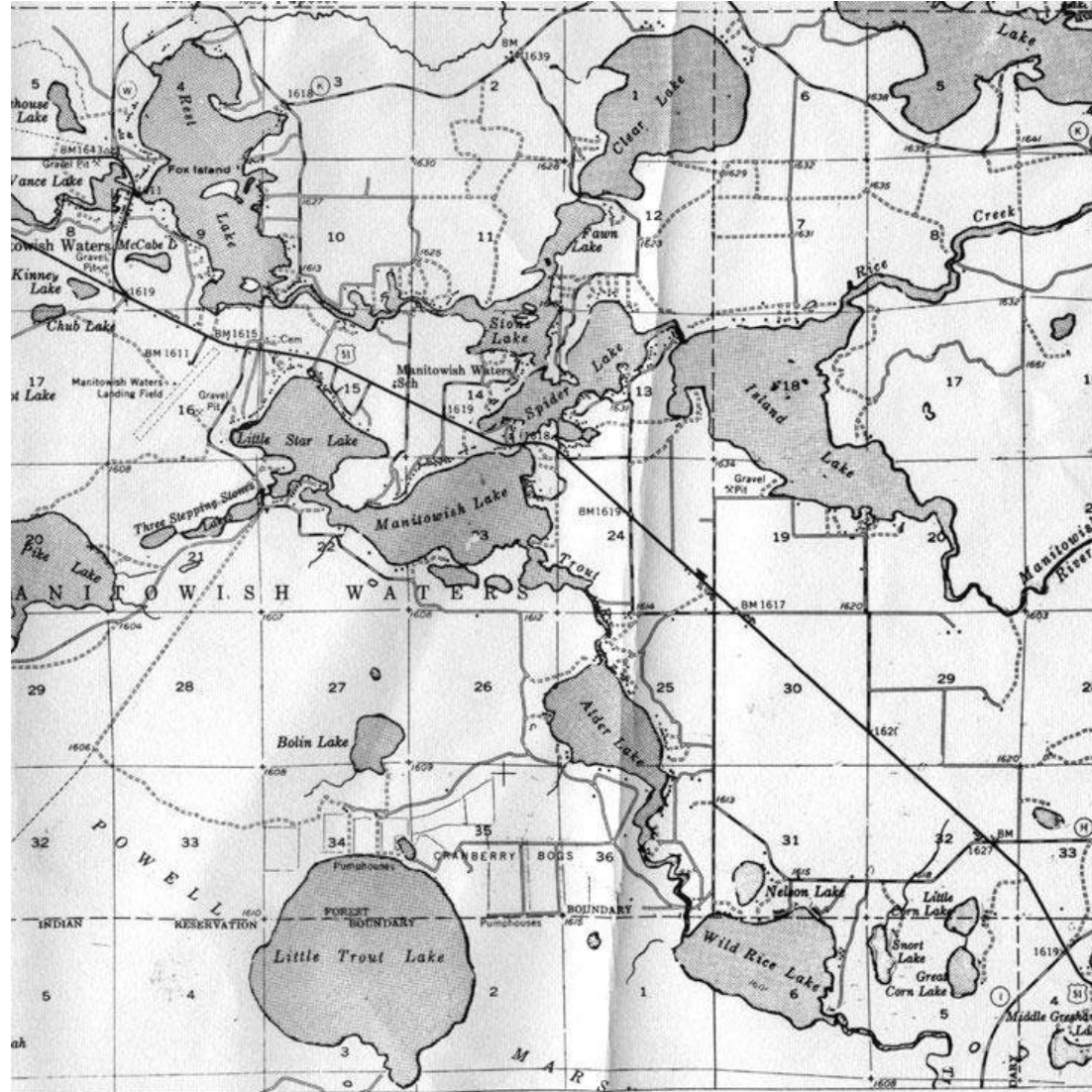
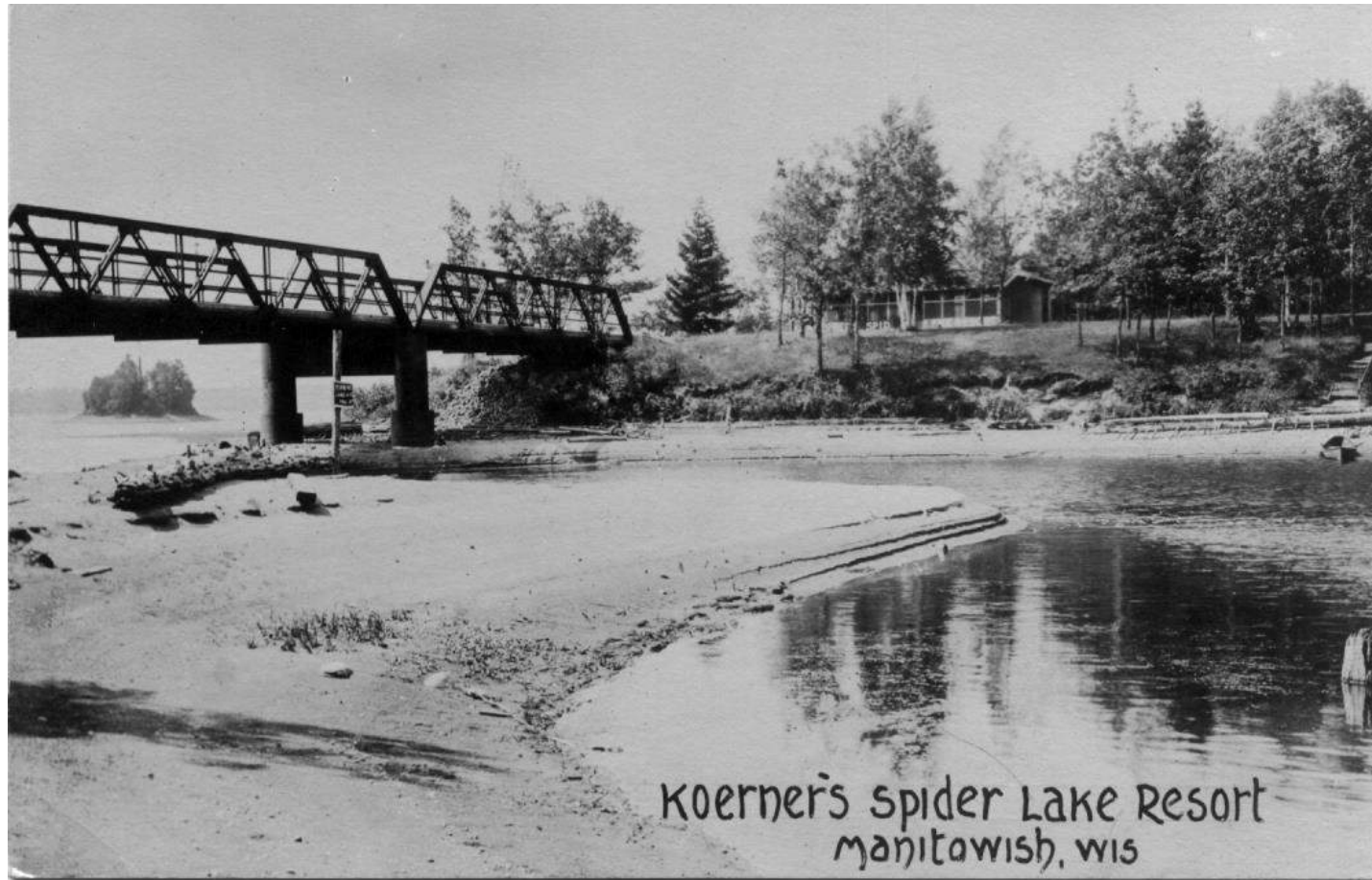


