

## Introduction

On 21 July 2013, *The New York Times* featured a story about the revival of Newark, New Jersey, a city long associated with urban decline and decay. Newark's decline, in part a result of deindustrialization and the loss of jobs, also stemmed from environmental ills such as the earlier disposal of dioxin into the Passaic River, which runs alongside the city. Today, the river is central to Newark's recovery and reclamation efforts include a new sewage treatment plant and a highly visible boardwalk, reconceptualizing the use of riverfronts. The Passaic, in turn, becomes symbolic of a renewed Newark. But the article is quick to point out that Newark's recovery, represented through the reclamation of the Passaic River, is not unique. Instead, "It's a common approach these days, from Seoul to Madrid to San Francisco: upgrading cities by revamping ravaged waterfronts." The article goes on to say, "The idea is to make the Passaic a point of pride." Urban rivers and the once-industrialized riverfront spaces have become fashionable as revitalized cities find new uses for urban space turning riverscapes into aesthetically pleasing areas full of potential for recreation and community building.

Historically, however, rivers have long been a means to cultivate regional or local pride of place as numerous mythologies, folk tales, and visual images reveal, offering rich collective memories. For example, Egyptians revered the Nile and often sang the river's praises, early Hindu cultures sanctified the Ganga with a colorful and provocative creation story, and Mid-Columbia Indians in the Columbia River Basin valued water as the "first sacred food."2 These earlier homages to rivers, however, were not as purposeful as twentyfirst-century efforts to enlist rivers in urban renewal strategies and instead were the product of daily experiences living and working alongside the rivers. As a result, individual rivers emerged as a source of pride, unifying the surrounding population. Always critical to ecological health, today rivers are enjoying a renaissance from a social and cultural perspective. As seen in the example of Newark, many cities in the throes of revitalization are relying upon urban rivers to serve as centerpieces for their revivals. Complementing the new appreciation for urban riverfronts, recent scholarship on rivers recognizes the centrality of rivers in the human past. In the academic realm, the literature on rivers progressed from earlier celebratory accounts on major rivers such as

the popular 1940s series on American rivers, edited by Constance Skinner, to an array of environmental histories such as Christopher Morris's work on the Mississippi River or Mark Cioc's eco-biography of the Rhine.<sup>3</sup>

The growing body of scholarly works reveals the multidisciplinarity of river research as the field widened from mid-twentieth-century works that were primarily descriptive where rivers were valorized for their aesthetics while acknowledged for their utility and contribution in civilization-building. For example, texts such as Gordon Cooper's Along the Great Rivers in which he rhapsodized "Rivers, like clarions, sing to the ocean of the beauty of the earth, the fertility of plains, and the splendor of cities" were common paeans to major rivers.4 Adding to the literature were institutional and administrative histories in which the development of a river was chronicled through the lens of a federal agency such as the U.S. Army Corps of Engineers. A number of works fall under this category such as Martin Reuss's examination of the Atchafalaya Basin or the exhaustive study of the Grand Coulee Dam by Paul Pitzer. Journalists have expanded the field with lively accounts of a single river, such as Marq de Villiers recalling his trip down the Volga after the collapse of the Soviet Union. De Villiers parlayed his journey into a running commentary on the post-Soviet environment. Other journalists, such as Ray March with his account of a California river in River in Ruin or Philip Fradkin's A River No More exemplify the contributions targeted for general audiences.<sup>5</sup>

Adding to the chorus of historical studies are contemporary journalistic works that address the environmental degradation of the world's rivers and water resources through years of rampant industrialization and modernization. Attracting a popular audience, the theme of environmental decline can be found in works such as Fred Pearce's When the Rivers Run Dry where he wrote of the deterioration of the Mekong and Rio Grande Rivers and Aral Sea, among others. Other popular books warning of the pending water crisis and the despoliation of major rivers include Steven Solomon's Water: The Epic Struggle for Wealth, Power, and Civilization and Patrick McCully's Silenced Rivers, to name a few from a burgeoning field. Although written from the perspective of impending environmental catastrophe, these texts complement academic efforts in that both reflect the consensus that rivers and water resources—critical to human existence—are threatened by contemporary resource practices. Further, works such as McCully's provide another context in which to understand the twentieth century drive to modernize, with the corresponding manipulation of rivers, and the subsequent effects upon major river systems.6

Growing in complexity are studies such as Sara Pritchard's book on the Rhône in which she drew upon methodologies from several disciplines including science, technology, and society (STS) and environmental history and provided an in-depth examination of post-World War II development of the

Rhône. Pritchard categorized her work as an enviro-technical approach, evidence of a maturation and sophistication in the study of rivers. In her findings, she demonstrated that the Rhône's development was motivated, in part, to recapture the past grandeur of a nation devastated by war. A common theme in river studies, Pritchard revealed how rivers are employed to enhance national prestige. Throughout the twentieth century, engineering feats on major rivers—such as the Grand Coulee, Aswan, and Three Gorges Dams—were testimonies to a nation's ascent and a source of national pride. Another sampling of the multidisciplinarity and increased sophistication of river scholarship can be found in a 2010 dissertation by Randall Dills on the Neva River and its part in the history of St. Petersburg. Dills considered his research as serving a number of audiences, including urban, Russian, and environmental historians. He credited the Neva with providing a lens through which to understand St. Petersburg as it evolved into a modern city. In his words, "water, particularly the meaning and use of the watered environs of the city, is the best lens to trace these disputes as the battle over capital was fought again and again." More singular in purpose are books such as that of art historian Tricia Cusack whose *Riverscapes and National Identities* analyzed the role of five major rivers in the emergent nationalism of the nineteenth century. Cusack's study adds another dimension to the historiography of rivers and challenged scholars of nationalism to consider riverscapes when theorizing about the construction of nationalist discourse. By relying upon visual imagery such as the artwork of Isaak Levitan portraying the Volga River, Cusack presented a convincing thesis how rivers valorized through these nineteenth-century portraits contributed to a growing national ethos. She also demonstrated that visual culture, in this instance riverscape imagery—frozen in time through the landscape art of Levitan and Repin—retained its influence on national identity.8

