



# **Industrialization and Deindustrialization: The Story of the Bruce Vento Nature Sanctuary**

Walking Tour Proposal

HSEM 3205H  
Exercise 3  
Jenna Duncan

**Format:** The proposed tour would make a **40 minute 1.1 mile loop** through the sanctuary on the current trails, stopping at **five locations** as outlined in the story. The group will depart from the trailhead or future Wakan Tipi Interpretive Center and walk together to the Wakan Tipi cave while observing the natural space around them. Along the way, there will be plaques with **QR codes** that can be scanned with a mobile device to provide information about native plants. The actual storytelling will begin at the cave since the story first introduces the Dakota connection to this land and sacred spaces. At each location, there will be a plaque with a QR code, which will allow visitors to view historical photos of the locations where they are standing. These images are inserted into the story.



# Tour Route

Bruce Vento Nature Sanctuary



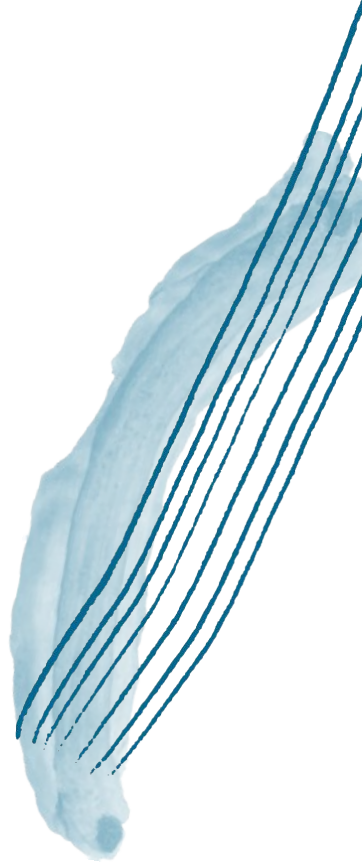
# Native Plant Information



Example QR code  
(Does not function)

## Information Included:

- English name
- Dakota name with audio pronunciation
- Dakota ceremonial or medicinal use (if any)
- Ecosystem role
- Conservation status
- Photos during different seasons



