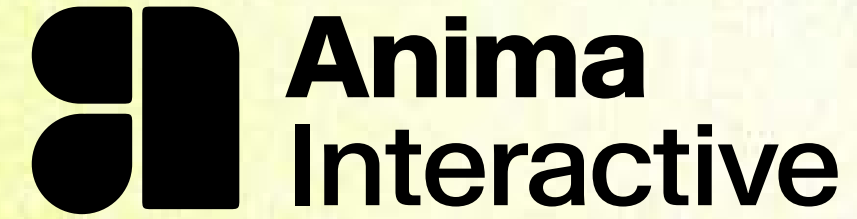
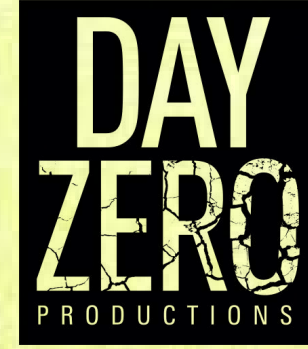


HOSTED BY



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DAY ZERO GAMES

SOLAR

PUNK ⚡ JAM

TOOLKIT



who are we?

HELLO FROM CINEREACH!

We, in partnership with [Day Zero Productions](#) and [Anima Interactive](#), are thrilled that you are interested in joining our efforts to explore climate futures that dare to imagine optimistically. Our goal as an organization is to cultivate intentional, fun and innovative ways to incubate stories that inspire change around the most impactful issues of our time.

“...stories are how humans have always reckoned with the joys and tragedies of being alive. They think we started telling stories roughly 30,000, possibly longer years ago, mostly to help process change and loss and death, but also as a way of passing down information through generations, through communities, and the more memorable and good the story was, the more likely people were to remember the information, and so it’s just been such an integral part of the human existence in our evolution for forever,”

—CLIMATE CHANGE LEADER, WEST COAST

WHAT IS THIS AND WHY SHOULD I READ IT?

This toolkit benefits from in-depth narrative research conducted in conversation with a broad range of community experts brought together by the invitation to speak to how climate change and the inequities that disparately worsen its effects can be mitigated, in part, by the storyworlds we create.

Our narrative research process depends on collaboration with subject matter experts who work with us to curate a range of voices.

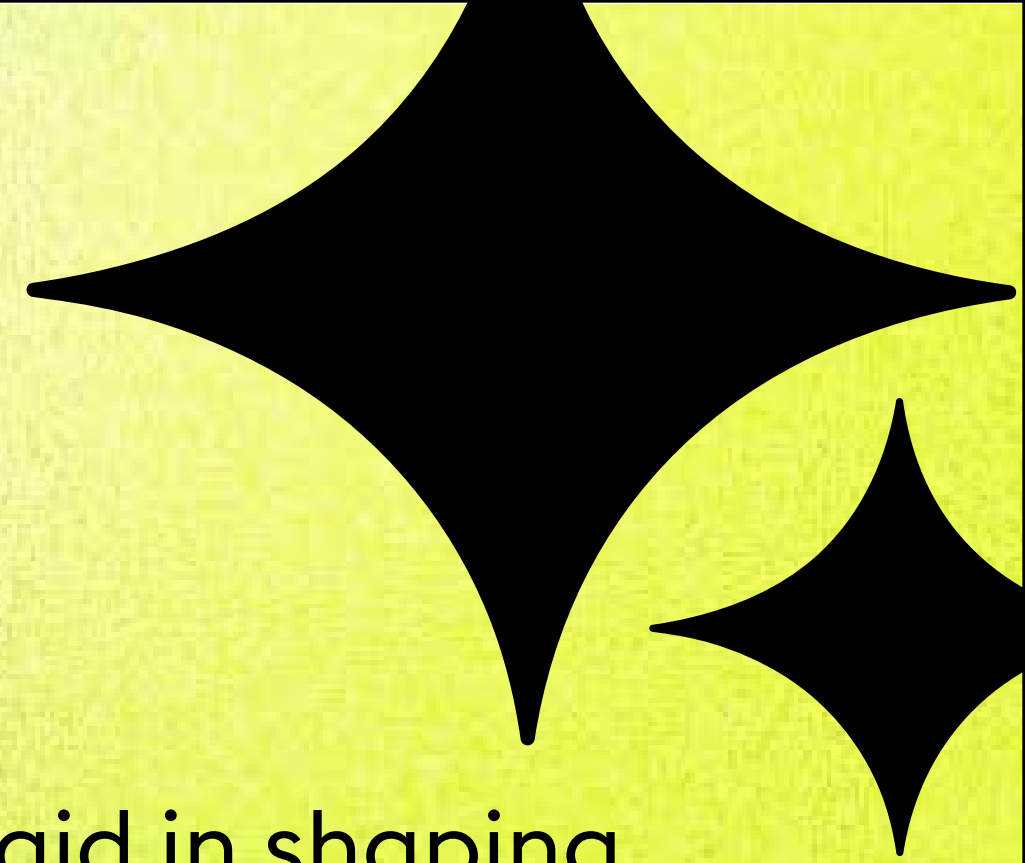
WHY DOES IT MATTER?