Adding to the historical record and another comparative study is Peter Coates's comprehensive work, A Story of Six Rivers. His approach, however, differed from Cusack in that he selected less well-known rivers—the Danube, Spree, Po, Mersey, Yukon, and Los Angeles—while the scope of inquiry was more extensive. In the introduction, Coates emphasized his was not the familiar story of environmental degradation as he showed how rivers were an integral part of the human past and, quoting from an environmental classic, contended that despite human alterations rivers "retain 'unmade' attributes." To Coates, "Rivers are works in progress." As an environmental historian, he presented contemporary perceptions of rivers as cultural constructions and furthers an understanding of the role of rivers by looking at ancient and ongoing associations with rivers such as "river of life," "river of riches," "river of recreation," "river of peril," and "river of inspiration." These associations revealed the cultural construction of nature and rivers as well as the multiple layers of human interaction with rivers. (The discussion of river associations complements Cusack's argument that visual imagery lends a constancy to nationalist ideals with their incorporation of riverscapes.) Coates even tackled the question of agency that so often plagues environmental historians and concluded that "Environmental history calls a river a river. It makes the river a leading participant, if not overwhelming protagonist." Coates's study, not only offered a theoretical framework, but also illustrated the dramatic shifts in river scholarship since the early twentieth century.

A less obvious association with the scholarship on rivers but still adding to the growing recognition that rivers played pivotal roles in the human past are the works of two Russian historians and their findings into overlooked aspects of Russia's imperial past. In Catherine Evtuhov's Portrait of a Russian Province: Economy, Society and Civilization in Nineteenth Century Nizhnii Novgorod, although an examination of a specific province, she demonstrated the centrality of the Volga and Oka Rivers in the province's history and success. In her retelling of this provincial history, Evtuhov's study is unusual on two counts. First, most Russian histories of the nineteenth century have been preoccupied with how the era led to the Bolsheviks and their ultimate failure. But in Eytuhov's study, she was concerned with what existed in the nineteenth century not what went wrong. Second, within this departure from traditional Russian scholarship in which Evtuhov focused on the history of one province, she included the role of the two rivers. By breaking down provincial history into its discrete parts, she revealed a Russian past that was more diverse with multiple leading participants. In her history, the Volga and Oka Rivers and Nizhnii Novgorod residents intersect at multiple junctures, producing the world-renowned Nizhnii Novgorod Fair and an economy dependent upon an extensive trade down to the Caspian Sea. In other words, Evtuhov recognized the importance of the Volga and local ecology in shaping the powerful merchant class. The role of the rivers became increasingly significant when her study highlighted how much the merchant class dictated Russian life. Evtuhov supplied further evidence of the two rivers' importance with her discussion of Russian words used specifically to describe the Volga's hydrological regime. For example, the Russian word staritsa referred to an earlier river course while the term polovodie indicated the annual May floods. The evolution of a vocabulary for a specific fluvial regime indicated an immediacy with the Volga, suggesting the river's presence in everyday lives. Still her history remained the story of how provincial life offered a valuable glimpse into nineteenth-century Russia revealing a powerful merchant class along with the province's other occupations. While the Volga and Oka Rivers played key supporting roles in this history, Evtuhov unlike Coates and Cusack did not portray the rivers as the principal actors.<sup>10</sup>

Similar to Evtuhov's work is Robert E. Jones's book, *Bread Upon the Waters*. Jones questioned the prevailing views regarding Russia's imperial past and in so doing, he illustrated the primacy of rivers, such as the Volga in Russia's past.

In his account— while the rivers served a strictly utilitarian role—the shift in emphasis for this time period and documentation that Russia was an imperial nation in the same mold as her European counterparts revealed the contributions of Russian waterways and the worlds they created. Rich in detail, he discussed these internal waterways which the government persisted in funding in order to ship grain from the central Volga region to St. Petersburg and its Baltic port. Jones, like Evtuhov, changed the focus of Russian scholarship and disclosed a society with a bustling grain trade and an economic outlook mirroring Europe. His evidence supported "Boris Mironov's contention that imperial Russia was a normal country following the same path to modernity as other European countries." The Volga, with its access to Eastern markets as well as Russia's grain-producing regions, was key to this shifting perspective.<sup>11</sup>

