ISSUE 24 : FALL 2023 OPEN RIVERS : RETHINKING WATER, PLACE & COMMUNITY

LAYERS

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https://openrivers.umn.edu An interdisciplinary journal of public scholarship rethinking water, place & community from multiple perspectives within and beyond the academy. ISSN 2471-190X

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

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ISSN 2471-190X

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FEATURE

LAYERS IN THE LANDSCAPE: A FLOODPLAIN FOREST AND THE PEOPLE WHO HAVE INHABITED IT By Patrick Nunnally

The Mississippi River in the Twin Cities region is a truly remarkable landscape corridor. It serves as part of an important flyway for North American birds, is the ancestral and traditional

homeland of Dakota people, and has been the site of several developments that have global and national significance. Food companies Pillsbury and General Mills began at flour mills located at the



Detail from Fig 17: The floodplain forest with the Mississippi River on the right, the city of St. Paul in the distance, and new trail development at the bottom of the photo.

Falls of St. Anthony in present-day Minneapolis. Fort Snelling, located at the juncture of the Mississippi and Minnesota Rivers, was an early frontier fort that also was the location for an internment camp housing Dakota people after the disastrous <u>1862 US-Dakota War</u>. Downstream, the site of St. Paul served as the head of river navigation for decades, and throughout the nineteenth century, was a jumping-off point for people and goods settling the northern plains.

All of these factors contributed to the river being designated as the Mississippi National River

and Recreation Area, a unit of the National Park Service, in 1988. But rivers are not single points, of course, and the stretches of the Mississippi between the more celebrated nodes also have interesting and important stories, albeit more subtle than the major historical and natural attractions. This essay will address a stretch of the river that goes by several names. For the US Army Corps of Engineers, it is part of Pool 2, that stretch of the river that is impounded behind Lock & Dam 2 at Hastings, Minnesota. Figure 1 illustrates Pool 2 as it is defined by federal resource managers such as the Army Corps of



Fig 1: The area of Pool 2 stretches along the Mississippi River from the Ford Dam down to Hastings. Map data ©2023 Google.

Engineers and the US Geological Survey. In river geography, a "reach" refers to a stretch of the river that retains comparable hydrological and geomorphological characteristics, in other words, where the land and water share many of the same characteristics. Pool 2 is quite a varied stretch of the river; this essay explores only that part of Pool 2 that is characterized by a floodplain forest, which is the upstream section, above downtown St. Paul. In St. Paul's <u>Great River Passage plan</u>, the city's master plan for its 17 miles of riverfront, this stretch is referred to as the "Valley Reach" (City of Saint Paul 2013). Whatever the name, this part of the river illustrates many of its most important stories in microcosm, from the geological and hydrological forces that shaped the physical landscape, thorough its inhabitation by Indigenous people to a short-lived settlement of white settlers, called Lilydale, and finally to a series of park spaces that are rejuvenating biological systems and highlighting the continued presence of Indigenous people.



Fig 2: This drawing, taken from the Great River Passage Plan adopted by the City of St. Paul in 2013, illustrates the "Valley Reach," that stretch of the Mississippi River between downtown St. Paul and the confluence with the Minnesota River. Image courtesy of the City of St. Paul Parks and Recreation Department.

So just what is it about this landscape that makes it so subtly notable? For one thing, the connection between the river and the adjacent landscapes is much closer than on most of the river corridor. The lands bordering the river here are marked by frequent seasonal flooding, which is not separated by walls the way it is in most urban areas, or by levees as it is farther downstream to protect farmland. The floodplain here is covered with second or third growth forest, which has been undisturbed in many places since soldiers at Fort Snelling cut the original growth for construction and fuel purposes. Figure 4 illustrates the densely wooded valley, with the City of St. Paul rising in the background from bluffs, much like the bluff vantage point from which the picture was taken.

Despite its geomorphological uniqueness, which created the particular configuration of floodplain and bluff, the long term history of this landscape reflects patterns found throughout the



Fig 3: One of the distinctive characteristics of the floodplain forest stretch of the Mississippi River is the proximity of land and water, which allows for perspectives such as this one, facing downstream to St. Paul from the waterline near the former community of Lilydale. Image courtesy of the author.

