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Christopher J. Manganiello, *Southern Water, Southern Power: How the Politics of Cheap Energy and Water Scarcity Shaped a Region* (Chapel Hill: University of North Carolina Press, 2015). ISBN: 9781469620053

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Introduction by Christopher F. Jones, Arizona State University

Water and the West. For the field of environmental history, it is hard to imagine a more foundational pairing of natural resource and place. Canonical works by Donald Worster and Richard White (among many others) have been crucial in shaping the questions asked by environmental historians and the topics they have addressed.¹ Yet as **Christopher J. Manganiello** demonstrates in *Southern Water, Southern Power*, we should not assume that water challenges are restricted to the American West. In fact, water—with its attendant problems of scarcity *and* abundance—have been integral to the shaping of the modern South as well. Bringing the humid south into the picture provides new opportunities to identify similarities and differences between regions and their water histories.

To the extent that those unfamiliar with southern history associate the region with water and power, it is usually through the iconic Tennessee Valley Authority initiated in the 1930s. While undoubtedly an important story, Manganiello demonstrates that the periods before and after contain an equally rich history. From a young John Muir traveling southern rivers in the 1860s and systematically ignoring the evidence of their industrial development to interstate debates over the allocation of water in the 2000s, southerners have depended on, utilized, altered, dammed, and fought over the region's waterways. Living with and adapting rivers to human ends has been inextricably linked to the development of the region's energy regimes, political economy, and ecological transformations. At the same time, it has reflected and exacerbated the south's hierarchies of race and class.

Manganiello's work has deservedly drawn considerable praise from reviewers. The dissertation manuscript that formed the basis of *Southern Water, Southern Power* received the Rachel Carson Prize from the American Society for Environmental History in 2011. Since its publication, the book received a 2015 GHRAC Award for Excellence from the Georgia Historical Records Advisory Council. And as our roundtable panelists note, it provides fruitful context for thinking about river history more generally.

I asked **Randal Hall** to participate in this roundtable because his expertise in southern and environmental history position him ideally to place *Southern Water, Southern Power* within the field of southern environmental history. His comments achieve this aim and open up a broader conversation about the borders of the south, definitions of modernity, and the links between policy and history. Hall is editor of the *Journal of Southern History* and author of *Mountains on the Market: Industry, the Environment, and the South* (University Press of Kentucky, 2012).

¹ Donald Worster, *Rivers of Empire: Water, Aridity and the Growth of the American West* (New York: Pantheon Books, 1985); Richard White, *The Organic Machine: Remaking the Columbia River* (New York: Hill & Wang, 1995).

Both **Matthew Evenden** and **Eve Vogel** bring a wealth of experience writing about rivers and focus their contributions on seeking to place Manganiello's story into dialogue with existing scholarship about waterways in other times and places. Evenden is the author of numerous books including *Fish versus Power* (Cambridge, 2004) and the recent *Allied Power* (Toronto, 2015). His comments praise Manganiello for frequently situating developments in the south in a trans-regional manner and encourage him to expand these reflections further. Vogel studies the human and ecological dynamics of river systems, with a particular interest in their governance. Her contribution is an ambitious attempt to use *Southern Water*, *Southern Power* to craft a synthetic account of similarities and differences between river systems in multiple regions. In addition to offering constructive reflections on Manganiello's work, her review puts forward a series of observed patterns about river history that will be of interest to anyone working on these topics.

Casey Cater completes our roundtable, bringing his knowledge of southern energy history to bear on Manganiello's work. Cater's forthcoming dissertation analyzes the history of electricity in the south, helping rectify at least two lacunae in energy history: limited attention to the south and an insufficient focus on race (*Southern Water*, *Southern Power* being an obvious exception!). His comments draw attention to the role of energy users, voices from the margins, and the interrelated history of rivers and coal in the production of electricity.

Before turning to the first set of comments, I would like to pause here and thank all the roundtable participants for taking part. In addition, I would like to remind readers that as an open-access forum, *H-Environment Roundtable Reviews* is available to scholars and non-scholars alike, around the world, free of charge. Please circulate.

Comments by Randal Hall, Rice University

The energy humanities are rising on a high tide of interest in the environmental and economic history of the Anthropocene, and now historians of the U.S. South can point with some pride to Christopher Manganiello's fine contribution to that surge. Manganiello has added an environmental dimension to key questions of southern corporate development, urban growth, and political conservatism. This is not a tale of southern exceptionalism, though. *Southern Water, Southern Power* should take its own place of significance on all U.S. environmental historians' shelves alongside books by Andrew Needham, Chris Jones, and others who are studying various regions and composing a national picture of energy generation and use in the United States of the past century and a half.

Manganiello focuses on the story of hydroelectric power in the Southeast from the emergence of that technology in the 1890s, but he starts the book earlier, with a look at how southerners used water power at the very beginning of the region's industrialization. Gristmills and sawmills serving local areas took advantage of rivers and smaller streams, but in the 1840s, larger water-powered factories in Georgia cities such as Augusta and Graniteville, places far from the inexpensive sources of coal that aided northeastern factories, "laid the foundations for an industrial New South upon the banks of southern rivers" (p. 23). They "were the building blocks of the American South's modern waterscape and political economy" (p. 24). By discussing Augusta's self-proclaimed status as the "Lowell of the South" (chapter one's title), he puts his southern evidence in conversation with work on the larger-scale industrialization in the Northeast, and his discussion of the government role in creating the important Augusta Canal also adds to southern historians' recently sharpened awareness of state-building efforts in the antebellum era. In showing the continuity of industrial aspirations across the Civil War years, *Southern Water, Southern Power* contributes to an important groundswell of work on the entrepreneurial nineteenth-century South by Bruce W. Eelman, Tom Downey, Michael J. Gagnon, and others, but Manganiello adds a sharper emphasis on contributing environmental factors like water flows and soil erosion.

In analyzing the New South period, which he defines as 1890 to 1930, Manganiello goes a step further toward understanding the South in wider perspective: he shows that the engineers electrifying southern factories and cities were taking part in an international world of technology and development. William Church Whitner, a key innovator, "was a member of a transnational engineering and energy community as much as he was a regional member of the South Carolina town-building community of industrialists" (p. 42). He and his peers moved easily between projects in the South and those elsewhere as they learned how to move electricity ever farther from its source, finally transferring rivers' energy into the factories and lights of booming cities such as Atlanta.

But an important continuity from the Old South to the New was the primacy of private capital, enabled by public cooperation, in the development of hydroelectricity and a manufacturing economy. Historians such as Gavin Wright and Beth English have shown the vital influence of regional markets for cheap labor in the rise of southern textiles, but Manganiello underscores the important role of cheap hydroelectric power in that process. Manganiello analyzes particularly well the tight links between the spread of textile plants and James B. Duke's electricity empire in the Carolinas on rivers such as the Catawba-Wateree. By the time the Tennessee Valley Authority brought comprehensive government planning and multi-purpose dams into southeastern hydroelectric development beginning in 1933, the region's private companies had already realized the vulnerability of hydroelectric power. A drought beginning in 1925 had shown Duke and other Piedmont energy companies the technology's limitations, and for a growing portion of its generation, the firms began to use water differently: in coal-fired plants that used steam to drive the turbines. (Though the southern coal-fired plants are not Manganiello's interest here, they deserve more study in their own right.)

This diversification of energy sources, though, did not keep the private power companies from fighting against the TVA's public power generation and regional planning to address soil erosion, flooding, and impoverished communities. The corporations found their way out of the New Deal dilemma by supporting the U.S. Army Corps of Engineers in a partial embrace of the federal role in dam building, shorn of its broader reform mission. Manganiello summarizes, "For New South capitalists, the answer—massive artificial reservoirs—became the Sun Belt's preferred method of taking federal dollars while maintaining acceptable environmental and social conditions" (p. 94). Private energy companies in the Savannah River basin—Manganiello's principal case study for the New Deal and afterward—did not get everything they wanted, because competing Sun Belt boosters needed the flood control, recreational facilities, and other benefits of the federal dams for their own development goals, but a more intensive TVA-style federal role was kept at bay.

The unfortunate residents displaced by the dams usually lacked an effective voice in the matter, but the nationwide backlash against big federal dams eventually did take hold in Georgia. There was a steady beat of corporate opposition to federal power projects throughout the postwar period, but in the 1960s and 1970s, the corporations were joined by other restive constituencies in what was an alliance of convenience at times. Farmers turned to farm ponds and irrigation; cities and towns unsettled by the major drought of the 1950s sought control of reliable municipal supplies; and conservationists and environmentalists concerned about water quality, rather than quantity, fought pollution and sought to leave some rivers undammed. Keeping the Chattooga River, featured in the film version of *Deliverance* (1972), running free amid "a sea of reservoirs" (p. 170) marked a critical victory for a different vision, though the Chattooga's popularity for commercial recreation has created environmental challenges typical of heavily used recreational areas.

One project of the book is to break down the overly rigid distinctions historians have made between the arid West and the humid South. Water scarcity clearly mattered in the South too at times. But in spite of his success on that point, Manganiello, when appropriate, explains the South's regional particularity. In his look at the 1950s and 1960s, Manganiello contrasts successful federal dam-building in Georgia with the blocking of big dam plans at Hells Canyon and Echo Park in the West. The coalition opposing big federal dams in Georgia had its success later, with the Georgia Scenic Rivers Act of 1969 and Governor Jimmy Carter's decision to rebuff the Corps' plans to dam the Flint River. Other regional particularities that Manganiello handles well include the states' rights element of political opposition to big dams and the fight to desegregate access to outdoor recreational amenities. Though brief, Manganiello's discussions of this civil rights aspect of environmental history adds in a valuable way to recent pioneering studies by scholars such as Andrew W. Kahrl. As is true of monographs about other areas, the emerging field of southern environmental history has made its most valuable contributions when scholars keep in mind both the national context and the regional variations.