In the same vein are the studies by historians Thomas C. Buchanan with his Black Life on the Mississippi and Walter Johnson's River of Dark Dreams that both examine African-American life during the time of slavery. In these texts, the Mississippi River figures prominently. For African-Americans the river intersected with their lives on a number of levels as the river offered freedom. oppression, escape, sustenance, renewal, disease, and displacement. While Buchanan emphasized the world of steamboat travel and its liberating effect upon free and enslaved Blacks, Johnson revealed an "agro-capitalist landscape" where the Mississippi represented both a means of escape and an avenue into the bowels of slavery. But similar to Evtuhov and Jones, the river is not the principal actor but instead remained in a supporting role. Still other recent contributions to riverine literature, complementing the scholarship of Buchanan and Johnson, can be found in literary studies such as Lee Joan Skinner's examination of the Pastaga River. In her study, she analyzed the power of the Pastaga as shown in the novel Cumandà by Juan Leon Mera that featured internal social and racial strife in post-independence Ecuador. Using the methodology of ecocriticism and cultural geography, Skinner perceived the river as one of the main actors in the drama as lives and identities are influenced by its dynamic presence. The river, like the Mississippi in Buchanan's and Johnson's studies, is a mediated space between cultures and in Skinner's analysis of Mera's work, the river was a central figure. In Skinner's words, the "river is a space of mediation between humans and the natural world, a landscape that both supports humans and is inimical to them." In Skinner's probing critique of Mera's work, she revealed his personification of the river through his identifying the river as "king" and "sovereign" even endowing the river's tributaries with the ability to fight in battle. Skinner's article and her use of eco-criticism and cultural geography broadens the discourse in river scholarship further supporting the case for rivers as historical actors.12

Anchoring the twenty-first-century outpouring of river scholarship are the classics beginning with Richard White's Organic Machine, which perhaps

more than any other study reconceptualized the way environmental historians perceived rivers. In White's words, "Nature, at once a cultural construct and a set of actual things outside of us and not fully contained by our constructions, needs to be put into human history." He succeeded in this with his portrayal of the Columbia River. In The Organic Machine, he brought the river alive with a history where earlier memories of the river were retrieved and integrated into the river that exists today—departing from previous environmental histories that emphasized decline and loss and placed nature outside the human drama. (Mentioned earlier, Peter Coates cited White's conclusions regarding the Columbia River and how although changed the river still kept certain attributes.) Another classic is Donald Worster's Rivers of Empire, in which he utilized Karl Wittfogel's hydraulic empire thesis to argue that rivers, as a source of power, continue to be appropriated and manipulated to serve the interests of a few in a capitalist system. Different approaches, to be sure, yet both scholars acknowledged the centrality of rivers in history. With these texts, White and Worster—founders of the field of environmental history—lent credibility to the scholarship of rivers.<sup>13</sup>

Given the multitude of books written on rivers, endowing them with numerous representations and functions, how is the following study different and what does it add to the scholarship of rivers? First, this is a comparative study of two major rivers—the Volga and Mississippi. Although multiple volumes on rivers exist, none offer a historical comparison of two major rivers from ancient times to the early twentieth century. Second, by looking at the past from the vantage point of these two rivers, multiple narratives emerge resulting in a history that is diverse, comprehensive, and rich in comparisons. For example, the Volga's story includes early empires such as the medieval Khazars, who long before the advent of the global market used the Volga to carry on a brisk trade with their neighbors to the east, west, and south. Or another story with Vikings camped on the middle stretches of the Volga hoping to capture prized silver dirhams through trade with Arab merchants. Along with trade, however, the Volga sustained numerous agricultural populations, such as the descendants of Slavic groups, with its riverbanks offering the best land and bounty. Several centuries after the Vikings, the story expands with the Mongol conquest of Russia during the winter—a singular feat unmatched by the armies of Napoleon and Hitler. After their victories, the Mongols made the Volga riverbanks their home with camps that included Kazan and Sarai. When the Mongols were routed by Ivan IV, also known as Ivan the Terrible, the river was an actor again as folklore celebrates Ivan's whipping and ultimately, taming the river in preparation for battle. Still another story commemorates the trials and tribulations, evoked through song and folklore, of the barge haulers or burlaki, who worked endless hours pulling barges over the shallow waters of the Volga before the arrival of the steamship. But the river had another story

of the burlaki. At nightfall along the riverbanks, they lived an existence free of constraints, again captured through song and folklore. Still, the Volga was witness to more suffering as the riverbanks were a breeding ground for cholera with major epidemics in the 1800s.

By the nineteenth century, the Volga's story parallels another history: the advent of modernization. Steamships, navigational canals, and hydropower tools of the modern nation-state—all become part of the Volga's history. Throughout these multiple narratives, one constant emerges. Whether during the long history of Imperial Russia or the brief Soviet Union interlude, the Volga's role in defining Russia is recognized as artists portray the riverine landscape and Soviet songs extol the nation's debt to the river. Thus, the Volga River was integral to the success of empires, the livelihood and identity of so many, and Russia's identity and emergence as a modern nation-state.

For the Mississippi, similar stories can be told. A robust Indian trade network saw the exchange of status goods ranging from copper found in the north by Lake Superior to shells and alligator teeth found in the Lower Mississippi River Basin and Gulf of Mexico—all by way of the river. Or by C.E. 1100, the existence of Cahokia, an empire on the banks of the middle stretches of the river, which saw the construction of pyramid-shaped mounds, lining a riverine landscape. From its vantage point on the river, Cahokia became the administrative center of an extensive mound-building empire with sites in present-day Oklahoma, Georgia, and Alabama. But the river also witnessed the advance of European missionaries and traders, competing for Indian souls and markets. As the river accommodated a growing trade between Indians and Europeans, waves of new populations from Britain, England, and Spain arrived. At the river's mouth, Indian populations who lived well off the bounty of a rich riverine environment saw the establishment of trading posts, and ultimately cities. In the upper reaches of the Mississippi, trade persisted in the eighteenth and nineteenth centuries, as the market in furs governed relations between Europeans and Indians. Other arrivals to the Mississippi River Valley were African slaves who also lent their stories to the river. For some, the river offered a means of escape as renegade communities in the delta swampland were established in the seventeenth century. For other African slaves, the river offered a respite and a measure of freedom from a plantation economy. Freedom also came to the flatboatmen whose lives, living on the margins, mirrored the burlaki. But the Mississippi, like the Volga, was a conduit for disease. As goods were traded up and down the river, smallpox also found its way into Native American communities, decimating populations. Cholera outbreaks occurred on board steamships with the deceased thrown overboard into the Mississippi. For the first European settlers, they chose locations in the Delta region that were often havens for disease as high mortality rates reveal.