Mississippi River corridor. Indigenous people lived in proximity to the river, utilizing it for food and other purposes, and building a spiritual life around it. After the series of treaties through which the United States government established "ownership" of the land, settlers colonized the river's banks, adapting them in ways that yielded money. In much of the river, that era of industrial capitalism is largely over, leaving behind landscapes that are being transformed into parks and "ecological restoration" sites. St. Paul's floodplain forest reach, then, is both unique and universal, and therein lies part of its importance. The layers of inhabitation of this landscape remain visible and present for centuries, even millennia, of human inhabitation with the river.



Fig 4: A view of downtown St Paul taken from a bluff at the upper end of the floodplain forest reach. The city itself and the cathedral to the left sit on benches left by catastrophic flooding of the Glacial River Warren approximately 12,000 years ago. The current Mississippi River channel is the low, tree-covered area in the middle of the image. Image courtesy of the author.

Water, Land, and People

The relationships between land and water define the floodplain forest reach, and, in this place, those relationships were established roughly 12,000 years ago when the Glacial River Warren cut its way through the immediate post-glacial landscape. As the Wisconsin glaciation retreated in what is now the Upper Midwest and Great Plains, it left behind Glacial Lake Agassiz as it tried to drain to the north into Hudson Bay and was blocked by the retreating ice. Lusardi and Dengler (1994, rev. 2017) note that Lake Agassiz covered over 300,000 square kilometers. The surface area of glacial Lake Agassiz was greater than the surface area of all the Great Lakes combined; it was the largest freshwater lake on the planet at that time. Glacial Lake Agassiz had several outlets where it drained, usually in a catastrophic fashion, during its existence.



Fig 5: The immediate post-glacial water flow in this area was complex. To the right, the yellow shading marks a pre-glacial channel of the Mississippi River. Blue arrows indicate water flow directions during a catastrophic flood of the Glacial River Warren. Notice that the smaller Mississippi River, to the left, is flowing in a reverse direction to what it does today. This is because the high floodwaters of the Glacial River Warren block the river from its normal course. Only with the final decline of the River Warren could water bodies assume something like their present configuration. Image courtesy of Jay Bell.

One of the most dramatic floods of Glacial Lake Agassiz occurred around what is Brown's Valley, Minnesota today. The lake is thought to have broken through an ice dam and the raging river, known as the Glacial River Warren, carved out what is the Minnesota River Valley today. Water from glacial Lake Agassiz drained toward the southeast, eventually reaching the area that is now the Twin Cities where the Minnesota and Mississippi River join. Geologist Carrie Jennings (2023) describes Glacial Lake Agassiz, the Glacial River Warren, and their relation to the Modern Minnesota River. The massive floodwaters caused the Mississippi River to flow backwards up into what is now the City of Minneapolis, and most of the floodwaters would have also carved the gorge and created today's blufflands and floodplains between the confluence of the rivers and St. Paul.

See the <u>video</u> featuring geologist Carrie Jennings describing Glacial Lake Agassiz, Glacial River Warren, and their relation to the Modern Minnesota River.

The River Warren also created a large waterfall (River Warren Falls) where the flood waters passed over an ancient, pre-glacial channel of the Mississippi River near today's Lowertown in St. Paul. This ancient channel is the precursor of



Fig 6: This image is made from a digital elevation model and shows the blufflines left by catastrophic floods of the Glacial River Warren. The approximate location of the original River Warren Falls is shown in red. Image courtesy of Jay Bell.

the wide Mississippi River that flows south from St. Paul today. The ancient river channel was filled with more recent glacial sediment that was scoured out by the floods, creating River Warren Falls on the edge of the old channel.

Over the hundreds of years in which the River Warren was cutting its way through St. Paul, evidence suggests that the flooding occurred in pulses where the river flowed at a higher level, only to subsequently have its flow reduced. These periodic flood pulses have resulted in a series of bluff formations in the city, all of which are above the current floodplain. In some areas of this reach, there are two distinct bluffs. On the north side of the valley, the lower bluff is below Shepard Road and the upper bluff above West 7th Avenue. The upper bluff was carved by the River Warren and the lower bluff is where the River Warren Falls subsequently carved another gorge. The geologist Greg Brick (2008) describes the process of landform creation as follows: "A waterfall on this glacial river, thought to have been grander than Niagara Falls, chewed its way upstream from downtown St. Paul" (7).



