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Water, Waste, and Race: Designing for Change on the Shelby County Landfill

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WATER, WASTE, AND RACE: DESIGNING FOR CHANGE ON THE SHELBY COUNTY LANDFILL

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the requirements
for the degree of
Master of Landscape Architecture

in

The Robert Reich School of Landscape Architecture

by
Elizabeth Peterson
B.A., Rhodes College, 2013
May 2020

“we still use gardening (or landscape design, as we now call it) to redeem landscapes that inspire our guilt because we have laid them to waste, just as they did with their forests. But when faced with toxic and derelict sites, it is not enough to turn away, assume that someone else will clean them up, take photos that will only be shown in a museum or art gallery, or cover them over with such stand-ins for “nature” as grass and trees. We must do more”

Di Palma, Vittoria. “In the Mood for Landscape”. 2017

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ABSTRACT

Historically, landfills have been viewed through an environmental lens as sites for technical remediation, employing scientific or engineering strategies for testing, mitigation and capping. They are more rarely viewed as cultural landscapes, places with histories of habitation and use, or as potential sites for design. This thesis investigation examines the Shelby County Landfill in Memphis, Tennessee from a cultural landscape perspective, opening up a dialog and opportunity to think about this site and other waste sites in a more layered and culturally rich way.

This research contributes to discussions within the field of landscape architecture that present waste landscapes as fertile spaces for design. By tracing the site history of the land that is now the Shelby County Landfill from the 1600s to 2020, this history reveals how water, waste, and race have intersected and influenced each other over time to shape not only the site, but the city of Memphis. This research presents the relevant information that future site designers should consider when designing the Shelby County Landfill site and is a case study for what landfills can teach us about history and the systems that shape culture and the environment.

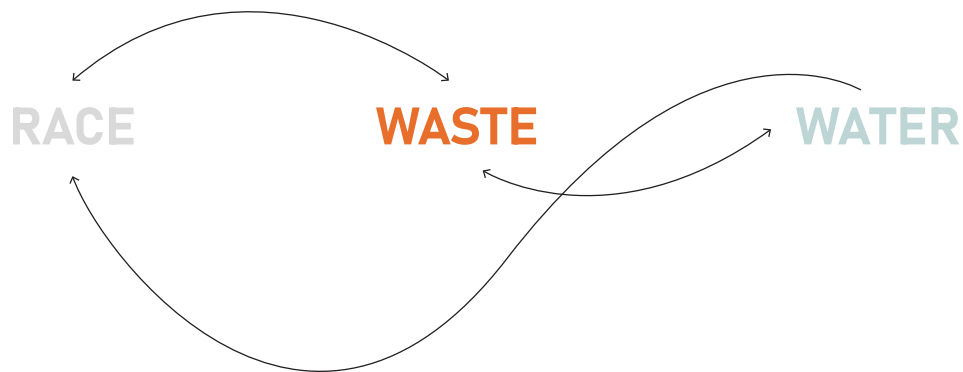


Figure 1. Diagram demonstrating the intertwined relationship between race, waste, and water on site; each influencing the other in a tangle of systems that have shaped this site and the city of Memphis.

CHAPTER 1. INTRODUCTION

APPROACHING THE SITE

The project site at the focus of this investigation was once on the outskirts of Memphis, out of sight and exiled to the margins along with the slaves and prisoners who resided on this land. Today, the project site, the Shelby County Landfill (SC Landfill), sits nestled within one of the largest urban parks in the United States: the 4,500-acre Shelby Farms Park in Memphis, Tennessee.¹ The landfill is fenced off and inaccessible as the Shelby County Government fulfills the 30-year post closure maintenance and monitoring procedures that the EPA requires of toxic waste sites. This year, 2020, marks the 30th year the SC Landfill has been capped, closed, and monitored, which opens the door for the County Government to apply to open the space to the public. *Designing for Change*, seizes this opportune moment by offering a design vision for the SC Landfill's future that considers regional resilience opportunities, realities of park maintenance, and the unique history on the site. The site history that follows reveals how the systems of water, waste, and race have shaped not only this site, but the city of Memphis. At the intersection of these systems are powerful histories and lessons to consider in future site designs.

I first encountered the SC Landfill back in 2014 when I was working for Shelby Farms Park Conservancy (SFPC), the non-profit that manages the Shelby Farms Park and Shelby Farms Greenline on behalf of the Shelby County Government and its residents, who own the land. Though many people drive by this site on their commute to work, most people do not notice it or know that this is a waste site as the landfill is closed, capped, and essentially a grassy mound. The underwhelming and ordinary surface of the site belies the fascinating layers of history beneath.

1 SFP is 4,500-acres, which is more than twice the size of Louisiana State University's campus and four times the size of Central Park.

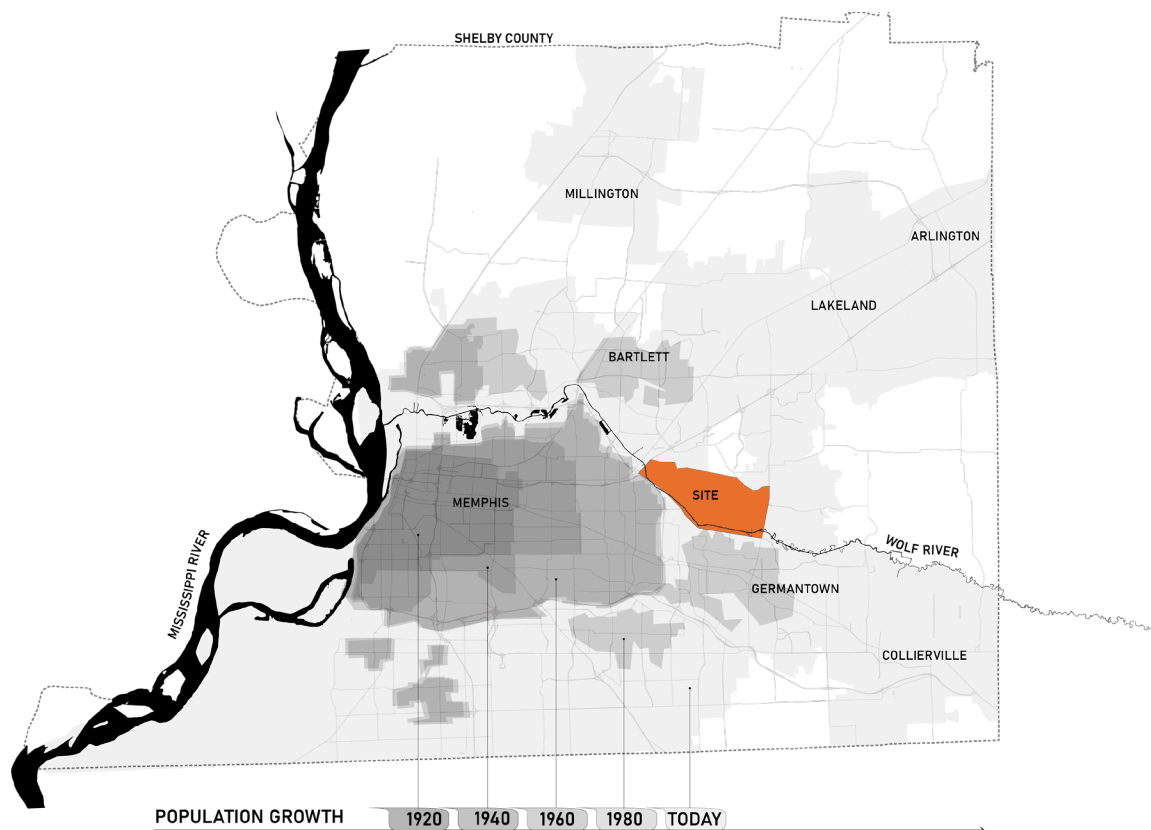


Figure 2. Map of city growth enveloping the site over time: Shelby Farms Park.



SHELBY FARMS PARK
4,500 acres



LSU
2,000 acres



CENTRAL PARK, NYC
840 acres

Figure 3. Urban scale comparison, graphic adapted from the James Corner Field Operations *Shelby Farms Park Master Plan*, 2006

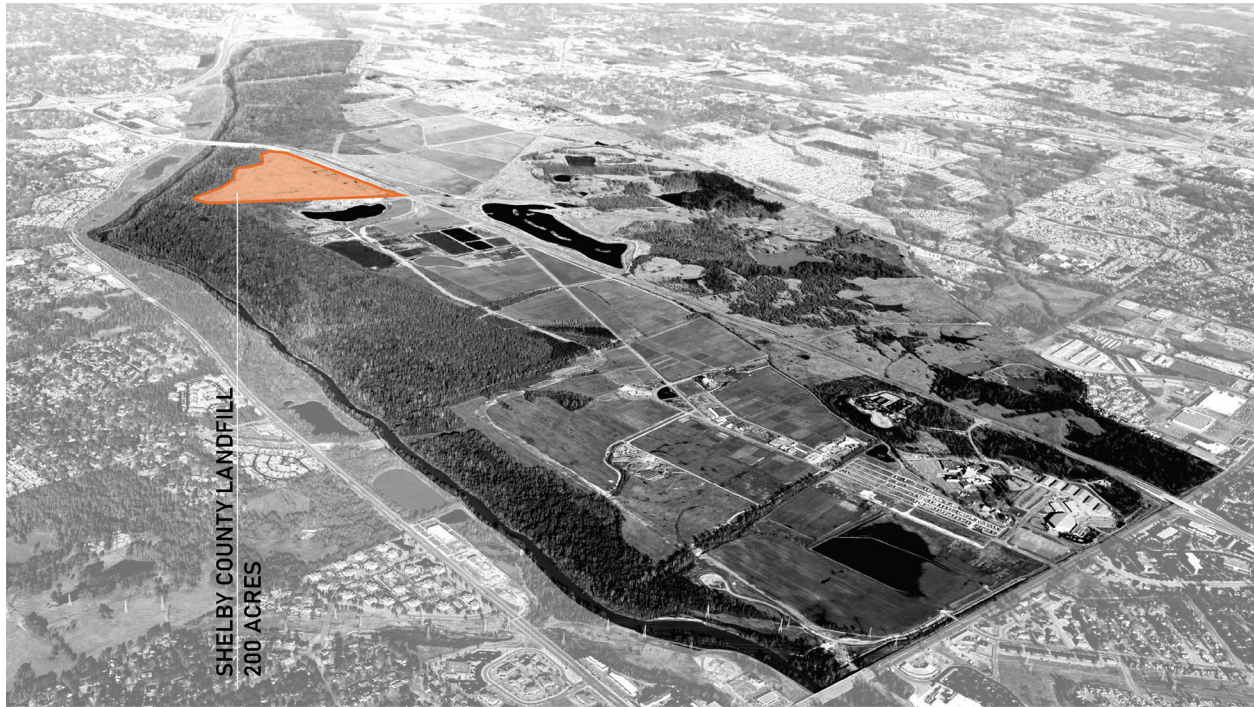


Figure 4. Aerial Image of SFP with the 200-acre SC Landfill Highlighted.

While working at SFPC as a grant writer, I was interested in applying for an Environmental Protection Agency (EPA) Brownfield Grant to remediate the site. I was quickly told this project was too complicated and not to dig any deeper. Once the opportunity arose for thesis research, I began asking lots of questions. I knew there was great opportunity to return to the site with a fresh perspective and apply the design training I had been cultivating in graduate school. I was familiar with the site and identified opportunities that might make this space rich for a design investigation:

1. The SC Landfill is in the middle of a 4,500-acre public park, a unique siting. Typically landfills are on the outskirts of town, ostensibly for health and logistics reasons, so this site presents a unique opportunity to showcase the scale of waste.
2. The landfill was closed, capped, and fenced off from the public because it was being monitored by the Shelby County (SC) Government. However, the year 2020 marks the 30th anniversary since the landfill was capped, fulfilling the monitoring requirements of the EPA.

Anticipating this opportunity, the SC Government plans to apply to the EPA for permission to open the site to the public. This thesis seizes the opportunity to provide design recommendations in advance of these changes.

3. There was concern about the landfill leaching into Memphis' drinking water and groundwater researchers were actively monitoring this threat.

4. After working at SFPC for four years, building relationships, I had many partnerships on which to build when researching the site.



Figure 5. Perspective image of the landfill highlighting the barriers to entry: the “Keep Out” sign and the fence encircling the site.

I was acquainted with the site, but unfamiliar with the history. My subsequent research uncovered a history that was previously not known about the SC Landfill. Methods used include archival research, georeferencing of historical maps to understand the urban context over time, and sectional drawings to diagram the relationship between land use and the site's floodplain. Research encompasses site and contextual history from the 1600s to today, following the threads of three systems at play on site: a system of racism and marginalization of people, the waste system, and the

hydrological system. The work provides evidence and connections to explain why the site evolved how it has, offering a more complete understanding of this waste landscape as a cultural landscape.

The goal for this design thesis is to tease out the opportunity latent in the 125-acre Shelby County Landfill (SC Landfill). This thesis research goes beyond the technical remediation strategies typical of landfill reclamation and investigates the site's history, physical and social context, ecological health, and recreational and educational potential.

By using a cultural landscape methodology, the project demonstrates how designers may approach similar, marginalized sites throughout the nation to tease out connections to larger issues and systems. The hypothesis is that SC Landfill is much more than a platform for art, as the current master plan dictates, but that the site itself could be the art form and the landscape the medium through which the site's unique history is revealed.

LITERATURE REVIEW

It would be naive to conduct basic scientific investigations of landscapes without considering the anthropogenic forces that have shaped them,

-J.A.Wiens

This thesis is ostensibly about a landfill, but much like the layers beneath the site's grassy cap, there are many more pieces, processes, and histories involved in this story. The study of landscapes involves numerous disciplines; this research draws from the fields of psychology, ecology, landscape architecture, history, land art, cultural geography, and economics. Each of these various perspectives informs the design and helps make sense of the complexity that is embedded in all landscapes. This section offers an overview of how this project is informed by many fields.

Research began with waste landscapes, to contextualize the project within this theory emerging from the field of landscape architecture. As this topic is relatively nascent, there are

not many writings on the subject. Critics or designers who have engaged in discussion of waste landscapes include Vittoria Di Palma, Mira Engler, Chris Reed, and this section details relevant passages from their work that informed this thesis. This body of work includes writings from landscape architects who highlight the richness of spaces left by industrialism, capitalism, and consumerism; spaces that are considered wastelands to most. Theorists on the subject offer their own terms and definitions to talk about these spaces, such as Alan Berger's "drosscapes", Ignasi de Sola-Morales Rubio's "terrains vagues", Antoine Picon's "anxious landscapes" or Mira Engler's "landscapes of waste".² Though coming from diverse perspectives and research angles, each of these researchers agrees that waste landscapes are a new frontier for design.

Di Palma's perspective stands out in the body of waste landscape works because she chooses to explore "the history and consequences of understanding landscape as a mood, rather than as a picture, an object, a territory, or a system."³ Di Palma recognizes that the spaces landscape architects consider as waste landscapes or "wastelands" are wide and varied and suggests that these sites, no matter the term used, are united by something unexpected: disgust. She notes that waste sites evoke "feelings located on the aversive end of the emotional spectrum — feelings like fear, horror, contempt, and disgust" and argues that mood is the commonality, not their physical properties.⁴ Her article, "In the Mood for Landscape" challenges readers to consider that wastelands, with which landfills are identified, have "less to do with *what they are* than with *how they make us feel*."⁵

Mira Engler, a landscape architect who has dedicated much of her career to writing about waste landscapes, has a similar perspective in her book eponymously named for her field of study.

2 Di Palma, Vittoria. "In the Mood for Landscape". *Thinking the Contemporary Landscape*. Eds Christophe Girot and Dora Imhof. New York: Princeton Architectural Press, 2017. p. 15

Berger, Alan. *Drosscape: Wasting Land in Urban America*. New York: Princeton Architectural Press, 2006. p. 33-35

Engler. *Designing America's Waste Landscapes*. p. xiv

3 Di Palma. "In the Mood for Landscape". *Thinking the Contemporary Landscape*. Eds Christophe Girot and Dora Imhof. New York: Princeton Architectural Press, 2017. p. 15

4 *Ibid*.

5 *Ibid* p. 15

Though there are logical arguments for distancing landfills from society for health, safety, and economic reasons, Engler taps into the psychological reasons for distancing these spaces, writing, “Our shame and fear of waste have made its facilities invisible, inaccessible, uncontrollable, and often unsafe.”⁶ Engler acknowledges the psychological elements that are embedded in waste landscapes and raises the consideration of marginalization that relates to these sites, which is a key characteristic of this project site throughout its history. Engler writes,

Waste, both matter and idea, is closely related to notions of “dirt” and “margin” (physically and conceptually). Waste is mostly dirty; dirt is often waste. The margin often includes waste; waste is always marginal. Expounding the concepts of marginality and dirt illuminates critical notions about waste... Their value, conferred by society, is intrinsic to the classification and stratification of society, material culture, and landscapes into binary oppositions of high and low, good and bad, valuable and unvalued that are hard to overcome.⁷

She identifies the elemental aspects of waste in her book and, by bringing this concept of marginalization into the conversation, she demonstrates how these sites can act as “cultural mirror(s)”, arguing that “waste is a key element in the ways in which we order and shape our environments”.⁸ I investigated the history of SC Landfill site with an eye to the marginalization of people, of waste, and of certain landscape typologies throughout time to reveal the changing value systems, how that reveals itself in the landscape, and in human relationships.

The goal throughout the research and design process is to avoid falling into the “two molds” that predominate in the profession of landscape architecture: designs that serve as “decorative art, invoked to dress up a site or cover over a problem; or as science-based planning methodology, often co-opted for purely economic development purposes.”⁹ These two approaches relegate the site to the

6 Engler, Mira. *Designing America's Waste Landscapes*. Baltimore: The Johns Hopkins University Press, 2004. p.xx

7 *Ibid.* pp.xv-xvi.

8 *Ibid.* p. xiii

9 Reed, Chris. “Public Works Practice.” Ed. Charles Waldheim. *The Landscape Urbanism Reader*. New York: Princeton Architectural Press, 2006. p. 268-285

status of an object by immediately identifying the land as something other than, and separate from, humanity. This is a problematic dichotomy to accept. Considering design as “decorative art” offers an intervention that obscures problems (often the vital meaning of place) instead of revealing them. Similarly, a “science-based planning methodology” can easily fall into the trap of uncovering data to justify land development or push design solution that fails to consider the more intangible elements of place, such as its history.

It is easy to imagine how these two approaches might be applied to a landfill site, such as the SC Landfill: cover the site with grass, art objects, or an attractive plant palette with no reference to the history of place; or, conversely, fix the site through remediation practices, offering a cure for toxins on site but not healing wounds inflicted by the sanitation industry’ and its history of racial discrimination, among other histories layered into the site. Designers must enter the design process with an acknowledgment that waste sites hold valuable history if we are to break from these ingrained patterns.

Cultural history offers the missing piece to the aforementioned approaches that prioritize art or engineering methods as avenues for interpreting the site. The body of cultural landscapes research informs the lens through which I viewed the site. A compilation of essays edited by Richard Longstreth, “Cultural Landscapes: Balancing Nature and Heritage in Preservation Practice” gives voice to some of the challenges inherent in interpreting cultural landscapes. An essay in the book by Susan Calafate Boyle suggests that taking an ecological perspective when analyzing vernacular landscapes can help make sense of the temporal and spatial dynamics of these ever-changing sites. Though this project is not preserving one particular site but interpreting the many layers of history, this essay helps situate unique and complex ecological sites in the practice of historic preservation.

This site’s history provokes a discussion of race, over the course of two centuries, as it relates to slavery, racial injustice, marginalization, and the ties between race and the waste industry. The book *Clean and White: A History of Environmental Racism* by Carl Zimring traces the forms of environmental racism throughout American history, suggesting that prejudice’s roots lie at the

intersection of race and waste. Zimring approaches the psychology embedded in waste spaces in a different way than Vittoria Di Palma, looking at the issue through the lens of race and justice rather than the “lens of emotion”. This work upends a common misconception that racism in America occurs largely in the “South”. By tracing the waste industry and the idea of cleanliness from Jefferson to Obama, Zimring demonstrates how intertwined ideas of race and waste are in America and how value judgments are now embedded in words such as “clean” and “dirty” and benign words that describe color, such as black and white, are charged with meaning because of the mental associations intentionally inscribed in these binaries that were constructed over this nation’s history. These value judgments lead to physical manifestations of discrimination, or acts of environmental racism, that push poor populations to hazardous, and less valuable, land such as floodplains or areas adjacent to landfills, chemical plants, or refineries.

Engler, Di Palma, and Zimring’s works were key in shaping my approach to historical research: Zimring connected waste to the national conversation about environmental and racial justice; Di Palma demonstrated the psychological reasons why certain spaces are marginalized; and Engler pointed out how much waste sites have to teach us about ourselves.

Technical research on remediation of waste sites is needed to balance the theory on race and waste. The primary source for landscape designers considering waste sites is the 2015 publication from Kate Kennan and Niall Kirkwood, *Phyto*. Their book is unique, addressing phytoremediation and phytotechnology from a design point of view. The authors offer perspective on regulatory frameworks and design checklists in addition to the toxicology and horticultural research behind phytoremediation. The book also briefly covers the different types of remediation practices that can be considered as alternative to or in tandem with phytoremediation.

Project research considered examples within the field of landscape architecture and land art that respond to cultural and waste landscapes. Building off this historical and theoretical research, precedents, such as Walter Hood’s current project for Charleston’s International African American Museum (IAAM) that began in 2013, offer examples of appropriate and thoughtful interpretations

of racial history. A journalist praises Hood's project vision, writing, "where many people saw a stretch of grass, Walter Hood saw a landscape that was 'charged.'"¹⁰ This statement gets to the heart of what is powerful and simultaneously extremely challenging about cultural landscape projects: some of the most vital histories to convey leave no physical trace and are invisible to the naked eye, which makes it ever the more impactful when they are successfully revealed to the public.

As a Landscape Architecture Master's thesis, this project considers the rich design history that precedes this study of the project site. Archival work uncovered historic master plans done by landscape architects during the 1980s and 2000s. This paper situates them in their context and, by offering a new design vision for the landfill site, is an implicit critique of these plans, positing that a design approach considering cultural histories, an angle not previously considered beyond surface level references to agriculture, is valuable.

Throughout the project, the support of local organizations and their willingness to offer primary source documents, meeting notes, archival information, plans and more was key to uncovering new information about the site and reinterpreting it in the context of Memphis history, land use, and environmental change. Archival materials were found in the Benjamin L. Hooks Public Library, the Shelby County Archives, Shelby County Engineering staff records, the Rhodes College Memphis Room, Shelby Farms Park Conservancy staff records, and landscape architecture firm Ritchie Smith Associates' records.

The work adds to the relatively nascent field of waste landscape research that acknowledges marginalized, overlooked sites such as landfills have valuable histories to reveal and learn from. Landfills create topography, delineate spaces, and have rippling impacts that scientists and communities are still uncovering.

The project site poses rich physical and cultural challenges. Physically, the design must contend with a landfill that threatens to leach into Memphis' drinking water source if compromised

10 Williams, Emily. "Architect for Charleston's African American Museum awarded national 'Genius' grant." *The Post and Courier*. 2019

by water inundation, and that is sited within a floodplain marked as a key retention area in the region's resiliency plans. How can these two physical realities be considered simultaneously? Culturally and socially, the site invokes a web of connections between water, waste, and race or marginalization, to learn from, acknowledge in design, and share with the community. The largest challenge comes in understanding that the physical and cultural systems on site are inseparable and must be considered together to tell the history and offer an equitable, resilient future. This project attempts to reach past the field of landscape architecture, and the tendency to beautify or fix the site, to tap into something more.