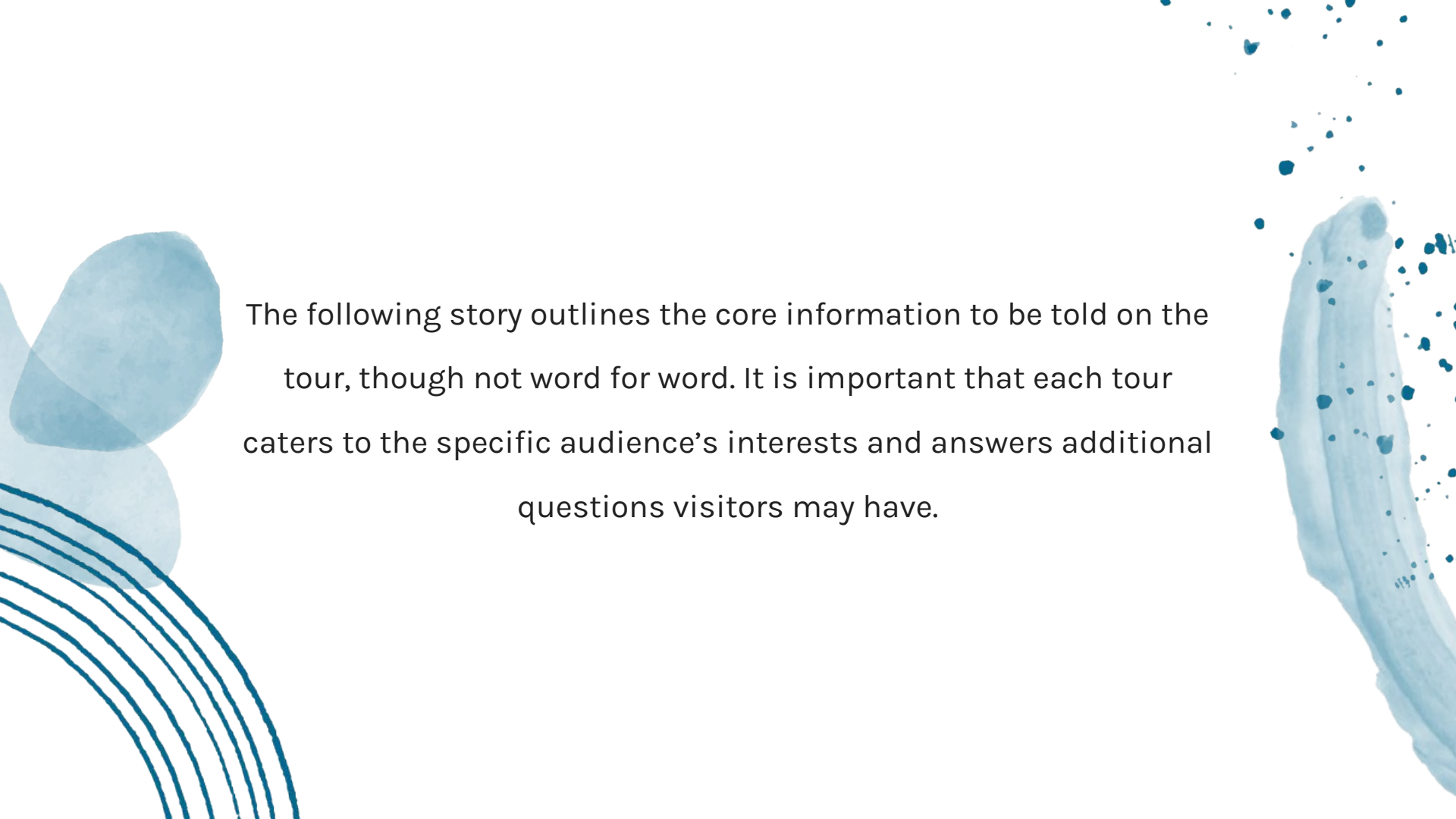
**Goal:** The goal of this project is to reach school groups and families visiting the Bruce Vento Nature Sanctuary. Interactive storytelling will help establish a greater connection between the audience, nature, and the region as a whole. Since change is still occurring at this site, reaching young people is especially important so that they understand the restoration efforts needed to create this space and are compelled to contribute to further change in the future. Additionally, this tour is designed to highlight the importance of this land to the Dakota people.

**Possible partners:** A logical partner is the Lower Phalen Creek Project because this entity is in charge of the development of the Wakan Tipi Interpretive Center and daylighting of the Phalen Creek. This tour could be a component of the future Wakan Tipi Interpretive Center educational programming. Staff and/or volunteer storytellers could be coordinated in conjunction with the LPCP. Furthermore, it is very important to include Dakota voices when telling Dakota stories, so it would be beneficial to work with Dakota community members to further develop aspects of this story.



The background features several abstract blue elements: a large, thick, curved brushstroke on the left side with numerous small splatters trailing downwards; a series of thin, parallel, slightly curved lines in the top right corner; and two overlapping, soft-edged, light blue shapes in the bottom right corner.

# The Story



The following story outlines the core information to be told on the tour, though not word for word. It is important that each tour caters to the specific audience's interests and answers additional questions visitors may have.

# Introduction

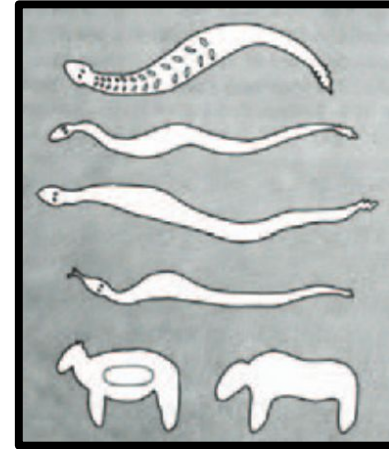
This place now called the Bruce Vento Nature Sanctuary has a complicated history, which first began with the Dakota people. Located on the East Bank floodplains, the Mississippi river is central to this narrative and the change that has occurred.



