Rest Lake Dam: From The Beginning

By Jim Bokern

For 136 years, Rest Lake Dam has stood out as one of the most iconic destinations in Manitowish Waters. Surveyors declared Rest Lake as the best dam site on the Upper Chippewa River basin long before our town's first pioneers arrived. The numerous iterations of dams that raised the MW chain's water levels transformed the region, while the operations of Rest Lake Dam sparked a century of legal battles.

In 1878, the Army Corps of Engineers conducted a series of surveys along the Chippewa River basin to facilitate dam construction mostly for river drive logging. Mr. J. H. Dager led the survey for the Rest Lake Dam. Dager and his men proclaimed the Rest Lake dam site as excellent, able to hold back 25 feet of water. After extensive research, Dager documented at the original dam site located a few meters downstream of the outlet of Vance Lake (yellow arrow). In 1880, the U.S. Congress changed the height of the Rest Lake Dam to 15 feet and 250 feet in length. Ultimately, the dam was moved upstream to its present location (red arrow) at the outlet of Rest Lake.

Frederick Weyerhaeuser's logging syndicate along the Chippewa River system created and directed most logging operations from 1886-1912. One part of Weyerhaeuser's syndicate was the Chippewa River Improvement and Log Driving Company, under the authority of Charles Henry, who directed the Rest Lake Dam operations from 1887-1888. Henry hired famous Northwoods logging engineer William England (aka Billie the Beaver) to lead the construction of the first Rest Lake Dam, starting in 1887.

A large river drive logging camp was constructed next to the dam on what is today the Pea Patch's lower parking lot. Recent research of deeds in the area of Rest Lake Dam proves Weyerhaeuser's Mississippi River Lumber Co. actually owned the land on Rest Lake's outlet from 1886-1902, and afterwards Weyerhaeuser's Chippewa Lumber and Boom Co. took over operations until 1912.

The logging camp at Rest Lake Dam had a central building called a dingle. The dingle was a cold space that essentially linked the bunkhouse to the cook house/dining area. This camp structure looked like one big building, but it had three distinct internal rooms. Additionally, a blacksmith shop, sheds, dam keeper's house, outhouses, and barns were all part of the logging camp.

River drive loggers only moved white pines down river due to their unique buoyancy. A paddlewheel steam boat rafted the logs across the chain to Rest Lake Dam, where logs were pushed through a sluice or chute in the dam for their voyage to Chippewa Falls or the Mississippi River. At the height of the river drive logging era, Rest Lake Dam held back 10 to 16 feet of water to facilitate river drive operations.

In 1901, a new dam was built at Rest Lake to facilitate the largest log drive ever on the Chippewa River. A year earlier, William Irvine, working for Weyerhaeuser, purchased 75 million feet of timber, in what they called "…the last great forest…," to be logged for two years before a massive log drive, starting in April of 1901. To make the drive happen, 150 "river pigs" (river drive experts) were at Rest Lake Dam ready to herd the logs downstream.

The Chippewa Lumber and Boom Co. seemed to be created to outsource logging and to sell assets as Weyerhaeuser's syndicate began gathering funds to move to Washington state. In 1905, at Rest Lake Dam, Brooks and Ross rented the logging camp and used the dam to raise water for moving red pines to Riley's railroad hoist on the east side of Rest Lake. The Rest Lake Dam simultaneously facilitated declining river drive logging of white pines and ensured growing railroad logging of red pines to railroad hoists by steamboat.

In 1912, the Chippewa Lumber and Boom Co. sold its interests in Rest Lake Dam to the newly created Chippewa & Flambeau Improvement Co., which was not owned by Frederick Weyerhaeuser. By 1914, court documents revealed growing disputes between local residents and the Chippewa & Flambeau Improvement Co., regarding dam operations and the dam being in terrible disrepair. As it turned out, the Chippewa & Flambeau Improvement Co. was interested in holding back maximum amounts of water (15 feet or more above the original water level) and then selling the water to downstream mills. This practice would have continued the disastrous riparian damage witnessed during the river drive era.

In 1914, a handful of residents met at Bucks Resort with the Wisconsin Railroad Commission to challenge the Chippewa & Flambeau Improvement Co.'s operations of Rest Lake Dam. Like David dropping Goliath, the town triumphed over the company and began the legal precedent of protecting riparian rights on the chain. The Chippewa & Flambeau Improvement Co. appealed the decision, and the Wisconsin Supreme Court sided once again with landowners on the MW chain of lakes. Compelling evidence cited under appeal to the Wisconsin Supreme Court included that high water and waves caused an entire bank with 30 pine trees to collapse into a lake.