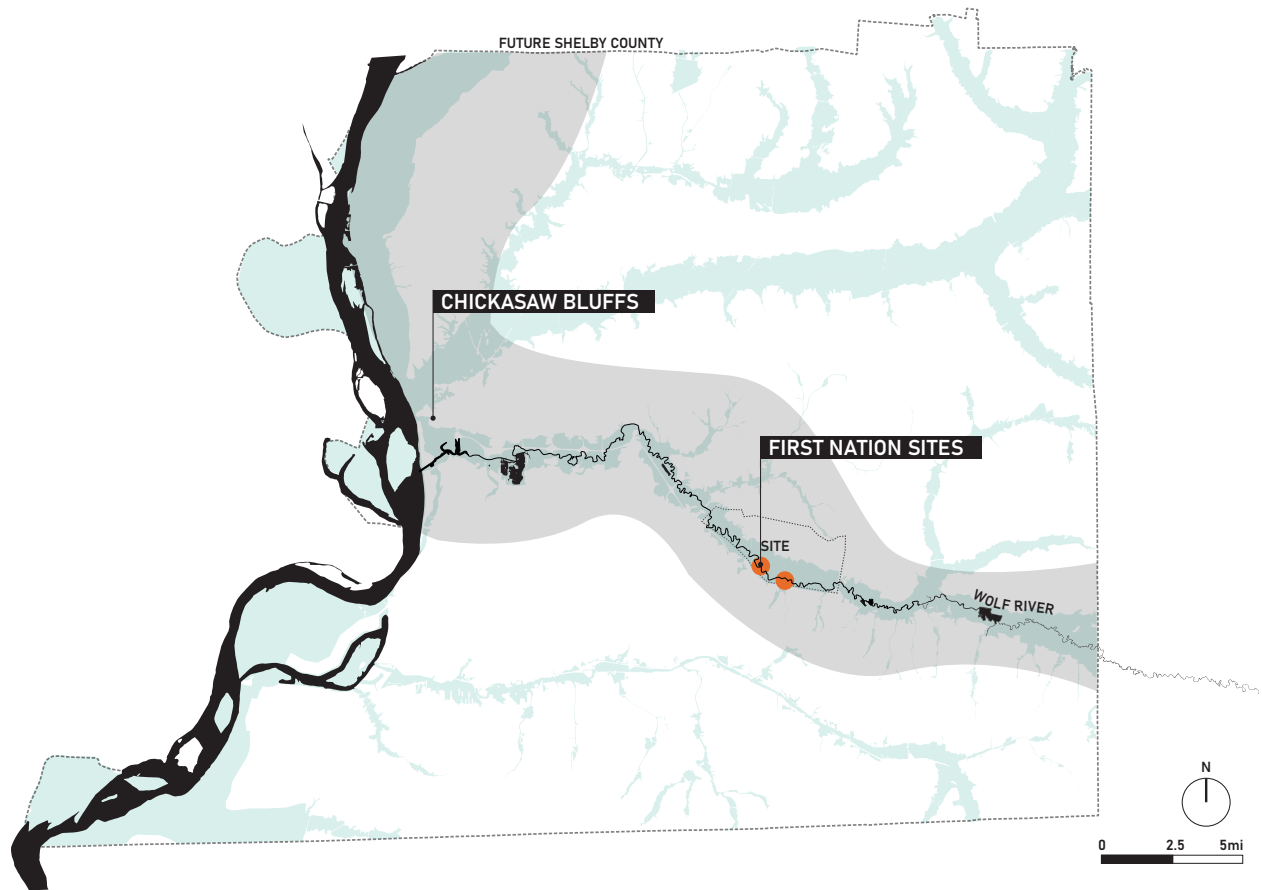


Figure 6. Context map of settlements in Shelby County during the early 1600s. The map represents First Nations populations' footprint in grey, floodplains in blue, and major waterways in black. The orange dots mark the approximate locations of archaeological sites in close proximity to the project site.

CHAPTER 2. A HISTORY OF MARGINALIZATION + INNOVATION: 1600-1960

Today, Shelby Farms Park (SFP), of which SC Landfill is a part, is a renowned Memphis landmark and destination for people across the Mid-South. However, to fully appreciate the site's significance it is important to understand the relationship between the site that is now SFP and Memphis throughout the city's history. Over time, due to the growth and expansion of the Memphis, the site has shifted from the city's margins to a position of centrality in the Memphis region. People have used the site as a platform for innovation and pushing back against social norms for much of the site's history, despite it being relegated to the outskirts of the city. The Shelby County Landfill serves as the fulcrum for this shift from margin to core and the history that follows unveils this waste site's importance in catalyzing the creation of SFP.

This chapter covers a large swath of history from the First Nations peoples, through the antebellum period to the beginning of the Civil Rights Era, focusing on the surrounding context and key moments in history as it relates to the site that is now SFP. This era of the site's history is primarily characterized by social and spatial change. Settlements follow rivers and avoid their floodplains during this era, as rivers offer efficient transport and their rich, alluvial soils offer nutrients to grow crops. Race and land use become intertwined, as marginalized peoples are pushed off of safe, high ground and relegated to floodplain lands time and again throughout history. During this time, water and race shape the site and society while waste comes in to play later in history.

FIRST NATIONS

Marginalization is not a concept that would have applied to the First Nations peoples who once resided in what is now the Memphis area. The word marginal was

first recorded in the late 16th century from the Medieval Latin word “marginālis” of, pertaining to an edge.¹ Today, the term also connotes value; Merriam Webster defines marginalize as “to relegate to an unimportant or powerless position within a society or group.”² For something to be marginal would require staking boundaries, marking edges, and deeming one space more valuable than the other. First nations tribes lived fluidly, without mental boundaries dividing their villages from nature nor physical ones dividing them from each other. Though tribes along the Chickasaw bluffs “guarded their well-known boundaries as well as their more vaguely defined hunting grounds”, they never claimed to own the land.³ With no sense of ownership, or division between human and nature, there was no concept of marginalized or devalued land.

1 “Marginal.” Merriam-Webster.com Dictionary, Merriam-Webster, <https://www.merriam-webster.com/dictionary/marginalize>. Accessed December 2019.

2 “Marginalize.” Merriam-Webster.com Dictionary, Merriam-Webster, <https://www.merriam-webster.com/dictionary/marginalize>. Accessed December 2019.

3 James, A. R.. *Standard History of Memphis, Tennessee: From a Study of the Original Sources*. United States, H. W. Crew, 1912. p. 12

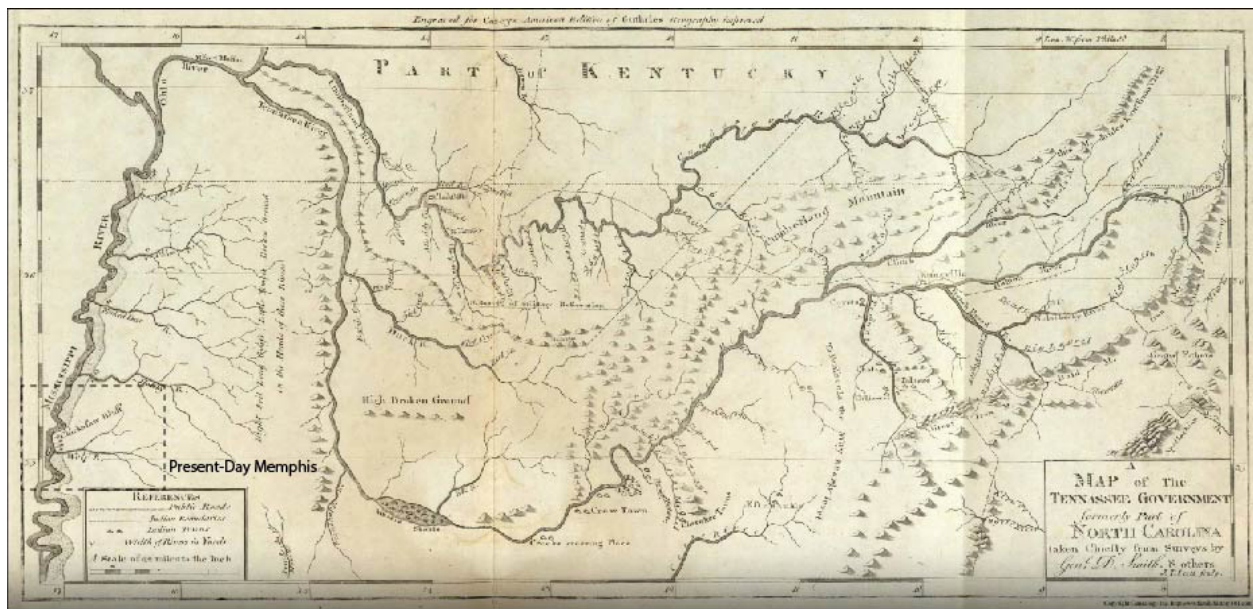


Figure 7. The first published map of Tennessee shows First Nations across the state. Tribes resided on high ground and, in Memphis, the Chickasaw peoples made their home on the Mississippi River bluffs. Source: Tennessee State Library and Archives, “Map of the Tennessee Government, formerly part of North Carolina, Taken chiefly from surveys by Gen. T. D. Smith and others. Engraved by J.T.Scott Felix

Waterways and soils guided settlement patterns during this time. Waterways were transport and life-giving sources of water and when these water highways topped their banks, they deposited nutrients, building up the fertile soils that characterize the delta region. The Chickasaw tribe dwelled primarily along the natural bluffs along the Mississippi River, using the high ground as refuge from the flood waters and cultivating the rich, alluvial soils that the Mississippi generated.

The Wolf River was one of the vital sources of water important to the Chickasaw, serving as the first source of drinking water in the area. The Wolf River originates as a spring and flows more than 100 miles west, entering the Mississippi River at the Chickasaw Bluffs. This tributary was a key identifying point for settlers to orient themselves along the Mississippi. Interestingly, the Wolf River does not get its name from the native wolves that used to roam its banks. Rather, in 1682, French explorer Robert Cavalier de La Salle passed the Chickasaw Bluffs on his way to New

Orleans and, before leaving, named that small river “after a Loup Indian, Mayot, who accompanied his party. Riviere a Mayot became the Riviere du Loup; the name was eventually translated to the Wolf River.”⁴

This water source was vital to people dating as far back as 1000 BCE, as evidenced by archaeological records that indicate human settlements existed adjacent to the river in the region of the project site. Paige Silcox, the Site File Curator at the Tennessee Department of Environment and Conservation Archaeology Division, provided archaeological site information. Approximate locations for the archaeological sites are indicated in Figure 8 with orange symbols. Site descriptions were included in a 1957 archaeological report from the University of Memphis: site 40SY100 is described as a “300 x 85 foot ridge along Wolf River and was identified based on the presence of diagnostic artifacts from the Woodland and early Mississippian cultural periods”; site 40SY101 is described only as “two or three mounds, filled in center... showing considerable erosion.”⁵

The landscape along the Wolf River was characterized by floodplain forests, cypress-tupelo and bottomland hardwood, and wetlands that were sustained by the river’s seasonal floodwaters. Typical tree species existing in this habitat would include bald cypress, water tupelo, swamp chestnut oak, and water oak. The river meandered and would change course often, as it lay on a bed of soft, alluvial soil. Though not ideal for farming, the land around the Wolf River provided abundant food resources to First Nations. The Wolf River Conservancy (WRC), a non-profit founded in 1985 to protect this waterway and its surrounding habitat, employs the local experts on

4 Bond, Beverly and Jannan Sherman. *Memphis: In Black and White*. Arcadia Publishing: Great Britain. 2003

5 Site descriptions were recorded when the site “had already been significantly disturbed by agriculture and erosion.” Correspondence with Paige Silcox of TDEC’s Archaeology Division. Files could only be accessed in person so I relied on staff to help pull materials and resources for me remotely.

this waterway. WRC describes the flora and fauna that would have lived along the Wolf River: “woodland bison, eastern elk and ivory-billed woodpeckers lived in the bottomland forests. Black bears and Bachman’s warblers took shelter in the river’s dense canebrakes. Wolves and mountain lions prowled the wooded bluffs. A vast network of forest and swamp surrounded the Wolf and its sister rivers to the north — the Hatchie, the Forked Deer and the Obion.”⁶

The pre-colonial era was one of little waste or marginalization and the structure and rhythms of life were greatly informed by humans’ relationship with rivers and their flood plain. Waterways were expedient transport routes and sources of water and food, magnetically pulling people to their banks for hundreds of years.

6 Wolf River Conservancy. “Introduction to the Wolf River.” [wolfriver.org](http://www.wolfriver.org/introduction-to-the-wolf-river). <http://www.wolfriver.org/introduction-to-the-wolf-river>. Accessed March 01, 2020.

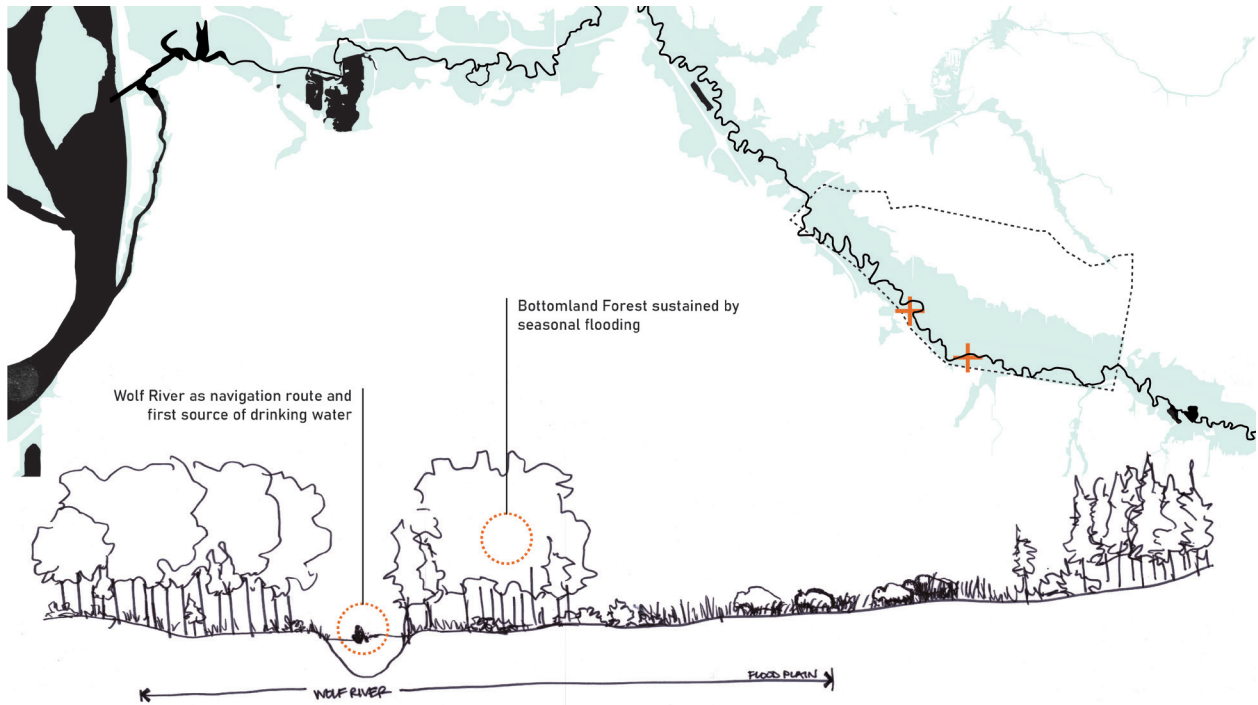


Figure 8. Diagrammatic section and reference plan noting some of the dynamics of water, race, and waste at play during this era.

NASHOBA

French and European settlers arrived to Memphis in the late 1600s and from that time until the 1800s, there was not much happening in the city besides people figuring out how to live out in the wilderness. It was very much a frontier existence. It is not until the 18th century when enough European settlers flocked to the region that problems related to urban development really surfaced. Because of this, the historical account here jumps from 1682 to 1825 to that moment of tension between settlers and native populations.

The high bluffs on the eastern side of the Mississippi, where the Chickasaw had lived for hundreds of years, drew the attention of French and English settlers. The site was chosen for the new city of Memphis because it was safe from seasonal floods as opposed to the lower-lying west banks of the river. Colonizers pushed the Chickasaw peoples outside the bounds of their new city, Memphis, which, by 1825, was a small clearing on the bluffs of the Mississippi River, “rambling” and “irregular”, extending from the Wolf River to the south only a mile. Beyond the small town, the

forest was cleared for livestock and “at either end of this space the forest again rears its dark wall, and seems to say to man, ‘so far shalt thou come, and no farther!’ Courage and industry, however, have braved the warning.”⁷

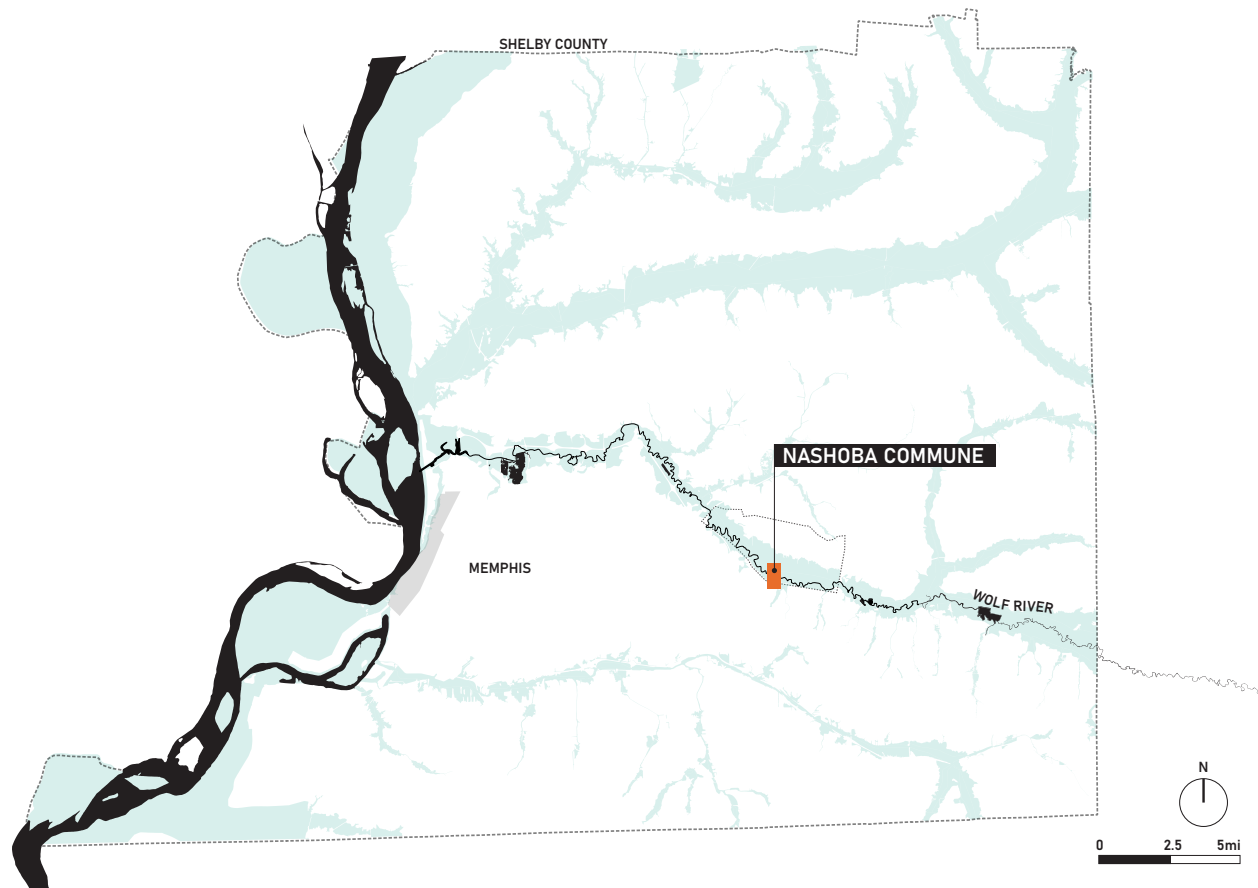


Figure 9. Map of the Nashoba Commune footprint in relation to Shelby Farms Park, riverine floodplains, and the extent of the city of Memphis in the 1820s

A few settlers had built log cabins in the woods, but the truly courageous one was Frances “Fanny” Wright, who developed what would later come to be understood as a social experiment on Nashoba Plantation, built between 15 and 40 miles outside

7 Trollope, Frances. *On the Domestic Manners of the Americans*. London: Whittaker, Treater, & Co., 1832. pp 35

of town.⁸ The tract of land she built upon came recommended by Andrew Jackson; the land was not ideal, with poor soils and being so far from town, but the focus of Wright's experiment lent itself to being positioned on the margins of society.⁹

Despite its name, Nashoba Plantation does not neatly fit into the typical history of southern plantations. On the contrary, Nashoba stood in opposition to the institution of slavery and the ideals it represented. Wright's goal was to "discover and then to demonstrate how slaves might be educated and responsibly freed" and in so doing, Fanny became "the first woman in America to act publicly to oppose slavery."¹⁰ Wright saw Nashoba not as a plantation but as a commune; her work was contemporary to a growing movement of social reform experiments, such as George Owen's New Harmony (1825-1827) in Indiana, that were "rejecting the rhetoric of individualism as too ready an excuse for selfishness". These communes and social experiments were not viewed as backward rejections of society as they might be today, but were considered viable alternatives to a nascent American economy.

Fanny's experiment proved more controversial than Owen's because it invoked the question of racial, not just economic, equality. The context in which Nashoba began— amidst a thriving

8 Different accounts place Nashoba at varying mileage from the city. Eckhart writes of a "40-mile horseback ride" (p. 160)

9 In 1825, Wright visited Andrew Jackson at his Hermitage in Nashville where he advised her on a property that may be suited to her plan along the Wolf River. The tract "lay about Fifteen miles from the trading post called Memphis and five miles from the Indian line... the soil of the tract was second-rate, but Fanny decided on it in part because she thought the land more healthful back from the Mississippi and away from the marshes. "This is a point... but too much neglected by American settlers." Eckhardt, Celia Morris. *Fanny Wright: Rebel in America*. Cambridge: Harvard University Press, 1984. pp 109

10 Eckhardt, Celia Morris. *Fanny Wright: Rebel in America*. Cambridge: Harvard University Press, 1984. p.1

The two visionaries shared critical views of American society, "neither Owen nor Fanny, for instance, trusted the commercial instinct to shape a society in which justice and generosity would prevail. Both looked to cooperation rather than competition for the foundation of the decent life. Both were organizing a community ... outside mainstream America." Wright's experiment was unique because she was tackling racial inequalities as well as the economic structure of society; in retrospect, the two were intrinsically linked at the time.