Our world is changing at an unprecedented rate, and in order to mitigate the effects of climate change we need collective action and the catalytic belief that a better future is possible. Where better to focus our efforts than a space that's inhabited by people all over the world? As developers you are exceedingly aware of the power of games to reach people and create powerful communities.

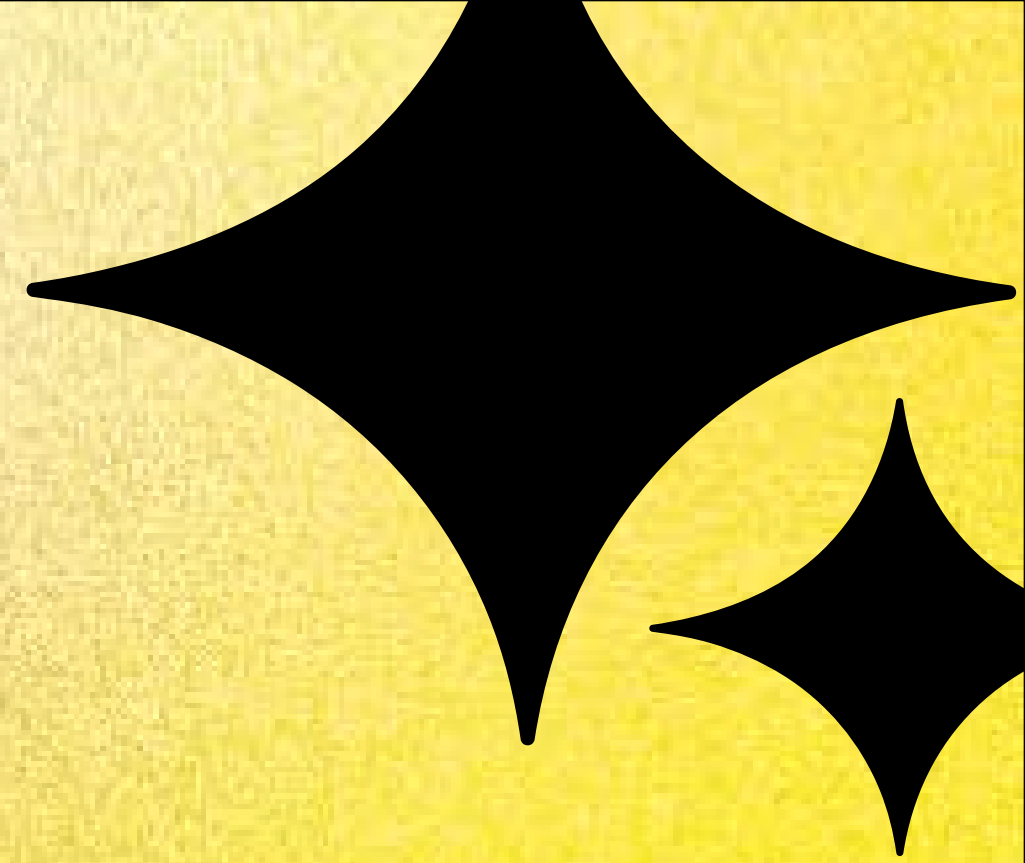
Climate change impacts not only the environment, but also the health, safety and well-being of billions of people across the globe. The visibility of stories that highlight its impact on humanity, especially communities that have, by way of systemic inequity, been

made especially vulnerable, can aid in shaping narratives that promote immediate structural change.

As such, we recognize that gaming is a great way to engage with climate change and all of the many ways it impacts us whether players are well informed, new to the conversation, or somewhere in between! By building worlds that allow players to imagine beyond the moment we're in, and encouraging people who identify across all lines of difference to take on varied roles and levels of decision making power, you can foster a sense of excitement and possibility about collective action towards a better tomorrow.