Ironically, these legal losses by the Chippewa & Flambeau Improvement Co. led to it purchasing nearly all the land around what would become the Turtle Flambeau Flowage to avoid similar conflicts. Eventually, these acquisitions set up Governor Tommy Thompson to purchase the Turtle Flambeau Flowage from the Chippewa & Flambeau Improvement Co. to create a 13,000-acre scenic water area in 1992.

Local historian Michael Dunn observed that many of the repair issues regarding Rest Lake Dam were delayed at the time: "The reservoir company replaced the wooden dam with the present masonry dam in the mid-1920s." Clearly, the fledging community of what would become Manitowish Waters was emerging from the logging operations era and the expanded chain of lakes resulting from Rest Lake Dam. Rail access to nearby Manitowish and Powell rail stations provided both supplies and passengers to support a budding tourist industry, starting before 1900.

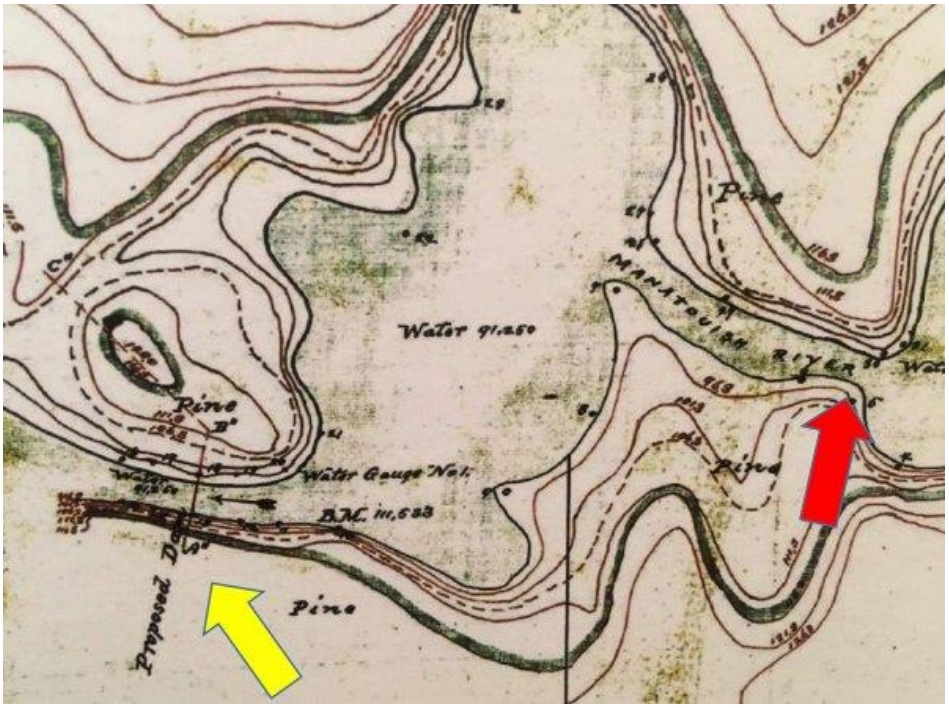
A new concrete dam and a supportive Rest Lake Dam operating order with the Chippewa & Flambeau Improvement Co. stabilized the chain of lakes. The Roaring '20s ushered in more tourists and more summer residents seeking cottages. The good times, beautiful lakes, isolation and rebounding forests proved to be attractive to a wide array of visitors. Distant law enforcement provided guests easy access to forbidden liquor during Prohibition, gambling and more.

The fall of 1929 shifted the fortunes of most Americans as the Great Depression gripped our nation. At Rest Lake Dam, two new projects were launched to improve fisheries and attract scarce tourists. In 1931, Harry Barr from Ironwood, Michigan created the first successful fishway, or fishlock, to safely transport spawning fish over Rest Lake Dam. In 1932, the town of Spider Lake (now Manitowish Waters) entered in to an agreement with the Wisconsin Conservation Commission to create the first municipal fish hatchery in our state. The town raised $1000 and constructed the Manitowish Waters Fish Hatchery a few yards downstream from Rest Lake Dam. The hatchery was a point of community pride, and other Wisconsin towns soon copied this progressive plan.

