

PREFACE

The truth is that we have located our agriculture and built our communities and all associated infrastructure in places and to standards appropriate to what we thought was a relatively stable climate; climate conditions upon which we can no longer rely. What should be deeply alarming to all is that climate we have taken for granted for so long is, right before our very eyes, being replaced by a climate that, unless we act now, we may not survive. — Robert Sandford, Canadian water policy expert (quoted in Smith 2021)

Much has been published on the topic of global climate change, and we owe a debt of gratitude to these previous works. As we were writing this book in 2021–22, Nature taught us even more: wildfires in California, Oregon, Siberia, Europe, and China; heat waves in Europe, China, and North Africa; droughts in the southwestern United States, China, and Afghanistan; dwindling water levels in the Colorado, the Mississippi, the Yangtze, and the Rhine Rivers; major flooding in Yellowstone Park and Kentucky; Seoul, Korea; and Pakistan. Particularly memorable were:

- Death Valley (1.46 inches [3.7 cm] of rain, nearly a year's rainfall, in 3 hours!)
- Dallas (a summer's worth of rain in a day)
- Pakistan (millions displaced and much of the country covered by floodwaters)
- British Columbia (a deadly heat dome, followed by drought, wildfires, and floods)

All this plus a host of other climate-change-induced disasters are happening far sooner than scientists had anticipated.



Figure 1. Mary Edna Fraser, *Fossil Fuel Map*, 2022. Batik on silk, 48 × 55 in. (1.2 × 1.4 m). This map shows the areas around the world that potentially have the world's oil, gas, and coal deposits, based on data from the US Geological Survey, the European Commission, and other government sources. Purple and brown areas represent oil and gas, while red areas show possible coal deposits. Conservative in methodology, the map indicates the minimum bounds of fossil fuel on our planet. Developed by Alice McGown and the Leave It in the Ground Initiative, the art showcases the extent of carbon energy sources that must stay in the ground if humanity is to prevent catastrophic climate change. For more information, visit <https://www.leave-it-in-the-ground.org>. Image © Mary Edna Fraser.

