Preface

Almost fifteen years ago, I was a doctoral student zigzagging some 3,000 miles across the western United States in a campervan, husband and three-month-old daughter in tow, interviewing water agency officials about groundwater law. The idea for this book was first inspired by their observations. The comment that I heard again and again went along the lines of "It's the cumulative impacts of groundwater pumping that are a big deal for us. Gosh, it would be good to have a better approach to that." It was not just the frequency of that comment that was striking, or the fact that I went on to hear the very same thing from officials in Australia, too. It was the reverberations of that same problem across very different environmental contexts. Cumulative impacts were a major concern for biodiversity, for climate change, for human health – for so many things that we value about our environment. Not only would it be useful to many different environmental settings to have a better way to deal with cumulative impacts but the wisdom collected across those settings could also surely help inform initiatives in other places and contexts.

Cumulative impacts are sneaky. Many diverse small harms aggregate with large ones, often over a long period of time, and in our legal blind spots – or in spots of willful blindness. To best address cumulative environmental problems, then, the design of laws and other formal rules needs to respond to why it is difficult to address these problems (what makes them sneaky?), while being alert to weaknesses in typical laws.

Accumulations of harm or risk also lie at the center of concerns about disproportionate impacts on populations who have fewer resources to deal with them, from Canada's First Nations fighting against cumulative impacts to caribou, to the aggregate climate vulnerabilities that affect coastal populations in South Asia. Dealing with cumulative environmental problems then is not

just a question of what we care about, but who we care about, and our responsibilities to each other.

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If I could construct this book in a three-dimensional shape, I would make it a series of bridges crossing boundaries between disciplines, jurisdictions, and parts of our natural world. Powering that construction would be the conviction that despite the massive and intractable environmental problems that we face, lawyers who want to address those problems can benefit immensely from gazing across these boundaries.

Crossing disciplinary boundaries is a deeply held objective for me. It sprouted as I studied for my undergraduate degrees in law and environmental engineering at the University of Melbourne. It grew when I practiced as an environmental and resources lawyer in a private firm and in a government agency, working with scientists and engineers across diverse environmental areas. Stanford Law School's social science–infused vision of law and the interdisciplinary Stanford Woods Institute for the Environment nurtured those aspirations further when I was a master's and JSD (Doctor of the Science of Law) student.

But the seed of those boundary-spanning aspirations formed much earlier, in practicing cultural boundary-crossing as the child of parents from a small southern Italian village and a small Midwestern US town, myself growing up in a large Australian city. Love of languages, from the Italian of home to the French, Chinese, Latin, and German of school and university certainly also contributed. These cultural and linguistic backgrounds have also informed and benefited the case studies of this book.

Professionally, in the almost twenty years since I finished my first law degree, I have reveled in working in diverse contexts, gaining diverse perspectives, working with agencies and nonprofits where I work closely with those of different disciplinary views and traditions – from ecologists to Indigenous knowledge-holders to economists. I have had most of these experiences in Western countries as a non-Indigenous person. Where I have worked in the context of lower-income countries, I have done so from a position of privilege. That much of my practical and scholarly experience has been in Western contexts with a rule of law tradition doubtless shapes the perspectives I share in this book, which stem from the belief that law is not (or not merely) performative; it is an essential tool that can make a difference.