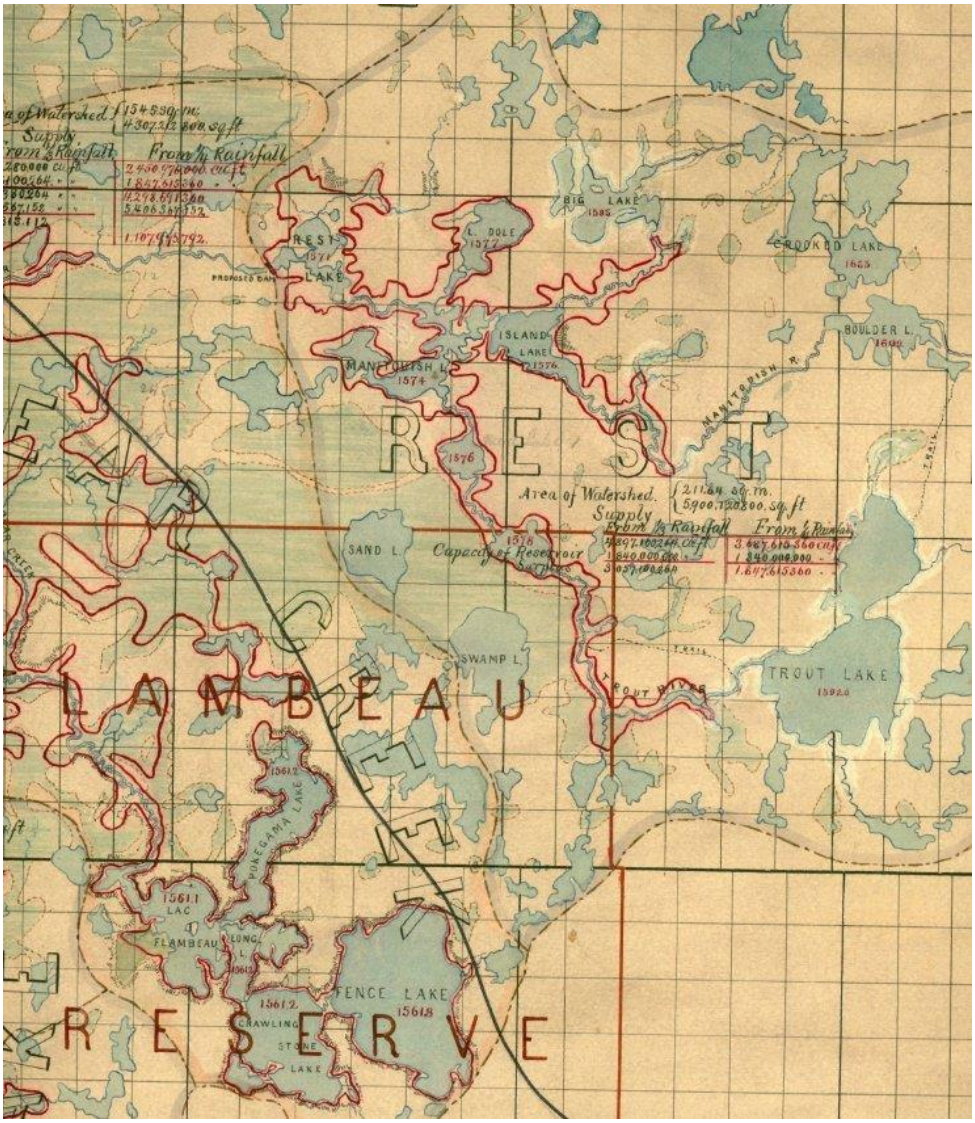
Late in 1936, Spider Lake residents launched a new petition to modify the operations of Rest Lake Dam through the Public Service Commission to continue their protection of fisheries. The operating orders resulting from the 1914 and 1916 court decisions set the summer height of the chain at 8.5 feet and reduced winter water levels to 2.5 feet. Petitioners documented 17 sandbars across the chain that created “potholes” that isolated and killed fish when the chain was lowered to the required 2.5 feet. Importantly, in 1937, the folks on the MW chain of lakes won in court again, requiring the Chippewa & Flambeau Improvement Co. to shift the winter water level from 2.5 feet to 5 feet. This shift caused the Chippewa & Flambeau Improvement Co. to lose an estimated $25,000 in water revenue annually, as well as to conduct five years of dredging channels through the 17 identified sand bars to open up potholes. The court set the yearly land and floating dredging at a cost of at least $1000 annually.

In 1938, the same petitioners from the chain attempted to raise the winter minimum level to 6 feet. Early in 1939, Wisconsin Public Service rejected the new petition and affirmed the 1937 winter water level of 5 feet. Petitioners were scolded for requesting to limit Chippewa & Flambeau Improvement Co. to 29% of their original water access and noted that the dam served broader public interest than just fishing or recreation. By 1939, hydroelectric power had increasingly become more important to rural and urban communities.

Rest Lake Dam continues to be a focal point in Manitowish Waters. In 2022-2023, the old Barr Fishway’s tunnel eroded, causing a significant leak. Consequently, Xcel Energy, which today holds the corporate authority from the Chippewa & Flambeau Improvement Co., lowered the water on the MW chain closer to the old 2.5 feet operating order. This spring, timely rains have ensured that we can enjoy a “full pool” of 8.5 feet for the summer of 2024.

