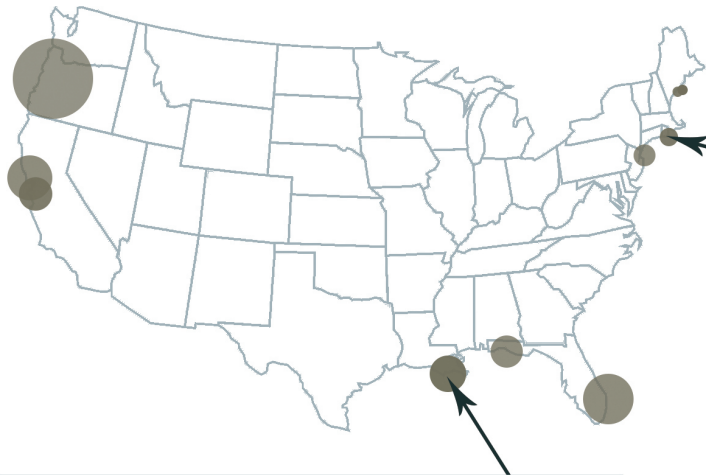


# RISING FACT SHEET

SEA LEVELS ARE RISING FASTER THAN THEY HAVE IN THE LAST TWENTY-EIGHT CENTURIES.



Facts and firsthand accounts from *RISING: DISPATCHES FROM THE NEW AMERICAN SHORE* by *Elizabeth Rush*.

## JACOB'S POINT, RHODE ISLAND

OVER THE PAST 200 YEARS, RHODE ISLAND HAS LOST OVER 50% OF ITS TIDAL MARSHES TO THE FILLING AND DIKING THAT COME WITH DEVELOPMENT.

## ISLE DE JEAN CHARLES, LOUISIANA

ACCORDING TO THE U.S. GEOLOGICAL SURVEY, LOUISIANA LOST 1,900 SQUARE MILES OF LAND BETWEEN 1932 AND 2000, AN AREA ROUGHLY EQUAL IN SIZE TO DELAWARE.

“THE ISLAND IS ALREADY A SKELETON of its former self and that’s what’s happening inside the community as well. . . . I am Choctaw, Native American. For us moving is not just about getting up and making a career move. We’re actually leaving the place where we belong.”

—CHRIS BRUNET, resident

CHRIS’S ISLAND USED TO BE ELEVEN MILES LONG AND FIVE MILES WIDE. NOW IT’S TWO AND A HALF MILES LONG AND A QUARTER MILE WIDE.

“IN THE TIME it has taken me to write this book, the predicted rise by century’s end has doubled. If sea level rise continues to accelerate at even half this speed, we are looking at a rise of well over ten feet in the next eighty years.”



milkweed  
editions  
milkweed.org/book/rising

SINCE THE 18TH CENTURY, RHODE ISLAND, CONNECTICUT, NEW YORK, AND MARYLAND HAVE ALL LOST OVER 50 PERCENT OF THEIR COASTAL WETLANDS TO DEVELOPMENT.

“ People don’t move into these places thinking, ‘Living here I might lose my life.’ No, there are builders who buy the lots and then they sell them and they spin it and you think you are living in a fine house. People buy what they can afford. . . . When my dad was gone, it wasn’t home anymore.”

—NICOLE MONTALTO, *resident*

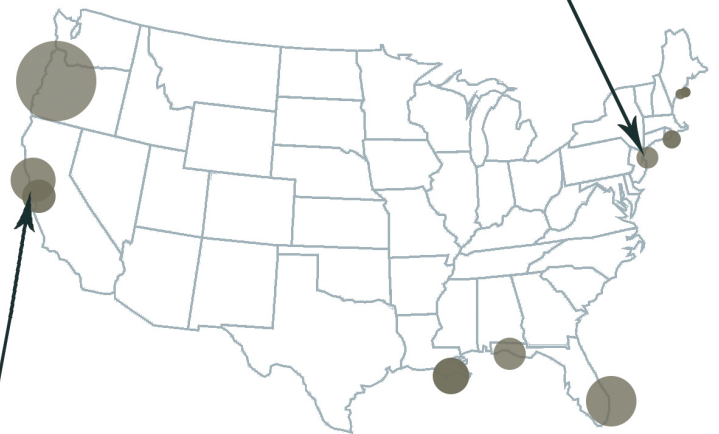
AS THE POPULATION OF THE NEW YORK METROPOLITAN AREA EXPANDED, ROUGHLY 90 PERCENT OF THE CITY’S WETLANDS WERE BACKFILLED AND HARDESCAPED. CHINATOWN WAS ONCE A WETLAND. CONEY ISLAND WAS ONCE A WETLAND. EAST HARLEM WAS ONCE A WETLAND. SO WERE RED HOOK AND THE ROCKAWAYS. BROAD CHANNEL, BERGEN BEACH, AND CANARSIE. JOHN F. KENNEDY INTERNATIONAL AIRPORT IS SITED ATOP FORMER TIDAL MARSH. SO ARE FRESH KILLS LANDFILL AND THE BROOKLYN NAVY YARD, A HEALTHY CHUNK OF COASTAL QUEENS, AND ALMOST ALL OF STATEN ISLAND’S EASTERN SHORE.

