Climate Migration: Should I Stay or Should I Go?

https://www.climateone.org/audio/climate-migration-should-i-stay-or-should-i-go
Recorded on March 22, 2024

Note: Transcripts are generated using a combination of automated software and human transcribers and may contain errors. Please check the actual audio before quoting it.

Ariana Brocious: I'm Ariana Brocious

Greg Dalton: I'm Greg Dalton

Ariana Brocious: And this is Climate One.

[Theme music]

Greg Dalton: So this weird thing happened to me: I got a notice in the mail, "your homeowners insurance is canceled."

Ariana Brocious: Why?

Greg Dalton: Because I live in a house in a place where there's wildfire risk.

Ariana Brocious: What did you do?

Greg Dalton: I called my insurance broker, made some changes to the area around my home, and then got a much more expensive policy.

Ariana Brocious: Yeah, people all over the country are experiencing this. Wildfires, floods, hurricanes, drought, you name it. And while those disasters have always been around, they're hitting with increased frequency and severity.As we'll talk about today, this is forcing many to consider the question of how long they can remain where they live now. And it's NOT an easy question to answer. Greg, have you ever thought about moving?

Greg Dalton: And Tucson, where you're based, has its own climate challenges. Do you ever think about moving?

Ariana Brocious: Yes.

Greg Dalton: I remember when I had a conversation with lawyer and climate justice organizer Colette Pichon Battle, she said that she made the decision to stay in her community in Louisiana despite the climate risk of living in that area.

Colette Pichon Battle: I have decided to stay in South Louisiana but I can make that choice because I'm single I don't have children and I know I can make a decision like that that many families can't make.

Ariana Brocious: And people moving within a country is one thing, there are also millions of people crossing borders. So much so that migration is becoming a central issue in the upcoming elections.

Greg Dalton: Right. And it's not just here in the US. We've seen immigration as an issue lead to right wing governments in many countries in the world – Italy, Spain, even the Netherlands. And I discuss that later in the episode with author Sonia Shah**.**

Ariana Brocious: To start the show, we're going to dig into the mechanics and push and pull factors of this pending migration with Abrahm Lustgarten, an investigative reporter with ProPublica. He's author of a new book: On the Move: The Overheating Earth and the Uprooting of America. We talked about this idea of the human niche–and how it's shrinking.

Abrahm Lustgarten: There is a human biodiversity niche on the planet that for the better part of the last 6,000 years, people have tended to live on the planet within a certain range of temperatures and precipitation. And this is just like studying where certain plants grow best, in different environments. And what the studies have found is that the niche is moving. That with climate change, it's shifting in a way that is going to leave large segments of the planet's population outside of it. So in North Africa, for example, where the largest concentration of global population now sits just slightly inside that niche as the niche moves northward, hundreds of millions, if not billions of people will slip outside of what has been the most traditional habitable part of the planet for the last 6,000 years. And that niche is moving all around the world. And as it does, it's displacing people from those normal conditions, around 3 billion people by 2070, according to these two studies that were published in the proceedings, the National Academy of Sciences. And it doesn't suggest that all 3 billion of those people will move. But it does suggest that all three billion of those people will face that kind of decision, will be experiencing a degradation in their environment and will be living in a place that hasn't traditionally supported human life and we'll have to make a decision about what to do with it.

Ariana Brocious: And a corresponding percentage of the earth that we inhabit now will become less habitable, uninhabitable in some cases. It's quite a lot, right? It's like 20 percent.

Abrahm Lustgarten: Yeah, so when the first study was published a couple of years ago, it was about 1 percent of the planet's population currently live in a place that was traditionally, less habitable, outside of the niche. And by 2070, the researchers project that it will be 19 percent of the planet's population.

Ariana Brocious: So the pace and frequency of climate impacts has begun to speed up, maybe intensify in recent years. People are seeing more of these impacts in their daily lives. Still, I think that a lot of listeners think: it won't get that bad where I live. But you write, "climate reality has

repeatedly outpaced climate predictions." So where can we see that?

Abrahm Lustgarten: Well, we see it in the last couple of summers and the extreme heat waves that are hitting the United States or Europe, or one headline after another about the rate of sea ice that's melting. And it's kind of like at every turn at every headline, we're learning in some way that things are either more severe than they were anticipated to be or happening faster than they're anticipated to be. And you know, how we experienced that change is, is relative, around the world. The United States doesn't have it as bad off as many places that are really kind of in the bullseye of change and also less equipped to handle that change. But we are still experiencing that change here and it's still extremely disruptive and that's really been the focus of the book work was to think about, well, how is that moving niche going to affect Americans? How are we going to experience it here? And what are we going to do in response to it?

Ariana Brocious: So, speaking of Americans, we've been incentivized to live in some of the riskiest parts of the country, the coasts, notably, and some of the southwest, where it's very hot and already been arid and water stressed for forever. Can you explain some of the policies and strategies that subsidize risk in places that are already suffering from sea level rise, extreme storms, drought, and water shortage?

Abrahm Lustgarten: Yeah. I mean, this has been a big focus of my reporting is to try to understand why Americans live where they do when elsewhere around the world, people make logical decisions. If it's really hot or it's really dry, there's usually less people that live in those places and that's not the case in the United States. And so I set out to understand that and I identified a number of perverse incentives that have encouraged people to live in some of the most at-risk sea level rise places in the country, some of the places that are flooding fastest and also some of the hottest and driest. And, the biggest example of that is the way that private property insurance is sold in the United States. We all, as homeowners or every building owner, property owner, buys insurance to protect them in the case of disaster. And as those disasters have gotten more and more severe, in Florida in particular, the free market insurance companies have backed out of those markets, which is logical. They don't want to pay to ensure that risk. And so after hurricane Andrew in 1992, Florida saw this as a really a monumental threat to their economic growth and to their hopes for development and building new homes and new buildings along the beaches and coasts.