Manitowish Waters Historic Mysteries

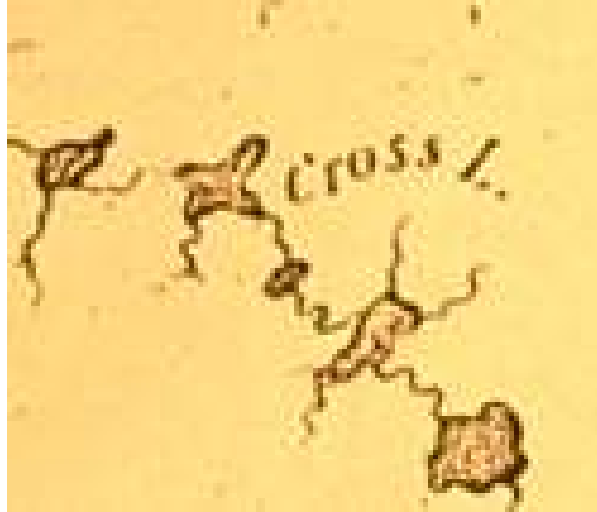


The Manitowish Waters Historic Mystery Project will reveal unsolved mysteries from all lakes connected to the chain through the Trout and Manitowish Rivers. These mysteries continue to challenge those interested in documenting and clarifying the robust history of Manitowish Waters.