STATEN ISLAND, NEW YORK

ONLY 3 YEARS AFTER AMERICAN SOLDIERS SEIZED THE MEXICAN PROVINCE OF CALIFORNIA, THE SWAMPLANDS ACT OF 1850 PASSED. IN JUST 2 YEARS, NEARLY 790,000 ACRES OF CALIFORNIA’S WETLANDS WERE SHIFTED INTO THE HANDS OF FEWER THAN 200 PRIVATE OWNERS, WHO PROCEEDED TO DAM, DIKE, DRAIN, AND FILL THE LARGEST ESTUARY ON THE PACIFIC COAST.

SAN FRANCISCO BAY, CALIFORNIA

AT 15,000 ACRES, THE SOUTH BAY SALT POND RESTORATION PROJECT IS ONE OF THE LARGEST COASTAL WETLANDS REHABILITATION EFFORTS IN THE COUNTRY, SECOND ONLY TO THE WORK TAKING PLACE IN THE EVERGLADES.



“ BACK THEN this was all migrant camps. It’s often folks with the least who share the most, but now everyone is trying to get a piece of Alviso, and I won’t let them. The wetlands restoration project out there, they’re keeping huge chunks of land out of developers’ hands, and that keeps the area around Alviso open space. And when that area is open space, it can absorb the floodwaters. Those wetlands are going to save the community I’ve fought so long to protect.”

—RICHARD SANTOS, *resident*

# RISING

## DISCUSSION GUIDE

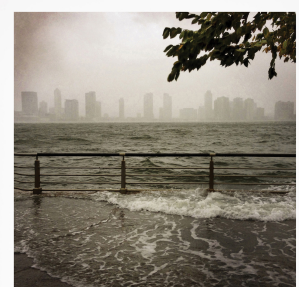
BOOK CLUBS • ENVIRONMENTAL HUMANITIES / SCIENCE / JUSTICE • CREATIVE NONFICTION

1. Naming plays a role throughout *Rising*: in “Persimmons,” Elizabeth Rush writes of “The hundreds of dead cypresses and oaks. And the fishing camps destroyed by Rita. Past Theo’s parents’ old home, and Lora Ann’s old home, and Albert’s old home, and all of the other residences that have been abandoned because rebuilding is tiresome and expensive” (25). Why is it necessary to name these homes? What purpose does it serve for Rush? In “The Password,” Rush writes of learning the names of the dying trees and other plants in the marshlands of Rhode Island. Later, she writes of black needlerush and cordgrass, as well as other specific species of plants. She quotes Robin Wall Kimmerer, in that “naming is the beginning of justice.” How does this play out in human justice, and with Twitter hashtags like #sayhername? How does naming the plants and birds around us support environmental justice? What do we mean by environmental justice? How are fairness and justice different?
2. The chapter “Persimmons” closes with Edison gifting Rush a persimmon, which leads to a moment of epiphany: “It is a taste I have never encountered before. And in that moment I think I know why he and the others do not leave” (41). One of the primary conflicts in this book is the distance between insiders and outsiders, between people who know the language of a place and the people from elsewhere who often hold different priorities. How does she navigate this distance, as a journalist? How do we, as readers and human beings who live in a place, also navigate this distance?
3. What is the value of a place? How do we measure it? In property values? In population density? Is a place that millions of people call home more valuable than a place that houses only a few hundred? Do we measure the value of a place in what we can take from it? In what it “gives” us? How else might we measure the value of a place? Is it possible for trees, animals, and humans to not be competing entities?
4. Alan Benimoff says, “Wetlands act as giant sponges, absorbing storm surges. When they are paved over, that water still has to go somewhere, crashing into everything in its path . . . No one talks about it, but the way we have developed the coast amplified Sandy’s destructive force” (119). We often think of landscape as inert, as simply there. Discuss the ways the Earth knows more than humans do. (Consider geological shifts, from ice age and back, the movement from one major extinction period to the next, as well as the specific knowledge inherent in each ecosystem). Consider this: are we yet ready to listen to the landscape?
5. We encounter the first of many outside voices in “On Gratitude,” “On Reckoning,” etc. While the interludes offer new voices, the effect also takes its cue from Montaigne, often called the father of the essay genre and its “On \_\_\_” titling. How do each of these sections offer a meditation into gratitude, reckoning, and more? What effect do these digressions have across the whole of the book? What is their purpose? What do you notice about the tone and content shift from one to the next? Do you notice an escalation of these interview stories?
6. Rush writes, “throughout Western history tidal wetlands were thought to be the homes of swamp serpents and marsh monsters, the boggy, slimy sources of malaria, disease, and death. As such, they have long gone overlooked, which is why the research taking place out here in the Gulf of Maine is so important” (56). In what other ways do cultural traditions of place play a role in which landscape we consider to be of value, or of little value? We are often more aware of landscapes of awe, of wonder; what are the landscapes of fear? Of disgust? Where do those impressions come from? Later, Rush writes that, “Wetlands have long been viewed as wastelands. . . . wetlands were thought to corrupt the air and whoever breathed it” (139). What happens when we give moral character to landscapes and the people who live on them? How have we come to create virtuous landscape as well as morally suspect landscapes?
7. It’s clear that currently the United States has little federal interest in addressing climate change and the approaching sea rises. However, beyond politics, one thing to consider is how much of the country is not coastline. How much of this conversation is tabled simply because it’s a problem of elsewhere? When Rush writes of glaciers calving in Greenland and Antarctica, does the information fail to make meaningful change in our lives because it is so far away?