And so they set out to subsidize that insurance and they created a state run plan called a FAIR program that, essentially guarantees insurance to people who can't buy it, through the private market and that, program has ballooned in size in Florida and it's been replicated in other states, including Louisiana and Texas and 29 or 30 other states all the way up the East Coast and California has a version of it that's protecting homeowners against wildfire, and it's really become sort of a de facto method of providing insurance for people who could lose their insurance in the face of environmental risk. But as it does that, it also hides the economic signal of climate change. They basically make it seem like it's cheaper or less riskier to take a risk than it actually is.

Ariana Brocious: In the book, you tie in with this kind of American culture of boosterism, you know, even back when Western settlers were coming in and taking land from indigenous people. But there was this idea that you could make it, and there's kind of been this promise of place that is really entrenched, I think, in the American identity. And in spite of, of what we see or experience, people want to rebuild, people want to stay where they are, and you get at this complexity that all of us experience, which is the identity you have, the place you call home, how much it means to you, your community, and how hard it is, even in the face of obvious risks, to leave.

Abrahm Lustgarten: Yeah. I mean, I portray it as a human dilemma. I really think it is a human dilemma. I mean, we can read all the statistics and the scientific facts and the political arguments

that we want. But in the end, it is what you say. It's a very personal decision. It's something that we all have to deal with and it's something that I deal with personally. I mean, I started this project because I live in Northern California in a place that's at risk from wildfires, and I'm probably one of those people that place matters to a little more than, you know, than average. I choose where I live by how beautiful it is, by its proximity to the mountains and water and these things that I value and I've always thought of that as a free choice and a subjective choice. And the more I learn, I've had to consider what my own risks are, wildfire risk among them, and what I want to do in response to those. And I've had moments as I know that, you know, so many other Americans do, of thinking I have to move, I have to protect myself or I have to protect my assets or my savings or my children's future and all of those things, and moments where, the countervailing forces of what I want, even in the face of all this evidence, it really just, outweighs what might be a more logical or more pragmatic decision. And so I sort of recognize in that and so many of the people that I talked to in writing my book are in the same position. That this is not an easily reconcilable circumstance. I don't pretend that there's, you know, a right answer, or a prescriptive solution, that my book or that this conversation can impose on people.

Ariana Brocious: Yeah, I have a similar connection to my place, which is, you know, the desert Southwest. It's been a challenge to live here since people have lived here. And, you know, I can feel critical of the numbers of people that continue to move to Phoenix every year and feel like they're threatening, you know, the limited supplies we have, but I'm also not moving. I'm staying here. I'm putting down roots, and it's a place that I love and I don't want to leave. But it's becoming more common to have those conversations with my friends and my family about, you know, we kind of joke about when the water is going to run out, but there is truth, real truth in that. So models suggest that over the next 50 to 70 years, at least 13 million Americans, maybe as many as 162 million, could move in response to changes in their climate. most will move north in the U. S. or into cities or both. I'd like to talk about the demographics of this shift as you understand it. You write that younger people, families, and job seekers will be the first to leave, while aging populations and the poor might be left behind or trapped in place.

Abrahm Lustgarten: Yeah so first I want to clarify [MORE TEXT HERE] 160 million is the number of Americans that, the research suggests will slide outside of that human habitability niche, which is to say that, you know, for about half of Americans, There will be a noticeable decrease in the quality of their environment related to climate change, and they'll be slipping closer and closer to, you know, circumstances that were not supportive of human life for 6,000 years, so we can imagine that some portion of those will move, whether the number turns out to be 13 million, or 25 million, or 100 million, we really have no idea. But we also know that mobility is a factor of ability, you know, is a factor of relative wealth, relative youth and energy. That's borne out in research around the world looking at migratory patterns, and it's borne out in demographic research in the United States. So when we look at the number of Americans that might be affected and the way that populations tend to move, the research suggests that we'll see 10 to tens of millions of Americans, probably younger and or wealthier ones, moving away from what I looked at in the book is kind of the primary risks, geographic risks facing the United States. And those are wildfires and coastal flooding, and extreme heat, a decline in crop viability, crop yields and agricultural production. All of those things are less of a threat in the northern part of the country and in the northeast in particular than they are in the south and the southwest. And that's not to say that those destination regions don't face plenty of climate risks of their own. They certainly do, but they have ample water. They won't face the same kind of extreme heat and they're relatively shielded from some of these, you know, most obvious climate risks. And so no one knows for sure what's going to happen, but, all of those signs point to a shift in population, both towards large cities, and then generally northward and northeastward.

Ariana Brocious: We're gonna take a quick break.

Coming up, what does it take for a city to absorb hundreds, maybe even thousands, of new residents?

Abrahm Lustgarten: We're not looking for magical climate solutions here. We're looking for an abundance of grocery stores that have high quality food and good transportation.

Ariana Brocious: That's up next, when Climate One continues.

Greg Dalton: Please help us get people talking more about climate by sharing this episode with a friend. And we'd love to know what you think of the show. Please give us a rating or review. You can do it right now on your device – and it really helps people find the show. Thanks!

