OPEN RIVERS:

RETHINKING WATER, PLACE & COMMUNITY

SHIFT



http://openrivers.umn.edu
An interdisciplinary online journal rethinking water, place & community from multiple perspectives within and beyond the academy.

The cover image of Santa Monica Pier is by Omar Prestwich.

Except where otherwise noted, this work is licensed under a <u>Creative Commons Attribution-NonCommercial 4.0 International License</u>. This means each author holds the copyright to her or his work, and grants all users the rights to: share (copy and/or redistribute the material in any medium or format) or adapt (remix, transform, and/or build upon the material) the article, as long as the original author and source is cited, and the use is for noncommercial purposes.

Open Rivers: Rethinking Water, Place & Community is produced by the <u>University of Minnesota Libraries Publishing Services</u> and the <u>University of Minnesota Institute for Advanced Study</u>.

Editors

Editor:

Laurie Moberg, Institute for Advanced Study, University of Minnesota

Administrative Editor: Phyllis Mauch Messenger

Media and Production Manager:

Joanne Richardson, Institute for Advanced Study, University of Minnesota

Contact Us

Open Rivers
Institute for Advanced Study
University of Minnesota
Northrop
84 Church Street SE
Minneapolis, MN 55455

Telephone: (612) 626-5054

Fax: (612) 625-8583

E-mail: <u>openrvrs@umn.edu</u>

Web Site: http://openrivers.umn.edu

ISSN 2471-190X

Editorial Board

Jay Bell, Soil, Water, and Climate, University of Minnesota

Tom Fisher, Minnesota Design Center, University of Minnesota

Mark Gorman, Policy Analyst, Washington, D.C.

Jennifer Gunn, History of Medicine, University of Minnesota

Katherine Hayes, Anthropology, University of Minnesota

Nenette Luarca-Shoaf, Lucas Museum of Narrative Art

David Pellow, Environmental Studies, University of California, Santa Barbara

CONTENTS

Introductions

	Introduction to Issue Nineteen By Laurie Moberg, Editor	4	
Fe	eatures		
	Reflections on Negotiating the Science-Society Relationship Together By The Tropical Rivers Lab	. 7	
	Future Rivers of the Anthropocene By Eleanor Hayman, Colleen James, and Mark Wedge	. 18	
G	Geographies		
	A Place in Flux: Memory and Futurity in the Hackensack Meadowlands By Evelyn Dsouza	. 35	
ln	n Review		
	On Water, Equity, and Justice By Kathryn Nuernberger, Henry McCarthy, Tyler C. Seidel, Jabari Jones, Amanda Lyons, and Verónica Cadavid González	. 41	
P	Perspectives		
	Review of <i>Between the World and Me</i> , by Ta-Nehisi Coates By Lark Weller	51	
Pı	rimary Sources		
	Meeting the Atchafalaya By Joanne Richardson	57	
Te	eaching and Practice		
	Water? I've Got a Story About That By Angie Hong	66	

OPEN RIVERS: ISSUE NINETEEN: FALL 2021

GEOGRAPHIES

A PLACE IN FLUX: MEMORY AND FUTURITY IN THE HACKENSACK MEADOWLANDS

By Evelyn Dsouza

From the middle of the Hackensack River, sweltering in the heat of an early summer day, I peered up at the New Jersey Turnpike from my seat on the pontoon boat. I usually see this place from the view of my own car—or occasionally, the train, from which an expansive view of the estuary is even easier to take in: billowing stands of common reed (*Phragmites*), glistening mudflats at certain times of the day, and looming

cityscapes on the horizon. I'd never before found myself *in* the landscape quite like this, from the view of the water.

"Can you hold this?" Dr. Ildiko Pechmann asked me. The pontoon boat was owned and operated by the New Jersey Sports and Exposition Authority (NJSEA), which serves as the regional planning and zoning agency for the Hackensack



A sensor station overlooking the Hackensack River. Image courtesy of Evelyn Dsouza.

OPEN RIVERS : ISSUE NINETEEN : FALL 2021 / GEOGRAPHIES

Meadowlands District. Four other interns and I were there to see the estuary firsthand, guided in part by Dr. Pechmann, one of the NJSEA's environmental scientists. Along the way, we'd stopped at one of the carbon sensors lodged in the river so that Dr. Pechmann could change its memory card. As I was sitting nearest to her, she handed me the old card while she replaced it with a new one. The little memory card seemed especially fragile as I was holding it there on the gently rocking boat; "Don't drop it!" I remember warning myself.

As a writer, I think a lot about the concept of memory. I held in my hand that day a small but rich record of environmental data, and as a humanities researcher about the Meadowlands, I'd been immersing myself in other kinds of kept memories before and after that day—those

of library books and records in archives documenting the natural and cultural histories of the region.