Fig 7: This bike path, adjacent to I-35E, reveals a view toward Shepard Road at the bottom of the bluffs. The successive floods of the Glacial River Warren left these bluffs on which the buildings sit, as well as the bluff where Shepard Road is located, well above the current river level. Image courtesy of the author.



Fig 8: Pickerel Lake before recent extensive park development. The lake, which is an example of a "yazoo channel" fed by groundwater and parallel to the present channel of the Mississippi River, is very close to the former village site of Lilydale. Image courtesy of the author.

As the river that became known as the Mississippi stabilized within its current banks, subject to periodic flooding, a distinct ecology emerged. These ecological communities are dependent on the interactions of land and water, with occasional seasonal floods filling more of the floodplain depending on the intensity of spring floods. Moreover, as the main channel stabilized, a series of side channels (known as yazoo channels) were established that were fed by groundwater, surface water, and upland springs that were replenished by the occasional seasonal floods. Contemporary Pickerel Lake on the west side of the river (Figure 8) and Crosby Lake and the backwater marshes (Figure 9) on the east are examples of these remnant channels.



Fig 9: Another "yazoo channel," fed by groundwater and springs and paralleling the current channel of the Mississippi River. This wetland is in the upper/east end of Crosby Farm Park. Image courtesy of the author.

Coarse, sandy soils form the river's banks, owing to deposition from fast-moving flood waters near the channel. Finer, silty soils travel farther inland on the slower moving floodwaters, and are deposited farther away from the bank. The sandy soils on the banks form a series of natural levees, which support particular vegetation species, such as silver maples, elms, cottonwoods and green ash (Randazzo 2013, 57). All of these are canopy trees, and the understory species associated with them flourished as well; all these species were important to Indigenous people as sources of food, fiber, and medicines.

Humans came to this reach of the Glacial River Warren millennia ago. This concept is central to platforms as diverse as the <u>Bdote Memory</u> <u>Map</u> web site, the video "<u>Telling River Stories</u>" (Allies: Media/Art 2011) and the book *Mni Sota Makoce: The Land of the Dakota* (Westerman



Fig 10: A path through the floodplain forest in Crosby Farm Park. The ridge to the right of the image is a natural sandbar formed by sand deposition during regular, seasonal flooding. Image courtesy of the author.

and White 2012). Dakota voices for all of these sources agree: this reach of the river is central to their genesis story, part of their conception of the center of the earth. Beginning in the eighteenth and nineteenth centuries, documents written by explorers and settlers created a more detailed sense of how Dakota people lived in this space, albeit those accounts have to be understood as told with a number of biases.

Many accounts of United States history proceed from an assumption that, while there were Indigenous people in North America, they had not altered ecological systems in any substantial way. This mythology, sometimes referred to later as "the ecological Indian" (see Krech 1999 for an argument overturning this myth), was used as a justification to take Indigenous lands in order to "improve" them. Westerman and White (2012) paint a very different picture, offering detailed accounts of how Dakota inhabited the southern parts of Minnesota. They make clear that, while the landscape may have been "empty" to undiscerning eyes, it was full of names, stories, meanings, and contemporary uses.

Westerman and White provide a map (2012, 121–22) of Dakota summer villages that shows the region around the floodplain forest reach to have been well populated, although no village is shown on the stretch of river between the confluence with the Minnesota and Kaposia's village, near present-day St. Paul. A number of factors have to be considered before judging that this particular stretch was "empty," however. For one thing, there is the question of what is a "summer village"? Contemporary observers, such as the missionary Samuel W. Pond, recount that Dakota moved seasonally, meeting in larger villages in warmer weather for agriculture and food-gathering purposes. In winter, people left summer villages for smaller groupings more suitable to cold weather and winter activities (Pond [1908] 1986). A second question that should be raised is when were the villages depicted in Westerman and White's map active? Groups moved about more or less frequently as the availability of game and the suitability of soils for agriculture dictated. These caveats notwithstanding, the map and account in Westerman and White, along with other scholarship by Gary Clayton Anderson ([1984] 1997), Janet Spector (1993) and others, depict a landscape that was thoroughly inhabited by Dakota people in the eighteenth and early nineteenth centuries.

