement these principles. Therefore, these principles are a starting point and what we present here is designed to be a living document that we will revisit, refine, and update periodically.

Photo: Jon Manjeot

<sup>1</sup> Transdisciplinary research is distinct from interdisciplinary research in that it seeks to bring together knowledge and expertise from not only distinct academic disciplines, but from other expert knowledge systems outside of academia. Following Knapp et al 2019, we conceptualize transdisciplinarity as knowledge development that “connects diverse knowledge holders with one another and the realm of practice, shares power within the process, and arrives at different outcomes including action and problem management” (2).

<sup>2</sup> For us, community means “A group of people who are linked by social ties, share common perspectives or interests and may or may not also share a geographic location” (MacQueen et al. 2001, 1929).

<sup>3</sup> These principles are substantially based on published work members of the CLIMAS team contributed to (Wilmer et al. 2021) and (Meadow, Wilmer, and Ferguson forthcoming). If you wish to cite *this* document, please cite as: CLIMAS. 2024. Principles and Practices for Ethical Socially Engaged Research. Tucson, AZ: Climate Assessment for the Southwest.

# Five Ethical Principles for Engaged Research

## Transparency

As a collective of researchers, staff, and community partners committed to bringing the best available knowledge into real-world climate challenges we have chosen to utilize a variety of socially engaged research approaches. While these engaged approaches are now commonly viewed as critical for addressing complex problems like climate change, they also require researchers to be open to a level of transparency that is less common in traditional disciplinary research. Socially engaged inter- and transdisciplinary research can reveal power imbalances that arise when people with different kinds of expertise, experience, and perspectives come together to develop relevant and useful knowledge. These power imbalances can be rooted in many different places including: differential access to funding, disciplinary biases, unequal positions in society, and the extent to which the issues we work on are directly—or not directly—impacting our lives. **To acknowledge and mitigate these and other power imbalances, we value transparency within collaborative teams as a primary means to promote internal equity.**



Photo: Jon Manjeot

### Questions to ask ourselves:

- » Who is bringing resources to the collaboration? How does access to resources impact the power dynamics within the collaborative team?
- » What actions could we take to reduce the power differential among collaborators?
- » How are the investments and benefits of the work distributed? Can they be balanced to achieve greater equity?
- » What are our incentives for doing this work? What are our partners' incentives?
- » What barriers do we foresee in being able to successfully contribute to the work?

### Potential Actions to Implement

- » Be clear about the commitments required to do the work (e.g., time, human and financial resources).
- » Develop explicit and agreed upon protocols for data collection, analysis, storage, sharing, and ownership.
- » Facilitate open dialogue about everyone's goals and incentives.
- » Maintain a team culture that values open and ongoing dialogue among team members.
- » Anticipate, plan for, and proactively address points of friction within the collaborative group as they arise.
- » In those instances where full transparency is not feasible (e.g., with confidential information) be transparent about the situation even if you are not able to discuss specifics.



