

# Archaeological Research Laboratory Center

Cultural Resource Management

September 1, 2022

Shawn Puzen
FERC Hydropower Licensing and
Compliance, Water
Mead & Hunt
1702 Lawrence Drive
De Pere, WI 54115

Sabin Hall, Rm 290 PO Box 413 Milwaukee, WI 53201-0413 414-229-3078 www.uwm.edu www.uwm.edu/archaeology-laboratory/

RE: Architecture/History Investigations
Gile Flowage Storage Reservoir Hydroelectric Project
Iron County, WI 54525
Project No. 15055
UWM-CRM 2022-0105

Dear Mr. Puzen,

The Cultural Resource Management program (Archaeological Research Laboratory Center) at the University of Wisconsin-Milwaukee (UWM) has completed a Determination of Eligibility for the Gile Flowage Dam, located in the City of Montreal, Iron County, Wisconsin. The investigation and resulting recommendation were conducted in accordance with those standards promulgated in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation and the Architecture-History Survey Manual (hereafter, Manual) as well as Section I of the *Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, the State of Wisconsin, State Historic Preservation Officer, and the State of Michigan, State Historic Preservation Officer, for Managing Historic Properties that may be Affected by New and Amended Licenses Issuing for the Continued Operation of Existing Hydroelectric Projects in the State of Wisconsin and Adjacent Portions of the State of Michigan (hereafter, Programmatic Agreement).* 

As a result of investigations conducted in June and July of 2022, the Gile Flowage Dam is not recommended as eligible for the National Register of Historic Places (NRHP) under any of the Criteria for Evaluation identified in 36 CFR Part 60 - National Register of Historic Places. Please see the attached NPS Form 10-900 and photo log.

If there are questions or concerns regarding the investigation, or to further discuss the project, please do not hesitate to contact me at (414) 251-6138 or at <a href="wedwards@uwm.edu">wedwards@uwm.edu</a>.

Sincerely,

Richard Wynn Edwards IV, Principal Investigator

And Kelly Blaubach, Architecture Historian

Encl.

NPS Form 10-900 Gile Flowage Dam Gile Flowage Dam Project Location Map Gile Flowage Historic Boundary Map Gile Flowage Dam Photo Log

# **United States Department of the Interior**

National Park Service

# **National Register of Historic Places Registration Form**

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, How to Complete the National Register of Historic Places Registration Form. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property
Historic name: Gile Flowage Dam
Other names/site number:
Name of related multiple property listing:
N/A (Enter "N/A" if property is not part of a multiple property listing)
(Enter 19/A if property is not part of a multiple property fishing)
2. Location
Street & number: Park Street and Nimikon Avenue
City or town: Montreal State: WI County: Iron
Not For Publication: Vicinity:
3. State/Federal Agency Certification
As the designated authority under the National Historic Preservation Act, as amended,
I hereby certify that this nominationX_ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.
In my opinion, the property $\underline{\hspace{0.5cm}}$ meets $\underline{\hspace{0.5cm}} \underline{\hspace{0.5cm}} X$ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance: $N/A$
nationalstatewidelocal Applicable National Register Criteria:
ABCD
Signature of certifying official/Title: Date
State or Federal agency/bureau or Tribal Government

Gile Flowage Dam Name of Property	Iron County, WI County and State
In my opinion, the property meets does criteria.	
Signature of commenting official:	Date
Title :	State or Federal agency/bureau or Tribal Government
4. National Park Service Certification	
I hereby certify that this property is:	
entered in the National Register	
determined eligible for the National Register	
determined not eligible for the National Register	
removed from the National Register	
other (explain:)	
Signature of the Keeper	Date of Action
5. Classification	
Ownership of Property	
(Check as many boxes as apply.) Private:	
Public – Local	
Public – State	
Public – Federal	
Category of Property	
(Check only <b>one</b> box.)	
Building(s)	
District	

ile Flowage Dam ame of Property		Iron County, WI County and State
Site		
Structure		
Object		
Number of Resources within P (Do not include previously listed	d resources in the count)	
Contributing1	Noncontributing 0	buildings
	0	sites
2	0	structures
0	0	objects
<u>3</u>	0	Total
Number of contributing resource	es previously listed in the Natio	onal Register N/A
6. Function or Use Historic Functions		
(Enter categories from instructional INDUSTRY/ waterworks = date		
	III/Teservon	_
Current Functions (Enter categories from instruction	ons.)	
INDUSTRY/ waterworks = dam		_

United States Department of the Interior
National Park Service / National Register of Historic Places Registration Form
NPS Form 10-900

OMB Control No. 1024-0018

Gile Flowage Dam
Name of Property

Iron County, WI
County and State

ne of Property	County and State
7. Description	
Architectural Classification	
(Enter categories from instructions.)	
Other: Dam	
Materials: (enter categories from instructions.)	
Principal exterior materials of the property:	
Earth (Dikes)	
Brick (Gatehouse)	
Concrete (Gated Spillway)	

United States Department of the Interior	
National Park Service / National Register	of Historic Places Registration Form
NPS Form 10-900	OMB Control No. 1024-0018

