



OUT OF HARM'S WAY

A scan of emerging global practices in climate change displacement for Canadian policymakers and practitioners

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EXECUTIVE SUMMARY

This report scans emerging global policies and practices addressing human movement in the context of climate change for consideration by Canadian policymakers and practitioners.

Nature and scope of climate displacement

Climate change is increasing the number and severity of extreme weather events. Some weather events occur suddenly (sudden onset disaster), forcing rapid temporary or long-term displacement of people, while others are gradual (slow onset disaster), pushing communities to relocate from an area becoming undesirable, disaster-prone, or uninhabitable over time. These forms of climate-related movement, which we call climate displacement, are of growing concern.

Global modelling forecasts that under our current trajectory of warming temperatures, millions will move, predominantly within their own borders, by 2050. Canada is not projected to be at high risk of weather-related disaster relative to other countries; however, reactive and top-down responses have often caused more trauma to communities experiencing climate displacement.

While anybody can be impacted by weather-related disaster, vulnerable populations like the young, the frail elderly, and the socioeconomically disadvantaged will be impacted more negatively. Due to historical, geographical, and cultural factors, Indigenous communities in Canada are disproportionately at risk.

The decisions of persons or communities to migrate is complex and specific to their circumstances. Some choose not to move while others become trapped. Sometimes only some members of a community or household move. Research shows that the option of moving, whether people under stress choose it or not, increases their resilience.

Researchers suggest the following principles to lower the severity of climate-related disasters and displacement:

1. Cut greenhouse gas emissions in line with the IPCC's outlined emissions pathways to prevent warming greater than 1.5C
2. Eliminate or otherwise constrain human practices (building on floodplains, deforestation) that increase risk
3. Address poverty and the vulnerability of less mobile and less privileged populations
4. Invest in prevention, adaptation, and mitigation infrastructure where appropriate
5. Enact local, bottom-up approaches that support safe, voluntary migration and relocation
6. Account for those who choose not to move
7. Gather disaggregated data, including qualitative data, on internal human migration patterns to better inform decisions
8. Develop funding mechanisms and policies to support human mobility.

Climate displacement policy landscape

The international community has developed a series of climate-displacement-related policy frameworks that set out legal and political commitments globally. The Government of Canada does not yet have any policies around climate displacement. Indigenous governments have passed resolutions related to specific cases of climate displacement under the rubric of the United Nations Declaration on the Rights of Indigenous Peoples.

Recommendations on formulating state-level policies to address climate displacement include the following:

1. Accelerate and deepen Canada's global climate obligations through working on the Paris Agreement's Nationally Determined Contributions and commitment to a National Adaptation Plan
2. Set out national and local plans for addressing poverty and building resilience
3. Strengthen climate resilience efforts and disaster risk reduction
4. Enact the objectives and commitments in the Global Compact for Migration.

International and domestic practices of possible relevance

An emerging approach for addressing displacement due to **sudden onset disaster** is to build safe, climate-resilient receiving communities able to support climate displaced people. Such cities would need good access to freshwater, be close to communities facing hazards, be less exposed to hazards, and have room to grow. Transforming them into hubs for receiving climate displaced people would require

1. local, community-driven approaches
2. Intensive inter-organizational partnerships (between governments, faith communities, nonprofits, private individuals, the private sector, etc.)
3. Investments in physical capacity as well as human (social cohesion/economic wellbeing) resilience
4. Federal coordination.

Planned relocation in the face of **slow onset disaster** is seen as a last resort option. It is a form of pre-emptive collective permanent move in the face of inevitable future forced displacement and comes at high cost. More data is needed to determine best practices in planned relocation. What is established, however, is that

1. Ideally, planned relocation is community-driven and federally supported
2. Delaying relocation can increase impoverishment and make movement harder

3. People can be resistant to planned relocation
4. Disaster is often a trigger (and creates a 'policy window') for planned relocation, but it is better to be pre-emptive: \$1 spent proactively is \$2-10 in future cost saved
5. Consultation and good communication are central.

As for **international climate displacement**, it is highly unlikely for large numbers of climate displaced people to arrive at Canada's borders. That said, immigration is a past and ongoing priority. Canada opened its borders to non-Europeans in the late 1960s in response to changing international norms around racial discrimination. Canada could likewise now provide modest but significant leadership as global border policy norms change due to climate displacement. Canada could proactively

1. Determine a systemic response for when climate disaster hits
2. Offer temporary protection as well as pathways to permanence for the climate displaced
3. Enhance flexibility in existing migration categories for people at risk
4. Integrate diplomacy, development assistance, and climate displacement policies
5. Focus on specific regions or countries at risk
6. Consider mutual cooperation in regional and subregional agreements.

Diasporic communities in Canada, perhaps from countries at high risk, could be important partners in developing climate displacement policies and bilateral linkages with their countries of origin.

Conclusion

Climate change is forcing a new normal, much like the COVID-19 pandemic has done. This report has worked to offer an overview of current resources and practices on human movement in the context of climate change relevant to Canada. While research can offer heuristics for approaching climate displacement, each context, each disaster, and every community has its own characteristics. Fundamentally, local approaches supported by an enabling federal structure are best, and community ownership and consultation are key.

What matters is enabling movement. It behooves us, knowing what we do, to act with resolve and

1. Address the root causes of climate displacement by cutting emissions
2. Raise the resilience of our communities to cope with the expected and unexpected
3. Facilitate the whole-of-society collaboration needed to ensure our collective ability to move out of harm's way, to find community and shelter, no matter what comes.

INTRODUCTION

Migration has long been part of human traditions, livelihoods strategies, and coping mechanisms. Now, however, climate instability is adding an additional layer to human movement. Migration models forecast that climate change will catalyze movement for millions in the coming decades, mostly within domestic borders, as their homes and communities become either suddenly or slowly, temporarily or permanently, undesirable, or, sadly, uninhabitable.

Human movement in itself is not a problem. It is when that movement is unwilling, under stress, or in great numbers, that problems arise. The coming impact of climate change on human settlements is a known unknown. Based on forecasts and human settlement patterns, rural and remote communities on the coasts and in northern Canada will potentially be strongly affected by sea level rise, storm surges, and coastal erosion. Extreme weather could also cause sudden onset disasters – ice storms, wildfires, floods – anywhere. From a governance standpoint, the challenges are many. What is important to maintain is the ability of people and communities to move freely and safely out of harm's way as their environment changes.

Climate displacement has already begun, visible for instance domestically in evacuations due to extreme wildfires, and globally in the relocation dilemmas of communities in the Pacific islands. It will be challenging to find the optimal suite of policy approaches at multiple scales nationally and internationally to a problem that is unpredictable, planetary in scope, and yet deeply place-based in consequence.

This report aims to contribute to a conversation around climate displacement policy in British Columbia and Canada. Drawing from research literature and consultations with academics and practitioners, it will set out the nature and scope of climate displacement, grounding the issues in Canadian case histories and data. Then it will present the climate displacement policy landscape globally and in Canada and present globally recommended components of a climate displacement policy. Finally, the report will outline international and domestic practices of possible relevance to climate displacement approaches in Canada. Through this report, the Climate Displacement Planning Initiative hopes to gather innovations and initiatives from around the world that could usefully support policymakers, researchers, and practitioners in B.C. and Canada in reflecting on and formulating locally specific climate displacement strategies. We welcome comments and questions at info@climate-displacement.org.

NATURE AND SCOPE OF CLIMATE DISPLACEMENT

What is climate displacement?

We are using the term climate displacement broadly to mean human movement in the context of a changing climate.

There is a lot of debate around the terminology in this area. There are closely related technical terms which specify if the movement is voluntary (migration) or forced (displacement), temporary (evacuation) or protracted (long-term displacement) or permanent (relocation), whether movement is possible (mobility) or not (trapped population), and to what such movement should be attributed, whether weather-related disaster or climate change. See Box 1 for more details.

These distinctions are important but often difficult to make. The term ‘climate refugee’ is sometimes used but is misleading as people suffering climate-related distress do not qualify for refugee status under international law.¹

For the purposes of this report, we will just use one term, climate displacement, to encompass what the International Organization for Migration (IOM) defines as environmental migration:

Climate displaced people are “**persons or groups of persons** who, predominantly for reasons of **sudden or progressive change in the environment** that adversely affects their lives or living conditions, are **obliged to leave** their habitual homes, **or choose to do so**, either **temporarily or permanently**, and who move either **within their country or abroad.**”²

¹ “The United Nations 2009 annual report advises that the [United Nations High Commissioner for Refugees (UNHCR)] and the [International Organization for Migration (IOM)] would not expand the Convention and that the term “refugee” should be avoided in relation to environmental migrants.” Murray, Sheila. “Environmental Migrants and Canada’s Refugee Policy,” *Refuge: Canada’s Journal on Refugees*: 27, no. 1, 2010, p.92. This article is a comprehensive and prescient discussion of the global migrant protection regime and climate displacement.

² IOM, “Discussion Note: Migration and the Environment, 1 November 2007,” MC/INF/288, 1-2. https://www.iom.int/sites/default/files/jahia/webdav/shared/shared/mainsite/about_iom/en/council/94/MC_INF_288.pdf (accessed June 10, 2021).

BOX 1 – TERMINOLOGY

“**Climate migration**” refers to the “movement of a person or group of persons who, predominantly for reasons of sudden or progressive change in the environment due to climate change, are obliged to leave their habitual place of residence or choose to do so.”³ This is the International Organization for Migration’s (IOM) working definition for analytical and advocacy purposes for climate migration—it is without legal recognition.

“**Climate mobilities**” includes the various ways and reasons for movement; but it circumvents the false forced/voluntary binary that terms like *migration* and *displacement* imply. It is more inclusive and consensual; and it gets away from the problems of causality, instead referring to the movement (or not) of people in the context of a changing climate.

Climate or **environmental “refugee”** is a term many use to denote someone who climate change forcibly displaces. It is misleading and rejected by academics and legal scholars, and increasingly by policy-makers.⁴ Such persons do not meet the narrow legal definition of a refugee under current international law because their government is not persecuting them for reasons of race, religion, nationality, membership of a particular social group, or political opinion; they rarely cross an international border – and as such, they are not entitled to refugee status or international protection.

Perhaps less problematically, “disaster displacement” more accurately invokes the forced nature of climate mobility.

“**Disaster displacement**” is the “movement of persons who have been forced or obliged to flee or leave their homes because of a disaster to avoid the impact of an immediate and foreseeable natural hazard.”⁵ This definition draws on the work conducted by the Nansen Initiative, and its follow-up, the *Platform for Disaster Displacement* (PDD), which developed a protection agenda for those displaced across borders in the context of disasters and climate change. As such, it assumes a link between climate change and disaster severity and frequency. Displacement results when affected persons are exposed to a natural hazard and are too vulnerable (or do not have the resilience) to endure the impacts of the hazard—but have the ability to flee; it can be the result of

³ International Organization for Migration (IOM), *Glossary on Migration*, (Geneva: IOM, 2019), 31 https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf.

⁴ McAdam, Jane. *Climate Change, Forced Migration, and International Law*, (Oxford: Oxford University Press, 2014), 9.

⁵ IOM, *Glossary*, p.51.

“spontaneous flight, an evacuation order from an authority or an involuntary planned relocation process.”⁶

Source: Bates-Eamer, N., and G. Benson, “Climate Change Displacement – Mapping the BC Context,” Climate Displacement Planning Initiative, May 2021, p.16. Reproduced with permission.

Key resource: [IOM Environmental Migration Portal](#)

Why is climate displacement important?

Migration has been a regular human activity throughout history. It can enable cultural enrichment, promote community health, and enhance economies. Under crisis conditions, however, it can also be traumatizing, disrupt the social and cultural fabric of communities, and worsen economic vulnerability.

Climate change models show that warming temperatures will cause more frequent and more extreme weather conditions and disasters.⁷ These will add to the frequency and severity of forced human movement under crisis.

What kinds of weather-related disasters trigger climate displacement?

The kinds of weather-related disasters that can precipitate a move are often categorized as ‘sudden onset’ or ‘slow onset’ events.