Koerner's Spider Lake Resort
Manitowish, Wis

Solving these mysteries will require additional research, collaboration, and reasoned conclusions based on our evidence. We welcome all who are interested in solving these mysteries and documenting area history to join us as we grow the Manitowish Waters Historical Society.



TREATY WITH THE CHIPPEWA, 1837.

July 29, 1837. | 7 Stat., 536. | Proclamation, June 15, 1838

From Lac De Flambeau:

*Pish-ka-ga-ghe, or the White Crow,
Na-wa-ge-wa, or the Knee,
O-ge-ma-ga, or the Dandy,
Pa-se-quam-jis, or the Commissioner,
Wa-be-ne-me, or the **White Thunder**.*

Because Manitowish Waters has a well documented early history only four lakes will be explored in this first presentation



Benson Lake Mysteries

- How much change/environmental impact did the log drives have on Benson Lake, especially in regard to the entry of the Manitowish River?
- Why was Benson Lake omitted on the original land surveys but not the geologist maps from the 1840's?
- Was the rapids above Benson and Sturgeon Lakes utilized by the Ojibwa as fish spearing sites utilizing weirs?



Evaluating Minnesota's
HISTORIC DAMS
A Framework for Management

“Flashing” logs

Prepared by Principal Investigators:
Sigrid Arnott, Douglas A. Birk, and David Maki

with contributions by Geoffrey Jones

DECEMBER, 2013

The *Annual Report Chief of Engineers to the Secretary of War for the Year 1879* briefly describes the three main types of dams used in Minnesota log transport systems: gated driving dams, “roll” driving dams, and temporary “cutaway” dams.

The lumbermen (loggers, properly speaking) have been in the habit, for years, of building dams at will upon the tributaries and the main streams as well, many of the dams of a permanent character and erected at great cost, while others are temporary structures or "cut-away" dams. These dams pond up the water until a sufficient quantity is collected so that the logs may be floated down to the dam, when they are driven or flashed through, or over, according to the construction of the dam, depending upon the head of water, into the reach below, the process to be repeated at the next lower dam. The term "cut-away" is applied to a cheap temporary dam, without gates or sluices, erected to collect the water above it; sufficient water being collected, an opening is made in the dam, the logs run through, and the dam abandoned (Frizzel and Allen 1879:1196).

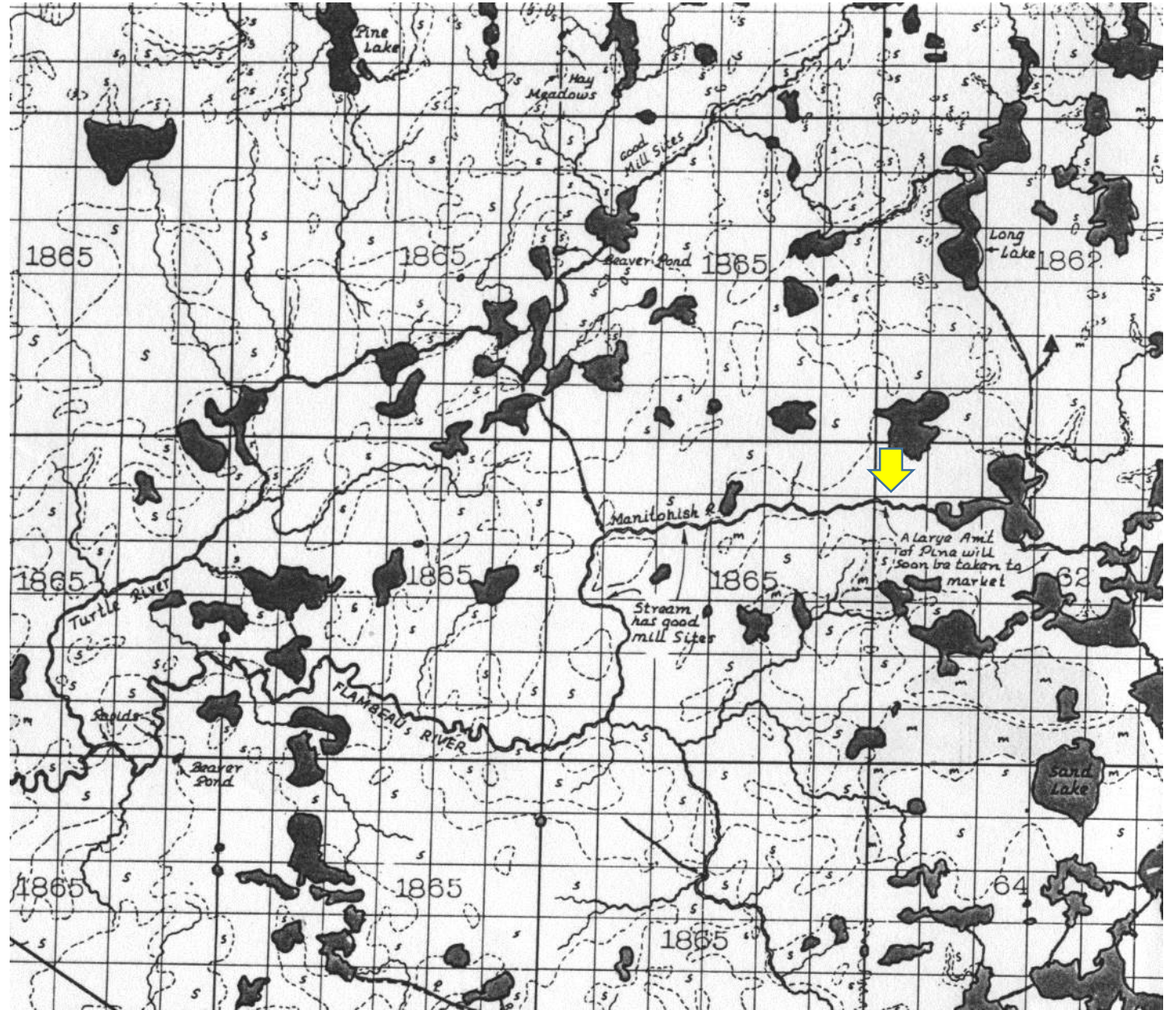
1879 House of Representatives 45th Congress 3rd Session Doc. No. 54 Page 1173