Ariana Brocious: This is Climate One. I'm Ariana Brocious. When people leave an area due to climate change, they have to find a home someplace else. Some cities see the changing climate as a sort of opportunity. Places that were once seen as less desirable… perhaps even a bit boring… may be the new "hot spots"…so to speak. One of those cities is Duluth, MN.

Two years ago, a Harvard professor singled out Duluth as a destination for future climate migrants. Locals were skeptical at first… then, new neighbors started showing up. And as Dan Kraker of Minnesota Public Radio reports, more are looking to come.

Dan Kraker: Duluth native Karen Pagel Guerndt remembers when she first heard about Duluth as a potential climate change refuge. It was January. And it was 20 below zero.

Karen Pagel Guerndt: "For me, the whole idea of climate migration for folks coming here, it kind of made me laugh."

Dan Kraker: Pagel Guerndt is a real estate agent in Duluth. When climate adaptation professor Jesse Keenan traveled to Duluth to pitch his idea for the city to playfully market itself as "Climate Proof Duluth," the media loved it. The New York Times did a big story; CNN came here. And not long afterwards…

Karen Pagel Guerndt: "I started hearing from people, from clients from the two coastal areas mostly, East Coast and West Coast, saying, what is this place called Duluth? And what is your weather really like here?"

Dan Kraker: Pagel Guerndt sold a house to a couple from Colorado who cited climate change as their chief reason for moving. And then to a couple from Salt Lake City who wanted to escape air pollution caused by increasingly severe wildfire seasons. That's also what brought Jamie Alexander and her family to Duluth. In 2018 the Camp Fire killed 85 people in Northern California, burned thousands of homes and filled the air with thick smoke.

Jamie Alexander: "The air quality in San Francisco was, like, in the hazardous category for two weeks straight. And just had considerable health impacts on my kids, one of my kids in particular."

Dan Kraker: So, when the pandemic hit in 2020 and another bad wildfire season was forecast, Alexander's family hopped in their camper van and landed in Duluth. At first, they just intended to stay the summer.

Jamie Alexander: "And then, ride out wildfire season here and then go back. And we just fell in love with it here. And 2020 in California was so horrible for, you know, the air quality."

Dan Kraker: So, they decided to make the move permanent. They bought a house right on Lake

Superior.

Jamie Alexander: “I did get into paddleboarding this summer, which is not something I ever expected I would do, but it’s pretty amazing.”

Dan Kraker: Jesse Keenan, the climate adaptation researcher who's at Tulane University now, says it's important to distinguish between people who are **displaced** by climate-related disasters and people who are re-evaluating where they want to live, because of climate or other factors.

Jesse Keenan: "There is a cohort of Americans who have the means, the resources, and they have the elective mobility to be on the move."

Dan Kraker: That creates an opportunity for a city like Duluth, where the population of 86,000 has barely budged over the past few decades. But it also creates challenges. Duluth already has a housing shortage. And welcoming more newcomers will mean a need for more homes and apartment buildings. That can sometimes create pushback from locals, says Adam Fulton, Duluth’s director of planning and economic development.

Adam Fulton: “Well, I think anytime you have community change, it's always tricky. And for the people who are experiencing that change, it's often very difficult.”

Dan Kraker: There isn't any data to show how many people are actually moving because of climate change. Only anecdotal stories. But Doug Kouma thinks the number will grow.

Doug Kouma: "I think Duluth as a climate migration hub is already a thing. I think we're just starting to recognize it. And I think 2,3,5 years from now, it's gonna be widely known, far and wide. That's what I think."

Dan Kraker: The 47 year old moved here from Sonoma County in California, after dealing first, with wildfires, and then flooding that forced him from his home for several days. He knew he wanted to move to the Midwest, where he has family.

Doug Kouma: "And I actually created a little spreadsheet for myself, because I'm that sort of analytical nerd. Um, where I created criteria and assigned points to those criteria."

Dan Kraker: Duluth rose to the top, he says, because of its outdoor beauty and growing creative community. And he says he knows several other Californians who have already moved to Duluth or are considering it. But, for prospective migrants, Kouma has a warning. Even with climate change, winters in Duluth are still long, and still cold.

For Climate One, I’m Dan Kraker in Duluth.

Ariana Brocious: That story originally aired on Minnesota Public Radio. Duluth may be excited to welcome new climate refugees. But other places are more wary – they’re already struggling to accommodate their existing residents and the influx of new residents strains resources even further. I talked about that with reporter Abrahm Lustgarten. He’s been tracking the impacts of climate migration – both the relief it offers and the new challenges it can create.

Abrahm Lustgarten: There's, just simply a tension between the possibilities that come with growth and the opportunity for growth and then the friction that comes with large communities shifting where they are and interacting with new communities. And so there's just a wide range of how this is viewed and what may happen. And cities in the Northeast in particular, many of them, especially around the rust belt have what planners I talked to describe as “capacity” so they're, they're past

their heyday. They have extra infrastructure and housing stock and maybe public transit and sewer systems that are built to handle a larger population than they currently have. And so that's one easy opportunity to absorb more people and some cities are embracing this and reaching out to recruit, potential climate migrants or just people who want to move in general. So, you know, the city of Buffalo, New York, for example, is marketing itself as a climate haven. Similar things in planning documents for Vermont, which for a time was paying people who wanted to move from out of state to move to Vermont and work remotely. And there's a lot of research that suggests. that there's a lot of opportunity in those receiving communities. I cite a paper from Stanford researcher Marshall Burke that looks at the economic impacts of climate change. And most of his research is focused on how bad it's going to be for a lot of the world. But the flip side of his data is how good it could be for some parts of the world. And those parts of the world include the Northern United States and, you know, Canada, Scandinavia, Russia, where he projects that GDP could grow, as the climate changes. But the flip side of all this, is friction and tension. And unfortunately, what we see in a lot of places around the world is that, you know, migrants aren't always welcome or not welcomed for long in the places where they wind up. And, you know, we see that with Central Americans moving through Mexico. Enormous sympathy for the first couple thousand people that show up and then heightening tensions and bias and ultimately rejection of people once those numbers grow, you know, to be much, much larger than a couple thousand people.

