

Apocalypse Soon

Flooding. Drought. Wildfires. Mass migrations of desperate people. Mike Blanchfield explains why security experts fear climate change will lead to war on a scale we have yet to see on this planet.

by Mike Blanchfield *Ottawa Citizen* July 25, 2009



Right: The Dead Sea, the lowest point on Earth's surface, is shrinking as its salty waters rapidly dry up.

Photograph by: Ronen Zvulun, Reuters

October 1, 2020 Thousands of people pour out of Manhattan onto an armada of ships. "October Surprise" hit with a vengeance -- a massive hurricane has paralysed New York City. World leaders watch the disaster unfold as they're airlifted from the United Nations General Assembly on the banks of the overflowing Hudson River. Meanwhile, on Wall Street, North America's financial centre sits in watery ruin.

"I don't think we will get the New York Stock Exchange back up and running as quickly as we did after 9/11," the president of the United States writes in his diary.

"We counted on this not happening -- at least

not yet. Most scientists assumed the worst effects of climate change would occur later in the century. Still, enough warned there was a chance of an extreme weather event coming sooner and, if it hit just right, one of our big urban centres could be knocked out." The president recalls his most recent briefing on climate change where advisers said chances of a weather-related catastrophe were slim. Yet it's hard to ignore the turmoil unfolding around the world. He wonders if the dam burst that killed 100,000 in China will break the Communist Party's grip on power. He thinks of the food shortages that have

forced more people into the world's urban centres, sparking tension and conflict.

The president gets ready to board a helicopter for an aircraft carrier, where the UN General Assembly has relocated.

He writes one final thought in his diary: "The culmination of disasters, needed cleanups, permafrost melting, lower agricultural yields, growing health problems and the like are taking a terrible toll, much greater than we anticipated 20 years ago."

War in the forecast

This presidential diary is, of course, fiction. But its inclusion in a November 2008 report by the National Intelligence Council, a Washington security think-tank, illustrates a grim and troubling concern shared by the Pentagon, the British defence ministry, the UN, major aid agencies and, of course, environmentalists.

Climate change has been linked to predictions of massive flooding, droughts, population explosions and massive migrations of uprooted and desperate people facing life-threatening food and water shortages.

"Climate security" is a phrase that is now being heard well beyond the war rooms of the West.

The trepidation is that these threats will fuel a drive for war on a scale we have yet to see on this planet, bringing tension to stable parts of the world, making the tense places worse.

Don't dismiss this as military-driven paranoia: the alarm is being sounded by non-military actors, from UN agencies, leading philanthropists, the World Bank, as well as major international aid agencies that have always strived to maintain a healthy distance from the world's military establishment.

Here in Canada, the connection between climate change and global instability is not discussed publicly. No one seems to know why.

"I don't want to be a scaremonger, but I am concerned climate change does not seem to be a priority within Canada's security, intelligence, defence establishment. I'm concerned that, as far as I know, Canadian security players haven't analysed the existing scientific reports," says Margaret Purdy, who spent 28 years as a leading federal public

servant in Canada's security apparatus, including as associate deputy minister of defence. "This is a large, existential kind of threat; it is different. I can't think of any precedent for this kind of phenomenon."

But some of Canada's European allies -- Purdy points to Britain as the leader -- have embraced climate change as a security issue. "They have ministers who have certainly stepped up and talked about it in very direct language."

Anthony Cary, the British High Commissioner to Canada, says despite government cuts, London has supplied extra funding to spread concern about climate security. The British have a senior Canadian climate security officer, whose job it is to liaise with government departments, academics and other key players. He stresses this is "not a nefarious attempt to attack Canada, or point out the inadequacies of Canadian policy," but rather an effort to "encourage Canadians to see it as a cross-cutting issue that should involve the whole of government, that needs to be led from the centre."

Back in 2006, British Defence Secretary John Reid sounded the alarm in a major speech that linked climate change and declining natural resources to an increase in violent conflict over land, water and energy. He said climate change "will make scarce resources, clean water, viable agricultural land even scarcer" and will "make the emergence of violent conflict more rather than less likely."

Across the Atlantic Ocean, U.S. Secretary of State Hillary Clinton told her Senate confirmation hearing that climate change is an unambiguous security threat. "At the extreme, it threatens our very existence," she said. "But well before

that point, it could well incite new wars of an old kind over basic resources like food, water and arable land."

The Pentagon's most recent National Defense Strategy, unveiled last summer, lists climate change alongside terrorism and rogue states going nuclear. "Over the next 20 years, physical pressures -- population, resource, energy, climatic and environmental -- could combine with rapid social, cultural, technological and geopolitical change to create greater uncertainty," says the Pentagon paper. "Collectively, these developments pose a new range of challenges for states and societies."

This month, a diverse group that included the U.S. Army, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Bank, and the philanthropic giant Rockefeller Foundation warned in a 7,000-page tome that the "future effects" of climate change have "unprecedented implications for political and social stability," according to Britain's Independent newspaper.

Yet, we hear little in Canada, even though the implications are serious, if not dire -- particularly in the Arctic where polar ice caps are melting faster than anyone predicted. The National Intelligence Council report classifies Canada as a "winner" because a hotter planet would open northern lands to farming and habitable settlement. "I wouldn't go that far," says Purdy, now a senior research fellow at the Center of International Relations at the University of British Columbia. "I think that's a fairly narrow view of what could be in store."