# Wakan Tipi Cave



Photo by W.H. Illingworth (1870)



Drawing by Lewis (1898)

# The Beginning

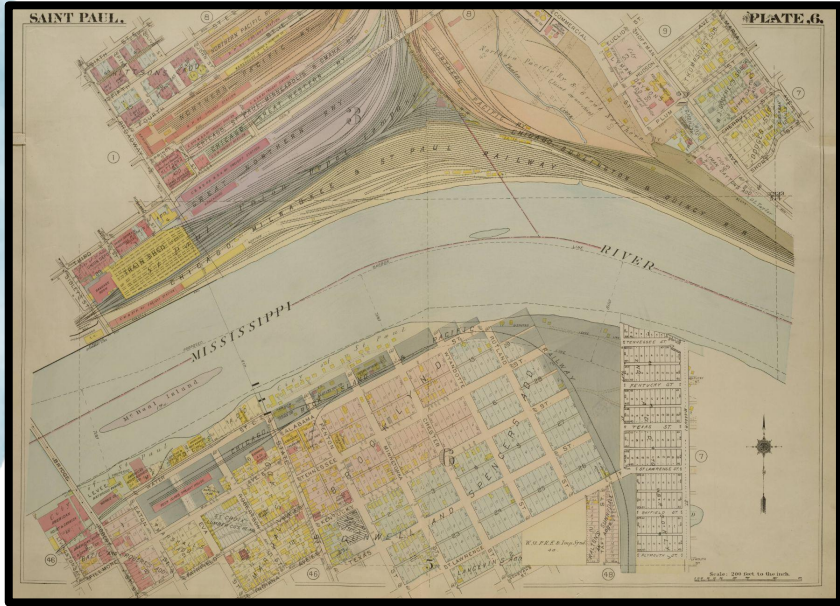
Located at the base of Dayton's Bluff, Wakan Tipi, meaning "they [who] live in the way of creation and/or destruction" is a cave sacred to Dakota people. The cave was carved out by flowing spring water, which does not freeze at any point during the year. Dakota people never permanently lived at this site but rather came to this area for ceremony and learning.

To Dakota people, this is a site pertaining to both birth and death. According to Autumn Cavendar-Wilson, this is "a place where the boundary between this world and the other is permeable." The spring water flowing out of the cave was considered to be the amniotic fluid of mother Earth's (Maka Ina) womb, and the burial mounds on top of the bluff were created to resemble a pregnant belly. Additionally, the ancient Dakota petroglyphs that were inscribed in the entrance to the cave on the sandstone ceiling represent constellations and origin stories. These further illustrate the term Kapemni in Dakota cosmology, which means "As it is above; it is below." Despite the significance of this site to Dakota people, the Dakota lost control of Wakan Tipi to the United States government in the Treaty of 1837.

Another water feature in this area was the Phalen Creek, which flowed from Lake Phalen to the floodplains near the Wakan Tipi cave before emptying into the Mississippi river. This creek was important to migrating wildlife, and it provided a corridor for Dakota people traveling between waterways.



# Railroad Tracks



(1916)



# Industrialization

In the late 19th century, the timber and flour milling industries had begun to develop rapidly along the Mississippi river in the Twin Cities area. These industries necessitated the transportation of materials and goods, and the railroads too expanded. The area surrounding Wakan Tipi became prime real estate for railroad companies.

However, the natural water features in the area posed a challenge to the expansion of the railroads. Since this was a floodplain site along the Mississippi river, significant amounts of fill were brought to create land suitable for industrial development. As railroads expanded on the floodplain, companies gradually rerouted the Phalen Creek creek into a storm sewer, and a majority of the creek was underground by the late 1800s.