Ariana Brocious: Yeah, I mean, even the words migrant and refugee, for many people, you know, draw up certain kinds of images and feelings, that can begin from a place of maybe empathy and compassion, and then turn into something different. We've seen that. One thing you write about that I found fascinating is that there might be parallels in this future migration with the great migration we saw of African Americans out of the American South, and that that migration, while complicated and not wholly good, of course, for those involved, had a profound impact on American culture all throughout the country and that there are these positive reverberations that continue today, right, of all of this shift that happened. So what are some of the projections that you've read about or that people are thinking about with this transformation that might be coming,

Abrahm Lustgarten: Yeah. I mean, the lesson I think is that, you know, change can be good. And what those past migrations were, were periods of enormous and rapid cultural change. So we saw 6 to 7 million African Americans migrating out of the South between 1915 and 1980 or something like that. And that migration was extreme. I mean, trains were full, roadways were full, there was no place to sleep often, in the cities where those people arrived, Philadelphia and Baltimore and Detroit, you know, places like that. But with a little bit of time and some, some programs that helped to receive those people and lots of programs to help employ, those people and take advantage of that larger, labor base as well, communities assimilated and they blended together and opportunities arose in so many ways that have really come to define our American culture today, integrating essentially, the culture of African American life with the culture of predominantly white life in the Northeast, and in places like Los Angeles as well. So, you know, so much of what we identify with in terms of our musical heritage, our literary heritage, sports and arts, is a result of that cultural transformation that happened during that era.

Ariana Brocious: So ultimately you and many of the researchers you interviewed arrive at somewhat of the same conclusion that ideally to handle this projected massive transformation and migration that we're going to see, we need coordinated high level planning and design that will prioritize equity, help cities plan, help people move. Is any of that happening?

Abrahm Lustgarten: Some of it actually is happening. When I began this project, the answer would have been no. With the passage of the Inflation Reduction Act, we see a lot more money going towards the types of things that are necessary and will help. And it's a really, you know, great start that gives me some optimism. What we're talking about needing are the same things that we have

always needed. So we're really just talking about how do you plan cities for rapid growth? And that growth could come from a whole lot of different things. In this case, it's going to come, you know, I believe from climate driven migration and demographic change in the United States, but we're not looking for magical climate solutions here. We're looking for an abundance of grocery stores that have high quality food and good transportation to get people around cities like Atlanta so they can get to work. Or homes that are planned in a way that they have great insulation and won't cost a fortune to live in, when the heat is too hot or, you know, or the cold is too cold. So really sort of like basic infrastructure and that stuff requires money and planning and jobs and strong communities. And we can do that and, and acts like the Inflation Reduction Act are a great example of an enormous amount of money that's being pumped into some of those investments. Not just in the North, but in the South and, you know, electric vehicle battery plants and in Georgia.

Ariana Brocious: It's not hard to think about a future where we become increasingly siloed by wealth and ability to insulate ourselves against the natural environment as these conditions change, right? And that there'll be kind of these little eco cities that perhaps are well-prepared to handle whatever climate threats come their way, but they're expensive and you have to live in a glass tower, a bubble to protect yourself. And then there will be people who are not able to do that, right? I mean, that seems a little dystopian, but also highly possible.

Abrahm Lustgarten: It's totally dystopian. I mean, the pessimistic view from many of the climate experts I talked to is that we can wind up in a situation just like you described where we have islands, or pockets of wealth and safety. And that's because the people who had a lot of money either were the first to move to a safe place and gentrified that place in the process or because they can afford to build walls or protections or literal sea walls around them. And so our challenge is, if we can foresee that, is to not fall into that trap. And not just because it's the right thing to do morally, but because that pattern, also forecasted by climate researchers and experts around the world, is only going to increase adversity and tension and ultimately conflict. And that conflict is going to spread a wider stability that's going to be a threat to the United States and a threat to peace around the world. And the challenge then has to be, how can you have the foresight to protect people in a more equitable way and not let those kind of islands of isolation be an organic result of this process because there was no planning for it.

Ariana Brocious: And that kind of growing inequality can also lead to increased extremism among some groups. I know you've been doing a little research on how extremist groups in the US are reacting to current climate-induced disasters. Can you touch on that just a bit?

Abrahm Lustgarten: Yeah, this is a teaser for future workbasically, you know, the pressures of climate change, are having all sorts of effects. They're affecting our communities physically, like we're talking about, but they're affecting our, collectively, our political views, and our social needs. And so, you know, there is a response to that among people who would like to see less immigration into the United States. So it affects border policy, for example, fears of climate driven migration, on the border. And it pops up in other ways, too. So, I've noticed how right wing groups, militia groups are, using climate driven disasters, for example as recruiting opportunities. They'll go and provide aid after a disaster or hurricane in Florida, for example, and they'll demonstrate to a community that there's a non-governmental entity that can be really effective in taking trees off your roof or, you know, helping evacuate or things like that. And once that disaster passes, they've ingratiated themselves into that community and they use it as a recruitment tool. So there's both a sense that they can take advantage of these trade changing circumstances, but also, you know, a sense that the changes themselves are becoming too plain to deny.