## Representation

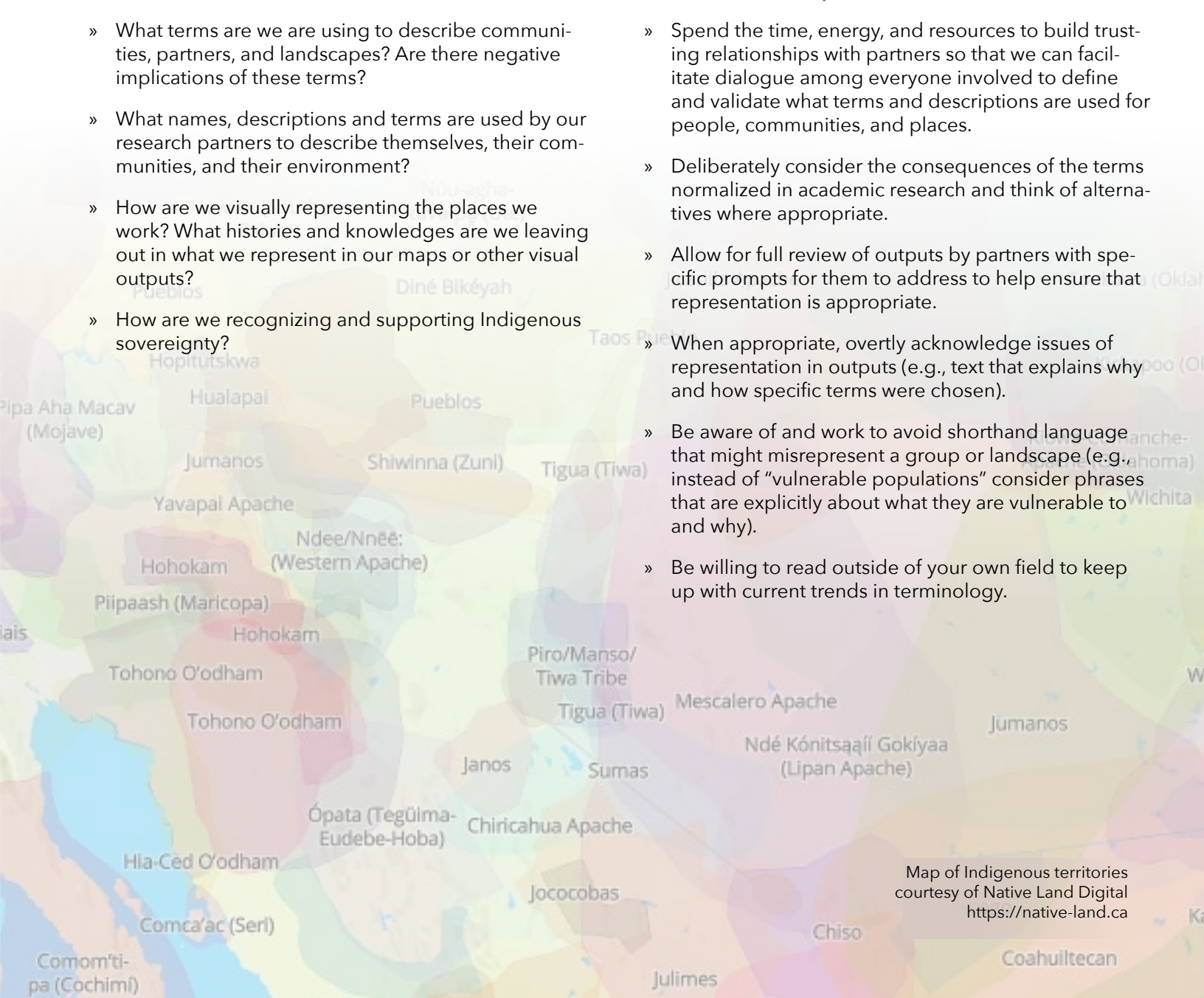
We view representation in research as a conscious effort to be *mindful of how we represent people, communities, landscapes, and other non-human elements*. When people, communities, or organizations are written about in academic literature, reports, or other documents those descriptions may be the only representations of those entities people outside of these groups ever see. The history of science suggests that we should be careful about the potential for lasting harm embedded in descriptions of communities. For example, describing communities as “vulnerable” or landscapes as “degraded” can portray people and places as powerless or inferior. Such descriptions invite people to think of poverty, degradation, and vulnerability as qualities inherent to people, communities, and places. Such “damage-centered” research can lead to a community being defined by its worst experiences without recognition of its strengths and capacities.<sup>4</sup> In addition to locking a community or people in a particular point in time, such narratives ignore the social and political construction of environmental inequality and vulnerability through practices such as slavery, colonialism, political marginalization, and discrimination.<sup>5</sup> When engaging with communities, we recognize the importance of giving our partners the opportunity to define and validate descriptions of themselves, their own communities, and their landscapes. This allows for greater self-representation of communities and greater representation of the strengths of communities and landscapes.

### Questions to ask ourselves:

- » What terms are we using to describe communities, partners, and landscapes? Are there negative implications of these terms?
- » What names, descriptions and terms are used by our research partners to describe themselves, their communities, and their environment?
- » How are we visually representing the places we work? What histories and knowledges are we leaving out in what we represent in our maps or other visual outputs?
- » How are we recognizing and supporting Indigenous sovereignty?