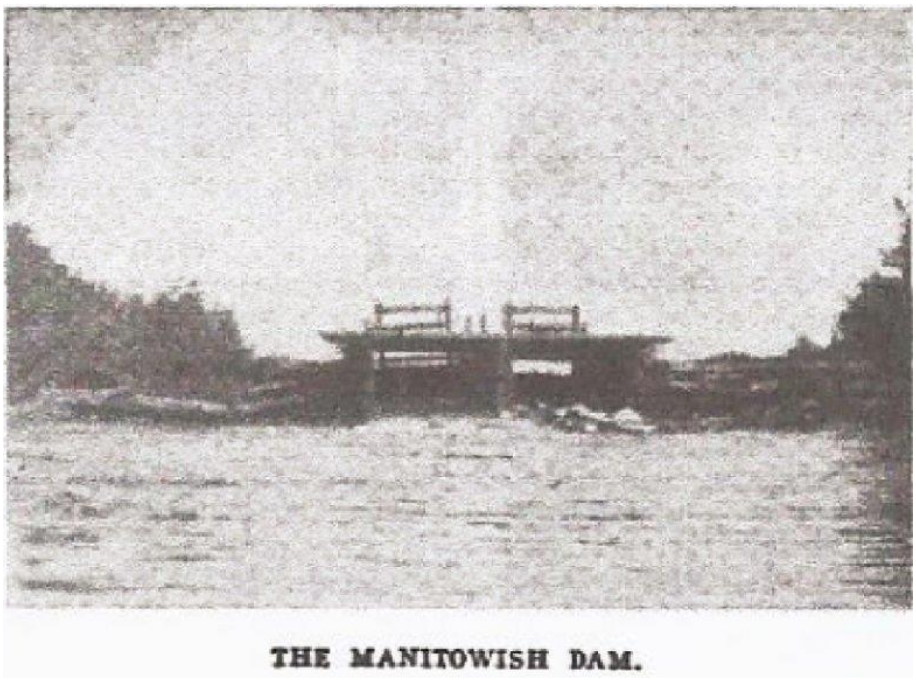


Source: Charles Allen Expedition 1878, Army Corps of Engineers
The yellow arrow indicates the originally dam site with 25 feet of capacity.
The red arrow indicates the actual dam site with 15 feet of capacity.



Source: Charles Allen Expedition 1878, Army Corps of Engineers

The red lines illustrate where the shoreline would exist with a 25-foot high dam at Rest Lake.



THE MANITOWISH DAM.

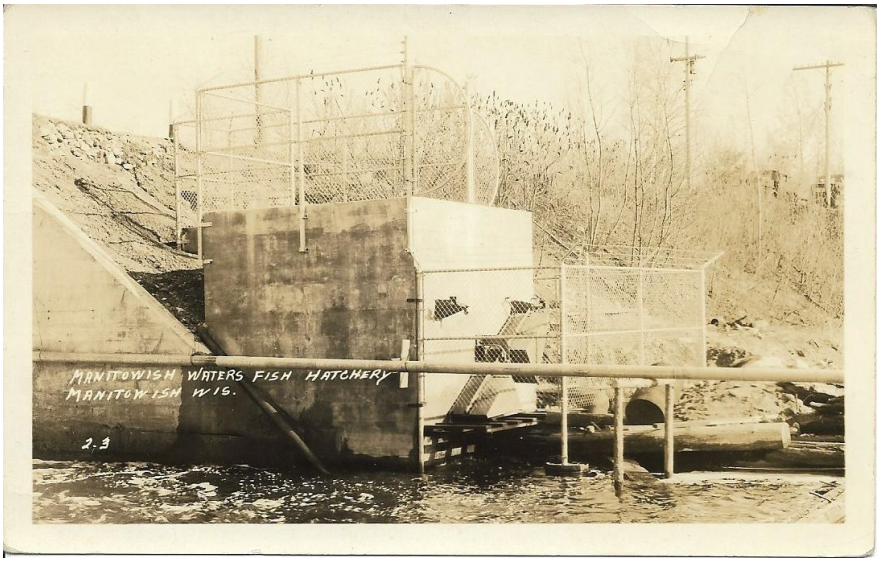
Upstream view of Rest Lake Dam in 1899

Dam at Manitowish

Rest Lake Dam Logging Camp operated by Mississippi River Lumber Co. 1887-1902 & Chippewa Lumber and Boom Co. 1903-1912.
Flancher Collection from Manitowish Waters Historical Society

A new dam was built from 1900-1901.

First concrete Rest Lake Dam built in the 1920s.



Barr Fishlock built in 1932.

Fish Hatchery, circa 1940