Additionally, companies such as 3M and Whirlpool dumped wastewater and other contaminants into the Phalen Creek watershed, which ultimately flows into the Mississippi river. Besides the watershed becoming physically degraded, the sacredness of Wakan Tipi was ignored. In the 1880s, J.J. Hill used dynamite to destroy 75 feet of Wakan Tipi's entrance chamber for railroad expansion, which destroyed the ancient petroglyphs. Another man, Jacob Schmidt, began using spring water to brew beer and stored it on site, further desecrating Wakan Tipi and the water flowing from the cave.

Furthermore, Dakota people were expelled from the state of Minnesota after the Dakota War of 1862, which left very few people (if any) to advocate for the protection of their sacred sites.



# Wetland





1974



# Transition/Restoration

After the peak of the timber and flour milling industries, the demand for railroad transportation for goods and materials declined. The general disuse of railroads at this site led to the creation of an illegal dumping ground for the railroad industry as well as community members. This became a site of toxic waste and a variety of discarded household appliances and trash.

## **Questions to be posed to the audience:**

Why might we not know much about this part of Wakan Tipi's history?

Is there any visible remaining evidence of this place being a dumping site?



# Transition/Restoration

The restoration of Wakan Tipi was driven by community engagement and support. In 1997, community activists came together to restore this area, forming the Lower Phalen Creek Project. In 2002, this land was bought from railroad companies by a variety of interest groups and conveyed to the City of St. Paul. In 2003, The 106 Group, a cultural resource management and planning company, contributed to this area being designated as an EPA toxic waste site. EPA Brownfield funding allowed for between 13-50 tons of soil contaminated with asbestos, mercury, petroleum, and other pollutants to be removed. It was due to the efforts of community members that an additional 50 tons of trash were removed.

The following year, ecological restoration was underway. Hundreds of volunteers removed invasive vegetation and planted native plants. Many of these people were Hmong youth who participated through the organization Urban Roots. Thousands of native wetland forbs and hundreds of trees have been planted thus far.