Ariana Brocious: As we wind down here, I want to bring it back to the personal experience that we touched on because it's really at the heart of this and also something I think so many listeners can

relate to. You write a bit about your own sort of new routine of having a go bag in the summer, for wildfire season and being ready to evacuate, which is something a lot of Californians have gotten used to and is scary to contemplate.

What's the roller coaster that you've been on in terms of, should I stay? Should I go? Should I move? You know, your connection to place and, and what's still unresolved for you?

Abrahm Lustgarten: Everything's unresolved for me. This book project specifically because of my personal experience. I began it in a year, when Northern California faced extraordinary wildfires. Some of them were really, really close to my house and we were all sort of walking around in a stupor of smoke with our windows closed and our air purifiers going and, and being on alert for possible in my community for possible evacuation. And so, the research evolved out of this incredibly unsettled feeling of, both wondering how everybody else's is thinking about this challenge and also just wanting data and information about where to go. What's the smart decision? How will it affect my finances? So a couple of things have happened over the course of that research. One is that the shock of the impacts has waned a little bit. I've gotten used to the idea of living in an unstable environment. I guess you could say I'm through the grief stage and I'm into the adaptation stage, you know?

Ariana Brocious: Acceptance.

Abrahm Lustgarten: So, yeah, some degree of acceptance, right? So, I understand the risks. It doesn't make them easier to solve, but they're a little less scary to think about. And so I think about them all the time. And the other thing, and I think this is very natural and affects people everywhere, is that we haven't had that kind of disastrous fire season, since the first two years or so that I was working on this research and that removed some of the urgency. And I know that that urgency will come back. All of the studies say that California will have those years again. And I think about what that's like for people locally around the country whenever they face whatever disaster they're facing, the heat waves in Arizona last year and, you know, hurricanes in the Florida coast. But for me, it’s just been a little bit of a reprieve and a little bit of an excuse to think about something else for a little while. And in that time, I've gotten very clear about what I also love and enjoy about where I live, and the reasons why it's hard to leave it, which doesn't mean that I never will, but it means that, you know, I'm not quite ready yet. And so I'm in, you know, this state of limbo, realizing that I'm not going to pack up and flee immediately, but that I might not be able to stay where I would otherwise choose to stay for the rest of my life.

Ariana Brocious: Abrahm Lustgarten is a reporter with ProPublica and author of On the Move, The Overheating Earth and the Uprooting of America. Thank you so much for joining us on Climate One and sharing these stories and your personal journey with us.

Abrahm Lustgarten: Thanks for having me on. I really appreciate it.

Ariana Brocious: We know climate migration is happening all over the country and the world. We asked you, our listeners, how it’s impacting your own thinking about whether to stay or go… One of the people we heard from was Farhan [FAR-han].

Farhan Malik: My name is Farhan Malik. I'm an ICU doctor and I moved from Florida to Michigan last year for a job opportunity. However, climate change was a big part of that decision. I was afraid of the future of my home in Florida in regards to Extreme heat, sea rise, and increasingly powerful hurricane.

I thought of the possible resilience factors of the Great Lakes region, such as less extreme heat and

access to fresh water long term. But boy, was I in for a surprise when I first moved to Michigan. The smoke from the 2023 Canadian wildfires was suffocating my city.

That made me hyper aware of something that even as a doctor who primarily deals with hearts and lungs that I never paid much attention to: air quality. I discovered that the region I migrated to exposed to a lot of smog from car and industrial infrastructure,.

Now I find myself debating whether this is the right long term move for me. The long term effects of elevated particulate matter and ozone are now in the forefront of my mind. Its relationship to dementia and cardiovascular disease have me thinking about moving again. This just goes to show that no place is immune to the effects of climate change.

Greg Dalton: Coming up, how reframing large-scale migration can change our responses to it:

Sonia Shah: The crisis is not that they have migrated. The crisis is a crisis of welcome. It's the fact that the people who are in these host societies don't want them.

Greg Dalton: That’s up next, when Climate One continues.

Ariana Brocious: This is Climate One. I’m Ariana Brocious.

It's easy to talk about the need to move or but actually doing so is much harder. Now we're going to go to a place where one community is trying to move and hear how difficult it can be. Reporter John Ryan of KUOW Public Radio in Seattle has this story.

John Ryan: I'm sitting on top of a seawall in the village of Toholo, Washington. It's too windy up here for standing. This is where the Pacific Ocean meets the Quinault Indian Reservation. One of the highest tides of the year, called the King Tide, is hitting the seawall right now. Big waves are crashing into the seawall and occasionally depositing big driftwood logs on top and even into the backyards of tribal members' houses.

Days like today also give a sneak peek of the future As an ever hotter climate causes global sea levels to rise.

Lia Frenchman: Lia? Yes. Hi, I'm John.

John Ryan: Lia Frenchman lives on the backside of that seawall with her partner and two kids.

Lia Frenchman: It is inevitable that my street will be in the ocean at some point.

John Ryan: Her home and others in the village of 800 people are perched on cinder blocks.

Lia Frenchman: Normally what happens is at high tide in the winters, the waves will come over, my backyard will fill with water, and you'll see the water running under my house out into the street.