Sudden onset events include severe storms, floods, extreme winter conditions, and wildfires. People may need to evacuate, find temporary housing, and then return once the disaster abates and their home is safe or rebuilt. Sometimes the displaced people cannot return and are in limbo for months or years before they integrate into their temporary relocation site or resettle in a third community.

⁶ IOM, *Glossary*, p.51.

⁷ IPCC. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. In *Climate Change 2014: Synthesis Report*; Core Writing Team, Pachauri, R.K., Meyer, L.A., Eds.; IPCC: Geneva, Switzerland, 2014; p. 151.

BOX 2 – SUDDEN ONSET DISPLACEMENT: PROLONGED PROBLEMS

Spotlight on Siksika Nation:

Flooding of the Bow River in June 2013 destroyed two bridges and forced the evacuation of over 1,000 people of the Siksika Nation about 80km southeast of Calgary. A report written six and a half years later stated that some community members had not returned to their homes after a displacement ordeal that for some evacuees involved moving up to 5 times in the prolonged recovery and rebuilding of their community.⁸

Slow onset events, meanwhile, “evolve gradually from incremental changes occurring over many years or from an increased frequency or intensity of recurring events.”⁹ Examples include gradually warming temperatures or sea level rise. It may take decades for their full impact to be seen.

BOX 3 – THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC) LIST OF SLOW ONSET EVENTS



Source: unfccc.int/wim-excom/areas-of-work/slow-onset-events

Key resource: [UNFCCC Slow Onset Technical Paper](#)

⁸ Yellow Old Woman-Munro D, L. Yumagulova, E. Dicken. “Unnatural Disasters: Colonialism, climate displacement, and Indigenous sovereignty in Siksika Nation’s disaster recovery efforts.” *Canadian Institute for Climate Choices*, 2021. <https://climatechoices.ca/publications/unnatural-disasters/>.

⁹ UNFCCC, “Slow onset events technical paper, 26 November 2012,” UNFCCC/TP/2012/7, 7. unfccc.int/resource/docs/2012/tp/07.pdf (accessed May 20, 2021).

In the interim, slow onset events do have an impact. At times, this impact is ‘invisible.’ People may state that they are forced to move for reasons other than climate: due to more frequent crop failure, for example, rather than desertification and warming temperatures.

Slow onset events may gradually erode a community’s environmental and physical health, disrupting access to vital resources like water, food, and shelter. They can increase economic vulnerability over time, deepening crisis when a sudden onset disaster or other crisis hits. Slow onset events can increase the likelihood of sudden onset events, with sea level rise transforming into repetitive floods, for example, or glacial retreat setting off landslides. Segments of entire communities may have to relocate if their homes experience severe repetitive loss from recurring disasters or if the area is forecast to become uninhabitable.¹⁰

Who is displaced by climate change?

BOX 4 – SEVERE WEATHER CAN DEVASTATINGLY AFFECT MANY

Spotlight on the Ice Storm of 1998:

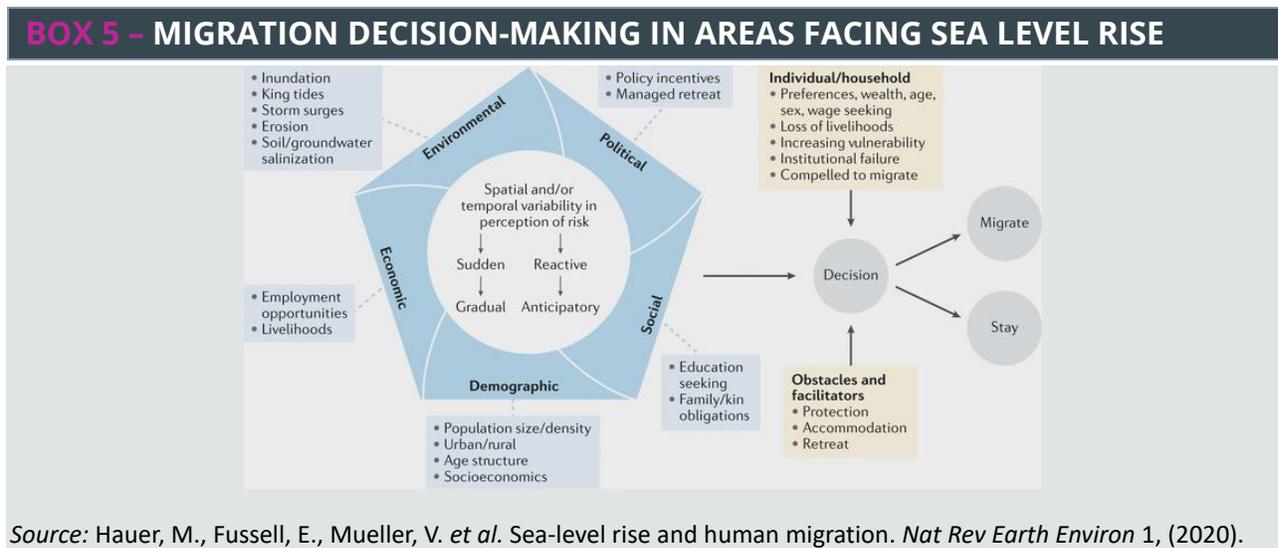
In January 1998, accumulated ice from a massive ice storm damaged power lines that were not built to withstand such unusual conditions, and caused electricity outages in Ontario, Quebec, and the Maritime provinces. The power outages affected over one-tenth of Canada’s population, lasting up to a month. Many households depended solely on electric heating and were forced to seek warm shelter in icy winter conditions. At least 25 people died, many were injured, 17,800 people were displaced to 535 shelters, and the region suffered \$3 billion in economic damage. Researchers later estimated that had the freezing rain extended further north, the power outage would have been far lengthier, and forced the evacuation of Montreal.¹¹

Weather-related disaster is only one of many push and pull factors in climate displacement decision-making. Box 5 shows factors affecting decision-making in the US around sea level rise:

¹⁰ Internal Displacement Monitoring Centre, “No Matter of Choice: Displacement in a Changing Climate,” *Research Agenda and Call for Papers*. <http://www.internal-displacement.org/sites/default/files/publications/documents/20181213-slow-onset-intro.pdf>. (accessed May 14, 2021).

¹¹ Kerry, Mara, Greg Kelk, David Etkin, Ian Burton & Sarah Kalhok. Glazed Over: Canada Copes with the Ice Storm of 1998, *Environment: Science and Policy for Sustainable Development*, 41:1, (1999): 6-11, DOI: 10.1080/00139159909604608.

the environmental, political, social, demographic, and economic considerations, and how individual/household circumstances and perceived obstacles and facilitators weigh in on the decision to migrate or stay.



Not every household in a community facing weather-related disaster will move. For instance, in Bangladesh, high-income families are more resilient and can adapt to and remain in adverse circumstances while low-income families can become ‘trapped,’ unable to afford the costs of moving. Thus, it is middle-income families who move in greatest proportions. Likewise, sometimes not everybody within a household moves. In some Bangladeshi households, younger healthy people move and send remittances to older or less mobile family members who remain.¹² These patterns are not universal but reflect coping mechanisms for people in different circumstances facing environmental stress, showing that migration is context-specific and often a collective rather than individual decision.

To where do climate displaced people move?

Research repeatedly shows that people generally do not want to move, and the vast bulk of climate displaced people remain within nation-state borders. Cross-border climate displacement

¹² Mallick, Bishawjit. "The Nexus between Socio-Ecological System, Livelihood Resilience, and Migration Decisions: Empirical Evidence from Bangladesh." *Sustainability (Basel, Switzerland)* 11, no. 12 (2019): 3332.

has been rare.^{13 14} Climate displaced people mostly move along prior migration patterns of their social networks and family, to familiar cities, and often stay close to the place they left.¹⁵ During disaster response, a nearby city may be the regional evacuation hub. In cases when the designated hub is overwhelmed, evacuation officials (see Box 6) can determine evacuation destinations.

BOX 6 – BE CAUTIOUS WITH EVACUATION-BASED DISPERSAL

Spotlight on Sandy Lake, Ontario:

A large wildfire in 2011 forced the full evacuation of 2800 residents in Sandy Lake, a remote fly-in First Nations Reserve 600km northwest of Thunder Bay, Ontario. Chartered planes and 21 flights by the Canadian Armed Forces flew the evacuees to 12 different destinations (see map), some of which were already overwhelmed by wildfire evacuees from other municipalities. The evacuation did not account for the health and psychosocial needs of elders, often separating them from caregivers or the grandchildren for whom they were responsible as culturally understood but not legal guardians, adding to their distress.^{16 17}

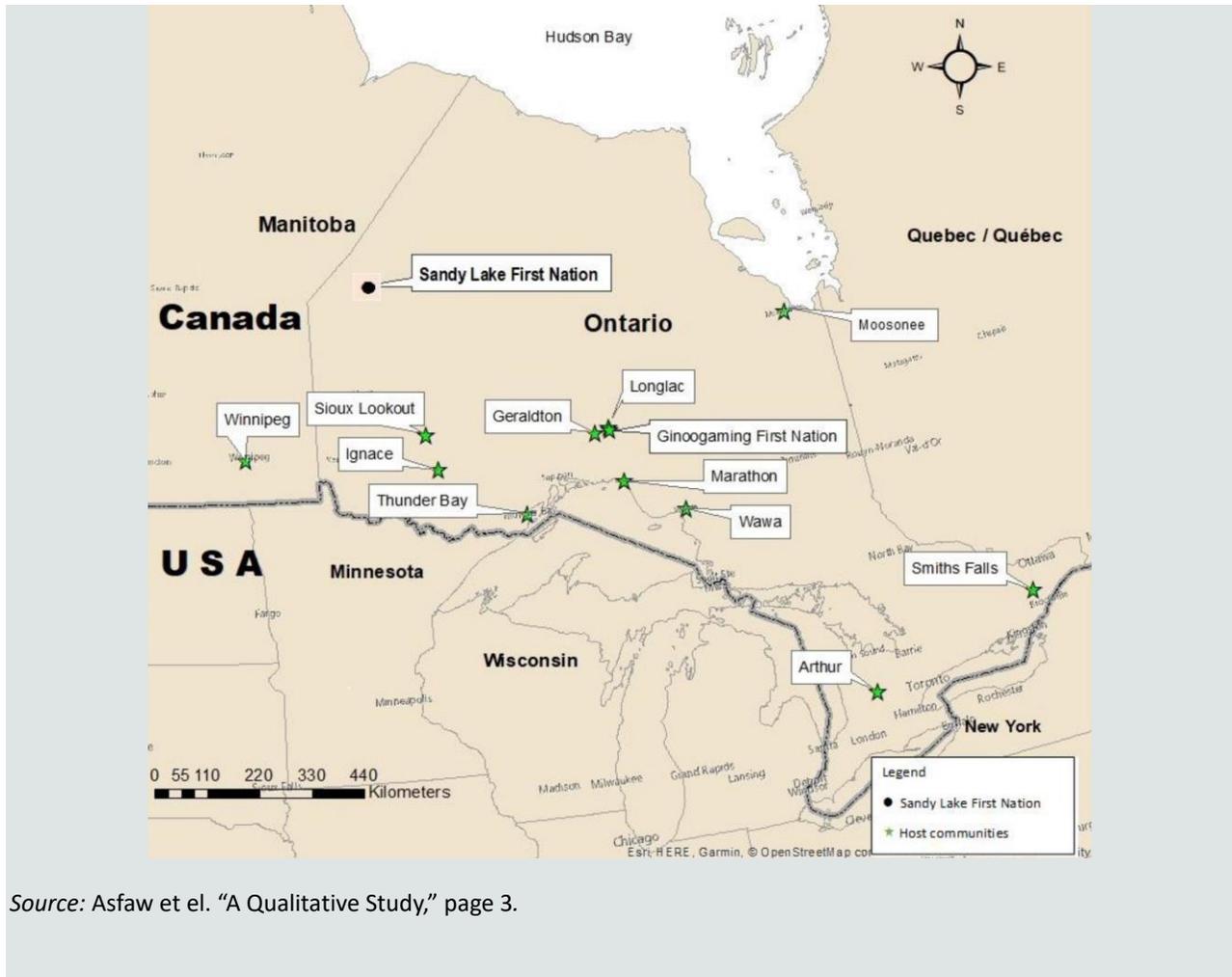
¹³ Rigaud, K, Alex de Sherbinin, Bryan Jones, Jonas Bergmann, Viviane Clement, Kayly Ober, Jacob Schewe, et al. *Groundswell: Preparing for Internal Climate Migration (Groundswell)*: World Bank, Washington, DC, 2018.

