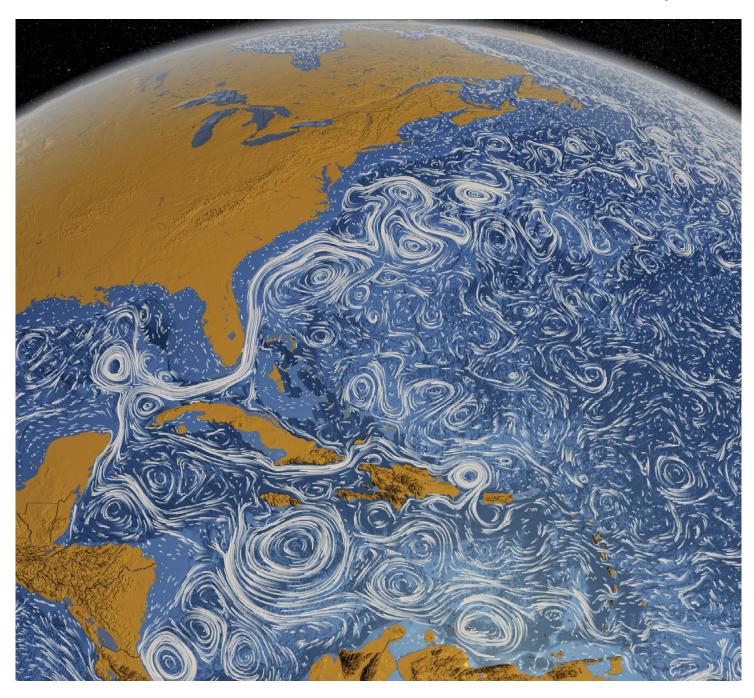
Environmentalists, what are we fighting for?

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by Graham Saul



Metcalf Foundation

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Cover image

Image of ocean surface currents around the world during the period of June 2005 through December 2007. Courtesy of NASA Goddard Space Flight Center's Scientific Visualization Studio.

ENVIRONMENTALISTS, WHAT ARE WE FIGHTING FOR?

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INTRODUCTION

I have always been fascinated by history's great social movements, the epic struggles that redefine our world and change the way that people relate to one another.

When I was ten years old, I bought a book at the souvenir store at the Lincoln Memorial in Washington, D.C. It was a thick photo essay filled with images from the U.S. civil rights movement. I would occasionally glance through the black and white pictures of protesters marching, crowds gathering at rallies, police dogs attacking, and children wading through angry mobs to attend all-white schools. At the back of the book was a collection of Martin Luther King's speeches and letters that I eventually started to explore.

King was a master storyteller. His speeches are filled with vivid descriptions of the injustices of racism in America. He always presented people with specific opportunities to make change at a local level as well as an inspirational vision that clearly defined his ultimate goal. You always knew what he was fighting for.

My early interest in the civil rights movement helped spark an interest in other great social movements, most notably the abolitionists that led the anti-slavery movement and the revolutionaries that led the great anti-colonial struggles of the nineteenth and twentieth centuries—especially in Africa and India.

Africa, in particular, has its hooks in me. I was born in Tanzania and though I moved back to Canada when I was only 10 months old, while growing up, the struggle for the liberation of southern Africa was a consistent theme within my extended family. As soon as I finished a degree in international relations I boarded a plane for Maputo, Mozambique, where I eventually started working for the aid organization Oxfam.

Over the next ten years, first in Maputo and then in Washington, D.C., the focus of my work shifted from international development and corporate globalization to environmental issues. I started working on climate change because of the devastating impact it has had in the world's most impoverished countries. I got involved in oil and energy issues in solidarity with communities fighting damaging oil projects in places like Chad and Nigeria.

By the time I returned to Canada in 2004, I was increasingly defining myself as an environmentalist. I was, and continue to be, many things—a feminist,

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an anti-racist, an anti-colonialist—yet for the past 14 years I have been primarily focused on international, national, and local climate change and nature conservation initiatives of one kind or another.

Progress on critical environmental issues has been slow during these years and it has become increasingly obvious that we are on the cusp of an environmental crisis of historic proportions. Toxins are playing havoc with ecosystems, land is being converted into farms and settlements, and climate change has begun to kill people, destroy and displace communities, and spark conflict. As a result, humanity is driving species to extinction at 1,000 to 10,000 times the pre-human or normal background rate. Dozens of species are becoming extinct every day.

These horrible developments are no longer the unintended consequences of an expanding human race that is sleepwalking through history unaware of the toll we are taking on the natural world. These problems are knowable. The consequences are predictable. We have a collective choice to do something about them, or not. How we choose to proceed raises profound moral questions about our obligations to one another, to other species, and to our children and grandchildren.

The good news is that hundreds of millions of people are waking up to the scale of the environmental crisis and the gravity of the decisions we currently face. Under the circumstances, it is not surprising that the environmental movement has emerged as one of history's greatest social movements.

History has taught me that it takes all kinds of people working in a wide variety of ways to build a successful social movement and we need strong organizations and great organizers to bring these people together.

Studying the past has also helped me appreciate the fact that mainstream institutions and vast segments of society rarely acknowledge the moral dimensions of social movements during the early stages of a struggle. Even issues like slavery were primarily discussed in economic terms—as opposed to ethical—for hundreds of years. Recognizing this, it is not surprising that most of society today is still unable to appreciate the moral implications of climate change and mass species extinction and of our policies to address the pressures and risks they pose.

History has also taught me that past social movements used powerful words to sum up their ultimate goal—words like *freedom*, *equality*, *liberty*, and *independence*. These inspirational words stitched a multitude of specific struggles and strategies into a coherent concept and they conveyed a goal

that was understood and worth struggling for. These words are tools that past social movements used to communicate with the public and frame the debate. They provide a simple and compelling answer to the question: What are you fighting for?

The more I thought about these words and the powerful role they played in past social movements, the more I asked: What are environmentalists fighting for?

Despite the fact that I have been working on a wide range of social justice and environmental issues for more than 20 years, I found myself unable to come up with a clear, easily understood, or commonly used answer to this question. When I started asking my friends and co-workers, I found that they were no better off.

So I decided to dig deeper.

I am thankful for the support of a Metcalf Innovation Fellowship which has allowed me to explore this topic in detail. Part of my research has included interviewing 116 of Canada's leading environmentalists to better understand how they would answer the question of what they are fighting for, and then to consider the implications of their answers. A complete list of all those interviewed is included at the back of this paper.

Apart from a few exceptions, most of the individuals I interviewed were unsatisfied with how they answered the question of what environmentalists are fighting for. They did not think that their own answers and the words they used would clearly sum up, for the general public, the goal of the modern environmental movement. Yet 75 percent of them believe it is important that we have the language to be able to do this.

Which leads us to ask why? Why is it important? Why go through the process of trying to articulate the goal of the environmental movement? I believe the answer is because we know, unequivocally, that words matter. Simple expressions that stick in people's minds and are grounded in values, not policy, help us cultivate a shared understanding of our work, encourage people to care about the issues, knit together diverse constituencies, and connect the local to the global. The environmental movement needs to be able to sum up concepts that inspire people, present aspirations that people can say "yes" to, articulate overarching goals that people are either for or against, and, in the end, convey truths that cannot be reasonably denied.

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Humanity has entered a new era in its relationship with planet Earth. While environmental problems have existed since the dawn of human civilization, the modern environmental crisis is, in fact, a relatively new phenomenon. The scale of the situation that we are in today, and our ability to understand it, is something that has really only unfolded during the course of my lifetime.

We are behaving in a way that threatens the survival of much of life on Earth, including humanity. Our common goal is to turn things around and become a life-affirming force in the world. This is not a new idea. Many people have articulated this goal in slightly different ways and, as outlined in this paper, some of them are trying to give it a name.

I believe that if environmentalists can learn to explain this goal coherently, and if we can develop an expression that comes to stand for this worthy thing we all have in common, then our individual and collective actions will have far more impact. The public will be more likely to care about our issues, better understand how to make a difference, and be motivated to act. To get there, we need to be prepared to look beyond our own slice of the broader problem and dedicate resources to better frame the issue.

Done correctly, this can be a hopeful message that inspires people to take action and provides a useful foil to the doom and gloom that so often, and understandably, characterizes how environmentalists communicate with the public.

I have two main goals with this paper. First, I want to help spark a debate around an obvious question that too many of us, myself included, seem to have a hard time answering: Environmentalists, what are we fighting for?

Second, I want to make the case that there *is* an answer to the question. We may not yet have a commonly used expression to sum it up, but if we can put our collective minds to it we can begin to articulate both the overarching problem and the solution in a simple, hopeful, and inspiring way. A way that speaks to the heart of what we are fighting for.

THE STAKES COULD NOT BE HIGHER

Humanity is extracting resources and converting forests, grasslands, and wetlands into farms and urban areas at an alarming rate. We are undermining our rivers, lakes, and oceans by diverting freshwater for human use and dumping massive amounts of chemicals like nitrogen and phosphorus into our waterways. We are also releasing a cocktail of toxic contaminants into the environment on a daily basis without fully understanding the impact they have on the health of humans and ecosystems.

To make matters worse, climate change is no longer a distant threat. It is happening today. As the Union of Concerned Scientists—a non-profit science advocacy organization based in the United States—points out, we are already witnessing rising seas, heavier precipitation, and increased flooding. Some areas are experiencing more severe droughts, increased pressure on ground-water supplies, and longer and more damaging wildfire seasons. Plant and animal ranges are shifting, coral reefs are dying, hurricanes are becoming more severe, oceans are acidifying, and heat waves and other extreme weather events are more frequent and intense.¹

Climate change is already killing people, destroying and displacing communities, undermining food security, sparking conflict and human migration, and spreading disease. But the sad truth is we have barely begun to witness the scale of the catastrophe that we will be facing if we continue on the trajectory we are on today.

In 2009, the prestigious health journal *The Lancet* argued "climate change is the biggest global health threat of the twenty-first century." Unless action is taken to reverse the trends, climate change will "put the lives and wellbeing of billions of people at increased risk," especially the poorest people in the world.²

[&]quot;Global Warming Impacts: The Consequences of Climate Change are Already Here," *Union of Concerned Scientists*, accessed March 3, 2018. https://www.ucsusa.org/our-work/ global-warming/science-and-impacts/global-warmingimpacts#.WjVjdt-nGUk

² A Costello, M Abbas, A Allen et al. "Managing the health effects of climate change," *Lancet and University College London Institute for Global Health Commission* 373, no. 9676 (2009): 1693-1733, accessed March 3, 2018, http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)60935-1/fulltext

The ongoing work of *The Lancet*³ and other global health agencies, such as the World Health Organization,⁴ is a reminder that climate change, much like many other aspects of the environmental crisis, is inherently a social justice issue. While a relatively small and wealthy percentage of humanity is disproportionately responsible for fuelling global warming, it is the world's more impoverished communities that are most likely to suffer. In other words, those least responsible for creating the problem are most likely to lose their lives and livelihoods as the situation grows worse.

But the environmental crisis also raises important ethical questions about our obligations to the rest of life on Earth.