The Hackensack Meadowlands, named for the primary river flowing through it, is the largest urban wetland complex in the northeastern United States (Tiner, Swords, and McClain 2002). It is the home of Berry's Creek, which contains mercury concentrations that are among the highest ever measured in a freshwater ecosystem (United States Department of Commerce, National Oceanic and Atmospheric Administration, and U.S. Fish and Wildlife Service 2014). Before settler colonialism, the area was a predominantly freshwater system, forested by Atlantic white cedars. Dutch settlers cleared the cedar forests and used dikes to drain the land, creating "meadows" of salt hay for harvesting—replaced, over time, by



A view of the Hackensack Meadowlands from Mill Creek Marsh, a nature preserve in Secaucus, New Jersey. Image courtesy of Evelyn Dsouza.

OPEN RIVERS : ISSUE NINETEEN : FALL 2021 / GEOGRAPHIES

invasive common reed (Ceberio and Kase 2015). The American motion picture industry, which was once at home in New Jersey before it moved to Hollywood, would later use the backdrop of the Meadowlands as stand-ins for prairie scenes (Sullivan 1998). And through a mix of human and natural causes over time, especially the creation of the upstream Oradell Dam, the condition of the lower Hackensack River turned brackish.

The "Meadowlands" is in many ways, then, a human creation. Even still, its protection and recovery in recent decades has relied on familiar environmentalist and conservationist arguments about the surprising natural beauty and biodiversity of the place, especially its importance as

bird habitat in the Atlantic Flyway. Although appreciation for the scientific and ecological value of wetlands has come a long way from the past, wetland ecosystems in this heavily urbanized coastal area need also to be able to thrive and persist under conditions of accelerated sea level rise. In a geography where space for landward retreat for the marshlands is limited and the marshlands would become inundated with increased saltwater, this ecosystem would no longer be able to sustain the same life or provide necessary ecological services. The rate of increase in the marshlands' surface elevation, however, is not enough to keep up with the predicted rise in sea level each year (Artigas, Grzyb, and Yao 2021).



The Meadowlands Museum, home of the William Carlos Williams Memorial Room. A red weelbarrow is placed outside the building. Image courtesy of Evelyn Dsouza.

OPEN RIVERS: ISSUE NINETEEN: FALL 2021 / GEOGRAPHIES

After a long history of environmental abuse and in the face of continued present-day perils, the New Jersey Department of Environmental Protection (NJDEP) announced its plan this summer to nominate the entire lower region of the Hackensack River as a Superfund site (Hajna and Shinske 2021). Declarations like these, and the necessary remediation that ensues, do not happen in a vacuum. They are informed by decades' worth of data and research—by the things we carefully write and document.

As I'm always reminding my students, I see writing as, at its core, a technology—a tool for externalizing memory and experience. And if writing is indeed a technology, it is one that we will want to wield with precision and care, just as we would any other in the service of sustainable land-use decision-making. We will want to use it in ways that are flexible and responsive to changing circumstances.

I think a lot about the ways that writing has an effect of immortalizing the things we observe and

then describe, however. The day I first visited the Meadowlands Museum, I remember lingering in the William Carlos Williams Memorial Room. Williams, who was born and died in the town of Rutherford, New Jersey, is one of the cultural icons of our region: the 20th-century American poet and physician most closely associated with the famous imagist poem "The Red Wheelbarrow." "[S]o much depends / upon // a red wheel / barrow," read the first two stanzas. A perfect example of a still life object in writing, isn't it? Meditative and intense. But do we inadvertently turn places into still life objects when we write about them?

The second time I went out on the pontoon boat, I met Terry Doss, the co-director of the Meadowlands Research & Restoration Institute (MRRI). (MRRI is the scientific branch of the NJSEA.) She told me about a competitive Environmental Protection Agency grant for which she and her colleagues had recently applied. The goal would be the restoration of Saw Mill Creek, one of the Hackensack's tributaries. I learned



A large stand of common reed (Phragmites australis) billowing in the breeze at a riverfront park in Secaucus, New Jersey.

that the channelization of the lower Hackensack and its tributaries was, of course, a human artifice—one that had caused the estuary to look more like a lake than a traditional tidal wetland. To increase the capacity of these wetlands to sequester carbon in its plant communities and its soil, restoration in the form of increased native vegetation in this area would be a vital approach moving forward (Fallon and Ford 2019).

When she spoke, I considered the expanse of water all around me—the view of the Meadowlands that I'd become accustomed to. I tried to picture, instead of the shimmering blue of the water reflecting the sky or the industrial gray of bridges, railroads, and high-rises surrounding us, dense enclosures of green and brown. Not all at once or even everywhere, but over time.

But how does a reality like that come into being? I've been paying so much attention to the way that writing memorializes and captures in time, but I'm finding my attention more balanced now by a dual consideration: thinking about the kind of writing that *actualizes*, looks forward, and initiates into being.