¹⁴ Findlay, A. "Migrant Destinations in an Era of Environmental Change." *Global Environmental Change* 21, (2011).

¹⁵ Hauer, M. "Migration Induced by Sea-Level Rise could Reshape the US Population Landscape." *Nature Climate Change* 7, no. 5 (2017): 321-325.

¹⁶ Asfaw, Henok Workeye, Sandy Lake First Nation, Tara K. McGee, and Amy Cardinal Christianson. "Evacuation Preparedness and the Challenges of Emergency Evacuation in Indigenous Communities in Canada: The Case of Sandy Lake First Nation, Northern Ontario." *International Journal of Disaster Risk Reduction* 34, (2019): 55-63.

¹⁷ Asfaw, Henok Workeye, Sandy Lake First Nation, Tara K. McGee, and Amy Cardinal Christianson. "A Qualitative Study Exploring Barriers and Facilitators of Effective Service Delivery for Indigenous Wildfire Hazard Evacuees during their Stay in Host Communities." *International Journal of Disaster Risk Reduction* 41, (2019): 101300.



Source: Asfaw et al. "A Qualitative Study," page 3.

When is climate displacement expected to happen?

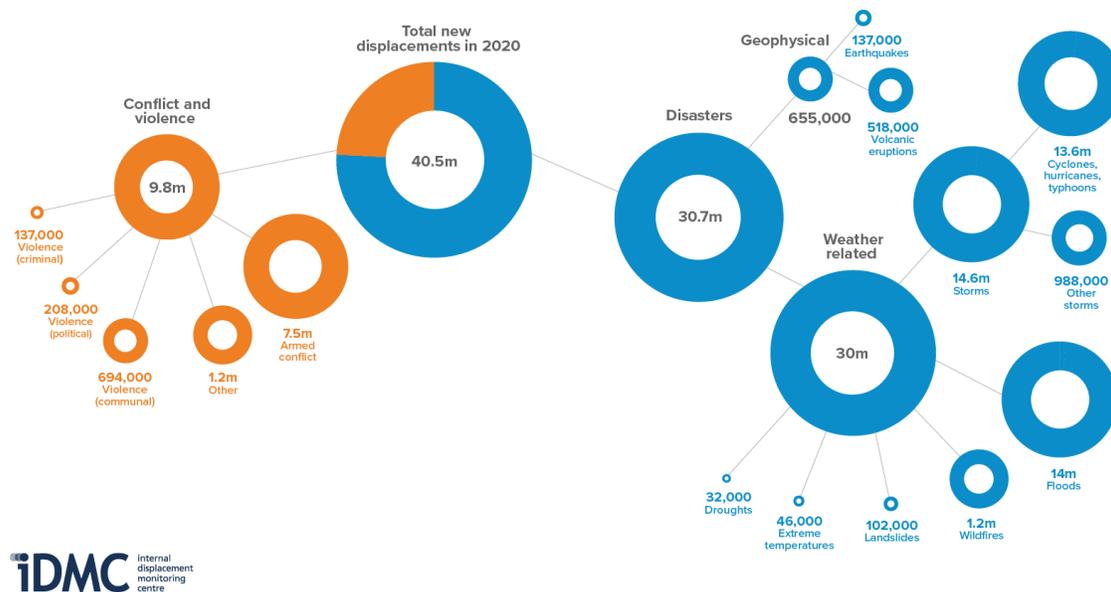
It already is happening. According to the Internal Displacement Monitoring Centre (IDMC), there were 30 million new internal displacements due to weather-related disasters globally in 2020. This was troublingly high: prior to 2020, new internal displacements due to weather-related *and* geophysical disasters *and* conflict *added together* was 24.5 million per year on average.

The IDMC warns that weather-related disasters constitute three-quarters of internal displacement globally (see Box 7), that trends towards more frequent disasters could herald a new normal, and that wildfires are a significant and increasing driver for displacement in North America.¹⁸

¹⁸ GRID 2021.

BOX 7 – TOTAL INTERNAL DISPLACEMENTS IN 2020, GLOBALLY

New displacements in 2020: breakdown for conflict and disasters



Source: Internal Displacement Monitoring Centre (IDMC), *Global Report on Internal Displacement (GRID)*, (Geneva: IDMC, 2021).

Key resource: [Global Report on Internal Displacement 2021](#)

Public perception of climate as a factor in choice of residence is also increasing,¹⁹ with families relocating due to wildfires self-identifying as ‘climate migrants.’²⁰

¹⁹ Katz, Lily. “Nearly Half of Americans Who Plan to Move Say Natural Disasters, Extreme Temperatures Factored Into Their Decision to Relocate: Survey,” *Redfin.com*, April 5, 2021. <https://www.redfin.com/news/climate-change-migration-survey/> and Katz, Lily. “Nearly 75% of People Worry About Climate Change When Buying or Selling a Home,” *Redfin.com*, February 25, 2020. <https://www.redfin.com/news/climate-change-concerns-homebuyers/>. (accessed June 1, 2021).

²⁰ Ropeik, Annie. “Americans are moving to escape climate impacts. Towns expect more to come,” *NPR*, January 22, 2021. <https://www.npr.org/2021/01/22/956904171/americans-are-moving-to-escape-climate-impacts-towns-expect-more-to-come> (accessed May 22, 2021).

How much Canadian climate displacement is there right now?

In Canada, data on internal disaster displacement (weather-related disasters plus less common geophysical disasters like earthquakes and volcanic eruptions) collected by the IDMC shows 26,000 displacements in 2020, and an average of 50,000 displaced per year over the last 8 years.

BOX 8 – YEARLY DISASTER DISPLACEMENTS IN CANADA	
Year	New displacements
2013	120,000
2014	5,800
2015	13,000
2016	93,000
2017	85,000
2018	19,000
2019	41,000
2020	26,000

Source: Internal Displacement Monitoring Centre (IDMC). “Global Internal Displacement Database” Data (2020). <https://www.internal-displacement.org/database/displacement-data>.

Box 8 does not include people displaced by climate change – if any would identify themselves as such – entering Canada from other countries. There is no official climate-related migration pathway into Canada at present.

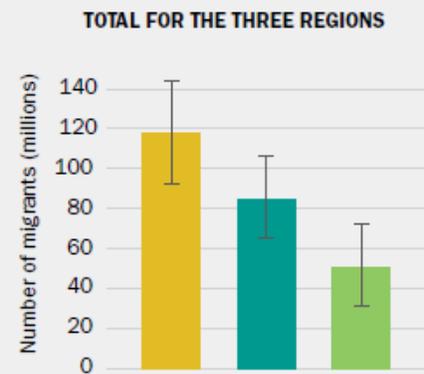
How much global climate displacement will there be in the future?

In 2018, The World Bank released a report with extensive modelling that found that 140 million people would become *internally* displaced in Sub-Saharan Africa, South Asia, and Latin America by 2050 due to slow onset events. This figure (see Box 9), graphed in yellow, was their pessimistic, business as usual (continued greenhouse gas emissions and unequal development) estimate and did not include sudden onset events. The report suggested that climate displacement would accelerate with expected shifts in climate after 2050.

BOX 9 – WORLD BANK MODELLING OF FUTURE CLIMATE DISPLACEMENT

PLAUSIBLE SCENARIOS

■ Pessimistic (Reference) ■ More Inclusive Development ■ More Climate-Friendly



Source: *Groundswell*, pg xx.

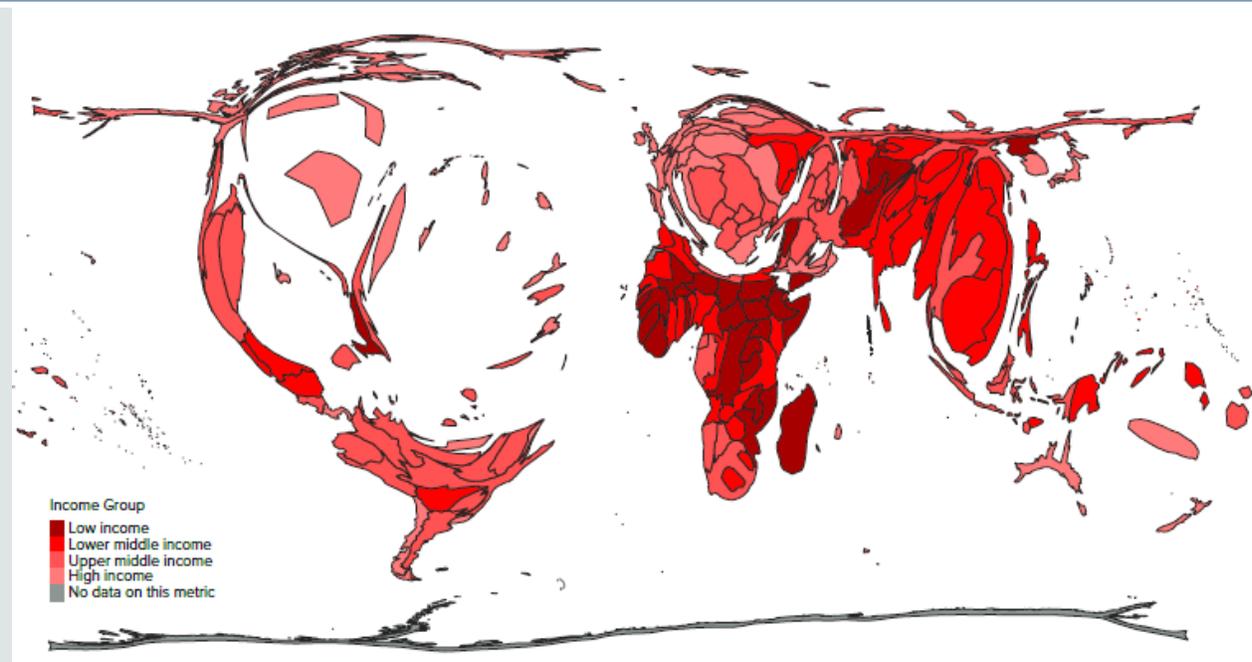
Key resource: [2018 Groundswell Report](#)

The World Bank’s modelling identified certain regions as likely ‘hotspots’ for climate in- and out-migration and said that early planning could shape those hotspots. The report found that ‘**climate migration may be a reality, but it doesn’t have to be a crisis**’ (:xxv) [emphasis added], that policies to reduce greenhouse gases (green) and reduce vulnerability and risk (turquoise) over the next 30 years could shift future outcomes away from crisis-hopping. A follow-up World Bank report modelling displacement in the Middle East and North Africa, Central and East Asia, Eastern Europe, and Small Island Developing States is forthcoming.

How about future climate displacement in Canada?

In part due to low population density, Canada’s future climate displacement risk is low relative to other countries (see Box 10). Small, remote communities in the north and west coasts are most exposed – vulnerable to sea level rise, coastal erosion, and storm surges – with communities in the north also impacted by melting permafrost and thinning ice.

BOX 10 – AVERAGE DISASTER DISPLACEMENT RISK, GLOBALLY



Annual average disaster displacement risk relative to population, by income group

Source: IDMC, licensed under CC BY-NC 4.0

Key resource: [IDMC Global Disaster Displacement Risk Report](#)

Urban areas and infrastructure along the Sunshine Coast and Lower Mainland of BC and in the Halifax/Dartmouth area of Nova Scotia, and perhaps Prince Edward Island, are also built close to sea level and may have to invest in heavy adaptation infrastructure or relocate in the coming decades as weather patterns shift.²¹ Inland, wildfires and flooding along river plains will also continue to be risks.

So, is it really that bad?

The good news is that human migration by itself isn't necessarily bad, and Canada's projected climate displacement risk is relatively low. The bad news is that displacement due to weather-

²¹ Robert McLeman, interview by author, December 1, 2020.

related disaster has caused people extraordinary harm and unnecessary suffering in Canada (see Box 11) and around the world in the past.