Gile Flowage Dam	Iron County, WI
Name of Property	County and State

# **Narrative Description**

(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

## **Summary Paragraph**

The Gile Flowage Dam is located on the west branch of the Montreal River in the City of Montreal, Wisconsin. The neighborhood of Gile, once a separate community, is located within Montreal's current municipal boundaries. The Gile Dam is located at the northern end of the reservoir, and was constructed in 1940 to store water for use in downstream hydroelectric generation. As such, the Gile Dam does not contain any electric generation equipment, but instead consists simply of a dam, spillway, and gatehouse. The dam is a 875-foot long earthen dike, punctuated in the middle by a concrete spillway with a tainter gate and slide gate, and a brick gatehouse above. The Montreal River travels north through the dam and continues towards two more hydroelectric projects downstream before emptying into Lake Superior. The 3138-acre reservoir behind the dam, known as the Gile Flowage, is surrounded by heavily wooded areas. The historic boundary encompasses the earthen dike, the gated spillway, and the gatehouse. The property retains a moderate level of integrity to its date of completion in 1940.

# **Narrative Description**

The earthen dike spans a total of 875 and is 30 feet high, with a 10-foot wide top and 3:1 side-slopes. Approximately 700 feet of the earthen dike is visually evident at the site of the dam, identified by a moderately steep drop to the water's edge on the southern side, and a steeper drop to the base of the dike on the northern side. It was constructed in 1940 on an axis running roughly northeast to southwest. A line of boulders is located near the eastern end of the dike, extending over the top of the dike to prevent automobile access. A gravel path travels along the top of the dike to the gatehouse, and continues west along the top of the dike on the other side of the gatehouse. Stone rip rap is located on the southern (upstream) side of the dike, while the northern (downstream) side is grassy, with a small drainage stream along the bases of both the east and west portions of the earthen dam.

The gated spillway consists a reinforced concrete structure of left and right abutment walls, a sluiceway bay, a tainter gate bay, and a concrete stilling basin and tailrace. Concrete beams span the downstream walls of the stilling basin and tailrace. The sluiceway bay is located at the western end of the spillway, with equipment that is largely unseen below the level of the water and within the concrete structure. The sluiceway consists of an intake structure and trash rack on the upstream side, a slide gate measuring 6 feet wide by 6 feet high operated by an electric hoist located inside the gate house, and a large concrete outlet that conveys flow to the stilling basin. The tainter gate bay contains a riveted steel tainter gate measuring 16 feet wide and 12 feet high and is operated with an electric hoist located inside the gatehouse.

Gile Flowage Dam

Name of Property

Iron County, WI

County and State

The Gatehouse sits above the gated spillway atop a concrete platform. The southern elevation of this side-gabled utilitarian building features a wide overhanging eave that shelters the walkway over the spillway. Constructed of brick laid in a common bond, the north and south elevations are comprised of two bays separated by wide brick pilasters, with the wider bay over the tainter gate portion of the spillway and a narrower bay over the sluiceway portion. A metal-door entrance is located in the narrow bay of the southern elevation. The eastern and western elevations are comprised of single bays flanked by brick pilasters at the corners, with vertical metal siding in the eaves of the gable-ends. Ornamentation is limited to shallow brick pilasters throughout. All window openings have been bricked-in, though openings are still apparent due to the concrete sills that remain.

## Integrity

The earthen dike, gated spillway, and gatehouse collectively retain a moderate level of integrity. While the earthen dike and gated spillway remain virtually unchanged since the 1940s, the gatehouse's window openings have been completely bricked in. In a district with so few resources, such an alteration to the only significant building constitutes a considerable loss of integrity of design.

United States Department of the Interior National Park Service / National Register of Historic Places Registration Form NPS Form 10-900 OMB Control No. 1024-0018 Gile Flowage Dam Iron County, WI Name of Property County and State 8. Statement of Significance **Applicable National Register Criteria** (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.) Property is NOT recommended as qualifying for the NRHP A. Property is associated with events that have made a significant contribution to the broad patterns of our history. B. Property is associated with the lives of persons significant in our past. C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction. D. Property has yielded, or is likely to yield, information important in prehistory or history. **Criteria Considerations** (Mark "x" in all the boxes that apply.) A. Owned by a religious institution or used for religious purposes B. Removed from its original location C. A birthplace or grave

G. Less than 50 years old or achieving significance within the past 50 years

D. A cemetery

E. A reconstructed building, object, or structure

F. A commemorative property

Iron County, WI
County and State

Gile Flowage Dam	
Name of Property	
Areas of Significance	
(Enter categories from instructions.)	
Industry	
Engineering	
<del></del>	
D 1 1 001 10	
Period of Significance	
_1940-1972	
~	
Significant Dates	
_1940	
Significant Person	
(Complete only if Criterion B is marked above.)	
<u>n/a</u>	
Cultural Affiliation	
<u>n/a</u>	
Architect/Builder	

United States Department of the Interior	
National Park Service / National Register	of Historic Places Registration Form
NPS Form 10-900	OMB Control No. 1024-0018

Gile Flowage Dam	Iron County, WI
Name of Property	County and State

**Statement of Significance Summary Paragraph** (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The licensing of the Gile Dam and Flowage led to the evaluation of this property as a historic district, having potentially local significance under National Register Criteria A and C. Research was undertaken to assess the potential eligibility of the property for its significance within the areas of hydroelectric engineering and industry. The results of this research are detailed below and do not appear to support a potential listing of this District under any criteria.

