For years, environmental education has faced an existential crisis. Is its goal to build the capacity of participants to make their own decisions about whether or not to take action? Or do environmental educators aim to improve the environment—using education as a tool to address the environmental crisis? Recently, as research documenting the link between nature and human well-being has captured the public’s attention, environmental educators have turned to health and youth development outcomes for program participants. Other environmental educators view their work as science literacy—as a means to make science come alive for students and to teach about ecological systems.

As the author of this book, I am not shy about my belief that environmental education should be directed at addressing environmental problems. But I have tried to write for those who prioritize building participants’ capacity to make informed decisions, helping humans thrive, and teaching science. I believe that we benefit from a “big tent” approach that encompasses a diversity of ideas and strategies. I also believe that different environmental education programs can realize multiple goals simultaneously—and that the pathways to realize environmental quality, community well-being, and human health are intertwined.

But—and this is the thesis underlying this book—environmental educators, regardless of our ultimate goals, are more effective when we articulate sound theories of change. A theory of change is our beliefs about how program activities lead to program outcomes. We all have big goals like environmental quality, sustainability, resilience, or ensuring that every child thrives. To get to these big, or ultimate, outcomes of environmental education, people need to engage in environmental behaviors, like reducing meat or energy consumption, and in collective action, like restoring wetlands or advocating for a carbon tax.

Environmental educators impart knowledge, influence attitudes and norms, nurture environmental identity and political efficacy, and build trust in order to change participants’ behaviors. A theory of change drawing from research on how trust enables people to act collectively might be “When participants do a challenging outdoor activity like climbing a mountain or running a race together, they learn to trust each other. Having built trust, they are more likely to work together to help steward a local green space.” Other times environmental education programs start by engaging participants in the actual desired behaviors—a nature center serves only vegan meals, or a business incentivizes workers
to volunteer for a litter cleanup. The environmental educator might reason, “Through engaging in a litter cleanup, participants develop norms that will lead to similar future behaviors. By the time they pick up the twentieth plastic straw, maybe they start to realize connections with their own behavior and responsibility.”

Whether their pathway to changing behavior is through first building trust that leads to collective action, through engaging participants in a behavior where they develop norms that lead to future behaviors, or any number of other pathways, environmental educators can articulate their theory of change. Generally, a theory of change is expressed as a diagram showing the relationships among program activities; intermediate outcomes like trust, norms, knowledge, and efficacy; environmental behavior or collective action outcomes; and even ultimate outcomes like environmental quality, health, and resilience. A short narrative explaining the diagram is also part of a theory of change.

All environmental educators—including myself—can do more to critically reflect on how our theories of change determine what we do. I think that the lack of attention to our theories of change, and the tendency to do what seems natural in education—that is, to teach or convey knowledge—are even more important than the differences we debate about the fundamental purpose of environmental education. We can incorporate multiple approaches, but to reach our goals, we need to pay attention to the research and our experience, and to articulate, test, and adapt our theories of change. We also need to realize that environmental education is one tool in a toolbox—or perhaps more accurately one node in a network—of interwoven efforts to steward, restore, and even transform our environment in ways that benefit humans and other life. In addition to environmental education organizations, nodes in the network include NGOs focused on community and youth development, businesses seeking to address sustainability, and universities wanting to engage in participatory research to solve real problems. Environmental education alone cannot address the climate crisis, plastics proliferation, or human health. But it can play an important role working alongside—and by linking with—other social and environmental endeavors.