Because any good work of history inspires the reader's curiosity, there are, of course, aspects of Manganiello's topic that I would have liked to see treated at greater length. Despite its broad title, the book explicitly focuses on the Piedmont and Blue Ridge portions of Georgia and the Carolinas, with the most attention given to the Savannah River basin. I would like, however, to know more of Manganiello's ideas on how developments there compared with the broader South. As Sarah T. Phillips and others have shown, Lyndon Baines Johnson gained political prominence, in part, because of the development of hydroelectric power by the Lower Colorado River Authority, which he fostered in Texas. How did gradually growing opposition to big dams in Georgia compare with those developments in Texas? Is John Graves's *Goodbye to a River* (1960), written in opposition to turning the Brazos River into still water, comparable to James Dickey's novel *Deliverance* (1970)?

More comparisons could help open up other aspects of the book as well. As Manganiello's analysis moves past the New South, both the modernization discussion and the transnational links lose the analytical spotlight. I would have liked to see those ideas revisited more regularly through the rest of the book. Historians have produced some compelling recent studies that historicize the idea of modernization and place its transnational implications firmly at the concept's center. Manganiello acknowledges Sarah Phillips's effort to follow New Dealers into the wider world, but his own analysis of the New Deal and Sun Belt eras might have been even richer had he discussed more explicitly the ties between modernization ideology and forceful shifts in social structures, as portrayed in various ways by Nils Gilman and other scholars. I would like to know more from Manganiello on how he defines those key terms *modern* and *modernization*.

In his introduction and epilogue, Manganiello unabashedly engages current water policy questions, some of which came to the fore in Georgia after a major drought in 2007. In another example, Duke Power's 2014 coal ash spill in the Dan River in

North Carolina and the company's powerful political defenders are easier to comprehend when one knows more about the company's long and successful history of exercising influence in pursuit of profit. Manganiello shows some optimism for future policy choices, though, if citizens can be made aware of the environmental implications of selecting "less-water-intensive energy systems, such as solar or wind generation." "With this knowledge," he writes, "there is a good chance individuals will adopt smart energy and water behaviors" (p. 204). But how far can that hope extend in a broader South where coal companies are still blasting mountain tops into streambeds in West Virginia and where water-intensive agriculture, such as increasing production of cotton, sheds chemicals into unprotected streams? I find environmental history a murky source of solace, so I would be eager to learn more from Manganiello, who is in the policy-making mix through his work with the Georgia River Network, about how his experiences there relate to his views of southern environments past and future.

Comments by Matthew Evenden, University of British Columbia

“Tilting south and looking beyond”

As a graduate student in the late 1990s, studying outside of the US on a non-US topic, I nevertheless immersed myself in the US field. Environmental history had started in the US, its historiography was rich and developing, and since I was interested in rivers, dams and fish, major American titles needed to be tackled and digested from Donald Worster’s *Rivers of Empire* to Richard White’s *Organic Machine*.² At the time, the whole field seemed tilted towards the western US, but this was especially true in my area of interest. Water was a western topic-- that much was evident. As a western Canadian specialist, this regional bias suited me just fine. The parallels and the divergences between the Canadian and US Wests provided a useful handle to work with: why, I began to wonder in my early research, was the Canadian Fraser not like the American Columbia?

At no point in this process did I stop to ponder whether a comparative perspective might make as much or more sense with the US South. Although I came across many references to the Tennessee Valley Authority in my work, these seemed more metaphorical than concrete, aspirational rather than policy-relevant. Working in western Canada, I was as yet unaware of the major northward capital flows from North Carolina’s Duke Power Company to Quebec, which instigated a major phase of hydro-electric development on the Saguenay River in the early twentieth century.³ Nor had I thought of the potential commonalities between federalism and water development in the southern US and western Canada. Since no border was shared with the southern states, my interest in transnational and comparative perspectives pulled me in more obvious directions. In retrospect, I think it might have been useful to look more closely at the southern case. Christopher Manganiello’s *Southern Water, Southern Power* represents the latest piece of evidence that my earlier perspective, and perhaps that of the whole field, was limited by the regional historiographical bias which then existed. Joining recently released titles like Craig Colten’s *Southern Waters* and Christopher Morris’s *The Big Muddy* on the Mississippi River, Manganiello’s book completes a troika of recent studies which collectively demonstrates the importance of water to southern history and of the South to US water and environmental history.⁴

I will leave it to others to comment on Manganiello’s contribution to the history of the Savannah basin and of the US South more generally. There is no doubt that this

² Donald Worster, *Rivers of Empire: Water, Aridity and the Growth of the American West* (New York: Pantheon Books, 1985); Richard White, *The Organic Machine: Remaking the Columbia River* (New York: Hill & Wang, 1995).

³ David Massell, *Amassing Power: J.B. Duke and the Saguenay River, 1897-1927* (Montreal and Kingston: McGill-Queen’s University Press, 2000).

⁴ Craig E. Colten, *Southern Waters: The Limits to Abundance* (Baton Rouge: Louisiana State University Press, 2014); Christopher Morris, *The Big Muddy: An Environmental History of the Mississippi and its Peoples, from Hernando De Soto to Hurricane Katrina* (New York: Oxford University Press, 2012).

contribution is important and wide-ranging from the social history of race and recreation to contests over water supply in times of scarcity, but I'd like to approach the book as so many other readers will from beyond the region, and indeed, from beyond the US. What does *Southern Water, Southern Power* contribute to the wider field, and might it offer up comparative insights or yield some potential transnational pathways worth exploring?

First of all, apart from its regional focus, how could we classify Manganiello's study in comparative historiographical terms? At one level, the narrative builds from and around the Savannah River, yet it is not strictly speaking a river history. Manganiello does not take up the Savannah as a biographical subject like Marc Cioc on the Rhine or Peter Coates in his river topography, *A Story of Six Rivers*.⁵ Fish do not often enter these pages, nor does the delta. The author makes few connections between river landscapes and regional identity. Manganiello, in short, is not making the case for the Savannah as an Ur-like force in southern history, wending its way through the region's history and culture at every turn. Rather, he comes to the river's banks with specific questions in mind about the industrial transformation of the river, the forces driving it and the intertwined political and environmental consequences. Since hydro power was critical to this transformation, the book has much to say about energy and its role in the river and region's modern history. As periods of drought and flood shaped the politics of the river, questions of water control and security inform the analysis. Nor is the study bounded by the basin. When and where appropriate, Manganiello moves beyond it, following the transmission lines, corporations and government institutions that did so much to structure the river's flow and shape the region's developmental trajectory. In this way, his focus on the Savannah basin unfolds in a wider regional context.

Considered against the titles in the international field, one might plausibly compare the focus of this book to Sara Pritchard's *Confluence* on the Rhône, another work which addresses the envirotechnical history of a river chiefly through the prism of hydro-electricity and energy, or David Pietz's *The Yellow River*, which makes the case for the Yellow at the center of Chinese history but also places a central focus on dam-building and energy as well as flooding.⁶ Within the United States, the closest comparison might be to Paul Hirt's *The Wired Northwest* (a book which Manganiello strangely does not engage or reference).⁷ Manganiello's book shares with these recent studies what might be described as a post-*Organic Machine* sensibility, by which I mean an approach which is less concerned to demonstrate the hybridity of the river as a partly human, partly natural creation and more concerned to examine the political outcomes of complex hybridities. In this respect, *Southern Water*,

⁵ Marc Cioc, *The Rhine: An Eco-Biography, 1815-2000* (Seattle: University of Washington Press, 2002); Peter Coates, *A Story of Six Rivers: History, Culture and Ecology* (London: Reaktion Books, 2013).

⁶ Sara B. Pritchard, *Confluence: The Nature of Technology and the Remaking of the Rhône* (Cambridge: Harvard University Press, 2011); David A. Pietz, *The Yellow River: The Problem of Water in Modern China* (Cambridge: Harvard University Press, 2015).

⁷ Paul W. Hirt, *The Wired Northwest: The History of Electric Power, 1870s-1970s* (Lawrence: University of Kansas Press, 2012)

Southern Power builds on an earlier generation of scholarship but takes it in new directions.

Since the author wears two hats as a scholar and a policy director for the Georgia River Network, his approach also connects historical issues with contemporary concerns. More than most works of environmental history, Manganiello introduces the present not just as a hook but as the beginning and end point of the narrative. Against the background of recent drought events and the unfolding controversies over Atlanta's water supply, Manganiello points out that issues of water supply in the South have always been connected to choices about energy production and use; that water scarcity and droughts have a long history and that as population continues to grow, increasing water demands will inevitably follow, both for domestic consumption and a range of agricultural and industrial needs. While Manganiello demonstrates his command of current water politics and the strong influence of the energy industry on state governments in the South, he also recognizes that stripped to fundamentals, the South's enduring water problems share broad similarities with those found elsewhere in the United States. These are not purely southern issues, nor ones confined to the multi-state Savannah basin, but rather national problems and challenges instantiated in particular ways in the chosen regional context.

Unusually for a study in regional history, Manganiello has constructed his narrative to provide an appropriate level of detail about local events, places and peoples for his regional audience, without alienating readers from afar with a provincial orientation. Rather, he works hard to integrate the history of the Savannah into a wider stream of influences and ideas. Chapter One, for example, opens with the iconic but young John Muir tramping along the river munching on grapes as merrily as he pleases. Manganiello's subtle recounting of Muir's travel narrative balances exposition with analysis but also functions to bring the river into focus for readers from afar who may know little about the northern limit of the longleaf pine or the significance of the fall line uniting the Piedmont and the coastal plain but do know something about Muir. Manganiello's reading of Muir's perspective also reveals notable absences—Muir recorded little about the textile mills or emerging industry of the area, but focused rather on an agrarian landscape, reflecting and re-enforcing stereotypes about the antebellum South.

As Manganiello proceeds to recount the range of uses to which the river was put in the mid and late nineteenth century, he similarly looks for and builds bridges outwards. He links Augusta's early textile mill developments based on waterpower to the example and experience of Lowell, Massachusetts. The arrival of electricity in the late nineteenth century is firmly grounded in the networks of engineering expertise and entrepreneurialism which identified and exploited hydro-electric possibilities across North America in these years. Canadians may be surprised to learn about the presence of Canadian-born engineer James Mitchell, discussed in Christopher Armstrong and H.V. Nelles' *Southern Exposure*, for his exploits in Brazil, arriving in the US South in 1911 and rapidly building up the Alabama Power

Company.⁸ This attention to the development of the region and the river before the rise of the Tennessee Valley Authority both situates southern history in comparative and transnational perspective and demonstrates Manganiello's claim that inordinate attention to the TVA in previous scholarship has skewed understandings of water development in the New South.