Figure 44: Frances Wright c. 1825, the year she founded the Nashoba Community.. Source: Bradley, Cole. "Germantown's Secret History as a Utopian Colony for Freed Slaves." *High Ground News*, 2017.

slave economy in the country, directly adjacent to a city that was on its way to becoming the largest inland cotton market in the world — made this venture incredibly risky and positioned Fanny as a visionary. It is not surprising that when Fanny published her plans for Nashoba in the local papers stating “she was eager to have free people, white or black, as soon as houses were ready for them” that the call met deaf, or covered, ears.¹¹ Fanny spent many solitary months at Nashoba, but, writing the day after Christmas, Fanny recounts the desolation with optimism:

Forest land still full of bears, wolves, and panthers, and pictured herself galloping her white horse over rough, open country. She slept in log cabins open on all sides... she could now ride forty miles a day without fatigue, and she did so often, going between Memphis and Nashoba, greeting the Indians who were her nearest neighbors as they came to sell their furs.¹²

Fanny was evidently influenced by her neighbors’ culture, as she chose to name her Utopian experiment after the Chickasaw word for Wolf: Nashoba.¹³

Finally, Robert Wilson of South Carolina responded to Fanny’s solicitation for people to join her cause. A relative had left Wilson “seven slaves whom he was directed to raise and to emancipate as they came of age. Opposed to slavery and unwilling to own slaves, he nevertheless could not afford to pay their way to Haiti or Liberia”.¹⁴ Nashoba offered him a solution and he sent the family to Memphis. Lukey was pregnant and came with her six children Maria, Harriet, Elvira, Isabel, Viole, and Delilah; “they were the first people [Fanny] had a chance to shape for freedom.”¹⁵ Fanny later purchased eight more slaves, who were delivered by steamboat from Nashville. There were eight adults— Willis, Jacob, Grandison, Redick, Henry, Nelly, Peggy, and Kitty— and three of

11 *Ibid.* p. 110

12 *Ibid.* p. 114

13 *Ibid.* p. 109 In historical documents and maps, the word is often spelled Neshoba.

14 *Ibid.* p. 119

15 *Ibid.*

their children who remain unnamed.¹⁶ In all, there were fifteen enslaved people at Nashoba.¹⁷

From 1825 to 1826, Fanny's land holdings grew from the initial 320– to about 1,800–acres of land flanking the Wolf River.¹⁸ Her confidence grew with the size of the property. She had cabins a quarter mile away from the Wolf River and imagined making paths through the woods for “secluded walks”, constructing a dairy, wash house, and more. The group built simple structures, a five-acre apple orchard, a plot of potatoes, fifteen acres of corn, and two acres of cotton.¹⁹ She was becoming notorious, receiving attention from fellow visionaries and disgruntled townspeople alike.

One admirer, William Maclure, worked alongside Owen at New Harmony and was sent to try and entice Fanny to leave Nashoba and come join their cause.²⁰ When Maclure arrived, he was reportedly “astonished that everything proceeded so smoothly. Comparing the good order and good conduct of the Nashoba blacks with the disorder and dilapidation he had left at New Harmony, he said the two places contrasted more vividly than the black skins and the white... his admiration for Fanny tripled when he saw what she had achieved in so short a time.”²¹

16 Eckhardt, Celia Morris. *Fanny Wright: Rebel in America*. Cambridge: Harvard University Press, 1984. p.119

17 It is very curious. Fanny bought and owned slaves, but gave them some semblance of agency and freedom that makes the term ‘slave’ or ‘enslaved people’ not appropriate here. They were technically her property, but, for most of their time at Nashoba, were not treated as such.

18 *Ibid.* p. 123

19 *Ibid.* p. 120

20 Often cited as the father of American geology

21 Eckhardt, Celia Morris. *Fanny Wright: Rebel in America*. Cambridge: Harvard University Press, 1984. p. 133

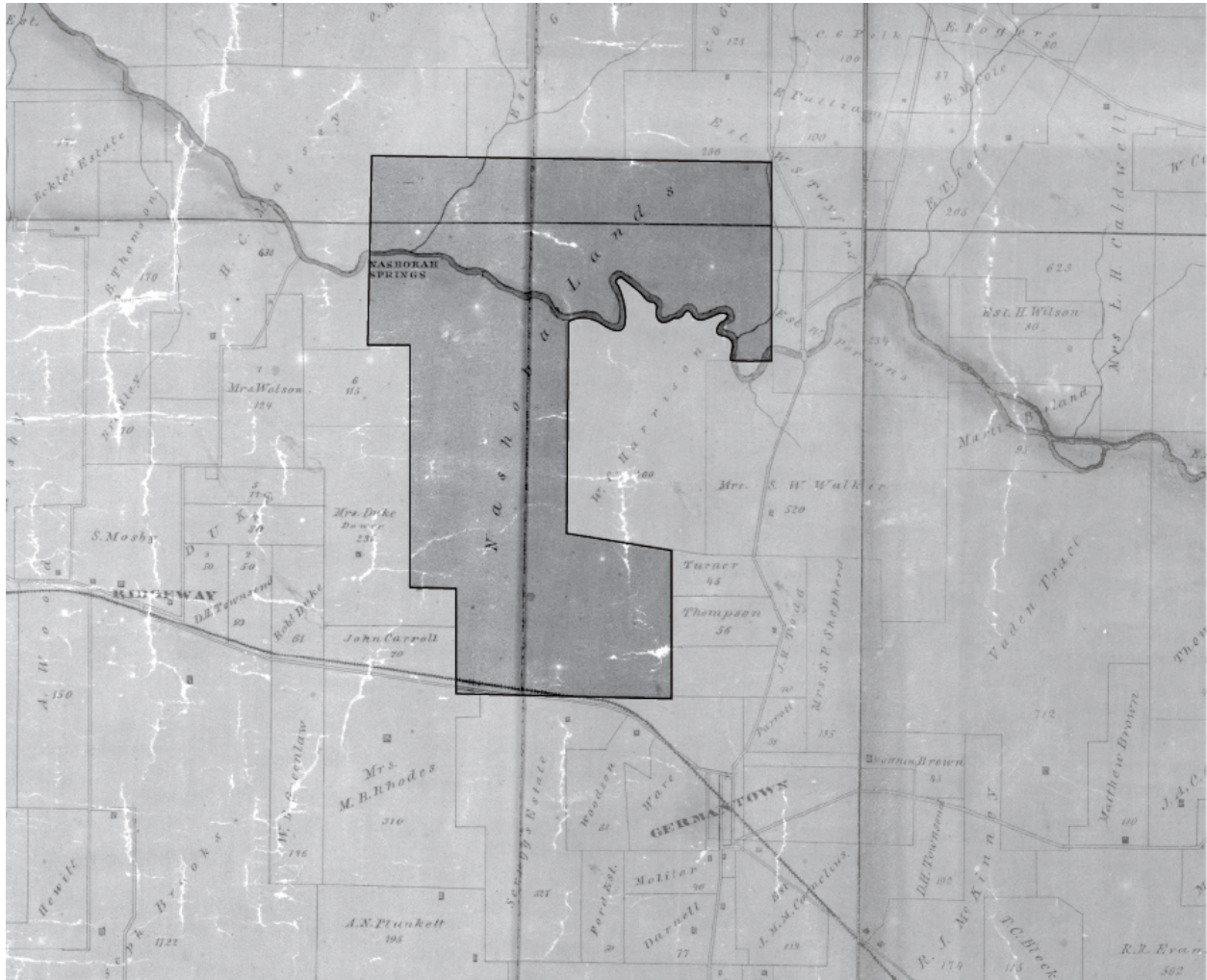


Figure 10. Nashoba Plantation Tract Map, 1869. Source: Shelby County Archives. Edited by author

He wrote that leaders in communal systems, such as Fanny, “would save the world an immensity of labor and further civilisation perhaps an age.”²² This was a resounding compliment coming from one of the founders of her model institution.

Others encouraged her efforts to test the idea that diverse races could coexist peacefully. In her biography of Fanny Wright, Celia Morris Eckhardt details Thomas Jefferson’s “long and careful” letter encouraging Fanny’s efforts:

22 *Ibid.* p. 134

[Thomas Jefferson] told her that the abolition of slavery was not impossible and that 'Every plan should be adopted, every experiment tried, which may do something towards the ultimate object.' Her proposal had 'its aspects of promise.' Although he wondered if 'moral urgencies' were sufficient to prompt blacks to labor, there was as yet too little evidence to decide that question. He closed on a note as positive as Fanny might have wished: 'You are young, dear Madam, and have powers of mind which may do much in exciting others in this arduous task. I am confident they will be so exerted, and I pray to Heaven for their success, and that you may be rewarded with the blessings which such efforts merit.'²³

In January 1828, Frances Trollope accompanied Fanny to Nashoba on her journey to document a new, united American way of life. In *On the Domestic Life of the Americans*, Trollope provides not only a valuable visual sketch of the commune, as well as an equally detailed verbal sketch of how Fanny's experiment was viewed and its import within its context.

This lady, since become so celebrated as the advocate of opinions that make millions shudder, and some half-score admire, was, at the time of my leaving England with her, dedicated to a pursuit widely different from her subsequent occupations. Instead of becoming a public orator in every town throughout America, she was about, as she said, to seclude herself for life in the deepest forests of the western world, that her fortune, her time, and her talents might be exclusively devoted to aid the cause of the suffering Africans. Her first object was to shew that nature had made no difference between blacks and whites, excepting in complexion; and this she expected to prove by giving an education perfectly equal to a class of black and white children. Could this fact be once fully established, she conceived that the Negro cause would stand on firmer ground than it had yet done, and the degraded rank which they have ever held amongst civilized nations would be proved to be a gross injustice.

This question of the mental equality, or inequality between us, and the Negro race, is one of great interest, and has certainly never yet been fairly tried.²⁴

23 *Ibid.* p. 110

24 Trollope, Frances. *On the Domestic Manners of the Americans*. London: Whittaker, Treater, & Co., 1832. pp 17



Figure 11. Frances Trollope's sketch of the Nashoba Commune (1828)

Despite verbal support from many, in the end, no whites physically joined the commune at Nashoba other than Fanny's co-founder George Flower, her sister Camilla and Camilla's husband James Richardson. The commune proved to be too radical for the time and Fanny's bold experiment would soon come to an end.

Fanny became ill as the city of Memphis was ravaged with malaria in 1827 and she retreated to Europe to heal. In her absence, Nashoba fell into old habits of slave owner and slave relations, reversing all the ideals Fanny had worked so hard to establish. James Richardson, who was left in charge, recorded dismaying things in his Nashoba log, one of which is particularly striking:

May 24

Two women slaves tied up and flogged by James Richardson in the presence of Camilla and all the slaves. Two dozen and one dozen on the bare back with a cowskin.²⁵

Until this point, Nashoba had all the same components of its neighboring plantations —African slaves, white overseers, crops— but the difference was in management and intent. Fanny and Flower’s goals for Nashoba were to create an ideal community that rejected the economics of slavery: “instead of wanting to make money from slave labor, they wanted to shape men and women capable of directing their own lives. They did not use the lash, nor did they intimidate the slaves with an overseer’s presence.”²⁶ Richardson’s abuse directly opposed Nashoba’s core purpose and undermined Fanny and George Flower’s hard work towards their vision. Seeing a much transformed place upon her return, and facing threats to her life, Fanny decided to end the experiment in 1830 concluding “the present generation, as a mass, is corrupt past reform.”²⁷

Fanny’s experiment was short-lived, but historic. The verbal support she gleaned from people such as Jefferson show that slavery did not exist without critique but proved that words alone, and small experiments such as Nashoba, were not enough to uproot the system of slavery that was embedded into the economy and social life of the American South until it was legally abolished in 1865. Today, a standard form National Park Service Historical Marker sign stands along Summer Avenue, inaccessible in a grassy island among traffic lanes. The marker offers only two sentences to this rich layer of local history, misrepresents the dates of the experiment which lasted from 1825 to 1830, and is not located on the footprint of the old commune.

25 *Ibid.* p. 114

26 Eckhardt, Celia Morris. *Fanny Wright: Rebel in America*. Cambridge: Harvard University Press, 1984.p. 115

27 *Ibid.* p. 163

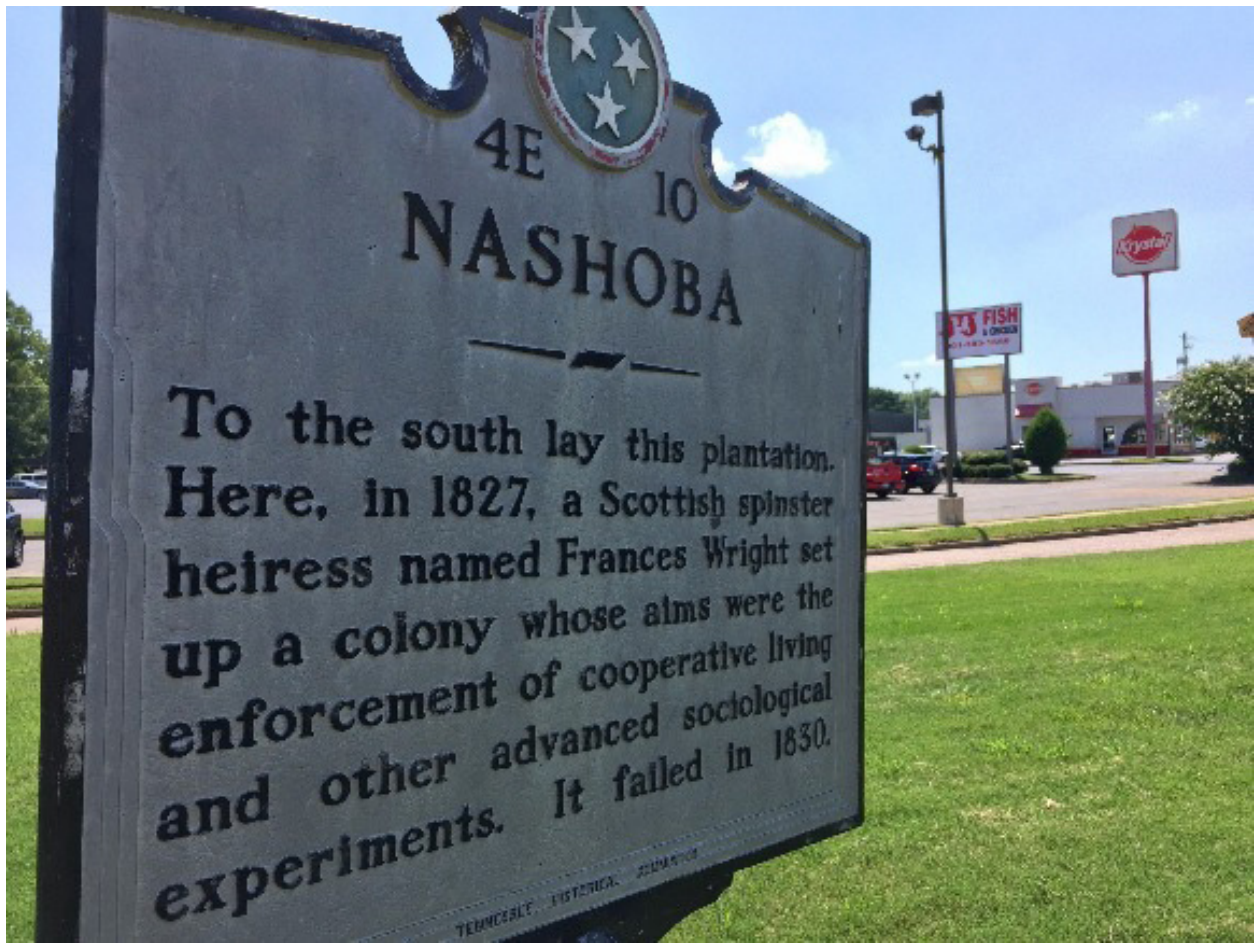


Figure 12. Historical marker on the corner of Summer Avenue and Sycamore View Road in Memphis, TN. The sign is a poor ode to this history of Nashoba that it commemorates; the dates are misrepresented, it is illegible from the pace of the cars that drive by, and it is not on the site of the former commune. Source: Bradley, Cole. “Germantown’s secret history as a utopian colony for freed slaves. *High Ground News*. August 2017

The marker also fails to mention the other key participants in the Nashoba experiment, without whom the site would have remained only an idea. Their names are: Lukey, Maria, Harriet, Elvira, Isabel, Viole, Delilah, Willis, Jacob, Grandison, Redick, Henry, Nelly, Peggy, Kitty, and those whose names are lost to history. Though the Nashoba experiment failed to reform American slavery, it offered an escape for the people listed above; they left Nashoba not as slaves, but as liberated humans. Fanny accompanied them to Haiti and “left them there, free, and under the protection of

the president.”²⁸ The nuances of this story offer lessons of bravery and resistance in the face of an abusive and far-reaching system that still apply today.

The Nashoba history complicates the notions of race and marginalization that were widespread at the time. History often characterizes the slavery era as black and white, good and evil, right and wrong. However, this story introduces shades of grey and a wrinkle in this neat dichotomy that is often presented between slave and slave owner. Fanny purchased slaves, but in an effort to educate, train, and free them; this was a necessity in order to test her progressive vision and a means to a better end. No matter the intent for equality, Fanny is still complicit in the slavery machine that used people as resources, valued, bid and sold just like the land they were forced to work.

The waterways continued to guide settlement patterns, particularly the floodways, but society’s conflation of race with value dictated who could occupy what space physically and within the social hierarchy. Black persons were enslaved and relegated to work the field; Native Americans were allowed to roam free, but only on less valuable pieces of land, not the Chickasaw bluffs that still hold their name today. This era on site is one of resisting the value system prescribed by society and being overcome by it.

28 Trollope. *Domestic Manners*. p. 41

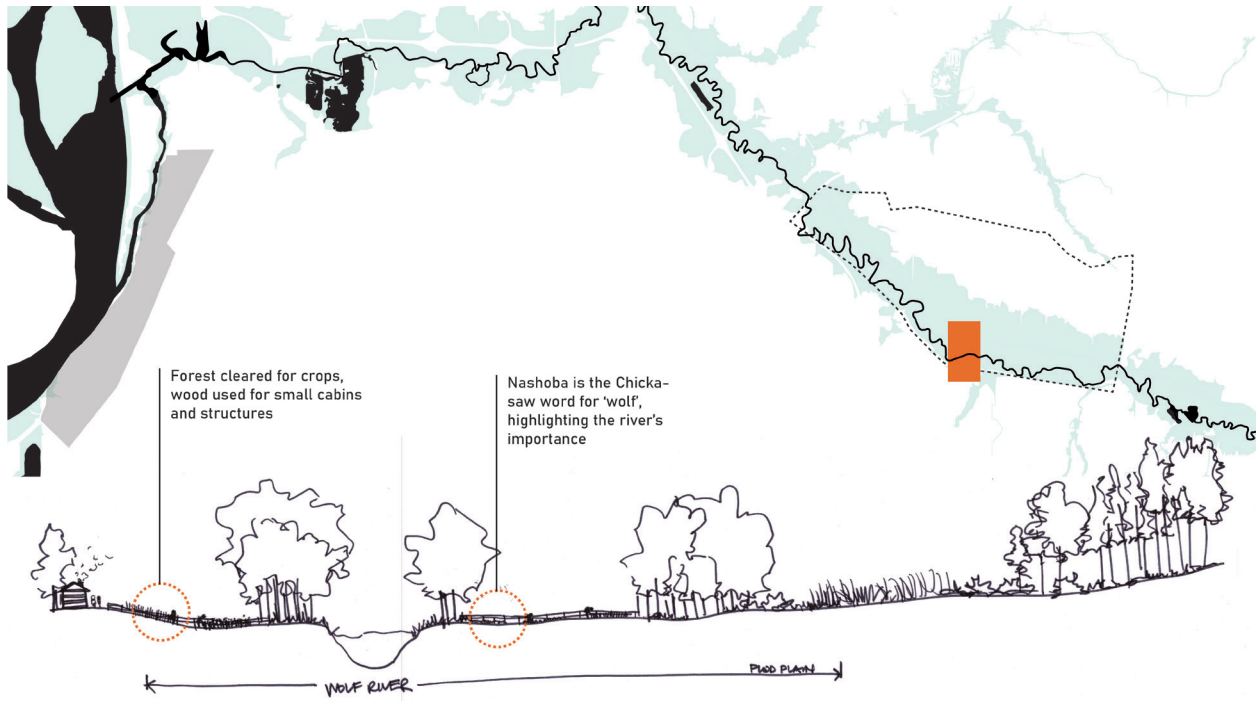


Figure 13. Diagrammatic section and map highlighting the Nashoba footprint and distance from the urban center along the Mississippi River

SHELBY COUNTY PENAL FARM

After the dissolution of Nashoba, a large gap exists in the site's known land use history until the records pick back up in the 1920s, noting the existence of the Shelby County Penal Farm. Located five miles east of the city, as far away from the urban center as the city was wide, the Penal Farm was pioneering a model prison system that reformed the 'workhouse' system and offered inmates training, education, and various skills to help them integrate successfully back into society once released. This mission sounds notably similar to Fanny's project underway fifty years earlier, though the scale of the operation was larger and more long-lasting than its predecessor, growing from an initial 2,400 acres in 1928 to 5,017 acres at its peak in 1946.²⁹

29 Ellis, O.B. "Shelby County Penal Farm Report". *Office of Shelby County Commissioners*. October 1946. p.8

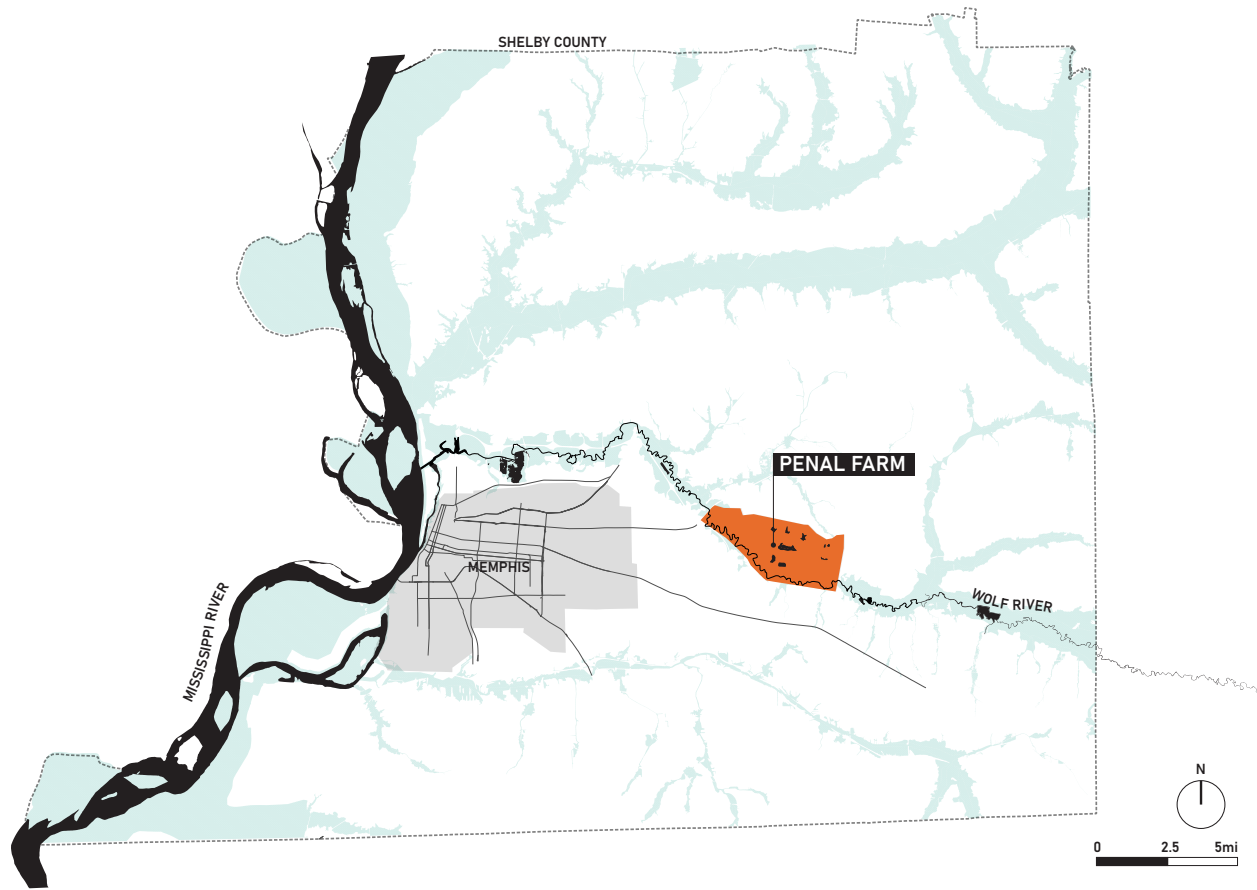


Figure 14. Map of the footprint of the Shelby County Penal Farm as it existed around 1940 in relation to Shelby Farms Park, riverine floodplains, and the extent of the city of Memphis

The Penal Farm, as indicated by its name, continued the agricultural heritage of the area that existed at Nashoba and in fields across the Mid South with one key distinction: it did not grow cotton. In Memphis, cotton was king.³⁰ By the 20th century Memphis was the largest inland cotton market in the world and the crop dominated the fields in the delta region. The Penal Farm made a point to showcase other “money crops” such as barley, wheat, corn, sorghum, oats, and rye to encourage diversification in the South where farmers “depended too much upon a one-crop

30 To this day, the city crowns a King of the Cotton Carnival, a lasting remnant of the society that white Memphians hoped to preserve decades after the Civil War. The Cotton King is always white.

system”.³¹ In addition to these money crops, the farm grew vegetables and cultivated livestock. On a 300-acre portion of the farm, “thirty-nine varieties of vegetables” were grown and 93% of the food grown was used to feed inmates, supervisors, and residents at the Shelby County hospital.³² O.B. Ellis, secretary and commissioner of penal farm roads and bridges, puts together a report on the Penal farm.. The report, published in 1946, praises the efforts of the institution and presents a the prison as a progressive and uncontroversial space, neglecting to mention the skewed proportion of African American to white inmates and the leg chains that prisoners were forced to wear as punishment, In this minimally veiled propaganda piece for the Penal Farm, Ellis describes the agricultural goals for the institution:

A new economy is on the horizon of Southern Agriculture. Better farm management aided by the development of mechanized equipment, and an improved type of live stock will eliminate the one-crop system and its evils — soil erosion, soil depletion, cheap unskilled seasonal labor, and low standards of living.... Involved in this transition, are many problems facing the average farmer, and Shelby County Penal Farm is endeavoring to point the way — not as an experiment station but as a demonstration farm — so the farmer can see the enormous possibilities inherent in this type of agriculture in the South.³³

The farm was innovative not only in agriculture, but also in hydrology, manipulating water runoff with dikes and lakes. Half the Penal Farm property lay in the Wolf River’s flood zone and half lay in an upland area with varied topography; in a system that raised livestock and crops, water was a vital resource and they used it wisely.