### Potential Actions to Implement

- » Spend the time, energy, and resources to build trusting relationships with partners so that we can facilitate dialogue among everyone involved to define and validate what terms and descriptions are used for people, communities, and places.
- » Deliberately consider the consequences of the terms normalized in academic research and think of alternatives where appropriate.
- » Allow for full review of outputs by partners with specific prompts for them to address to help ensure that representation is appropriate.
- » When appropriate, overtly acknowledge issues of representation in outputs (e.g., text that explains why and how specific terms were chosen).
- » Be aware of and work to avoid shorthand language that might misrepresent a group or landscape (e.g., instead of “vulnerable populations” consider phrases that are explicitly about what they are vulnerable to and why).
- » Be willing to read outside of your own field to keep up with current trends in terminology.



Map of Indigenous territories  
courtesy of Native Land Digital  
<https://native-land.ca>

<sup>4</sup> Marino and Faas (2020); Britton (2023); Tuck (2009)

<sup>5</sup> Ranganathan and Bratman (2021)



## Autonomy

Carrying out research in collaboration with non-academic partners brings with it a level of responsibility for ensuring that the work is being done equitably and fairly for all who participate. We recognize and value the autonomy of our partners to choose to work with us on their own terms and for their own purposes. Putting this principle into practice takes many different forms. When working with Indigenous Peoples, the right to self-determination and sovereignty is the controlling principle that is clearly spelled out in the US context in federal policy and internationally in the [UN Declaration on the Rights of Indigenous Peoples](#).<sup>6</sup> CLIMAS is housed within the University of Arizona, which subscribes to a set of [institutional guidelines](#) for engaging with Indigenous Peoples. As such, CLIMAS researchers—even those outside of the University of Arizona—abide by these policies and guidelines. In broad terms, researchers working with Indigenous Peoples and/or on Indigenous lands must seek community consent from the authorities who govern research activities (often a research review board) and follow the research protocols of the community. We uphold our responsibility to follow current guidelines and protocols articulated by these communities regarding data collection, management, and sharing. For any work that includes Indigenous Peoples, we follow the [CARE Principles](#) (Collective Benefit, Authority to Control, Responsibility, and Ethics) for Indigenous data governance.

In addition to the policies and procedures that govern research collaborations with Indigenous Peoples, federal regulations govern research with all people under the regulation of human research. Even when a project does not meet the definition of human research, such as when no generalizable data is collected, we will use the principles that underpin those regulations—particularly those for gaining informed consent—to guide our work. We will make sure that partners working with us understand the purpose of the project and their role in it. When working with a community that has not established research protocols, we will seek out community partners to initiate conversations about community values related to our collaborative work. When working with a professional organization, for example a resource management agency, we follow their policies and protocols for working with external partners, which may include development of memoranda of understanding or other formal arrangements that guide the collaboration. Finally, we can keep in mind that the imperative to undertake research does not outweigh the rights and autonomy of our partners. “A researcher’s scientific observation is some person’s [or community’s] real-life experience. Respect for the latter must precede respect for the former.”<sup>7</sup>

### Questions to ask ourselves:

- » What policies, guidelines, or protocols must be followed to ensure all participants are able to equitably participate in a research project?
- » How are we ensuring that any research consent that is part of the project represents not just individual collaborators, but—when appropriate—the communities which they represent?
- » How will data be gathered, managed, analyzed, and archived? How are these plans developed so that they are equitable to all who are involved?

### Potential Actions to Implement

- » At the outset of a project, facilitate a conversation among collaborators about how the team will ensure that the autonomy of all who participate is respected. This may focus on specific policies and protocols, but it may also require the group to collectively agree on how best to follow this principle.
- » Facilitate open conversations among collaborators about any consenting that will be required for the project. Ensure that research consents follow all relevant policies and protocols, but also ensure that consenting fulfills the wishes and concerns of all project participants.
- » Before any data is collected ensure that all collaborators have had the opportunity to contribute to the overall planning for data collection, management, analysis, storage, and use.