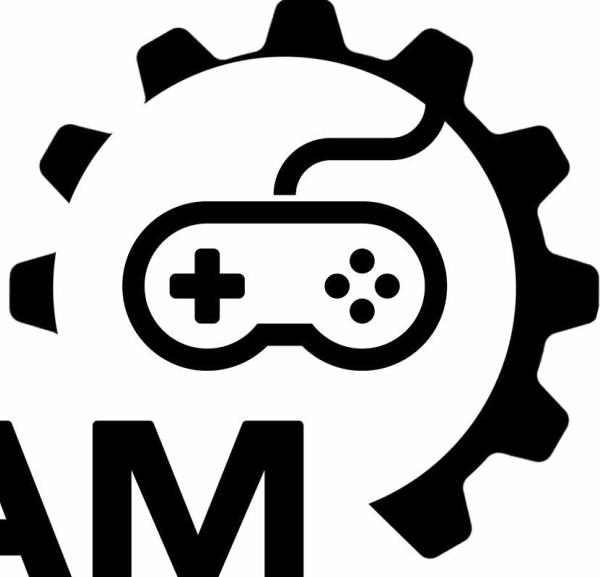
WHAT AM I SUPPOSED TO DO WITH ALL OF THIS INFORMATION?



Our hope is that you find your own unique, fun, unexpected, original way to use these narrative nuggets to inform your game design, mechanics, worldbuilding and narrative. This toolkit is only intended to serve as an additive resource – we hope that you will find inspiration in the insights we’ve compiled. The key here is not to build “THE CLIMATE GAME!!” In fact, quite the opposite. You will see in this research that the true conversation about climate is its presence in every aspect of life. No matter your personal identity, location, profession, beliefs, we are all in constant relationship with the climate.

We are interested in exploring climate futures through story because there is so much information out there about where we are right now. Stories are unique in their ability to imagine and normalize a future in whatever way moves the storyteller – that future may not be perfect, it may be in progress, it may be near term, it may be generations from now – we look forward to experiencing the approach you choose to take when thinking about how to reflect the importance of the climate in the future you design.

SOLAR PUNK ⚡ JAM

The logo consists of a large gear with a white game controller icon inside it. The text 'SOLAR PUNK' is stacked above 'JAM', with a lightning bolt symbol between 'PUNK' and 'JAM'.

why “solarpunk”?

As a movement, solarpunk invokes a future that draws on historic knowledge and sustainable practices of land stewardship. The optimistic future that [solarpunk](#) invites us to imagine is one in which humanity is thriving in synchronicity with the well-being of the planet, not driven by consumerism. It leverages the technologies that we have at our disposal for the greater good. Although our narrative research insights do not directly reference this movement, its optimistic bent is in direct alignment with the themes that emerged from the conversations we had with experts across experiences.

THIS IS HEAVY STUFF...

We know... so please keep in mind your game should be compelling and engaging to play, and given the subject matter, the world you build will be replete with complexity, hijinks, and decision-making dilemmas. We're serious about the urgent state of our climate, and are keenly aware that to reach a broad swath of players you'll have to lead with a good story that will keep them wanting more. We believe that because climate touches everything, **there is no one way to make a game about climate futures!**



QUESTIONS TO ASK YOURSELF

Consider these questions inspired by our narrative research findings as you design:

QUESTIONS TO ASK YOURSELF

1. What is your sensory and emotional experience of climate change? How does it look, feel, sound, taste, and smell?

2. Is there a moment in your life that changed the way you think about climate? How did your behavior and mindset change after that moment?

3. What tensions do you experience in your daily life when it comes to climate change? How might these draw attention to the systems that add strain to the ways we experience its effects?

4. Does your game imagine beyond the traditional dichotomy of a dystopian future or an unrealistically stable one? Be creative about depicting the in-between!

5. How might you be able to depict a thriving world? What is the role of hope in your imagined climate future?

6. Does your game allow players to consider the impacts of climate change on communities in a way that does not compromise their dignity?

Ex. ensuring that portrayals of impacted communities do not engage stereotypes.

7. We are not climate scientists, AND we don't expect you to be either... does your game invite all potential players to consider climate in some accessible way (even those who may not yet believe in the urgency of climate change)?

8. What is the role of technology in aiding the communities you create?

true or false?

**CLIMATE CHANGE IS
SOLELY A NATURAL
PHENOMENON.**



FALSE

Overwhelming scientific evidence confirms that human activities are the primary drivers of the rapid changes observed in Earth's climate over the past century. Dismissing human influence on climate change can lead to inaction or inadequate responses to the urgent need for mitigation and adaptation measures. By addressing common misconceptions about climate change, such as the belief that it is solely natural, game creators can provide players with scientifically accurate information that helps them understand the causes and consequences of climate change more fully.

[Photo by Roya Ann Miller on Unsplash](#)



true or false?