If international readers know one thing about hydro-electric development in the southern United States, indeed in any part of the United States, it may relate to the TVA. The storied institution has not only produced a small cottage industry of histories, but also its historical and contemporary international influence is something to behold. At the end of the Second World War, proponents of river development from Europe to Asia and beyond sought to model their work on the TVA. The TVA's pairing of "grass roots" organization, expert planning and large technological systems shaped development discourse in the Cold War. While the myth of the TVA in international ideas and as a mobile policy complex is an important subject, Manganiello's book helpfully informs readers about the scope and limits of the TVA in the US Southeast, noting the range of private developments which provided the platform for the TVA to emerge in the 1930s, and the range of ways in which different political coalitions and corporate interests reframed the TVA developments and created alternative development models under the Army Corps of Engineers shorn of their previous democratic social planning agendas. Indeed, one of my primary take away lessons from this book is the circumscribed and contested role of the TVA in the Southeast notwithstanding the New Deal dam consensus. I wonder how our perspective on the TVA's international history might change if we were better acquainted with its regional history in the South? Manganiello's book provides the basis to address that question.

A final way in which Manganiello connects his regional study outwards is by situating the rising criticism of the big dam era within wider frames of reference at the national level. He thus suggests the extent to which the Hells Canyon controversy in Idaho shook the New Deal big dam consensus and provided openings for rival and corporate interests to question how river developments might unfold. He also suggests the extent to which changing ideas about conservation and a rising interest in environmentalism coincided with and contrasted national trends. The passage of the Wild and Scenic Rivers Act (1968), for example, laid the groundwork for the ultimate protection of the Chattooga River, a Savannah tributary, from damming. In a tantalizingly brief discussion, Manganiello also explains the complex backstory of the rising popularity of the Chattooga as a national recreational amenity following the publication and Hollywood film adaptation of James Dickey's *Deliverance* about the harrowing misadventures of suburban canoeists on the river. Before the film, the US Forest Service pegged annual visits to the river at 800 persons in 1971; a year after the release of the film, those numbers shot up to 21,000 in 1973. Local reaction to the stereotypical depiction of Appalachian peoples

⁸ Christopher Armstrong and H.V. Nelles, *Southern Exposure: Canadian Promoters in Latin America and the Caribbean* (Toronto: University of Toronto Press, 1988), pp. 57-58.

and the sudden rush of newcomers into a former recreational commons caused a backlash and the forests along the river were struck by arsonists. The episode suggests the tensions of scale that run through this book connecting place, region and nation.

Amongst other reasons, Manganiello's *Southern Water, Southern Power* is a welcome addition to international water and energy historiography because it offers a nuanced regional history which connects beyond the South and takes up important themes and questions of interest to a wider national and international audience. I am nevertheless left with several questions that Manganiello might wish to address. At different points in this book, the emphasis is more or less regional, and more or less comparative. Pulling back from the detail, what are the important commonalities and contrasts in southern and western US water history that the case of the Savannah River highlights? While the comparative dimensions of this book are generally and plausibly bounded by the United States, in what ways might this book provide a platform for other comparisons or transnational pathways of research?

Comments by Eve Vogel, University of Massachusetts Amherst

Christopher Manganiello says in the introduction to his book *Southern Water, Southern Power* that his book fills in a missing niche. It is true. The niche isn't quite as broad as his title suggests, but rather, specifically about the way that dams in the Georgia-Carolina Piedmont, and particularly dams in the Savannah River – and in at least one tributary, the absence of dams – have been linked to the regional development and politics of the American Southeast. But this niche is very significant. The American South is so central to American development and history, even to global history, that our understanding of river-regional development through dam construction can come together more fully now that this story has been told. This is so in three ways. First, seeing the role of dams and river development in regional history here, and comparing it side by side with other river-regional histories, one can see that drivers of river development that have sometimes been depicted as specific to other regions are far more universal. Second, at the same time, variables emphasized less in other histories emerge here as crucial, with potential implications elsewhere as well. Finally, perhaps even more profound than comparison, *adding* the American Southeast to the growing accumulation of river-regional histories, one can begin to construct an increasingly *unified* narrative of river development through dam-building as deeply integral to successive waves of uneven development around the country, continent, and world.

First, side by side similarities between Manganiello's history of the Savannah River and other river development histories reveal drivers and patterns to dam building that are more common than we knew. This is a point Manganiello himself makes quite strongly. Manganiello argues compellingly that just as the American West has been found to be less exceptional in its relation to water and environment than we once thought, so too is the Southeast less unique.

Manganiello begins his evidence on this point by taking us back deep into the antebellum era. The Southeast, like New England, has an English-American history that dates back to the 1600s. Manganiello shows there were some parallel developments for its rivers. Like New England, Georgia and South Carolina had mill dams as far back as the 1700s. By the mid-1800s, despite common perceptions of the South as nonindustrial before the Civil War, Southern capitalists were beginning to follow the footsteps of New England,⁹ building large mill dams to power new industrial factories.

Manganiello hammers repeatedly through the book that while the Southeast may get more rain than many other regions, it has dramatic inter-annual variability, and has experienced both repeated floods, and, more surprisingly, repeated droughts.

9. Theodore Steinberg, *Nature incorporated: Industrialization and the waters of New England*, University of Massachusetts Press (1994).

Floods and droughts led Southerners, like others,¹⁰ to build large storage dams starting in the New Deal period. How large, and how does this compare to other regions? According to one wikipedia page,¹¹ of the twenty-five largest storage reservoirs in the US, two are on the Savannah River – Lakes Hartwell and Clarks Hill, both featured prominently in this book.

Manganiello also emphasizes that many of the Southeast's large dams were built by the US federal government, just as they were in the West.¹² The South may be known today as a region whose political leaders often mistrust federal government agencies and ownership, but in the decades when the federal government was busy building dams on a massive scale (approximately the 1940s to the 1970s in the US), it was doing so in the Southeast, too. Not against the will of Southeastern leaders, either. Manganiello documents that political leaders like Senator Strom Thurmond, who today is remembered (at least in the North) mainly for his support of the Confederate Flag, were recruiting federal dollars much as their counterparts were doing in other regions. Manganiello's research reveals that Thurmond and others believed that federal dam projects could bring more reliable development and cheaper power prices than could private-sector dam construction and ownership.

Manganiello also describes significant negative environmental consequences, and he emphasizes these are not so different from those experienced in more water-poor regions.¹³ By the 1980s, most Southeastern rivers became a series of reservoirs or lakes. Pollution increased, discharged by the industries brought by cheap power and water. Today, a region with an abundance of water finds itself locked in multiple interstate conflicts over water.

Manganiello notes that the West, New England, and suburbia have often been heralded as the sites where environmental consciousness rose up in the United States. Here, again, Manganiello shows they are not so exceptional. Despite assumptions and aspersions to the contrary, the Southeast, including the Southeastern countryside, have a long history of conservation activism. Among its accomplishments: it protected one major tributary of the Savannah, the Chattooga, made famous by the movie *Deliverance*, as a wild and scenic river.

There are other ways that the Southeast is revealed in Manganiello's story as echoing other regions' experience which Manganiello does not emphasize, but his empirical story shows. One major example is his history of electric system development. He situates river development after the Civil War, in the late 1800s

10. e.g. Donald Worster: *Rivers of Empire: Water, Aridity, and the Growth of the American West*, Oxford University Press (1982); David P. Billington and Donald C. Jackson: *Big dams of the New Deal era: A confluence of engineering and politics*, University of Oklahoma Press (2006).

11. "List of largest reservoirs in the United States."

https://en.wikipedia.org/wiki/List_of_largest_reservoirs_in_the_United_States

12. See note 3.

13. For an international overview see Patrick McCully, *Silenced Rivers: The ecology and politics of large dams*, Zed Books (2001).

and early 1900s, within a very particular historical and regional moment, the “New South” era. Leading capitalists quickly adopted the new technology of electricity, and private power companies expanded and profited rapidly, organizing their early electrical generation and grids around hydropower. In the New Deal era, Army Corps dams produced and sold federal power. But investor-owned electric companies continued to build dams in the Southeast, too. Manganiello describes repeated contests between private and federal dam builders, promoters of private and public power. But he shows the two eventually had to work together, both functionally and to some extent politically. Readers of other works on early electrical grids, and on mid-twentieth-century politics in the US over dams and hydropower will recognize these as common tales.¹⁴

The second way this story helps to enlighten a broader understanding of regional development through dams is to illuminate the role of key variables that are under-emphasized in many other river histories.

One key variable is labor. Manganiello notes repeatedly that the South's key comparative advantages over the North since the late 1800s have been cheap and compliant labor, cheap resources, and low taxes and regulations. As early as the turn of the twentieth century, hydropower, or “white coal,” was promoted by at least one Southern booster for its ability to 'create a domestic and industrial labor utopia free of racial and class conflict' (Preston Arkwright, quoted p. 57). A utopia for industrial owners and shareholders, that is – for the idea was that uppity workers could be replaced with machines driven by falling water. Though Manganiello is not explicit about this, hydropower evidently served not only as a resource; it was also a useful threat to labor. One senses that race also helped the capitalists' cause, for the threat of replacing white workers with even-cheaper Black workers also must have helped to keep white labor compliant. This aspect of hydropower – the way it could be used to reduce wages and amplify wedges between social groups, to make labor more tractable – is under-emphasized in many other river development histories, but it resonates.¹⁵

14. For early hydropower-based grid development see e.g. Thomas P. Hughes, *Networks of Power: Electrification in western society, 1880-1930*, The Johns Hopkins University Press (1983) (especially on California); Paul W. Hirt, *The Wired Northwest: The history of electrical power, 1870s-1970s*, University Press of Kansas (2012); John T. Landry and Jeffrey L. Cruikshank, *From the rivers: The origins and growth of the New England electric system*, New England Electric System (1996); Christopher F. Jones, *Routes of Power: Energy and modern America*, Harvard University Press (2014). On the history of public and private power, their battles, and their eventual détentés in various regions, see e.g. Thomas K. McCraw, *TVA and the power fight, 1933-1939*, Lippincott (1939); Karl Boyd Brooks, *Public power, private dams: The Hells Canyon High Dam Controversy*, University of Washington Press (2009); Eve Vogel and Alexandra Lacy, New Deal versus Yankee Independence: The Twenty-Year Battle Over Comprehensive Development of the Connecticut River and Its Consequences. *The Northeastern Geographer*, 4(2): 66-94 (2012).