31 Ellis, O.B. “Shelby County Penal Farm Report”. *Office of Shelby County Commissioners*. October 1946.p. 31

32 *Ibid.* pp. 30, 33, 42

33 *Ibid* p. 26



Figure 15. Entry Sign Characteristic of the Shelby County Penal Farm. Source: *Shelby Farms Park: Elevating a City*

The workers retrofitted this land in innovative ways that physically endure today. Prisoners and farm managers devised a system of levees on the southern end of the site to retain rich sediment deposits from Wolf River flood waters; ditches made from building up this land rapidly drained water from the agricultural fields. They also dug ponds for pig wallows, collected runoff to create a water source for cattle, and dug trenches and raised mounds to irrigate and drain the fields. The moves to dam up drainage ways and sculpt the land to move water indicates a shift in mindset from water as primarily transport and habitat for wildlife to a resource to be used and controlled. Though, the engineers or designers managing the project took cues from the existing landscape and placed lakes in natural drainage paths, working with nature not against it. Each lake is sited at a natural collection point for several sub watersheds, meaning they were ideally placed within the topography to naturally replenish and the land was graded so they fed into one another.

Ellis gives credence to the successful implementation of the County's vision for a new type of prison by citing praise from leaders in the United States Department of Agriculture, the Dean of

University of Tennessee's School of Agriculture, the Director of Information of the American Farm Bureau Federation, among others. Louis Bromfield, an author, conservationist, and Pulitzer Prize Winner, offered his words of praise:

In no spot in the United States is better or more effective work being done in behalf of conservation of natural resources than at the Shelby County Penal Farm. It offers a whole education in the modern agriculture which is necessary for the future welfare of the nation.³⁴

The farm won many awards in its time, including largest cabbage grown, and touted "one of the top [cattle] herds in the world," breeding Jersey dairy cows for sale across the country.³⁵ But at what cost? The labor force used to achieve these aims must not be overlooked.

Despite its progressive farming practices and stance as a remedy to the "workhouse" system, the methods used and hierarchy in place at the Penal Farm raise questions about the motivations and potential prejudices behind the institution. Ellis positions the farm as demonstrating a new way of life in post-slavery America:

From Civil War days, the farmer of the Deep South has relied upon cotton almost exclusively for a livelihood. This was natural since we had climate and rainfall adapted to the growing of the crop, and we had an abundance of cheap labor. The natural conditions are the same today, but cheap labor to cultivate and harvest the crop is a thing of the past.³⁶

However, if one looks past the self-published report, the farm's use of prisoners greatly resembled the "free labor" of slaves in decades past and in many ways appeared to be a modern version of the plantation system. A majority of the inmates were African American, jailed for minor crimes such as vagrancy or gambling that were misdemeanors used to target the black population during the Jim Crow era.³⁷ The penal farm reflected the skewed values of the society, or person, it served.

34 *Ibid.* p.27

35 *Ibid.* p. 35

36 *Ibid.* p. 38

37 Welky, David, "There Will Be No Discrimination". *An Unseen Light: Black Struggles for Freedom in Memphis, Tennessee*. edited by Goudsouzian, Aram, and Charles W. McKinney Jr. Lexington, KY: University Press of Kentucky, 2018. p. 96

The farm was founded by E. W. Hale, Chairman of the Shelby County Commissioners, and E.H. “Boss” Crump, an infamously racist mayor – some would say dictator – who governed Memphis officially as Mayor from 1910 to 1915, but effectively ruled the city for the first half of the century, appointing every mayor elected from 1915 to 1954. The Penal Farm Report details



Figure 16. Penal Farm Workers circa 1940. Source: Shelby County Archives

the two men’s friendship and touts their leadership as transformative for Memphis and the Penal Farm.³⁸ Countless examples of racism occurred against blacks during Crump’s reign, but there is one particular instance when discrimination within the city intersected with the Shelby County Penal Farm. David Welky details the event which occurred during the Mississippi River flood of 1927, the worst in the city’s history:

The clearest and most notorious example of racial disparities in Memphis came as the flood was peaking at the end of January. With the waters climbing and no crest in sight, business leaders whose properties were imperiled by Nonconnah Creek

38 Ellis, O.B. “Penal Farm Report” pp 7-8

implored Boss Crump to focus the city's efforts on bolstering the rickety levee protecting their plants and factories from certain destruction... After evaluating the situation, [Crump] decided the levee needed more workers than the WPA could provide, and fast. Crump ordered 500 inmates from the Shelby County Penal Farm, most of them black, to the barrier. Area planters often used black convicts as forced labor, so Crump was tapping a familiar source of cheap employees... Leg irons clanked as black inmates lugged heavy sandbags to the levee.³⁹

The discrimination was not limited to black prisoners; the city needed more workers to save it from the Mississippi River floodwaters, so Crump ordered his police department to send “every able bodied black man they could find to the Nonconnah levees. Anyone who resisted the roundup should be arrested for vagrancy.”⁴⁰ The city's reaction to the flood reveals the divisions that existed along racial lines in Memphis, more than 70 years after the abolishment of slavery.⁴¹ Water and race intersect at this moment in history as black prisoners were put in harms' way to protect what, and whom, the city valued from floodwaters.

Discrimination was embedded in how the city was structured and, as has occurred throughout history and across the country, the value of land is related to the value society places upon the people who reside there. Just as white people had pushed Chickasaw people to settle down in the Wolf River floodplain and other marginal, undesirable lands in the 1800s, they later relegated African Americans in Memphis to floodplain lands:

Around 100,000 African Americans lived in Memphis in 1937, accounting for about 40 percent of the population. Most of them lived in the worst parts of town, in ghettos with such evocative names as Slippery Log bottoms, Queen Bee Bottoms, and Shinertown. Occupying the lowlands along the Wolf River and other peripheral districts, these slums were warrens of tumbledown hovels and ramshackle tenements,

39 Welky, David, “There Will Be No Discrimination” in *An Unseen Light: Black Struggles for Freedom in Memphis, Tennessee*. edited by Goudsouzian, Aram, and Charles W. McKinney Jr. Lexington, KY: University Press of Kentucky, 2018. pp. 95-6

40 *Ibid.*

41 *Ibid.* p. 87

many of which had communal outdoor toilets rather than indoor plumbing and were health hazards even in normal times.⁴²

This passage touches on environmental racism, a term that would not be coined until 1992 but was acting, unnamed, in cities well before then.⁴³

African Americans in Memphis were forced to endure poor environmental conditions for a multitude of reasons – they could not afford better land or were not allowed to purchase it, even if they could; they wanted to remain around their community; they were intimidated out of the city center. The core of all these nuances of situation is the fact that they were less valued members of society, and society was structured to place black people on less valued, even dangerous land. Welky details how the social context is intricately linked to the spatial:

[Shantytown districts] were built on swampy and unhealthful land that was part of a network of bayous and lowlands that served as natural reservoirs whenever the Mississippi went on a rampage. These areas had flooded before, and there was no reason to doubt that they would flood again. That they primarily housed African Americans reflected the deep, often unspoken socioeconomic inequality permeating the city. Restrictive codes and financial limitations kept black Memphians penned up in a few neighborhoods, most of them undesirable.⁴⁴

White Memphians in the mid-twentieth century continued to discriminate against their fellow African American citizens, using different systems of suppression – penal farms, red lining, a slanted legal system, governmental intimidation– that continued to morph as the city grew. In the 1950s and 1960s, racism appears more in acts of avoidance than in outright confrontation. For instance, as white flight left the city's disadvantaged populations, predominantly African Americans, in the

42 *Ibid.* p. 91

43 Benjamin Chavis, the executive director of the Commission for Racial Justice of the United Church of Christ defined environmental racism as “racial discrimination in environmental policy-making and the enforcement of regulations and laws, the deliberate targeting of people of color communities for toxic waste facilities, the official sanctioning of the life-threatening presence of poisons and pollutants in our communities, and the history of excluding people of color from leadership in the environmental movement”. Zimring, Carl. *Clean and White: A History of Environmental Racism in the United States*. New York: New York University Press, 2015. pp 1-2

44 *Ibid.* p. 93

urban core, as white residents moved to the suburbs. This diaspora is the moment when the Park begins to shift from being on the margins to being enveloped by the migrating population. With this population shift comes a shift in public values, altering the way the project site is contextualized, how water is managed, and how the land is valued.

In 1964 the Shelby County Penal Farm closes its doors, leaving a gaping 5,000-acre void of county land ripe for development as the city expanded eastward. A new phase of the site's history emerges, characterized by engineering, interstates, and the environmental movement.

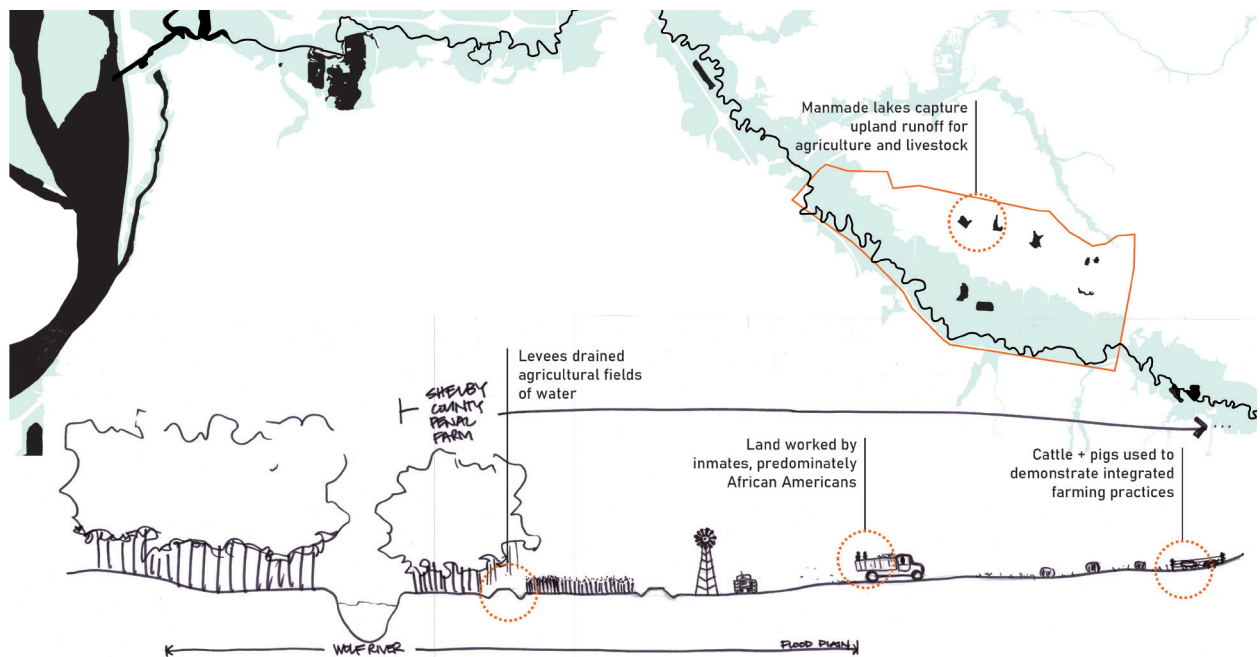


Figure 17. Shelby County Penal Farm era, 1920 - 1960. Diagrammatic section and map highlighting the aspects of the Shelby County Penal Farm in relation to the extent of the city and Wolf River Floodplain

CHAPTER 3. A SITE AND CITY IN FLUX: 1960 - 2000

AN ERA OF ENGINEERING

The city of Memphis had been steadily, but slowly, growing since it restored its charter in 1893, but the Interstate System deployed in the 1950s catalyzed outward expansion in Memphis at a rate the city had not yet experienced. Interstates tore through cities and streamlined transportation and access to remote cities, often cutting through impoverished neighborhoods and dividing communities which were powerless to stop the modern progress.¹ The interstate system wrapped around the City of Memphis, loosely marking the city limit line and aiding the outward migration of the city's wealthiest citizens. Figure 17 shows population growth encroaching on the Wolf River floodplain and a straightened river channel; this is not a coincidence.

By the 1960s, cities across America were experiencing white flight as the more affluent citizens fled city centers to build new lives away from African Americans. Memphis was no different. Population expansion outside the city catalyzed the restriction of the Wolf River as people, specifically the white and wealthy, encroached eastward onto the river's floodplain.

By 1964, the United States Army Corps of Engineers (USACE or the Corps) had channelized 22 miles of the Wolf River as part of their West Tennessee Tributaries Project aimed at mitigating flooding in the region, cutting the river's length in half.² Engineers and land owners were drastically shaping the landscape across Tennessee. Massive deforestation was occurring across the state as land was cleared for farms and old growth forests were felled for lumber. Water management control measures, such as ditches used on the Penal Farm property to rapidly drain flood waters, were used to create land in riverine floodplains suitable for farming or development across the state. Locally, sedimentation within the Wolf River watershed increased from these exposed, sandy soils, causing flooding and leading the Corps to intervene. They straightened the Wolf River from its

1 Memphis put up an historic fight to an Interstate 10 route through the city. This history is of particular import to SFP as it continues to inform conversations about roadways through parks today.

2 Wolf River Conservancy. "Introduction to the Wolf River." [wolfriver.org](http://www.wolfriver.org/introduction-to-the-wolf-river). <http://www.wolfriver.org/introduction-to-the-wolf-river>. Accessed November, 2019.

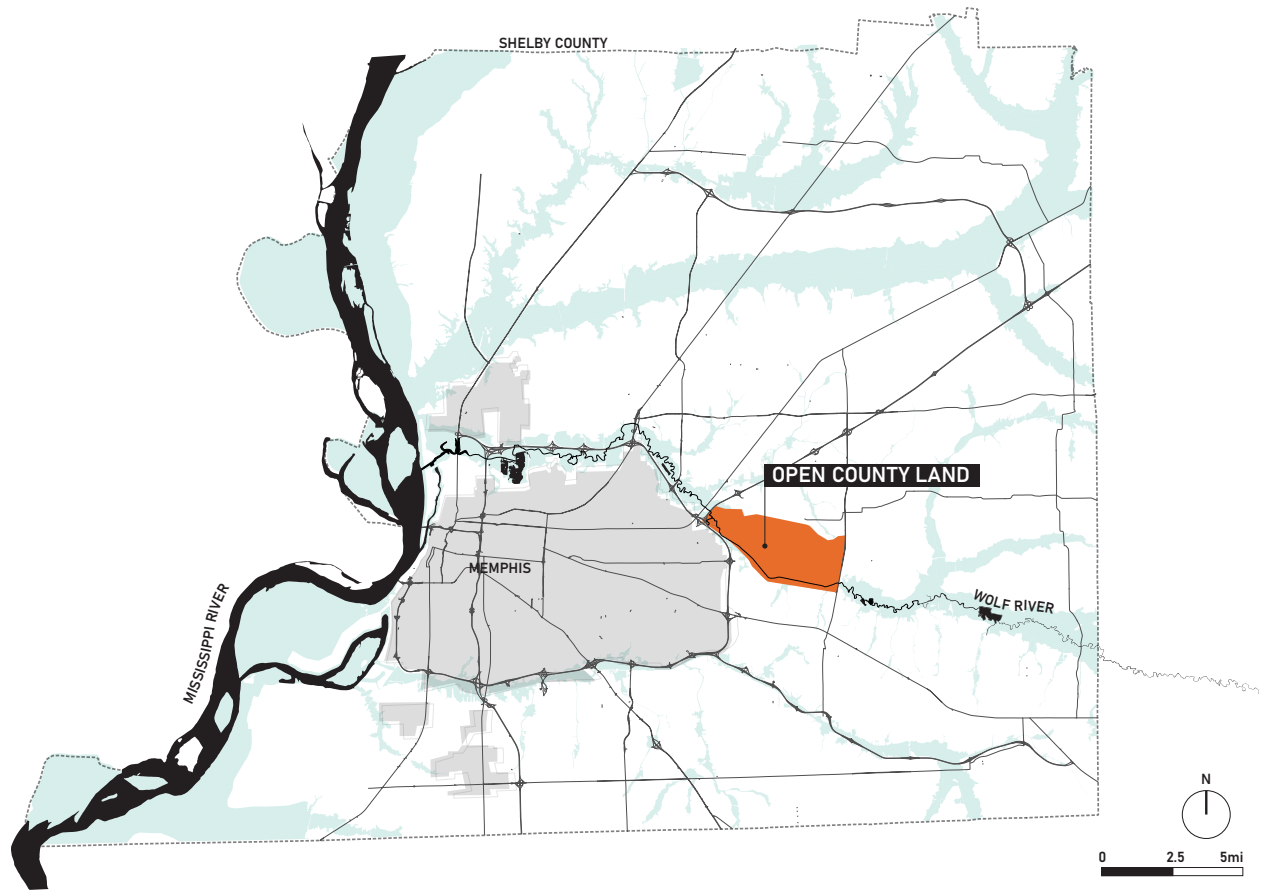


Figure 18. Contextual map of the 1960s demonstrating the relationship between the expanding city of Memphis, the open space left from the closing of the Shelby County Penal Farm and the newly channelized Wolf River

mouth at the Mississippi River all the way out to the new suburb of Germantown, and later in the 1970s, all the way to Moscow, Tennessee. Though channelization succeeded in slowing major floods in the upper reaches of the river, the straightened channel had negative impacts downstream. The project increased the flow efficiency and eliminated wetland storage areas in the floodplain, both of which funneled water downstream faster than it could be received. The attempt to control the river moved the flooding downstream to lower income areas, eliminated large swaths of bottomland forest by altering the river's flood patterns, and reduced the Wolf River's ability to filter water through its wetlands and recharge the aquifers below.

The quality of the Wolf River continued to deteriorate despite the Corps' intervention and, in 1970, scientists declared the river "dead". In 1977 Mary Winslow Chapman published *I Remember Raleigh*, which included vivid, nostalgic descriptions of a pre-channelized Wolf River:

To form any picture of [the river's environs] we must forget what we now see and imagine the Wolf as it was then, a clear, spring-fed stream slipping silently along through the endless forest, where the unbroken shade shielded it from the fierce Southern sunshine and kept it flowing fresh and cool all summer long ... The water was fresh and sweet, flowing out of the uncontaminated woods, but gradually this condition changed. As more and more land upstream was cultivated, more silt was washed into the river. After each rain it took longer for the stream to clear, and finally, with the establishment of the Penal Farm [today's Shelby Farms] with all its disagreeable effluvia, swimming became impossible.

Gone now forever from this spot are the cane brake and the horses; the tall timber and the mysterious river, where hard by, on Austin Peay Bridge auto traffic streams triumphant, night and day in one unceasing roar, all oblivious of the life and history buried down below.³

Winslow implicates the Penal Farm as a contributor to the Wolf River's destruction, citing its "disagreeable effluvia". The author could be referencing any number of toxins coming from the site, including agricultural runoff from fields, with pesticides and sediment, waste from livestock, or toxins coming from the dump housed on what was once the Penal Farm's property.

3 Chapman, Mary Winslow. *I Remember Raleigh*. Memphis, TN: Riverside Press. 1977



Figure 19. Image reminiscent of the habitat characteristic of bottomland forests before widespread draining efforts of the 1960s and 1970s. The Nature Conservancy.org, <https://www.nature.org/en-us/get-involved/how-to-help/places-we-protect/west-tennessee-program/>. Accessed January 2020.



Figure 20. Image of LBSNA forest post channelization; the forest is notably more dry and invasive species such as chinese privet dominate the understory

Located just north of the Wolf River and on the edge of the city limits, the SC Landfill opened in 1967 to accept wastes from households across the city, though it had been accepting waste from the Shelby County Penal Farm and the Shelby County Hospital, likely, for decades. It stands as the oldest dump on record in Tennessee.⁴ In the early days, individuals would drive to the site and dump trash, old Volkswagen buses, food scraps, drums of unknown liquids, and innumerable other waste products into an exposed pit deemed suitable for this practice. The SC Landfill, like thousands across the country, began as a dump on vacant land before any accepted disposal methodologies had gained widespread traction and before the federal government crafted regulations to control dumping and separate waste types. Originally, the idea was, simply, to take trash far away from the city to control odors and health concerns. It is unknown as to whether the dump was intentionally situated along the Wolf River so refuse could be washed away during flooding, or if the site was chosen for its low elevation and potential to serve as a giant hole to be filled with trash. Regardless of the intent this dump had detrimental health and environmental impacts, particularly as it lay within the Wolf River's floodplain. An image from the Press Scimitar newspaper shows just how chaotic the scene was when the river overtopped its banks.

In retrospect, the siting of this dump in a flood plain is horrifying; however “using solid waste for filling low spaces” or dumping in water bodies was a common practice in the United States that only began to draw criticism in the late–nineteenth and early–twentieth centuries.⁵

4 Landfill records for the state of Tennessee. US Environmental Protection Agency's Landfill Methane Outreach Program. “Project and Landfill Data by State.” Retrieved from [https://www.epa.gov/lmop/landfill-technical-data.\[lmopdataatn.xlsx\]](https://www.epa.gov/lmop/landfill-technical-data.[lmopdataatn.xlsx]). August 2019.