**WOMEN ARE
DISPROPORTIONATELY
AFFECTED BY CLIMATE
CHANGE.**



TRUE

**“THERE IS NO
SUCH THING AS
A SINGLE-ISSUE
STRUGGLE
BECAUSE WE
DO NOT LIVE
SINGLE-ISSUE
LIVES.”**

—AUDRE LORDE

Women and gender expansive people, intersectionally speaking, are disproportionately impacted. In the U.S., this is also true for Black people, Indigenous, People of Color, and people navigating conditions of impoverishment across all lines of racial and ethnic difference (Yes, we know that all of these groups overlap! as Audre Lorde said “There is no such thing as a single-issue struggle because we do not live single-issue lives.”). So many parts of our world have been designed in a way that deliberately distances some groups from equitable access to power and natural resources. As a result, at the intersections of facets of identity like race, gender, social class, and countless others, many are already navigating disproportionate harm caused by a rapidly changing climate. Climate change affects everyone, but we would be remiss to imagine that it will affect us all in the exact same ways.

true or false?

**NATURAL DISASTERS ARE
UNRELATED TO CLIMATE
CHANGE.**



FALSE



2010-2019 was the warmest decade ever recorded across the globe. Global warming has brought about natural disasters like massive wildfires, hurricanes, droughts, and floods and forcibly displaced communities fleeing human rights violations, political and economic unrest, violence, and threats to their lives.

A direct byproduct of this is the issue of litter in the oceans and microplastics, which further exacerbate the issues above. Cities around the globe are under equipped to deal with these new arising problems and new solutions must be made to adapt.

[Photo by Mike Newbry on Unsplash](#)

true or false?

**THERE IS A ROLE FOR
EVERYONE IN ADDRESSING
CLIMATE CHANGE.**



TRUE



Achieving systems level change in this context depends on both big and small actions and the relationships of people and actions in society. Large corporate campaigns and initiatives to end fossil fuel extraction and shift towards alternative renewable energy should work in tandem with small individual actions in communities to reduce and limit energy consumption. Small individual actions can create a ripple effect that impacts these larger systems. Moving towards transformative progress over unattainable perfection is paramount in reaching a broader audience in collective systems change for a sustainable future.

Photo by John Englart

true or false?

**YOUR FAVORITE A/RPG
CAN BE PERCEIVED AS A
CLIMATE SIMULATIONS
GAME.**



TRUE



Any game that invites you to inhabit a character and a new world is making choices about the environment, its state, the choices reflected in how the environment is affected by game play. In your game, you may consider addressing this through the ways that things like food energy, fuel, technology, community, health and a host of other elements emerge, as **all of these are inextricably linked with climate.**

Photo by Gorodenkoff Studios



NARRATIVE RESEARCH TAKEAWAYS

“We are nature and we continuously try and separate that.”

-ECO-THERAPIST, EAST COAST

This chart outlines the kind of phenomenal folks we got to speak with:

Activist	Product Designer	Beekeeper	Producer	Environmental Justice Youth Leader
Cognitive Scientist-Entrepreneur	Earthworker	Doctoral Student	Urban Planner	Warehouse Worker
Indigenous Youth Leader	Author	Mother	Award-winning Writer	Theorist
Customer Service Agent	Soil Scientist	Organic hemp and veg/fruit farmer	Gardener	Social Worker

In addition to the array of professional and lived experiences brought to bear, our workshops were enriched by the diversity of identities reflected by participants. Our participants convened across regions and time zones to grapple with what we believe to be among the most pressing issues of our lives. Although these insights were primarily gathered by participants within the U.S., we recognize the need for climate stories that demonstrate what hopeful climate futures look and sound like around the globe. **The following pages contain some key themes that were uncovered and explored in those conversations.**