Humanity is driving species to extinction at 1,000 to 10,000 times the pre-human or normal background rate.⁵ Dozens of species are going extinct every day.⁶ Yet the extinction rate alone fails to capture the extent of the "biological annihilation" that the planet is experiencing.⁷

A recent paper in the *Proceedings of the National Academy of Sciences of the United States of America*, suggests that populations of species that we thought were relatively common are crashing in ways that we are only now beginning to understand.⁸

We may or may not have already entered the sixth mass extinction, but there is no question that we are presiding over what science writer Peter Brannen calls a "hollowing out of wildlife itself." Vertebrates, including mammals, birds, fish, amphibians, and reptiles have decreased in abundance by as much as 50 percent since 1970. We now live in a kind of "Frankenstein biosphere" of our own making. As Brannen points out, "until very recently, all vertebrate life on the planet was wildlife. Today, astoundingly, wildlife accounts for only

- 3 "The 2017 Report of the Lancet Countdown," Lancet
 Countdown: Tracking Progress on Health and Climate
 Change, accessed March 3, 2018. http://www.lancetcountdown.org/the-report/
- 4 "Climate Change and Human Health," World Health
 Organization, accessed March 3, 2018. http://www.who.int/
 globalchange/en/
- 5 See: http://onlinelibrary.wiley.com/doi/10.1111/cobi.12380/abstract
 https://www.ncbi.nlm.nih.gov/pubmed/12348876
 http://www.biologicaldiversity.org/programs/biodiversity/elements_of_biodiversity/extinction_crisis/http://wwf.panda.org/about_our_earth/biodiversity/biodiversity/All accessed March 3, 2018
- 6 "The Extinction Crisis," Center for Biological Diversity, accessed March 3, 2018. http://www.biologicaldiversity.org/ programs/biodiversity/elements_of_biodiversity/extinction_ crisis/
- 7 Gerardo Ceballos, Paul R. Ehrlich, and Rodolfo Dirzo, "Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines," Proceedings of the National Academy of Sciences of the United States of America 114, no. 30 (2017): accessed November 29, 2017, http://www.pnas.org/content/114/30/E6089.abstract
- 8 Gerardo Ceballos, Paul R. Ehrlich, and Rodolfo Dirzo, "Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines," Proceedings of the National Academy of Sciences of the United States of America 114, no. 30 (2017): accessed November 29, 2017, http://www.pnas.org/content/114/30/E6089.abstract

3 percent of earth's land animals; human beings, our livestock, and our pets take up the remaining 97 percent of the biomass."9

While it is true that humanity is beginning to grapple with some of the ethical questions associated with mass extinction and our treatment of other species, we are really only scratching the surface of this discussion. Despite our rhetoric and a promising patchwork of inconsistently applied legislation, we still tend to treat most species as though they are essentially our property. We all too often behave as though we are free to brutalize and/or drive them to extinction at our own discretion.

We are also just beginning to appreciate the inter-generational justice issues that emerge from the environmental crisis. Climate change and other environmental problems have obvious implications for our children and grandchildren. They are the ones who will suffer the consequences of any environmental issues we fail to address. Do we have obligations to avoid harm to future generations? Will our grandchildren look back with moral outrage that we ignored predictable and avoidable threats?

It is tempting to view this kaleidoscope of problems as nothing but doom and gloom, but that is not at all the case. The environmental movement has exploded in its size and complexity. Hundreds of millions of people around the world are engaged in their own small way in promoting healthy communities, defending and restoring land, water, and other species, and helping usher in a clean energy revolution. People are beginning to recognize that these problems and injustices are as serious, predictable, and avoidable as any problem that we have ever faced. And this explains why the environmental movement has emerged as one of history's defining social movements.

While there are aspects of the environmental crisis that are genuinely unprecedented, this is not the first time that humanity has been called on to rise above its worst instincts, acknowledge a grave injustice, and address an ongoing disaster. We have made important progress over the past 200 years in working to overcome injustices like slavery, sexism, and racism that have plagued civilization since its inception, and we can learn a lot from the social movements that led the way on these issues. Environmentalists should not forget to look to the past for lessons on how best to lead the way into the future.

Peter Brannen, "Earth Is Not in the Midst of a Sixth Mass Extinction," *The Atlantic*, June 13, 2017, accessed on November 29, 2017. https://www.theatlantic.com/science/archive/2017/06/the-ends-of-the-world/529545/

LESSONS FROM THE PAST

All social movements, large or small, mobilize people to strive for social change. History provides many lessons about the kind of circumstances and conditions that spark and coalesce successful movements. Based on my studies of the anti-slavery, civil rights, women's liberation, and anti-colonial movements, I have organized these lessons into five categories.

It takes all kinds

Building a successful social movement really does "take all kinds" of people including activists, organizers, lobbyists, lawyers, orators, idols, philanthropists, fundraisers, political champions, authors, researchers, photographers, civil servants, entertainers, journalists, and most importantly, a lot of everyday citizens from across the political spectrum who participate in their own ways when and where they can. This diversity of skills and talents and political and spiritual ideologies comes together in a very messy way to attack a given injustice with "spears from all sides." ¹¹⁰

Organization matters

Strong organizational infrastructure plays an essential role in cradling and sustaining movements. Whether it is religious congregations, university campuses, political parties, local unions, non-profit organizations, or armies of liberation, organization matters and strong organizations are built by great organizers who bring people together in meaningful ways.

Blessed unrest¹¹

Breakthrough periods for social movements are usually characterized by significant social unrest, including non-violent civil disobedience, armed insurrections, strikes, protests, and uprisings of all kinds. Great social movements, by definition, disrupt entrenched interests and those interests do not go away quietly.

The ethical fog

Struggles that seem obviously righteous to us today were treated in the past with an amazing degree of moral relativism by mainstream politicians, the media, and vast segments of society. It is hard to imagine, but otherwise well-intentioned people had polite conversations about whether or not a given country could afford to end slavery, and whether or not women could be trusted to own property. It is as though all of society is blanketed by a kind of ethical fog that prevents many otherwise well-intentioned people from seeing a burning injustice before their very eyes.

Words matter

Great social movements use powerful words to sum up their ultimate goals—words like freedom, equality, liberty, and independence. People participating in those movements take many paths and approach the issue from many directions, but these words, and the ideas that they represent, are like north stars leading society out of the ethical fog and guiding people in a common and righteous direction.

Viewed in the context of these five lessons, we can see how the environmental movement is poised to be one of the major social movements. There are hundreds of millions of people around the world and hundreds of thousands of organizations focused on finding solutions to the environmental crisis. People are coming together agitating for change. In the section *The things we cannot measure*, I will look at the ethical and moral complexities that are becoming visible through the fog of environmental contamination, destruction, and extinction.

This paper touches upon all these lessons, but its primary focus is the fifth one: words matter. And specifically, how to answer the question: What are environmentalists fighting for? Though there is no easy answer, many inspiring people are working to articulate the goals of the modern environmental movement and patterns are beginning to emerge. The outlines of a coherent goal are starting to take shape. In the next section we will begin to explore these through the various responses and the predominant and most pressing ideas and themes expressed by many of Canada's leading environmentalists in the interviews I conducted.

WHAT DO CANADA'S LEADING ENVIRONMENTALISTS THINK?

In April and May 2017, I interviewed 116 leaders in their fields who are either directly or indirectly involved in the environmental movement. Interviewees included prominent activists focused on specific environmental issues (land conservation, climate change, air pollution, toxins, mass extinction, etc.), the heads of most of Canada's leading environmental organizations, and many of the best campaigners in the country. I also interviewed representatives from a number of Canada's environmental grant-makers as well as key politicians from three political parties. I spoke to activists who primarily approach environmental issues through another lens (faith, business, women's rights, Indigenous rights, health, etc.), as well as people who work on environmental issues outside of the activist world (journalists, public opinion specialists, and communications experts). ¹² Interviewees represented different age groups and spanned across the generations. A complete list of those interviewed is included at the back of this paper.

The interviews took about 20 minutes each. Questions were not provided in advance because I wanted to see what immediately sprang to mind when people were asked certain questions.

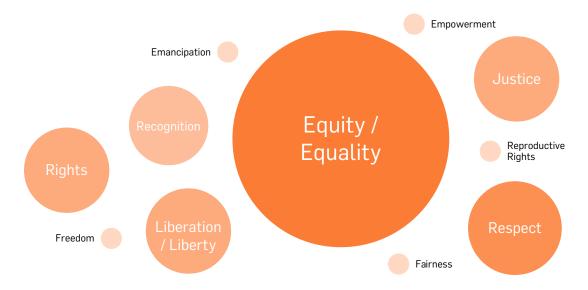
The overall goal was to better understand whether or not leading environmentalists agreed that words like *freedom* and *equality* played an important role in past social movements, and to see what words and concepts they would use to sum up the ultimate goal of the environmental movement today. And I wanted to know how important these individuals thought it was to be able to answer the question: Environmentalists, what are we fighting for?

WHAT WERE PAST SOCIAL MOVEMENTS FIGHTING FOR?

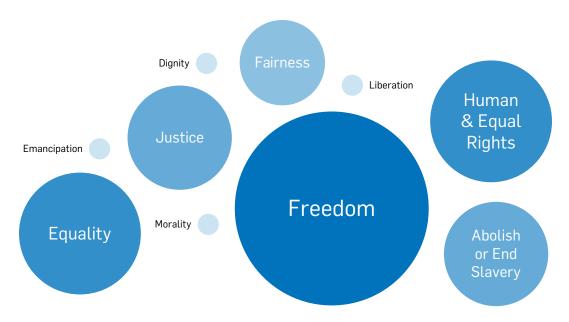
When I asked interviewees to sum up the ultimate goal of past social movements there was overwhelming consensus on the words as well as agreement that words played a very important role in helping the public understand what those movements were fighting for.

¹² While I did speak to a number of Indigenous leaders and people of colour, overall, the people interviewed—like the environmental movement in Canada in general—were not sufficiently representative of Canada's ethno cultural diversity. It was, however, a truly amazing group of people.

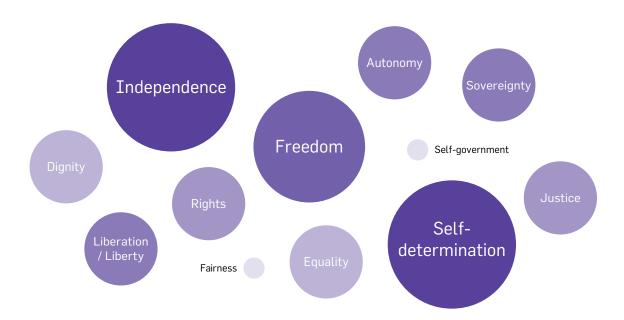
More than 70 percent used the words *equality*, *equity*, or *equal*, when asked to sum up what the **women's movement** was fighting for in the 1960s and 1970s. This is a remarkably coherent response given that the people interviewed had no idea they were going to be asked about the goal of the women's movement.



When asked to sum up what the abolitionists were fighting for during the **anti-slavery movement**, again there was consistency. Seventy-seven percent of respondents mentioned one of four expressions: *freedom*, *equality*, *human rights*, and *end slavery*.

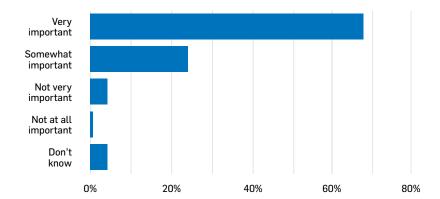


To describe what the revolutionaries were fighting for during the **anti-colonial movements** after the Second World War, 75 percent of interviewees used one of six relatively synonymous words: *self-determination*, *independence*, *sovereignty*, *autonomy*, *liberation*, and *freedom*.



Not only did certain words immediately come to mind to describe the ultimate goal of past social movements, but there was also overwhelming consensus that these words played an important role. More than 90 percent of those interviewed said that words like *equality*, *freedom*, and *independence* were "somewhat" or "very" important in communicating the ultimate goal of these movements to the public. More than two-thirds said these words were "very important." (Figure 1.)

FIGURE 1: You used "x" to sum up the ultimate goal of "y" and and "a" to sum up the ultimate goal of "b". How important do you think these words were in communicating the ultimate goal of those movements to the general public?



WHAT ARE ENVIRONMENTALISTS FIGHTING FOR?

When I asked interviewees to sum up what environmentalists are fighting for, the answers were far more diverse and people were generally unsatisfied with their answers. Most did not think that their own choice of words would clearly convey, for the general public, the goal of the modern **environmental movement**.