5 Melosi, Martin. “National Historic Landmark Nomination: Fresno Sanitary Landfill”. *National Register of Historic Places Registration Form: United States Department of the Interior, National Park Service*. August 2000. p.10

It took until the 1930s for the earliest American landfill prototypes to arrive, and they were little more than covered holes in the ground, marketed as developable land, with one exception: the Fresno Sanitary Landfill.⁶



*Sanitary Fill Invades Flood Plain
of Wolf River, Adding to the Pollution Problems.*

Memphis Press-Scimitar Photo

Figure 21. Undated photograph of the Shelby County Dump, the project site, as seen inundated by floodwaters in the mid-1900s. Source: Memphis Press-Scimitar

⁶ Melosi describes offers two examples of these new practices, contemporaries with the Fresno County Landfill: “In New York, ... refuse was placed in deep holes primarily in marshes and then the holes were covered with dirt. In San Francisco, layers of refuse were deposited in tidelands to produce additional land.” *Ibid.* p. 11

Across the country, Jean Vincenz⁷, a civil engineer and public administrator, was testing a method of waste disposal on the Fresno Sanitary Landfill (FSL), in Fresno County, California. Opened in 1937, the FSL introduced trench disposal and compaction to the disposal methodology⁸ and a deeper cover, ideally 12” to 24” in depth, that was applied daily over the waste cells.⁹ Contemporary methods from New York to California consisted of digging a hole in marshy areas or tidelands and “casually cover[ing] the hole” before moving on or attempting to use the fill as developable land.¹⁰ The lack of an effective cover and compaction meant these sites were unstable, exposed, and attractive to rats compared to the Fresno landfill which addressed these issues with the new methods.

7 A civil engineer and public administrator by training, Vincenz served as “commissioner of public works, city engineer, and manager of utilities in Fresno, California from 1931 to 1941”. Because of his success in Fresno, he later served as the assistant chief of the Repairs and Utilities Division Army Corps of Engineers which later launched him into his role as president of the American Public Works Association in 1960. Fresno NPS Application p 11

8 Spoken like an engineer through and through, Vincenz describes his design:

“A ramp was constructed running up to 3 or 4 feet in height by digging a ditch or trench 3 feet or more in depth and piling the dirt to form the ramp at one side. The trench was from 20 to 24 feet in width and the ramp was wide enough to allow the trucks to swing and back up to dump their loads into the trench... a chain laid on the bottom of the truck is pulled by the shovel to move a false tail gate which slides the garbage into the trench... The shovel then levels off the garbage and compacts it by dropping the bucket on the pile of garbage. Then we are ready to begin covering. A second trench is dug parallel to the first trench and adjacent to it,...and the dirt from the second trench is spread on top of the garbage and is compacted by allowing the bucket to drop on top of the earth covering. The depth of the garbage in these first and second trenches was increased to continue the slope of the ramp until a depth of about 8 feet of garbage was reached. The fill was then leveled off...[A] compacted and settled cell of garbage is about 6 feet in depth.”
Ibid. 43-44

9 *Ibid.* p. 14

10 *Ibid.* p. 13

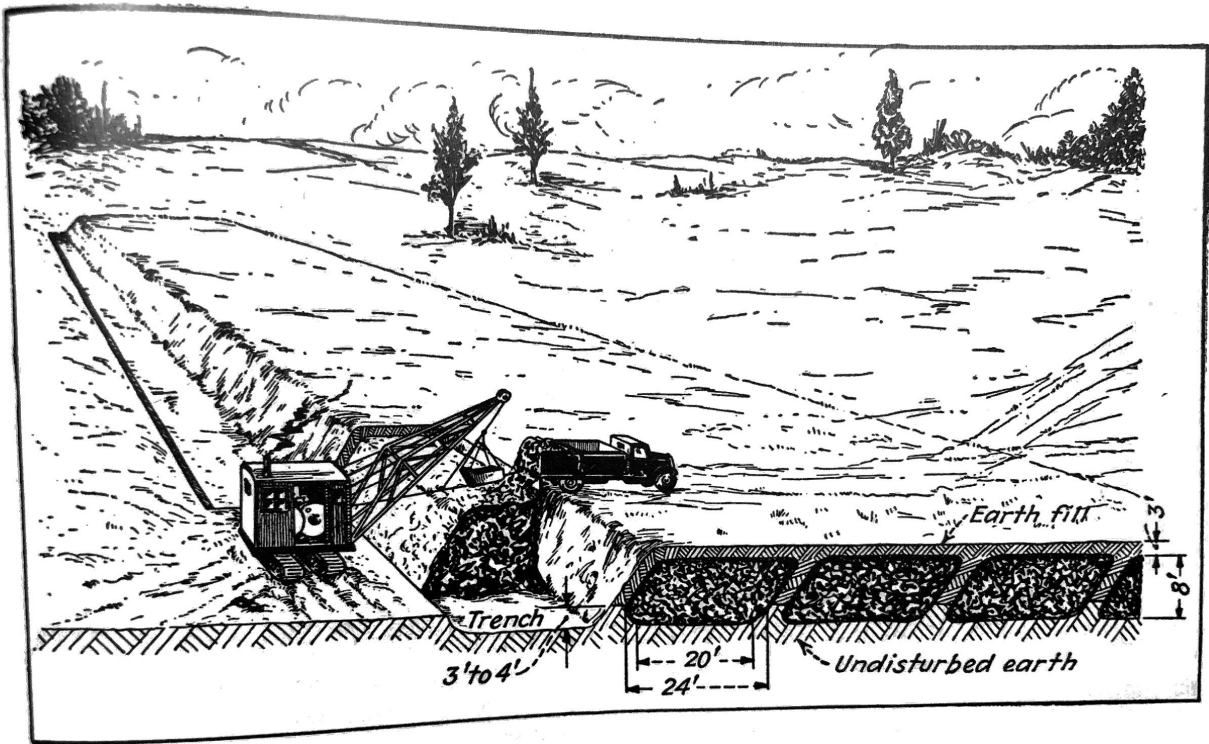


Figure 22. Sketch of the Fresno Sanitary Landfill Operation, National Park Service, 1939

Vincenz's design for the first ever "sanitary landfill" gained traction after World War II, with 100 cities having adopted the practice by 1945, and soon became the most widely utilized waste disposal method in the 1970s and 1980s.¹¹ The Fresno County Sanitary Landfill stands today as the "oldest 'true' sanitary landfill in the United States" and "is a significant prototype because its primary intent was to create a new disposal option for [municipal solid waste]", not to create developable land like his contemporaries.¹² It is honored as such, by being included on the National Register of Historic Places.

11 Interestingly, Melosi points out that "this was due in no small part to the recommendation of the United States Public Health Service in 1943 that sanitary fills should be viewed as emergency wartime measures to conserve labor and materials." *Ibid.* pp. 10, 15-16

12 *Ibid.* p.10

Thousands of waste disposal sites were in operation before Vincenz's invention spread, as each city had its own local dump. The Resource Conservation and Recovery Act (RCRA), passed in 1976, forced cities to adopt the 'sanitary landfill' methods prototyped in Fresno. What emerged in the 1970s were Frankenstein-composites of open dumps and engineered sanitary landfills with varying degrees of success in mitigating environmental and safety risks. The SC Landfill is one of these hybrids, converting to a formal landfill later in its life once forced by regulations.¹³

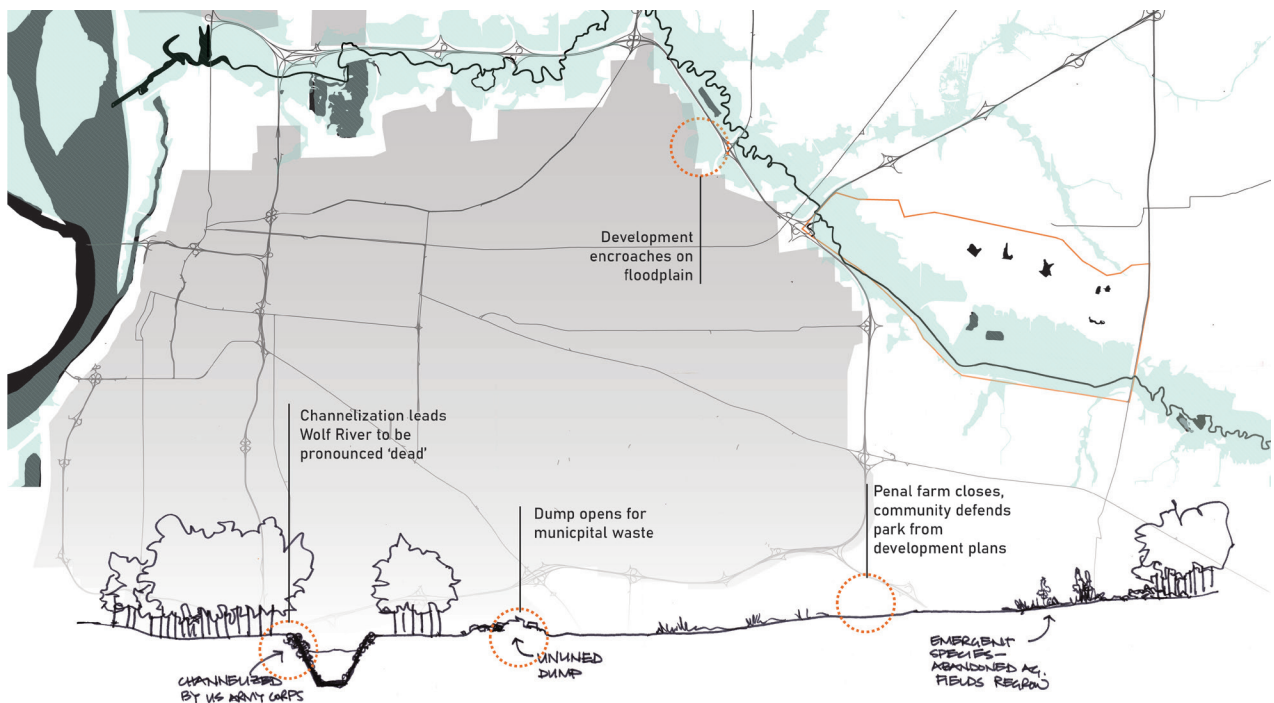


Figure 23. Diagrammatic section and map showing the channelization of the Wolf River adjacent to Shelby Farms Park and the beginnings of a dump nearby

13 Dates on when the SC Landfill started using Vincenz's modern landfill method are hard to pinpoint. According to John Boatright's 1991 Inspection Report submitted to the Tennessee Department of Health and Environmental Division of Solid Waste Management, the landfill was "registered" in 1972 "pursuant to the implementation of the Regulations Governing Solid Waste Processing and Disposal in Tennessee."

I AM A MAN: RACE AND WASTE IN MEMPHIS

Contemporary with the environmental movement that was sweeping the nation in the 1960s and 1970s — spurring the RCRA, Clean Water Act, and several other environmental regulations at the federal level — was the Civil Rights movement and in the Spring of 1968, Memphis found itself at the epicenter of the cause. The Memphis sanitation system might have been reforming their landfill practices, but they were sadly lagging behind in safety regulations, compensation, and humane treatment of their sanitation workers. Martin Luther King Jr. visited Memphis to support the Sanitation Workers' Strike that had rendered the city streets a war zone of un-collected waste, but had yet to inspire the city leaders to acknowledge their demands for better pay and humane treatment.

Before recounting the events of the Sanitation Worker's Strike, it is important to step back and assess what tensions were boiling up before the situation came to a head. Carl Zimring's book *Clean and White: A History of Environmental Racism in the United States* sheds light on the link between race and waste throughout America's history and not only provides the history of how the two became intertwined, but also demonstrates that this issue is not specific to Memphis but is endemic to this nation. Zimring traces how American ideologies concerning waste and filth have been applied to certain racial groups throughout our history, establishing abusive power dynamics and discrimination in new ways in each new era:

Skin in the United States became (to use Michel Foucault's term) a technology of power, a marker connoting any number of traits from intelligence to virtue to sexuality, depending on the insecurities and fears of those seeking to gain power from racial superiority. The biopolitics of the nineteenth century had skin color emerge as marker of purity and pollution. In the first half of the century, skin color marked boundaries between freedom and slavery, with heightened emphasis on whiteness as strength. After abolition, color did not wane in importance; instead, it actually increased during the struggle for a new social order. In a period of great social

insecurity, white identity gained increased significance, attached itself to another great concern of the era, cleanliness.¹⁴

The sanitation industry was one of the modern ways whites exerted power over black citizens in the mid-1900s, relegating them to the hardest jobs for the lowest pay. The sanitation industry was composed entirely of black workers who “worked long hours for low wages, with no overtime pay and no paid sick leave. Injuries on the job could lead to their getting fired. If they didn’t work, they didn’t get paid. Most of them made 65 cents per hour.”¹⁵

The issue came to a head on February 1, 1968 when two sanitation workers, Echol Cole and Robert Walker, were crushed to death in a trash compactor. While attempting to seek shelter from the rain — conditions in which they should not have been working but were forced to — the compactor short-circuited and killed the two men. This tragedy catalyzed a series of events that would change Memphis, and the course of the Civil Rights movement, forever. What followed were months of protests, bringing an estimated 1,300 sanitation workers out on strike to fight for living wages, safe working conditions, and to be seen as fellow humans; their slogan was “I Am A Man.”

14 Zimring, Carl. *Clean and White: A History of Environmental Racism in the United States*. New York: New York University Press, 2015. pp 6

15 Brown, DeNeen L. “‘I Am a Man’: The ugly Memphis sanitation workers’ strike that led to MLK’s assassination” *Washington Post*. 2018



Figure 24. National Guard surrounding civil rights strikers, now known as the I AM A MAN strike.
Source: Smithsonian Magazine, Bettmman Collection

Though more than 10,000 pounds of garbage piled up in the city streets, the city's Mayor Loeb remained unshaken in his resolve to deny these families compensation for the deaths of Cole and Walker and to refuse any attempts at compromising with the workers' demands.

A Civil Rights activist and local pastor, Reverend James Lawson, spoke out against Loeb at a new conference:

When a public official orders a group of men to 'get back to work and then we'll talk' and treats them as though they are not men, that is a racist point of view. And no

matter how you dress it up in terms of whether or not a union can organize it, it is still racism. At the heart of racism is the idea 'A man is not a man.'¹⁶

When the strike continued to fall on deaf ears, Lawson asked his friend, the Reverend Martin Luther King Jr., to come to town and support their cause. The first protest march King led in Memphis ended in violence. During the peaceful march on March 28, a group calling themselves “the invaders” started smashing windows in frustration; the police responded with nightsticks, mace, tear gas and gunfire, fatally shooting a young 16-year old boy, Larry Payne. The strike continues and the state sends 4,000 National Guardsmen to Memphis. Later in the month, King returns to Memphis a second time and is met with a temporary restraining order from the city¹⁷. Lawson calls upon a renowned, local lawyer named Lucius Burch to represent King. Burch explains the scenario in an interview later that year:

Well, reverend Lawson presented it on the basis that the leading exponent of nonviolence in the world was being deprived of his constitutional rights under the 1st and 4th amendment and that there were things that I stated that I believed in and it was time for me to show whether I really believed in them or not... So he put it to me in a way that I couldn't refuse although I'll be perfectly frank with you as I was with him I wished at that time that he had called anyone else in the city of Memphis rather than call me because ... as you can imagine it did involve a good deal of unpleasantness as the thing went along and subsequently too.¹⁸

16 Brown, DeNeen L. “‘I Am a Man’: The ugly Memphis sanitation workers’ strike that led to MLK’s assassination” *Washington Post*. 2018

17 King mentions this in his “Mountaintop” speech, given April 3, 1968, stating, “I call upon you to be with us Monday. Now about injunctions: We have an injunction and we’re going into court tomorrow morning to fight this illegal, unconstitutional injunction. All we say to America is, “Be true to what you said on paper.” If I lived in China or even Russia, or any totalitarian country, maybe I could understand the denial of certain basic First Amendment privileges, because they hadn’t committed themselves to that over there. But ... Somewhere I read that the greatness of America is the right to protest for right. And so just as I say, we aren’t going to let any injunction turn us around. We are going on.”

18 Transcript of an oral history interview following the death of Dr. King. Yellin, David G. and Joan Turner Beifuss. “Lucius Burch, Lawyer for Martin Luther King.” *Sanitation Strike Tapes*. Rhodes College Digital Archives. September 03, 1968. Accessed December 2019.

While Burch worked in the courts to get permission for him to march alongside the workers, Martin Luther King gave his, now infamous, “Mountaintop” speech at the Mason Temple on a stormy April evening. King touches on the reason the group is gathered in Memphis:

Secondly, let us keep the issues where they are. The issue is injustice. The issue is the refusal of Memphis to be fair and honest in its dealings with its public servants, who happen to be sanitation workers. Now, we’ve got to keep attention on that. That’s always the problem with a little violence. You know what happened the other day, and the press dealt only with the window-breaking. I read the articles. They very seldom got around to mentioning the fact that one thousand, three hundred sanitation workers were on strike, and that Memphis is not being fair to them, and that Mayor Loeb is in dire need of a doctor. They didn’t get around to that. Now we’re going to march again, and we’ve got to march again, in order to put the issue where it is supposed to be. And force everybody to see that there are thirteen hundred of God’s children here suffering, sometimes going hungry, going through dark and dreary nights wondering how this thing is going to come out. That’s the issue.¹⁹

He reminds the group of the power of peaceful marches, preparing them for the planned strike from Clayborn Temple the next morning. Then Dr. King concludes his speech with the foreboding words that would prove to be prophetic:

Well, I don’t know what will happen now. We’ve got some difficult days ahead. But it doesn’t matter with me now. Because I’ve been to the mountaintop. And I don’t mind. Like anybody, I would like to live a long life. Longevity has its place. But I’m not concerned about that now. I just want to do God’s will. And He’s allowed me to go up to the mountain. And I’ve looked over. And I’ve seen the promised land. I may not get there with you. But I want you to know tonight, that we, as a people, will get to the promised land. And I’m happy, tonight. I’m not worried about anything. I’m not fearing any man. Mine eyes have seen the glory of the coming of the Lord.²⁰

The next morning, Dr. King was shot and killed outside his hotel room at the Lorraine Motel.

19 American Federation of State, County and Municipal Employees “‘I’ve Been to the Mountaintop.’ by Dr. Martin Luther King, Jr.” <https://www.afscme.org/about/history/mlk/mountaintop>. Accessed February 2020.

20 *Ibid.*



Figure 25. Photo of Martin Luther King Jr. at Mason Temple delivering his Mountaintop Speech. Photo by Vernon Matthews. "National monument status sought for Mason Temple." *The Commercial Appeal*. Posted: June 24, 2016. Accessed March 10, 2020.

It is hard to fathom the scene in Memphis following Dr. King's assassination, even though the events that follow are well chronicled in articles, the National Civil Rights Museum, oral histories, and history books. It is written that a march of 15,000 people rallied behind Coretta Scott King to march for Reverend King and the cause he died for; that on April 11, President Johnson signed the Civil Rights Act, also known as the Fair Housing Act, providing equal housing opportunity regardless of race, religion or national origin; and that Memphis leaders finally began to consider compromise and the strike ended April 16, 1968. But what of the city's reaction? Though this event is a watershed moment in American history, we have the benefit of time and reflection to

help order history and make sense of the march, Dr. King's death, and what it meant for the county; the gravity of these events and what ripple impacts they would have was not as clear at the time.

The Sanitation Strike Tapes were a series of interviews collected later that year to record oral histories from sanitation workers, government officials, and others involved or impacted in the events that transpired in March and April 1968. An interview with Lucius Burch, the lawyer, underscores the importance of a nonviolent march to Dr. King and the misinformation that existed among white people about the movement he was leading:

“Yellin [interviewer]- Is there anything in particular that you would like to recall about your meeting with [Dr, King]?”

Lucius Burch- My meeting was very brief with him, I met him down in the motel, I have forgotten the name of it where he was killed.

David Yellin- The Lorraine.

Lucius Burch- The substance of my conversation was to check out from him personally the things that I had heard and I believed about the nonviolent nature of his objective... I have heard so many things circulated in the community about him that he had been to Vietnam or Poland or some place and the FBI thinks he is a communist and all that sort of junk... Dr. King made it very clear to me that his whole future depended on having a nonviolent march in Memphis. ... he was looking forward to the poor people's gathering or camping or whatever it was in Washington and the whole success of that was dependent upon him being able to have to nonviolent march in Memphis... So after that I had no second thoughts or looking back or anything else about it.”²¹

Burch donated his time to defend King, to the astonishment of the business leaders who usually employed his services, but had no regrets about his actions even after the weeks of harassment and threats that followed. This is evidently because Lawson and others made him see the constitutional and moral underpinnings of their cause. Burch goes on to describe how Andrew Young, a close confidant of King who would later be awarded with the Presidential Medal of Freedom, opened his eyes to the importance of civil rights marches, such as the Sanitation Workers' Strike:

21 Interview. “Lucius Burch, Lawyer for Martin Luther King.” *Sanitation Strike Tapes*. 1968

“He made me see for the first time the fullness of the whole situation that surrounds demonstrations. It is much more than to point out the grievance. They have got people they have to have in support of their movement that are people that have no outlet for expression whatever. It is a device and a necessary device to keep their troops employed. They are leaders of a group that does not have good means of communication. They don’t read the newspapers, they don’t listen to any media that gives them the opportunity to get the full arguments of their leadership. The way they keep their support is that they have got to keep moving ahead. They are like a man on a bicycle... We in the white community don’t see it but the struggle... it is tooth and law... I must say this is something that I never thought of..

You see a negro boy who is bright and energetic and has everything running for him except opportunity. He turns on the television and he sees the young fellow in his dinner jacket with a gal of (muffled) going down the steps of the country club going to get into the camaro and the whole implication is that if you don’t make this picture you are falling short somewhere and that guy knows from the very beginning he is not going to have any of that, none of that. So you have got to do something for him to make him feel like a person, you have got to make him feel involved. And these movements, are very necessary for that, it supports the pride and the ego of the people as well as to advertise their grievances. It is a psychological therapy for the people involved in it.”²²

The point of recounting this interview is to offer specific, first-hand context to an event often described only with the big moments. The conversation shows Mr. Burch, a man who defended Dr. King in trial, still working through the meaning of the workers’ strike and, it seems, still not able to fully grasp their struggle. Burch’s words reveal some of the awakening that occurred after King’s death within the white community, but it also shows how much resistance, misinformation, and racism African Americans would have to fight to overcome, even after the Civil Rights Act was passed.

THE EMERGENCE OF A PARK

Out in east Memphis, another battle was being waged: one to save the remnants of the Penal Farm property. In 1960, the Penal Farm was declared ‘surplus’, and for forty-two years the

22 *Ibid.*

politicians, government officials, and citizens fought over what to do with this swath of land.²³

This 5,000-acre parcel was no longer on the margins of town but in the heart of the eastward-moving population; it was now valuable land with seemingly endless opportunities for what it could become.