POTENTIAL FUTURES



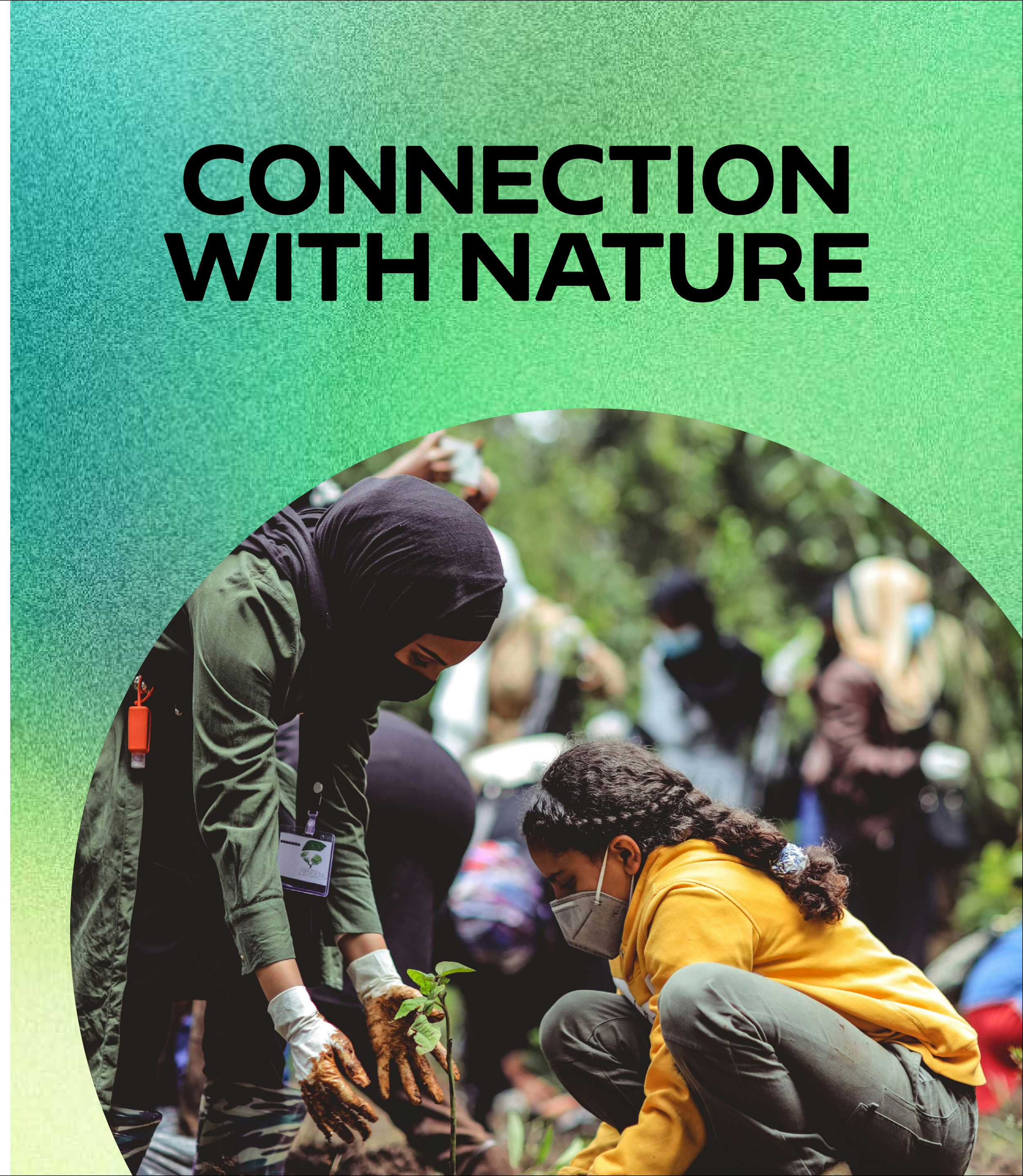
Speculating about potential futures allows creators to educate audiences about the possible consequences of different climate change scenarios. By depicting various outcomes, from best-case to worst-case scenarios, creators can illustrate the importance of taking action to mitigate climate change and adapt to its impacts. Imagining alternative futures can inspire viewers to take action to create a more desirable outcome. By presenting hopeful and aspirational visions of the future, creators can motivate individuals, communities, and policymakers to work towards a sustainable and resilient world.

Source: U.S. Department of Agriculture, Natural Resources Conservation Service

CONNECTION WITH NATURE

Participants noted the importance of stories that demonstrate humans engaging with their surrounding natural environments in ways that are restorative. These portrayals, especially when conveying communities that have been historically disconnected from nature on screen, have the capacity to reshape how belonging in the outdoors is imagined. **To the extent possible, it is helpful to portray intergenerational connection with natural environments as a backdrop**, especially for communities that are seldom depicted at the center of hopeful climate stories. Although stories should not belabor themes of individual responsibility, it is beneficial to invite an audience into empathic relationship with the natural world.

[Photo by Eyoel Kahssay on Unsplash](#)



BELONGING & INCLUSION



Relatedly, participants noted disparate access to outdoor spaces as a direct outcome of structural inequity. Among the myriad impacts of segregationist urban planning policies and documented experiences of racialized harm in nature is the very pronounced disproportionality of who is perceived to benefit most from consistent relationship with the environment. For many participants who self-identify as Black and Indigenous, interrupted connections with natural spaces are significant historical elements that continue to challenge spatial equity. We recognize that this theme emerged as uniquely salient to a U.S. participant pool, but the themes of curtailed access to resources for groups that have been alienated from power and opportunity ring true around the globe.