The Gile Dam and Flowage was evaluated under Criterion A: History for its association with the industry of hydroelectric generation in the region. Constructed in 1940, no hydroelectricity is generated at the Gile Dam; rather, it provides water storage for release to Saxon Falls and Superior Falls downstream on the Montreal River. These hydroelectric facilities, both constructed in 1911-12, benefit from the steady flow of water released from Gile Dam and Flowage, which ensures efficient hydroelectric operations and energy production. However, the Gile Dam alone does not constitute a significant resource within the context of hydroelectric generation in the region. It is not currently recommended as eligible for listing in the NRHP under Criterion A: History. Additional research may be needed to determine whether the Gile Dam is significant as part of a larger linear resource with the downstream hydroelectric facilities at Saxon Falls and Superior Falls. Such research was beyond the scope of the current investigation.

The Gile Dam and Flowage was also evaluated under Criterion C: Engineering as an example of a dam property type. The Gile Dam is an earthen and concrete gravity dam, with sluice gates used during low flow and a tainter gate used during high flow. A gate house atop the dam contains the controls for gate operations. The structures of the Gile Dam are fairly typical compared to other hydro-related resources in Wisconsin and do not demonstrate any exceptional design elements relative to its function. For this reason, the Gile Dam and Flowage are not recommended as eligible for listing in the NRHP under Criterion C: Engineering.

Narrative Statement of Significance (Provide at least one paragraph for each area of significance.)

# History of the Gile Flowage

Prior to European settlement, the area that would become the Gile Flowage contained a portion of the Flambeau Trail, used by native travelers and later traders between LaPointe on Madeline Island and Lac du Flambeau. The flowage is currently within the Ceded Territory of the Chippewa (Ojibwe) Tribe and the body of water is co-managed by tribal resources management through the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) and the Wisconsin

Gile Flowage Dam

Iron County, WI County and State

Name of Property

DNR. Tribal spearing for walleye occurs each spring and GLIFWC has reintroduced wild rice into the northeastern corner of the flowage along Highway 51<sup>1</sup>.

The unincorporated village of Gile was originally founded as a community surrounding a sawmill on the Montreal River. The Montreal River Company built the first dam across the river at Gile in 1885, though no evidence of the dam remains. Gile is currently located within the boundaries of the City of Montreal, a settlement established in the late 1800s by the Montreal Mining Company. Forty-five million tons of iron ore were mined and shipped from this location until 1962, when the Montreal Mine closed.<sup>2</sup>

By the 1920s, the first dam was gone and the Montreal River at Gile was once again natural. The river had been developed further downstream, however, with a hydroelectric project at Saxon Falls in 1912 and another hydroelectric project at Superior Falls in 1917. The electricity generated at these facilities found immediate markets, and further expansion and consolidation of various companies and systems led to the creation in 1922 of a regional utility company known as the Lake Superior District Power Company (LSDPC). By 1936, the utility company operated in eight northern counties and served 55 communities. That same year the LSDPC applied to Wisconsin's public service commission to construct the dam at Gile. <sup>4</sup> The earthen dike, concrete spillway, and gatehouse were completed by 1940, creating a reservoir that helps control the flow of water to the hydroelectric facilities downstream. The stored water is known as the Gile Flowage, encompassing 3138 acres with a maximum depth of 25 feet. It is a popular destination for anglers, with Musky, Panfish, Smallmouth Bass, Northern Pike, and Walleye populating its waters.<sup>5</sup> No hydroelectric power is generated at the Gile Dam.

### Hydroelectric Development in Wisconsin

By the advent of electricity in Wisconsin, many of the state's numerous rivers were already dammed in order to provide adjacent mills and factories with hydro-mechanical power. In fact, waterwheels still supplied over one third of the state's mechanical power in 1889.<sup>6</sup> Once the nationwide enthusiasm for electricity took hold in Wisconsin in the late nineteenth century, using these water resources to produce electricity was common sense. Utilizing extant water resources was considered more cost effective than steam-generated electricity, as the average steam engine at the time required approximately 12 pounds of coal to produce a single kilowatt hour.<sup>7</sup> Installing hydroelectric generators at existing dams in the state could indeed prove extremely economical, but, as on the national scene, there were many downfalls on the way to financial

<sup>&</sup>lt;sup>1</sup> "Brief History of the Gile Flowage," Friends of the Gile Flowage, accessed June 24, 2022, https://www.friendsofthegile.org/home/flowage-facts.

<sup>&</sup>lt;sup>2</sup> "History," City of Montreal, accessed June 24, 2022, https://montrealwis.com/.

<sup>&</sup>lt;sup>3</sup> Timothy Heggland, "Saxon Falls Determination of Eligibility," Northern States Power Company, September 14, 1988, pp. 8.16-18.