Vegetation, or as some Dakota say, "plant relatives," provides critically important threads of continuity between past and present Dakota inhabitation of this landscape. The cottonwood tree, in particular, has remained vitally important to Dakota people. In a July 2021 webinar, "Gifts of the Cottonwood Tree," Maggie Lorenz spoke of how the cottonwood is "a sacred tree, a medicine tree" (Wakan Tipi Awanyankapi 2021). Lorenz is the Executive Director of Wakan Tipi Awanyankapi, an Indigenous-led organization that works on cultural and natural restoration at a floodplain site just downstream from the River Warren Gorge. Jim Red Eagle, a respected Nakota/Dakota elder, spoke at the webinar and shared that, "We believe our spirit comes from the stars, so we relate that to the star in the cottonwood tree....Our spirit is from the star world, and within the branch is a star shape....The cottonwood brings water, it will find water" (Wakan Tipi Awanyankapi 2021). He cautioned that it is important to understand that there are multiple names for the cottonwood, depending on how it is being used, whether as medicine, as food, or as provisions for animals in a severe winter. Whatever its particular use, Dakota will often

refer to "our cottonwood relative." The webinar was described very elegantly in an accompanying text, "Plants that Doctor the Earth: A Mid-Summer Appreciation of the Cottonwood," which also addressed contemporary concerns about water levels and pollutants in the Mississippi River and how changing conditions may be affecting cottonwood regeneration (Wakan Tipi Awanyankapi n.d.). Other writers have described medicinal properties of the cottonwood in different terms, explaining that "the anti-inflammatory nature of its salicin-filled buds, leaves, and bark is well understood and appreciated" (Suchanek 2023).

A short, beautifully told <u>version of the cot-</u> <u>tonwood star story</u>, as given by Mary Louise Defender Wilson, is part of *My Relatives Say: Traditional Dakotah Stories as told by Mary Louise Defender Wilson* (2001). The star remains, as part of the joint structure of the cottonwood tree.



Fig 11: The star shape of the pith in twigs and small branches of the cottonwood tree is visible in cross-section.

See the <u>video</u> "The Star in the Cottonwood Tree." by Mary Louise Defender Wilson.

Beyond the specific values and attributes of the cottonwood tree, this stretch of the Mississippi, like the broader river itself, is of continued tremendous importance to Dakota people. The late Elder Alameda Rocha told a 2010 gathering, "We always lived along the river. We used it in many ways" (Rocha 2010). Dakota educator Ramona Kitto Stately says, "The river itself is where I go....I really feel the spirits of my grandmothers in that place. So we walk all the way along that island, Pike Island, and that's where we look for the perfect round medicine stones" (Stately 2012). The Pike Island that Stately refers to is immediately across the river from the upper part of Crosby Farm Park, at the very head of the floodplain forest reach.



Fig 12: The confluence of the Minnesota River, shown by the silty water in the foreground, and the Mississippi River. Crosby Farm Park is in the background and Pike Island, wita tanka to Dakota people, is just to the left of the image. This area is known as Bdote, the site of Dakota genesis and genocide. Image courtesy of the author.

But the river is a place of pain and loss as well as renewal. Šišókaduta (Joe Bendickson) put the complicated feelings this way:

> No one ever told us that this is where we were imprisoned in 1862. I just developed a connection to the river naturally. We would ride our bikes down there, go walking or hiking, or just go down by the river and skip rocks. We've been living here, according to our oral histories, since we were created,

this is the spot of our creation, the Bdote, so we've been here since the beginning of time, basically, according to the Dakota people. I also learned how the wasichu came and basically swindled us out of our land, with the treaty of 1805 (Sisokaduta 2012). Note: "Wasichu" is one Dakota term for white settler colonizers, who began to dominate this part of the river in the early nineteenth century.

"You can't negotiate with the river"

When Sisokaduta speaks of the Dakota being swindled out of their land, he is referring to a series of nineteenth-century treaties between Dakota people and the United States that conveyed land in exchange for various goods, services, and funds. These treaties have been addressed thoroughly, in exhibits such as Why <u>Treaties Matter</u> and at web sites such as <u>Bdote</u> Memory Map. The Minnesota Historical Society offers a <u>clear map of treaty lands</u> in the state. In all of these historical sources, it is evident that the treaties were never fulfilled as intended and, in fact, were likely fraudulent from their very signing. The brief account that follows addresses only the most salient aspects of the treaties affecting the floodplain forest on either side of the Mississippi in the River Warren Gorge.