John Ryan: When big waves hit the seawall, her home shakes.

Lia Frenchman: It just vibrates like a little mini earthquake constantly for a few hours.

John Ryan: Should a big earthquake hit, most of the village could be inundated by a tsunami.

Lia Frenchman: My kids' schools are all, they're all sea level. They're all in the flooding zone.

John Ryan: In December, the Quinault government reached a milestone in its long push to provide

safe housing for its people. Tribal council member Ryan Hendricks showed me from his pickup truck.

Ryan Hendricks: You're looking at about nine acres of fresh development with asphalt and sidewalks and lots of open space to start building some houses.

John Ryan: The site is on higher ground, about a mile from the lower village.

Ryan Hendricks: It's a big project for such a small group of people to take on.

John Ryan: Incomes on the Quinault reservation are low, about half the national average. Housing is scarce. Tanya Eisen Palak wanted to move back to Tohola after she finished grad school studying ocean policy.

Tanya Eison-Pelach: I do wish that I could have moved back into the home that I love so much, but I realize that that's. It's not a place that I would feel safe raising a family.

John Ryan: Heat trapping pollution has raised the world's oceans by about seven inches over the past century.

Tanya Eison-Pelach: We're trying to solve a problem that we didn't create. We didn't create carbon emissions to any level of like, the outside non-tribal world.

John Ryan: The Quinault government has received millions in state and federal funds to relocate the village. It's spent millions of its own revenue from timber and casino operations. Now the tribe needs hundreds of millions more to get homes built in the new neighborhood.

Guy Capoeman: It's been a long process.

John Ryan: Guy Capoeman is president of the Quinault Indian Nation.

Guy Capoeman: We've had to do a lot of convincing to get some of our folks to agree that You know, it's best to move up on the Hill.

John Ryan: Tribal members, including Kipoman, have mixed feelings about relocating away from the mouth of the Quinault River, the heart of Quinault culture. Capoeman says he hasn't decided whether he'll move away from the lower village.

Guy Capoeman: At my age, I'm 54. The thought of taking on a home loan is something that is, you know, it's a big investment.

John Ryan: Tanya Eisen Palak says there's a generational divide. It's even fueled tense discussions in her own family about what to do with the family home.

Tanya Eisen Palak: No, Mom, we shouldn't put 15,000 into this because it's going to get washed away.

John Ryan: Lia Frenchman says she's looking forward to moving uphill and saving her family from the rising ocean. Still, she says she'll miss the sounds of the surf and eagles overhead.

Lia Frenchman: I hear them whistling all day. My heart just, breaks when I think about not being near that anymore. I know it's at the same time, not reasonable and not safe, but it's a hard thing to accept.

John Ryan: The Biden administration has issued grants to tribes in five states that are looking to move to higher ground. Even for tribes like the Quinault that have safe uphill space available nearby. It takes a lot of time and effort to move the village.

John Ryan: John Ryan, KUOW News.

Ariana Brocious: Thanks to John Ryan and KUOW Public Radio in Seattle for sharing that piece with us.

Greg Dalton: People aren't the only ones traveling long distances in search of new homes, of course. Most animals migrate too – usually seasonally – and they've done so for thousands of years. Those patterns are changing along with hot and weird weather. And that's the subject of The Next Great Migration – a book by Sonia Shah. She asks: what might humans learn from the way animals are responding to this moment?

Sonia Shah: That was the big question I had when I started doing the research for this book was, you know, I had encountered scientists who were talking about, oh, we need to build corridors for these animals so that it can, you know, get over highways and get through like human infrastructure so they can get into these new places. Facilitating animal migrations because of climate change. But then you look at humans moving around and everyone's just totally freaked out about it. We want to pull up the ladders and close the doors and build the walls. And, you know, right now we have more walls and fences on national borders around the world than at any time in the past. When I started this process of trying to figure out why that was, I first looked at all of the obvious arguments, right? Like there's like economic problems, there's cultural problems, there's security issues, there's you know crime issues, all of these supposed problems of migration come up again and again, and I look through the social science research, I talk to a lot of people and almost all of those arguments completely fall apart when you start really looking at them closely.

Greg Dalton: Historically, migration has been East to West. Now it's more North-South. How is that changing and how is climate related?

Sonia Shah: Yeah so many different wild species migrate and we're now learning that humans, we are also animals and we too are migrating in many of the same ways, but biologists who have studied non humans have figured out that there's actually a formula by which they can kind of predict whether a species or a population or even an individual is likely to migrate. And they've distilled that into, what I call a migrant formula, which is essentially If the time it takes you to rear the next generation is longer than the time you expect your habitat to be stable, then it's likely that migration is gonna become more common in your group or population or family. that plays out in all different species. So you look at different populations of bats, for example, bats that roost in caves, as opposed to bats that roost in trees. When they're in trees,they're in a less stable environment than the bats who roost in caves and bats who roost in trees are indeed more likely to migrate than bats that roost in caves. This is true for all different species. It's true even on a population level, on a family level, as well as on a species level.

Greg Dalton: So we're learning from the animal world. Humans are animals. so we're making similar calculations. There's a lot of people on the move now. you went to Greece to study human migration. What surprised you about what you found there?