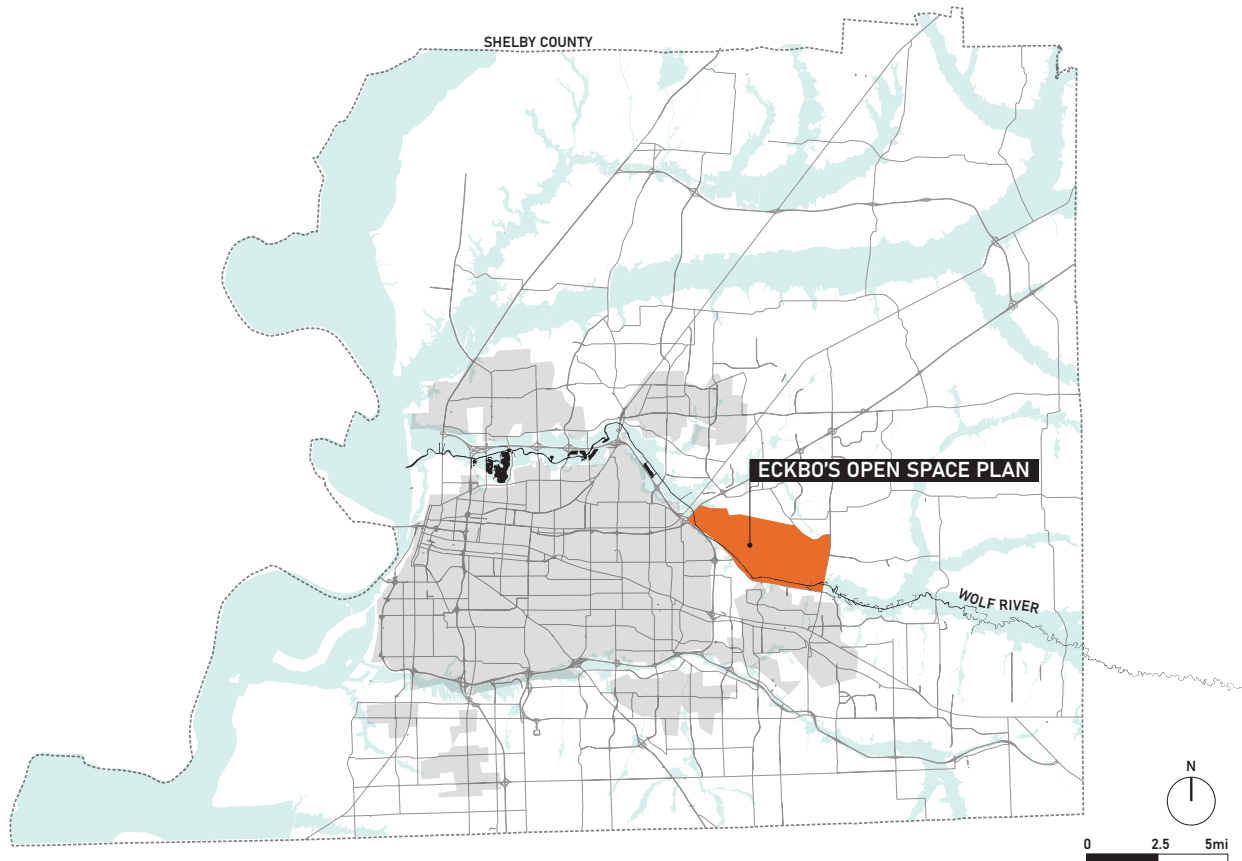


Figure 26. Context map of Shelby County demonstrating the scale of the open space available in relation to the eastward moving urban core

This conversation is happening in tandem with the national modern environmental movement that spanned the 1960s and 1970s. Publications such as Rachel Carson's *Silent Spring* (1962) brought to light the extent of pollution and spurred an entire generation into action. A series of legislative actions were taken and new organizations and efforts were born, including

23 Jones, Tom. *Shelby Farms Park: Elevating a City*. Memphis, TN: Susan Schadt Press. p. 56

the Environmental Protection Agency (1970), Earth Day (1970), National Oceanographic and Atmospheric Administration (1970), the Clean Water Act (1972), a ban on DDT in the U.S. (1972), and the Endangered Species Act (1973), just to name a few. This era of the site's history is influenced by these national conversations.

There was no shortage of ideas for how to divide up and sell the land. Early proposals included relocating the zoo from Overton Park out east, building a community college, an arena, an airfield, or a pyramid, and selling land to the Atomic Energy Commission to build an “atomic smasher”. The land use proposal that gained the most momentum was a residential, planned community which the Shelby County planning department backed in 1966. The scheme was a sprawling residential development meant to house sixty-five thousand people in more than twelve thousand homes on the property.²⁴

The “opposition was immediate and intense” with community members rallying behind a young John Vergos, leader of the Penal Farm for Public Use Committee.²⁵ As the movement gained support and financial backing, Lucius Burch took over to lend his wisdom and influence to the campaign to save the park for public use. Their campaign was seemingly inspired by the rhetoric Citizens for the Preservation of Overton Park wielded to successfully defeat the construction of Interstate 10 through the historic park with full-page ads run in the local newspaper stating “If we break up the Penal Farm land today, we’ll regret it tomorrow. We have the once-in-a-century chance to do something unique and spectacular that will benefit us and generations to come.”²⁶

The group took it in their hands to hire a landscape architect and brought in none other than Garrett Eckbo to guide the vision for the tract of land. Eckbo produced the “Shelby Farms Public Use Program” report in 1975, now known as the “Eckbo Plan”, and turned the tide of the conversation by recommending the land be used as a large regional park.²⁷ Community organizers

24 *Ibid.* p. 61

25 *Ibid.* p. 56

26 *Ibid.* p. 61

27 *Ibid.* p. 61.

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P.O. BOX 171159
MEMPHIS, TN
38187-1159

(901) 685-2100

January 29, 1988

Kenneth Bunting, Director
Division of Water Pollution Control
Tennessee Department of Health and Environment
TERRA Building
Nashville, Tennessee 37201

Dear Director Bunting:

Please consider this letter to be a formal complaint and a request for an investigation into the matter described below. We would like a detailed explanation of the disposition by your department of the violations incurred by Norman Brown and associates at the inactive, illegal dump site located south and adjacent to Wolf River on the west side of Germantown Road in Shelby County, Tennessee.

It is our understanding that this dump site was never properly permitted, discharged material into Wolf River, and was not properly maintained or closed. We are specifically interested in knowing if this site is endangering the quality of Germantown's groundwater and the Wolf River. What monitoring of this site has and is presently being undertaken by your division? What enforcement action was taken?

For your information, it is our understanding from a news article in The Shelby Sun Times that Mr. Brown and his associates are presently proposing to develop a shopping center on this site.

Your timely response to this complaint will be appreciated.

Sincerely,

Betty Ann Tabatabai

Larry M. Wilson

Betty Ann Tabatabai Larry M. Wilson
Co-chairs, Habitat Inventory Committee

cc. Warner Hodges III, Mayor of Germantown
Charles Cooley, President, Wolf River Conservancy
Harvey Faust, Alderman

*Peral Fourn
Jawfell*

Figure 46. Letter of complaint from WRC stating their concern that the landfill is negatively impacting the groundwater

4-W-88

FEB 9 1988

This is a formal complaint.

The Memphis and Shelby County Landfill operated by Shelby County Government , is the source of soil and leechate pollution to the Wolf River in Shelby County Tennessee.

Complaint

1. No soil erosion measures for fill cap on landfill. (silt fences , grass, rock etc.)
2. Liquid material is running out of the landfill into the Wolf River along the route shown on the enclosed map. (seepage points marked in red x's , route marked in a red line.)
3. Exposed garbage is being washed into streams and adjacent oxbow lakes.

Thank you for your consideration in this matter.



ANTHONY E BRITTEN
5170 SHADY GROVE RD
MEMPHIS, TN 38117
901-683-4884

Enclosed map of landfill and flow route of dump runoff.
Enclosed 3 color pictures of site.

Figure 47. Letter of complaint from Anthony Britton, a Memphis citizen. Courtesy of Shelby County Engineering Architves. Page 1 of 3

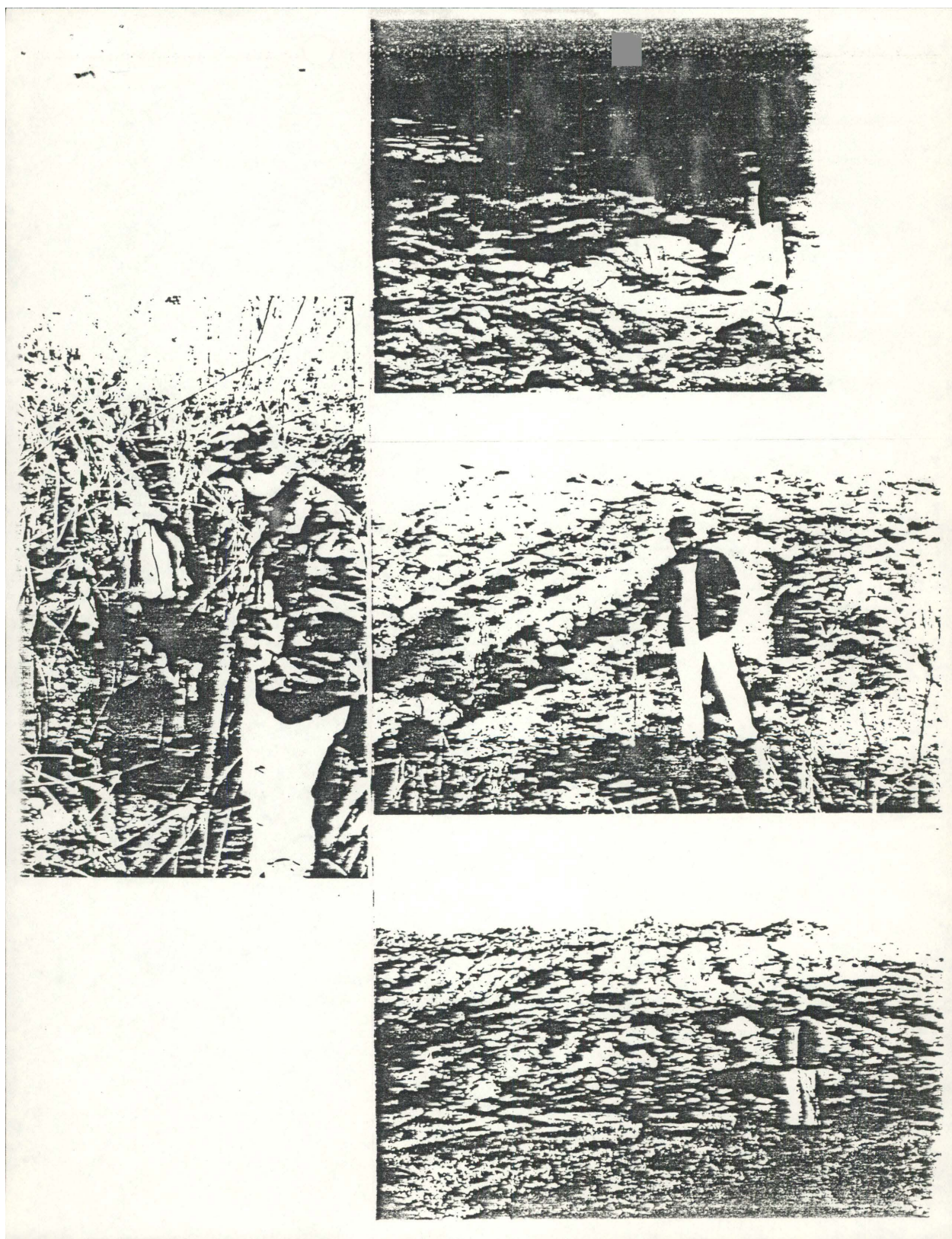


Figure 49. Britton's complaint package continued, Images show Britton on site with the eroding landfill were likely much easier to decipher in their original state as color photographs. Page 3 of 3

used the Eckbo Plan as a new, tangible tool in the fight to preserve this land as open space. Armed with the vision and recommendations of a world-renowned landscape architect, the community was finally able to demonstrate that this land was valuable remaining as open, public space. The Eckbo Plan convinced the county to abandon their development scheme in an historical win for the community.²⁸



Figure 27. Eckbo Plan, 1975. Courtesy of the Agricenter Internatinonal Archives

28 *Ibid.* p. 56



Figure 28. Garrett Eckbo delivering his pitch for the Shelby Farms Public Use Program in 1975, that would forever be known as the Eckbo Plan. Jones, Tom. *Shelby Farms Park: Elevating a City*. 2017. Image photoshopped by author

Eckbo's Plan is fascinating not only for the community action it generated, but for details of his design. Eckbo's hand rendered plan directs attention with two main sweeping gestures that are his largest design moves: the vehicular and hydrological circulation. The roads and waterways are the darkest rendered aspects of the plan, pulling the eye to read these spaces first. The arcing road brings you into and around the edges of the site. Eckbo ostensibly relocated the existing Walnut Grove Road to avoid bifurcating the park and to prioritize pedestrian connections through the landscape. He takes notable, strategic care on roadway placement in a time of automobile dominance and interstate expansion, demonstrating that vehicles are not the primary way to experience this space. He visually demonstrates that this infrastructure can be designed to support the unity of large, open park space.

He brings your eye clockwise around the plan with this sweeping road to the edge of the plan (also a road), down south to the amorphous black waterway being siphoned from the Wolf River through the park. This meandering waterway stands in stark contrast with the channelized Wolf River that disappears, graphically, and seems to exist simply to serve as the southern boundary to the park. At the time, that is essentially what the waterway was. After the Corps channelized the

Wolf River in the 1960s, the waterway no longer nourished the adjacent forests with floodwaters. The widening and straightening of the channel prevented seasonal flooding; the water rushed past the site with little interaction other than occasional views from woodland trails. Eckbo's plan brings a riverine channel into the park, making water a central feature in recreation, not just a bounding edge. It is unclear whether he was considering ideas of bottomland forest restoration with this move, but it nevertheless reads as prophetic. In 1985, a non-profit called the Wolf River Conservancy (WRC) was formed to stop a gravel mine proposal east of the Penal Farm land that would have negative impacts on the Wolf River. This non-profit group would go on to save a section of the river known as the Ghost River, from being channelized, and to work alongside the Corps to restore and renaturalize large stretches of the Wolf River channelized by the Corps.²⁹ WRC continues work to undo some of the channelization work still today, to mitigate flooding and restore lost habitat, however the section of the Wolf River that lines the project site's southern boundary is still channelized today.



Figure 29. Aerial image highlighting the channelized Wolf River that marks SFP's southern border.

29 A total of 22 miles of the Wolf River were channelized by the Corps in the 1960s in the name of public safety



Figure 30. Aerial photograph showing the straight Wolf River channel, looking west as it runs adjacent to the LBSNA and forms the southern boudnary of SFP. Photo taken by author. 2019

The Eckbo Plan was prophetic about the need to restore the channelized Wolf River and is similarly forward thinking about the SC Landfill site. Though an active landfill at the time, the Eckbo Plan designates the SC Landfill as a “skeet and trap shooting range”.³⁰ Eckbo indicates this site could be repurposed in the future for recreation. Interestingly, the year Eckbo released his plan was the same year his contemporary Richard Haag opened Gas World Park to the public.³¹ Eckbo likely knew of this project, but it is unclear whether Gas Works Park inspired him to propose covering the

30 The master plan was georeferenced in QGIS to pinpoint what on Eckbo’s pan overlaps with the landfill site. The kidney bean shaped lake adjacent to the landfill is a visual marker that also helps to orient the viewer; the lake can be seen in Eckbo’s plan as one of the ponds along the river he weaves through the park forest.

31 Gas Works Park in Seattle, Washington, was the first brownfield remediation project. Designed by Richard Haag, this park would be built upon the site of a coal gasification plan, contaminated with industrial waste. This was an unprecedented experiment at the time that not only embraced site history, incorporating remnants of previous industry in the design, but also attempted the first soil remediation and adaptive reuse of a brownfield site. Today, Gas Works Park is honored as a National Historic Landmark.

landfill and programming it for recreation. Regardless, Eckbo indicated that the landfill site should be incorporated into the park and reclaimed as usable space.

From 1975 until 2006, bits and pieces of the park started to take shape, reflecting Eckbo's vision of public land for public use. His work unified people around a collective vision of this space as a park, however, other than establishing the land as recreational space, the Eckbo Plan did not end up dictating much of the following development.³² The county opens the first official park on the Penal Farm land in 1977: the 333-acre Plough Park. Little else was done with the remaining 4,000-acres besides the county's mowing regimen, but this did not keep community members from using the space. There were ad hoc running groups, Boy Scout troops marking trails in the forest, or people bird watching and enjoying the open space in the heart of a growing city.

As more people engage with the site, citizens start fighting to protect this resource that is now theirs to share. Individuals step up to voice environmental concerns with the landfill on site and band together to protect and enhance the Wolf River and its surrounding forest. This marks a significant shift in perspective in the community. In the 1940s and 1950s, communities were allowing and taking part in massive deforestation that razed the state's forests for lumber or agricultural land; they allowed the channelization of waterways in Tennessee and draining of wetlands for development and farming. Now, just a few decades later, citizens are fighting to protect their forests and waterways, recognizing this as a unique ecosystem and valuable habitat in a growing sea of urbanization.

In 1988, citizens succeed in protecting the forest on the southern edge of the site. The 728-acre forest becomes part of the Tennessee Natural Area System and takes on the name Lucius Burch State Natural Area (LBSNA) in honor of one of the park's leading advocates. Understanding the history of Lucius Burch and his involvement with Dr. King sheds new light on the proximity of the

32 In fact, after the acceptance of his plan, Eckbo said "There may be some feeling of disappointment that this is not a 'final' plan... there are decisions left to be made." Jones, Tom. *Shelby Farms Park: Elevating a City*. Memphis, TN: Susan Schadt Press. p. 56

SC Landfill and LBSNA forest. The landfill mound stands as a reminder of the hardships African Americans endured in the sanitation industry which culminated in the I AM A MAN strike while the surrounding forest envelops the site, signaling protection; it is as if Burch still stands in solidarity with the sanitation worker's cause on this land, still today.

The same year, the WRC and concerned citizens submit letters to the Tennessee Department of Health and the Environment voicing concern about the SC Landfill's impact on the surrounding environs. Though designated a landfill, the site was apparently being mismanaged, with waste spilling out of the southern side of the landfill, emitting oozing liquids and pungent odors. It is important to situate these complaints in its national context and detail how shifting legislation regarding waste sites led to changes in how the SC Landfill was managed and later closed.

In 1976, the federal government passed environmental regulations concerning waste disposal methods that would hasten the reality of the SC Landfill's transformation. The Resource Conservation and Recovery Act (RCRA) details the ways landfills should be managed to protect humans and the environment from the hazards of waste disposal.³³ The RCRA mandates that Municipal Solid Waste Facilities, abide by location restrictions, composite liner requirements, leachate collection and removal systems recommendations, operations best practices, groundwater monitoring requirements, closure and post-closure care requirements, among other mandates.³⁴ The SC Landfill does not meet many of these safety requirements.

This is because the SC landfill began as a dump on vacant land before any accepted disposal methodologies had gained widespread traction in the U.S. The dump site served the Penal Farm and Shelby County hospital before it officially opened as a municipal dump in 1968 and accepted waste

33 The RCRA is in Title 40 of the Code of Federal Regulations Its stated goals include:

Protecting human health and the environment from the potential hazards of waste disposal; Conserving energy and natural resources; Reducing the amount of waste generated; Ensuring that wastes are managed in an environmentally-sound manner.

34 Jones, Tom. *Shelby Farms Park: Elevating a City*. Memphis, TN: Susan Schadt Press.p.56

from the citizens of Memphis.³⁵ The site was later converted to a sanitary landfill in 1972, and was still active when Eckbo designed the master plan for the park. The distinction between dump and landfill is key. A dump is defined as “a site for depositing garbage” whereas a landfill is “a system of trash and garbage disposal in which the waste is buried between layers of earth to build up low-lying land.”³⁶ Notice the word “system” is used to describe a landfill. Landfills are highly engineered systems, following prescribed methods of disposal whereas dumps have existed in many forms in many cultures throughout time and are simply a place where waste collects.

Because there were no protocols in place when dumping began, the site is a frankenstein waste operation, retrofitted with safety measures in an attempt to lighten the negative environmental impact.³⁷ There is no impervious lining underneath the dump which means there is no barrier preventing leachate from migrating into the soils and groundwater underneath the landfill; for half of its life, the site was not compacted or covered like a modern landfill, so the site subsides more rapidly as waste shifts and decomposes; a leachate collection system was retrofitted, later embedded into the waste pile; and groundwater monitoring was non-existent on site until the 1970s. Most importantly, the site does not abide by location restrictions. It lies within the Wolf River’s floodplain, exposing the landfill to its greatest threat: water. RCRA regulations seek to mitigate dangers caused by landfills, the most concerning of which are methane and leachate. Leachate is created when water enters a landfill, picks up toxic materials from the waste making a toxic sludge that is then mobile,

35 As dump sites were, by nature, unregulated and often undocumented, it is hard to pinpoint the moment that the dump began. The footprint was likely larger than the landfill today, as old bedpans from the old Shelby County hospital have been found inside LBSNA forest. Bikers have hung these found treasures on display along forest trails over the years in an area colloquially referred to as “Bedpan Hill”

36 “Landfill.” Merriam-Webster.com Dictionary, Merriam-Webster, <https://www.merriam-webster.com/dictionary/landfill>. Accessed Mar. 2020.

“Dump.” Merriam-Webster.com Dictionary, Merriam-Webster, <https://www.merriam-webster.com/dictionary/dump>. Accessed Mar. 2020.

37 The SC Landfill is not unique in being a blend of old and new dumping practices. There are thousands of other waste sites that began before 1976 RCRA regulations improved waste management practices. These sites pose similar threats to the environment across the country. See Appendix A for more information on the scale of the issue.

flowing through soil and threatening groundwater quality and public health. Leachate from the SC Landfill caught the attention of scientists during the 1970s and still threatens to leach toxins into the Memphis Sands aquifer, the city's drinking water, today. Citizens' complaints coupled with the new knowledge that the waste site threatened the Memphis Sands aquifer converged to spur the SC Government to close the landfill in 1989.³⁸

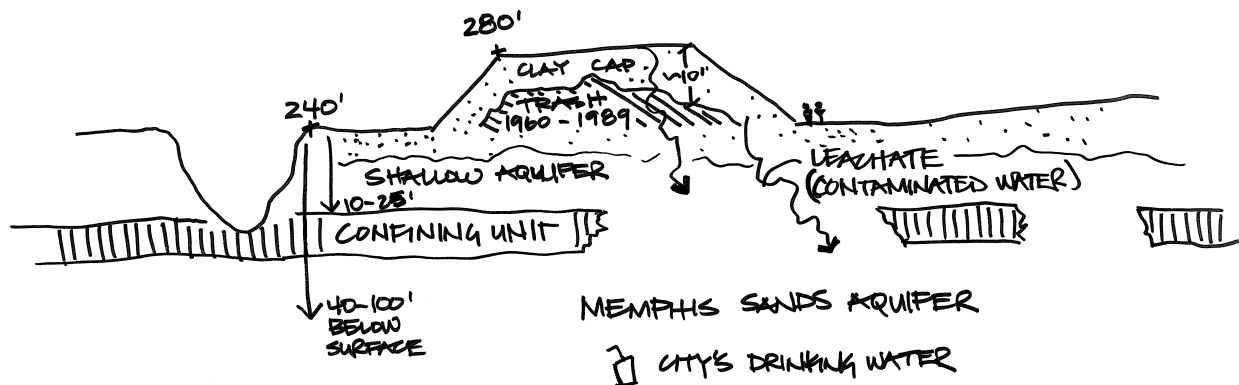


Figure 31. Sketch demonstrating the geologic window that allows leachate to migrate from the SC landfill into the Memphis Sands aquifer

38 Municipalities and private companies could no longer place landfills within floodplains or sensitive environments and they had to undergo strict environmental testing before receiving approval to open a new landfill or expanding an existing waste site. In <date>, Shelby County was investigating expanding the SC Landfill north across Walnut Grove Rd. when groundwater testing revealed there was a direct link to the underlying aquifer that supplied the city with drinking water. With no room to expand and regulations increasing, the Shelby County Government decided to cap and close the landfill.