The first treaty, between Lt. Zebulon Pike of the US Army and a number of Dakota leaders in 1805, is the subject of some controversy, historian Martin W. Case argues: "Today, many people believe that Pike Island in the Mississippi River, and its entire vicinity (on which the Twin Cities now rest) became the property of the US at a treaty conducted by Zebulon Pike in 1805. This is not true, and it is typical of the misinformation that surrounds Pike's conference with the Dakota" (Case 2012). Case points out that Pike may not have been acting on behalf of the United States government at all, that there are inconsistencies in the historical record about the terms of the alleged treaty, and that whatever Pike signed was never ratified by the Senate. Legally, if there's no ratification, there's no treaty; nevertheless, Pike's actions started a process of dispossession of Dakota land.

The north side of the Mississippi ("east" in common parlance because the Mississippi is generally a north/south river in its navigable reaches, hence has a common "east" and "west" bank) is where downtown St. Paul now is located and is likewise the location of Crosby Farm Park. This land was conveyed by treaty in 1837, signed in Washington D.C. between government officials and representatives of the Mdewakanton Dakota bands who had not been told in advance the purpose of the trip to Washington. The MnOpedia digital platform managed by the Minnesota Historical Society reports that "the Treaty of Mendota transfers control of lands that include what will later become St. Paul's West Side from the Dakota to the United States, thus opening it to legal Euro-American immigration" (Nelson 2015). This was the second land cession treaty signed in 1851; the first, at Traverse des Sioux between the United States and the Sisseton and Wahpeton bands, conveyed land farther west (Weber 2012). A tragic outcome of all of

these treaties is that after the catastrophe of the 1862 US-Dakota War, all treaties between the United States and the Dakota in Minnesota were unilaterally nullified by the United States government, legally exiling Dakota people from their ancestral home (DeCarlo 2022). As the voices of Sisokaduta, Ramona Kitto Stately, and many others remind us, Dakota people are still here and deeply tied to the land, but subsequent efforts and changing land use and settlement must be seen in light of the events between 1805 and 1863.

The treaties, of course, were devices to remove Indigenous people from their homelands and "open" them to white settlers. In the case of the Mendota treaty with the eastern Dakota, it did not take long for settlers to begin staking claims to the land on the west side of the Mississippi. Historical accounts in the personal papers of Lilydale village historian David Byrne indicate that the first real estate transaction on the west



Fig 13: This map shows the Lilydale and Crosby Farm Park area. Map data ©2023 Google.

bank of the river between the town of Mendota and the city of St. Paul-the platting that would become the Village of Lilydale-was made in 1855, only four years after the area was available for sale to settlers, and involved the mayor of St. Paul (and soon to be Governor of Minnesota) Alexander Ramsey. However, there were no articles of incorporation or settlement until the 1880s (Owen n.d.). For several decades around the turn of the twentieth century, the settlement's news items centered largely on what its name should be (Lilydale, or Lilydale, or Lily Dale), what county it belonged in (Dakota or Ramsey), and whether or not it should be formally incorporated as a village separate from a rural township in the county (Byrne n.d.).

Tangible, physical aspects of a growing community appeared during the decades after initial platting in the 1850s. By 1893, a school house had been built, which, according to an article in the Dakota Historical Society (1982) magazine Over the Years, "provided shelter for church services, weddings, Ladies Aid meetings, and would later hold council meetings." The Twin City Brickyards opened in 1889 on land that was at the eastern edge of the village site. A nearby gravel pit owned by the Shiely Company became the subject of local controversy in the 1950s, as the company offered to help repair a road through the village at the same time as the village was considering separating from Mendota Township again. There was a great deal of suspicion about these two events being connected-Shiely would perhaps have more influence on an independent villagebut it does not appear that collusion was proven (Dakota County Historical Society, 1982, 3-4).