Words they chose varied from *survival*, *sustainability*, *justice*, *cultural change*, and *protection*, to *conservation*, *human health*, *preservation*, *balance*, *world safety*, *life*, *green energy*, *living lightly*, *species' rights*, and *saving Pachamama*. The word cloud below reflects this jam-packed mishmash.



There was a tendency among a minority of people to focus on a particular dimension of the environmental crisis, most notably climate change. For instance, *climate justice*, *green energy*, and *greenhouse gas reduction* were among the responses.

Some answers tended to be relatively ecocentric such as *land conservation*, *species preservation*, and *species rights*. Others tended to be more anthropocentric such as *human health*, *human survival*, *social justice*, *social rights*, *people*, *survival of civilization*, and *human rights*.

There was no one word or expression—like equality—that clearly dominated the answers. The three most frequently mentioned concepts were *survival* (22% of respondents), *sustainability* (14%), and *justice* (9%).

Though all of the Indigenous leaders I interviewed identified to some degree with being an environmentalist, most expressed an element of discomfort with the interview structure itself and cultural assumptions inherent within the modern environmental movement that views human life as distinct from the land, environment, and ecosystems.

A MATTER OF SURVIVAL

Despite being the most commonly used word to sum up the goal of the modern environmental movement, people had mixed feelings about the word *survival*.

Some argued that no matter how accurate the word may be, it won't resonate with the public because people don't see the environmental crisis as a matter of survival. One politician I interviewed chose the word *survival* but was unsatisfied with the word because: "The average person thinks the environmental movement is about recycling more. The average person doesn't see the world in terms of radical transformation. They are more incrementalists, and so the radical terms don't resonate with the average incrementalist."

Others argued that the word survival is too negative, conjuring up notions of an environmental movement that traffics catastrophe instead of inspiring a vision for a better future. "It's too scary," said one person. "Doom and gloom is out," said another. I was genuinely surprised to see survival emerge as the number one answer because it had not come up in any of my ad hoc conversations prior to conducting the interviews, and I do understand the concerns about its appropriateness. That said, there are a lot of good reasons for the environmental movement to figure out how best to communicate the concept of survival to the public.

In many ways, it is an accurate depiction of the problem. Mass species extinction is obviously a matter of survival. And if the world were to pass a tipping point and we were suddenly faced with runaway climate change, the catastrophic implications would put billions of lives at risk. Life on Earth would fundamentally change. As Ian Hanington of the David Suzuki Foundation put it: "[Survival], to me, is what it is really about. People have to be made aware of that no matter how uncomfortable it is."

I think we should value and support those voices that are prepared to speak candidly about the scale of the problem. We shouldn't just paper over it because we think people can't handle the truth. I agree with Cara Pike, Executive Director of Climate Access and CEO of Social Capital Strategies, who said to me: "There is something to be said for still having a voice calling out the fact that the very foundation of what we base our life on is showing distress signals. I'm afraid that voice, the willingness to put it out there so boldly, is going to get lost."

Furthermore, there are good reasons to think that people could intuitively understand the concept of survival in the context of the environmental crisis, if properly explained. Michael Adams, President of the Environics Institute and one of Canada's leading public opinion experts, chose and stood by the word *survival* as one way to sum up the ultimate goal of the environmental movement because:

People won't know what you mean by sustainable development. But we've been trying to survive for millions of years. We've entered the Anthropocene, we are now in the era where humans are increasingly the determinant of the conditions of where we live—the ecology and the environment—so [survival is about] recognizing that our human interventions are threatening the ecosystem. It is a primal appeal, and one that makes citizens vote for parties that promise to do something about it.

I would argue that it is our job as environmentalists to find the best to way to convey uncomfortable truths. Though the term survival may not immediately be understood by the average person, as Rick Smith, Executive Director of the Broadbent Institute suggested, more and more people are coming around to understand the idea. Rick used the word survival to communicate the ultimate goal of the environmental movement, but then said he was unsatisfied with the word for a number of reasons. However, he also acknowledged that: "I do think that climate change and toxins—the urgency of the environmental challenge—is clearer to people than it was five or ten years ago. People today do worry about survival of the planet whereas ten years ago people would have thought that was ridiculous."

Instead of putting aside the word survival and the ideas that it conveys, I think we should figure out the best way to explain it to people so that they can properly internalize its meaning and the urgency of the problems that we face. It does convey values that people intuitively understand and, if the public were to internalize the intended meaning of the word, it could help influence voting decisions and facilitate mass mobilization.

DON'T LOSE HOPE

Nobody I spoke to actually chose the word *hope* to describe what environmentalists are fighting for, but it was a consistent theme in most of the interviews. As Cara Pike put it, "we can't just keep it in threat mode." We need to be aiming to thrive, not just survive. We need words that convey hope, not just fear.

When I asked Franz Hartmann, Executive Director of the Toronto Environmental Alliance, to put aside the question of what the right word was and, instead, to tell me what emotion he thinks the word should trigger, he immediately replied: "The short answer is hope." And when I put the same question to Stephen Huddart, President and CEO of the McConnell Foundation, he expanded on Hartmann's answer by saying: "Urgent hope."

Unfortunately, most leaders I interviewed seemed to agree that environmentalists don't do hope very well. As one person put it: "We're not big believers in hope. If we are honest with ourselves, we peddle mainly in fear."

WHERE DOES JUSTICE FIT IN?

About one out of every ten interviewees used the word *justice* to sum up the ultimate goal of the modern environmental movement. However, most of them were unsatisfied with the word because they worry that "it doesn't mean anything to people," or that it "turns off a large portion of the population" who see it as "signaling to the movement for social justice, as opposed to the broader meaning."

Angus McAllister of McAllister Opinion Research argued that it was important to ensure that the concept of justice didn't get lost:

I've noticed the connective tissue between the environment and notions of justice emerge organically a number of times in the past when I've done naming and branding research for Canadian [environmental non-governmental organizations]. So I suspect that there is a definite alignment in the minds of not only your opinion leaders, but the general population as well.

Regardless of the words we use, I would argue that the environmental crisis is inherently a justice issue because it is inherently an ethical issue. Once people are comfortable acknowledging that the decisions we are making around environmental issues are not just technical and political in nature, but that they also raise important moral questions, we will have succeeded in inextricably linking our ultimate goals to the concept of justice.

HAS SUSTAINABILITY LOST ITS MEANING?

Almost 15 percent of the people that I interviewed used the word *sustainability*, *sustained*, or *sustainable*, to summarize the goal of the environmental movement. It was the second most commonly used word after *survival*. But almost everybody who used the word *sustainability* was unsatisfied with it. They found it vague and uninspiring and argued that it has lost its original focus on ecological integrity by taking on a triple bottom line meaning that includes economic, social, and environmental dimensions.

A few people stood by the word *sustainability* because they felt, as one leading public opinion expert put it, "working people actually understand the term sustainability." However, by far the dominant sentiment was that "it's vague," that it "can mean so many different things to so many people," and it doesn't have an emotional appeal because "it feels unambitious, like it comes out of a textbook."

I agree with these sentiments, but I have also come to think of the word *sustainability* as fundamentally linked to the concept of *survival*. At first, *survival* and *sustainability* seemed like very different ideas to me. *Survival* felt like a desperate rearguard action that conveyed the urgency of the environmental crisis; *sustainability* felt like a vague but aspirational goal that people have in mind as they strive to achieve a balance with nature. But the more I thought about these two words the more they seem to be telling a similar story, with *survival* conjuring up threatening notions of continuity, durability, and endurance, and *sustainability* conjuring up similar but more hopeful notions of something that is continuous, viable, and unceasing.

Erick Lachapelle, assistant professor of political science at the University of Montreal, made a similar point when he observed that: "In Japanese, sustainability can be translated literally as something like 'the possibility of continued existence'."

Perhaps *survival* and *sustainability* are to some degree two ways of saying the same thing. They both convey that there is something that we hold dear that is threatened—in this case the lives and well-being of people and other species. And they both imply that we need to find a way to make sure that what is threatened remains viable. That it has the possibility of continued existence.

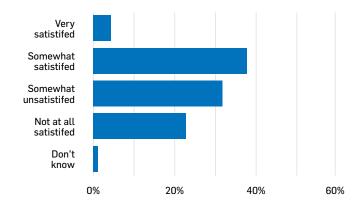
Regardless, very few of Canada's leading environmentalists who I interviewed thought that *sustainability* is a useful way to convey the ultimate goal of the environmental movement. I tend to agree.

THE IMPORTANCE OF WORDS

Putting aside the specific words that people used, there were three main takeaways from the interviews.

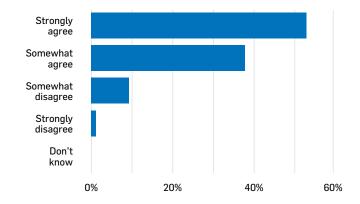
First, Canada's leading environmentalists are generally **unsatisfied with the words they use to describe the goal** of the modern environmental movement. A majority (57 percent) said they were either somewhat unsatisfied or not at all satisfied that the words they used would clearly sum up the goal of the modern environmental movement for the general public. Only 5 out of 116 people (4 percent) said they were very satisfied. (Figure 2.)

FIGURE 2: You said "z" to sum up the ultimate goal of the environmental movement. How satisfied are you that this response would clearly sum up the goal of the modern environmental movement for the general public?



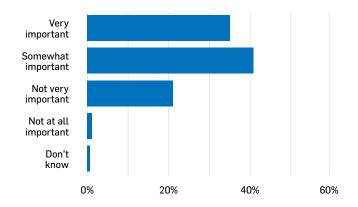
Second, almost everyone agreed that **a commonly used expression has not yet emerged.** About 90 percent of the environmentalists I spoke to agree with the statement: "Environmentalists do not have a commonly used expression to sum up the ultimate goal of the environmental movement," and more than half of respondents strongly agreed. (Figure 3.)

FIGURE 3: To what extent do you agree or disagree with the following statement: "Environmentalists do not have a commonly used expression to sum up the ultimate goal of the environmental movement."



Third, Canada's leading environmentalists generally **want to be able to answer the question:** What are environmentalists fighting for? About 75 percent thought that it was important that a word or expression that sums up the ultimate goal of the environmental movement either exist or be developed. About 35 percent of people argued that it was very important and about 40 percent argued that it was somewhat important. Almost no one claimed that it was not at all important. (Figure 4.)

FIGURE 4: How important do you think it is that a word or expression to sum up the ultimate goal of the environmental movement exist or be developed?



Talking with many of Canada's leading environmentalists helped me understand why this issue has been nagging me in recent years. It also helped me better understand what we want to get out of a word or expression that sums up the goal of the environmental movement.

Words like *equality*, *freedom*, and *independence* are clear and simple words, even when they are conveying goals that are complicated to achieve. We need easily-understood expressions because, as Joel Solomon, Chair of Renewal Funds explained: "We live in a world and time where simplicity works for a broad human landscape." We probably always have. And as Elizabeth May, Leader of the Green Party of Canada said to me, "Public action resonates to clear goals and clear descriptions. It's like when we changed 'Long Range Transport of Acidic Precipitation' to 'Acid Rain."

In addition to clarity, words like *equality*, *freedom*, and *independence* convey values that people tend to care about or, at the very least, they come to care about over time as they learn more about the issues. There is an emotional appeal. As Jim Hoggan, author of *I'm Right and You're an Idiot* put it to me: "It's not just the words. It is the words that express the values, that express the moral nature of the conversation. Unless you do that there is no deep meaning."

As Clare Demerse, former Federal Policy Advisor at Clean Energy Canada argued, there needs to be "a thing that people can say 'yes' to." By providing something that people can say "yes" to, words provide clarity of purpose. This is critical because, as David Miller, North American Director, C40 Climate Leadership Group and former Mayor of Toronto put it: "It is necessary to have clarity of purpose in order to inspire people to act."