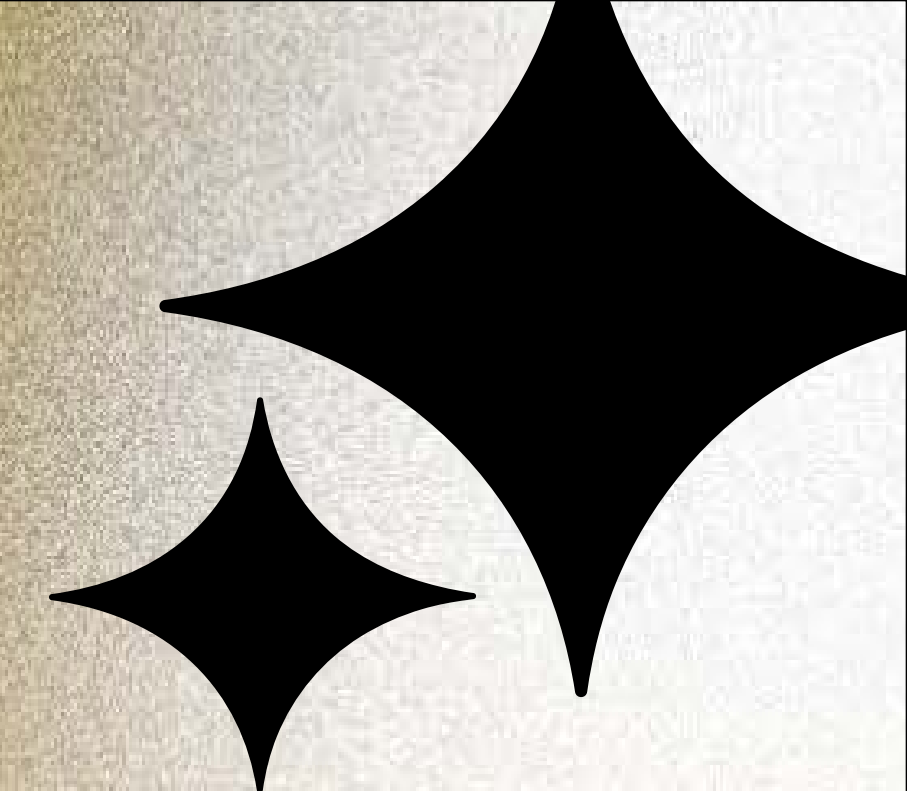
Photo by CHUTTERSNAPE on Unsplash

Inextricably linked with belonging and inclusion in nature, participants across lines of difference elevated the need for stories that offer insight into the systems that have shaped the world we inhabit today. **Understanding these histories allows for the construction of an informed, equitably designed future beginning with the stories we tell.**

HISTORY AND ACCOUNTABILITY

The right side of the image features a light green background with a subtle gradient. Overlaid on this are several large, overlapping, rounded shapes in various shades of green and yellow. The shapes are semi-transparent, creating a layered effect. The colors range from a bright, vibrant green to a more muted, yellowish-green. The overall composition is abstract and modern.

HONORING INDIGENOUS STEWARDSHIP



Many Indigenous communities around the globe have been distanced from their homes, and as recently as the last century many were forced into institutions that sought to strip them of their heritage. Our workshops revealed a desire for stories that demonstrate reverence for Indigenous stewardship without relegating their practices to a distant past. We recognize that many communities are actively working to maintain spiritual and cultural connections to the land and honor ancestral knowledge about local ecosystems, biodiversity, and sustainable resource management practices. At the same

time, we recognize that linking Indigenous communities to both the past and the land may engage harmful stereotypes that act as a barrier to their inclusion in contemporary movements towards justice. Rather than seeking to tell these stories alone it is important to interrogate what lived experiences and mindsets we're bringing to our work—nothing is “neutral”. As such, finding ways to honor the aforementioned knowledge and create opportunities for co-authorship wherever possible is pivotal to telling stories that can meaningfully catalyze change at any scale.

Existing power structures perpetuate inequalities, injustices, and exploitation. Structures that perpetuate harmful climate practices range from promoting ideas of consumerism, to policies that protect extractive practices, to big oil. Power structures deliberately marginalize and silence certain groups within society. Content that challenges these structures can shine a light on abuses of power and hold individuals, institutions, and systems accountable for their actions. By questioning established power structures, content creators encourage audiences to think critically about the distribution of power and access in society. This can lead to greater awareness of systemic issues and stimulate discussions about how to create more equitable and just societies. Content creators have the opportunity to respectfully amplify the voices of marginalized communities, challenge dominant narratives, and advocate for greater representation and inclusion.