As she looks to the future, Purdy sees the following threats:

- In Atlantic Canada, storm surges and

rising sea levels could cause widespread flooding and economic hardship;

- In Ontario, a loss of critical infrastructure, including power generation and water treatment;
- Droughts, floods and wildfires in the Prairies;
- In B.C., forest fires, water shortages and new infestations of bugs;
- Across Canada, extreme weather that will increase the risk of infectious diseases.

Problem is, Purdy says, that with the exception of some notable work in the departments of Health and Natural Resources, no one has tried to quantify the long-term security effects of climate change in Canada.

The Harper government's ambitious Arctic strategy, which calls for economic and social development, plus a greater military presence, is the best example of a policy that could address future threats, says Purdy. "There is no doubt we will see the first implications in the Arctic. While that's very serious and needs sustained attention, that's not the whole picture," she says. "We have seven climate zones and this huge footprint. We're going to feel a wider variety of impacts than most European countries."

Purdy says the government must answer three questions, and urges the secretive security apparatus to bring in scientists and experts to help respond to the following:

1. Are the current government contingency plans adequate to deal with droughts and other disasters?
2. How vulnerable is the critical infrastructure of nuclear plants, military installations, dams and transport networks?
3. How ready is the public health system to deal with new pests and diseases that are considered rare, but could appear later when the country heats up?

"Over the last two years, I'm increasingly concerned that Canada does not seem to be giving the same serious and sustained attention to the physical impacts that are laid out pretty clearly in the science and how they could translate into stresses and challenges for Canadian security organizations," says Purdy.

Canada will also face pressure at home that will include demands to accept big numbers of settlers from other parts of the world.

By 2050, when the Earth's population has swelled to nine billion, the majority of the planet's inhabitants will live in cities, where they will have "crushing environmental footprints." But they will be just as vulnerable to floods, droughts, storms or other intense climate shifts,

concludes a new study on future migration patterns, released this spring and sponsored by CARE International, the UN Institute for Environment and Human Security and the Earth Institute of Columbia University.

"Climate change will motivate or force millions to leave their homes in search of viable livelihoods and safety," said the study, which predicted "the mass of people on the move will likely be staggering and surpass any historical antecedent."

Estimates vary from 200 million to 700 million "environmental migrants" by 2050, a moniker that will come to replace "refugee."

"Hundreds of millions, according to the World Bank, will be on the move just because of sea level rise," says Purdy.

"What will happen in Latin America? What will happen in the Caribbean? What will happen in vulnerable countries, including Asian countries that are countries of origin for our refugee movements in Canada?"

Cary, the British envoy, says the wave of migration will become a great source of international tension. "It would lead to huge pressures on countries like Canada to accept very large numbers of people."

Meanwhile, as security breaks down across the globe, Canadian Forces troops will be in even higher demand.

Earlier this year, the British Ministry of Defence predicted that repeated flooding will threaten major coastal cities and their critical infrastructure.

The melting of the polar ice caps will create "territorial tensions," with Arctic rim states competing for vast, untapped natural resources (this would, of course, apply to Canada and Russia, not to mention the U.S. and several European countries).

The British military also predicted that weather will make life even more miserable in already tense parts of the world:

- In the Middle East, rainfall shortages will reduce access to drinking water;
- India, China and Pakistan will face a reduced water supply from melting Himalayas glaciers, "which will have a major impact on regional security. The same is true for Middle East countries such as Turkey, Syria, Iraq, Jordan, Lebanon and Israel."

Purdy says it's not farfetched to conclude that climate change will fuel a rise in international terrorism.

"Muslim countries will be among the hardest hit," she says. "Bin Laden has spoken more than once on the inequities of climate change."

Already, some see harbingers in this summer's drought on the Prairies and in such high-profile disasters as Hurricane Katrina on the U.S. Gulf Coast, the

cyclone that ravaged Myanmar and the steady melt of Canada's Arctic.

"We don't know if Hurricane Katrina was caused by climate change, but we do know to a certainty that we're rapidly heading for a world where climate change causes more Katrinas," U.S. Democratic senator and former presidential hopeful John Kerry told a June symposium at the Council on Foreign Relations in New York. "More than one-third of Americans live within coastal counties."

This past week, Kerry and retired military experts warned the Senate Foreign relations committee that rising sea levels could flood U.S. naval bases not only in the Indian Ocean but on the docks of the Atlantic Fleet and NATO's North American headquarters in Norfolk, Virginia.

In the fictional Manhattan flood scenario, the U.S. president of 2020 confides in his diary:

"I guess we had it coming, but it was a rude shock. Some of the scenes were like the stuff from World War II newsreels, only this time it was not Europe but Manhattan."

Purdy says U.S. President Barack Obama has shown a clear understanding of the security risks.

"This issue was certainly paid attention to by think-tanks and scholars, but it really took the arrival of Barack Obama with an aggressive approach to climate change."

She is hopeful U.S. influence combined with the growing pressure out of this December's world climate change conference in Denmark will prod Canada and others to action.

Cary says Britain's diplomatic outreach is yielding positive signs at the highest levels.

"I've spoken to Jim Prentice, and I think he gets it," Cary says of Canada's environment minister. "I think Canada will want to be a positive contributor."

Purdy says years of inaction by Canada and other governments cannot be mitigated. Even if ambitious greenhouse gas reduction schemes or other dramatic interventions were on the horizon, they'd have little effect.

"What is really distressing is it's just been in the last few months I've started to notice this flurry of very reputable scientific reports coming out that show that a lot of worst-case scenario projections. The consensus is they are underestimated. In terms of temperatures, sea level, etc., there's a now a growing consensus the impacts will be faster and more several overall ... that's a concern," she says.

"The causes can't be traced to the usual suspects -- spies, criminals, terrorists. The cause comes back to all of us."