Providing something that people can say "yes" to also helps create the conditions for a meaningful conversation because it presents an idea that you are either "for or against." It stimulates a societal debate that isn't about one local struggle, but rather hundreds of struggles playing out across an entire movement. This, in turn, makes it easier for people to proselytize and recruit others.

Stephen Huddart, President and CEO of the McConnell Foundation argued that: "... we need a point around which the multitude of constituencies can rally for a shared purpose, and a shared sense of possibility and commitment. If we go back to those earlier movements there was a rallying call. An aspirational fundamental appeal to human goodness and creativity that is missing in our environmental discourse."

Huddart's expression, "a fundamental appeal to human goodness," raises another point. Words like *equality*, *freedom*, and *independence* began as contested concepts but, as more and more people were won over and as thousands of small battles were won, the ideas that these words conveyed became less controversial. They became something that most people believe to be inherently righteous. They became, as Michael Curry, a Partner at InvestEco Capital put it to me: "A truth that can't be denied." The closer social movements using these words got to "a truth that can't be denied," the more inevitably successful they became.

DIFFERENT OPINIONS BUT A COMMON GOAL

The environmental movement is facing a diverse set of challenges from defending land and water and saving species from extinction, to reducing toxic contamination and pollution and stopping climate change. Despite these different issues, we are all part of an environmental movement. As Tim Gray, Executive Director of Environmental Defence put it: "When you look at climate work it seems to be focused on things that don't have a biodiversity dimension, but that is not true. It is about having humans operate within a system where we are not overtaxing the limits. If you listen to the narratives from people [in various environmental fields], they are very similar."

There is also no one right answer to the question of how ambitious our demands should be. There will always be people who want to promote revolutionary changes that are in line with the urgency and scale of the problem, as well as others who want to focus on harvesting politically palatable victories that move us forward in concrete ways and lay the groundwork for long-term change.

We need to accept the fact that even if we hold wildly different views on critical ideological issues, we are all still environmentalists. Some people argue that all of this complexity makes it impossible to talk about an environmental movement. I disagree. As Karen Mahon, Canadian Director at Stand.earth, puts it: "It's nonsense that we are too complex to have common goals and the movement is too complex. Clearly there is a movement. It's disparate, and increasingly so, but we understand that human survival is based on planetary health as the primary principle that drives all else."

I have found that there are three overarching ideological issues, in particular, that tend to divide us. First, there is **the role of the market economy**. Some suggest that capitalism is the underlying cause of environmental degradation and that it needs to be fundamentally upended if we want to address the environmental crisis. Others believe that the market economy, properly reformed, is one of the few forces in the world with the power to create the change that we need in the time that we need it. There are also those who argue that our obsession with viewing the world through an economic lens distracts us from other, more fundamental, ethical questions about humanity's relationship with the natural world.

Second, there is the question of **how best to relate to other social movements**. Some people think that we should be talking about issues like class, sexism, racism, colonialism, and militarism in almost all of our communication with the public in order to properly reflect and best address the complexity of the challenge. Others believe that environmental degradation and issues like species extinction and climate change are fundamental injustices in and of themselves and we need to focus our communication in order to have the greatest possible impact on these issues.

Third, there is the question of whether or not to approach the environmental crisis in an **anthropocentric or ecocentric** way. Are you an environmentalist who believes that the movement should focus on how best to ensure the survival and well-being of humans because it is naïve to think that we can solve the crisis without fundamentally appealing to humanity's self-interest? Or are you an environmentalist who believes that other species, or even ecosystems, have an intrinsic value that demands respect, and that anthropocentrism is little more than a chauvinistic expression of an underdeveloped value system? Or, perhaps you believe that this is a false distinction altogether, a byproduct of a narrow-minded western scientific conception of the world that fails to properly situate humanity within the circle of life and reflect the more holistic perspectives of many Indigenous and eastern worldviews.

These latter two points are particularly important when considering the critical role and leadership that is being shown by Indigenous Peoples in Canada around environmental issues. Many of the Indigenous leaders that I interviewed were critical of mainstream environmentalists for failing to adequately engage with and reflect Canada's history of cultural genocide, colonialism, and oppression. One of the Indigenous leaders I spoke to summed this up by saying: "Some environmentalists are still under the colonial mentality. While we agree on certain things—the goals and aspirations of the environmental movement—another part of it for us is achieving self-determination."

Similarly, some of the Indigenous leaders I spoke to rejected the notion that the work they were doing was "environmental" in nature. As Jessie Housty put it: "I don't consider most of what I do to be involvement in environmental issues, particularly. I consider what I do to be upholding my responsibility to carry on the stewardship tasks that have been passed down to my generation

from my ancestors. While people in a Western context will label me an environmentalist and say that I work on environmental issues, I consider myself to be a Heiltsuk person who follows and upholds Heiltsuk laws which may end up in many of the same places as environmental goals but the impetus is not the same."

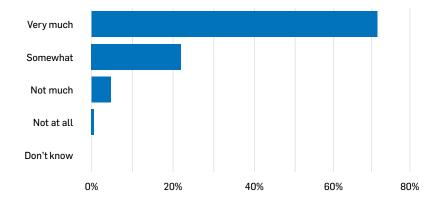
These are all important issues and they need to be discussed. They are also issues around which some environmentalists are naturally going to disagree for some time; they are not a litmus test for whether or not you are an environmentalist.

Our differences should not prevent us from acknowledging that we are facing a common crisis or that, on some level, we share a common goal. It takes all kinds and there is so much work to be done on so many fronts that no one thing will get us where we need to be. As Matt Price, author of *Engagement Organizing: The Old Art and New Science of Winning Campaigns*, said to me: "I don't argue with people anymore, I just out organize them."

If we look back in time we can see that the ideological differences described above have been playing out for hundreds of years. Much like the word "feminist" today, or "abolitionist" in the 1800s, the word "environmentalist" is a contested concept. We use the word on a regular basis and it frequently appears in the media, but even people actively working on environmental issues are sometimes wary of the word.

About 95 percent of the individuals I interviewed were comfortable self-identifying as an environmentalist. In fact, more than 70 percent of them said they were "very much" an environmentalist. Ironically, however, some then proceeded to distance themselves from the word and question whether or not we all really have anything in common. (Figure 5.)

FIGURE 5: How much of an environmentalist do you consider yourself to be?



The Oxford online dictionary defines environmentalist as "a person who is concerned about protecting the environment." I do not think it needs to be any more complicated than that.¹³ As Jennifer Lash, Executive Director of the Sisu Institute put it to me: "The common theme is trying to care for the earth and the air. An environmentalist is someone who is trying to protect the environment. Environmentalists are worried about how the actions of humans affect the natural world."

The sheer scale and nature of the modern environmental crisis, as well as humanity's ability to measure and understand it, is a relatively new phenomenon. It is important that we take some time to look beyond the things that divide us and find a way to sum up our common goal in a compelling way. It's a critical impetus of all successful social movements. As a starting point, in order to succeed we will need, collectively, to convince a lot of people that the world as they know it is over.

UNDERSTANDING EARTH: THE THINGS WE CAN MEASURE



Photo by NASA

In 1972, when the crew of Apollo 17 took the famous Blue Marble photo, it was the first time humanity had ever seen a photo of the entire planet. When I was born in 1971, a proper picture of Earth did not exist. My lifetime has been characterized by an explosion in technology that has only recently put us in a position to begin to truly witness and understand how the planet functions as a living nd interdependent system.

In 1961, there were only half a dozen active satellites orbiting the Earth. Since then, we have launched over 7,000 more, about 1,000 of which are functional today. The growth in satellites and Earth monitoring systems has been accompanied by rapid change in our ability to use computers to process the information we are gathering. Combined with advances in

fields like biology and ecology, our ability to understand and explain the impact of human activities on our world has fundamentally changed.¹⁴

THE BEGINNING OF THE ANTHROPOCENE

In many ways it is the scientists, not the activists, who recognized the profound and all-encompassing nature of this moment and have begun to communicate it conceptually to the world. In 2009, the International Union of Geological Studies established a working group—the International Commission on Stratigraphy—to determine if the world as we know it is over.

If you have never heard of the International Commission on Stratigraphy, you are not alone. But you are probably vaguely familiar with their best-known product. They are the scientists who debate and produce the chart you might have seen in your high school geography textbook—the one that categorizes 4.6 billion years of Earth's history into a series of layers called periods, epochs, and ages.

¹⁴ See David Grinspoon's Earth in Human Hands: Shaping our planet's future, for an excellent overview of this technological and scientific revolution.

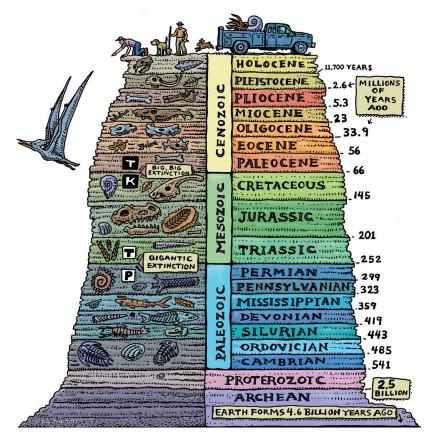


Illustration by Ray Troll

Many of the popular versions of this chart (see side image for one example) look like the layers of an archeological dig. They leave you with the impression that if you started digging a hole you would find billions of years of history revealed in the soil and rock below your feet, including evidence of Earth-changing events and mass extinction. To some degree, that is exactly the point.

For example, the Mesozoic Era began about 250 million years ago when a mass extinction killed off most of life on Earth and created the conditions for the rise and dominance of the dinosaurs. The popular dinosaur movie *Jurassic Park* takes its name from the Jurassic period. Then, 65 million

years ago, another mass extinction killed off the dinosaurs and Earth entered the Cenozoic Era, an era characterized by the rise and dominance of mammals including, very recently, humans.

For the past 12,000 years we have been living in a tiny slice of the Cenozoic Era known as the Holocene Epoch. The Holocene has provided life on Earth with a relatively stable and warm climate since the last ice age, and humanity has truly flourished during this time including all of our written history and the rise of mass civilization.

The International Commission on Stratigraphy was tasked, in the broadest sense, with answering the question: Is the Holocene over?

They debated the issue for seven years and reported back in August 2016 with the answer: Yes.

What ended the Holocene? We did. Humans.

What should we call this new Epoch in Earth's history that we are now entering? The Anthropocene.

Why? Because the term Anthropocene comes from anthropo for "man," and cene, for "new." It relates to "the current geological age, viewed as the period during which human activity has been the dominant influence on climate and the environment."¹⁵

The International Union of Geological Studies received the commission's recommendation, but they are still making a final decision on whether or not the Holocene is officially over and the Anthropocene has begun. These are scientists who count their years in the billions and they are not going to be rushed. This is the kind of change that will appear in the geological record for the rest of history. It will literally be written in stone for millions of years.

THE END OF NATURE

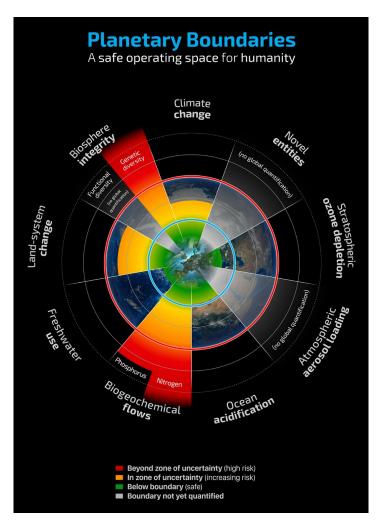
I remember being a university student in the early 1990s and reading *The End of Nature*, by Bill McKibben.¹⁶ It is sometimes referred to as the first book on global warming written for a popular audience. What left the greatest impression on me was McKibben's underlying argument that humanity's overall relationship with the natural world had just profoundly changed.