Photo by Markus Spiske on Unsplash

CHALLENGING POWER STRUCTURES



CONSEQUENCES OF CLIMATE CHANGE



Climate change poses significant and immediate threats to human societies, ecosystems, and the planet as a whole. Content that explores its consequences highlights the urgency of taking action to mitigate its impacts and adapt to changes already underway. Many people still lack a full understanding of the extent and severity of climate change and its consequences.

[Photo by Matt Palmer on Unsplash](#)

IMPORTANCE OF CONSERVATION

Conservation efforts are essential for protecting the rich diversity of life on Earth and play a crucial role in mitigating climate change by preserving carbon sinks such as forests, wetlands, and oceans. Healthy ecosystems provide essential services such as clean air and water, pollination of crops, regulation of climate, and protection against natural disasters. Content that emphasizes the importance of conservation can illustrate how these ecosystem services benefit society and highlight the economic and social value of preserving natural habitats.



[Photo by Tyler Butler on Unsplash](#)

MENTAL HEALTH



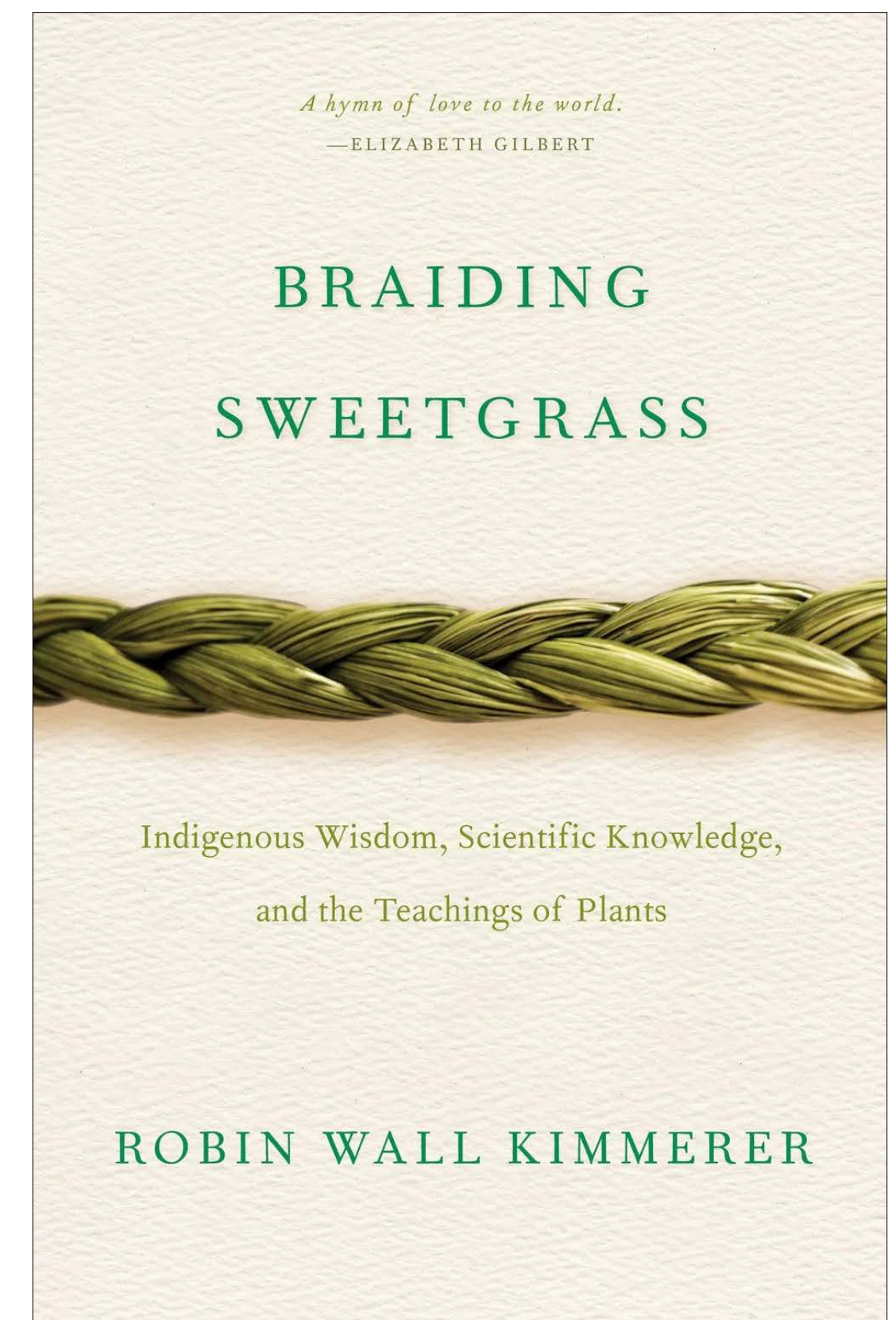
As we contend with climate change on individual, institutional, and structural levels, mental health across communities is significantly affected. Feelings of dread, defeat, powerlessness, and despair are becoming more common. An internal battle occurs for individuals who may want to take action, but also feel disempowered and unhelpful. For some, the rapid and unprecedented changes that are unfolding may contribute to these feelings of deflation. As climate change progresses more steps will be needed as a society to ensure the mental health of populations across all groups is considered and prioritized, not only to provide spaces for climate solutions but for our collective well-being.