<sup>4 &</sup>quot;\$200,000 Dam in Iron County, Plan of Utility," La Crosse Tribune and Leader Press, July 30, 1936

<sup>&</sup>lt;sup>5</sup> "Gile Flowage," Wisconsin Department of Natural Resources, accessed June 24, 2022,

https://dnr.wi.gov/lakes/lakepages/LakeDetail.aspx?wbic=2942300&page=facts.

<sup>&</sup>lt;sup>6</sup> John D. Buenker, The History of Wisconsin: The Progressive Era, 1893-1914, Vol. 4. William Fletcher Thompson, general ed., (Madison: State Historical Society of Wisconsin, 1998), 98.

<sup>&</sup>lt;sup>7</sup> Forrest McDonald, Let There Be Light: The Electric Utility Industry in Wisconsin, 1881-1955, Madison, WI: The American History Research Center, 1957), 98.

Gile Flowage Dam

Name of Property

Iron County, WI
County and State

success. In Wisconsin, it soon became clear that not all of the state's rivers were ideal for hydro development. The low-head waterways found throughout much of the state simply did not contain the falling force necessary to produce high levels of electricity; the profits gained were therefore not enough to offset the costs of equipment. While inland waterways had been improved throughout the nineteenth century to accommodate shipping and navigation needs, seasonal changes could still create wide variations in annual water flow; winter weather froze the headwaters and smaller tributaries of most major rivers, reducing flow and electrical output at a time when demand was highest. If a hydroelectric venture included the construction of a new dam, the financial risk was even higher. The Projects constructed at Saxon and Superior Falls provide examples of the seasonal changes that could effect water flows. The dam at Gile was constructed later to help regulate flows throughout the year.

Such drawbacks were not enough to deter hydro promoters from trying to develop the state's waterways, and by 1916 Wisconsin contained approximately seventy-five hydroelectric plants. Although the power produced by these plants was insignificant when compared to hydro developments in other regions such as the California's Sierra Nevada Mountains, the installed maximum capacity of Wisconsin's hydro plants had the potential to meet three-fourths of the maximum electrical demand of the entire state by WWI. As hydro development increased, so too did Wisconsin's hydro-manufacturing industry, which provided the machinery and supplies for hydroelectric development in the state. In 1889, the hydro-manufacturing industry consisted of three plants, fifteen workers, and was valued at \$38,870. By 1914, the industry boasted twenty-nine factories, two thousand workers, and was valued at five million dollars. 10

During the energy crisis brought on by high demand during WWI, the installed hydroelectric power was able to considerably alleviate coal shortages in the state. <sup>11</sup> At the same time, the business of electrification and hydro development began to change. A class of businessmen interested in building electric utility companies began to oversee the technological standardization of the industry and the consolidation of many of the state's hydroelectric plants and electric companies. <sup>12</sup> Modern utility companies like Wisconsin Public Service Corporation and the Northern States Power Company of Wisconsin-Minnesota were founded in the 1920s. They began to consolidate smaller companies and extend electric service into new markets, producing electricity generated by both steam and hydropower. Between 1917 and 1930, the number of communities in Wisconsin receiving central station electric service increased from approximately 370 to 1,000. By 1930, organizational efficiency had increased so that, with only three times the amount of capacity from all forms of electrical generation, the industry could produce six times the amount of energy. <sup>13</sup> Following the nationwide pattern, electrification was largely an urban phenomenon. Even though Wisconsin farmers also began to realize the benefits of electric power after WWI, extension of the utility companies into rural areas was hindered by

<sup>&</sup>lt;sup>8</sup> McDonald, Let There Be Light, 114.

<sup>&</sup>lt;sup>9</sup> McDonald, Let There Be Light, 171.

<sup>&</sup>lt;sup>10</sup> John D. Buenker, *The History of Wisconsin*, 99.

<sup>&</sup>lt;sup>11</sup> McDonald, Let There Be Light, 172.

<sup>&</sup>lt;sup>12</sup> McDonald, Let There Be Light, 199-200.

<sup>&</sup>lt;sup>13</sup> McDonald, Let There Be Light, 274-275.

Gile Flowage Dam

Iron County, WI

Name of Property

County and State

high costs of installation with low expectations of profits. <sup>14</sup> Widespread extension of service into the state's farmlands would not take place until the creation of the Rural Electrification Administration (REA) in 1935. <sup>15</sup> Through the REA, government loans were arranged for rural, member-owned cooperatives to purchase electrical power from existing utilities and distribute that power on their own network of transmission lines. A number of Wisconsin cooperatives still exist today and obtain power from both coal and hydroelectric plants. <sup>16</sup>

While the entire electrical industry continued to grow after WWI, the hydroelectric development of the state's waterways also increased. However, as with the rest of the country, most private investment in Wisconsin came to a halt during the Great Depression. The state's major utility companies were able to survive mainly because the sale of electrical power continued to thrive. By the beginning of WWII, almost an entire generation of urban Wisconsinites did not know a time when electricity was not readily available to power their lights, appliances, and factories. As a commodity deemed absolutely necessary to modern life, the practices and rates of electric utility companies came under public scrutiny. Since 1907 Wisconsin has relied on the Public Service Commission of Wisconsin (PSC) to set rates and regulations for public utilities. In that year, Wisconsin became the first state in the nation to regulate public utilities, when the state's Railroad Commission was granted extended regulatory powers. Those powers were separated from the Railroad Commission in 1930 and given to the newly-created Public Service Commission, which continues to set rates and regulations for the electric industry today.<sup>17</sup>