Historically, humanity's impact on nature was confined to the regions in which we lived and worked. People hunted, chopped down trees, mined minerals, dammed rivers, and cleared fields. The local impacts were often devastating, and some civilizations travelled great distances to plunder the resources of faraway ecosystems, but still there were areas of the world that existed independently of large-scale human interference. In the depths of our greatest forests you could still find nature that was largely untouched by human hands.

Then that changed.

Exactly when is a matter of debate. Maybe it began with the nuclear explosions in the 1940s through the 1970s, and the radioactive debris that shot into the atmosphere and left its trace in almost every corner of the world. Maybe it began when acid rain started to fall across entire regions, or when humanity discovered that it was creating a hole in the ozone layer. Or maybe, as McKibben suggests, it changed when we realized the sheer scale of the climate crisis, and it dawned on us that we were literally warming up the entire planet. If you think about it in geological terms (over thousands of years), the exact timing does not matter. What is important is the idea that humanity went from having an impact on certain areas of the planet to having an impact on every corner of the world at once and, in the process, we began to destroy the planet's life support systems.

In 2012, David Suzuki and Coastal First Nations leader Art Sterritt summed it up this way: "Humanity has become so powerful in numbers, technology, consumption and a globalized economy that we are altering the physical, chemical and biological properties of the planet on a geological scale. In the process, we are undermining Earth's life-support systems—the air, water, soil, photosynthesis and biodiversity that keep the planet habitable." ¹⁷



Credit: F. Pharand-Deschênes / Globaïa

PLANETARY BOUNDARIES

How do we approach and address a change as all-encompassing and multifaceted as the idea that humanity is destroying the life support systems of the planet? One way could be to use the breakthroughs in Earth systems studies (allowing us for the first time to have a clear picture of the world and our impact on it) to map out the core life support systems of the planet. We could then systematically assess the rate of their decline or restoration.

That is exactly what the Stockholm
Resilience Centre has been trying to do for more than ten years with their Planetary
Boundaries project. The planetary boundaries concept, first published in 2009, "identifies nine global priorities relating to human-induced changes to the environment. The science shows that these nine processes and systems regulate the stability and resilience of the earth system—
the interactions of land, ocean, atmosphere and life that together provide conditions upon which our societies depend." 18

Without going into the details of the science, here is a general outline of what they measure:

- 1. Climate change. Measured by the accumulation of atmospheric carbon dioxide in the atmosphere. This planetary boundary reflects how quickly we are warming the planet.
- **2. Biosphere integrity.** Measured by the extinction rate or the number of species per million lost every year. This boundary reflects how quickly we are driving species to extinction.

- **3.** Land-system change. Measured by the percentage of land converted to cropland. This reflects how much of our forests, grasslands, and wetlands have been lost because we have turned them into farms.
- 4. Freshwater consumption and the global hydrological cycle. This looks at the degree to which we are undermining our lakes and rivers by diverting freshwater for human use.
- 5. Nitrogen and phosphorous flows to the biosphere and oceans. Measured by the amount of chemicals like nitrogen and phosphorus in the oceans. This reflects the degree to which industry and agriculture are changing our atmosphere and polluting our waterways.
- **6.** Ocean acidification. Measured by the level of acidification of surface seawater. Reflects how quickly we are making our oceans uninhabitable for many species.
- **7. Atmospheric aerosol loading.** Measured by the level of particulate matter in the atmosphere. Is one way of looking at the air pollution that is choking life on Earth.
- **8. Stratospheric ozone depletion.** Measured by ozone levels in the stratosphere. Reflects the degree to which we are exposing life on Earth to dangerous amounts of UV radiation leading to an increase in skin cancer in humans and other problems.
- 9. Chemical pollution and the release of novel entities. Measured by the accumulation of toxic substances, plastics, endocrine disruptors, heavy metals, and radioactive contamination in our environment.

With varying degrees of scientific certainty, we now have the ability to map the rate at which these indicators are in flux, or these boundaries violated. As a species, we can use these boundaries as an evolving proxy for the degree to which we are destroying the life support systems of the planet.

Although they provide a simplified and imperfect view of the life support systems of the planet, these boundaries are the closest thing that I have seen to depicting the overarching problem that unites us. I would argue that, if you are an environmentalist, your hopes and fears are almost invariably caught up in the dangerous web depicted by the Stockholm Resilience Centre's planetary boundaries research.

The framework provides a foundation for engaging the public in a truly holistic conversation about planetary health. It shows the empirical and measurable problems we face and how all of our actions—whether expressed

through your vote, your conversations with friends and loved ones, or the specific programs that you participate in to make the world a healthier and more sustainable place—are designed in part to respond to some dimension of this common crisis.

Environmentalists already talk to the public about these boundaries. We just tend to do it in a piecemeal way. For instance, 350.org is one of the world's leading organizations working to stop climate change and, not coincidentally, an atmospheric CO_2 concentration of 350 parts per million is one of the variables used to define the planetary boundary related to climate change.

Whenever possible, we should be referencing the broader holistic conversation about planetary health when engaging the public, and not just one part that any given organization is focused on. For example, the World Wildlife Fund produces the Living Planet Index, which measures trends in thousands of populations of mammals, birds, reptiles, amphibians, and fish across the globe. The Living Planet Index is essentially one way of talking to people about the planetary boundary related to biosphere integrity.

The planetary boundary concept, explained properly, can help us communicate why "survival" is actually an appropriate word under the circumstances. And it can do something else that is critically important: help us talk about our victories as well.

Although almost all of the boundaries are moving in the wrong direction, there are wins. We have cut back on the use of DDT and certain kinds of bird populations are rebounding. We realized that acid rain was killing our lakes, so we changed the way we burned coal and promoted alternatives to fossil fuels.

In some parts of the world, forest cover is actually increasing and our air is cleaner because we did something about air pollution. This is really just common sense. It responds to the same logic as human health; if you are doing something that is killing you, stop doing it.

The planetary boundary related to stratospheric ozone depletion is perhaps the best example of our ability to turn things around. We were producing a chemical (chlorofluorocarbons) that was destroying a planetary life support system—a kind of protective shield around the planet called the ozone layer. So what did we do? We got together and decided to stop using chlorofluorocarbons (we adopted the Montreal Protocol). Once again, not rocket science, folks.

The planetary boundaries concept can be used to not only help us talk to people about the overarching problem that we face, but it can help us talk to people about the overarching solution. Given space, the planet can heal. It is possible for humanity to benefit from the Earth's life support systems without destroying them. If we apply a little more common sense, and if we apply it consistently, humanity can be a healing, restorative, and beneficial force in the world. We can choose to heal and restore. And isn't that really what we are fighting for?

THE THINGS WE CANNOT MEASURE

Admittedly, there is something cold about the technological, scientific, and quantitative way that I have summed up the environmental crisis. It smacks of technophilia. It feels like I am putting humanity on a pedestal and relying on the same blind faith in scientific progress that got us into this problem in the first place, to get us out of it. It fails to convey, explicitly at least, the desire for justice that motivates so many environmentalists and the need to ground our work in values as well as metrics.

We know that nature does not need us to "fix" it. Freed from negative human interference it will thrive, which leads me to say that I don't see any way to talk about the magnitude of the environmental crisis today without acknowledging that human activity is essentially the problem. Given the way that most of humanity is living in the world today, our expanding technology and biological knowledge could just as easily exacerbate, as solve, our problems.

Our emerging ability to scientifically know our world, to empirically appreciate it for the first time as a complex and interdependent entity, represents a kind of awakening. For the first time in history, we have an opportunity to truly observe and realize the impact of human activities. Far from being a rejection of age-old ideas that humans are an equal partner in a circle of life, this new era presents an opportunity to retell the story in a way that affirms Indigenous oral traditions and knowledge. In many ways, a holistic scientific approach like the planetary boundaries reinforces an integrated view of the world that embraces the value of Indigenous traditions and knowledge systems.

Still, I don't know how to resolve the fact that many people see data on rising levels of toxic contamination, ecosystem destruction, species extinction, and global warming as little more than scientific facts, as opposed to an ethical indictment of human values. The questions of environmental justice,

inter-generational justice, and inter-species justice seem so obvious to me that it boggles my mind that anyone could view the environmental crisis as anything but a moral dilemma.

I often think about the story that opens Aldo Leopold's seminal chapter "The Land Ethic" in his 1949 environmental classic, *The Sand County Almanac*. Leopold writes:

When god-like Odysseus returned from the wars in Troy, he hanged all on one rope a dozen slave-girls of his household whom he suspected of misbehavior during his absence. This hanging involved no question of propriety. The girls were property. The disposal of property was then, as now, a matter of expediency, not of right and wrong. Concepts of right and wrong were not lacking from Odysseus' Greece: witness the fidelity of his wife through the long years before at last his black galleys clove the wine-dark seas for home. The ethical structure of that day covered wives, but had not yet been extended to human chattels. During the three thousand years which have since elapsed, ethical criteria have been extended to many fields of conduct... [But] there is as yet no ethic dealing with man's relation to land and to the animals and plants which grow upon it. Land, like Odysseus' slave-girls, is still property...

There is an aspect of the environmental crisis—and all of history's greatest struggles—that lies beyond the jurisdiction of science and politics, and exists deep inside the human heart and brain. It is the difference between what we can know and legislate as a society, and what cannot be resolved by governments—or even logic it seems. It is the chasm and the time delay between taking action and enforcing laws to address the legacy of oppression, and removing the stain of racism, colonialism, sexism, and speciesism from our hearts.

So many of the social movements that I've mentioned in this paper have evolved as part of a 500 to 3,000 year struggle to conceptualize and operationalize the enlightenment idea of "human rights." People struggle and sometimes die coming to terms with or promoting compassion for the differences that exist between human beings.

If we find it so hard to treat other human beings with compassion and respect, to truly acknowledge and believe in human rights, imagine how hard it will be for humanity to find a way to engage all of the Earth community in a mutually beneficial way. To foster relationships that are characterized by the respect and compassion that all life on Earth deserves.

Tragically, I do not believe that this can be accomplished in my lifetime. There are simply too many people alive today who see almost every aspect of nature as little more than a piece of property that humans are free to preserve or destroy at their discretion. There is too much cruelty towards animals built into our modern food system and too many people alive today who will go to their grave without ever truly opening their minds to the logical consequences of the intrinsic value of nature and what it would look like to treat other species with compassion and respect.

That said, "change is slow until it's fast." We should never use "the impossibility of absolute cleanliness as an excuse to roll around in manure." We have started and must continue to not only grapple with the scientific and political dimensions of the environmental crisis, but also to lead people out of the ethical morass that characterizes our relationship to the natural world and our cruelty towards animals.

Humanity is wakening to the terrible implications of our current relationship to the natural world. We are also beginning a conversation about the rights of animals and the rights of nature that is grounded in values and ethics, rather than strictly science and politics.

In the early 1970s, only a handful of countries had a Ministry of the Environment. Today almost every government in the world has a ministry dedicated to environmental issues and more than 110 nations around the world guarantee their citizens' right to a healthy environment, often through their constitutions.

In Canada, we have the 2002 Species at Risk Act, and we are also debating various dimensions of brutality against animals, be it the rights of the dogs and cats we live with, the pigs, chickens, and cows we eat, or the whales and dolphins that we hold in captivity for our amusement and study. Some countries are even discussing the rights of rivers and mountains and entire ecosystems. In New Zealand, at least three geographic features that are sacred to the Indigenous Maori population have been granted "legal personality," granting them similar legal rights as a person.

WHAT ARE WE FIGHTING FOR?

Over the last half century, many visionary thinkers have stepped forward to interpret the evidence of a looming environmental crisis and to help humanity understand that a new and terrifying era has begun. While there is no doubt that we have failed to adequately respond to these warnings, it is important to remember that these changes are so all encompassing that even the scientific community is struggling to incorporate them into a new world view.