BOX 11 ARTIFICIAL CONTROL CAN BUILD TO DISASTER

Spotlight on Lake St. Martin First Nation:

Lake St. Martin is a First Nations community of 2000 in Manitoba forced to evacuate in 2011 due to severe flooding. They chronicled their story in a 2012 video called “Flooding Hope”:

“In 1961 the first water control structure was constructed at the mouth of the Fairford river to protect Lake Manitoba cottagers and farmers from flooding. This impacted downstream communities including Lake St. Martin First Nation without warning or consultation...creating annual flooding in the spring. In 1970, the second water control structure, the Portage Diversion, was constructed to keep the City of Winnipeg safe and dry. This elevated the water levels even more.... The last nail in the coffin for Lake St-Martin was the 2011 water channel from Lake St. Martin to Big Buffalo Lake” (3:55 – 5:26).

The video indicated that water and poverty in the community kept rising with each new structure, and the 2011 channel was built using the Emergency Measures Act without community consultation or environmental assessment. The water level of Lake St. Martin rose and triggered the 2011 evacuation of four First Nations communities. The floodwater then did not recede, and the land around many Lake St. Martin First Nation homes became swampland. Between 2011 and 2012 Lake St. Martin First Nations evacuees were moved to an abandoned military base instead of the culturally suitable land identified and requested by the community. The video continued:

“The Flood of 2011 at Lake St. Martin First Nation was artificial²² but with real, dire consequences. The community was permanently displaced from their homes, losing their livelihoods, health, and sociocultural integrity. The government chose to use the control structure to flood people with a deep history to the land compared to people who had only economic or recreational interest. There’s been no compensation to the community or people yet. The non-First Nations have already been compensated” (18:30 – 19:12).

²² A 2013 technical report by the Government of Manitoba later concluded that the flooding was artificial. See “2011 Flood: Technical Review of Lake Manitoba, Lake St. Martin and Assiniboine River Water Levels,” available at http://content.gov.mb.ca/mit/wm/assiniboine_lakemb_lsm_report_nov2013.pdf.

The UN Special Rapporteur on the Rights of Indigenous Peoples brought the concerns of Lake St. Martin residents to the attention of the Government of Canada on February 12, 2013.²³ A class action suit brought against the Government of Manitoba won \$90 million in damages on January 12, 2018 for Pinaymootang (Fairford), Little Saskatchewan, Lake St. Martin, and Dauphin River First Nations for the flooding and evacuation of 2011.²⁴ In May 2021, Lake St. Martin First Nations community members enacted a two-stage return home, 10 years after evacuation.²⁵ 91 people from Peguis First Nation are still evacuated due to the 2011 flood as of May 1, 2021.²⁶



Source: Ballard, Myrle, and Shirley Thompson, “Flooding Hope: The Lake St. Martin First Nation Story” (Flooding Hope), August 11, 2016, 18:33, <https://lakestmartinfirstnation.ca/flooding-hope>.

Key resource: [Flooding Hope \(video\)](#)

²³ “Report of the Special Rapporteur on the rights of indigenous peoples, James Anaya”. From A/HRC/24/41/Add.4, paras. 47–52. http://unsr.jamesanaya.org/wp-content/uploads/2013/09/2013_09_communications_A_HRC_24_41_Add.4_ENG.pdf (accessed June 10, 2021).

²⁴ See <http://www.manitobafloodclassaction.com/>

²⁵ Lake St. Martin First Nation, “Residents of LSMFN currently in Hotels since Evacuation. There will be a Two-Stage Approach to return home,” Facebook, May 21, 2021, <https://www.facebook.com/lakestmartinfirstnation>

²⁶ “2011 Manitoba flood: status of community rebuilding and numbers of displaced persons”. Indigenous Services Canada. <https://www.sac-isc.gc.ca/eng/1392046654954/1535122238673> (accessed June 11, 2021).

As evident in the Lake St. Martin, Sandy Lake, and Siksika Nation cases spotlighted in this report, unplanned and reactive approaches to displacement is causing unnecessary distress and loss for communities in Canada. These cases show that climate displacement in Canada has been catastrophic even when occurring at what should be manageable scales.

Further, current projections of future climate displacement risk in Canada are in the realm of what is foreseeable. Crises in our globalized world, however, are increasingly complex, interlocked, and unknowable. Some of the factors that will influence further potential for displacement and new drivers of mobility include the following:

1. Climate models suggest that average temperatures may not warm gradually but rather change dramatically when thresholds believed to be irreversible, called tipping points, are reached, with cascading social and ecological consequences globally²⁷
2. The COVID-19 Pandemic has highlighted the fragility of global supply chains and the dangers of critical systems becoming overwhelmed by unexpected spikes in demand
3. This report addresses climate-related displacement only, without addressing instabilities arising where climate- and conflict-related drivers for migration converge
4. On average, Canada is and will be warming twice as quickly than the global average, whatever the emission scenario, with the Arctic region warming about three times as fast.²⁸ As climate change accelerates, the rate of change in Canada will be higher than elsewhere, with implications for flora and fauna interlinked with that of human populations.

The IDMC found that some internally displaced people globally were being displaced for the fourth time in 2020.²⁹ Canada can and should take proactive measures to avert negative outcomes for Canadians who may face displacement and invest in safer, resilient communities around the world now, before the next bend in the road.

²⁷ Lenton, Timothy M., Johan Rockström, Owen Gaffney, Stefan Rahmstorf, Katherine Richardson, Will Steffen, and Hans Joachim Schellnhuber. "Climate Tipping Points - Too Risky to Bet Against." *Nature (London)* 575, no. 7784 (2019): 592-595.

²⁸ Bush, Elizabeth, and Donald S Lemmen. *Canada's Changing Climate Report*. Ottawa: Government of Canada, 2019, p. 121, 434.

²⁹ *GRID 2021*.

Who in Canada is most at risk of climate displacement?

“It is a cruel fact: disasters discriminate.”³⁰

Source: National Centre for Disaster Preparedness, Columbia University

The frail elderly, people dependent on assistive mobility and communication devices or with complex health care needs, children, and poor and marginalized groups are especially vulnerable during any form of displacement. Men, women, and children face different risks and problems when they move. When an entire community is affected, those who are already vulnerable tend to be most impacted and have their situations worsen the most.

Further, while Indigenous communities comprise 5% of the population in Canada, they currently make up about 30% of the climate displaced every year.³¹ Indigenous communities have already endured forced relocation for non-climate-related reasons including making way for aluminum smelters, parks, cattle farms, hydro dams, urban housing, or for the government’s purposes of administering social programs more cheaply or asserting Canadian sovereignty over the Arctic (see Box 12).³²

Restricted to living on the less desirable land of reserves,³³ having international and provincial borders drawn through their home territories,³⁴ and subject to assimilationist and racial

³⁰ See <https://ncdp.columbia.edu/research/vulnerable-populations/>

³¹ GRID 2020

³² These histories and those of non-Indigenous communities are chronicled by the Canadian Geographic online at <https://relocations.canadiangeographic.ca>.

³³ Vowel, Chelsea. *Indigenous Writes: A Guide to First Nations, Métis & Inuit Issues in Canada*. Winnipeg, MB: HighWater Press, 2016.

³⁴ A study by the UN Human Rights Council’s Expert Mechanism on the Rights of Indigenous Peoples (EMRIP) states that members of the Akwesasne First Nation face heavy reporting requirements when crossing the US-Canada border that cuts through their traditional land (para 60). Further, it says that “in British Columbia, Canada, the Kaska Nation spans four jurisdictions (three provinces and the federal jurisdiction) impeding their movement, in particular when it comes to traditional hunting and harvesting and their ability to self-govern” para 63. See EMRIP, “Indigenous peoples’ rights in the context of borders, migration and displacement”. A/HRC/EMRIP/2019/2/Rev.1 <https://undocs.org/A/HRC/EMRIP/2019/2/Rev.1> (accessed May 31, 2021).

subject to malnutrition, illness, forced labour, physical and sexual abuse, and death at those schools.³⁷

Indigenous communities have experienced multiple displacements through centuries of colonial policies, and yet shown extraordinary resilience in preserving their language, traditions, and land-based ways of life. They have already experienced the dislocations that all societies will now face due to climate.³⁸ The difficult reality is that after this history of deterritorialization, disenfranchisement, and impoverishment, Indigenous communities continue to bear the disproportionate brunt of future climate displacement risk in Canada. While they have contributed the least to (and been land and water defenders against) the pollution that is changing weather patterns, their communities are the most exposed and vulnerable to climate-related disaster.

In some cases, Indigenous communities' exposure to flood risk has been exacerbated by water control structures (see Box 11) or ignored in municipal histories of dyke construction.³⁹ In other cases, First Nations communities already struggling with hazards specific to their circumstances like substance abuse, medical shortages, and remote community access and egress issues are reporting new environmental hazards, such as yearly flooding risk from ice floe buildup on the Albany River in Ontario.⁴⁰ Alaskan Native communities likewise identified a new compound hazard now known as *usteq*, catastrophic land collapse arising from flooding, erosion, and permafrost degradation.⁴¹

Coastal Indigenous communities like Tuktoyaktuk (an Inuvialuit community in the rapidly warming western Canadian Arctic) are at the forefront of exposure. The community faces difficult decisions around relocation and its attendant risk of permanent cultural loss.⁴² The need for all

³⁷ Truth and Reconciliation Commission of Canada, *Honouring the Truth, Reconciling for the Future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada*. Truth and Reconciliation Commission of Canada, 2015.

³⁸ Davis H and Todd Z, "On the importance of a date, or, decolonizing the Anthropocene." *ACME: An International Journal for Critical Geographies* 16, no. 4 (2017): 761–780.

³⁹ Yumagulova, Lilia. "Disrupting the Risksapes of Inequities: A Case Study of Planning for Resilience in Canada's Metro Vancouver Region." *Cambridge Journal of Regions, Economy and Society* 13, no. 2 (2020): 293-318.

⁴⁰ Diabo, David. "First Nations Emergency Management – a national perspective" (sharing circle, Planning Our Home, June 10, 2021). <https://youtu.be/iw2MC7mTQa4>.

⁴¹ Overbeck, J., R. Bronen, S. Natali, and C. Maio. "Rights Resilience and Community-led Relocation: Co-producing Knowledge To Identify Risk." In *AGU Fall Meeting Abstracts*, vol. 2019, pp. C13D-1353. 2019.

⁴² Saunders-Hastings, P., Barnard, M., and Doberstein, B. *Planned Retreat Approaches to Support Resilience to Climate Change in Canada*. (Ottawa: Natural Resources Canada, 2020), p. 30-32.

governments and institutions to act on climate change displacement is not only a general policy concern for the equity and safety of Canadians, but can be considered a critical component to Canadians' commitments to work towards reconciliation with Indigenous peoples.

What happens if people don't move?

BOX 13 – DEFINITION OF TRAPPED POPULATIONS

Trapped populations are those “who **do not migrate**, yet are situated in **areas under threat**, [...] at risk of becoming ‘trapped’ or having to stay behind, where they will be **more vulnerable** to environmental shocks and impoverishment. The notion of trapped populations applies in particular to poorer households who may not have the resources to move and whose livelihoods are affected.”

Source: IOM Environmental Migration Portal

Disaster displacement research has looked at people who move and is beginning to also look at those who stay behind. While some who stay behind do so involuntarily, part of what IOM calls a ‘trapped population,’ it is also important to recognize that people do not always want to move, even in the face of disaster. Rather than being trapped in place, they choose to remain voluntarily.⁴³ Some members of Lake St. Martin First Nation, for example, continued to live in their flood-damaged homes when the rest of the community was evacuated in 2011.⁴⁴ 70,000 residents of New Orleans were either unable or unwilling to leave when the area was evacuated in 2005 due to Hurricane Katrina.⁴⁵ Indeed, sometimes it is better not to move: analysis of the March 2011 disaster response related to the Fukushima Daiichi powerplant in Japan showed that the unwilling evacuation of some elderly residents caused distress and death, harming them more than if they would have stayed and been exposed to radiation.⁴⁶

Recent studies find that US households have “strong economic, social, and cultural reasons...to resist migrating away from areas exposed to [sea level rise] until migration is the only remaining

⁴³ Mallick, Bishawjit and Jochen Schanze. "Trapped or Voluntary? Non-Migration Despite Climate Risks." *Sustainability (Basel, Switzerland)* 12, no. 11 (2020): 4718.