By the late 1950s, most of the state's ideal water sites had already been dammed and developed for hydroelectric generation, and throughout the 1960s and '70s, hydroelectric development had to compete with the growth of the coal-fired power plants. The first nuclear power plant in Wisconsin, located at Point Beach in Manitowoc County, also came online in 1970. However, beginning with the nation-wide energy crisis in 1973, the PSC began encouraging public utilities to consider alternative energy sources as part of their generation strategies. In the 1990s, PSC began *requiring* public utilities to consider renewable energy sources and conservation, putting a low priority on fossil fuel development. <sup>18</sup> Currently, there are approximately 3,900 dams in Wisconsin, and 127 are identified as generating hydroelectric power. <sup>19</sup> These include privately-owned dams as well as municipal, state, and federally-owned dams. In the last twenty years, increased interest in renewable energy has led to the retrofitting of smaller dams to produce

<sup>&</sup>lt;sup>14</sup> Paul W. Glad, *The History of Wisconsin: War, a New Era, and Depression*, Vol. 5. William Fletcher Thompson, editor, (Madison: State Historical Society of Wisconsin, 1990), 382.

<sup>&</sup>lt;sup>15</sup> McDonald, Let There Be Light, 294.

<sup>&</sup>lt;sup>16</sup> "History," Diaryland Power Cooperative, accessed Jan. 24, 2017, http://www.dairylandpower.com/who we are/history.php.

<sup>&</sup>lt;sup>17</sup> "The Making of the Public Service Commission of Wisconsin," Public Service Commission of Wisconsin, accessed Jan. 20, 2017, http://psc.wi.gov/aboutUs/anniversary/makingPSC.htm.

<sup>&</sup>lt;sup>18</sup> "The Making of the Public Service Commission of Wisconsin."

<sup>&</sup>lt;sup>19</sup> "Interactive Report," National Inventory of Dams, United States Army Corps of Engineers, accessed January 27, 2017, <a href="http://nid.usace.army.mil/cm\_apex/f?p=838:4:0::NO">http://nid.usace.army.mil/cm\_apex/f?p=838:4:0::NO</a>; these numbers differ from those of the WI Dept. of Natural Resources.

Gile Flowage Dam

Name of Property

Iron County, WI

County and State

small outputs of energy, as well as the installation of additional generators in order to increase electrical output at existing dams.<sup>20</sup>

## Montreal River

The west branch of the Montreal River is a north-flowing, non-navigable river that begins in Island Lake in Iron County and runs to the confluence with the east branch of the Montreal River and on to Lake Superior. It is part of Wisconsin's Lake Superior watershed, which drains approximately nine percent of the state's area into Lake Superior. Though the Lake Superior watershed is comparatively small, it features a large descent in elevation: between six hundred and one thousand feet over an average distance of thirty miles. The limited area of the watershed means that most rivers are small in comparison with other rivers in the state, but they can boast swift flows due to the rapid drop in elevation. Rainfall and snowmelt can be discharged very quickly into Lake Superior, meaning streams can fluctuate from small to raging and back again in very short time periods. This makes the steady supply of water for hydroelectric generation a difficult task; however, the reservoir at Gile serves to alleviate a potentially volatile water supply, by regulating the flow of water for its downstream hydroelectric facilities.

#### Conclusion

The Gile Flowage Dam was evaluated for the National Register of Historic Places under Criteria A and C in the areas of industry and engineering. Under Criterion A, the Gile Flowage Dam does not produce electricity, and is only tangentially related to the hydroelectric industry through its control of water flows for use at downstream hydro projects. An evaluation of the Gile Flowage Dam as part of a larger linear resource in connection with the downstream hydroelectric projects was beyond the scope of current investigations. In addition, as a fairly common example of a dam property with only a moderate degree of integrity due to the infill of the gatehouse window openings, the Gile Flowage Dam does not appear to hold significance under Criterion C. No evidence was found to suggest significance under Criterion B or D. As a result, the Gile Flowage Dam is not recommended for listing in the NRHP under any criteria.

<sup>&</sup>lt;sup>20</sup> "Hydro-electric generation," Wisconsin Department of Natural Resources, accessed January 27, 2017, http://dnr.wi.gov/topic/Dams/hydroElectric.html.

<sup>&</sup>lt;sup>21</sup> Leonard S. Smith, *The Water Powers of Wisconsin: Wisconsin Geological and Natural History Survey*, (Madison, Wisconsin: State of Wisconsin, 1908), 250.