Environmental activist and author Joanna Macy argues, "the living systems of Earth are coming apart," but humanity's "needs can be met without destroying our world." She argues that the ultimate goal is to generate a "shift from the Industrial Growth Society to a life-sustaining civilization." Macy calls this shift "The Great Turning."

Diane Ackerman, in her book *The Human Age*, makes the same argument in a different way. She writes: "We billions of creative, problem-solving humans don't have to be parasites in our environment—we have the technology, the understanding and the desire to become ecologically sustaining symbionts."²³

I think it is safe to say that the term "ecologically sustaining symbionts" is not going to go viral any time soon, but it is also clear that at the most fundamental level Ackerman and Macy are expressing the same overarching goal.

In his recent book, *Earth in Human Hands*, David Grinspoon joins this chorus when he argues that humanity can "shift to being stabilizers."²⁴ He notes that we are now in a position to choose to "work with the planet, not against it,"²⁵ and that we can find "a way to live well with the Earth."²⁶ He thinks we need to learn to be better "collaborators,"²⁷ and "apply global technology in concert with the functioning of [our] world, augmenting it in the service of life."²⁸

²⁰ Joanna Macy, Joanna Macy and the Great Turning Film, online at http://www.joannamacyfilm.org/ (accessed November 3, 2017)

²¹ Joanna Macy, "The Great Turning," Centre for Ecoliteracy, accessed November 3, 2017. https://www.ecoliteracy.org/ article/great-turning/

²² Ibid.

²³ Diane Ackerman, The Human Age: The world shaped by us, (New York: HarperCollins Publishers Inc., 2014) at pp. 66.

²⁴ David Grinspoon, Earth in Human Hands: Shaping our planet's future, (New York: Grand Central Publishing, 2016) at pp. 193.

²⁵ Ibid., pp. 197.

²⁶ Ibid., pp. 243.

²⁷ Ibid., pp. 252.

²⁸ Ibid., pp. 326.

Grinspoon argues that achieving this shift should be our goal, and he calls the world that will unfold when the goal has been met "Terra Sapiens, or Wise Earth."²⁹

George Monbiot, in *Feral: Rewilding the land, the sea and human life*, argues that: "It is not enough to know what you are fighting against: you must also know what you are fighting for."³⁰

He wants us to create the conditions "to permit ecological processes to resume," ³¹ and work to ensure that "destructive processes are thrown into reverse." ³²

Although Monbiot's focus is regionally specific, he is echoing the others in arguing that we have an overarching goal to turn things around. Instead of destroying the life support systems of the planet we need to restore them. He calls this idea "rewilding."

I was first introduced to the ideas these authors are exploring by the cultural historian Thomas Berry. In his book *The Great Work: Our Way into the Future*, ³³ Berry argues that our core challenge, in this new millennium, is to:

- "...understand how the human community and the living forms of Earth might now become a life-giving presence to each other."³⁴
- Be working at "moving the human project from its devastating exploitation to a benign presence."
- "...carry out the transition from a period of human devastation of the Earth to a period when humans would be present to the planet in a mutually beneficial manner."36

Much like Ackerman's expression "ecologically sustaining symbionts," Berry's attempts at summing things up do not exactly roll off the tongue. They do, however, convey the basic idea and the overarching goal. Berry calls this "The Great Work."

²⁹ Ibid., pp. 276.

³⁰ George Monbiot, *Feral: Rewilding the land, the sea and human life*, (City of Westminster: Penguin, 2013) at pp. xix.

³¹ Ibid., pp 8.

³² Ibid., pp 12.

³³ Thomas Berry, *The Great Work: Our Way into the future*, (New York: Three Rivers Press, 1999) at pp. 3.

³⁴ Ibid., pp. ix.

³⁵ Ibid., pp. 7.

³⁶ Ibid., pp. 3.

What I like about Berry's "mutually beneficial" phraseology is that it acknowledges that humanity has always benefited, and hopefully always will benefit, from the natural world. What we need now is reciprocity. We need a situation where the natural world benefits from humanity.

TALKING TO THE PUBLIC

It took hundreds of years for concepts like equality, freedom, and independence to achieve the kind of moral clarity that they enjoy today. These concepts emerged from an enlightenment discourse that was at the time just as alien and ill-defined for most people as any expression we can come up with today to describe the solution to the overarching environmental crisis that we are facing. It takes time for people to understand new ideas. But that is not an excuse to walk away from the challenge, or to do it badly as we have been doing to some degree. After all, we do not have hundreds of years to address the environmental crisis.

"Survival" is a powerful way to articulate the existential threat that we are facing, and we should use it, but it lacks the hope and the inspiring vision that is conveyed by words like equality and freedom.

"Sustainability" is a term that could describe our common goal, but few people who use it are satisfied with it because it has been appropriated into a "triple bottom line" view of the world that fails to convey the modern and measurable ecological threat that we are facing in the Anthropocene.

Perhaps the expression we are looking for is already in use and we should rally around it and help people understand it. Expressions like "the great turning" or "the great work," "the good Anthropocene," "rewilding," "renewal," or "restoration" come to mind.

Perhaps there are words that already exist, and are grounded in an ecological worldview, but have not traditionally been used in this broader sense. Words like "succession." In ecology, succession refers to (among other things) the way that life reestablishes itself in the wake of a catastrophic disturbance like a forest fire, a volcano, or the paving over of a parking lot for a suburban mall. It could come to convey the idea of the turning point, the moment when the worst of the disaster is over and life on earth begins to restore itself.

Or perhaps it is a word that we are using in another social context but that is also relevant to this discussion, such as "reconciliation." Reconcilation is defined in the English Oxford Living Dictionary as the "restoration of friendly relations." What a great way to describe what environmentalists are fighting for. I could imagine myself using an expression like "reconciliation with all our relations" to describe our common goal because it elegantly conjures up the idea of both an injustice and a community of life that is engaged in a mutually beneficial and respectful relationship.

Reconciliation is a word that first held important meaning to me as a result of the Truth and Reconciliation Commission in South Africa, but in the Canadian context the word has come to refer to the need to recognize and honour Indigenous rights and come to terms with Canada's tragic history of cultural genocide. As a result, there are obvious problems associated with using it to define the goal of the environmental movement.

Perhaps we need to invent a new word entirely. When Gandhi was developing his philosophy of non-violent civil disobedience, he held a contest in his newsletter inviting people to write in with their suggestions. He eventually settled on satyagraha, a combination of the Sanskrit words satya (meaning "truth") and agraha (meaning "insistence" or "holding firmly to").

There are many approaches and I don't know which is the best. I do know that when we find the answer it will not be a panacea for our problems. But the benefits of searching for language and a powerful expression to articulate our goals are clear to me. Based on my research and survey findings it is also clear that many Canadians, who are leading the way forward on environmental work, share this aspiration.

I want to be part of a generation that took the time to reconceptualize humanity's relationship to the world and turn our trajectory away from the cliff. I can't think of a better or more important legacy to leave behind. I will work to advance this goal in many ways, and I want to work with other environmentalists to find the best way to describe a hopeful vision that will inspire people to achieve what today seems like a distant and improbable utopia.

We are in uncharted territory, which is both terrifying and exciting. As Arundhati Roy once wrote: "Another world is not only possible, she is on her way. Maybe many of us won't be here to greet her, but on a quiet day, if I listen very carefully, I can hear her breathing."³⁷

Conclusion 43

CONCLUSION

The environmental crisis is sometimes described as "death by a thousand cuts"—a gruesome description that reflects the myriad causes of environmental degradation. Similarly, solving the environmental crisis requires "a billion acts of courage," and literally hundreds of millions of people taking action in their own way to move the world in the right direction.

Environmentalists obviously differ in many ways. We focus on a bewildering range of issues at a variety of different levels from the personal to the global—from lifestyle changes to laws, regulations, and scientific research. We also hold different views on critical ideological issues like the role of the market economy, solidarity with other social movements, and the degree to which we should be anthropocentric or ecocentric in our approach.

None of these differences takes away from the fact that we have much in common. We care about different parts of the problem, we experience the problem in different ways, and we believe in different solutions, but we are all struggling in one way or another with the same fact: humanity is destroying the life support systems of the planet. Fortunately, our ability to understand and measure Earth's life support systems gives us a kind of "baseline" that describes how the planet is supposed to be functioning as an integrated system.

We are on the cusp of redefining how people relate to one another and how humanity relates to the rest of life on Earth. And the environmental movement has the markings of one of the greatest social movements that the world has ever seen.

There are hundreds of millions of people around the world approaching the environmental crisis "with spears from all sides." It is a truly global movement.

Hundreds of thousands of groups, organizations, and associations have sprung up. We are building the organizational infrastructure and rediscovering the craft of organizing in a way that is needed to address the scale of the challenge. The advent of new media and online platforms are changing the way we see, learn about, and organize around environmental issues.

YouTube, Instagram, Google Earth, and interactive journalism such as *The New York Times* series on the <u>Antarctic</u> are able to provide new evidence and raise awareness, and are also providing new forms of public engagement.

People are coming together to agitate for change. They are demanding action from decision-makers and they are standing up to irresponsible and indefensible decisions that move us in the wrong direction. While the environmental movement is still failing to make widespread use of the kinds of non-violent civil disobedience that was so essential to many past social movements, "blessed unrest" is taking hold in a way that will be necessary to shake the ill-conceived foundation of our society.

We still find ourselves in the midst of an ethical fog, but it is slowly lifting. Decisions that have life and death consequences for millions of people are still being discussed in technical, economic, or administrative terms as though the broader ethical and moral questions that they relate to are incidental. That said, a generation is being born that looks at the environmental crisis not just as a complicated regulatory and legislative problem, but as an ethical issue that reflects our commitment, or lack thereof, to address questions of environmental justice, inter-generational justice, and interspecies justice.

Environmentalists do not need to abandon their differences in the interests of helping the public understand what we are fighting for. But we do need to come together and put the necessary time and energy into a conversation about how best to talk about the issue with the public. As Martin Luther King's speeches illustrate, people need opportunities to make change locally and they also need an inspirational vision that defines their united goal.

Conclusion 45

WORKING TOGETHER TO FIND THE ANSWER

Over the past 20 years I have had the privilege to be part of an effort to help communicate issues related to one of the most important dimensions of the environmental crisis: climate change. Environmentalists have invested millions of dollars in public opinion research and communications expertise in an effort to craft the messages that best sum up the nature of the climate crisis and the solutions to the problems. These efforts, combined with all the other dimensions of the work that we have been doing to struggle for climate justice, are now beginning to pay off. The tide is turning and the clean energy revolution is unfolding around us in ways that the average person has only just begun to grasp. The crisis, though, is that it's not happening fast enough.

I am asking environmentalists of all kinds to put aside their differences and come together to engage in a similar communications effort around how we articulate a common solution to the broader environmental crisis.

If a critical mass of environmentalists can agree on this basic concept as a goal that we all have in common, then we can begin to invest our time and money in thinking through how to best communicate it to the general public.

This will not be a substitute for our efforts to frame specific struggles like climate change or species extinction, or to adapt our messages and messengers to specific audiences. Instead, it will be an attempt to explain an idea that connects all of our work, that acknowledges the interdependence of our efforts, and that weaves our specific struggles into an overarching goal that redefines humanity's relationship to the world and each other.

There is a revolution underway, and the outcome is far from certain. A lot of people look back at history's great social movements and wish they could have been part of these breakthrough periods in human history. I look at the moment that is unfolding around us and realize that we have the opportunity to be part of one of the most important things that has ever happened in the history of our planet.