But similar to its counterpart, a change occurred during the nineteenth and twentieth centuries when the Mississippi becomes a partner in America's story of modernization. Like the Volga, travel on the Mississippi is dominated first by steamships with later transportation facilitated by the construction of navigational canals—all contributing to the nation's success. Underlying that success, the Mississippi was part of an emergent national narrative, crafting an identity depicted in song, art, poetry, and prose that is both nostalgic and forward looking.

By viewing the past through these two rivers, which in itself differed from earlier cited works, history is not circumscribed by the boundaries of nations or the political actions of a few. Political ideologies become conflated as the historical similarities overwhelm any national differences. Instead, from the starting point of the Volga and Mississippi Rivers, a more nuanced history is revealed as the rivers diminish the traditional markers that shape the history of cultures and nations. When the river becomes the organizing theme, a different story evolves. For example, new questions of race and class are raised when looking at the intersection of humans and these two rivers. For the African-American community, the Mississippi River alternated between liberator and oppressor informing the social construct of an identity that was at times lamented, celebrated, demeaned, and feared. By looking at the lower Mississippi River in the eighteenth and nineteenth centuries, a world is revealed that allowed for a freedom of movement for African slaves not permissible in the surrounding plantations. Yet the river also served for many African slaves as a reminder of past lives or what the future held. Spirituals, such as "Roll, Jordan, Roll" could be heard on the river, suggesting a connection that went beyond the everyday world of work. A similar experience can be found in the lives of the earlier-mentioned burlaki, men who pulled barges up and down the river by way of leather harnesses strapped across their chests. For them, the Volga offered a freedom not experienced by the land-bound serfs. Again, their lives on the river were punctuated by song; work songs to be sure that often reflected the rhythmic pulling of the barges. Still, the songs bound them to the river. Songs from both communities—the burlaki and African-Americans—offered cultural artifacts that revealed the construction of an identity closely tied to the rivers.

The lives of the burlaki and African slaves were shaped by their work on the Volga and Mississippi. Both groups through their labor on these rivers experienced a freedom that their counterparts did not have. This freedom, evoked in song and folklore, contributed to a cultural identity as well. But more importantly, by viewing the past through the history of these two rivers, a new historical relationship between the environment and labor is uncovered. In both cases, the rivers not only oppressed but also liberated. Further, the songs, folklore, print, and visual culture that emanated from the experience of the

burlaki and African slaves capture the constraints and freedom of their labor on the rivers. In the same vein, the rivers presented a frontier experience, which again had a liberating effect on certain classes. In the United States, the Mississippi offered a "rough and tumble" existence for flatboatmen, depicted in the art of George Caleb Bingham. In Imperial Russia, the Volga, particularly the southern reaches far away from the seat of power, was often a refuge for bandits as travelers were often warned about their safety in these areas. Once again, it was the rivers that provided an environment where humans experienced a freedom unknown in other settings.

But a study of the rivers reveals even more about race and class when looking at the outbreak of disease, such as the cholera epidemics that plagued Imperial Russia throughout the nineteenth century. For Russia, cholera outbreaks persisted after being eradicated in other modern nations and the poor suffered the most with each occurrence. The disease, a product of poor drinking water, originated along the riverbanks where housing was substandard and poorer populations lived. For inhabitants of the Mississippi River Valley, smallpox in particular found its way into Native American tribes via trade on the river. Even today, there is a correlation between disease and the river as a number of petrochemical plants are located along the river from Baton Rouge to New Orleans in areas with large, poor Black and Latino populations. The term "Cancer Alley," refers to this stretch of the river as many from academic and activist communities contend there is an unusually high incidence of cancer, stillbirths, and asthma. The multifaceted nature of the rivers endures as both were and are conduits for trade while simultaneously conveying a sense of freedom inherent in the flowing rivers. Yet at the same time, the riverbanks were the homes of the very poor and breeding grounds for epidemic diseases. For African-Americans and the burlaki, their oftentimes immediacy with the Volga and Mississippi Rivers, in turn fostering a more conscious level of the river's workings, produced knowledge and an identity that differed from the mainstream societies.