⁴⁴ *Flooding Hope* 2012.

⁴⁵ Findlay, "Migrant Destinations."

⁴⁶ Allison Macfarlane, "Regulating Science" (lecture, University of British Columbia, April 6, 2021).

option.”⁴⁷ Farmers in coastal Bangladesh noticing water and soil salinization and increasing silt in their freshwater rivers, meanwhile, understand that climate impacts are worsening their land and livelihoods, but choose not to move due to land ownership, their social networks, and economic considerations.⁴⁸ Traditional connections to the land among Indigenous populations are another reason for unwillingness to move.

In some circumstances, communities exposed to climate-related disaster can invest in infrastructure that could reduce their risk; in others, people could choose to remain and accept a hazard-prone living condition out of sense of confidence that they can handle the difficulties.⁴⁹

Some researchers who are working to understand populations that choose to stay behind now advocate for a ‘right to stay behind’ along with the ‘right to move.’ In general, a consistent finding is that having the *option* of moving, whether people choose it or not, leads to better outcomes.

What then exactly should we do about climate displacement?

Researchers suggest the following principles to lower the severity of climate-related disasters and displacement:

1. Cut greenhouse gas emissions in line with the IPCC’s outlined emissions pathways to prevent warming greater than 1.5C
2. Eliminate or otherwise constrain human practices (building on floodplains, deforestation) that increase risk
3. Address poverty and the vulnerability of less mobile and less privileged populations
4. Invest in prevention, adaptation, and mitigation infrastructure where appropriate
5. Enact local, bottom-up approaches that support safe, voluntary migration and relocation
6. Account for those who choose not to move
7. Gather disaggregated data, including qualitative data, on internal human migration patterns to better inform decisions
8. Develop funding mechanisms and policies to support human mobility.

The rest of this report will explore point 8 by examining the global and Canadian policy landscapes and explore three categories of climate displacement practice of possible relevance to Canada.

⁴⁷ Hauer, et al., “Sea-level rise.”

⁴⁸ Mallick, B., Rogers, K.G. & Sultana, Z. In harm’s way: Non-migration decisions of people at risk of slow-onset coastal hazards in Bangladesh. *Ambio* (2021). <https://doi.org/10.1007/s13280-021-01552-8>.

⁴⁹ Mallick et al. In harm’s way.

CLIMATE DISPLACEMENT POLICY LANDSCAPE

What is the global policy landscape around climate displacement?

The international community has developed policy frameworks relevant to addressing climate displacement (see Box 14).

BOX 14 – GLOBAL POLICIES AND CLIMATE DISPLACEMENT ⁵⁰		
Framework / Mechanism	Details	Lead Organization
Guiding Principles on Internal Displacement 1998	Sets out 30 standards that define the rights of Internally Displaced People and the protections available to them.	Office of the High Commissioner for Human Rights
United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) 2007	An international instrument setting out a framework for Indigenous Peoples' human rights, dignity, and fundamental freedoms. Article 10 addresses forced relocation of Indigenous Peoples.	UNDESA (Economic & Social Affairs)
Kampala Convention 2009	A regional agreement by the African Union addressing internal displacement in Africa. Provisions in Article 3 set out the rights of climate-related internally displaced persons.	African Union
Nansen Initiative 2012	The Nansen Initiative was a state-led consultative process that resulted in a Protection Agenda addressing the needs of people displaced across borders in the context of disasters and climate change.	Inter-governmental body

⁵⁰ This table has been adapted from Bates-Eamer and Benson, "Climate Change Displacement."

<p><u>Warsaw International Mechanism (WIM) on Loss and Damages Task Force on Displacement</u> 2013</p>	<p>The UNFCCC established the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts, to address loss and damage associated with impacts of climate change, including extreme events and slow onset events, in developing countries that are particularly vulnerable to the adverse effects of climate change.</p>	<p>UNFCCC</p>
<p><u>Sendai Framework for Disaster Risk Reduction</u> 2015</p>	<p>The objective of the Sendai Framework is to prevent new and reduce existing disaster risk. It advocates “including migrants in DRR work; informing urban development about current and future mobility trends; managing relocations, evacuations, and displacement to prevent future risks and reduce existing ones; and preparing for and managing disaster-induced population movements to reduce the direct and indirect impacts of natural hazards.”⁵¹</p>	<p>UNGA</p>
<p><u>Sustainable Development Goals (SDGs) / 2030 Agenda for Sustainable Development</u> 2015</p>	<p>The 2030 Agenda for Sustainable Development is an action plan for planetary wellbeing. It sets out 17 Sustainable Development Goals (SDGs); migration is referenced in 7 SDGs but is relevant to all 17. The 2030 Agenda calls for better migration data, and target 10.7 is to facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies. SDG 13 is “Take urgent action to combat climate change and its impacts.”</p>	<p>UNDESA (Economic & Social Affairs)</p>

⁵¹ Guadagno, Lorenzo. "Human Mobility in the Sendai Framework for Disaster Risk Reduction." *International Journal of Disaster Risk Science* 7, no. 1 (2016), p. 30.

<p>Platform on Disaster Displacement 2016</p>	<p>This follow up to the Nansen Initiative works to implement the recommendations of the Protection Agenda for better protection of people displaced internally or across borders in the context of disasters and climate change.</p>	<p>Inter-governmental body</p>
<p>Paris Agreement 2016</p>	<p>An agreement under the UNFCCC on climate change. It includes a mixture of binding and non-binding elements. Targets set under the agreement to reduce emissions are not binding in international law, but nations may adopt legislation to bind them within their own domestic legal systems. The agreement contains provisions related to the decrease of global and national GHGs; commitments to climate change adaptation, data collection and sharing; and financing, especially for low-income and developing states. The agreement specifically requires the Warsaw International Mechanism to work with many stakeholders to “develop recommendations for integrated approaches to avert, minimize and address displacement related to the adverse impacts of climate change,” leading to the Task Force on Displacement.</p>	<p>UNFCCC</p>
<p>Task Force on Displacement 2017</p>	<p>The Task Force on Displacement was established at the 21st session of the Conference of Parties in Paris to develop recommendations for integrated approaches to avert, minimize and address displacement related to the adverse impacts of climate change.</p>	<p>UNFCCC</p>
<p>Global Compact for Safe, Regular and Orderly Migration (GCM) 2018</p>	<p>Looks at principles for safe movement of people, including climate displacement.</p>	<p>UN General Assembly</p>

<u>Report on Indigenous peoples' rights in the context of borders, migration and displacement</u> 2019	A report meant to complement the Global Compact on Migration with advice to States on upholding Indigenous Peoples' rights, experiences, and needs in migration policy.	Expert Mechanism on the Rights of Indigenous Peoples
<u>Report of the Special Rapporteur on the Human Rights of Internally Displaced Persons</u> 2020	Recommendations to states and other international stakeholders on their human rights obligations and responsibilities with respect to slow onset climate displacement.	UN General Assembly and Human Rights Council
<u>UN Human Rights Committee decision on <i>Ioane Teitiota v. New Zealand</i></u> 2020	This landmark non-refoulement case sets the precedent that it is illegal for states to return people to countries where their lives would be at risk due to climate-related impacts.	International Covenant on Civil and Political Rights

What are the current climate displacement policies of the Canadian government?

Despite Canada's leadership in actively drafting the Global Compact for Migration, the Canadian government has not yet developed plans, policies, strategies, or funding mechanisms at the federal or provincial levels to address climate displacement. At present, communities hit by weather-related disaster receive support from local and regional emergency disaster responders, government bodies, and the military, on an as-required, case by case basis.⁵² A Parliamentary background paper notes, however, that "the absence of an international legal framework that reflects the current environment-related displacement realities does not preclude the possibility

⁵² "Under the Emergency Management Framework for Canada, the federal government coordinates emergency management activities throughout Canada and provides support when requested by provincial and territorial governments who are responsible for emergency management within their jurisdictions." See Government of Canada, *Climate Change: Its Impact and Policy Implications*. Vol. no. 2019-46-E. Ottawa: Library of Parliament, 2020, p. 11.

of developing specific local, national and international policies to protect those who are forced to move because of climate change.”⁵³

What are the current climate displacement policies of Indigenous communities in Canada?

While our research has not found a body of Indigenous policies addressing climate displacement in general, we have found resolutions from Indigenous bodies relevant to specific instances of climate displacement.⁵⁴ We have also found a resolution asserting the right to free movement on Indigenous land despite political borders.⁵⁵ The Assembly of First Nations (AFN), a body that has been developed nationally as an amplified collective voice for the First Nations, has set out a series of resolutions calling for strengthening of Indigenous Emergency Management systems.⁵⁶ A proactive resolution addressing the degradation of the Mi'gmaq land base due to sea level rise was passed in 2019.⁵⁷

The resolutions in question often cite UNDRIP articles in relation to the right to self determination, redress for forced population transfer or dispossession of land, and the right not to be forcibly removed.

⁵³ Canada. *Climate Change: Its Impact and Policy Implications*. Vol. no. 2019-46-E. Ottawa: Library of Parliament, 2020, p. 15.

⁵⁴ Southern Chief's Organization, Chiefs-in-summit meeting on May 1 and 2, 2012, Resolution number 5 addressed a needs assessment for the 4525 people displaced by flooding of Lake St. Martin, Manitoba, in 2011. See *Flooding Hope*, 18:06-18:18. That same evacuation was raised in Assembly of First Nations Special Chief's Assembly of Dec 6-8 in Ottawa, Resolution 73/2011: "expediting the process of obtaining a new reserve for Lake St. Martin First Nation due to artificial flooding." <http://www.afn.ca/uploads/files/sca-res-11.pdf>.

⁵⁵ Assembly of First Nations Special Chief's Assembly Dec 6-8, 2011, Resolution no.52/2011, "First Nations Right to Travel Freely." <http://www.afn.ca/wp-content/uploads/2020/01/Special-Chiefs-Final-Resolutions.pdf>.

⁵⁶ See AFN Resolutions 03/2015, 94/2017, 83/2019, 84/2019, and 85/2019. Thanks to Diabo, David, "First Nations Emergency Management," for discussing these resolutions.

⁵⁷ Assembly of First Nations Special Chief's Assembly Dec 6-8, 2011, Resolution no. 116/ 2019, "Degradation of Mi'gmaq Land Base by Rising Sea Levels." <http://www.afn.ca/wp-content/uploads/2020/01/Special-Chiefs-Final-Resolutions.pdf>. The resolution specifically cites climate change and discusses funding to cope with weather-related events.

Why not continue as is, without specialized policies?

While patched together networks of response manage to address urgent issues of evacuation, longer term displacement and return is less well-managed. Taking the cases spotlighted so far, members of Siksika Nation have been waiting 6 years to return home, and Lake St. Martin First Nation waited a decade. Had the 1998 Ice Storm forced the evacuation of Montreal, would authorities have been prepared to respond?

Analysis of the 2011 evacuation of a few thousand people from Sandy Lake revealed that lack of clarity over chains of command as local, provincial, and emergency response teams converged created delays and confusion that impeded informed and active crisis leadership.⁵⁸ As disasters caused or amplified by climate change become more frequent and larger in scope, the cost of being unprepared and disorganized in disaster response will grow.

In recognition that First Nations communities living on reserves were 18 times as likely to be evacuated as people living off reserve, Canada's 2019 Budget set aside about \$300 million over 5 years to increase resiliency and emergency management on reserves.⁵⁹ This is an important step forward. To move further forward, coordination and investments across multiple levels of governance and across society are necessary for what some forecast will be the reshaping of our human landscape,⁶⁰ and over time, the largest mass migration in history,⁶¹ to be safe and orderly.