PEOPLE INTERVIEWED FOR THIS RESEARCH

Catherine Abreu, Executive Director, Climate Action Network Canada

Michael Adams, President of the Environics Institute

William Amos, Member of Parliament for Pontiac

Mike Balkwill, Organizer, activist and consultant

Mitchell Beer, President of Smarter Shift and Curator of the Energy Mix

André Bélisle, President and co-founder of AQLPA

Tzeporah Berman, Environmentalist and Adjunct Professor at York University

David Boyd, Environmental lawyer, professor, author

Paul Bubelis, Executive Director at the Sustainability Network

Bridget Burns, Co-Director at Women's Environment & Development Organization

Louise Comeau, Director of the Environment and Sustainable Development Research Centre at the University of New Brunswick

Ian Connacher, Filmmaker, "Addicted to Plastic"

David Coon, Leader of the Green Party of New Brunswick

Lucy Cummings, Executive Director of Faith & the Common Good

Michael Curry, Partner at InvestEco Capital

Guy Dauncey, Author and futurist

Clare Demerse, Federal Policy Advisor at Clean Energy Canada

Paul Dewar, Member of Parliament for Ottawa Centre (2006 to 2015), Board Member of Human Rights Watch Canada and Partners in Health Canada, and Chair of Ottawa Centre Refugee Action

Mike De Souza, Journalist, Managing Editor at *National Observer*

Pegi Dover, Executive Director at the Canadian Environmental Grantmakers' Network

Lauryn Drainie, Marketing Manager at CoPower

Stewart Elgie, Professor of Law and Economics at the University of Ottawa and Chair of the Smart Prosperity Institute

Eleanor Fast, Executive Director at Nature Canada

Cameron Fenton, Canada Communications and Strategy Manager with 350.org

Mathew Firth, Senior Officer, Canadian Union of Public Employees

Aaron Freeman, Environmental consultant

Ellen Gabriel, Indigenous Human Rights and Environmental Activist from Kanehsatake

Julie Gelfand, The Commissioner of the Environment and Sustainable Development, Office of the Auditor General of Canada

Katia Gianneschi, Communications consultant

Emma Gilchrist, Executive Director at DeSmog Canada

James Glave, Principal of Glave Communications Stephen Huddart, President and CEO of the McConnell Foundation Kevin Grandia, President of Spake Media Anna Johnston, Staff Counsel, West Coast Tim Gray, Executive Director at Environmental **Environmental Law** Defence Antonia Juhasz, Independent Writer and Steven Guilbeault, Senior Director at Équiterre **Investigative Journalist** Brendan Haley, Banting Post Doctoral Fellow at Joanna Kerr, Executive Director at Greenpeace Dalhousie University School for Resource and Canada Environmental Studies and Policy Fellow at the **Broadbent Institute** Kapil Khatter, Family Physician Ian Hanington, Senior Editor, David Suzuki Michael Khoo, Co-Founder at UpShift Strategies Foundation Dr. Femi Kolapo, Associate Professor of History at the University of Guelph Joel Harden, National Researcher, Canadian **Federation of Students** Stan Kozak, Project Coordinator at the Gosling Foundation Sarah Harmer, Musician and activist Kathryn Harrison, Professor of Political Science Camille Labchuk, Lawyer and Executive at the University of British Columbia Director at Animal Justice Franz Hartmann, Executive Director at the Melina Laboucan-Massimo, Member of the Lubicon Cree First Nation and David Suzuki Toronto Environmental Alliance Fellow Dave Harvey, Founder and Executive Director at Park People Erick Lachapelle, Associate Professor of Politics Science, Universite de Montreal Eric Hebert-Daly, National Executive Director at the Canadian Parks and Wilderness Society Donald Lafleur, Canadian Labour Congress **Executive Vice-President** Jennifer Henry, Executive Director at Kairos: Canadian Ecumenical Justice Initiative Julia Langer, CEO at The Atmospheric Fund Jim Hoggan, Author and President of Hoggan and Jen Lash, Executive Director at Sisu Institute Associates Johanna Leffler, Fund Director of the Clean **Economy Fund** Will Horter, Director of Strategy at the Dogwood **Initiative** Kevin Leonard, Executive Director of Sandy Houston, President and CEO of the **Echo Foundation Metcalf Foundation** Pat Letizia, Executive Director at Alberta

Jessie Housty, Program Director at Qqs

Project Society

Ecotrust Foundation

Bruce MacLellan, CEO of Environics Communications and Member of the Board of the Nature Conservancy of Canada

Karen Mahon, Canadian Director at Stand.earth

Dale Marshall, National Program Manager at Environmental Defence

George Marshall, Founder of Climate Outreach

Burkhard Mausberg, CEO of the Friends of the Greenbelt Foundation and the Greenbelt Fund

Elizabeth May, Environmentalist, writer, activist, lawyer, leader of the Green Party of Canada and Member of Parliament for Saanich-Gulf Islands

Clifford Maynes, Executive Director, Green Communities Canada

Angus McAllister, President of McAllister Opinion Research

Patrick McCully, Climate and Energy Program Director at Rainforest Action Network

Margo McDiarmid, Senior Reporter at CBC Parliamentary Bureau in Ottawa, Environment, Energy and Indigenous Affairs

Logan McIntosh, Interim Campaigns Director at Leadnow

Bill McKibben, Author, Educator, Environmentalist, and Founder of 350.org

Shannon McPhail, Executive Director of Skeena Watershed Conservation Coalition

Ross McMillan, President and CEO of Tides Canada

David Miller, President and CEO of World Wildlife Fund of Canada and former Mayor of the City of Toronto Kevin Millsip, Director of Next Up

Jason Mogus, Principal Strategist at NetChange.co

Teika Newton, Executive Director of Transition Initiative Kenora

Devon Page, Executive Director at Ecojustice

Andrea Peart, National Health and Safety Officer, Public Service Alliance of Canada

Cara Pike, Founder and Executive Director of Climate Access, and CEO of Social Capital Strategies

Lindsay Poaps, Executive Director of Leadnow

Matt Price, Author and Environmentalist

Andrea Reimer, City Councillor of the City of Vancouver

Sidney Ribaux, Executive Director of Équiterre

Angela Rickman, Issues and Policy Coordinator, Office of the Leader of the New Democratic Party

Bernard Rudny, Independent consultant

Julia Sanchez, President-CEO at the Canadian Council for International Cooperation

Charlie Sark, Community Member, Lennox Island First Nation

Dr. Dianne Saxe, Environmental Commissioner of Ontario

Adam Scott, Senior Campaigner, Canada, at Oil Change International

Hugo Seguin, Environmental consultant

Nan Shuttleworth, President of the Salamander Foundation

Merran Smith, Fellow at Simon Fraser University and the founder and Executive Director of Clean Energy Canada

Rick Smith, Executive Director at the Broadbent Institute

Sandra Smithey, Program Officer, Environment, at the Charles Stewart Mott Foundation

Joel Solomon, Chair of Renewal Funds

Natalie Southworth, Communications strategist

Andrew Stewart, Consultant in archaeology and geoarchaeology and Member of the Board of Directors of the McLean Foundation

Keith Stewart, Senior Energy Strategist at Greenpeace Canada

Lauren Storer, Director of Granting and Operations at Sitka Foundation

Eric St-Pierre, Executive Director at the Trottier Family Foundation

Lindsay Telfer, Project Director at Canadian Freshwater Alliance, a project of Tides Canada

Mardi Tindal, Moderator of the United Church of Canada (2009 to 2012), Writer, Presenter and Facilitator with the Centre for Courage and Renewal

Ralph Torrie, Independent consultant, Torrie Smith Associates

Kay Treakle, Executive Director at the Harder Foundation

Daniel T'seleie, Indigenous activist and former Manager of Dene Nation Lands and Environment Secretariat

Chris Turner, Author and journalist

Andrew Van Iterson, Manager at the Green Budget Coalition

Dr. Ingrid Waldron, Associate Professor, School of Nursing, Dalhousie University and Director, Environmental Noxiousness, Racial Inequities & Community Health Project (ENRICH)

Tim Weis, Special Advisor, Climate Change Implementation, Officer of the Minister of Environment and Parks, Government of Alberta

Hayley Zacks, Student

SUGGESTED READING AND BIBLIOGRAPHY

At the end of each interview I asked people to provide me with suggestions on great environmental reading and their favourite writings on communications. What follows is a list of the answers that I received. I am looking forward to diving into the works on this list that I have not yet read.

Abram, David. *The Spell of the Sensuous*. New York: Vintage Books: A Division of Random House, Inc., 1996.

Ackerman, Diane, *The Human Age: The world shaped by us*, New York: HarperCollins Publishers Inc., 2014.

Alinsky, Saul. *Rules for Radicals: A Pragmatic Primer* for *Realistic Radicals*. New York: Random House, 1971.

Ariely, Dan. *Predictably Irrational: The Hidden Forces That Shape Our Decisions*. New York: HarperCollins, 2008.

Basáñez, Miguel. A World of Three Cultures: Honor, Achievement and Joy. Oxford: Oxford University Press, 2015.

Basso, Keith. *Wisdom Sits in Places: Landscape and Language Among the Western Apache*. Albuquerque, New Mexico: University of New Mexico Press, 1996.

Beck, Don Edward, and Christopher Cowan. *Spiral Dynamics: Mastering Values, Leadership and Change.* Hoboken, New Jersey: Wiley-Blackwell, 2005.

Berman, Tzeporah. *This Crazy Time: Living our environmental challenge*. Toronto: Alfred A. Knopf Canada, 2011.

Berry, Thomas. *The Dream of the Earth*. Berkeley, California: Counterpoint, 2015.

—. *The Great Work: Our Way into the Future.* New York: Broadway Books, 2000.

Bowles, Samuel. *The Moral Economy: Why Good Incentives Are No Substitute for Good Citizens*. New Haven, Connecticut: Yale University Press, 2016.

Boyd, David R. *The Optimistic Environmentalist:*Progressing Toward a Greener Future. Toronto: ECW Press, 2015.

Braungart, Michael, and William McDonough. *Cradle to Cradle: Remaking the Way We Make Things*. New York: North Point Press, 2002.

Brown, Peter, and Geoffrey Garver. *Right Relationship: Building a Whole Earth Economy.* Oakland, California: Berrett-Koehler Publishers, 2009.

Bullard, Robert D. *Dumping in Dixie: Race, Class and Environmental Quality*. Boulder, Colorado: Westview Press, 2000.

Canning, Doyle, and Patrick Reinsborough. *Re:Imagining Change: How to Use Story-based Strategy to Win Campaigns, Build Movements, and Change the World.*Oakland, California: PM Press, 2010.

Carson, Rachel. *Silent Spring*. Boston: Houghton Mifflin Company, 2002.

Cialdini, Robert. *Influence: The Psychology of Persuasion*. New York: HarperBusiness, 2006.

Cooney, Nick. Change of Heart: What Psychology Can Teach Us about Spreading Social Change. Herdon, Virginia: LanternBooks, 2010.

Engler, Mark. *This Is an Uprising: How Nonviolent Revolt Is Shaping the Twenty-First Century*. New York: Nation Books, 2016.

Flannery, Tim. Atmosphere Of Hope: Searching for Solutions to the Climate Crisis. New York: HarperCollins Publishers, 2015.

—. The Weather Makers: The History and Future Impact of Climate Change. New York: HarperCollins Publishers Ltd., 2005.

Francis, Pope. *Encyclical on Climate Change and Inequality:On Care for Our Common Home*. New York: MelvilleHouse, 2015.

Frodeman, Robert. *Geo-Logic: Breaking Ground Between Philosophy And The Earth Sciences*. Albany: State University of New York Press, 2003.

Ganz, Marshall. Why David Sometimes Wins: Leadership, Organization, and Strategy in the California Farm Worker Movement. Oxford: Oxford University Press, 2009.

Gardiner, Stephen. A Perfect Moral Storm: The Ethical Tragedy of Climate Change. Oxford: Oxford University Press, 2013.

Gladwell, Malcolm. *The Tipping Point: How Little Things Can Make a Big Difference*. New York: Little Brown, 2000.