The river, though, was a constant presence in the physical landscape of Lilydale. During most

of the period of the village's existence, the river was mostly used for transportation and the removal of waste. The threat of flooding was an annual concern (Woltman 2019) There was no regional wastewater treatment until 1938, when the Metropolitan Wastewater Treatment Plant opened on the east side of St. Paul. The growing Twin Cities region and its industries had begun putting more waste into the river than could be removed naturally. Two other structural changes contributed to declining water quality. In 1917, a dam and lock were built upstream from the floodplain forest reach at the foot of the Mississippi River gorge. The intent of this dam was to provide hydroelectric power and to attract industry, a goal which was met in 1925 when the Ford Motor Company opened a plant at the site of the lock and dam (Bellvill 2019). The second factor, which may have been even more of an impetus for wastewater treatment, was the closing of Lock and Dam 2 at Hastings in 1930 (National Park Service 2020). This facility, which was part of the Army Corps of Engineers Nine Foot Channel Project to improve commercial navigation, backed water up past St. Paul, past the Lilydale village site, all the way to the lock and dam at the Ford site. The effect was to slow the flow of the river, as well as runoff from pollution sources on land, at a time when there was not vet a way to treat industrial or urban household wastewater. In effect, a river that flowed according to natural cycles and saw a spring "flushing" every year with the rise of water due to snowmelt was turned into a placid lake-like body of water, which was much more stagnant. According to village historian David Byrne, "Lilydale had no sewer system. They had septic systems. Floods in 1965 and later put the septic contents into the River" (personal email correspondence with the author, October 17, 2023).

Lock and Dam 2 at Hastings created a permanent condition of high water, eliminating the seasonal ebb and flow of river levels. The presence of a permanent water level suitable for commercial navigation meant that summer and fall, which were ordinarily "low water" seasons on the river, were no longer times when the river shrank in its channel. Subsequently, floods would perhaps be higher, although the correlation is poorly understood. Also poorly understood, and being researched currently, is the relation between standing high water and the health of the floodplain's cottonwood stands.

According to an article in Over the Years, flooding in 1951 and 1952 "caused a mass exodus from Lilvdale" (Dakota County Historical Society 1982, 4). Unpublished or privately published memoirs of this time paint a picture of farming, some houses with electricity, but some heating with wood stoves and lighting their houses with kerosene, and outhouses instead of widespread indoor plumbing. One writer recalls that the 1952 flood reached the eaves of his house, and his family never returned, while another waited it out until the even greater 1965 flood accelerated the exodus from the floodplain. After the school house closed in 1950, children took a bus to schools on St. Paul's West Side (Byrne n.d.). Some floodplain residents relocated to other parts of the region, and those who stayed lived in mobile homes with a kitchen and bath (David Byrne, personal email correspondence with the author, October 17, 2023).

By 1978, according to an article in the *Dakota County Tribune* by Yvonne Macko, land that had formerly been farmland and sand and gravel pits along Highway 13 on the bluff above the Mississippi had become home to 400 people–the relocated Village of Lilydale–although it would be referred to as "Upper Lilydale" for quite a while. Byrne points out that the residents who had been moved off the floodplain, the original Lilydale village site, "landed in working class sections of St. Paul, West St. Paul and South St. Paul" and not up the bluff to what was a higher-end residential development (David Byrne, personal email correspondence with the author, October 17, 2023) Across the river and slightly upstream, the farm originally farmed by Thomas and Emma Crosby endured as a farm through the floods of the 1950s before being acquired by the City of St. Paul for eventual use as a park in the 1960s.

The exodus from Lilydale, which had begun in the late 1940s, was complete by the end of the 1970s. According to village historian David Byrne, Ramsey County had coveted the village site and surrounding bluffs and lake as a potential location for a regional park for some time. But the land was in Dakota County, complicating efforts by Ramsey County to develop a park on the site. According to Byrne, the state legislature passed a law in the early 1970s permitting a county to acquire land in another county, and the City of St. Paul became the site's manager. As Byrne put it, "The Lilydale city council felt they had no option and went along hoping to lobby for the best deal for the displaced" (personal email correspondence with the author, September 12, 2023). According to newspaper accounts, attitudes about the move among the displaced people ranged from resignation to bitterness. The last residents to leave Lower Lilvdale agreed that a special place, a settlement in the middle of the city that felt like a rural village, was ending. But, as was reported in a short article, "Lilydale to Be Ghost Town? 4 Homes Moved by Barge" (unidentified clipping in the papers of David Byrne), "you can't negotiate with the river." Today, the "City of Lilydale, pop 619" sign on the I-35E bridge over the Mississippi River refers to the population of

the present city, which is on top of the bluff, along State Highway 13.

The current City of Lilydale has recently embarked on a research project to gather the stories of people who lived in "Lower Lilydale" A video, "<u>A Call to Remember Lower Lilydale</u>," hints at the stories that exist, as well as the landscapes that remain an oasis of quiet in the middle of a metropolitan area (Town Square Television n.d.).