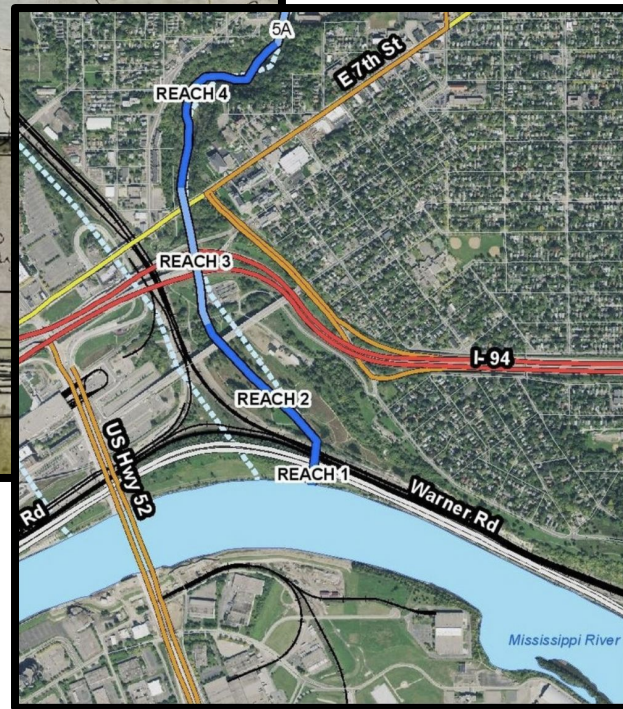
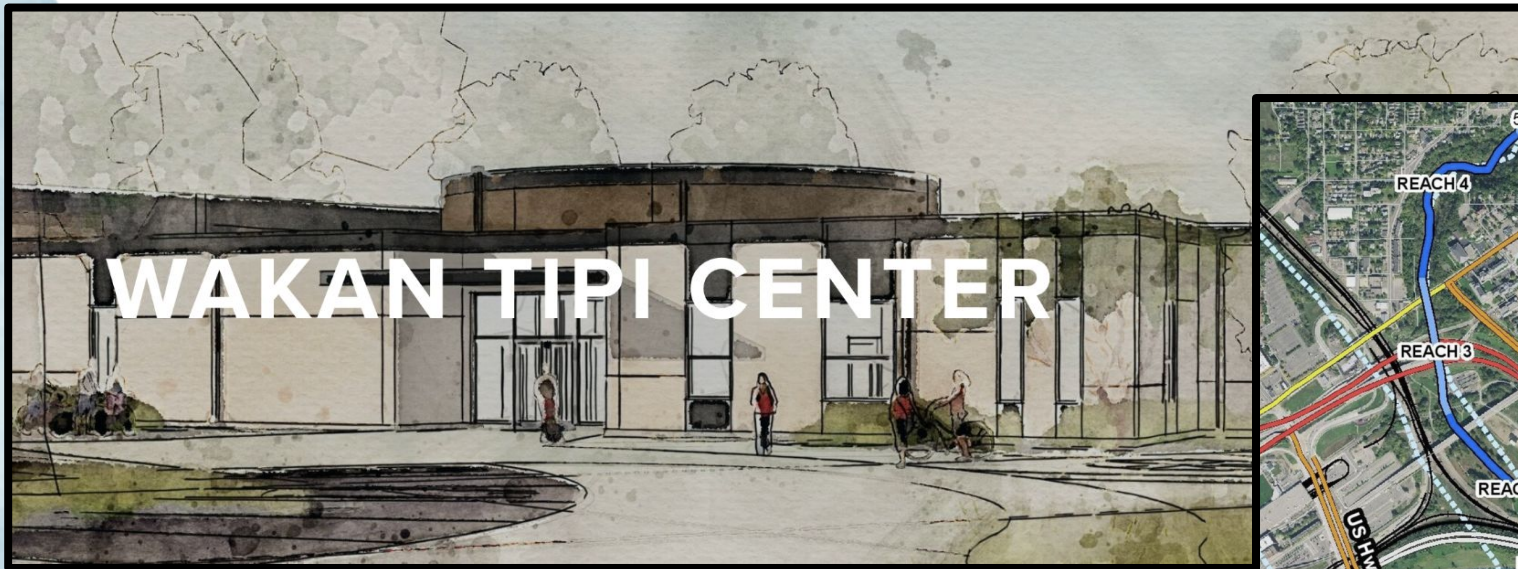
Restoring Wakan Tipi was important because it is adjacent to the Mississippi River Flyway, which is a major migration corridor for more than 40% of the birds and waterfowl native to North America. Springs at the base of the bluff were channeled into a stream and multiple wetland locations, and this ecological restoration has created suitable habitat for a variety of wildlife. All of these water features also include a clay liner to prevent further pollution contamination.

# Transition/Restoration

Throughout the restoration process, Dakota people were involved with planning, yet issues caused by differences in perspectives still arose. At one point, workers were instructed to cut down dozens of cottonwood trees used for Dakota ceremonies. They were to be replaced with oak trees parallel to the previous railroad tracks to “honor” the history of the railroads. This is an example of a continued lack of reverence for the sacredness of this site and the championing of industry.



# Reach 2 Area



# Current State & Future Plans

Opening in May 2005, the 27 acre Bruce Vento Nature Sanctuary contains floodplain forest, dry prairie, oak savanna, bluff prairie, oak woodland, and spring-fed streams and wetlands ecosystems, which are vital for a variety of wildlife. As part of additional restoration plans, a survey of Dakota Culturally Important Plants is being conducted between 2020-2025. It is important to note that the Wakan Tipi cave continues to be gated off to prevent further site desecration.

A current major project located at the Bruce Vento Nature Sanctuary is the creation of the Wakan Tipi Interpretive Center, which is planned to be a \$12.4 million facility to serve as a gathering place and connect people to this sacred site and Dakota traditions.