By the nineteenth century, however, both rivers were reimagined and integrated into a metaphorical rather than a physical space. This transition was experienced differently by those living in the emerging nation-states of Russia and the United States. Although each country possessed its own symbolic representations, the move to appropriate these distinguishing characteristics mirrored an emergent nationalism found throughout the West in the nineteenth century. Scholars, such as Benedict Anderson, Ernest Gellner, and Anthony Smith, have traced the rise of nationalism with different conclusions as to its causes and definition. For example in a 2013 article by Anthony Smith, he recognized the contributions of landscape artists in building a nationalist consensus. While his study was limited to the artwork of Britain and France, some of his findings applied to the United States and Russia such as a growing

nineteenth-century tourism in the British Isles with an increased appreciation for British landscapes. 14 Both the United States and Russia experienced a similar outcome as the tourist trade grew with steamboat cruises on the Volga and Mississippi Rivers in the nineteenth century. Nationalist sentiment reinforced the notion of exceptionalism for both countries. Each country touted their uniqueness through a litany of landscape references. Concomitant with the Volga and Mississippi as primary symbols, each advancing a unity unknown in earlier centuries, were other riverscapes or landscape features distinguishing each country and forming a distinct national identity. In the United States and Russia, the argument for exceptionalism was based upon a comparison with European landscapes. In the United States the Hudson River represented American perceptions about being at the "center of the world" in art and prose that touted the riverscape's superiority.<sup>15</sup> For Russia, in addition to the Volga, other images long associated with Russian identity were the forest and steppes. But landscape and national identity were not limited to these countries as comparisons can be drawn with the German search for identity found in the idea of heimat. Or in Italy, another analogy was the association of its mountains with national identity as explored by Marco Armiero in his groundbreaking work, to cite a few examples. 16

Among the cacophony of images, however, the Volga and Mississippi as national rivers enclosed within the border of each country, became key to crafting national identity. Further, long after the rivers served the emergent nation-states, their roles as national icons persisted. For the elite, although the rivers had been valorized earlier through myth, by the nineteenth century the rivers became a cerebral experience as they occupied a spiritual place in Russian and American iconography, and represented a part of the historical memory. In the 1800s, when both the United States and Russia sought to distinguish themselves from a dominant Western European tradition, the unique landscapes of the Volga and Mississippi Rivers figured prominently. "Mother Volga" and "Old Man River" became select epithets associated with each country's sustenance, wealth, and of course, aesthetics. But for the Russian peasant or Midwestern settler, who lived at the mercy of each river's capriciousness—whether through floods, challenging navigation routes, or the carrier of disease—the aesthetics of the river did not resonate in the same fashion. This is not to say that the growing body of mythology surrounding each river was not celebrated by all classes, as it was, and all knew the legends and songs memorializing each river. But the daily experiences with the rivers differed, resulting in different narratives. This gap in experience persisted into the twentieth century even while those representing the elite changed; particularly in what became the Soviet Union. In either the United States or the Soviet Union, the class that labored on the river, whether constructing dams for hydropower or building locks to improve navigation experienced

the river in all its facets, especially when trying to harness these once magnificent, free-flowing rivers.

To the elite, the technological accomplishment could not be overstated as rivers were bridled, tamed, and rerouted in order to modernize. Nineteenthcentury imagery of the rivers, commemorating their beauty and strength, framed a discourse that further enhanced twentieth-century engineering feats. While all citizens benefitted from the results of these technological and engineering feats as improved transportation meant cheaper goods and hydropower meant electricity, the laborers who took part in the construction, realizing the technological achievements, saw in the river a far different taskmaster. This proved especially true for those in the Soviet Union who were forced to work in the icy waters of the Volga to build the Moscow-Volga Canal in record time. Even laborers on the locks and dams of the Upper Mississippi River faced dangers and undoubtedly perceived the river much differently than the political leaders celebrating the completion of a new nine-foot channel.

Despite the duality of associations, the rivers unified as well as separated. By the nineteenth century, Russia and the United States were crafting national identities that unified populations by drawing upon the historical memory of the Volga and Mississippi. As each country sought distinguishing characteristics to celebrate, the rivers with all their attendant mythology, folklore, prose, poetry, art, and song offered a rich repository in which to shape a national narrative. For Imperial Russia, through art, the Volga was part of a trilogy of symbols that included the bordering steppes and the onion-shaped dome of the Russian Orthodox Church. (The Volga as seen from the vantage point of the Russian village was another traditional Russian portrait.) For the United States, the Mississippi symbolized a frontier, where free agents such as the flatboatmen, realized a life free from convention. "Mother Volga" and "Old Man River" each became a source of national pride while at the same time aided in both countries' drive to modernize. The unique riverscape of each became a cause to celebrate as the rivers assumed iconic status. With imagery ranging from the pastoral to utilitarian, Russian and American populations early on reconciled the duality of the rivers. Steamboats not only altered the riverine habitat as snags were removed and riverbank forests cut down but also became part of the growing mythology of the river anchored in an earlier pastoralism. The twin images persist as both rivers are still depicted as nineteenthcentury icons while increasingly becoming engineered rivers-modern-day super bargeways.

Using rivers as a starting point, however, brings into question what is historically important or significant. By viewing early-twentieth-century histories of the United States and Soviet Union, through the vantage point of the Mississippi and Volga Rivers, a different story emerges than the one steeped in political history or limited to social histories of the era. By the 1920s, engineers

and political leaders in the Soviet Union and United States, like their predecessors, perceived the rivers as avenues to modernization. For the Soviet Union, the dream of linking Moscow to the Volga, first envisioned by Peter the Great in the 1700s, became a reality in 1937. Through a series of locks and dams, river barges traveled from Astrakhan to Moscow six months out of the year. For the United States, constructing the nine-foot channel on the Upper Mississippi River had been a long-standing dream as "improvements" to the river began in the early 1800s. By the late 1930s, agricultural goods from the Upper Mississippi could be shipped economically to the Gulf Coast. Contemporary histories in the 1930s focused on the engineering successes of each project, extolling the technological prowess each country demonstrated. In addition, credit was placed upon the governments of each that facilitated these projects and others. To the Soviets, only a communist system with a centralized economy could successfully facilitate major hydro-projects. To American political leaders, only a democracy could undertake these engineering marvels. Always part of the each country's national narrative, the rivers were later incorporated into a Cold War rhetoric that defined each nation for fifty years.