Key resource: [Climate Change: Its Impact and Policy Implications](#)

⁵⁸ Afsaw, "Evacuation preparedness." This problem is noted more generally by the IDMC: "Even in a high-income country like Canada, disaster displacement of indigenous communities is a multifaceted issue. While emergency management responsibilities are shared by various levels of governments and their partners, these communities lie at the intersection of multiple legal systems. Federal and provincial laws intersect with each other, as well as with indigenous laws, governance systems and traditions of the community. This creates a challenging situation, particularly for those who live on-reserve, as decisions to temporarily move require the consideration of local needs, provincial or territorial capacities, and federal resources." Miranda, A., E. du Parc, J. Benet, M. Kurkaa, V. Fung, "Inclusive data on disaster displacement must include indigenous people," Expert Opinion, Internal-displacement.org, August 2020. <https://www.internal-displacement.org/expert-opinion/inclusive-data-on-disaster-displacement-must-include-indigenous-people>.

⁵⁹ Canada. Budget 2019. *GBA+ Chapter 3*. <https://www.budget.gc.ca/2019/docs/gba-acsgba-acsgba-chap03-en.html>.

⁶⁰ Hauer, "Migration induced by sea-level rise."

⁶¹ Friedman, Lisa. "Coming Soon: Mass migrations spurred by climate change," *NY Times*, March 2, 2009, <https://archive.nytimes.com/www.nytimes.com/cwire/2009/03/02/02climatewire-facing-the-specter-of-the-globes-biggest-and--9919.html>.

INTERNATIONAL AND DOMESTIC PRACTICES OF POSSIBLE RELEVANCE

What specifically will be required to build a national policy?

Climate displacement is considered a whole-of-government, whole-of-society issue requiring cross-cutting, transdisciplinary approaches. It will take time and effort and consultation to build a set of integrated climate displacement policies. A recommended starting point⁶² might be to

1. Accelerate and deepen Canada's global climate obligations through working on the Paris Agreement's Nationally Determined Contributions and commitment to a National Adaptation Plan
2. Set out national and local plans for addressing poverty and building resilience
3. Strengthen climate resilience efforts and disaster risk reduction
4. Enact the objectives and commitments in the Global Compact for Migration.

While importing climate displacement and migration approaches from other states would be inadvisable as the priorities, culture, and circumstances of every state is different, it can be useful to evaluate practices and strategies across the world, as well as existing practices in Canada. The following sections outline climate displacement strategies in these three circumstances:

- sudden onset disaster (emergency evacuations)
- slow onset disaster (planned relocations)
- international climate displacement (movement across borders and into Canada).

⁶² These recommendations are adapted from policy suggestions from the World Bank *Groundswell* report.

What kind of climate displacement strategy should we have for sudden onset disasters?

The approach seemingly gaining the most ground for addressing displacement due to sudden climate disaster is occurring at the city level.⁶³ Called ‘secondary cities’ in Bangladesh⁶⁴ and ‘climate havens’⁶⁵ or ‘climate destinations’⁶⁶ in the United States, this approach focuses on identifying cities

1. close to communities likely to experience hazards
2. with good access to fresh water
3. with low exposure to hazards
4. with room to grow physically and economically.

Such safe, disaster-resilient, receiving communities are then prepared for incoming population flows by ensuring affordable housing, planning for scaled up municipal infrastructure, and building community cohesion and services.

In Bangladesh, the priority is to prepare smaller cities to receive large waves of people, up to 1 million each, to reduce pressure on major urban centres like the capital, Dhaka. In the US, the concept similarly is to divert displacement flowing out of “vulnerable cities” away from likely host urban centres nearby that themselves have high existing stressors (“receiving cities”) and instead repopulate post-industrial cities that are safer destinations and have overflow capacity (“climate destinations”).⁶⁷ See Box 15 for details.

⁶³ One notable exception is Vermont, which has discussed becoming a climate haven at the state level. Mihaly, Elena, “Vermont as a Climate Haven: Who will come and how can we we prepare?” (lecture, Antioch University, October 22, 2020). <http://www.communityresilience-center.org/webinars/climate-migration-research-analyze-implement-what-can-we-learn-from-other-places/>.

⁶⁴ Hasan, Mehedi, “Experts: Identify and build secondary climate resilient cities,” *Dhaka Tribune*, October 22nd, 2019, <https://www.dhakatribune.com/climate-change/2019/10/22/experts-identify-and-build-secondary-climate-resilient-cities>.

⁶⁵ McDonnell, Tim, and Amanda Shendruk, “It’s time to prepare cities for people uprooted by climate change,” September 1, 2020, <https://qz.com/1895263/how-cities-can-prepare-to-support-climate-migrants>. Some people have begun to invest in climate haven properties: eg, <https://www.climatehavenrealestate.com/about>.

⁶⁶ Correspondence with Anna Marandi, June 15, 2021.

⁶⁷ Marandi, Anna and Kelly Main. “Birds Eye View: Cities and Climate Migration” (lecture, Antioch University, October 22, 2020). <http://www.communityresilience-center.org/webinars/climate-migration-research-analyze-implement-what-can-we-learn-from-other-places/>.

BOX 15 – TYPOLOGY OF CLIMATE DISPLACEMENT AFFECTED CITIES

Type	Characteristics	Examples	Local Considerations
1. Vulnerable Cities	<ul style="list-style-type: none"> • Under direct threat • Much of the community is exposed • Smaller cities may lack capacity, resource, or political will to address climate challenges • Many are still experiencing growth 	<ul style="list-style-type: none"> • Western communities with elevated wildfire risk (Ventura, CA) • Coastal communities facing storm/sea level rise risks (Charleston, SC; Norfolk, VA; Lake Charles, LA) 	<ul style="list-style-type: none"> • Proactive planning requires state and fed resources • Population loss / retreat may impact tax and other revenue • Lower income/racialized populations disproportionately impacted when city services are strained
2. Recipient Cities	<ul style="list-style-type: none"> • Urban center in a region with climate hazards • Marginally to significantly less vulnerable than neighboring communities • Has its own share of socio-economic or environmental stressors 	<ul style="list-style-type: none"> • Orlando, FL • Chico, CA • Austin and Dallas, TX 	<ul style="list-style-type: none"> • Less disaster funding available • Existing stressors can become a crisis • Smaller cities disproportionately affected • Invest in resilience to prepare current and future populations
3. Destination Cities	<ul style="list-style-type: none"> • Climate impacts less severe or acute • Access to fresh water • An affordable housing stock is available • Post-industrial, legacy cities with growth potential (and expressed desire to grow) • Has made investments in equity, livability, resilience 	<ul style="list-style-type: none"> • Duluth, MN • Buffalo, NY • Cincinnati, OH 	<ul style="list-style-type: none"> • Protect affordable housing to prevent displacement • Work with residents and CBOs on community-driven approaches • Invest in community cohesion • Continue investing in sustainability and resilience programs

Source: Marandi and Main, "Bird's Eye View," as updated on June 15, 2021 in correspondence with the author. Reproduced with permission.

The following are examples of practices from different sectors and at different scales relevant to this general strategy of identifying and building up resilient receiving communities:

Global practices:

- The Climate Resilience Toolkit (<https://toolkit.climate.gov/>) (USA)
 - o A compilation of federal climate science modelling tools and data to help US state, regional, and municipal governments plan climate change adaptation. This online toolkit empowers local decision-making by offering resources on evaluating a localities' exposure to sudden onset events, assessing its social vulnerabilities, and offering a step-by-step guide to developing a locally specific adaptation action plan.
- Mayor's Migration Council (<https://mayorsmigrationcouncil.org>) (International)
 - o The MMC, a global consortium of mayors, is using its network and collective voice to raise awareness of how cities, including secondary cities, are affected by climate displacement and pressing for national and international action and policy to respond to urgent migration priorities.⁶⁸
- Researching how climate displaced people could participate in urban planning (Bangladesh)
 - o The University of Exeter (UK) and the Refugee and Migratory Movement Research Unit (Bangladesh) are researching how climate displaced people in Chittagong, Bangladesh, a destination for displaced coastal and ethnic minority populations, could exchange their perspectives with local planners and shape improved municipal policies for the integration, security, and wellbeing of the community.
- Municipal integration of climate displacement forecasts (USA)
 - o Missy Stults, the sustainability manager at Ann Arbor, Michigan, commissioned a leading researcher to model climate displacement flows to her city. The projection was that her region would likely see 50,000 climate displaced people in the next thirty years. Stults ensured those projections were incorporated into all aspects of city planning.⁶⁹

⁶⁸ See Mayors Migration Council, "Climate Action: Cities at the Forefront," [mayorsmigrationcouncil.org](https://www.mayorsmigrationcouncil.org). <https://www.mayorsmigrationcouncil.org/climate>. (Accessed June 10, 2021).

⁶⁹ McDonnell and Shendruk, "Time to prepare cities."

Canadian practices:

- Cultural anchors for climate displaced communities (Mattagami First Nation, 3 hrs north of Sudbury, ON)
 - o Mattagami First Nation, population 200, is too small to be a host community to populations displaced due to wildfire. Its leaders decided instead to be a holiday destination and cultural anchor for First Nations evacuees. Being First Nations and having experienced evacuation themselves, the Mattagami First Nation knew Indigenous populations suffer culture shock and loss of identity in urban host communities, and so invited First Nations wildfire evacuees sheltering in Timmins, Ontario, to a day of familiarity and community on their reserve, with fishing, boat rides, food, and fun, lightening the mental health load of the homesick evacuees.⁷⁰
- One-stop community referral and psycho-social resource for evacuees (Siksika Nation, 1 hr east of Calgary, AB)
 - o Over 1000 people from Siksika Nation were evacuated due to a flood in 2013 (see Box 2). 152 homes were destroyed in the flood. Funded by the Alberta Health Services Psycho-Social Impacts of the Flood Funding,⁷¹ the Dancing Deer Disaster Recovery Centre (DDDRC) was established by a multidisciplinary team of community members to support recovery. DDDRC teams went door to door to meet with evacuees, listen to their concerns, and assess their needs. As trusted local intermediaries, they facilitated household planning and referrals to required psychosocial services in culturally appropriate ways and in the language of the evacuees, and advocated for them as they were moved through various forms of temporary shelter over several years of displacement.⁷²

⁷⁰ Naveau, Devin, and Elder Leonard Naveau Sr, "Planning for Seven Generations in the Mattagami First Nation" (sharing circle, Planning Our Home, April 7, 2021). <https://www.youtube.com/watch?v=L-AZPhcVpac>, t = 51: 07.

⁷¹ Sweetgrass, Susan Solway, "Flood victims get help with mental, emotional struggle," *AMMSA.com*: 22, no. 6, 2015, <https://ammsa.com/publications/alberta-sweetgrass/flood-victims-get-help-mental-emotional-struggle>.

⁷² Yumagulova, Lily. "Dancing Deer Disaster Recovery Centre: an interview with Darlene Yellow Old Woman-Munro, Siksika Nation, Siksika, Alberta," *Haznet*:8 no. 1 (Spring 2016).

Bottom line:

Building safe, climate resilient receiving communities able to support climate displaced people requires

1. local, community-driven approaches
2. Intensive inter-organizational partnerships (between governments, faith communities, nonprofits, private individuals, the private sector, etc.)
3. Investments in physical capacity as well as human (social cohesion/economic wellbeing) resilience
4. Federal coordination.⁷³

A National League of Cities policy brief on city-level adaptation for US climate displacement is forthcoming and would be a key resource.⁷⁴

How about slow onset disasters?

Slow onset disaster can be difficult to see and prioritize as it moves slowly and can be forgotten in the face of more immediate concerns. When a location is understood as becoming uninhabitable over time, a community can respond with planned relocation, which is a form of pre-emptive collective permanent move in the face of inevitable future forced displacement.

Planned relocation is too new to have data on best practices and outcomes,⁷⁵ but is gaining sustained attention as some communities make the decision to move, and forecasts show more will have to do so.⁷⁶ Costs are very high economically as well as in terms of place attachment, and this form of climate displacement is seen as an option of last resort.⁷⁷

⁷³ Mehedi, “Experts.”

⁷⁴ Communication with Anna Marandi, Program Manager of Climate Resilience and Sustainability, National League of Cities, and Kelly Leilani Main, Executive Director, Buy-In Community Planning, 15 June, 2021.