15. Some river-regional development histories do give attention to labor and/or race. Not surprisingly, histories of other parts of the South have often recognized the role of race in river development politics. One focused analysis of the role of Blacks within efforts at institutional and land use change in the context of river development is Nancy L. Grant's (1990): *TVA and Black*

A second variable is race. Perhaps most poignant is Manganiello's tale of Hamburg, South Carolina, a mostly Black town that was flooded in 1929, while Augusta, Georgia, across the river, was protected by levees that only made Hamburg's flooding worse. Whites patted themselves on the back for helping Black residents resettle in an uphill town – even though much of the money and initiative was provided by a successful Black business leader, Will Carpenter. Years later when the second side of the river was protected with levees, the old Black town became a site for luxury homes for the wealthy (and white). Other critical histories of dams have often emphasized the losses that river development means for local and indigenous groups and subsistence economies.¹⁶ Manganiello's recognition of the ways river development actively favored whites at the expense of Blacks, though both were in similar locations and both immersed in capitalist economies, highlights a kind of cause-and-effect that is familiar but less sharply emphasized in many other histories.

One of the most fascinating insights in the book is that in the 1950s and 1960s, the politics of dams in the Southeast became intricately connected with the politics of racial integration. The federal government, pushed by civil rights activists and the Supreme Court, began to force Southern states and communities to integrate schools and, later, other public accommodations. Even before states were forced to integrate public accommodations, federal policy required it for federal actions. Thus federal dam ownership meant federal recreation areas around reservoirs would be integrated – and in the perception of many Southern white leaders, this meant unusable by whites. As recreation rose in economic and cultural importance in the South during the same era, this alone became a reason to oppose federal dams.

Issues of race, labor, and integration also connect to political party alliances in Manganiello's story, another variable seldom emphasized in river development histories. Since the New Deal, the Democratic Party had been the promoter of big federal dams and regional development through wide public provision of cheap power and other benefits. The South had long been the “solid South,” almost universally Democratic, a legacy from the Civil War, when Lincoln had hailed from the Republican Party (though Manganiello notes “solid” was never as uniform as often depicted). The Tennessee Valley Authority (TVA) was initially supported strongly by Southern Democrats, but, as Manganiello emphasizes, even after Southerners grew leery of valley authorities, they still eagerly supported major dam projects by the federal Army Corps of Engineers. But as the Democratic administrations of Kennedy and Johnson pursued civil rights, the Southern

Americans: Planning for the Status Quo. Though the emphasis is different, Richard White's *The Organic Machine: The remaking of the Columbia River*, Hill and Wang (1995) grapples in fascinating ways with the interaction between river and regional development and labor as well as race relations. 16. See e.g. Fay G. Cohen, *Treaties on trial: The continuing controversy over Northwest Indian fishing rights*, University of Washington Press (1986); David Massell, *Quebec hydropolitics: The Peribonka concessions of the Second World War*, McGill-Queens University Press (2011); Christopher Sneddon and Coleen Fox 2012: Inland Capture Fisheries and Large River Systems: A Political Economy of Mekong Fisheries. *Journal of Agrarian Change* 12(2-3): 279-299.

allegiance to the Democratic party began to break up. Senator Strom Thurmond switched parties in 1964. Soon, it became almost impossible to garner full regional support for federal dam projects. Many have told the story of the changing politics of federal dams in the US, but they have told it more as a backlash or obstruction from moneyed and propertied interests, the rise of Republicans, the no-new-starts and partnership policy of Eisenhower, the foot-dragging of some conservative Democrats, and the rise of a new ethic of private business as the greater public virtue.¹⁷ Manganiello shows us that the collapse of the big federal dam consensus in the US happened concurrently with – and partly because of – the loss of the solid South from the Democratic Party.

These insights also connect dams, race, labor and political party alliances directly to both the rise and the contradictions of Southern, and American, conservatism. The rejection of federal dams was also a rejection of the social goals of deliberately sharing resources. Southern conservatives grew to deride the notion of “entitlements,” but, as Manganiello points out this grew out of a determination to protect their *own* desired “entitlements – to local self-determination, to peaceful segregated recreation, or access to the water supply – as fundamental rights” (160). Manganiello leaves this sharp insight unelaborated, but it seems broadly relevant.

The third way this history contributes to a wider history of region-building-through-dam-building is by helping to create a more *unified* history of the central role played by river development in successive waves of uneven development across the country, continent, and globe – and to understand some of the inter-regional and inter-national political conflicts that result. The American Southeast did not use dams to develop industry and build the region's economy in isolation from other regions. As Manganiello explains, regional boosters deliberately recruited water-powered textile and other manufacturing industries from the Northeast. This is a starting point for connections and insights beyond Manganiello's regional story. By the 1920s, while the Southeast was booming thanks in part to its river development, New England was in decline, the first United States region, perhaps, to suffer the effects of disinvestment and deindustrialization. There were political repercussions – for example, while Southern political leaders embraced dam-building initiatives in the New Deal (mostly in the South and West), New England business leaders resented and opposed it. More locally, New England business leaders attacked unions for demanding high wages that made the region less competitive.¹⁸

Other regions followed the South's lead. The Pacific Northwest, for example, later developed massive volumes of cheap water power as a way to build its regional economy. It did not have the advantages of high populations of low-wage workers,

17. See e.g. William Leuchtenburg, *Flood Control Politics: The Connecticut River Valley Problem, 1927-1950*, Harvard University Press (1953); Elmo Richardson, *Dams, Parks and Politics: Resource Development and Preservation in the Truman-Eisenhower Era*, The University Press of Kentucky (1982); Brooks, *Public power, private dams*.

18. Vogel and Lacy 2012. See also Leuchtenburg, *Flood control politics*.

but it used even-cheaper power rates to recruit particular kinds of industry: electricity-intensive industry like aluminum.¹⁹ Later, as Manganiello notes, the Southeast learned from the arid West, using cheap power and dammed water to enable industrial agriculture on vast scales, even as water quantity and quality suffered.

Still later, though, in the 1990s, the Northwest and the American South began to lose their competitive edge in manufacturing to overseas locations that could outdo them with still cheaper power and labor, and they began to suffer as New England once had.²⁰ And, much as with New England earlier, there have been political implications. Global trade policies have liberalized trade in manufactured goods, but American negotiators continue to protect agricultural subsidies, helping to buttress irrigated agriculture in the American West and South – even if it becomes more difficult for rivers to provide all that is demanded of them. Back in the American Southeast, as Manganiello notes, Georgia suffers in continued recession, hit once again in 2008, this time by the real estate crash. What he does not note as clearly is that politicians have pushed to lower taxes and reduce social services, while continuing to push cheap labor and energy as regional comparative advantages.²¹

Meanwhile, the new cheap power elsewhere is often provided by new massive hydropower dams, in places like China and Brazil. There are profound environmental consequences. Today, places like Vietnam can threaten even China and Brazil, especially as the Mekong, today by far the greatest natural producer of fresh-water fish, begins to be dammed nearly from headwaters to mouth.²²

The Southeast region and its river-regional development that Manganiello profiles in his book are central links in this global story. With the American South in the picture, we can see a full series of regions each in turn newly opened up to industrial development, their rivers key sites of physical and economic-social transformation. Rivers are tapped to provide water and cheap energy, enabling the industrialization of manufacturing and agriculture. While dams are new, labor and land is generally cheap; and so river development provides for a tremendously competitive region. Older regions suffer, though, as industry leaves. Their business and political leaders fight back in larger-scale political realms of federal policy or international trade negotiations, demanding reduced subsidies and investments for their new competitor regions. At home, they push to reduce wages and social service guarantees. Over the succeeding decades, in the new region, rivers become fully tapped, infrastructure ages, workers become skilled and learn to organize for better wages and benefits, and water becomes scarce. The once new region becomes old,

19. See e.g. White, *The organic machine*.

20. Center for Globalization, Governance & Competitiveness, Duke University: "Textiles & apparel." North Carolina in the Global Economy. <http://www.ncglobaleconomy.com/textiles/overview.shtml> (accessed 10/26/2015).

21. See e.g. Alana Semuels, "What's wrong with Georgia?" *The Atlantic*, 2 Jan (2015).

<http://www.theatlantic.com/business/archive/2015/01/whats-wrong-with-georgia/384101/>

22. Sneddon and Fox, *Inland Capture Fisheries and Large River Systems*.

and faces strains. It may rediscover its rivers as scenic or ecological sites, potential recreation destinations, as it searches for new regional economic opportunities – but will face tremendous challenges as it attempts to clean up pollution, restore fisheries, and assure water delivery among competing users. The ecosystems, species and human cultural groups once dependent on natural rivers never fully recover. From England to New England to the American South to China and Brazil to Vietnam, we can follow a familiar story of uneven development. By telling the story of a crucial missing link, Manganiello helps us finally place rivers and river development at the heart of this story, not only in one or a few of these regions, but in each of these regions in turn.

* * *

Despite its contributions to the effort, Manganiello's own project is not to place Southern river history within the tale of global rivers or uneven development. It's hard to fault an excellent empirical tale, especially for a first-time book author, for not playing its role as missing link in a broader story just a bit better. Still, with this perspective in mind, one can't help wish for some more details in parts of his story, and some more clearly articulated and elaborated conceptual arguments.

The most glaring missing set of details was a greater analysis of tangible environmental change and its politics. Strangely, the problems caused by dams and reservoirs themselves – the major focus of the book's history – are not elaborated. In a book written by an environmental historian who is also the policy director for a rivers organization, this is perhaps the most surprising lack. For example, in Manganiello's story, the issue of changes in seasonal and daily flow seems not to have come up in debates about dams on the Savannah River, nor the issue of fish passage, though these are central issues in river and dam politics elsewhere. It seems hard to believe that these were not somehow recognized problems. But, if not, why not? Did other issues somehow mute any potential constituencies for these concerns? Even a few focused pages on this would have helped fill in the holes in thinking through the full range of impacts of the South's long pursuit of dams, and the surrounding politics.