See the <u>video</u> "A Call To Remember Lower Lilydale" by Town Square Television.

The 1970s was a period of dramatic change in this reach of the river. Crosby Farm, on the east side of the river, had been bought by the City of St. Paul in 1962 for park use, and development activity began in the 1970s. There was no bridge across the river in this stretch, so it is unlikely that there was much connection between Lilydale



Fig 14: This park path in Lilydale Regional Park likely follows one of the street alignments in the village, as illustrated in historical aerial photographs. Image courtesy of the author.

and the farming activities on the Crosby site. The City and the newly-formed Metropolitan Council followed in 1976 by purchasing the land on the floodplain where the Village of Lilydale had been. A park road appears to follow roughly the alignment of a central street in Lilydale. Sharp-eyed vegetation experts might recognize the occasional lilac bush or other invasive ornamental plant as evidence of a former residential location. For the most part, though, in the roughly 50 years since residents left Lilydale, the floodplain forest has regrown.



Fig 15: This 1923 aerial photograph captures the village of Lilydale at what might have been its greatest population and spatial extent. The dark clump of trees left of the center appears to be roughly the spot of the park path in Fig 14. Aerial photograph from City of Saint Paul aerial survey, 1923. Photo 4-6. Image via John R. Borchert Map Library, University of Minnesota.

The River at the Heart of the City

For nearly a century, between the industrial heyday of the 1880s to the 1920s and a flurry of planning and park development activity beginning in the 1970s, the Twin Cities essentially "turned their back" on the Mississippi River. The river itself was a filthy, polluted mess and river-adjacent lands were either the sites of aging transportation and industrial infrastructure or gatherings of impoverished newcomers to the region. The examples of Bohemian Flats, Little Italy, and Swede Hollow, all of which were unplatted informal settlements sequestered in available space on the river, were the most common settlement type (Hines 2014). By contrast, Lilydale was almost idyllic, with platted streets, formal government, and much less crowding than the other sites. Nevertheless, the river flooded all of them out, and with the retreat of the last Lilydale residents, the way was clear for city and regional government to put these lands to new purposes.

Development of regional parks on the land that was formerly the village of Lilydale and Crosby Farm depended on several sometimes-related events. In 1972, Congress passed the <u>Clean Water</u> <u>Act</u>, which regulated the discharge of pollutants into most of the nation's rivers from industrial



Fig 16: The boat launch in Lilydale Regional Park is roughly where the village site was. The image also clearly illustrates the bluff landscape overlooking the present Mississippi River and floodplain forest channel. Image courtesy of the author.

and urban sources. Although the river remains polluted from a wide array of dispersed "nonpoint" sources, the water is measurably cleaner than it was 50 years ago (Metropolitan Waste Control Commission 1988). The Minnesota Legislature created a Regional Parks system for the Twin Cities in 1974, under the purview of the Metropolitan Council. The impact was to coordinate park development on lands where the importance was regional, not just local. Crosby Farm Park and Lilydale Regional Park are both designated as regional parks. In 1976, in part as a response to proposed development near Crosby Farm Park (see Anfinson, n.d.), the State of Minnesota established the Mississippi River Critical Area, which regulates development and requires special local land use planning along a

72-mile stretch of the Mississippi River in the Twin Cities. Finally, in 1988, this 72-mile stretch of the river was declared to be the <u>Mississippi</u> <u>National River and Recreation Area</u>, a unit of the National Park Service. The image here shows the floodplain forest, with the Mississippi River on the right, the city of St. Paul in the distance, and new trail development at the bottom of the photo. The combination of features in this landscape, with the proximity of ecologically valuable spaces, urban space, and recreational space, all of which still have Dakota presence, is why this stretch of the Mississippi River was named as a unit of the National Park system.

The net impact of these changes is far-reaching. The river is cleaner, so it is more attractive for



Fig 17: The floodplain forest with the Mississippi River on the right, the city of St. Paul in the distance, and new trail development at the bottom of the photo. Landscapes such as these, with the proximity of ecologically valuable spaces, urban space, and recreational space, all of which still have Dakota presence, are why this stretch of the Mississippi River was named a unit of the National Park system in 1988. Image courtesy of the author.

park development and for urban redevelopment of obsolete industrial and transportation sites. The combination of local, regional, state, and federal planning and policy protection makes the corridor much better protected than it would have been otherwise. In fact, when the City of St. Paul was implementing its Master Plan for Lilydale Regional Park, the potential to gain state funding for the process overcame local opposition from community members who wanted to preserve the park as it was, as a more "natural" landscape (Dunbar 2012).