⁷⁵ Bower, Erica, and Sanjula Weerasinghe, “Leaving place, restoring home: Enhancing the evidence base on planned relocation cases in the context of hazards, disasters, and climate change,” Platform on Disaster Displacement (PDD) and Andrew & Renata Kaldor Centre for International Refugee Law, 2021.

⁷⁶ United States Government Accountability Office, “A Climate Migration Pilot Program Could Enhance the Nation’s Resilience and Reduce Federal Fiscal Exposure,” Highlights of GAO-20-488, July 2020, p. 45.

⁷⁷ Bower and Weerasinghe, Leaving Place.

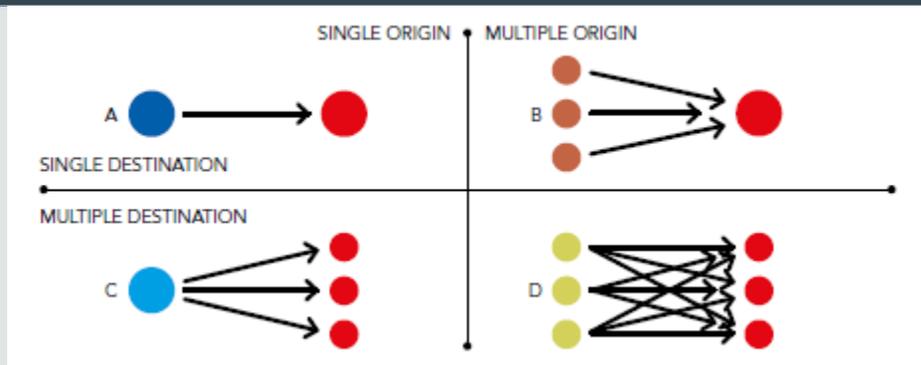
BOX 16 – DEFINITION OF PLANNED RELOCATION

Planned relocation is “the **planned, permanent** movement of a **group of people from identifiable origin(s) to identifiable destination(s)**, predominantly in association with one or more hydrometeorological, geophysical/geological, or environmental **hazard(s)**.”

Source: Leaving Place, p. 8.

Research on past and ongoing cases of planned relocation show great variability. The Platform on Disaster Displacement-commissioned study, *Leaving Place*, reviewed 308 cases of planned relocation and found that while relocation from a single origin to a single destination was most common, all four permutations of single to several origins and destinations could be found.

BOX 17 – TYPOLOGY OF PLANNED RELOCATION SPATIAL PATTERNS



Source: Leaving Place, p. 19.

Of the Type A relocations, from a single origin to a single destination,

1. Half of the relocations occurred after the population was already displaced (for instance by sudden onset displacement so severe that evacuees could not return home)
2. Completion of relocation could take from one year to decades
3. Most relocations were for short distances, less than two kilometers
4. About half involved less than 250 homes
5. About half involved Indigenous populations
6. In some cases, relocated people did not stay in the destination and moved back to the site of origin or elsewhere

7. In some cases, the destination was later found to be exposed to new or similar hazards to the origin
8. Environmental assessments of both origin and destination were evident in one-fifth of the cases reviewed, and few had policy frameworks associated with the relocation.⁷⁸

Leaving Place highlights the arduous, context-specific, multicausally-driven and often unpredictable path of planned relocation. A review of Canadian relocation cases, *Planned Retreat Approaches*, found similar layers of complexity, as evident for instance in community relocation consultations involving people living in one locality but under two administrations such as the residents of Surrey and the Semiahmoo First Nation in BC.⁷⁹

Bearing in mind that it is an understudied strategy, the following are proposals and initiatives relevant to planned relocation:

Global practices:

- Climate Relocation Trust Fund and Planned Relocation Guidelines (Fiji)
 - o The Republic of Fiji was the first country in the world to launch a relocation fund, called the Climate Relocation and Displaced Peoples Trust Fund for Communities and Infrastructure. It was also the first to develop a national policy specific to planned relocation, called the Planned Relocation Guidelines.⁸⁰ Standard Operating Procedures are in development to further support the operational aspects of the Relocation Guidelines.⁸¹
- Proposed federal pilot program and lead agency to coordinate relocation support across agencies (USA)
 - o The US Government Accountability Office outlined, in a report to Congress, its concern that lack of national leadership has made planned relocation in the US costlier, lengthier, and riskier, exposing the government to fiscal risk. It proposed that the federal government enact a pilot program to support communities that have chosen to migrate, managing risk, housing data and lessons learned from

⁷⁸ Bower and Weerasinghe, *Leaving Place*.

⁷⁹ Saunders-Hastings, P., Barnard, M., and Doberstein, B. *Planned Retreat Approaches to Support Resilience to Climate Change in Canada*. (Ottawa: Natural Resources Canada, 2020), p. 30-32.

⁸⁰ Ministry of Communications, "World's first-ever relocation trust fund for people displaced by climate change launched by Fijian Prime Minister," Fijian Government, September 25, 2019. <https://www.fiji.gov.fj/Media-Centre/News/WORLD%E2%80%99S-FIRST-%E2%80%93EVER-RELOCATION-TRUST-FUND-FOR-PEOP>.

⁸¹ Fiji. *Planned Relocation Guidelines - A framework to undertake climate change related relocation*, December 2018.

relocation cases, and streamlining access to technical and financial support across agencies.⁸²

- State-level buy-out program for clusters of households to relocate (New Jersey, USA)
 - o The State of New Jersey faced a high burden from severe recurrent flooding. Homeowners could access a federal fund to relocate, and for their homes of origin to be demolished and converted into public open space. The federal buyout on average took five years to complete, however. New Jersey's Blue Acres Program became an intermediary to support voluntary relocation of clusters of at-risk homes in the state, streamlining the paperwork process by having a dedicated mortgage team in-house, allowing appeals of appraisals, negotiating debt forgiveness, and paying rent differentials for 42 months for relocated tenants, thus reducing the burden on homeowners for voluntary retreat from areas of high risk.⁸³

Canadian practices:

- Expert analysis of planned relocation triggers, challenges, and key enablers (Natural Resources Canada)
 - o In support of Canada's Climate Change Adaptation Platform, Natural Resources Canada commissioned interdisciplinary professional research drawing from relocation practitioners, government, industry, and academia to create a foundation of common understanding around planned relocation in Canada. Written in accessible language, the report *Planned Retreat Approaches* is designed to support planning and action by practitioners and community stakeholders via pragmatic information about success factors and common pitfalls drawn from 6 case studies of planned relocation across Canada.⁸⁴
- Community-led housing buyout program (City of Grand Forks, BC)
 - o In 2018, a record flood forced the evacuation of 1,500 properties in Grand Forks, BC. 400 homes received moderate to major damage, with 50 considered too

⁸² United States Government Accountability Office, "A Climate Migration Pilot Program."

⁸³ McGee, Fawn, "Part 2: Household Level Retreat," National Adaptation Forum webinar, October 20, 2020. This initiative was limited in that the buy-outs were for single-family homes for the most part, skewing towards households of higher socioeconomic status.

⁸⁴ Saunders-Hastings, Barnard, and Doberstein. *Planned Retreat Approaches*.

damaged to repair.⁸⁵ The community voted to buy out neighbourhoods affected by the flood, subject to funding.⁸⁶ The government funding that arrived for 120 homes scheduled for buyout,⁸⁷ however, would only pay the diminished value of the homes post-flood⁸⁸ and was not always sufficient for buying a viable replacement home.⁸⁹ After significant community rallying,⁹⁰ the city engaged in extensive community consultations around economic options. Eventually, 90% of the homeowners accepted a buyout offer.⁹¹ The City of Grand Forks struggled with the economic impacts of the buyout program on disadvantaged groups, but was successful in its focus on social resilience via case-based psychosocial support for distressed homeowners before and during the buyout.⁹²

- First Nations-led development of a grade school resilience curriculum for Indigenous youth
 - o Líl'wat Nation, Mount Currie, British Columbia, relocated to its current location in 1986 due to regular flooding.⁹³ Drawing from these lived experiences, Xetólacw Community School of Líl'wat Nation developed and implemented a community-based youth-led disaster resilience program and school curriculum. Designed to engage Indigenous youth in leadership, risk management, and planning activities in their own communities, the program combines traditional practices and

⁸⁵ Grand Forks. <https://resilience.grandforks.ca/project-milestones/>

⁸⁶ Yumagulova, L. "Recovering from the worst BC flooding in modern history: A story of teamwork and cooperation," *Haznet*: 12 no. 1, (Spring 2019). <http://haznet.ca/recovering-worst-bc-flooding-modern-history-story-teamwork-cooperation/>

⁸⁷ FAQ

⁸⁸ Milestones.

⁸⁹ Saunders-Hastings, Barnard, and Doberstein. *Planned Retreat Approaches*.

⁹⁰ Thistlethwaite, Jason, Daniel Henstra and Anna Zirolecki. "Managed Retreat from High-risk Flood Areas: Design Considerations for Effective Property Buyout Programs," Policy brief no. 158, Centre for International Governance Innovation (April 2020). <https://www.jstor.org/stable/pdf/resrep24935.pdf>.

⁹¹ Knox, Jules. "Grand Forks city officials plan for next phase following buyout plan," *Globalnews.ca*, (May 6, 2020). <https://globalnews.ca/news/6912991/grand-forks-city-officials-buyout-plan/>.

⁹² Saunders-Hastings, Barnard, and Doberstein. *Planned Retreat Approaches*.

⁹³ Yumagulova, L., Yellow Old Woman-Munro, D. ., Gabriel, C. ., Francis, M. ., Henry, S., Smith, A., & Ostertag, J. Preparing Our Home by reclaiming resilience: Lessons from Lil'wat Nation, Siksika Nation and Mohawk Nation at Akwesasne, Canada. *Nordic Journal of Comparative and International Education (NJCIE)*, 4(1), 2020, 138–155. <https://doi.org/10.7577/njie.3626>.

knowledge with western science and technology and emergency management protocols.⁹⁴

Bottom line:

More data is needed to determine best practices in planned relocation. What is established,⁹⁵ however, is that

1. Ideally, planned relocation is community-driven and federally supported
2. Delaying relocation can increase impoverishment and make movement harder
3. People can be resistant to planned relocation
4. Disaster is often a trigger (and creates a 'policy window') for planned relocation, but it is better to be pre-emptive: \$1 spent proactively is \$2-10 in future costs saved
5. Consultation and good communication are central.

Key resource: [Planned Retreat Approaches](#)

Key resource: [Design Considerations for Effective Property Buyout Programs](#)

What do we do about climate displaced people looking to enter Canada?

Climate displacement in general occurs within borders: people do not want to move, and when they do, they do not move far. This fact, when added to Canada's geographic location, mean it is unlikely for large numbers of climate displaced people to arrive at Canada's borders.

That said, Canada is a country of immigrants. Historically, from Quakers fleeing persecution, to Black Loyalists, to Eastern European Jews, to Iraqi and Syrian refugees, people in distress have been admitted into Canada and integrated into society.⁹⁶ Canada has maintained its border policy and national values of tolerance and multiculturalism in ways that have kept Canada in the top

⁹⁴ Gabriel, Casey. "Lessons from Xetólacw Community School, Líl'wat Nation" (sharing circle, Planning Our Home, January 28, 2021). <https://youtu.be/1NFYCodk2os>. Please also see <http://preparingourhome.ca/wp-content/uploads/2017/05/Preparing-our-Home-brochure-3.pdf>

⁹⁵ Saunders-Hastings, Barnard, and Doberstein. *Planned Retreat Approaches*.

⁹⁶ Immigration, Refugees, and Citizenship Canada, "Canada: A history of refuge." Accessed June 17, 2021. <https://www.canada.ca/en/immigration-refugees-citizenship/services/refugees/history.html>.

ten recipients of migrant populations since the 1960s.⁹⁷ A recent poll also found Canada most accepting of migrants of any country in the world.⁹⁸

In 2016, the proportion of foreign-born people in Canada was 21.9%, and by 2036, that proportion is projected to be 28.2%.⁹⁹ Canada's labour shortages, low birth rate, and aging population are driving increases in immigration quotas, with the coronavirus pandemic further spurring federal, territorial, and provincial consensus on the importance of their respective immigration programs for economic recovery.¹⁰⁰

As immigration is a past and ongoing priority, it would be in keeping with Canada's global political commitments as a Champion of the Global Compact for Migration¹⁰¹ to integrate emerging concerns around climate displacement into the existing humanitarian, economic, and security interests of Canada's immigration framework. As a medium power, Canada could meaningfully protect populations at risk through targeted humanitarian border policies.