The conceptual arguments that I found missing or limited were in the "so what" category. Manganiello argues well and compellingly that the South faces real water scarcity problems, and that water – his history (if not his argument or epilogue) emphasizes dams in particular – have been far more important to the regional political economy than commonly recognized. What isn't clearly articulated is why this matters. There could have been other ways to do this, but given his emphasis on political economy, there was a ripe opportunity to extend into an analysis on river development and uneven development to begin to hammer on why this story matters so much – to all of us, not just in the South, and not just to people who care about rivers. The South has hitched its competitive success for many decades on cheap power, water, labor and taxes, but as Manganiello shows, there are strains in this effort today. If the South continues on the road of advancing more of the same –

keeping energy prices low, water prices low, wages low, and government services low to keep taxes low, what price will the region's rivers, its workers, its students, its Blacks and other newer marginalized minorities, pay? If regional leaders succeed in luring industry back – as recent news suggests South Carolina is doing with its textile industry, using cheap power and labor-replacing automation²³ – what will be the repercussions? Is there hope to be found in the political mobilizations Manganiello also references, of civil rights and “countryside conservationists”? These kinds of “so whats” and “what ifs” could have been found by continuing to follow some of the links Manganiello has drawn between water development, regional political economy, and politics. Let's hope Manganiello, or a follower, helps to trace some of these linkages next.

²³ Stephanie Clifford, “Textile industry comes back to life, U.S. Textile plants return, with floors largely empty of people,” *International New York Times*, 19 Sept 2013.

Comments by Casey Cater, Georgia State University

In the summer of 1994, just before I began my senior year of high school, I played in a statewide basketball tournament in Atlanta on an Atlanta-based team that had talent but not much size and very little acclaim. One of the reasons teams like ours participated in this type of event was to be pulled in by the gravity of teams with players who did have lots of size and lots of acclaim and lots of college scouts watching them. We wanted to attract attention, too. We wanted to be recruited and we wanted scholarship offers. In addition to competing against other squads from metropolitan Atlanta, we expected to face lineups with rising stars from central and southwestern Georgia towns like Macon and Americus. We especially looked forward to challenging the team from Albany because it featured several high-ranking, nationally-coveted prospects. If we played against them, we thought, we might perform well enough to impress a few scouts, even if they represented second or third tier college programs. But the tournament collapsed even before it began. We only played one game and our sole opponent also hailed from the Atlanta area. The teams from central and southwest Georgia, and most of the scouts, never showed up.

As it turned out, our dreams of squaring off against Georgia's best got rained out—on a catastrophic scale. Just a year after the scorching and drought-addled summer of 1993, Tropical Storm Alberto assaulted much of central and southwest Georgia (and parts of Alabama and Florida) with as much as twenty-seven inches of rain in just five days in July 1994; twenty-one inches of rain, or about three-fifths of its annual average, pounded Americus, Georgia in a single day. Alberto's diluvian-caliber precipitation forced both the Flint and Ocmulgee Rivers to surge some twenty feet above flood stage, expelling tens of thousands of people from their homes, destroying hundreds of thousands of acres of farmland, and claiming dozens of human lives. For at least one week, Alberto left 500,000 people without clean drinking water and without a way to escape the devastation, as floodwaters had washed out more than 1,000 roads and bridges.²⁴

Alberto affected my life in a small way, briefly disrupting my summer and only temporarily dashing my ultimately quixotic hoop dreams. But for countless residents in the central and southwestern sections of my home state, the floods of 1994 had a major impact on everyday life for years. Characterized in singular and superlative terms as a "500-year-flood" and as the "greatest natural disaster that has ever hit the state of Georgia," the 1994 flood may well be an extreme example of the South's struggles with water.²⁵ But it's not a unique one. As Christopher Manganiello

²⁴ Timothy C. Stamey, "Floods in Central and Southwestern Georgia in July 1994," *Proceedings of the 1995 Georgia Water Resources Conference* (Apr. 11-12, 1995), 313-316, <<http://www.gwri.gatech.edu/sites/default/files/files/docs/1995/StameyT-95.pdf>> (accessed Aug. 10, 2015);

²⁵ Peter Applebome, "Georgia Tries to Make Sense of a Flood that Comes Once in 500 Years," *New York Times* (Jul. 9, 1994).

persuasively demonstrates in *Southern Water, Southern Power*, water problems—and attempted solutions—have been a recurring theme with a long and deep history in the US South.

By focusing on rivers in Dixie, particularly on the Savannah River, Manganiello tells a heretofore “untold story about southern waterways,” showing how “people negotiated regional water insecurity and attempted to bend rivers to meet human demands” (pp. 10, 12). But *Southern Water, Southern Power* does more than fill in lacunae. Its central idea—that “from the New South to the Sun Belt periods, water has been a critical part of the southeastern political economy”—provocatively and productively flouts the conventions of both southern history and US environmental history (p. 17). Environmental factors, especially those associated with water, have traditionally played only marginal roles in southern historiography.²⁶ Yet Manganiello’s work, true to the practice of good environmental history, insists that the New South (1890-1930), New Deal (1930-1944), and Sun Belt (post-1945) eras cannot be properly understood without an accounting of how water, especially through flooding and drought, acted on and manipulated southern people, and how southerners acted on and manipulated their rivers to create an urban-industrial society. Each of the book’s seven chapters ably demonstrates this point. At the same time, *Southern Water, Southern Power* also challenges US environmental history’s apparent commitment to the position that the arid West has a corner on the American water-problem market. The relatively humid South, Manganiello shows, has suffered through more than its share of water-insecurity issues, many of them manufactured by the very structures built to solve water problems. This perspective enables him, in his words, to “simultaneously hold the region apart to explain what makes southern water and power choices different while bringing the region into the larger discussion about the nation’s energy-water nexus and water supply future” (p. 17).

The idea of the South as a “region apart” is a topic that Manganiello confronts throughout his study, which allows him to jettison another convention that still carries both popular and scholarly weight. Many readers at first blush might think, “Of course water and power have been important in southern history: The TVA!” In fact, I frequently encounter that sentiment. When I tell people I study electrification

²⁶ In recent years, southern environmental history has emerged as a coherent field. Agriculture and land management issues, though, seem to dominate historians’ thinking. See, for example, Mart Stewart, *What Nature Suffers to Groe: Life, Labor, and Landscape on the Georgia Coast, 1680-1910* (Athens: University of Georgia Press, 1996); Paul S. Sutter, *Let Us Now Praise Famous Gullies: Providence Canyon and the Soils of the South* (Athens: University of Georgia Press, 2015); James C. Giesen, *Boll Weevil Blues: Cotton, Myth, and Power in the American South* (Chicago: University of Chicago Press, 2011); and Albert G. Way, *Conserving Southern Longleaf: Herbert Stoddard and the Rise of Ecological Land Management* (Athens: University of Georgia Press, 2011). Prominent works that study southern rivers and water management, as Manganiello points out, most often deal with the Mississippi River. See Ari Kelman, *A River and its City: The Nature of Landscape in New Orleans* (Berkeley: University of California Press, 2006); and Christopher Morris, *The Big Muddy: An Environmental History of the Mississippi and its Peoples from Hernando de Soto to Hurricane Katrina* (New York: Oxford University Press, 2012).

in the US South, the response most often is something like: “Oh, yeah? The TVA?” Inherent in this sort of question, genuinely intrigued as the questioner may be, seem to be deep-seated assumptions about the South as a stubbornly backward, desperately impoverished, and embarrassingly exceptional region of the United States that finally saw some semblance of modernization only when the federal government decided to install a series of dams on the Tennessee River in the 1930s. Perhaps I’m overstating the case about people’s thinking on the South; southerners are hardwired to do that. Manganiello, though, seems to share this sensitivity, especially given his emphasis on privately owned utilities’ and the US Army Corps of Engineers’ dramatic alterations of multiple southern waterways before, during, and after the TVA’s heyday. “Could all this occur in a backward region?” he rhetorically asks. “To the contrary,” he responds (p. 58). Let me be clear: I am not at all suggesting that this book resulted from a desire to offer some sort of retrograde defense of Dixie. Rather, even as Manganiello underscores the South’s peculiarities, he wants to highlight the region’s universality. This is one of the reasons Manganiello’s new book is so valuable. It takes the story far beyond the TVA (temporally, geographically, and topically), dispatches lingering notions about the South as a place fundamentally different from the rest of the United States, and, in so doing, forces the South’s historical experiences with water instability into vitally important conversations on national water conservation policy. And the book—not coincidentally, considering Manganiello’s current position as policy director of the Georgia River Network—clearly intends to do just that: it both begins and ends with substantial discussions of current matters and lists several policy prescriptions.

There is another, fundamental element of *Southern Water, Southern Power* that I have deliberately avoided until now: energy. This is where I want to turn for the balance of my comments. With a dedicated and steady hand, Manganiello shines a bright light on the water and makes plain through the entirety of his work that energy development (specifically electricity) and river manipulation in the southern past, and indeed present, cannot possibly be separated. Granted. Water’s significance to electrical generation, even the nuclear and fossil fuel versions, is hard to overstate. But by so brilliantly and unwaveringly illuminating water’s role in Dixie’s energy history, Manganiello leaves other, significant factors in the dark. The choice to do one thing, needless to say, is also a choice not to do another, and I don’t want to offer a lazy and unfair critique of the book the author didn’t write. But given that this work explicitly intervenes in energy history debates, a few of these shrouded elements merit discussion.