<sup>6</sup> For an analysis of Indigenous sovereignty in the context of UNDRIP, see: Wiessner (2008).

<sup>7</sup> Patton (2015, 243)



## Reciprocity

Reciprocity in research is the principle that participants in research should receive direct benefit from the process and/or research outcomes. In other words, benefit should not just accrue to the researcher (e.g., for professional gain) or to the broader society, but the needs and interests of direct participants should be prioritized through the process.

Acting on the principle of reciprocity means asking external partners at the start of a project: "What would you like to happen because of this research?" That information can then be used to build the research team and process in such a way as to address those interests to the best of our ability (and being transparent when meeting those goals is outside of our capacity - see above). Beyond benefits that should accrue to partners from the research itself, reciprocity also asks us to examine how funds and other resources will be used and shared between the research team and community partners.

### Questions to ask ourselves:

- » What do our community partners want to happen as a result of this research?
- » Does our team have the capacity to meet those needs? If not, what options are available to add the necessary skills and capacity?
- » How are we sharing funds and resources between ourselves and our partners?

### Potential Actions to Implement

- » Identify desired outputs and outcomes for all partners at the onset of the project.
- » Allocate additional project time and resources to develop products requested by community partners such as plain language and translated documents, reports, or data aimed at a public audience and/or addressing community questions directly in the research process.
- » Compensate community participants fairly for the time they devote to the project.
- » Establish a formal budget-sharing agreement with community organizations.



Photo: PTZ Pictures



## Respect for Diverse Knowledges

The way that CLIMAS works—in partnership with communities, practitioners, and policy makers and with colleagues from multiple scientific disciplines—requires cooperation and collaboration among all the different knowledge traditions involved. Our guiding principle of respect for diverse knowledges means that we strive to be aware and respectful of the expertise, methods, and ways of understanding the world all participants bring to our collective work. In the simplest terms this principle reminds us to be humble about what we know and how we have come to know it, while being open to different ways of thinking. We specifically recognize that Indigenous Peoples have connections and relationships with landscapes and resources that they hold as sacred and/or culturally significant, although they may not be under their legal jurisdiction. We honor those sacred values and perspectives of the communities we engage with regardless of the "ownership" status of the lands and work to ensure the research we carry out respects the wishes of those Indigenous Peoples.

### Questions to ask ourselves:

- » How does my academic discipline or knowledge tradition construct knowledge?
- » Do I hold biases about knowledge that comes from outside of my academic discipline?
- » Does our research team encompass all the necessary expertise and experience to understand the research question(s) and its implications? If not, what different types of knowledge are needed to inform this project?
- » How will we recognize and respect the cultural values of our partners?

### Potential Actions to Implement

- » Collaboratively design research questions, co-design research methods, and co-develop outputs with everyone who will be involved in these aspects of the project.
- » Hold practical discussions as a team about data gathering approaches, analytical techniques, and the assumptions we all bring to new research in order to reveal hidden biases and help the team identify the best methods for the particular research question(s) at hand.
- » Practice citational justice by seeking out the voices of thinkers from diverse backgrounds who are commonly under-cited or left entirely out of academic literature.
- » Build our teams in ways that ensure all necessary skills are represented.
- » Commit to our own professional development and seek out learning opportunities that build our understanding of research ethics, research methods, and research justice.
- » Facilitate open and respectful conversations about the extent to which cultural values should be integrated into the project regardless of whether a partner group's legal status provides them with specific jurisdictional rights or not.



## Commitment to Institutional Change and Progress

By utilizing engaged research approaches and seeking out opportunities to work with communities on the frontlines of climate risks and impacts, groups like CLIMAS inevitably encounter institutional tensions because this type of work typically falls outside of traditional research norms. As a result, we recognize that an element of our work involves a commitment to institutional change and progress, which we see as **identifying and working to revise policies and procedures that act as barriers to authentic community engagement within the universities, funders, and other organizations that support our research**. Advocating for institutional change increases our capacity to do research that is meaningful and can create tangible societal change.