The running of loose logs, and the practice of loggers on the tributaries of the Chippewa, and the Chippewa itself, in shutting off the supply of water, whenever they deem it necessary to do so, by means of huge dams across the streams, until enough water is collected to enable them to gather the logs above and flash them down into the reaches below, are also detrimental to the navigation below Eau Claire. The logs, flashed down thus, from reach to reach, finally enter the main stream. The dams, alternately closed and opened, very seriously affect the stages of water in the stream. The largest of these dams is at Little

An example of an early temporary logging dam with a sluice for logs



Trygg Maps are composite maps from several original land surveys which also contain key cultural details from surveyor journals. Note the yellow arrow pointing at the outlet of Benson Lake noting that: “A large AM’T of Pine will soon be taken to market” This survey was completed in 1862.



1879 House of Representatives 45th Congress 3rd Session Doc. No. 54 p. 1221

small areas of pine are seen.” On the Flambeau, below Turtle River, the timber is of various kinds; birch, ash, soft maple, and poplar on the lower lands and on some of the ridges. On most of the latter, however, white or Norway pine is found. Of the river above the rapids, just above Turtle River, and the Manadonish above its junction to Rest Lake (see map), where another excellent dam-site was found and a survey made, Assistant Dager says: “The river has few rapids, but is one of the crookedest imaginable; the bottom and banks are fine sand and loam, though below the junction of the Manadonish a cluster of bowlders occurs about every mile. Considerable pine, mostly second growth, is found on the high lands, with more poplar and soft wood than is generally seen, up to the junction; above this there is no timber of value; the country is mostly covered with brush. The land is valueless, full of swamps and sink-holes. The valley of the river is from $\frac{1}{2}$ to 1 mile wide, with large grass-meadows on either side; these I learn are considered quite valuable, and have all been taken up by lumbermen. No indication of rock in place is seen within the limits of this survey.”

1879 House of Representatives 45th Congress 3rd Session Doc. No. 54

“....the Manidowish above its junction to Rest Lake (see map), where another excellent dam-site was found and a survey made, Assistant Dager says: “The river has few rapids, but is one of the crookedest imaginable; the bottom and banks are fine sand and loam, though Below the junction of the Manidowish a cluster of bowlders occurs every mile. Considerable pine mostly second growth, is found on the Highlands, with more poplar and softwood than is generally seen, up to the junction; above this there is no timber of value; the country is mostly covered with brush. The land is valueless, full of swamps and Sinkholes. The valley of the river is from 1/2 to 1 mile wide, with large Grass-meadows on either side; these I learned are considered quite valuable, and have all been taken up by lumbermen....”.

