### THINK IN SYSTEMS



Acknowledge that we live in an interconnected world, and consider how problems, actions, and solutions relevant to one component in a system can trigger changes in the other components. Holistically consider the multitude of intersecting risks that social and ecological systems face. This includes risks derived from both climate and non-climate hazards. Look holistically at the benefits of solutions and actions. Articulate and maximize co-benefits to increase the inherent value of projects, and increase partnerships, support, and collaboration.

How do you build capacity in all stakeholder groups to think in systems?

What is the trad-off between a systems approach and rapid action?

What stakeholders should be on a project team to best explore interconnected systems and solutions that recognize tradeoffs and complementary actions?

How can we build multi-solving / cobenefits of climate change adaptation planning into ALL work (education, policies, plans, implementation, engagement..)?

how do you get decision makers to commit to take actions that are related to them in a climate adaptation plan/strategy?

On any given project, have we sufficiently mapped out how our actions affect other ecosystems, industries, communities? When will we know if it's sufficient?



## ADDRESS ROOT CAUSES OF CLIMATE CHANGE

Acknowledge that adaptation will only be successful in the long-term if concurrent mitigation efforts are successful at maintaining safe levels of carbon dioxide in the atmosphere. Ensure that climate change adaptation actions are consistent with and supportive of mitigation actions. Certify that adaptation actions are low-emissions. Work in synergy with climate change mitigation whenever possible. Appreciate limits toadaptation and push mitigation.

Am I collaborating with the team in charge of mitigation within my organization?

Am I ensuring that my adaptation recommendations also reduce GhG? What are the underlying power relations? and how can we rebalance them to address root causes and ensure equity?

Do I link climate change adaptation and mitigation whenever it is possible to do so?





Contextualize adaptation research, policies, practices, communication, and actions to the appropriate issues, location, and scale. Understand existing, underlying conditions and vulnerabilities that climate change may exacerbate before deciding what adaptation action to take. Design strategies to adjust over spatial and temporal scales, and account for variability and extremes. Assess localized outcomes of adaptation actions.

Have I taken into and honored account a person's lived experience?

Am I doing the best I can to make sure I get as many contexts possible, not just those of the privileged few?

How can I eliminate barriers to listening to, sitting with, and understanding impacts to community members on the ground?

How can I best understand context if I am not familiar with the local geography/culture?





Safeguard the health, well-being, safety and existence of all people affected by an adaptation action. Focus on more vulnerable populations, engage those who have traditionally been disenfranchised, and consider multiple, intersecting vulnerabilities, systemic injustice, and oppression when identifying problems and solutions. Assess all strategies to ensure that they do not have disproportionate negative impacts on these populations. If possible, adaptation strategies should actively strengthen these populations.

How can I engage leadership and decision-makers with the urgency of acting to safeguard people and the most vulnerable communities in particular?

compelling case for supporting community-led resilience efforts to leverage greater understanding of local needs and a more democratic, community-owned and sustainable current day and long-term approach to

What kinds of information sharing agreements are needed to enable action? - Katharina Davis

How do we find community leaders that are truly representative and knowledgeable of the community's needs?

How will this this action strengthen vulnerable communities? -Jenna Ortega





Have we considered all the priority species that would benefit from a restoration project? Explicitly address the needs of ecological systems, including fish, wildlife, and plants, in adaptation strategies. Assess all actions to ensure that they protect or enhance the capacity of ecosystems to sustain function over time, and that human communities can continue to sustainably derive benefits from them in the long-term.

It's so easy to talk about/think about people; how can I also be sure that helping species adapt is part of discussions? How can I assure the ecosystem needs are addressed well without alienating community members at risk? How can we shift the focus from recreation to safety?

How can I better articulate the values that nature provides?

What do we mean by "nature?" We should get specific.



## USE BEST AVAILABLE SCIENCE AND KNOWLEDGE

Ensure adaptation-related decisions are consistent with and responsive to the best-available science about climate change and current knowledge of how it will affect human and natural systems. Use the full range of scientific tools, including both quantitative and qualitative methods, community knowledge, Traditional Ecological Knowledge, collaboration among the sciences, and the informed co-production of knowledge. When given the opportunity to design or implement an adaptation process, follow a vetted adaptive management process. Update policies and shift priorities as new information becomes available.

How can I best keep up with the latest best available science and knowledge?



## USE PROJECTIONS ABOUT FUTURE CONDITONS

Whenever possible, use projected future conditions, rather than averages over time, when planning for social, economic, ecological and other impacts, and in assessing prospective risk and vulnerability. Incorporate the full range of possible climate outcomes in assessments and plans, including highly uncertain events, acknowledging that conditions are becoming increasingly dynamic. Consider projected future conditions across all variables that may influence the outcome of adaptation actions, such as demographic and economic conditions. Continually re-evaluate underlying goals in light of new knowledge about projected changes.

How do we equitably address risk in areas of deep uncertainty? (e.g. long-term sea level rise) and decision-makers to care about long-term resiliency in the face of more urgent issues that need to be addressed (and in the context of high uncertainty and short-term orientation due to election and budget cycles)?