Barriers to community engaged research exist within research funding institutions, academic institutions, and community partners' institutions through a variety of policies, procedures, and practices. We can work to reduce or overcome many of these barriers by incorporating the principles above into our work, tracking the progress and outcomes of our work over time, communicating these outcomes within our institutions and spheres of influence, and advocating for institutional change and progress. Everyone on the CLIMAS team is embedded within institutional structures that both facilitate and inhibit our abilities to carry out socially engaged research. Some members of our team have greater opportunity than others to help facilitate institutional change to support this kind of research, but all of us are committed to ongoing support for positive change and progress. Below are a series of ways that we believe we can practically contribute to those changes.

**Advocate for funding models that allow time for relationship building and scoping activities.** Many calls for research funding have a relatively short turnaround times (weeks to perhaps a couple of months) and/or only provide funding for 2-3 years. These mechanisms do not allow sufficient time for trust-building and relationship building, nor do they allow for the sometimes slow co-development of research questions that may have significant societal impact. As a result, typical research funding models in the US incentivize development of traditional academic outputs that may have minimal real world impact. These funding models—particularly for work in communities on the frontlines of climate change—also often support “parachute research”, where researchers drop into a community, do a bit of work and then leave, without making time to follow up with the community or seek longer-term impacts of the research for the community. When we have the opportunity—e.g., in discussions with our funders, meetings with our university state and federal relations staff, when we are invited to join panels or give presentations on engaged research—we strive to spell out these shortcomings and advocate for different funding models.

**Seek opportunities to incorporate and value the outputs of community engaged research as part of incentive structures and academic promotion and tenure processes.** For CLIMAS team members who belong to university faculties we typically have service commitments, some of which present opportunities to influence institutional policies and perspectives. For example, serving on various departmental, college, or university committees provides an avenue for starting conversations about the value of engaged research, more inclusive promotion criteria, and alternative forms of research impact. While peer-reviewed publications, datasets, and awarded grants remain the most prominent metrics for measuring academic success, as socially engaged researchers we have a responsibility to demonstrate the value of this work, which may not result in traditional academic outputs, through whatever institutional channels we have access to.



**Support efforts to build the capacity of researchers to do ethical community engagement work.** Through our teaching, research, outreach efforts, and contributions to collaborative projects we have opportunities to provide support for colleagues and collaborators who may have limited access to skills and knowledge development about topics like inclusive facilitation, trauma-informed approaches, and cultural competency. When possible, many members of the CLIMAS team seek out ways to share this knowledge and help others develop these skills through seminars, webinars, courses, and formal and informal mentoring.

**Demonstrate the value of research evaluation and assessment of societal impact.** The CLIMAS program has developed progressively more innovative evaluation approaches over the last 10 years, with a particular focus on documenting and articulating traditionally under-valued societal impacts of research. We seek opportunities to learn from peer programs and share what we have learned from our own work about assessing the impact of research meant to have societal impact because we recognize that embedding these efforts into research projects can help bring about institutional change. We also actively pursue discussions with funders, university leaders, and our partners about why we think robust research evaluation that goes beyond typical academic metrics (e.g., publications and grants) is both important and beneficial for demonstrating the value of socially engaged research.

**Overcome hurdles that prevent financial resources from going to community partners.** It can be difficult for grants run through universities to pay community partners for project collaboration, to pay people for participating in a project, or to make subawards for partner organizations. Because this financial exchange is a tangible representation of other ethical principles above, we actively seek out opportunities to influence systemic changes that reduce or eliminate these hurdles.

## Concluding Thoughts

Despite institutional and practical challenges, socially engaged research approaches offer a promising path forward for tackling some of the most complex environmental challenges we face globally. Although the members of the CLIMAS team have years of experience carrying out this kind of work, we recognize that a primary feature of research done in this way is the necessity to continually learn and adapt. We believe the principles and commitments we describe above are critical for ensuring our work is carried out in ways that are useful, respectful, fair, and in the service of addressing a range of injustices that science has historically either overlooked or been complicit in. However, we do not believe these represent a finite set. As a collective we will periodically reflect on our efforts to implement these principles and commitments and adapt them as we continue to learn.

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