The Lower Phalen Creek Project is also working to daylight the Phalen Creek at the South end of Lake Phalen, which is north of the sanctuary. While this is outside the sanctuary borders, the goal of this work is to improve water quality, improve local ecosystems, create aquatic habitat, manage stormwater, and connect people to nature. After this project is completed, it is possible that the portions of the Phalen Creek within the Bruce Vento Nature Sanctuary will also be daylighted.



# Trail Split

Resources to Get Involved

Lower Phalen Creek Project:

<https://www.lowerphalencreek.org/volunteer>

Friends of the Mississippi River

<https://fmr.org/volunteer>

Mississippi Park Connection

<https://parkconnection.org/volunteer>

Urban Roots

<https://urbanrootsmn.org/volunteer/>

# Call to Action

To conclude, the story of the Bruce Vento Nature Sanctuary is ongoing. The importance of this site to Dakota people remains prominent, and the impacts of industrialization still linger. There are continuous efforts to deindustrialize this area and restore it to its natural state.

The future of the Bruce Vento Nature Sanctuary and surrounding areas are dependent on community members contributing to restoration efforts. You can become directly involved through volunteering with the Lower Phalen Creek Project and other organizations. There are still many restoration projects occurring at this site to improve the ecology in this area for both wildlife and people.

*Additionally, as we move through spaces in the Twin Cities area, it is important to be conscious of whose land this originally was and respect sacred places.*

**Note:** The tour will conclude at the future Wakan Tipi Interpretive Center.

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**Why?**

# Importance

This story is important because erasure is central to the narrative. The first white settler to document Wakan Tipi was Jonathan Carver in 1766, and the cave's name was not published again in the Dakota language until 1994 in a map produced by Paul C. Durand. Naming of sacred sites remains an issue today. Currently, the cave is still most widely known as Carver's Cave, though the industrial development of white settlers destroyed portions of it. The sanctuary itself is named after Bruce Vento rather than being given a Dakota name, and continuing to overlook Indigenous names for places discounts Indigenous presence and perpetuates erasure.

Additionally, there are gaps in the current narratives that are told. The transition period between railroad use and creation of the nature sanctuary is not well documented. While it is understandable that little information about this illegal dumping ground was recorded, the efforts to remove trash and toxic waste is often overlooked. Hundreds of community members came together to remove tons of trash, and the immense amount of community support to later restore vegetation in this area has largely been left out of the narrative.

Furthermore, this story is special because the Bruce Vento Nature Sanctuary is a unique outcome of deindustrialization in the Twin Cities. Many other areas, such as the downtown milling district, have been converted into luxury condos in recent years or used for other purposes. These regions have not been ecologically restored to their natural state, and it is unlikely many of these regions ever will be.



# Patterns

The development of the timber and flour milling industries occurred all along the Mississippi river in this region, which fostered the creation of the Twin Cities. The ways in which industrialization impacted Wakan Tipi fit into many of the stories discussed over the course of the semester. To begin, this story is a prime example of how industrial development has led to the desecration and destruction of sacred spaces. This was previously illustrated by the destruction of Spirit Island to construct St. Anthony Falls Lock and Dam and the Dakota concentration camp located at Bdote. Additionally, it is important to recognize Dakota names for their sacred places, though this remains an issue at many locations besides Wakan Tipi.

The negative impacts of industrialization on ecosystems is also evident. Although there have been restoration and remediation efforts in many locations, significant damage was done previously. Permanent change is embedded in the landscape at Wakan Tipi, and the ecosystems will never be as they once were. The history of Mississippi river water quality is something discussed in detail, and the remediation of Wakan Tipi mirrors the river water quality remediation that occurred after the creation of the Clean Water Act. These ecological changes in the landscape also relate the permanent physical infrastructure at locations such as the St. Anthony Falls Lock and Dam and surrounding mills. Permanent change is still visible, and the ways in which the land was used has changed drastically and will continue to evolve into the future.

# Bibliography

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