Significant sand build-up and widening of the river entering Benson Lake may have been due to “Flashing” logs

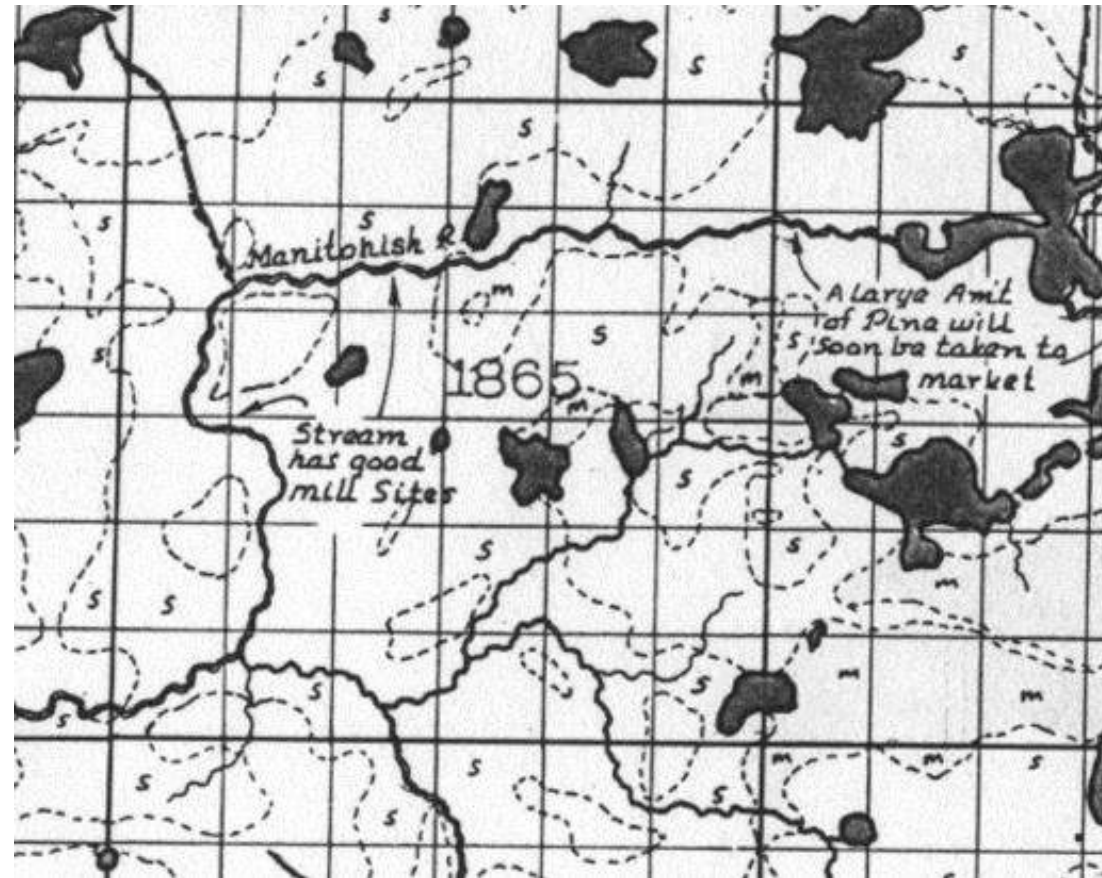


A.B Gray Geologist traveling from 6 Pause Portage to Cross Lake in 1846

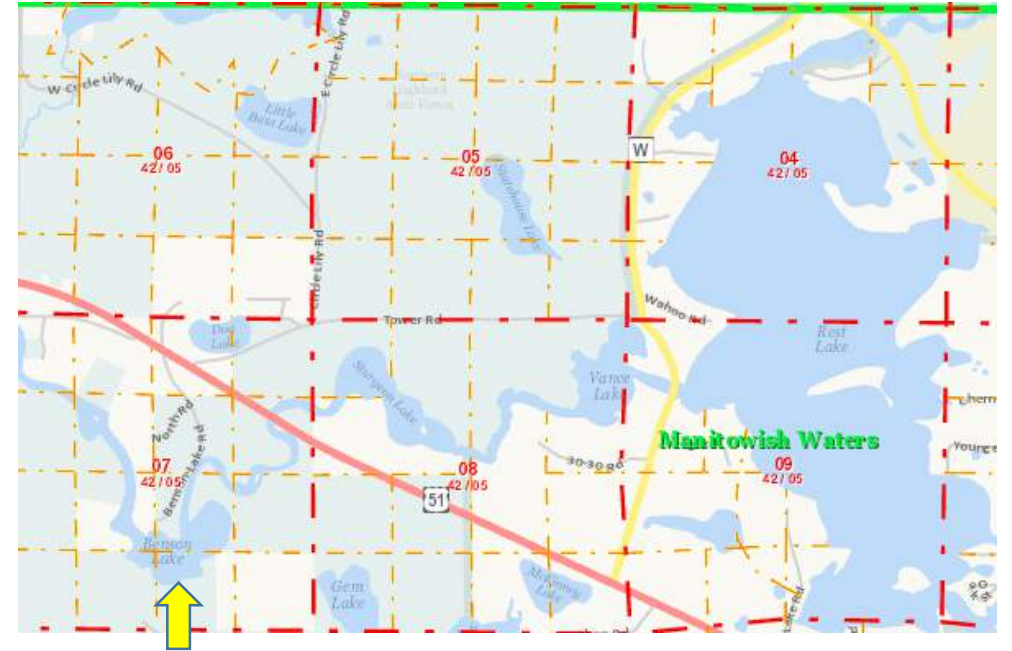
Our course up the river for about 10 or 15 miles, to this lake, was easterly, although the stream curved around in every direction, occasionally opening into small and picturesque lakes, surrounded by high