In doing so, it may be useful to consider the following:

- Even though climate displacement is happening already, it is often invisible. People facing drought could be entering Canada on study visas, for instance, or as seasonal workers
- Accepting migrants is a highly effective form of overseas assistance. Migrants from low- and medium-income countries usually send remittances to their country of origin, at

⁹⁷ See the Top 25 Destinations of International Migrants tool of the Migration Policy Institute Data Hub. <https://www.migrationpolicy.org/programs/data-hub/charts/top-25-destinations-international-migrants#>

⁹⁸ Esipova, N., J. Ray, and D. Tsabutashvili. "Canada No. 1 for Migrants, U.S. in Sixth Place," Gallup.com, September 23, 2020. <https://news.gallup.com/poll/320669/canada-migrants-sixth-place.aspx>

⁹⁹ Statistics Canada, "Number and proportion of foreign-born population in Canada, 1871 to 2036." Accessed June 17, 2021. <https://www.statcan.gc.ca/eng/dai/btd/othervisuals/other006>

¹⁰⁰ Thevenot, Shelby, and Kareem El-Assal. "Canada's immigration ministers plan for future after coronavirus," *cicnews.com*, July 28, 2020. <https://www.cicnews.com/2020/07/canadas-immigration-ministers-plan-for-future-after-coronavirus-0715174.html>

¹⁰¹ Under the UN Network on Migration, GCM Champions advocate for the implementation of the GCM. See Bates-Eamer and Benson, "Climate Change Displacement," p. 24.

rates three times that of foreign aid.¹⁰² These remittances could increase resilience in the country of origin, averting future displacement.¹⁰³

Examples of policies, proposals, and practices relevant to cross-border climate displacement follow.

Global practices:

- Proposed 'mobility as a release valve' policy (Australia)
 - o Arguing that migration is a form of adaptation and risk management strategy, this proposal suggests giving Pacific peoples at risk of climate displacement preferential access to study, work, and family visas to Australia, thus increasing linkages between Australia and regional states facing climate hazards and easing the integration burden of future climate displacement. By also integrating development assistance into the strategy through vocational training in the Pacific states, the labour opportunities and contributions of the migrants would increase for mutual benefit.¹⁰⁴
- Integrated action plan for early global leadership on regional migration priorities (New Zealand)
 - o Along with the Pacific Access Category Resident Visa, New Zealand has formulated an array of highly regarded strategies in Overseas Development Assistance, international diplomacy, regional dialogue, and research to address climate displacement in the Pacific.¹⁰⁵

¹⁰² The Economist. "When a worker migrates, a family benefits," November 24, 2019. (Accessed June 10, 2021). <https://www.economist.com/special-report/2019/11/14/when-a-worker-migrates-a-family-benefits> Nov 14 2019. This entire special issue on migration argues that both origin and destination countries benefit from the active economic, intellectual, and cultural exchanges inherent in migration, and the downsides can be addressed with careful policies.

¹⁰³ McAdam, Jane. Interview by author. December 3, 2020. This section leans heavily on her pioneering work and guidance.

¹⁰⁴ McAdam J., and J. Pryke, "Climate Change, Disasters and Mobility: A Roadmap for Australian Action," Kaldor Centre for International Refugee Law, UNSW, Sydney, Policy Brief 10, 2020. <https://www.kaldorcentre.unsw.edu.au/publication/policy-brief-10-climate-change-disasters-and-mobility-roadmap-australian-action>.

¹⁰⁵ New Zealand. Ministry of Foreign Affairs and Trade. "Pacific climate change-related displacement and migration: a New Zealand action plan," 2 May 2018. <https://apo.org.au/node/213946>.

- Definition of and responsibility for ‘climate migrants’ in domestic migration law (Bolivia)
 - o Bolivia’s 2013 migration law includes a definition of ‘climate migrants’ and assigns to the Bolivian National Migration Council the responsibility for
 1. promoting the signing of international agreements for the protection of climate-affected Bolivians
 2. coordinating public policies around admission of climate migrants.¹⁰⁶

Canadian practices:

- Response to the 2010 earthquake in Haiti¹⁰⁷
 - o Canada’s humanitarian response to the 2010 earthquake in Haiti included
 - priority processing of family sponsorships for Haitians
 - extensions of temporary status and work permits for Haitians visiting Canada who could not return to Haiti.
 - o A 2017 law in Ecuador set out a two-year humanitarian visa as a similar temporary protection for people affected by disaster.¹⁰⁸
- Private sponsorship of refugees
 - o Canada allows groups of 5 Canadian citizens or permanent residents to sponsor someone deemed a refugee by the UNHCR or a foreign government to come to Canada.¹⁰⁹ This program could be expanded to climate displaced people.¹¹⁰

¹⁰⁶ Bolivia. *Ley N. 370. Ley de Migración*. <https://www.acnur.org/fileadmin/Documentos/BDL/2014/9556.pdf>. See Article 4(16) for the definition of *Migrantes Climáticos*, and Article 65 (*Migración por cambio climático*) for the responsibilities of the National Migration Council towards them.

¹⁰⁷ Immigration, Refugees, and Citizenship Canada. “Special measures in response to the earthquake in Haiti,” ARCHIVED – Operational Bulletin 179 – March 5, 2010. <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/operational-bulletins-manuals/bulletins-2010/179-march-5-2010.html>.

¹⁰⁸ Ecuador. Suplemento – Registro Oficial N° 938. *Ley Orgánica de Movilidad Humana*. <https://www.acnur.org/fileadmin/Documentos/BDL/2017/10973.pdf>. Article 58 also states that the humanitarian visa can be extended if the emergency conditions have not abated after two years.

¹⁰⁹ Immigration, Refugees, and Citizenship Canada. “Groups of five: about the process.” <https://www.canada.ca/en/immigration-refugees-citizenship/services/refugees/help-outside-canada/private-sponsorship-program/groups-five.html>.

¹¹⁰ Kaduli, Stephen. “Canada has a moral obligation to accept climate migrants,” *Policy Options*, February 5, 2020. <https://policyoptions.irpp.org/magazines/february-2020/canada-has-a-moral-obligation-to-accept-climate-migrants/>.

Bottom line:

Canada opened its borders to non-Europeans in the late 1960s in response to changing international norms around racial discrimination.¹¹¹ Canada could likewise now provide modest but significant leadership as global border policy norms change due to climate displacement.¹¹² Canada could proactively¹¹³

1. Determine a systemic response for when climate disaster hits
2. Offer temporary protection as well as pathways to permanence for the climate displaced
3. Enhance flexibility in existing migration categories for people at risk
4. Integrate diplomacy, development assistance, and climate displacement policies
5. Focus on specific regions or countries at risk
6. Consider mutual cooperation in regional and subregional agreements.

Diasporic communities in Canada, perhaps from countries at high risk, could be important partners in developing climate displacement policies and bilateral linkages with their countries of origin.

¹¹¹ Murray, Sheila. "Environmental Migrants."

¹¹² See box 14 for the precedent on non-refoulement.

¹¹³ These recommendations are based on McAdam. Interview.

CONCLUSION

Migration has long been a livelihoods strategy. Whether as traders, pilgrims, or in search of a better future, humans have moved through the ages. Climate change will raise the scale of human movement, and add urgency, grief, and trauma to the mix. Some people may move pre-emptively to find security in less disaster-prone areas, or as a strategy for sending home remittances to vulnerable family members. Others may be forced by disaster to leave their homes and rebuild their lives elsewhere. The circumstances are myriad and individual, with every journey central to the future of the family embarking on it.

Climate science and migration modelling is clear: people are and will be moving as climate conditions change. We have emerging tools at our disposal to ease that movement, so it can proceed safely; it need not be threatening to receiving communities, nor devastating to the sending communities. Families in distress can be supported in between, as they travel to find shelter.

Climate change is forcing a new normal, much like the COVID-19 pandemic has done. This time, however, we know it is coming. We have time to prepare. This report has worked to offer an overview of current resources and practices relevant to Canada. While research can offer heuristics for approaching climate displacement, each context, each disaster, and every community has its own characteristics. Fundamentally, local approaches supported by an enabling federal structure are best, and community ownership and consultation are key.

What matters is enabling movement. It behooves us, knowing what we do, to act with resolve and

1. Address the root causes of climate displacement by cutting emissions
2. Raise the resilience of our communities to cope with the expected and unexpected
3. Facilitate the whole-of-society collaboration needed to ensure our collective ability to move out of harm's way, to find community and shelter, no matter what comes.

There are no easy answers and the road ahead will be difficult. The good news, however, is that investments in climate displacement preparedness build stronger, more resilient communities, and pay for themselves by averting much higher future costs. We may not have familiar landmarks in the migration patterns of our future, but, unlike many, we have a window of time to chart a safer path decisively now, before crisis hits, protecting our communities and ensuring shelter from the storm.

Change is hard. It is coming. Let's get through it.

SUMMARY OF KEY RESOURCES

Section	Key resource
Box 1 - Terminology	IOM <i>Environmental Migration Portal - Environmental Migration</i> . https://environmentalmigration.iom.int/environmental-migration-1 .
Box 3 – UNFCCC Slow Onset Technical Paper	UNFCCC, “Slow onset events technical paper, 26 November 2012”. UNFCCC/TP/2012/7. unfccc.int/resource/docs/2012/tp/07.pdf
Box 7 – Global Report on Internal Displacement 2021	IDMC, <i>Global Report on Internal Displacement (GRID)</i> , (Geneva: IDMC, 2021). https://www.internal-displacement.org/global-report/grid2021/ .
Box 9 – 2018 Groundswell Report	Rigaud, Kanta Kumari, Alex de Sherbinin, Bryan Jones, Jonas Bergmann, Viviane Clement, Kayly Ober, Jacob Schewe, et al. <i>Groundswell: Preparing for Internal Climate Migration</i> : World Bank, Washington, DC, 2018. https://openknowledge.worldbank.org/handle/10986/29461 .
Box 10 – IDMC Global Disaster Displacement Risk Report	IDMC, <i>Global Disaster Displacement Risk: A Baseline for Future Work</i> . (Geneva: IDMC, 2017). https://www.internal-displacement.org/sites/default/files/publications/documents/201710-IDMC-Global-disaster-displacement-risk.pdf .
Box 11 – Flooding Hope (video)	Ballard, Myrle and Shirley Thompson, “Flooding Hope: The Lake St. Martin First Nation Story” (Flooding Hope), August 11, 2016. https://lakestmartinfirstnation.ca/flooding-hope .
Why not continue as is, without specialized policies? – Climate Change: Its impact and policy implications	Canada. <i>Climate Change: Its Impact and Policy Implications</i> . Vol. no. 2019-46-E. Ottawa: Library of Parliament, 2020. https://lop.parl.ca/staticfiles/PublicWebsite/Home/ResearchPublications/BackgroundPapers/PDF/2019-46-e.pdf
How about slow onset disasters? – Planned retreat approaches	Saunders-Hastings, P., Barnard, M., and Doberstein, B. <i>Planned Retreat Approaches to Support Resilience to Climate Change in Canada</i> . (Ottawa: Natural Resources Canada, 2020). https://geoscan.nrcan.gc.ca/starweb/geoscan/servlet.starweb?path=geoscan/fulle.web&search1=R=328323 .
How about slow onset disasters? – Design Considerations for	Thistlethwaite, Jason, Daniel Henstra and Anna Ziolecki. “Managed Retreat from High-risk Flood Areas: Design Considerations for Effective Property Buyout Programs,” Policy brief no. 158, Centre for International

Effective Property
Buyout Programs

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Abstract

Climate change is catalyzing a new normal, one where the increased severity and frequency of weather-related disaster is driving people to move. This movement is not problematic in itself; however, under crisis conditions it can be devastating. This report outlines emerging global climate displacement strategies to support Canadian policymakers and practitioners in planning for and enabling safe, dignified human movement and resilient, cohesive communities in the face of climate change.