

BREAKPOINT: RECKONING WITH

America's Environmental Crises

Jackson, J. and Steve Chapple
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“...our journey became a metaphor for the range and scope of the environmental problems we all face, and of how the things we do in one place affect the wellbeing of far-away places and peoples we have never met—not just in the Heartland or Delta, but everywhere that human actions are pushing the environment beyond its limits” (Jackson and Chapple, xii).

In *Breakpoint: Reckoning with America's Environmental Crisis*, co-authors Jeremy Jackson and Steve Chapple bring together a wide range of literature and interviews to problematize interconnections in the social and ecological systems that have contributed America's greatest environmental crises. Jackson, a distinguished ecologist and environmentalist, provides historical ecological discourse to backdrop their understanding of environmental impacts, as well as regional social-ecological histories and the recent evolution of global market demands for natural resources. Meanwhile, journalist Chapple's contribution is evident in the book's structure, which follows a series of interviews from trips southward along the Mississippi Delta to New York, Florida, and California. Their argument is clear: the effects of climate change on global social-ecological systems will be profound, but all is not hopeless (yet). They contextualize and humanize their argument around three main issues as they are rooted: industrial agriculture, sea level rise, and extreme weather.

In the first section of the book, “Heartland”, Jackson and Chapple discuss the impacts of industrial agriculture on the hydro-ecological systems of the United States in an era of climate change, globalization, and changing economic demands for natural resources. The Heartland, once an area famed for its production of corn and soybean for human consumption, has overwhelmingly evolved to produce corn for ethanol and animal feed. Consequently, soil erosion, groundwater contamination, cyanobacteria blooms, and superweeds are but some of the negative human-environment impacts experienced in some proximity to industrial agricultural complexes. In this section, the authors bring together the picture of America's agricultural system in crisis and point our way out of it through solutions like vertical farming and ecosystem-based agricultural management practices.

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In the second section of the book, the “Coast”, the authors use New Orleans and Miami to explore the impacts of sea level rise and inappropriate land use. America’s coastal cities are extremely vulnerable to erosion and land loss, even under conservative climate model projections. Along the Mississippi Gulf Coast, the authors cite upstream nitrogen runoff and mismatched human-environment land use systems as having further entrenched us in the misfortunes of our coasts. The authors argue we are at a crossroads that requires critical decision-making and systemic changes, including managed coastal retreat and more advanced and just mitigation strategies.

In the third section of the book, “Too little water and too much” the authors remind us that people all along America’s coasts will be impacted by climate change, and the cost of relocation efforts and other long-term mitigation strategies are far more favorable than the costs of simply *responding* to disasters as they happen. The authors also argue that the United States cannot afford to roll back environmental protections nor leave them unenforced. We need look no further than the Mississippi Delta’s ‘cancer alley’ to see how chemical plants pose great risks to life and safety; or to the droughts, wildfires, and intense storms that have pummeled the United States in recent years.

The strength of the book lies in the immediacy of these complex issues. The way this information is presented is what keeps the reader’s attention; the authors move beyond rich facts and data to storytelling. Thanks to a cast of characters, environments, and subjectivities, the introduction of each place along the Delta builds further complexity around modern issues of land use practices and environmental change. The book could be strengthened by drawing more heavily on the United States’ global connections to policies and places over time. Additionally, while the authors highlight the experience of living within a landscape of change, I wish this compelling aspect of the book was further developed and returned to.

Overall, their book put into conversation some of the many environmental crises facing Americans, making it suitable for an audience interested in learning more about them. However, it may not be suitable for non-academic audiences with little knowledge of the subject matter. Within academia, this book is well-suited for undergraduate courses in Environmental Studies, Geography, or related disciplines; particularly those that explore dimensions of the food-energy-water nexus or the impacts of climate change and land use management practices. Throughout the book the reader is invited to think critically about their human-environment connections to other places—across the world and just downstream.