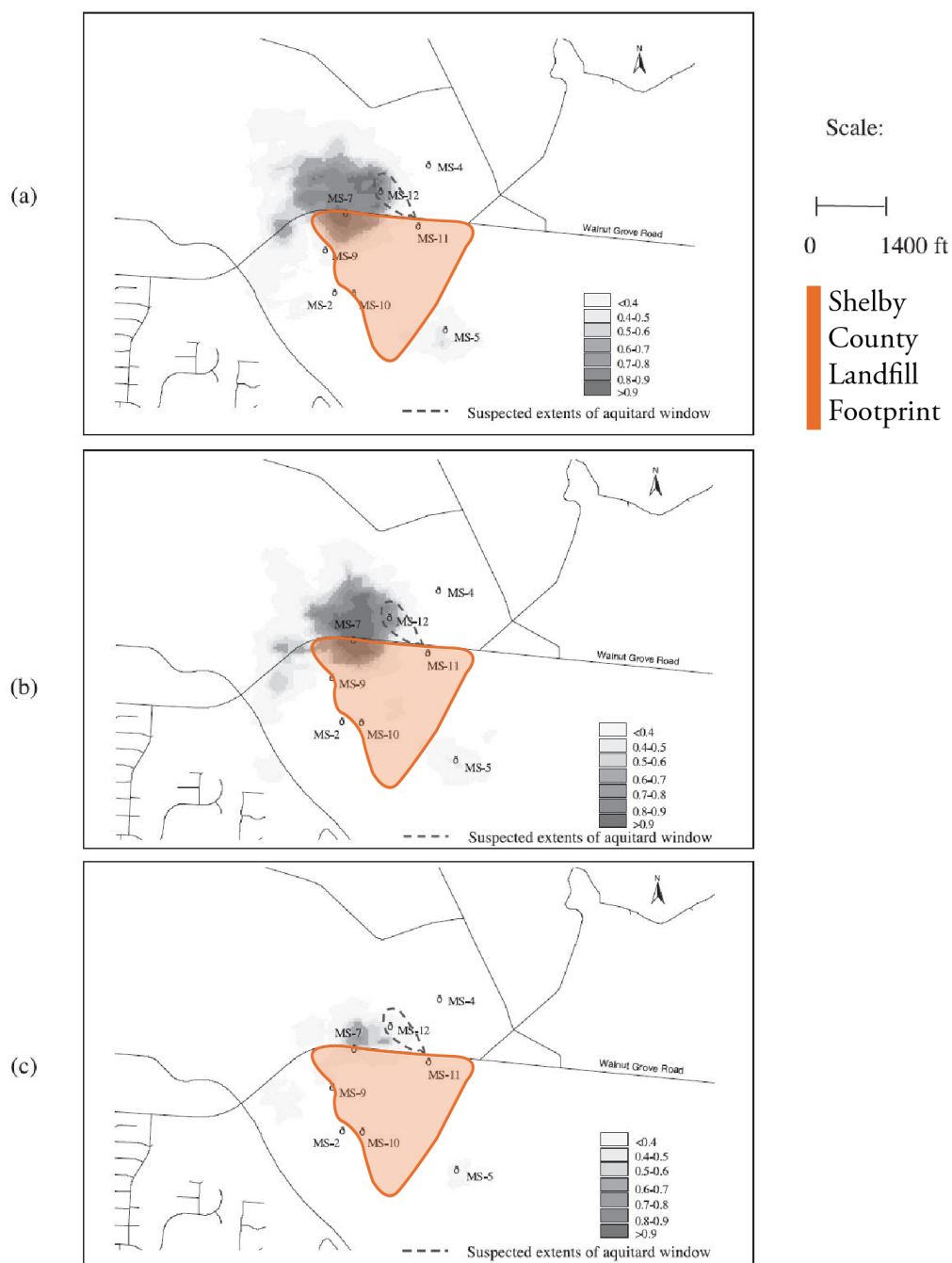


Figure 32. Diagrams of the suspected aquifer window, edited by author. Base image credit: Gentry, Randy, Larry McKay, and Norbert Thonnard. “Novel Techniques for Investigating Recharge to the Memphis Aquifer.” *Awwa Research Foundation*, 2006.

Leaders came up with an inventive solution to closing the landfill: they would use earth from across Walnut Grove Road to save on transport costs and to create a new amenity for Shelby County: Patriot Lake. The landfill had grown at least 25 feet vertically, covered an estimated 175-acres, and accumulated 242,036 tons of waste over its lifetime.¹ It required a lot of soil to cap and cover its waste. When the site was capped and closed in 1990, a new 45-acre lake dedicated to U.S. soldiers named Patriot Lake opened as the new keystone attraction at Shelby Farms Park.

The transformation of the SC Landfill from dump to covered mound marked the site's transition from marginalized land to community park, from backwater dump to the center of the city. This lake was the first constructed part, possibly the germ of the idea, of what would become the iconic "Heart of the Park" development within Shelby Farms Park. The landfill closure represents a move to cover up the past and sculpt a new future for the site. The era of the site's marginalized history had ended, and a new era as Shelby County's backyard and Memphis' most central park was beginning.



Figure 33. Diagrammatic section and map highlighting changes to the site from 1980 to the 2000s

1 US EPA. "Project and Landfill Data by State." Retrieved from [https://www.epa.gov/lmop/landfill-technical-data.\[lmopdataatn.xlsx](https://www.epa.gov/lmop/landfill-technical-data.[lmopdataatn.xlsx). August 2019.

CHAPTER 4. CENTER STAGE: 2000-2020

VISIONS FOR THE FUTURE IGNORE THE PAST

In the decades that followed the Eckbo plan, parts of the vast 4,500-acre parcel of open land were slowly earmarked and developed for recreational or environmentally minded efforts. An arboretum was added adjacent to the small 300-acre Plough Park, a herd of bison were kept in a fenced-in range on site (a signature attraction for the park still today), the Agricenter International opened, claiming 1,000-acres of land for crop research, Ducks Unlimited relocated their headquarters within the park, soccer fields came and went, and a BMX bike course opened adjacent to the closed landfill. These changes occurred slowly over three decades from 1975 to 2005. A change in the leadership structure managing the park land would soon unify these scattered efforts at shaping the park and greatly accelerate the pace of park improvements.

In 2006, the Shelby County Government approves a fifty-year conservation easement, legally protecting the land from certain types of development and, the next year, enters into a public-private partnership with the newly formed non-profit Shelby Farms Park Conservancy (SFPC). SFPC is a small team of three and a new iteration of the Friends of Shelby Farms who stewarded the land for the previous decade. The new partnership arrangement positions SFPC as the organization charged with managing daily park operations as well as funding and completing improvements to the land, which the Shelby County Government would continue to own. SFPC's mission statement still guides their efforts today: "To give rise to a celebrated twenty-first-century park that defines and shapes a great city."

One of the first efforts SFPC led was a master planning effort to finally hone in on a specific vision for the land that was now recognized as Shelby Farms Park. The staff sent out a request for proposals and received many phone calls from people asking "*is this a typo? you do mean 450-acres, don't you?*", leaving designers shocked and excited with the rare prospect of designing 4,500-acres in the heart of a major city. SFPC received designs from all over the country and narrowed it down to three finalists: Hargreaves Associates, Tom Leader Studio, and James Corner Field Operations. None of these lead firms were local to Memphis, though some of the larger project teams included

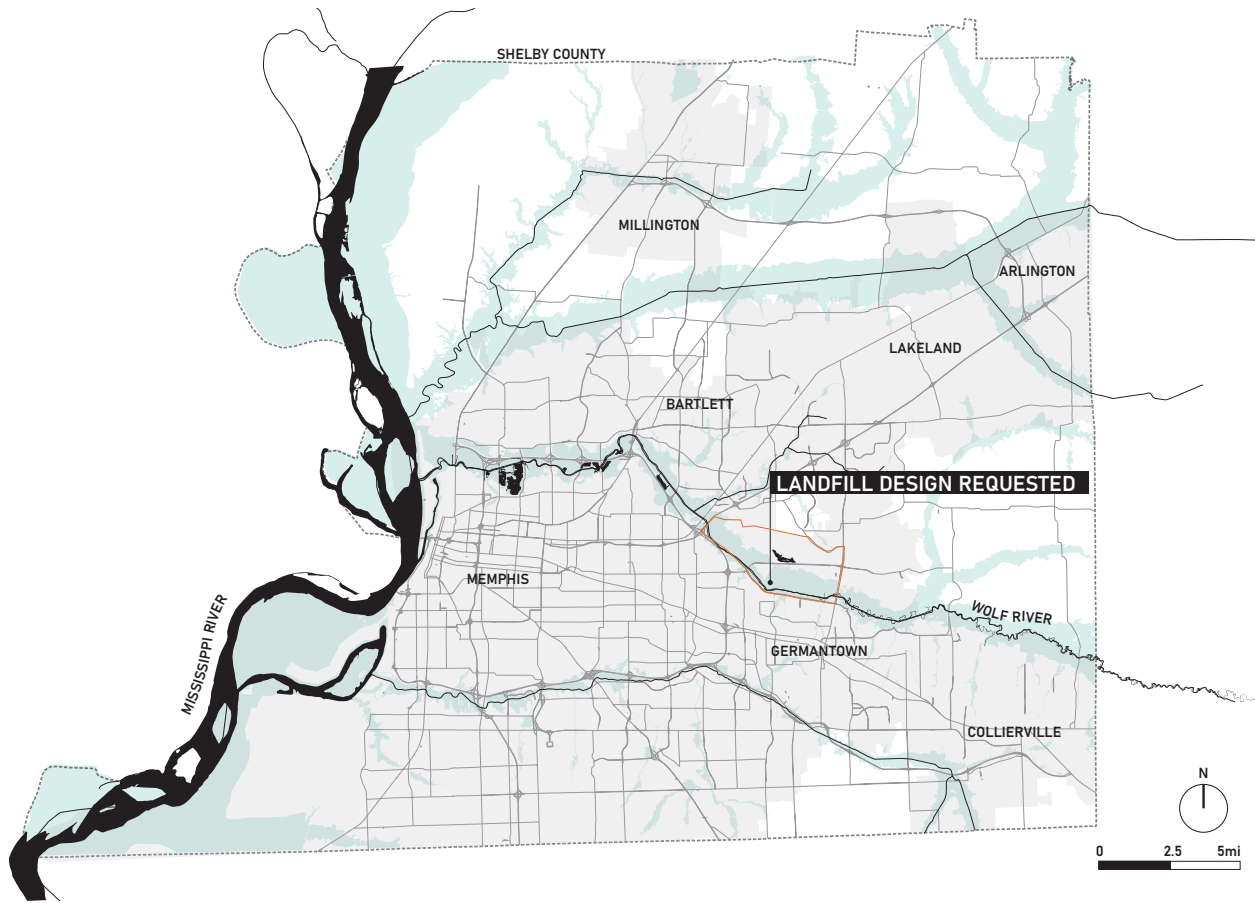


Figure 34. Map of Shelby County highlighting the urban growth that is now surrounding SFP on all sides along with the SC Landfill as it lies within the Wolf River Floodplain.

local landscape architecture firms. This was the second time in the park's history that the top talents in landscape architecture were called in to offer a vision for the site's future and the second time that community support swayed the course of history. SFPC prioritized community engagement, believing that was the only way to finally generate significant changes for the park's future, and the community would cast the final vote on which of the three firms would design the Shelby Farms Park Master Plan.

It is interesting to note that all three master plans acknowledge the agricultural history in form and programming, even in their language, to pitch the projects, but only Hargreaves and Associates digs any deeper into history past the farming heritage indicated in the name, "Shelby Farms Park". Each of the design teams envisions the landfill as a space for the arts, proposing ideas

such as an event amphitheater or art installations. What follows is a dissection of the three proposals, situating each in context and highlight interesting, key, or relevant components.

Hargreaves Associates, now known as Hargreaves Jones (Hargreaves), is a firm with offices in New York, San Francisco and Cambridge, Massachusetts that, at the time of the competition, had been operating for more than twenty years. Their firm pitches bold changes to the site and suggests a new name: “Shelby Lakes Park.” They describe their design approach in two categories: Shelby Lakes and A Productive Landscape. The lakes serve as the “connective tissue of the park” and seem to be filled from water diverted from the Wolf River in a pump house on the south eastern edge of the park. The firm credits the spectacular Memphis sunsets and the historic, meandering Wolf River as their formal inspiration for these large sweeps of water.² Their narrative references the depth of their historical research:

The site’s history as a productive landscape also greatly influenced our design approach. First it was the Nashoba farm, a productive landscape and haven for freed slaves, then a penal farm, and now an agricultural research mecca. Our design extends this rich history of a productive landscape into the future with biofields, energy generation, solar collection, wetlands and tree farms.³

It is worth noting that Hargreaves chose to focus on the thread of production, isolating it from the social and racial aspects tied to these agricultural systems. The landfill site is designated for hiking trails and an event amphitheater on the master plan.

2 Hargreaves Associates. “Shelby Lakes Park: Executive Summary & Financial Sustainability Report.” Shelby Farms Park Master Plan Competition Submission. 2007. Accessed via the SFPC Archival collection. p. 13

3 *Ibid*



Figure 35. Master Plan entry for the Shelby Farms Park Master Plan Competition, by Hargreaves and Associates. The plan is titled “Shelby Lakes Park”. Accessed via the SFPC Archival collection

Tom Leader Studio (TLS), a firm based out of Berkeley, California, plays up the site’s agricultural history the most out of the three finalists. TLS pitches their project, “Grow the Park”, as a collection of “crops” or landscape programs and spaces seeded throughout the park. TLS’s Request for Qualifications Proposal describes their methodological approach to the site as “cultivation and production” drawing out an interesting comparison between farms and parks:

[the farm] is a powerful and complex engine of cultivation subject to intricate management and infinite adjustment and revision by practically minded people who need to make a living... it never looks the same way twice since its operations are in constant motion. Rather than any singular, static notion of space, the “reality” of a farm is based more on a critical set of natural and cultural relationships, developed

and managed over time. We would suggest Shelby Farms Park could work the same way.⁴

There is nothing specific in their master plan that addresses the landfill site, however the team they built and pitched in their Request for Qualifications (RFQ) Proposal indicates they may have been thinking about remediation strategies for the landfill. They included Applied Ecological Services, Inc. on their team, a company that distinguishes themselves from typical engineering firms because of their focus on sustainability and natural systems. In the RFQ they describe their process: “by identifying where humans and nature are potentially in conflict, and where we can potentially cooperate, we then provide leadership in resolving conflicts in favor of sustainable natural systems.”⁵ They later mention brownfield redevelopment and landfill reclamation specifically as part of their suite of ecological approaches. TLS would need Applied Ecological Services if they were to implement their designs for the landfill that are indicated on the plan in Figure 29. The design team designated the landfill site as a solar farm, archery range, and art installation. The stars across the plan indicate land art will be found throughout the park, however the graphic representation of the art installation on the landfill indicates it will be an art destination uniquely different from the park’s other collection.

4 Tom Leader Studio. “Shelby Farm Park: Request for Qualifications Response.” October 10, 2017. Part of the Shelby Farms Park Conservancy Archival Collection. p. 6

5 Tom Leader Studio. “Shelby Farm Park: Request for Qualifications Response.” October 10, 2017. Part of the Shelby Farms Park Conservancy Archival Collection.

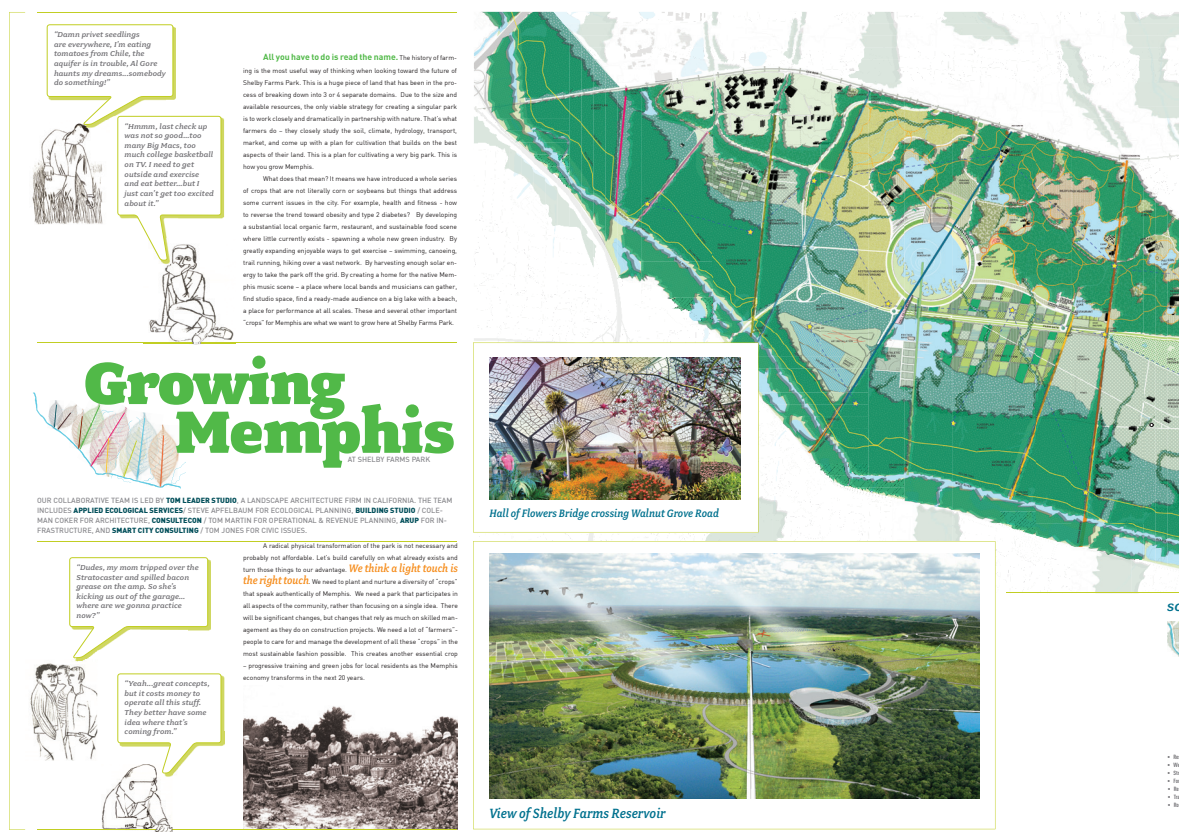


Figure 36. Tom Leader Studio. “Growing Memphis”. Shelby Farms Park Master Plan Competition Submission. 2007. Accessed via the SFPC Archival collection

Field Operations, the third finalist, is a New York based firm founded in 1998 by James Corner, a theorist and landscape architect. Field Operations pitched their master plan vision with a catchy title that summarizes their approach: “One Park, One Million Trees, Twelve Landscapes.”⁶ They envisioned art on the landfill, like TLS, though their master plan indicates temporary art installations on what they deem the “Art Mound.” Field Operations dedicates a full spread to each of

6 Field Operations. “One Park One Million Trees Twelve Landscapes: Shelby Farms Park Design Competition.” Shelby Farms Park Master Plan Competition Submission. 2007. Accessed via the SFPC Archival collection

their twelve landscape rooms, including one for the Art Mound that features a rendering of an artist's vision for a temporary installation on the SC Landfill. The description reads:

The old landfill mound will be transformed into a new venue for large-scale outdoor sculpture and public art. The abstractness of the flat-top mound and level horizons lends itself to extraordinary interpretation by artists. We imagine a rotating series of exhibits, or bi-annual shows by both regional and international artists, curated around themes such as "Memphis Outdoors," "Sustainability", or "Climate Change." Such programming would bring high visibility to the Park as an arts and culture destination. The installation shown above is a specific proposal for Shelby Farms by artist Terry Adkins, where polished mirrors reflect the sky and weather.⁷

SFP shared the three finalists' designs with the public in an extensive public engagement process.

In 2008, the public voted to award Field Operations with the bid to design the Shelby Farms Park Master Plan.

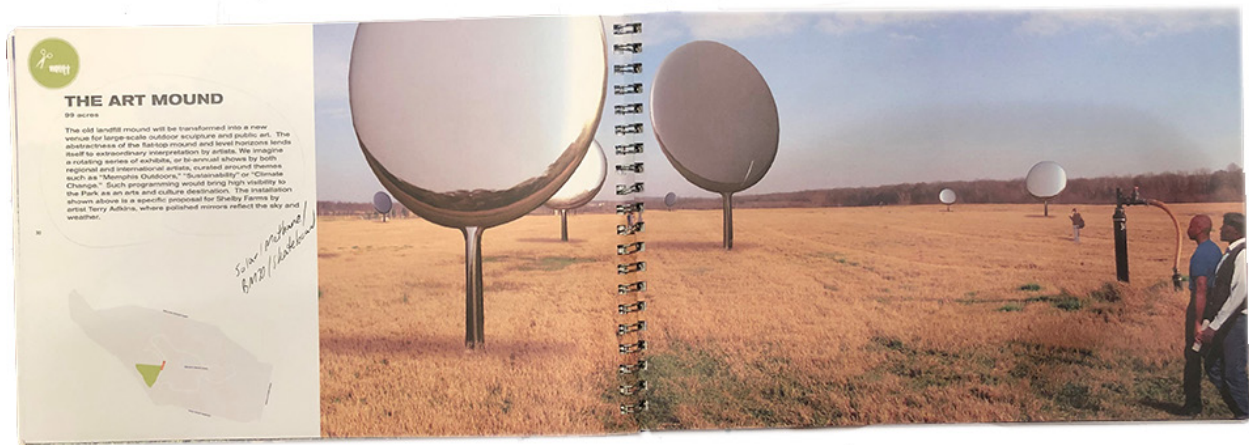


Figure 37. The Art Mound spread from Field Operations' master plan submission. They demonstrate their vision of the landfill as a platform for art through a rendering of a proposed temporary art installation. *Ibid.* pp. 30-31



Figure 38. This schematic design plan for the Art Mound was completed by Field Operations after they had won the Master Plan competition and was part of the final Master Plan package completed for SFPC. Field Operations. *The Art Mound*. 2008. Accessed via SCPC Archival Collection



Figure 39. Winning entry in the Shelby Farms Park Master Plan Competition, submitted by James Corner Field Operations. 2007. Accessed via the SFPC Archival Collection

Excitement was building at an unfortunate time; SFPC started fundraising for their big vision just as the economy crashed in 2008. The team responded creatively to this setback, leveraging funds from an angel donor to jump start smaller, much needed improvements to bicycle and pedestrian access to the park and to demonstrate to the city that this new fledgling conservancy could deliver on their vision in a big way. SFPC opened the Shelby Farms Greenline in 2010, providing low income and under-served neighborhoods direct bicycle and pedestrian access to the park on a protected rails-to-trails project. The Wolf River Bridge and Woodland Discovery Playground followed shortly after in 2010 and 2011, respectively. Including the community in design and prioritizing access to diverse populations was vital in the park's success, as it had faced criticism as being a white man's playground in the past. These projects started to build trust in the community that this park was for all of Shelby County and that SFPC was chipping away at their goal of creating the next great park of the 21st century.

As the economy recovered, SFPC began fundraising for the biggest renovation they would ever undertake: the \$52 million Heart of the Park project. This was the central gathering space in the Master Plan, heavily programming an iconic lake at the center of the Park –an expanded version of the one created when the landfill was capped in 1990– and leaving the rest of the park to be dominated by nature instead of structures. The Heart of the Park project was completed in 2016, offering new amenities such as a restaurant, boat rental kiosk, water playground, visitor center, and event stage, that put it on the region’s mental map and made it the city’s recruiting tool for attracting talent to Memphis. SFP is now truly at the geographic center of Memphis, no longer on the margins, and boasts more than 2 million visitors per year.