Sonia Shah: Well, when I went, I actually was thinking this is, you know, there's migration going on you know, this is time, um, when this Syrian war was happening. was triggering just huge flows of people out of Syria, huge flows of people out of Afghanistan, North Africa, and people are trying to get into Europe, especially Northern and Western parts of Europe. And they're getting stuck in the

Mediterranean, in the southern countries of Europe as well. And, you know, so this, this so called migrant crisis was in the papers every day at the

Greg Dalton: Mm hmm. Mm

Sonia Shah: And I had just written a book about pandemics and infectious diseases. And so I got a grant to do some reporting. And I got several assignments from editors to go write about the potential public health problems triggered by this migrant crisis in the Mediterranean. So when I went to Greece, I was looking for, well, What are all the things that can go wrong here? You know, I was looking for, are there going to be infectious disease outbreaks? Are they going to bring some new pathogen into these new environments and infect the local people?

Greg Dalton: So, you went in with a mindset, migration is a problem, I'm going to go document the problems.

Sonia Shah: So that was totally my mindset when I went in. And I remember sitting down with one aid doctor in particular, and I mentioned the migrant crisis in my question somehow, like, you know, what are the public health impacts of this migrant crisis? You know, that kind of question, And he said, There is no migrant crisis. And, and I was like, well, all these people are, you know, stuck in tents. There's politicians are

screaming about this every day. It's in the headlines. There's riots in the streets. Like, people are very upset about what's going on. There's all this tumult. There's surely a crisis of some kind, right? And he was like, well, yes, but it's not a crisis of migration. He pointed out that there's plenty of jobs in Greece at the time. There's plenty of housing in Greece. In fact, there was a housing crisis in Greece. There was so much empty housing stock and there was labor shortages, less so in Greece, but in other parts of Europe at the time. So there's plenty of jobs, there's plenty of housing, uh, there's absorptive capacity in this place where these people have come to, you know. And so it's, the crisis is not that they have moved. The crisis is not that they have migrated. The crisis is a crisis of welcome. It's the fact that the people who are in these host societies don't want them.

Greg Dalton: So that was a real frameshifting, awakening moment for you.

Sonia Shah: Totally. I mean, I hadn't, I hadn't really thought about, you know, is it life saving for the migrants themselves that they move? Does it contribute to the resilience of the societies they leave behind if they move? Is there absorptive capacity in the places that they are moving to? You know, these are, like, at least three of the things you'd want to consider before deciding whether a given migrant crisis is like a net positive or a net negative.

Greg Dalton: Do you accept the narrative that the migrant influx, whether it's some see it a crisis, some not, pushed some countries to the political right in Europe?

Sonia Shah: Oh, absolutely. I mean, I think there's a direct line from the migrant crisis that was happening in the Mediterranean and specifically, and the right wing populist kind of takeover of many different countries, not just in Europe, but here in the United States, too, in the Philippines and India and Brazil. Like there's all these different countries where populist leaders were pointing to this quote unquote migrant crisis and saying, that's what's going to happen here. You better let me take over and I'm going to close the borders and pull up, you know, build the wall.

Greg Dalton: Certainly in the United States, the right has been saying there's a migration problem for some years, and on the left, and I know you write for The Nation and others, it's like, well, it's not

so much, it's not a problem. The New York Times reported more than 2.4 million apprehensions in the 2023 fiscal year ending last October, more than any year since 1960, when U.S. government started collecting data. It depends on what the stats you look at, but it is at an all time high and yet that's not really recognized on the political left. Would you agree with that?

Sonia Shah: I think it is downplayed because people don't want to contribute to this underlying narrative that migration is a problem that we need to solve, as opposed to let's facilitate it so we can,capitalize on the positives and minimize the negatives, which is, You know, if you look at migration overall, right? Like we've been migrating ever since we evolved, ever since we walked out of Africa, we've been moving along, we've been moving again and again and again. And not because of a crisis, not because like, you know, something terrible happened, we didn't run out of food or water or space in Africa, but we left anyway, migration is very much built into the human experience and not us, but all these other species too. So really, I think on the left and the right, there's a tendency to think of migration as, well, this is good. Like, let's just keep it going, open the faucet or no, this is bad. Let's close the faucet, you know, turn it off. But a third way of looking at migration, which is what I argue for in this book is to say migration is a reality. It is going to happen. It does happen. It has happened in the past is going to continue in the future. We can either turn it into a crisis. So we have this, you know, rolling series of catastrophes again and again and again, or we can manage it, right. We can manage it so we can minimize the cost and maximize benefits.

Greg Dalton: My family came from Ireland and Germany a long time ago. You know, we're all, you know, we're all immigrants from some timeframe. How did your personal immigrant experience in your family shape your approach to this work?

Sonia Shah: It very much contributed to the sense that migration is a problem. I kind of grew up with, my parents are immigrants from India. My great grandfathers were sort of, I traced the, you know, the kind of larger migration story of my family to them. They both were from a small fishing village in the western coast of Gujarat in India. And, my great grandfathers, told their kids they had to marry within the village, within the same sect of the small religion that I'm a part of. and my grandparents did that, but then they also decided to move to the big city. So they both left those fishing villages, went off to the big city, Mumbai for one side and Coimbatore in the South for another side, and then they had my parents and my parents came of age in the 1960s and they were doctors at that time, which is when the United States needed a lot of new doctors and engineers because they're expanding Medicare and Medicaid and all these new entitlements, uh, programs that come online. And so, uh, they did the big jump over the ocean, before I was born. And so then I was born in New York city. You know, and when you're born in a country as a kid, like you assimilate really quickly, But of course there's a whole system of exclusion here in the United States, so I was not accepted as a real American, you know, and I think I attributed that to my immigrant status, correctly so, right? Like people would say, where are you from? And I would say, I'm from here. You know, I'm from right here where you are from, too. And they would say, no, no, really, where are you really from? You know, which means, no, you can't be from here, really. You must really be from somewhere else.