What is missing, however, from the narratives is that in both instances the outcome for each river was the same. Instead of free-flowing rivers, a series of slack water ponds dotted the riverscapes with environmental consequences for the Volga and Mississippi. From the perspective of the rivers, political ideology mattered little. The bigger story is the one about the health of riverine environments, regardless of rhetoric. Granted, major rivers have always served utilitarian purposes, and river traffic—whether birchbark canoes, rafts, steamships, or barges—on the Mississippi and Volga Rivers has been present since humans arrived. But in the twentieth century, the scale of use changed dramatically. With the aid of technology to enlarge channels, build navigational locks, and ensure an even depth for barges, the utility of the rivers entered a new dimension; one that affected habitat, water quality, and species. These consequences will have long-lasting effects that will shape human history in all its dimensions.

Yet while there have been numerous books recounting the history of major rivers, few, if any, have viewed the past from the comparative perspective of two major rivers from pre-modern times to the twentieth century. Those that have, such as Tricia Cusack's work, placed each river in the context of the nineteenth century and the relationship between riverscapes and national identity, and Peter Coates's work did not include the Volga and Mississippi in his vignettes of five lesser-known rivers. Many noteworthy individual river histories have been written with landmark texts such as Mark Cioc's work on the Rhine River, or the forthcoming scholarship of David Pietz as he reveals the role of the Yellow River in China's long history, or more commercial texts, such as Peter Ackroyd's work on the Thames, to name a few. But these works exam-

ine a single river without the comparative analysis that chronicles similarities and reveals certain constants that rivers have played in the past. By comparing these two major rivers, a dialectic emerges that can be applied to other river systems that demonstrates the connections between ideology and nature, power and state control. In summary, several themes surfaced that might be applicable in understanding other major river systems.

First, each river is enshrined in the collective memory through mythology, folklore, and song. Second, the rivers persisted in the historical memory through the nation making of the nineteenth century. Both the Volga and Mississippi Rivers contributed to Russia's and the United States' emergent national narrative with evidence of each river's iconic status found in art, prose, poetry, and song. Earlier renditions of the rivers whether through mythology, folklore, or the arts, were enlisted to serve the modern nation-state. Third, the rivers revealed the gaps in race and class through the lens of labor and disease. Several laboring classes (African slaves, the burlaki, and frontiersmen) all experienced the river differently than their counterparts and those more economically advantaged. Fourth, as modernization became the rallying cry in the twentieth century, the rivers were a critical part in realizing the modern nation-state whether through navigation and/or hydropower. Case studies of the Moscow-Volga Canal and the Upper Mississippi River locks and dams are testimonies to twentieth-century modernization. Yet even as the rivers are harnessed, bridled, and subdued—becoming part of each nation's modernization ethos—past images of the rivers were drafted into use as the Mississippi and Volga evolved into the engineered rivers we see today. The duality of the rivers persists as both are icons of a revered past and symbols of a dynamic future. Fifth, in revealing the history of the rivers and their similarities, the competing ideologies of the United States and Soviet Union mattered little. Despite political rhetoric extolling each nation's hydro-projects—constructed to serve either a greater democratic or socialist state—differing political ideologies were inconsequential. The outcome for both rivers was the same as each was rerouted, bridled, harnessed, and ultimately, subdued. Sixth, both rivers' development became models for export as hydro-projects in the 1930s became the symbols for modernization in developing countries. While not universal, these themes may be found when studying other major river systems, adding to a growing body of knowledge regarding race and class, the role of historical memory, nation-making and national identity, modernization and the environment.

Now a few words about methodology—in telling a story about two major rivers, the problem of scale and sources challenged this project from the beginning and I beg the reader's pardon for any omissions. In trying to chronicle as complete a history as possible, I have drawn from multiple disciplines and worked with both print and visual culture. The disciplines I relied upon most include history, archaeology, art history, architectural history, political science,

and geography. But despite including such a vast range of subject areas, there are omissions. No one better than the author realizes that greater attention to Native American settlements along the Mississippi or the work of geographers on the Volga, for example, would have resulted in a more thorough account. But given the time span covered and the importance of a balanced coverage, choices were made about what to include and leave out. The more immediate goal, however, of broadening our understanding of the past through the perspective of two major river systems was met through a diverse array of sources. For the early chapters, primary sources included folklore, mythology, travelers' accounts, and archaeological findings. Beginning with chapter 2, sources in print and visual culture were used with artwork and photographs cited. In the use of artwork portraying each river and the surrounding landscape, these images became part of the river's past and integral to the historical memory of each country. So by the 1930s, the images, or waterscapes—the historical building blocks—were part of the story that enhanced the transformation of each river.

In addition to visual culture, primary print sources included memoirs by a host of actors, such as Gulag survivors, writers, and political leaders, whose lives intersected with either the Volga or Mississippi Rivers. Secondary sources, such as those found in a number of archives (among them the National Archives at Kansas City, the Smithsonian, Russian State Library, Dmitrov History and Regional Museum and Archives, and the Museum of the Moscow-Volga Canal, University of Wisconsin-La Crosse Archives, and Winona State University) included newspapers, testimonies and bureaucratic reports published at the Moscow-Volga Canal work camps, 1930s promotional publications by the Soviet Union, engineering bulletins by the U.S. Army Corps of Engineers, and newspaper articles from a number of small communities located along the Upper Mississippi River. These were the principal sources for chapters 3 through 5. Supplementing the sources were several oral history interviews with Russian scholars who either researched the Moscow-Volga canal or had family members affected firsthand by its construction. Secondary sources by prominent scholars in Russian and U.S. history, cultural studies, art history, architectural history, archaeology, and political science were used throughout the text.