Gile Flowage Dam	
Name of Property	_

Iron County, WI	
County and State	

# 9. Major Bibliographical References

**Bibliography** (Cite the books, articles, and other sources used in preparing this form.)

- Buenker, John D. *The History of Wisconsin: The Progressive Era, 1893-1914*. Volume 4. William Fletcher Thompson, General Editor. Madison: State Historical Society of Wisconsin, 1998.
- City of Montreal. "History." Accessed June 24, 2022, https://montrealwis.com/.
- Diaryland Power Cooperative. "History." Accessed Jan. 24, 2017. http://www.dairylandpower.com/who we are/history.php.
- Friends of the Gile Flowage. "Brief History of the Gile Flowage." Accessed June 24, 2022, https://www.friendsofthegile.org/home/flowage-facts.
- Glad, Paul W. *The History of Wisconsin: War, a New Era, and Depression*. Volume 5. William Fletcher Thompson, General Editor. Madison: State Historical Society of Wisconsin, 1990.
- Heggland, Timothy. "Saxon Falls Determination of Eligibility." Northern States Power Company. September 14, 1988
- McDonald, Forrest. Let There Be Light: The Electric Utility Industry in Wisconsin, 1881-1955. Madison, WI: The American History Research Center, 1957.
- Public Service Commission of Wisconsin "The Making of the Public Service Commission of Wisconsin." Accessed Jan. 20, 2017. http://psc.wi.gov/aboutUs/anniversary/makingPSC.htm.
- Smith, Leonard S. *The Water Powers of Wisconsin: Wisconsin Geological and Natural History Survey*. Madison, Wisconsin: State of Wisconsin, 1908.
- United States Army Corps of Engineers: National Inventory of Dams. "Interactive Report." Accessed January 27, 2017. http://nid.usace.army.mil/cm/apex/f?p=838:4:0::NO.
- Wisconsin Department of Natural Resources. "Hydro-electric generation." Accessed January 27, 2017. http://dnr.wi.gov/topic/Dams/hydroElectric.html.
  - -- "Gile Flowage." Accessed June 24, 2022, https://dnr.wi.gov/lakes/lakepages/LakeDetail.aspx?wbic=2942300&page=facts.

e of Property		County, W
e of Property	Cour	nty and State
Previous documentation on file	e (NPS):	
preliminary determination	of individual listing (36 CFR 67) has been requ	iested
previously listed in the Nat		iestea
previously determined elig		
designated a National Histo		
recorded by Historic Amer	rican Buildings Survey #rican Engineering Record #	
recorded by Historic Affier	rican Landscape Survey #	
Primary location of additional	data:	
State Historic Preservation	Office	
Other State agency		
x Federal agency		
Local government		
University		
x Other		
	Friends of the Gile Flowage	
Historic Resources Survey Nur	mber (if assigned): <u>244690</u>	_
10. Geographical Data		
10. Geographical Data		
10. Geographical Data  Acreage of Property 1.65 a	acres	
	ncres	
Acreage of Property 1.65 a		
Acreage of Property 1.65 a		
Acreage of Property1.65 a  Use either the UTM system or la	atitude/longitude coordinates	
Acreage of Property 1.65 a  Use either the UTM system or la  Latitude/Longitude Coordinat	atitude/longitude coordinates	
Acreage of Property1.65 a  Use either the UTM system or la  Latitude/Longitude Coordinat  Datum if other than WGS84:	atitude/longitude coordinates	
Use either the UTM system or la  Latitude/Longitude Coordinat  Datum if other than WGS84:  (enter coordinates to 6 decimal p	es blaces)	
Acreage of Property1.65 a  Use either the UTM system or la  Latitude/Longitude Coordinat  Datum if other than WGS84:	atitude/longitude coordinates	
Acreage of Property1.65 a  Use either the UTM system or la  Latitude/Longitude Coordinat  Datum if other than WGS84: (enter coordinates to 6 decimal p	es blaces)	
Acreage of Property1.65 a  Use either the UTM system or la  Latitude/Longitude Coordinat  Datum if other than WGS84: (enter coordinates to 6 decimal p  1. Latitude:	etitude/longitude coordinates  es  places)  Longitude:	
Acreage of Property1.65 a  Use either the UTM system or la  Latitude/Longitude Coordinat  Datum if other than WGS84: (enter coordinates to 6 decimal p  1. Latitude:  2. Latitude:	ces  Dlaces)  Longitude:  Longitude:	
Acreage of Property1.65 a  Use either the UTM system or la  Latitude/Longitude Coordinat  Datum if other than WGS84:  (enter coordinates to 6 decimal p  1. Latitude:	etitude/longitude coordinates  es  places)  Longitude:	

Gile Flowage Dam	Iron County, WI
Name of Property	County and State

# Or

#### **UTM References**

Datum (indicated on USGS map):

NAD 1927 or × NAD 1983

1. Zone: 15N Easting: 712994 Northing: 5145054

2. Zone: 15N Easting: 713144 Northing: 5145135

3. Zone: 15N Easting: 713194 Northing: 5145132

4. Zone: 15N Easting: 713190 Northing: 5145105

5. Zone: 15N Easting: 713154 Northing: 5145102

6. Zone: 15N Easting: 713010 Northing: 5145026

# **Verbal Boundary Description** (Describe the boundaries of the property.)

The historic boundary for the Gile Flowage Dam is a polygon that encompasses the earthen dikes, tainter gate, and gatehouse, as well as the intake and tailrace areas immediately north and south of the dam structure. Beginning at the southeast corner of the boundary, where the line of the boulders atop the dike above intersects the shoreline, the boundary travels approximately 670 feet southwest along the edge of the stone rip rap at the shoreline to the end of the rip rap at the western side. The boundary then turns north and travels approximately 90 feet up and over the western end of the earthen dike before turning northeast and traveling approximately 700 feet along the base of the earthen dike, across the Montreal River and dam tailrace to the end of the boulder line at the eastern side. The boundary then travels south along the boulder line for approximately 100 feet to the point of beginning.