Grinspoon, David, *Earth in Human Hands: Shaping our planet's future*, New York: Grand Central Publishing, 2016.

Haidt, Jonathan. *The Righteous Mind: Why Good People Are Divided by Politics and Religion*. New York City: Pantheon Books, 2012.

Harper, Fletcher. *GreenFaith: Mobilizing God's People to Save the Earth.* Nashville, Tennessee: Abingdon Press, 2015.

Hawken, Paul. Blessed Unrest: How the Largest Social Movement in History Is Restoring Grace, Justice, and Beauty to the World. City of Westminster: Penguin Books, 2008.

- —. Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming. City of Westminster: Penguin Books, 2017.
- —. The Ecology of Commerce: A Declaration of Sustainability. New York: HarperBusiness, 2010.

Hawken, Paul, Amory B Lovins, and L Hunter Lovins. Natural Capitalism: Creating the Next Industrial Revolution. New York: Little Brown, 1999.

Heath, Chip, and Dan Heath. Made to Stick: *Why Some Ideas Survive and Others Die*. New York: Random House, 2007.

Hoffman, Andrew. *How Culture Shapes the Climate Change Debate*. Stanford, California: Stanford Briefs, 2015.

Hoggan, James. *I'm Right and You're an Idiot: The Toxic State of Public Discourse and How to Clean it Up.* Nanimo, British Columbia: New Society Publishers, 2016.

Homer-Dixon, Thomas. Carbon Shift: How Peak Oil and the Climate Crisis Will Change Canada (and Our Lives). New York: Vintage Canada, 2010.

—. The Upside of Down: Catastrophe, Creativity, and the Renewal of Civilization. Toronto: Knopf, 2006.

Hunter, Robert. 2030: Confronting Thermageddon in Our Lifetime. Toronto: McClelland & Stewart, 2003.

Jensen, Derrick, Aric McBay, and Lierre Keith. *Deep Green Resistance: Strategy to Save the Planet*. New York: Seven Stories Press, 2011.

Jones, Van. The Green Collar Economy: How One Solution Can Fix Our Two Biggest Problems. San Francisco: HarperOne, 2008.

Kahneman, Daniel. *Thinking, Fast and Slow*. New York: Farrar, Straus and Giroux, 2011.

Kempf, Hervé. *How the Rich are Destroying the Earth.* Cambridge: Green Books, 2008.

King, Stephen. *On Writing: A Memoir of the Craft*. New York City: Pocket Books, 2002.

Klein, Naomi. *This Changes Everything: Capitalism vs. the Climate*. New York: Simon & Schuster, 2014.

Kolbert, Elizabeth. *The Sixth Extinction: An Unnatural History*. New York: Henry Holt & Company, 2014.

Kroeber, Theodora. *Ishi in Two Worlds*. Oakland, California: University of California Press, 2011.

Lakoff, George. *Don't Think of an Elephant: Know Your Values and Frame the Debate*. White River Junction, Vermont: Chelsea Green Publishing, 2004.

—. The Political Mind: Why You Can't Understand 21st-Century American Politics with an 18th-Century Brain. New York: Viking Press, 2008.

Leopold, Aldo. *A Sand County Almanac: And Sketches Here and There*. Oxford: Oxford University Press, 1949.

Lewis, Michael. *The Undoing Project:*A Friendship That Changed Our Minds. New York: WW Norton, 2016.

Luntz, Frank. Words That Work: It's Not What You Say, It's What People Hear. New York: Hachette Books, 2008.

Macy, Joanna. *Despair and Personal Power in the Nuclear Age*. Nanimo, British Columbia: New Society Pub, 1983.

Manuel, Arthur. *Unsettling Canada: A National Wake-Up Call*. Toronto: Between the Lines, 2015.

Marshall, George. *Don't Even Think About It: Why Our Brains Are Wired to Ignore Climate Change*. New York: Bloomsbury, 2014.

McKenzie-Mohr, Doug. Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing. Nanimo, British Columbia: New Society Publishers, 2011.

McKibben, Bill. *Oil and Honey: The Education of an Unlikely Activist*. New York: Times Books, 2013.

—. *The End of Nature*. New York: Random House Trade Paperbacks, 2006.

Monbiot, George. *Heat: How to Stop the Planet From Burning*. Toronto: Anchor Canada, 2007.

Moore, Kathleen Dean. *Great Tide Rising: Towards Clarity and Moral Courage in a time of Planetary Change*. Berkeley, California: Counterpoint, 2017.

Moser, Susanne, and Lisa Dilling. *Creating a Climate for Change: Communicating Climate Change and Facilitating Social Change*. Cambridge: Cambridge University Press, 2007.

Neihardt, John. *Black Elk Speaks*. Lincoln, Nebraska: Bison Books, 2014.

Nelson, Joyce. *Sultans of sleaze: Public relations and the media*. Toronto: Between the Lines, 1989.

Nikiforuk, Andrew. *Tar Sands: Dirty Oil and the Future of a Continent*. Vancouver: Greystone Books/David Suzuki Foundation, 2010.

Noah, Trevor. *Born a Crime: Stories from a South African Childhood.* New York: Spiegel & Grau, 2016.

Ogilvy, David. *Confessions of an Advertising Man*. London: Southbank Publishing, 2012.

Orwell, George. "Politics and the English Language" in Shooting an Elephant and Other Essays. San Diego, California: Harcourt, 1984.

—. *The Road to Wigan Pier*. City of Westminster: Penguin Classics, 2001.

Otto, Scharmer, and Katrin Käufer. *Leading from the emerging future: from ego-system to eco-system economies*. San Francisco: Berrett-Koehler, 2013.

Pinker, Steven. *The Better Angels of Our Nature: Why Violence Has Declined*. New York: Viking Books, 2011.

Preston, Brent. *The New Farm: Our Ten Years on the Front Lines of the Good Food Revolution*. Toronto: Random House Canada, 2017.

Price, Matt. Engagement Organizing: The Old Art and New Science of Winning Campaigns. Vancouver: On Point Press, 2017.

Quammen, David. *The Song of the Dodo: Island Biogeography in an Age of Extinction*. New York: Scribner, 1997.

Raworth, Kate. *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. White River Junction, Vermont: Chelsea Green Publishing, 2017.

Romm, Joseph. *Climate Change: What Everyone Needs to Know.* Oxford: Oxford University Press, 2015.

Rose, Chris. *How to Win Campaigns, Second Edition: Communications for Change*. London: Earthscan, 2010.

Roy, Arundhati, *War Talk*, New York: South End Press, 2003.

Saul, Nick, and Andrea Curtis. *The Stop: How the Fight* for Good Food Transformed a Community and Inspired a Movement. New York: Random House, 2013.

Schumacher, Ernst Friedrich. *Small Is Beautiful: A Study of Economics As If People Mattered*. New York: HarperCollins, 2010.

Shapiro, Jonathan. Lawyers, Liars, and the Art of Storytelling: Using Stories to Advocate, Influence, and Persuade. Chicago: American Bar Association, 2016.

Shimo, Alexandra. *Invisible North: The Search for Answers on a Troubled Reserve*. Toronto: Dundurn, 2016.

Skocpol, Theda. *Diminished Democracy: From Membership to Management in American Civic Life.*Norman: University of Oklahoma Press, 2004.

Taylor, Paul. Respect for Nature: A Theory of Environmental Ethics. Princeton, New Jersey: Princeton University Press, 1986.

Thaler, Richard, and Cass Sunstein. *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven, Connecticut: Yale University Press, 2008.

Thoreau, Henry David. *Walden*. Seattle: CreateSpace Independent Publishing Platform, 2013.

Tudge, Colin. *The Tree: A Natural History of What Trees Are, How They Live, and Why They Matter.* New York: Broadway Books, 2007.

Turner, Chris. *The Geography of Hope: A Tour of the World We Need*. Toronto: Vintage Canada, 2008.

Vance, Ashlee. *Elon Musk: Tesla, SpaceX, and the Quest for a Fantastic Future*. New York: Ecco Press, 2016.

Weaver, Andrew. *Keeping Our Cool: Canada In A Warming World*. Toronto: Penguin Canada, 2009.

Westen, Drew. *The Political Brain: The Role of Emotion in Deciding the Fate of the Nation*. New York: PublicAffairs, 2008.

Wulf, Andrea. *The Invention of Nature*. New York: VintageBooks, 2016.

Zola, Émile. *Germinal*. Oxford: Oxford Paperbacks, 2008.

ONLINE RESOURCES

Banse, Liz. "Seeing is Believing: A Guide to Visual Storytelling Best Practices." *Resource Media: Visual Story Lab.* Accessed Jan 8, 2018. http://www.resource-media.org/wp-content/uploads/2013/04/Visual-storytelling-guide.pdf.

Crompton, Tom. "Common Cause The Case for Working with our Cultural Values." *WWF-UK*. September 2010. http://assets.wwf.org.uk/downloads/common_cause_report.pdf.

Franklin, Ursula. "Ursula Franklin Massey Lectures Online" *McGill-Queen's University Press*. Aug 5, 2014. https://www.mqup.ca/blog/ursula-franklin-massey-lectures/.

Gore, Al, writer. *An Inconvenient Truth*. 2006; United States: Lawrence Bender Productions and Participant Productions.

Haidt, Jonathan. "Moral Foundations Theory" 2017. Accessed Jan 8, 2018. http://moralfoundations.org/.

Jackson, Tim and Peter Victor. "Green Economy at Community Scale" November 2013. http://metcalffoundation.com/wp-content/uploads/2013/10/GreenEconomy.pdf.

Jensen, Derrick. "Forget Shorter Showers: Why personal change does not equal political change." July 7, 2009. http://www.derrickjensen.org/2009/07/forget-shorter-showers/.

Kenner, Robert, dir. *Merchants of Doubt*. 2014; United States: Participant Media.

Lertzman, Renée. "The Myth of Apathy." June 19, 2008. https://theecologist.org/2008/jun/19/myth-apathy.

Macy, Joanna, *The Great Turning*, The Centre for Ecoliterarcy. Accessed November 3, 2017. https://www.ecoliteracy.org/article/great-turning.

Macy, Joanna, *Joanna Macy and the Great Turning*, a film, accessed November 3, 2017. http://www.joannamacyfilm.org/.

Marshall, George. Climate Outreach. Accessed: Jan 8, 2018. https://climateoutreach.org/.

Marshall, George. "I've learnt the most about climate change from those who deny it" *TedxEastEnd*. April 19, 2017. http://www.tedxeastend.com/event2017/george-marshall/.

Merton, Thomas. "Rain and the Rhinoceros." *MyMac.* June 9, 2003. Accessed Jan 8, 2018. http://www.mymac.com/2003/06/rain-and-the-rhinoceros-by-thomas-merton/.

Milani, Brian. "Green Economics." Accessed: Jan 8, 2018. http://www.greeneconomics.net/.

Nisbet, Matthew. "Communicating Climate Change: Why Frames Matter for Public Engagement." *Environment: Science and Policy for Sustainable Development*. April 2009. Accessed Jan 8, 2018. http://www.environmentmagazine.org/Archives/Back%20Issues/March-April%202009/Nisbet-full.html.

"One Million Climate Jobs." *Green Economy Network*. Accessed Jan 8, 2018. http://greeneconomynet.ca/.

Shellenberger, Michael and Ted Nordhaus. "The Death of Environmentalism: Global Warming Politics in a Post-Environmental World." 2004. https://www.thebreakthrough.org/images/Death_of_Environmentalism.pdf.

"Work in a Warming World." York University. Accessed Jan 8, 2018. http://workinawarmingworld.yorku.ca/projects/work-in-a-warming-world/.

"Yale Program on Climate Change Communication." *Yale University*. Accessed Jan 8, 2018. http://climatecommunication.yale.edu/.

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