Planning activity continued in the late 1990s and picked up speed considerably in the years between 2009 and 2019, with the City of St. Paul adopting and in some cases implementing master plans for parks at Lilydale and Crosby Farm Park.

Landscape Futures

Ironically, as Bob Shaw (2012) points out, the very layers of protection discussed above can be a contributing factor to challenges facing the river itself. Because the adjacent undeveloped landscapes are undeveloped, there is not an obvious constituency to press for remediation of problems such as increased sedimentation filling in the channel. Friends of Pool 2, an advocacy group for this stretch of the river, is focused for the most part downstream from St. Paul, where both commercial and recreational boating are concentrated. In the floodplain forest reach, matters are pretty quiet with regard to the river itself.

The case is very different on the land. Private sector advocacy groups such as the <u>Mississippi</u> <u>Park Connection</u> have teamed up with the City of St. Paul, the <u>National Park Service</u>, and the University of Minnesota to devise an adaptive urban silviculture program that might serve as a climate change adaptation and begin to answer questions about why cottonwoods are not thriving as they might be expected to. Moreover, those partners, plus the nonprofit Great River Passage

By 2009, when the City of St. Paul adopted an addendum to the earlier Harriet Island-Lilydale Regional Park Plan, the area had become known and loved as a park with very little development. A road and bike trail passed through the floodplain forest, which retained several magnificent cottonwood trees, and there was a boat ramp on the Mississippi. A gravel parking lot adjacent to Pickerel Lake led hardy fisherfolk to an informal boat ramp. Despite opposition, the City went ahead with its adopted plan, addressing water and sewer issues in 2014, rebuilding the park road in 2017, and opening a picnic pavilion overlooking Pickerel Lake in 2019. The former inhabitants of the Village of Lilydale are not memorialized with so much as an interpretive sign, landscape feature, or street name.

Conservancy, are combining efforts to develop a <u>River Learning Center</u> on a site adjacent to and including part of Crosby Farm Regional Park.

The Master Plan for Hidden Falls-Crosby Farm Regional Park concludes with this powerful acknowledgement: "This area's proximity to the Bdote must be acknowledged as future park projects move towards realization. Engaging with the Minnesota Indian Affairs Council (MIAC), local tribal leaders, and the Indigenous community will be necessary throughout the stages of every project (City of St. Paul Department of Parks and Recreation 2019, 58). Most Dakota people would say that Hidden Falls-Crosby Farm Regional Park is in and is central to Bdote, not just proximate to it, but the point is significant: working with Indigenous people, who have lived in and valued this place for millennia is a necessary part of planning for its future.

This is true throughout the length of the Mississippi. Indigenous continued presence must always be recognized, honored, and engaged, a fact which is important to take into account

throughout the corridor. If we are going to live for a long time with the vicissitudes of the great river, we must understand the layers of the landscape that are present, how and why they developed and were (partially) erased, and what options remain for our future actions in place. Landscapes are layered in complex ways, not all of which are visible to the naked eye, or to the casual visitor. All of the settlements along the length of the river over the past 300 years, from cities such as New Orleans and Memphis to the remnants of shantyboat communities, are on Indigenous land. The stories of Lilydale and the floodplain forest where it was situated are important in their own right, but also for what they suggest about how humans have lived in relationship to this big river in the past for millennia and what can be done to ensure a long term sustainable and just future with the river.

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Recommended Citation

Nunnally, Patrick. 2023. "Layers in the Landscape: A Floodplain Forest and the People Who Have Inhabited It." *Open Rivers: Rethinking Water, Place & Community*, no. 24. <u>https://doi.org/10.24926/2471190X.10467</u>.

DOI: https://doi.org/10.24926/2471190X.10467

About the Author

For over three decades, Patrick Nunnally's work has focused on understanding and enhancing the connections that people and communities have with places they value, particularly places along the Mississippi River. Nunnally is an environmental historian by training and is broadly experienced in gathering interdisciplinary teams and working with community partners in teaching and program development. For the past 15 years, Nunnally has developed a special focus on working with Indigenous community partners.