In an effort to capture the most pressing themes in a chronological framework, the chapters were divided as follows. In chapter 1, the early history of each river was explored through the lens of select Native Americans that lived in the Mississippi River Valley along with the first European explorers to travel the Mississippi. (Given the multiple Native American tribes that lived in the river basin, only a few were chosen to represent these early intersections with the river.) When looking at the Native American experience, mythology, folklore, and archaeological findings were used. For the Volga, early mythologies

from the Kievan period along with accounts from groups, such as Arab and Viking traders, were examined. From the folklore and mythologies generated by these early riverine experiences, the Mississippi and Volga Rivers became intrinsic to the cultural and historical past. A brief physical geography of each river was recounted in the chapter.

In chapter 2, each river's role in the emerging national narratives of the nineteenth century was explored. The literature is dense regarding the representative role of landscape with contributions from scholars such as Denis Cosgrove, Martin Warnke, and Simon Schama. The chapter utilized their arguments (and others) in illustrating each river's part in advancing a nationalism that touted a unique, exceptional landscape. Through literary texts, music, and art the earlier celebratory images of "Mother Volga" and "Old Man River," also known as "Father of Waters," were expressed to serve burgeoning national identities. But there were differences between the portrayals of each river. In the case of the Mississippi, the river was memorialized not only for a scenic beauty, one that rivaled and often surpassed the Alps, but as a liberator. The American artist George Caleb Bingham popularized this view of the Mississippi with his well-known works, "The Jolly Flatboatmen" and "Raftsmen Playing Cards." In both paintings, the stereotypical American frontiersman as rugged individual was celebrated. In contrast, while the Volga was noted for its aesthetic value, with comparisons to the Rhine and other major rivers, the river was also seen as an oppressor. One of the most famous paintings in nineteenth-century Russia, Ilya Repin's "The Barge Haulers," depicted a world where the Volga was part of the tyranny that the burlaki faced. Still, both rivers, evidenced by print and visual culture, contributed to the national narratives that emerged in the nineteenth century and distinguished Russia and the United States from other nations.

Entering the twentieth century, chapter 3 examined the discourse regarding nature and the subsequent consequences for the Volga and Mississippi Rivers, offering a context for the case studies to follow in chapters 4 and 5. Throughout the industrialized West, political leaders and the new league of professionals, including engineers and planners, were mesmerized by the potential through technology to reshape the natural world. In the United States, multiple purpose water projects become one of the means to conquer new regions of the country. In Lenin's Soviet Union, electrification became the panacea and symbol for "catching up" with the industrialized West. The literature during this period of utopian visions was rich with references on how to enlist nature in developing an industrialized, modernized society. Harnessing the Volga and Mississippi Rivers was one of the principal means by which this modernization occurred. By looking at the political writings of Lenin, Trotsky, Franklin Delano Roosevelt, David Lilienthal, and other well-known American and Russian political thinkers, the similarities between the two nations was

striking. Further support can be found in the exchange between the Russian and American community of engineers and scientists. (One of the first major hydropower projects, Dneprostroi, was constructed through the assistance of American engineers.) Chapter 3 articulates the shared vision of modernization and how the vision subsumed differing political ideologies, despite rhetoric to the contrary. For both rivers, however, the outcome was the same.

In chapters 4 and 5, the story of two major engineering projects on the upper reaches of the Volga and Mississippi Rivers is retold. These projects, the Moscow-Volga Canal, a 128-kilometer-long canal linking Moscow to the Volga River, and the Mississippi River Channel Project with its construction of twenty-eight locks and dams, were undertaken in the 1930s. Both illustrated the technological prowess of each country as major navigation channels were constructed and additional power sources were acquired. But the projects revealed more than engineering feats as the nationalist rhetoric surrounding both touted achievements in labor, providing jobs for unskilled, often illiterate workers, and securing a future for the disenfranchised, to name two. In the Soviet Union, the Moscow-Volga Canal was one of the hallmarks in Stalin's second Five Year Plan and the project was a showpiece with its own journals, theater, artists, and architects. In the United States, the locks and dams were built during the Depression Era by the Corps of Engineers using New Deal public employment. Similar to the Moscow-Volga Canal, every phase of the project's construction was documented with thousands of photographs, journals, and news accounts publicizing the undertaking. The symbolism of transforming these major rivers was not lost on the promoters of each project. For example, one of the journals for the Mississippi River project was called "Old Man River" and upon completion of the Moscow-Volga Canal, journalists declared that "Mother Volga was constrained." One of the ongoing themes will be the persistence of river mythology, encased in the ongoing national narrative, enhancing the engineered transformation of both rivers while also keeping alive the treasured aesthetics of each river.

In ending the text, the epilogue briefly chronicled the subsequent history of the Volga and Mississippi Rivers up to the present. In retelling this history, the rivers were placed within the broader context of hydro-modernization and how what happened to the rivers in the 1930s became a model for export throughout the developing world. The consequences of this on a local and global scale were discussed. In conclusion, seeing the past through the prism of the Volga and Mississippi Rivers continues to enlighten and enrich our understanding of history as I hope the following chapters will reveal.