As I move forward with my own research in the fields of writing and technical communication, I continue to ponder some of the bigger questions that I've raised in this article. How do we document places without fixing them in time? How do we allow our collective understanding of those places to change and adapt over time, since places themselves are always in flux? As we continue to reclaim and develop methods for storytelling that lend themselves more to such a perspective, with more attention to both polyvocality and multimodality, I am curious to see how the story of the Meadowlands continues. Efforts to protect this region, like those announced by the NJDEP this summer, will always rely on a layered understanding not just of what this place was, or has been, but very much could be. "So much depends," indeed, on the ability of the Meadowlands and other urban wetlands like it to protect and improve water quality, provide vital and productive habitat, store carbon, and protect against floods and shoreline erosion (US EPA 2015). In turn, then, "so much depends" on the work of ordinary, mundane texts in this regard—site descriptions, inventories, logs in memory cards, grant applications. It is grueling and exacting, but urgent, and integrally connected with the fate of places themselves.

Acknowledgements

Thank you to the staff of the Meadowlands Research & Restoration Institute (MRRI) for teaching me, opening the doors of the archives for me, and inviting me on those wonderful boat tours, with special thanks to Dr. Ildiko Pechmann, Terry Doss, Dr. Francisco Artigas, and Cheryl Yao for our conversations. I am very thankful to the University of Minnesota's CLA Office of Research and Graduate Programs for

their sponsorship of my summer internship, and to the Department of Writing Studies, especially my advisors Dr. Donald Ross and Dr. Daniel Card, for their ongoing support of my dissertation project. Thank you, also, to Tom Bivin at the Meadowlands Museum for the informative tour. Finally, I am especially thankful to the community of *Open Rivers*, especially Laurie Moberg, for your interest and support.

References

Artigas, Francisco J., Joseph Grzyb, and Ying Yao. 2021. "Sea Level Rise and Marsh Surface Elevation Change in the Meadowlands of New Jersey." *Wetlands Ecology and Management* 29 (2): 181–92. https://doi.org/10.1007/s11273-020-09777-2.

Ceberio, Robert, and Ron Kase. 2015. New Jersey Meadowlands: A History. Charleston, SC: The History Press.

Fallon, Scott, and Andrew Ford. 2019. "The Effects of Climate Change in New Jersey Are Already Here. They're Everywhere." *North Jersey Media Group*, August 23, 2019. https://www.north-jersey.com/story/news/environment/2019/08/23/new-jersey-already-seeing-effects-climate-change/2069961001/.

Hajna, Lawrence, and Caryn Shinske. 2021. "NJDEP – News Release 21/P024 – Commissioner Latourette Announces NJDEP Will Pursue Cleanup of Lower Hackensack River as a Federal Superfund Site." New Jersey Department of Environmental Protection. July 23, 2021. https://www.nj.gov/dep/newsrel/2021/21_0024.htm.

Tiner, Ralph W., John Q. Swords, and Bobbi Jo McClain. 2002. "Wetland Status and Trends for the Hackensack Meadowlands." Hadley, MA: U.S. Fish and Wildlife Service.

Sullivan, Robert. 1998. *The Meadowlands: Wilderness Adventures at the Edge of a City*. New York: Anchor.

United States Department of Commerce, National Oceanic and Atmospheric Administration, and U.S. Fish and Wildlife Service. 2014. "Preassessment Screen Determination for the Berry's Creek Watershed, Bergen County, New Jersey." https://www.fws.gov/northeast/njfieldoffice/pdf/BCSA_PAS.pdf.

EPA (United States Environmental Protection Agency). 2015. "Why Are Wetlands Important?" Overviews and Factsheets. April 9, 2015. https://www.epa.gov/wetlands/why-are-wetlands-important.

Recommended Citation

Dsouza, Evelyn. 2021. "A Place in Flux: Memory and Futurity in the Hackensack Meadowlands." *Open Rivers: Rethinking Water, Place & Community*, no. 19. https://editions.lib.umn.edu/openrivers/article/a-place-in-flux.

DOI: https://doi.org/10.24926/2471190X.8297

About the Author

Evelyn Dsouza is a Ph.D. candidate in the Department of Writing Studies at the University of Minnesota, Twin Cities, where she also earned a graduate minor in natural resources science and management (NRSM). She is a resident of the New York City metropolitan area and was proud to serve this region as a former AmeriCorps New Jersey Watershed Ambassador. Today, she enjoys teaching first-year writing and technical and professional writing as she completes a dissertation that centers on the Hackensack Meadowlands. She can be reached at edsouza@umn.edu.

OPEN RIVERS : ISSUE NINETEEN : FALL 2021 / GEOGRAPHIES