THE LANDSCAPE OF OPPORTUNITY TODAY

It is an interesting time to consider designs for the SC Landfill. Not only is the site being considered as potentially developable park land, but it is also the key factor to address when considering the recommendations for SFP contained in the Memphis Regional Resiliency plan, released in December 2019.⁸

The Memphis Regional Resiliency Plan (MSRRP) developed by Sasaki and released in December 2019, places Shelby Farms Park at the heart of its plans for a resilient future in the greater Memphis region. The plan was funded through the HUD National Disaster Resilience Competition and offers recommendations for resilience in the face of increasingly damaging climate events.⁹

8 As mentioned previously, this year, 2020, marks the 30th year since the landfill was capped and closed. This is the length of time the EPA requires land managers to monitor the leachate and methane outputs and test groundwater for contaminants on closed landfill site. The SC Government is now applying for permission to cease some monitoring requirements, and ease up on the paperwork, in order to begin planning for the site’s future. This thesis offers a cultural landscapes body of research from which designs can pull inspiration.

9 Sasaki used HUD’s definition of resilience when crafting these recommendations: “Resilience is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow, no matter what kinds of chronic stresses and acute shocks they experience.”

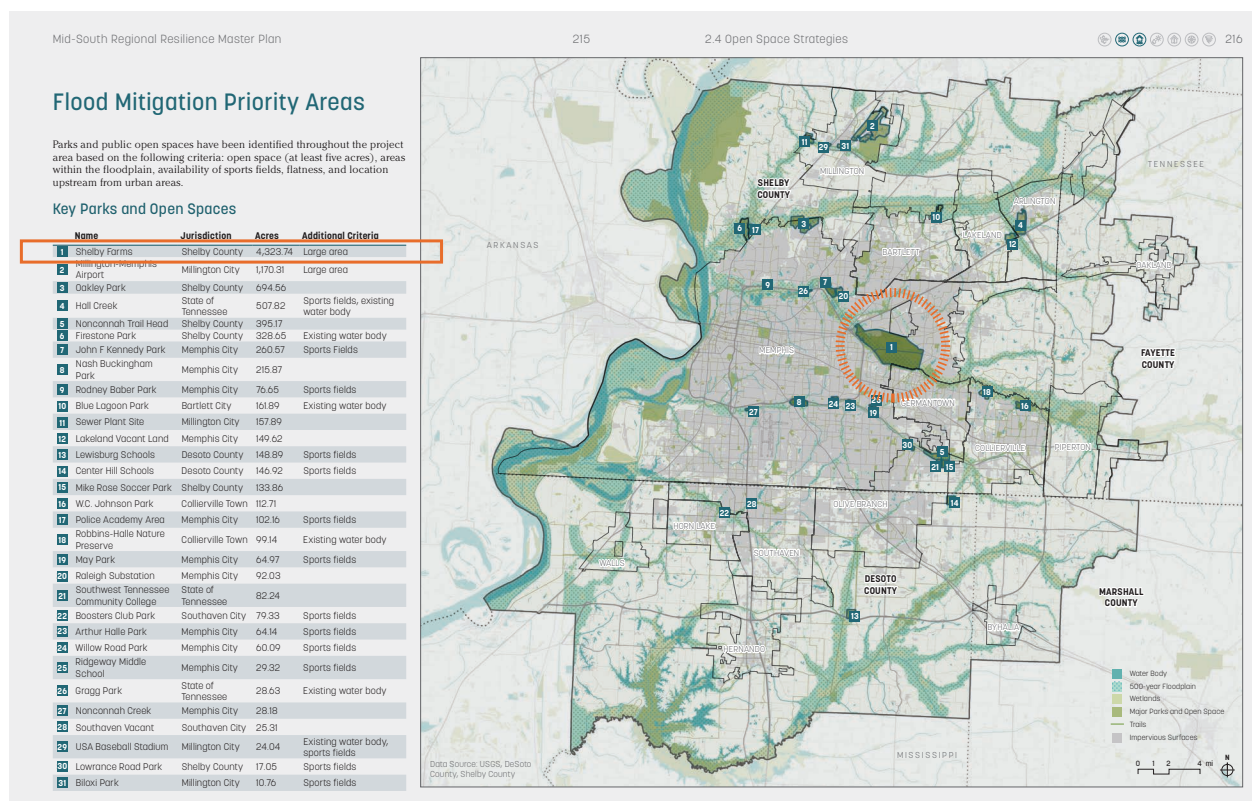


Figure 40. Page from the Mid-South Regional Resilience Master Plan showing the flood mitigation priority areas. Sasaki Associates. “Mid-South Regional Resilience Master Plan”. December 2019. pp. 215-216

Recommendations are divided into seven key themes: waterways, watersheds, buildings, land planning, infrastructure, post-disaster opportunities, and governance and include thorough research, mappings, and case studies for each topic. The sections on waterways and watersheds are the key ones relating to this research. The MSRRP mentions SFP on several analysis maps, highlighting the site as “park with high mitigation value”, as number 10 on a list of Critical Public Assets related to Conservation Priority Areas, and as one of the parks with “an untapped capacity to reduce flooding”.¹⁰ The Wolf River is identified as a priority restoration corridor and the plan indicates that SFP could serve as a key water storage area as it is located above the aquifer recharge area. In this

¹⁰ Sasaki Associates. “Mid-South Regional Resilience Master Plan”. December 2019. pp. 15-16, 190, 215-216

plan, the floodplain is what makes the park land invaluable today, an interesting flip on the script that historically de-valued bottomland forests and floodplains because they did not suit the economic model of agriculture and development. This plan represents a shift in mindset and call to action to value, and use, land for water retention, restoration, habitat creation, and to protect marginalized people from increasingly dangerous rain storms and climate events.

SFP is sited further upstream along the Wolf River, placing the park in a position to help improve the quality of life of low income and minority populations whom are the most vulnerable to the impacts of climate events. Figure 42 shows the population distribution in Shelby County, with predominantly white individuals surrounding SFP and black individuals remaining in the urban core and along the Wolf River floodplain as the river flows west into the Mississippi River. SFP's LBSNA forest could offer floodwater storage, as it historically did, and lessen the impacts of flooding on these populations downstream. This places SFPC in a great position to further their mission of creating a "21st century park that defines and shapes a great city" and re-design the landscape to incorporate restored wetlands and bottomland forests as flood water storage, new recreational opportunities, and habitat for migratory birds and other species who rely on these niche habitats.

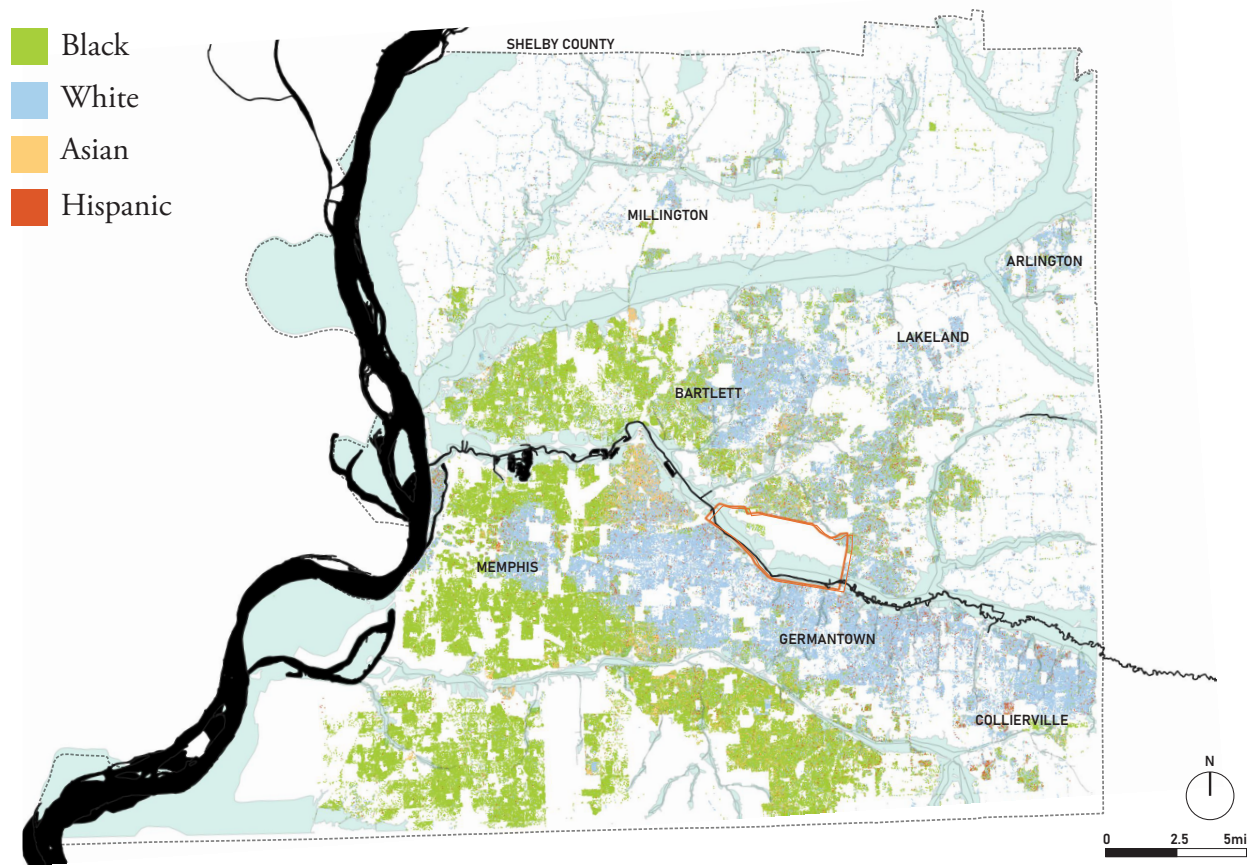


Figure 41. Racial Dot Map of Memphis showing the city is still largely separated along racial lines.

Zooming in from this visionary plan to site realities, a glaring concern arises: the SC Landfill is located in the Wolf River floodplain that is the suggested area for water retention. As previously mentioned, landfills and water do not mix because water threatens to pick up toxins from the waste on site, creating leachate that has the potential to pollute the Wolf River and the Memphis Sands aquifer below. Future designs must consider how these two realities might be conflated, allowing for water retention and habitat restoration while protecting the community and the environment from leachate.



Figure 42. Diagrammatic section and map highlighting the relationship between the landfill, the Wolf River floodplain and the Memphis Sands aquifer today.

CHAPTER 5. CONCLUSION: SYNTHESIZING WATER, WASTE, AND RACE

The conflict between waste and society rests in aesthetics and the imagination.

- Robert Smithson, 1967¹¹

Over time, the site that is now SFP, transitioned from the margins of the city where it was home to slaves and prisoners, to the geographic heart of Memphis, open to all people, regardless of race, income, or background. The public park stands as a symbol of freedom and democracy on the ground where there was once imprisonment and discrimination. This park's history is largely unknown and, hence, is not communicated on the physical site. Therefore, there is an opportunity to design for the hydrological, social, and waste systems at play on site in today's context while referencing how these systems have shaped the SC Landfill and SFP over time. What follows is a synthesis of recommendations to consider for future designs for the SC landfill and its surroundings.

SC Landfill is a complex web of challenges situated in an environment of opportunity. The challenges can be categorized in two ways: as social or physical challenges.

The social challenge lies in addressing topics of race and waste, which are often marked as taboo and avoided, through spatial design. Engaging with the site's history of race and waste is vital in the site's current context within a community still largely divided along racial lines who are disproportionately vulnerable to future climate events. The site is well positioned, in the middle of a large public park, to raise awareness about these issues.

The most pressing physical challenge to address on site today is balancing the opportunity for flood mitigation in the LBSNA Forest with the need to protect the SC Landfill from these same floodwaters. Landfills pose very real health, safety, and logistical challenges to future development

11 Engler, Mira. *Designing America's Waste Landscapes*. 2004. p. xvii

and start to limit what can physically be done to manipulate the site. Understanding site restrictions is the first step in pushing past their limitations.



Figure 43. Proposed goals for future designs that consider the SC Landfill and its potential to help create a more resilient and just Memphis

Suggested precedents that can serve as models for future designs for the SC Landfill and its surrounding area include works from Walter Hood and Nelson Byrd Woltz. Walter Hood's design for the International African American Museum (IAAM) is evocative in its use of temporality in design. Hood uses the incoming tides to conceal and reveal the provocative, life scale imprints of slaves bodies embedded in the site floor that represent enslaved peoples packed into slave ships on the voyage to America. This design is focused on the particular history of place, which was the port for slave ships in Charleston, and is a powerful example of how to confront difficult history surrounding race and slavery in America through spatial design.

Memorial Grove, a design in Memorial Park in Houston, Texas by Nelson Byrd Woltz, uses metaphor in the landscape to convey history. The firm uses rows of pines to represent soldiers

stationed at Fort Bragg awaiting deployment in WWII and to rebuild the canopy that was decimated by extreme droughts in the area. Loblolly pines were chosen as the plant for this design because they reach maturity at 22 years, the same age as the average man killed in WWII. The proposed management strategy is a sort of ritual used to evoke the experience of loss and commemorate the thousands of young men killed in the war: every 22 years, hundreds of trees will be felled in a ceremony honoring the young men killed in the war. Wood from these trees will then be used to build homes for the homeless and impoverished populations in Houston in a move to enhance the resiliency of the local community. This design is a poetic blend of cultural history and restoration and resilience strategies that is an applicable model for future designs considering the SC Landfill; NBW shares stories of history through spatial design that simultaneously serves an ecological purpose.

The SC Landfill site offers landscape architects an opportunity to demonstrate how the field is well positioned to address complicated social and environmental systems, such as the ones found on site. The opportunities detailed in this thesis and in the MSRRP beckon SFPC to step forward with design partners and innovate like many have done throughout history on this land. Historically, landfills have been viewed through an environmental lens as sites for technical remediation, employing scientific or engineering strategies for testing, mitigation and capping. They are more rarely viewed as cultural landscapes, places with histories of habitation and use, or as potential sites for design. This thesis investigation hopefully serves as evidence that the SC Landfill has the potential to be more than a capped, covered landfill site and is key to address when considering the resilience recommendations held in the MSRRP. There is opportunity to think about this site and other waste sites in a more layered and culturally rich way.

Future designers assessing the SC Landfill site should consider how to highlight, rather than ignore, the site's layered histories to create dialogue among citizens, with the city's past, and with the environment. This is something that previous master plan designs for the park have not done. A successful design will fold cultural history into designs that solve the challenge of storing floodwaters

APPENDIX A. LANDFILLS AND THE SCALE OF WASTE IN AMERICA

A landfill is not the same thing as a dump. Defining the terms used to talk about these waste sites is important to help understand the SC Landfill site in comparison to other waste sites. Landfill refers to either an approved or permitted facility for solid waste disposal. An open dump refers to property where solid waste has been deposited without a landfill permit or approval. The SC Landfill began as a dump and was later converted to a landfill around the time when environmental regulations concerning these sites were specified under the Resource Conservation and Recovery Act (RCRA).

Landfills are categorized by the refuse they admit on site and are regulated by the federal government accordingly. Landfills can be categorized as a Municipal Solid Waste Landfill (household and nonhazardous wastes), Bioreactor Landfill (breaks down organic waste), Industrial Waste Landfill (often largely solid waste), Construction and Demolition Debris Landfill, Coal Combustion Residual Landfill (manages coal ash), Hazardous Waste Landfill, and Polychlorinated Biphenyl Landfill. The SC Landfill is a Municipal Solid Waste Landfill (MSWLF). The US EPA defines a MSWLF as “a discrete area of land or excavation that receives household waste. A MSWLF may also receive other types of nonhazardous wastes, such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial nonhazardous solid waste.”¹ To protect humans and the environment from the hazards of waste disposal, the RCRA² mandates the following features of MSWLFs (emphasis by author):

- **“Location restrictions**—ensure that landfills are built in suitable geological areas away from faults, wetlands, flood plains or other restricted areas.

1 epa.gov. “Municipal Solid Waste Landfills”. www.epa.gov/landfills/municipal-solid-waste-landfills. Accessed September 2020.

2 The RCRA’s stated goals include: Protecting human health and the environment from the potential hazards of waste disposal; Conserving energy and natural resources; Reducing the amount of waste generated; Ensuring that wastes are managed in an environmentally-sound manner.

- **Composite liners requirements**—include a flexible membrane (i.e., geo-membrane) overlaying two feet of compacted clay soil lining the bottom and sides of the landfill. They are used to protect groundwater and the underlying soil from leachate releases.
- **Leachate collection and removal systems**—sit on top of the composite liner and removes leachate from the landfill for treatment and disposal.
- **Operating practices**—include compacting and covering waste frequently with several inches of soil. These practices help reduce odor, control litter, insects, and rodents, and protect public health.
- **Groundwater monitoring requirements** —requires testing groundwater wells to determine whether waste materials have escaped from the landfill.
- **Closure and post-closure care requirements**—include covering landfills and providing long-term care of closed landfills.
- **Corrective action provisions**—control and clean up landfill releases and achieves groundwater protection standards.
- **Financial assurance**—provides funding for environmental protection during and after landfill closure (i.e., closure and post-closure care).³

The SC Landfill is not unique in its existence as a hybrid dump-landfill; it is one of at least 10,000 waste sites that began before 1976, prior to RCRA regulations.⁴ Landfills were rapidly expanding during the “Age of Disposability in the 1970s and 1980s”, when plastics in the post-WWII era were taking off and consumerist culture was on the rise.⁵ An analysis of the EPA’s Landfill Methane Outreach Program (LMOP) records reveals that a total 1,541 of the 3,363 landfills tracked

3 *Ibid.*

4 Zimlich, Rachael. “Regional Landfill Capacity Problems Do Not Equate to a National Shortage.” *Waste 360*. Aug. 2015.

5 Johnson, Kirk. “Dumping Ends at Fresh Kills, Symbol of Throw-Away Era.” *New York Times*, March 2001.

by the EPA were active before the RCRA was enacted.⁶ This indicates that nearly half all recorded landfills in the country were created without the full modern sanitary and environmental standard precautions. This map does not capture the full scale of the issue, though, as the EPA data accounts for only a fraction of the 10,000 old municipal dumps the EPA estimates existed. This means the majority of all landfills pose similar environmental challenges, and potential health risks, to their communities as the SC Landfill poses to Memphis.

The LMOP data also points to another trend occurring in the United States: the number of landfills is shrinking, but the sites themselves are increasing in scale. As of 2013, there were an estimated 1,900 landfills compared to the more than 7,600 that existed in the mid-1980s. Following the RCRA, landfills became more expensive to operate as companies and local governments dealt with the cost of managing sites per the new regulations. Many landfills closed because site managers could not comply with regulations. For new landfills, the expense of maintenance, rising costs of urban land, new location restrictions, and push back from the environmental justice movement limited the locations waste could be deposited.

6 US EPA “Project and Landfill Data by State.” Retrieved from [https://www.epa.gov/lmop/landfill-technical-data.\[lmopdatatn.xlsx\]](https://www.epa.gov/lmop/landfill-technical-data.[lmopdatatn.xlsx]). August 2019.

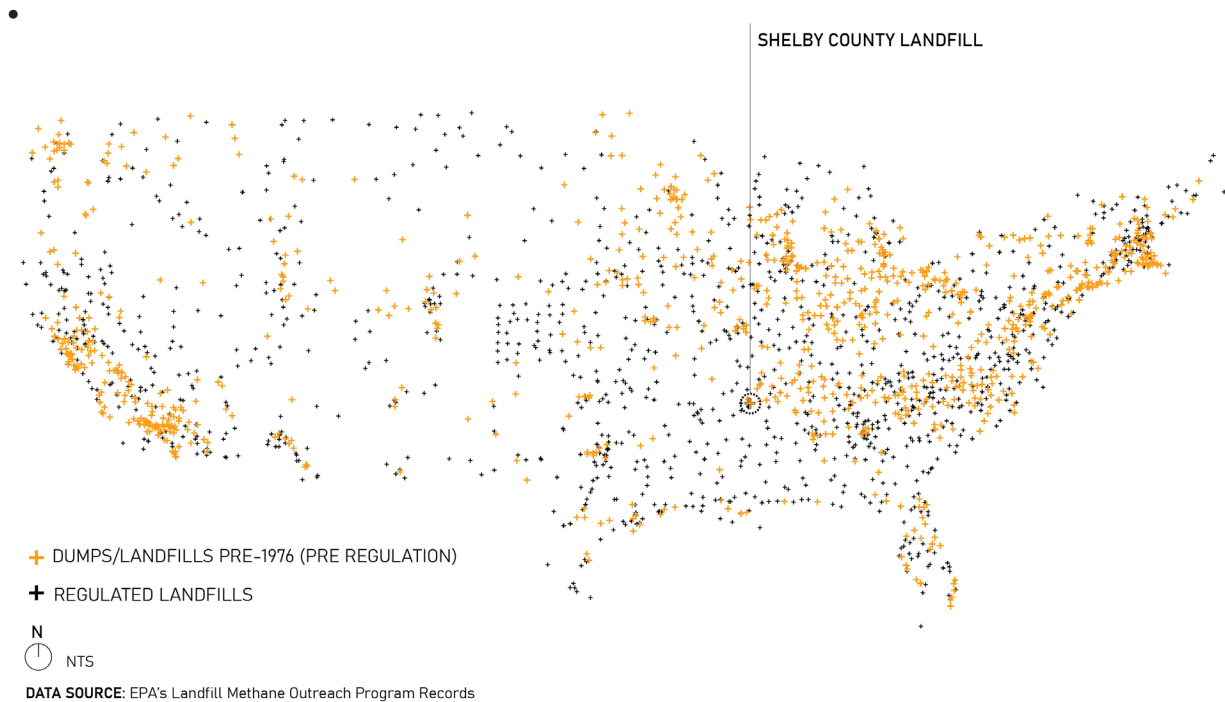


Figure 50: Landfills Shape Space: All Recorded Landfills Across the United States. Dumps started pre-1975 RCRA and enforcement of regulations are highlighted in orange

What resulted were mega-landfills, approaching 1,620-acres, that are “much larger and more efficient than their predecessors”, are sited further from city centers and populations, making it rare for people to encounter landfills and active waste sites in daily life.⁷ The SC Landfill offers a unique opportunity for people to come in contact with an artifact of the waste from consumer culture, this mound built by human detritus, as it exists within a public park in the center of town.

7 Hester, Jessica Leigh. “Mapping America’s Mountains of Garbage”. *City Lab*. August 2016. <https://www.citylab.com/life/2016/08/mapping-americas-mountains-of-garbage/493727/>. Accessed September 2019

APPENDIX B. LIST OF COMMONLY USED ABBREVIATIONS

EPA - Environmental Protection Agency

MSRRP - Mid-South Regional Resiliency Plan

SC Landfill - Shelby County Landfill

SC Government - Shelby County Government

SFP - Shelby Farms Park

SFPC - Shelby Farms Park Conservancy

WRC - Wolf River Conservancy

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VITA

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After graduating from Rhodes College in 2013, she worked at Shelby Farms Park Conservancy, a non-profit that manages a 4,500-acre public park in the heart of Memphis. While at SFPC, Betsy worked as a grants manager coordinating capital improvement projects, designing trail systems, and funding free fitness classes for the community over three years. This work designing, then funding landscape improvements and programs for the community inspired her to look for formal design training. Shelby Farms Park has had a lasting impression on Betsy, resurfacing as the focus of this thesis research. Landscape Architecture is the field that blends her passions in stewarding the environment, addressing issues of equity in cities, and creating spaces that connect people to each other and to the environment. This thesis is the culminating project of her work at LSU's RRS LA program and it comes full circle, designing for the very place that led her to this field. This work marks the beginning of a landscape architecture career that she envisions as one operating at the intersection of nature, culture and ecology that reveals buried stories, phenomena, and histories through design.