One of the drawbacks of maintaining a strict gaze on water and the high-level efforts to manipulate waterways is that it brings certain actors into our field of vision at the expense of others. Manganiello gives us a very clear picture of the indispensable parts corporate leaders and political elites played in building reservoirs, dams, powerhouses, and power lines in the New South era, but makes only passing reference to the “early-twentieth-century consumers [who] expressed indifference toward questions of where their energy and water came from” (p. 68). This assertion, however, doesn’t hold up to scrutiny. Even when there were no significant

problems with electrical supply, many ordinary southerners expressed quite the opposite of indifference to questions of where their electric energy came from and of who should control it. In Georgia alone—the state to which Manganiello directs most of his attention—southerners engaged in a vigorous municipal ownership movement, helped bring about state-level regulatory oversight (an extremely important feature of hydropower development that rates no mention in the book), led a dynamic environmentalist crusade against dam construction, and tried to convince legislators to place rivers and dams in public hands and thereby end corporate monopoly control over water and power. All of this happened before 1925. Despite Manganiello's marginalization of ordinary southerners' role in the histories of both water and energy in the pre-New Deal South, their agency is integral to the story. Shouldn't we account for their contributions and resistance to the rise of powerful, region-dominating energy corporations and the construction of hydroelectric systems? Could their actions teach us lessons applicable to current issues of corporate hegemony and water insecurity?

A similar set of questions might be asked of the New Deal, World War II, and postwar periods. Especially in chapters three through six, readers get a thorough look at the US Army Corps of Engineers and various non-elite citizens' groups that opposed the Corps' development schemes on the Savannah River in the 1950s, 1960s, and 1970s. Here I should add that Manganiello nicely links this opposition to more well-known postwar issues such as civil rights and the rise of modern conservatism. Opponents of the Corps' work on the Savannah River, he writes, "grafted water projects into a discourse of states', civil, and water rights in the post-1945 period" (p. 160). But, the reader might ask, where are the people—the people for whom Dick Russell and Strom Thurmond purportedly spoke—who wanted the cheap public energy generated at the Army Engineers' dams? Where are the Rural Electrification Administration (REA) and its rural electric cooperatives? Local co-op leaders spearheaded the fight against the Georgia Power Company at Clarks Hill (a critical site for public-private power struggles featured in chapters three and four) and proved instrumental in making sure that the public power generated at that dam remained public power for use by farmers in Georgia and South Carolina. Why are they not included in tapestry of postwar southern energy history?

Another downside to the intense focus on the water is that it seems to blind the author to the treacherous path of determinism, on which environmental historians have been prone to stumble. I am not accusing Manganiello of being an environmental determinist. He is not. He takes pains to invoke numerous human and non-human factors in his examination of southern water and its relationship to power. But in attending so closely to the water, he overlooks other factors and at times tends to veer toward monocausality. Why, for instance, did southern utilities forsake hydropower and adopt coal as their primary fuel source? Drought. In Manganiello's words: "The 1925 southeastern drought led the companies on a technological path from a hydro plateau back to coal-fired steam generation plants." Also: "After the 1925 drought, Georgia Power's chief executive abandoned plans to build white coal projects...and instead invested in black coal plants....White coal was

no longer the industry standard” (p. 65). A more careful look at the situation, however, would reveal that utilities such as Georgia Power did not abandon hydroelectricity after the 1925 drought. Just two years later, the company (along with its counterparts across the southeast) was once again producing the overwhelming majority of its output at hydroelectric plants and drafted plans to build large new dams on three watersheds across the state.²⁷ And even after the Georgia Power Company completed a new “black coal” plant in 1930, it served only as a peak power station for the rest of the decade. Indeed, as late as 1939, upwards of 80 percent of Georgia Power’s electrical production came from hydroelectric stations.²⁸ Georgia Power only began to shift away from hydropower in the World War II years, and not, clearly, because of the 1925 drought alone. A confluence of factors—including another horrific drought in 1941, the exigencies of wartime industrial production, spiking domestic electrical demand, and federal claims on the southern waterscape—contributed to the transition. It’s easy to understand why Manganiello might disregard these factors. His book is not centrally about electricity, at its core it’s about water, and he needed to move the narrative about water problems and manipulation along. But still, attributing something as important as coal’s place in southern electrical generation to a single, but not inconsequential, climactic event tends to endow that event with transhistorical force, denying southern water and power the very history the book seeks to highlight.

Mentioning consequential climactic events, Tropical Storm Alberto and the floods of 1994 didn’t stop me from going on to college to play basketball. But it wasn’t until the middle of my freshman year that I realized I had already gone well past the point of usefulness, at least as far as my ability to contribute was concerned. I don’t want to make the same mistake here, so I won’t take my commentary any further than this. But I do want to reiterate that, on the whole, Manganiello has produced a fine study on the indispensable place of water in the history of the modern South. *Southern Water, Southern Power* is book that southern historians, environmental historians, energy historians, American historians in general, and even people in the world of policy would do well to read. Let me end by saying that I am honored to have had the chance to participate in this discussion and want to offer my sincere thanks to Chris Jones for extending me the opportunity to do so.

²⁷ Thorndike Saville, “The Power Situation in the Southern Power Province,” *Annals of the American Academy of Political and Social Science* 153 (Jan. 1931), graphs between pages 94 and 95; and Federal Power Commission,

²⁸ Federal Power Commission, *Statistics of Electric Utilities in the United States, 1939* (Government Printing Office, 1940), 607.

Response by Christopher J. Manganiello, Georgia River Network

I am honored for Chris Jones's offer to host and moderate *Southern Water*, *Southern Power* for the *H-Environment Roundtable Reviews*. This format is an important channel for the profession given the proliferation of literature and subfields. The reviewers typically pick up on different themes which results in a more comprehensive commentary than is possible in the standard academic journal review. This time, as in the past, Chris's reviewers delivered and I am grateful for their time, energy, and insight.

The reviews speak evenly to the contributions *Southern Water*, *Southern Power* makes to environmental, southern and energy history. In the process of responding to the observations, questions, critiques and shortcomings identified by the reviewers I hope to clarify the project's intent and why water and power in the U.S. South mattered and will continue to matter. My responses follow the order that my email account arranged the attachments and I printed them out, though I hope what immediately follows addresses some of Randal Hall's observations and Eve Vogel's "so whats?" Finally, this review is late on my account: I am thankful for Chris's and my reviewers' patience and respect for the fact that life and death happen.

A week before April Fool's Day, I surfaced from an intense eleven-week stint of lobbying state legislators on clean water and other issues, managing media relations, and raising money to keep the lights on. I am an environmentalist and I work for a living. Fortunately I share company with dedicated colleagues from the Georgia Water Coalition—one of the most successful statewide environmental coalitions in the country.

We kicked off the General Assembly session with Flint, Michigan fresh in our minds, and memories of West Virginia's Elk River and Toledo's Lake Erie not far behind. Now we have our eyes on Jackson, Mississippi as well as a host of communities across Georgia. Failure to protect the most basic resource—drinking water—in the United States in the twenty-first century is really hard for me to get my head around. But, after my four-year tenure in government affairs, very little is shocking. Most Georgia legislators rely on well-funded and connected corporate lobbyists for information, campaign funding, and help making decisions. Like legislators all over the country, that means they don't have paid staff to help them learn about the issues. Add a conservative political ideology that has worked for decades to make "government" smaller and defund agencies with critical functions, and then the state of affairs in Georgia, Michigan, and across the country makes some sense. In my neck of the woods, there has been a slight shift. Many of the same forces responsible for creating this political climate are becoming victims. Folks who wanted to make government small enough to drown it in a bathtub (to paraphrase Grover Norquist) probably never stopped to think the tub might also be filled with toxic water that did no one—taxpaying neighbors, constituents, business interests, farmers—any good. And that's what happened on Georgia's Ogeechee River.

In May of 2011, tens of thousands of fish started floating belly-up along a stretch of the Ogeechee River below a pipe discharging partially treated industrial wastewater. The record keeping is spotty, but the event is considered one of the biggest fish kills in state history. King America Finishing, a Chicago-based textile firm, was found to have been illegally discharging waste into the Ogeechee River. One of the company's two wastewater discharge lines lacked a National Pollutant Discharge Elimination System (NPDES) permit as required by the federal Clean Water Act. Apparently the state's Environmental Protection Division inspectors missed the second new discharge line when it was installed in 2006 and in the ensuing years despite numerous on-site inspections. Furthermore, the fish kill took place during a dry period when the Ogeechee was running low, water quality was already impaired, and there was little water available to dilute the effluent. The state agency never conclusively linked the fish kill to the discharge despite finding no dead fish upstream of the discharge; they said the fish technically died from bacterial infections and not a toxic cocktail.

While the state was in negotiations with the company about what to do, a second fish kill took place almost exactly one year later. By 2014, a consent agreement was finalized, and the company agreed to a financial settlement with Ogeechee Riverkeeper and to fund environmental projects. A new discharge permit was written. However, the company never had to legally admit guilt which absolved King America Finishing of Clean Water Act fines north of \$90 million. But local outrage—channeled in part through the Ogeechee Riverkeeper, a local environmental non-profit and watershed organization in an overwhelmingly rural part of the state's Coastal Plain—made waves in the state Capitol.

You have to understand, the Ogeechee River is an undammed, tangled, black water river and leisure oasis for numerous rural communities and residents who are not exactly looking for a resort or spa vacation. On weekends, cars and trucks full of families, floatable inflatables, coolers, and grills roll in and stay the night. In a very Republican part of the state, riverfront property owners posted yard-signs encouraging voters to “Remember the Ogeechee. Dump Deal,” referring to then first-term Republican Governor, former U.S. Congressman and proponent of ‘selling the South’ Nathan Deal. These modern countryside conservationists, conservatives and local legislators lost trust in the state environmental agency, whose director is appointed by the Governor. If they had not before, a sliver of rural Georgia began to justifiably doubt the agency director's claim that the state could promote economic growth and protect the environment as the facts trickled out.

The distrust born of this incident has snowballed as my colleagues and I provide legislators with facts and the necessary background information about other statewide threats to clean water and property. When the legislators decide to dig a little deeper or press the state environmental agency for answers, they learn “the environmentalists” are not exaggerating.

The work I do is fundamentally located at the intersection of nature and culture, and perhaps best articulated as something Don Worster has advocated for: “watershed democracy.” It is “a notion that people should organize their governing institutions according to the watershed in which they live, both for their political and their ecological wellbeing.” Worster attributes this ideal to John Wesley Powell’s reckoning with the arid American West and those who sought to make it bloom and grow in the nineteenth century.²⁹ Powell thought farmers should be the key stakeholders in the management of the watersheds they called home. Instead, we ended up with the policy and political institutions that give little thought to watersheds as functional units.