## **Boundary Justification** (Explain why the boundaries were selected.)

The historic boundary was delineated to encompass the structures and building of the Gile Flowage Dam project. The intake and tailrace areas immediately north and south of the structure were also included as part of the setting of the district. While the structure of the earthen dike extends 1,100 feet, the historic boundary for the district encompasses only that portion of the dike that is visually evident in the field. The eastern boundary line is visually defined by the line of boulders at the earthen dike's eastern edge. The western boundary line

Gile Flowage Dam	Iron County, WI
Name of Property	County and State

is marked by the end of the stone rip rap at the earthen dike's western end. The northern boundary line follows the base of the earthen dike, crossing the Montreal River and encompassing the tailrace and a portion of the downstream. The southern boundary line follow the edge of the stone rip rap along the shore of the Gile Flowage, encompassing the intake area immediately north of the tainter gate and gatehouse.

11. Form Prepared By				
name/title: Kelly Blaubach, Architec	tural Histor	ian		
organization: University of Wisconsin-Milwaukee, Cultural Resource Management				
street & number: 3413 N. Downer Av	enue		-	
city or town: Milwaukee	state:	WI	zip code: 53201	
e-mail <u>kjblaub@uwm.edu</u>			<u> </u>	
telephone: 414-251-7361				
date: 8-31-2022				

### **Additional Documentation**

Submit the following items with the completed form:

- Maps: A USGS map or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- Additional items: (Check with the SHPO, TPO, or FPO for any additional items.)

Gile Flowage Dam

Name of Property

Iron County, WI
County and State

# **Photographs**

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

# **Photo Log**

Name of Property: Gile Flowage Dam

City or Vicinity: City of Montreal

County: Iron County State: Wisconsin

Photographer: Kelly Blaubach

Date Photographed: 7/27/2022

Description of Photograph(s) and number, include description of view indicating direction of camera:

Please see Attachment 1 for Photo Log.

- 1 of 14. Gile Flowage Dam, overview, looking northwest
- 2 of 14. Gile Flowage Dam, overview, looking west
- 3 of 14. Gile Flowage Dam, overview, looking west
- 4 of 14. Top of east earthen dike, looking west
- 5 of 14. East earthen dike, looking west
- 6 of 14. Gatehouse, east elevation
- 7 of 14. Gatehouse, south elevation
- 8 of 14. Gatehouse, west elevation
- 9 of 14. Gatehouse, north elevation
- 10 of 14. Gatehouse and tailrace, looking southwest
- 11 of 14. Gated spillway and tailrace, looking southwest
- 12 of 14. Gated spillway and sluiceway outlet, looking southwest
- 13 of 14. West earthen dike, looking west
- 14 of 14. Tailrace and downstream, looking northwest

NPS Form 10-900	OMB Control No. 1024-0018	
Gile Flowage Dam		Iron County, WI
Name of Property		County and State

Paperwork Reduction Act Statement: This information is being collected for nominations to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.). We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

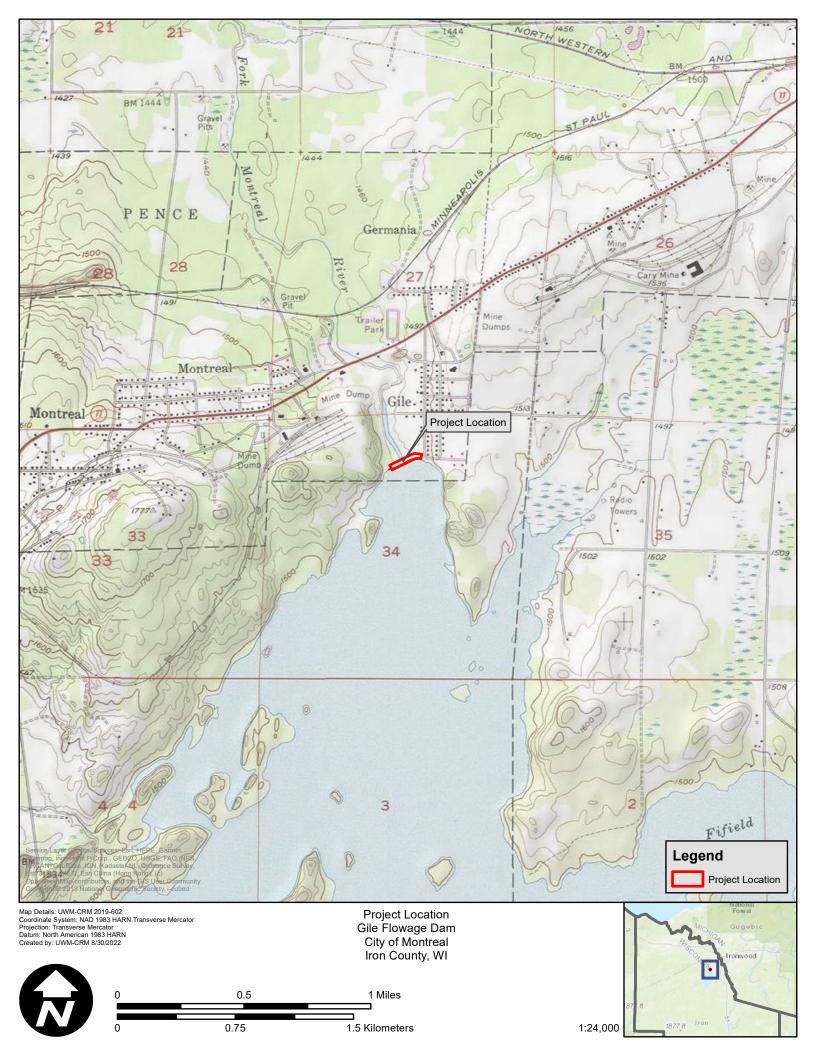
**Estimated Burden Statement**: Public reporting burden for each response using this form is estimated to be between the Tier 1 and Tier 4 levels with the estimate of the time for each tier as follows:

Tier 1 - 60-100 hours Tier 2 - 120 hours Tier 3 - 230 hours Tier 4 - 280 hours

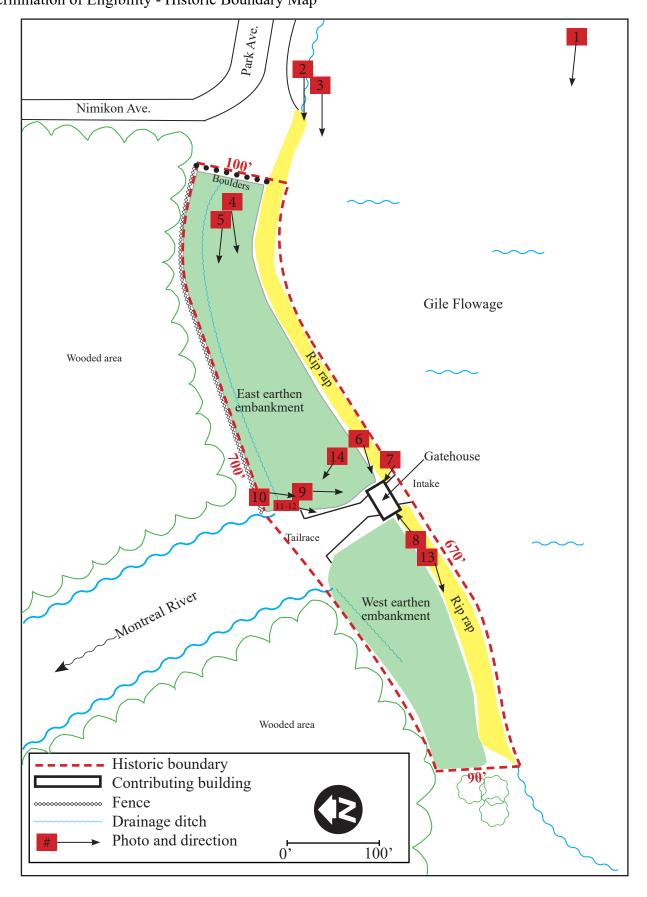
United States Department of the Interior

National Park Service / National Register of Historic Places Registration Form

The above estimates include time for reviewing instructions, gathering and maintaining data, and preparing and transmitting nominations. Send comments regarding these estimates or any other aspect of the requirement(s) to the Service Information Collection Clearance Officer, National Park Service, 1201 Oakridge Drive Fort Collins, CO 80525.



Gile Flowage Dam Park Street and Nimikon Avenue at the Montreal River City of Montreal Iron County, WI Determination of Eligibility - Historic Boundary Map



# Gile Flowage Dam, AHI 244690 Nimikon Avenue and Park Street City of Montreal Iron County, WI

Photographed by UWM-CRM July 27, 2022 Images on file at UWM-CRM

Photo 1 of 14 Gile Flowage Dam, overview, looking northwest

Photo 2 of 14 Gile Flowage Dam, overview, looking west

Photo 3 of 14 Gile Flowage Dam, overview, looking west

Photo 4 of 14 Top of east earthen dike, looking west

Photo 5 of 14 East earthen dike, looking west

Photo 6 of 12 Gatehouse, east elevation

Photo 7 of 14 Gatehouse, south elevation

Photo 8 of 14 Gatehouse, west elevation

Photo 9 of 14 Gatehouse, north elevation

Photo 10 of 14 Gatehouse and tailrace, looking southwest

Photo 11 of 14 Gated spillway and tailrace, looking southwest

Photo 12 of 14 Gated spillway and sluiceway outlet, looking southwest

Photo 13 of 14 Top of west earthen dike, looking west

Photo 14 of 14 Tailrace and downstream, looking northwest



Photo 1 of 14



Photo 2 of 14



Photo 3 of 14



Photo 4 of 14



Photo 5 of 14



Photo 6 of 14



Photo 7 of 14



Photo 8 of 14



Photo 9 of 14



Photo 10 of 14



Photo 11 of 14



Photo 12 of 14



Photo 13 of 14



Photo 14 of 14