8. At the end of “Marsh at the End of the World,” Rush retells the Hindu fable about the flood and the reestablishing of the world and briefly considers the spirituality of flood stories, a relationship between religion and ecology. Later, she writes of the biblical flood: “I do not believe in a vengeful God—if God exists at all—so I do not think of the flood as punishment for human sin. What interests me most is what happens to the story when I remove it from its religious framework: Noah’s flood is one of the most fully developed accounts of environmental change in ancient history. It tries to make sense of a cataclysmic earthbound event that happened long ago, before written language, before the domestication of horses, before the first Egyptian mummies and the rise of civilization in Crete. An event for which the teller clearly held humans responsible” (74). Consider that: what happens when we remove religion. Nearly every civilization has a flood story—not a fire story or an ice story, but a flood story. What are we to make of that?
9. Rush writes, “When Hurricane Sandy destroyed much of Oakwood, many residents decided they didn’t want to return. They chose to retreat instead. To watch what remained of their house get bulldozed. To walk away” (76). What happens when people move inland—towards the Midwest, towards the Ogallala Aquifer, towards a place where the 100<sup>th</sup> Meridian is moving east? How will our conversations about water evolve? What happens when migration continues to move inland towards other landscapes—like the Great Plains; “flyover country”—that are not considered valuable?
10. Rush writes of her second grade science fair project which failed to impress with its work on Florida’s flat topography: “My project didn’t win a prize; it wasn’t even given honorable mention. Back then topography probably seemed boring, especially when set next to dioramas of rain forests and exploding miniature volcanoes” (82). Even at a young age, we are taught to favor sexy landscapes; the idea that volcanoes are more interesting and worthy of study than marshlands prevails. What opportunities do we have to teach our young people to think differently?
11. Consider the cultural role of owning a house as part of the American Dream. In “On Gratitude,” Laura Sewell says that she does not have children, so she worries less about not being able to leave her house to her descendants, but she questions what legacies we leave. Robert Cisneros, in Florida, says, “I wanted to leave this house to my kids, but soon it’s going to be worthless” (88). How did owning a house become such an indelible part of the American Dream and a marker of success? How and why did the concept of “growing up and settling down” become a sign of adulthood? What happens when the American Dream must change?
12. In Marilyn Wiggins’ account, “On Vulnerability,” she tells a story of environmental racism that Rush has been building, of what happens when the disparities in power play out in the environment: sewer plants and toxic waste dumping in poor communities, often communities of color, who have no power to fight against it. She says, “My neighbors next door complain that they have black dust coming out of their faucet” (135), which brings to mind the ongoing water issues in Flint, Michigan as well as the lack of federal disaster assistance to Puerto Rico after Hurricane Maria. Rush writes, “And so what I once thought of as an inquiry into vulnerable landscapes—and the plants and animals that call those places home—has also become an inquiry into vulnerable human communities” (139). How do you see this idea developed throughout the book?
13. Rush writes, “But up close, relocation is more complicated than I had imagined” (170). She continues: “As I speak I begin to see that the communities with the least options going into a flood have predictably fewer paths toward equitable relocation afterward” (171). Where do you see this kind of environmental inequality playing out in your community, in your state? Where are the vulnerable communities and the vulnerable landscapes? Who is putting them at risk? Outsiders? Insiders? If you don’t know the political work and the advocacy groups involved in the issue, do a quick Google search now.
14. Rush concludes *Rising* with an Afterword titled with the names of recent hurricanes. The other sections have been voiced by those she’s interviewed; what do you do think of Rush giving the final voice to something that is not human?
15. In the Afterword, Rush reconsiders the failure of language in a way related to how she began the book. She considers the environmental racism and environmental justice of the lack of federal disaster response to Hurricane Maria (257). She does not end her book with concrete actions for the reader to undertake, no calls to action. What, then, does Rush want from readers as we close *Rising*?

## FURTHER EXPLORATION

ADDITIONAL MATERIALS: [MILKWEED.ORG/BOOK/RISING](http://MILKWEED.ORG/BOOK/RISING)  
 FURTHER READING: [MILKWEED.ORG/CLIMATE-CHANGE](http://MILKWEED.ORG/CLIMATE-CHANGE)



# RISING

DISPATCHES from the  
 NEW AMERICAN SHORE

ELIZABETH RUSH