In Georgia, I have witnessed a version of Worster’s watershed democracy in practice on the Ogeechee River and beyond. My avocations, research and vocation teach me how and why politics and the environment matter. At the root: All politics is local. And legislators—past and present—do indeed behave on many occasions as their constituents wish.

I work closely with other regional organizations and local watershed groups that have practiced their own versions of watershed democracy for decades. Among the most effective are the state’s nine Riverkeepers (there are fourteen major river basins in Georgia) who work mostly in rural Georgia. Combined, these are the grassroots folks who are on the frontlines every day. They are highly effective and they get the necessary conservation and community work done that otherwise would not get done. And the Riverkeepers are most powerful when they turn their members loose in the Capitol to lobby their river basin’s legislators.

Over the past four years, and with no public administration or media training, I learned on the job how to diligently shepherd legislative measures to protect clean water in Georgia from all types of indifference, misinformation and greed. This year, as in previous years, we trained over 150 volunteer citizens from all over the state to lobby their legislators in person at the Capitol or engage their representatives at home on a Sunday morning. Another event brought a handful of residents from the rapidly de-populating southern portion of the state to the Capitol so they could tell their stories about groundwater contamination in the taps (arsenic) and drainage canals (volatile organic compounds).

Storytellers are effective lobbyists. Many people may cringe at the word “lobbyist.” However, until a more perfect watershed democracy is in place where the necessary governing bodies have institutionalized a watershed’s stakeholders, we are left to build relationships in whatever form we can. If we don’t lobby, we will all suffer.

²⁹ Donald Worster, “Watershed Democracy: Rediscovering the Lost Vision of John Wesley Powell,” in *Water: Histories, Cultures, Ecologies*, edited by Marie Leybourne and Andrea Gaynor (Crawley, Western Australia: University of Western Australia Press, 2006), 3-15. Please note that Worster is not the first to arrive at the ideal of watershed democracy. I first came across the notion in Eugene P. Odum’s body of work. Additionally, the 1990s and early 2000s were the high-water mark years for watershed organizing around water quality monitoring.

In Georgia's conservative political climate finding common ground on our issues is not impossible. We win some. We lose some. Our biggest obstacle is not necessarily the General Assembly; it appears to be the state chamber of commerce. When we are successful with legislators it is because our bipartisan work is dedicated to the defense of property rights and clean drinking water for people. When it comes to water and power in the South today, I work hard alongside folks who live in the watersheds, or the place Worster identified as the "natural home of democracy."

Casey Cater is right: I omitted discussion of "state regulatory oversight" of the utility sector in Georgia. And I suppose I did overstate that "early-twentieth-century consumers expressed indifference toward questions of where their energy and water came from." [Cater] That said, I do credit, at least at the national level, conversation about a 'public' push-back against private utilities. Before the New Deal, Giant Power was the proposed public power and distribution system alternative to the private utilities' Super Power system. While Cater's examples of southerners' behaviors are correct, for all the southern opposition to monopolies, the southern utilities continued to operate the largest multi-state interconnected system in the country until the Great Depression.³⁰ I was aware Cater intended to work on some of these issues and have looked forward to reading about the Public Service Commission and other state regulatory actors.

While I draw in voices in many other cases throughout the book, Cater's question, "where are the people" in the specific context of the rural and municipal co-operatives is a fair question. My intent was to write a broad story about the rise of utilities and the market for the industrial energy they cultivated. It was not to be a story about the incredibly powerful and previously covered rural electrification movement, and thus not a genesis story of the Rural Electrification Administration (REA, created 1935). It is safe to say a good number of people were behind Senator Richard B. Russell, a de facto advocate for public power and rural electrification. Russell was the spokesperson for his constituents. Russell behaved, for better and worse, as his constituents wished. My intent was not to silence the voices of resistance to monopolies, but to instead tell a big story through their megaphone.

Furthermore, rather than use the voices Cater was looking for, such as the voices that opposed Georgia Power's proposal for Clarks Hill, I thought using the company's follies, poor justifications and missteps would indeed "teach us lessons applicable to current issues of hegemony and water insecurity." [Cater] How could an overextended utility that was already behind on one project propose to build an even larger project? How often has a major utility walked away from the equivalent of the modern Federal Energy Regulatory Commission license necessary to build a power plant because they did not think there was a market for the energy, but then

³⁰ Christopher J. Manganiello, *Southern Water, Southern Power: How the Politics of Cheap Energy and Water Scarcity Shaped A Region* (Chapel Hill: University of North Carolina Press, 2015), 59, 61.

tried to get the license back not once, but twice?³¹ These are relevant questions today given Georgia Power's continued struggles to build two new nuclear reactors at Plant Vogtle that will effect water quality and instream flow in the Savannah River. (Mississippi Power, Georgia Power's cousin in the Southern Company family, is currently handicapped by the Kemper coal gasification plant's \$4 billion cost-overrun.³²) Plus, Georgia Power recently announced an intent to plan for another set of nuclear reactors along the Chattahoochee River despite a transboundary water dispute and being \$8 billion over-budget and over three years behind schedule at Plant Vogtle.³³ Georgia Power's hubris or arrogance, not unlike that of Duke Energy's in the context of coal ash in the Carolinas as noted by Randal Hall, is a historical continuity that otherwise gets no airtime in corporate histories. The world is changing around global energy companies and they continue to struggle to adapt and evolve. They have all been paying attention to the wrong history.

And finally, on determinism: Droughts changed the way people thought and behaved in the past as much as they do in the present. The drought of 1925 changed the way James B. Duke, Rupert Vance, Georgia Power and their contemporaries thought about energy generation in the South.³⁴ While droughts of the 1920s changed the way people thought, it is true the events of the 1920s did not result in a complete abandonment of hydroelectric facilities. Yes, the private utilities continued to build hydroelectric dams in the southeast well into 1960s; my narrative explicitly acknowledges this and makes no attempt to hide that reality. But the droughts of the 1920s and 1940s taught a simple lesson: diversify your energy sources. Southern utilities like Georgia Power diversified in two ways: they made sure they had interconnected hydroelectric installations in every river basin in the region, and they operated coal burners to serve the dual purpose as a source of peaking power and backup. At the end of the day, I still believe I can accurately say the "1925 southeastern drought led the companies on a technological path from a hydro plateau back to coal-fired steam generation plants."³⁵

Matthew Evenden asked: How might the Tennessee Valley Authority's (TVA) regional history, as a contested history, inform our interpretation of the TVA's international history? A side project I have been working on illustrates that TVA's contested history extended well beyond the 1930s and 1940s. At the very moment in the 1960s that TVA inspired high-modernist projects emerged in other parts of the world, the TVA experiment was in full-retreat at home. The TVA attempted to retool and build more flood control reservoirs in the upper reaches of the Tennessee River's North Carolina headwaters. As would be expected, the chamber of commerce folks welcomed TVA's proposal. However, TVA's leadership encountered an organized and powerful coalition of environmentalists, fiscal conservatives and

³¹ *Southern Water, Southern Power*, 84, 89.

³² "Southern Co.'s Kemper power plant costs rise yet again," *Atlanta Business Chronicle*, April 4, 2016.

³³ "Georgia Power eyes rural site for possible nuke plant," *Atlanta Journal Constitution*, March 18, 2016.

³⁴ *Southern Water, Southern Power*, 65-67.

³⁵ *Southern Water, Southern Power*, 65.

Republican lawmakers at the grassroots. In western North Carolina, democracy was on the march and the boots of many trampled the TVA. Tore Olsson's (University of Tennessee) forthcoming book—*Agrarian Crossings: Remaking the U.S. and Mexican Countryside from the Great Depression to the Cold War*—will add to a growing interest in TVA's international exchanges in the post-World War II era.

The “important commonalities and contrasts in southern and western US water history” Evenden inquired about are many, so I will touch on two I anticipate working on in the very near future: water rights and agricultural water use. At the highest level, and of relevance for the work I currently do, remains the issue of legal water rights. The American South follows a regulated riparian legal framework, while the American West generally follows a prior appropriation framework. In the South, any person with property along a river can use the water (or prohibit others from accessing that water) so long as the river's flow is not diminished in volume for downstream riparian users. The regulated part means, among other things, that the state can require a riparian owner to follow an established water withdrawal permitting system. In states generally west of the Mississippi, a prior appropriation framework grants access to water to non-riparian entities, thereby enabling large volumes of water to be claimed, traded and transferred over great distances.

Why do water rights matter in the American South today? They matter in the context of the ongoing, long, and expensive transboundary water conflict (a.k.a. the so-called twenty-plus-years-old “water wars” waged by Alabama, Florida and Georgia) in the Apalachicola-Flint-Chattahoochee River Basin. On at least three occasions the state has quietly attempted to create legal or policy frameworks that would effectively commodify water or create a prior appropriation system in Georgia. This matters for a number of reasons but most important: the prior appropriation system alone will not protect environmental systems and the people who depend on those systems. Given the emergent conflict over prior appropriation in California's on-going five year drought, and the fact that the Colorado River rarely reaches the Gulf of California, the arguments to switch from one framework to the other are not convincing.

One other historic commonality and contrast would be the issues of competing interests. The water history of the American West is complex when trying to determine where the impetus to control water came from. Was it mining, agriculture, energy, industry, water supply, etc.? We know the answer is: “It depends on where in the West” one is talking about. Not too unlike the other side of the lower-48, water history in the South depends on where in the region the conversation is focused on. Was it flood control, energy, industry or scarcity? Today and on a national scale, energy and agriculture rank as the top water consumers with municipal and industrial demand growing. In the American South, agricultural water demand only shows up in my Epilogue. There is a reason for that: Unlike the American West, irrigated agriculture was never a serious consideration in any major water resource management planning exercise in the southeast. Agricultural demand only occasionally emerged in conversation, and some irrigation related

money trickled into the South after the droughts of the 1950s. In Florida and Georgia, for example, irrigated agriculture would not really lift-off until after 1970.

Given long droughts in Texas and California's ongoing drought, agribusiness operatives are reportedly scoping the American South as a place to set up shop. In 2014, a major legal and legislative battle erupted in South Carolina over a proposed potato farm's request for an exorbitant water withdrawal permit the source—the Edisto River—cannot sustain.³⁶ Alabama farmers, while currently engaged in a statewide water planning process, do not appear to want to regulate themselves. More recently in Georgia, the Bill and Melinda Gates Foundation is buying up land either to cash in on agricultural commodities or as part of a global plan to sow another "Green Revolution."³⁷ At any rate, if the region does not get a handle on irrigated agriculture, we will surely pump the Floridan aquifer, and the rivers connected to that massive aquifer, dry. In today's world, drought anywhere increasingly has consequences everywhere.