[Photo by Markus Spiske on Unsplash](#)

HISTORY AND INTERDEPENDENT SYSTEMS

History provides a record of past experiences, successes, and failures, which serve as valuable lessons for present and future generations. By studying history, we can learn from the evolutionary experiences of our ancestors, understanding how they adapted to challenges, innovated solutions, and navigated complex social, environmental, and political landscapes. Many posit that solutions that could be responsive to this moment already exist. This knowledge informs our decision-making processes and helps us better prepare for and respond to current and future challenges.

Cover Art: Milkweed Editions



BARRIERS TO COLLECTIVE ACTION



There are various tensions surrounding climate change, including a lack of understanding. There is concern that the issue may be too all-encompassing to solve effectively, with societal norms and stigma complicating efforts. Disbelief and a lack of interest are noted as barriers to action, leading to self-questioning and unproductive discourse within communities. For some, it may not feel as though the issue is sufficiently salient—in part, because although movements for environmental justice have historically existed across cultural communities, the most prominently featured leaders have not been broadly representative. Overall, these tensions underscore the complex and multifaceted nature of the challenge ahead.

Audiences, especially younger generations, want honest and authentic portrayals of their lived experiences and opportunities to design their futures for themselves. Many would rather do without the patronizing attitudes that further stymie progress or foster a sense of dread in the climate movement (NYT, 2022). Leaning away from simplified “good versus evil” tropes in climate storytelling also allows for more nuanced stories to be shared about this complex global issue that should be representative of a collective movement that is inclusive of people across all lines of difference.

RESPOND TO AUDIENCE DESIRES



Photo by Li-An Lim on Unsplash

INTERDISCIPLINARY SOLUTIONS

The background of the slide features a gradient from light yellow at the top to a darker yellow at the bottom. Overlaid on this are two large, overlapping, rounded shapes. The shape on the left is a vibrant green, and the shape on the right is a dark olive green. They overlap in the center, creating a darker shade of green.

Given the range of experiences reflected in our qualitative research process, **participants explored the need for varied solutions and cross-sector coalitions** unified by the cause of mitigating the damage done by climate change. From our vantage point, storytelling across mediums is pivotal to informing and engaging audiences, and when we say collective action we mean this beyond the individual level! It's not just about generating individual moral urgency, but also about ensuring that adequate funding is invested in all kinds of solutions.

Personifying the planet as a means of amplifying empathic connection sheds light on the fact that caring for the world is a necessary series of collective actions. It is helpful to, in nuanced ways, increase a sense of proximity to climate change and generate moral urgency without leaning on guilt and belaboring the role of the individual.

[Photo by Greg Rosenke on Unsplash](#)

PERSONALIZING CLIMATE CHANGE



POSITIVE EXAMPLES ABOUND

Our participants noted the existence of media that educated and engaged them over the course of their lives. These examples ranged from climate-centered documentaries to children's shows like *Fern Gully*. Stories about climate change feel pressing at this moment, but they are not novel!



FERN GULLY



**GULLAH GULLAH
ISLAND**



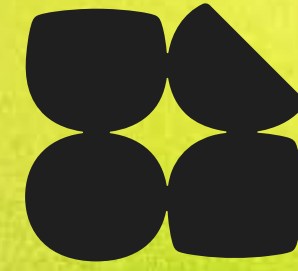
WALL-E



**HOW TO BLOW
UP A PIPELINE**



**LAKOTA NATION
VS. UNITED
STATES**



“...I believe the earth is speaking to us, everything that changes and then the season changes and everything. Once again, I’ll just use the example for when I go out hiking. So when I go out hiking, I feel the wind blowing through the trees, I can actually see the leaves changing colors. Grasses, I can see the foliage changing colors. And then again, I see the changing seasons. I feel like I sense a connection, a reminder of how things always change and how the earth is very fragile and how we care for it.”

-SCIENTIST/RESEARCHER



ACKNOWLEDGEMENTS

**Thank you to everyone who participated in our
Narrative Research Workshops!**