Greg Dalton: That white normalcy, the sort of all American, blue eyed, blonde, yeah. So people have always moved across borders. We tend to think like, Oh, if there's scarcity of resources, what's going to bring out our Mad Max impulses that we're going to try to hoard and protect our own? But there's also counterexamples you write to where, you know, cross border cooperation can in turn come out of these situations where there's stress and people on the move, can you share some of these success stories in the face of climate and migration stressors?

Sonia Shah: I think there's just a whole kind of untold narrative of how scarcity actually fosters cooperation. we just don't look at it that way, but in fact, it's, what is bringing us to the table in a lot

of ways? Like, okay, water becomes scarce in two countries that hate each other. And then suddenly they create a treaty to figure it out, right? To like, not have the conflict over this and to try to actually cooperate. So I just think it's a frame in which you could look at a lot of ways in which cooperative actions unfold is there's scarcity behind that

Greg Dalton: Well, we're taught in school,we're taught in school that capitalism is all about scarcity and that's, you know, drives up price and compete. And, you know, I get mine. And if I get mine, you're not going to get yours, right? We're kind of, part of that is, I think we're indoctrinated into that scarcity mindset and how we react to

Sonia Shah: I mean, we are in one hand, but on the other hand, we also really value innovation in and resilience, right? Especially in this society and capitalist societies generally. And where do you get that from? You get that from diversity and from new people and new ideas coming in. So. Getting more people, getting more different people, people bringing in new ways of living, new ways of thinking, new ways of seeing things, I mean, that's where, that is the source of innovation. We need that, you know, and we value that in our society too.

Greg Dalton: So there's, many reasons why people move across borders, what sort of progress is there around policy providing legal asylum for the climate refugees? Does that category even exist?

Sonia Shah: It doesn't exist. And this is, I think, one of the hugest gaps that we haven't discussed enough, in general, which is that there is no legal way for people to cross borders because of climate change. Always illegal everywhere in the world. And we know people are going to have to move from climate change. People already are moving from climate change, but there's no legal way for them to do that. So they have to say, well, I'm coming here because I'm being persecuted and, you know, try to get refugee status, or they have to try to get immigration status, which, you know, try to get a visa for, get an employer who actually wants you for some job or something. Or you just, you know, roll the dice and leave and hope that somehow you will get to somewhere where you can make a life for yourself. And this is just like a terrible waste of human capital, you know, besides like the inhumanity of it, it's just such a waste for society these are the people who are literally the most motivated, resilient people in their societies.

Greg Dalton: Think about it. It's the lazy people don't stay. It's the entrepreneurial people who get up and move and take, take risk. Great, you know, personal and social risk. they're all entrepreneurs in a sort,

Sonia Shah: They're innovators, they're resilient, they have all the skills, these are the people you want. As part of your community, these are the people who, build the new businesses and who come up with the new innovations. Like the people who are willing to move, who are taking those risks. Those are the survivors. Those are the people who have the resilience and the skills and the innovation that you want those people as part of your society. And we're doing the exact opposite. We're just shutting our doors to them.

Greg Dalton: I talk to people who are thinking about moving, uh, particularly in this political year, people are looking for a plan B outside the United States. Have you thought about moving yourself? As someone who studies butterflies and people moving, because of climate change.

Sonia Shah: I have. It's definitely something I think about. It's definitely something I think about for my kids in particular of like, where do we want to kind of land that would be easiest to ride out this next era of, um, disruptive climate changes. And I just, I actually think that, you know, where we are is pretty much okay. Like nowhere is going to be completely immune. Like this is something that's going to happen.

Greg Dalton: Yeah, it's, it's a fallacy to think there's some safe place you can go to that'll be untouched.

Sonia Shah: Exactly. So I don't think that exists. I think what resilience is going to come from is creating connections between people, right? Like you have to know your neighbors so that when the storm comes, you can share that ladder or you have to know where your food is grown because when there's wildfires, you need to figure it out and like start over somewhere new. That's the resilience we have always relied on really is as Homo sapiens is our sociality, our ability to make connections with each other and cooperate with each other.

Greg Dalton: Sonia Shah is author of The Next Great Migration, The Beauty and Terror of Life on the Move. Thank you so much, Sonia, for sharing your personal story and the stories of others.

Sonia Shah: Thanks so much.

Greg Dalton: On this Climate One… We've been talking about climate migration. You can find links and more information… in the show notes on our website, climate one dot org. While you're there, subscribe to our weekly newsletter to get a preview of next week's episode and a look at the biggest stories in the world of climate.

Ariana Brocious: Talking about climate can be hard-- AND it's critical to address the transitions we need to make in all parts of society. You can help us get people talking more about climate by giving us a rating or review. It really helps people find the show. And if you like what you hear, consider joining us on Patreon and supporting the show that way.

Greg Dalton: Brad Marshland is our senior producer; Our managing director is Jenny Park. Ariana Brocious is co-host, editor and producer. Austin Colón is producer and editor. Megan Biscieglia is our production manager. Wency Shaida is our development manager, Ben Testani is our communications manager. Jenny Lawton is consulting producer. Our theme music was composed by George Young. Gloria Duffy and Philip Yun are co-CEOs of The Commonwealth Club World Affairs, the nonprofit and nonpartisan forum where our program originates. I'm Greg Dalton.