Randal Hall "would like to know more" about how I defined the "terms modern and modernization." The short answer is: I was in the heads of the promoters. Their interpretation of modern was simple: more electricity is better and will make the region richer; electricity was clean energy compared to burning carbon (be it wood or coal); more efficient turbines make more energy. In no way did I intend for "modern" to mean "more enlightened" or that the hydraulic waterscape benefited everyone. There is plenty of evidence in *Southern Water*, *Southern Power* that water and energy decisions benefited the decision makers. The technological modernization in this history should not be equated with a more socially, politically and economically equal or egalitarian South. Again, there are plenty of examples of people living within a stone's throw of a hydroelectric dam who lived in homes that had no electricity.

Hall, like other reviewers, takes issue with the title's claim to address a broader South than I actually cover. The intent of the book was to address water and energy in a part of the South that lacked other energy sources, witnessed the rise of a powerful private utility sector and had to contend with drought. When I looked at Virginia, what I did find told me it would likely follow the North Carolina or Georgia model. I wanted to avoid a 'flood' focused narrative, so I elected not to include Mississippi and Louisiana. And Florida—which was re-plumbed to deal with too much water and to specifically benefit agriculture—did not have the same physical landscape I desired: artificial reservoirs small and large that were connected to the energy and industrial story I sought to tell. That left me with my South to discuss water and power: Tennessee, North Carolina, South Carolina, Alabama, and Georgia.

³⁶ "The farm fight for water: Politicos wrangle over pulling water out of the Edisto River," *Charleston Post and Enquirer*, April 13, 2015.

³⁷ "Bill Gates' Next Target: Revolutionize Farming," *Forbes*, January 24, 2012; "Bill Gates linked to farmland purchases in north Florida; may be looking elsewhere in the Southeast," *The Produce News*, October 28, 2014.

Having two of the nation's larger electric utilities covering the majority of the territory in these states for over 100 years also helped focus my geography.

What about Texas? Given the trajectory of my thinking, I stopped at the Mississippi River because I had to draw my boundary someplace. And Texas, from a climate perspective, was not exactly the humid South I looked for. I was well aware of Texas's energy and water history, and the Lower Colorado River's looked like other state-based New Deal liberalism projects such as the TVA and Santee-Cooper (South Carolina). Given the physical structure and independence of Texas's electric grid from the rest of the nation's grids, I have every reason to believe there is much more to the story.

Here is as good as any place to address Eve Vogel's wish for "a greater analysis of tangible environmental change." There are an estimated 5,132 dams in Georgia, and the state ranks fourth behind Missouri (5,519), Kansas (6,374) and Texas (7,310). When expanded to the top ten states, Mississippi and North Carolina represent the south while the balance are west of the Mississippi River.³⁸ In Georgia, the fall line structures went in as early as the 1840s, effectively eliminating the migratory fishery species. Fast forward to the 1930 when the federal government began financing the farm ponds that proliferated after the 1950s drought. Then the watershed dams, such that by the 1960, nearly every stretch and reach of Georgia's over 70,000 miles of creeks, streams and rivers were touched by an impoundment. The tangible environmental change is enormous and visible from an airplane approaching Atlanta's airport or a boat on any Georgia river. The artificiality and manipulation of the southern landscape—the dams, impoundments, levees, canals, field contours, gullies, and similar artifacts—inspired the project and I regret that the enormous work of people, bulldozers and the rivers themselves to re-plumb and create a vast hydraulic waterscape was not more clearly articulated.

Eve Vogel and Cater both raised questions about topics not covered in the narrative, topics I can say have been interrogated elsewhere. Cater, for example, was rightly surprised not to see an elaborated reference to opposition to a Georgia Power hydroelectric project at Tallulah Falls.³⁹ That story line made the cut for the dissertation, ended up on the cutting room floor when I entered "the book" phase, and makes appearances in my public lectures. Vogel raised the fish topic. How could a book about dams not include a story about fish? Early on I asked myself: Surely there is a story about fish since nearly every book about Pacific Ocean river drainages includes a tale of salmon? The iconic migratory fish of the South—shad (and sturgeon)—were effectively wiped out by fall line dams that went up as early as the 1840s. There was an attempt by famous nineteenth century fish culturalists to propagate shad after the American Civil War. They failed on the dammed rivers, and on the un-dammed rivers industrial discharges decimated the fishery in the twentieth century. Today, a small commercial shad fishery exists but the future

³⁸ See: [National Inventory of Dams](#).

³⁹ *Southern Water, Southern Power*, 144, 163.

looks dim for the one or two fishermen still looking to haul a catch. A comprehensive fish story is yet to be told. The general audience at the spectacular Savannah, Georgia symposium—[*Coastal Nature, Coastal Culture: Environmental Histories of the Georgia Coast*](#)—agreed a marine environmental history of the Southern Atlantic Bight is highly sought-after. As for the fish history I did accumulate, it can be found in *Southern Cultures*.⁴⁰

Scholars and policy professionals approach history with an eye on different timelines and timescales, and fundamentally speak to different audiences in different ways. Based on my experience, historians tend to view “history” as everything that happened before, say 1980. For actions and events to be considered history, they need to have taken place long enough ago to allow for interpretation. This space for interpretation evolves, and perhaps much faster given the availability of electronic resources. In the policy world, history matters but is often much more recent and entails what happened in the last ten or twenty years. In other words, based on my experience historians care about the deep past, and the policy world stays much closer to the surface. Both approaches to history are relevant in their own contexts. Policy professionals have short windows of time to become subject-matter experts and provide background to an audience, like a legislator, who is likely to have a short attention span and may have little knowledge of a given issue.

There is a twist to appreciating and using history as a tool in the policy professional’s world. When an individual company submits an application to renew an environmental permit—like the before noted NPDES permit and the Ogeechee River—the state issues a call for public comment. In 2012 I paddled past Rayonier Advanced Material’s discharge and learned like my colleague who has paddled nearly every river in the state, it was not an exaggeration to say it was the foulest, eye watering, suffocating discharge in Georgia. After years of listening to Rayonier’s employees talk about what a great job their company did and has done protecting the Altamaha River, I dug in. In 2014, I borrowed library passwords to access historic newspaper databases to prepare a comment letter for an international producer of cellulose fiber seeking a new NPDES permit. In what little time my day job allowed, I successfully turned up archival material in addition to media stories dating to the company’s first few months of operation in 1954. It was common knowledge that Rayonier’s industrial discharge fouled the river and killed fish commercial fisherman relied upon. Downstream property owners also pursued legal action because they feared their property values were going to tank. While everyone talked about this history, I never saw it written down. So I did.⁴¹ And I can nearly guarantee the agency staff—at the state level and at the federal Environmental Protection Agency—processing the permit application had been told

⁴⁰ Christopher J. Manganiello, “Fish Tales and the Conservation State,” for special “Southern Waters” edition of *Southern Cultures* 20, no. 3 (August 2014): 43-62.

⁴¹ Chris Manganiello, “Rayonier and the Altamaha,” [Georgia Water Wire](#) blog, April 13, 2015.

the same corporate stories I had heard as though the past did not matter for the Altamaha or the people who used the river. My comment letter was designed to give the permit writers documented perspective to encourage them to think independently about the applicant's story and motive. And maybe, just maybe, write a permit that was more protective of people and the environment. They did not, but history remains a subversive tool for the policy professional.

My academic journey has influenced how I interpret modern environmentalism and get things done. I do not do my job to save endangered species or because I enjoy wilderness recreation. Those things matter to me personally and defined environmental history as a field. I do what I do because everybody in this country should have access to clean water. We must protect clean water to sustain healthy communities and the environments they depend on. Climate change (or disruption) is real and has consequences for water supply and quality. We all deserve access to drinkable, swimmable and fishable water. I do the work I do in watersheds all over Georgia to ensure that access is fair and equitable. I ask you to find a local watershed group, Riverkeeper or entity that does the same. Then, please engage by sharing your time, money or both in building a more perfect watershed democracy.

About the Contributors

Casey Cater is a PhD candidate in the Department of History at Georgia State University. His dissertation, "Regenerating Dixie: Electric Energy and the Making of the Modern South," will be completed in the summer of 2016. He is also at work on a piece that examines the role of race and class issues in the onset of state-level regulation of southern power companies as well as another project that considers the significance of hydroelectricity to rural electrification efforts in the 1920s South.

Matthew Evenden is an Associate Professor of Geography and Associate Dean of Arts, Research and Graduate Studies at the University of British Columbia, Vancouver. His latest book is *Allied Power: Mobilizing Hydro-electricity during Canada's Second World War* (Toronto: University of Toronto Press, 2015).

Randal Hall is an Associate Professor of History at Rice University and editor of the *Journal of Southern History*. He is the author of *Mountains on the Market: Industry, the Environment, and the South* (University Press of Kentucky, 2012) and is interested in the environmental and economic aspects of how Americans have thought about abundance and scarcity. His current research involves conservationist Louis Bromfield.

Christopher F. Jones, Assistant Professor in the School of Historical, Philosophical, and Religious Studies, studies the histories of energy, environment, and technology. He is the author of *Routes of Power: Energy and Modern America* (Harvard, 2014) and is currently working on a project examining the relationships between economic theories of growth and the depletion of non-renewable natural resources.

Christopher J. Manganiello has served as the Policy Director at [Georgia River Network](#) since January 2012. He has published in the *Journal of the History of Biology*, the *Journal of Southern History*, and *Southern Cultures*, and was co-editor, with Paul S. Sutter, of *Environmental History and the American South: A Reader* (University of Georgia Press, 2009). He blogs on the [Georgia Water Wire](#).

Eve Vogel is Associate Professor of Geography at the University of Massachusetts. Her research focuses on river management, policy, politics, and history. She is especially interested in documenting and fostering efforts to manage rivers to sustain ecosystems while also supporting a diversity of human communities and needs.

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