How do we prevent unnecessary duplication and expense of projections which many times do not add value over what is available. This seems like a consultant default mode...

#### **AVOID HARM**



Evaluate the impacts of adaptation actions on potentially affected systems, scales, and sectors for both shortand long-term time horizons.

Guard against maladaptation by assessing potential impact across sectors, scales, and systems and by engaging multiple, diverse stakeholders in the process. Consider externalities, minimizing disproportionate impacts to some at the benefit of other regions, generations, social groups, or systems. Recognize that sometimes the optimal solution requires some level of harm to a sector, system, or population. In those instances, seek to minimize harm and maximize options of people with less political and social power.



## UNDERSTAND INJUSTICE AND WORK TOWARDS JUSTICE

Grave injustices of the past, which have been allowed to perpetuate today, have created an unjust and inequitable society. Climate change exacerbates these inequities, as those who are the least responsible for climate change are often the most impacted. Widespread discrimination, promoted by histories of colonialism, white supremacy, domination of nature, and economic exploitation have created systems that inhibit otherwise capable communities and ecosystems from thriving. Understand systemic injustice and oppression and the resulting barriers to adaptation. Address injustices at their core whenever possible to remove these barriers and create the conditions needed for individuals, communities, and systems to be able to adapt.

Who can I connect with on this? I want to connect with orgs doing this important work, amplify and support them, and involve their communities in our work.

Many people understandably have more immediate short-term priorities than climate change -- how do we help them build space and capacity? Have we gathered target communities to ask questions? Are we asking the right questions? Are we providing appropriate incentives to communities that we are gaining an understanding from?

### ENSURE FAIRNESS IN DECISION MAKING Principles of Quality Climate Change Adaptation

Adaptation professionals inform and influence decisions, design decision making processes, and make decisions that affect people, nature, and the systems on which they depend. Decision makers hold power. That power is sometimes used to limit people's access to decision-making structures, particularly people and communities on the frontlines of climate change. It is critical that climate change adaptation creates opportunity for the people on the frontlines of climate change to build power through decision making. Use what power you hold to help ensure that all decisions and the processes by which they are made include representatives from all affected groups. Whenever possible, those in power should use the principle of "decide with, not for." In situations where one must decide "for," they should seek to maximize transparency, accountability, and follow-through and minimize harm and maximize options. Seek to especially minimize harm and maximize options for people who have little political power due to historical injustices.

As a consultant, how can I influence project funders to potentially redesign projects to allocate resources to community engagement at the onset?



# ENSURE EQUITABLE DISTRIBUTION OF COSTS AND BENEFITS

Ensure that the costs of adapting to climate change and the benefits of adaptation actions are equitably distributed. This means paying particular attention to individuals and groups on the frontlines of climate change, those disproportionately affected by climate impacts, and historic inequities in the distribution of benefits.

Do I ensure that I think about redistribution, justice, when I think about costs and benefits?



## NETWORK AND LEARN TOGETHER

We are all in this together, and our successes amplify and build on each other. Adaptation is contextual, but there are similarities in approaches across regions and sectors. Create templates and models that can be modified, tailored, or adapted to a particular context. Create the conditions for transferring and scaling solutions. Acknowledge that sharing best practices, learning by doing, and iterative and collaborative processes can help support local and overall progress. Use case studies, organizations spanning sectoral boundaries, and networks to connect and learn. Avoid reinventing the wheel by continuously communicating successes and challenges with peers and colleagues. Develop new, innovative ideas through dialogue and collaboration.

What is the best way for people to network and learn together- ask people what they want. Don't make assumptions!



### COLLABORATE

Integrate a diverse set of individuals and types of organizations into adaptation work, including representatives from government entities at all scales, non-governmental organizations, corporations and businesses, community groups, and philanthropy. Create opportunities to include people at multiple levels of organizations, and unaffiliated individuals. Create a common agenda that is beneficial to all parties. Develop shared processes and align effort to maximize connection and efficiency. Involve all partners in all actions, from problem identification through evaluation. When feasible, create infrastructure and dedicated staff that cuts across sectors and organizations.

Am I starting my work engaging all the areas in my organization internally and externally?

What systems make collaboration effective? Again ask people what they want



### USE EXISTING BEST PRACTICES

Many of the promising practices for adaptation work are general best practices that apply outside of the adaptation field as well. Two prominent categories are program design and management, and communications and engagement. The sections below describe best practices for each that should be applied in adaptation work.

When it comes to program evaluation, there's no easy way to quantify "resilience" -- how do we ensure that our efforts are effective and sufficient?





We work tirelessly to address climate change everywhere – prioritizing communities on the front lines. We cannot unknow what we know and oftentimes, that can cause anxiety, grief, and trauma for professionals working in this field. In order to continue being of service to our planet, communities, colleagues, and families for the long-term, we need to take good care of ourselves.

How do we normalize that taking personal care is important and normal. And NEEDED How can I take the time I need to totally disconnect if I have limited PTO?

How can I better
help students and
community
members recognize
the climate anxiety
they feel, share
about it, and
develop strategies
to work with it?

Remaining Questions