## **Notes**

- 1. The New York Times, 21 July 2013, 1, 19.
- 2. Eugene S. Hunn, Nch'i-Wàna, "The Big River": Mid-Columbia Indians and Their Land (Seattle: University of Washington Press, 1990), 91.
- 3. For a discussion of the popularity of the Rivers of America series see Nicolaas Mink, "A Narrative for Nature: Constance Lindsay Skinner and the Making of Rivers of America" Environmental History 1, no. 4 (October 2006): 751-774; Christopher Morris, The Big Muddy: An Environmental History of the Mississippi and Its Peoples from Hernando de Soto to Hurricane Katrina (Oxford: Oxford University Press, 2012); Mark Cioc, The Rhine: An Eco-biography, 1815-2000 (Seattle: University of Washington Press, 2002).
- 4. Gordon Cooper, Along the Great Rivers (New York: Philosophical Library, 1953), 11.
- 5. Martin Reuss, Designing the Bayous: The Control of Water in the Atchafalaya Basin, 1800–1995 (College Station: Texas A&M University Press, 2004); Paul C. Pitzer, Grand Coulee: Harnessing a Dream (Pullman: Washington State University Press, 1994); Marq de Villiers, Down the Volga: A Journey Through Mother Russia in a Time of Troubles (New York: Viking, 1992); Ray A. March, River in Ruin: the Story of the Carmel River (Lincoln: University of Nebraska Press, 2012); Philip L. Fradkin, A River No More: The Colorado River and the West (New York: Alfred A. Knopf, 1981). This is only a sampling of the numerous texts on rivers with certain rivers such as the Hudson, Amazon, Mississippi, to name a few, having multiple publications from varying perspectives.
- 6. Fred Pearce, When the Rivers Run Dry: Journeys into the Heart of the World's Water Crisis (Toronto: Key Porter Books, 2006); Steven Solomon, Water: The Epic Struggle for Wealth, Power, and Civilization (New York: HarperCollins, 2010); Patrick McCully, Silenced Rivers: The Ecology and Politics of Large Dams (London: Zed Books, 2001).
- 7. Sara B. Pritchard, Confluence: The Nature of Technology and the Remaking of the Rhône (Cambridge: Harvard University Press, 2011); Randall Dills, "The River Neva and the Imperial Façade: Culture and Environment in Nineteenth Century St. Petersburg Russia" (Ph.D. diss., University of Illinois at Urbana-Champaign, 2010), viii.
- 8. Tricia Cusack, Riverscapes and National Identities (Syracuse: Syracuse University Press, 2010).
- 9. Peter Coates, A Story of Six Rivers: History, Culture and Ecology (London: Reaktion Books, 2013), 22–23, 27.
- 10. Catherine Evtuhov, Portrait of a Russian Province: Economy, Society, and Civilization in Nineteenth-Century Nizhnii Novgorod (Pittsburgh: University of Pittsburgh Press, 2011), xvi, 36-38.
- 11. Robert E. Jones, Bread Upon the Waters: The St. Petersburg Grain Trade and the Russian Economy, 1703-1811 (Pittsburg: University of Pittsburgh Press, 2013), 222.
- 12. Walter Johnson, River of Dark Dreams: Slavery and Empire in the Cotton Kingdom (Cambridge: The Belknap Press of Harvard University Press, 2013); Thomas C. Buchanan, Black Life on the Mississippi: Slaves, Free Blacks, and the Western Steamboat World (Chapel Hill: University of North Carolina, 2004); Lee Joan Skinner, "Identity, Engagement, and the Space of the River in Cumandà," in Troubled Water: Rivers in Latin American Imagination, ed. Elizabeth M. Pettinaroli and Ana Maria Mutis, Hispanic Issues On Line 12 (2013), 131. Web.

- 13. Richard White, The Organic Machine: The Remaking of the Columbia River (New York: Hill and Wang, 1995), x; Coates, A Story of Six Rivers, 22; Donald Worster, Rivers of Empire: Water, Aridity, and the Growth of the American West (New York: Oxford University Press, 1985).
- 14. Multiple studies regarding the origins and characteristics of nationalism are available with leading works including Benedict Anderson, Imagined Communities: Reflections on the Origin and Spread of Nationalism (London: Verso Books, 1983); Ernest Gellner, Nations and Nationalism (Ithaca: Cornell University Press, 1983); Anthony Smith, National Identity (London: Penguin, 1991); Smith, "'The Land and its People': Reflections on Artistic Identification in an Age of Nations and Nationalism," Nations and Nationalism 19, no. 1 (2013): 87-106.
- 15. R.H. Boyle, The Hudson River (New York: W.W. Norton & Co., 1969). For an example of the perceived Hudson River distinctness, see the quote by American naturalist John Burroughs on page 62.
- 16. For an excellent discussion of Russians' changing ideas about nature in the nineteenth century, see Christopher Ely, This Meager Nature Landscape and National Identity in Imperial Russia (DeKalb: Northern Illinois University Press, 2002); Jane T. Costlow, Heart-Pine Russia: Walking and Writing the Nineteenth-Century Forest (Ithaca: Cornell University Press, 2012); Alon Confino's work, The Nation as a Local Metaphor: Wurttemberg, Imperial Germany, and National Memory, 1871-1918 (Chapel Hill: University of North Carolina Press, 1997) convincingly argues that only through the symbol of the heimat, roughly translated as homeland, and its integration of certain aspects of German nature, was a common identity for the German Empire solidified; Marco Armiero, A Rugged Nation: Mountains and the Making of Modern Italy (Cambridge: The White Horse Press, 2011).