land, with excellent pineries, and narrowing again to a width barely sufficient for the passage of a canoe.

1879 House of Representatives 45th Congress 3rd Session Doc. No. 54 p.1221

The fall of the river from the dam-site at Rest Lake to the junction of the Manadonish and Flambeau Rivers is 18.7 feet. Thence to the crossing of the Wisconsin



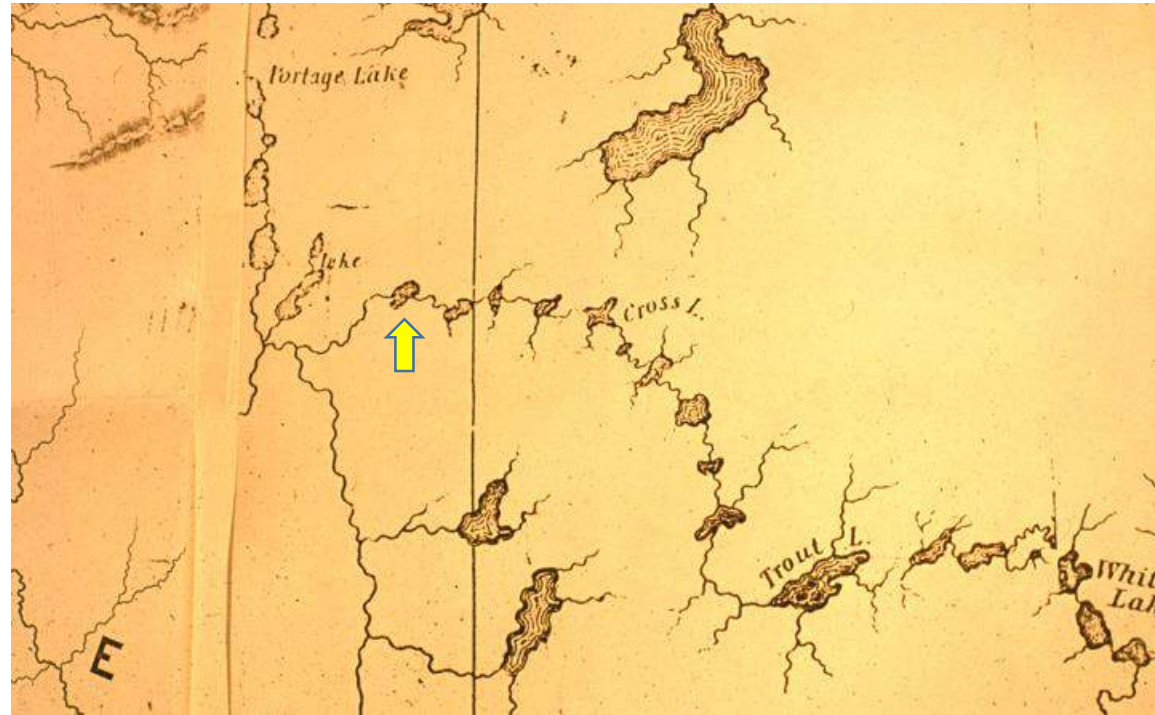
The modern map of Benson Lake clearly marked on the current Vilas County GIS map is omitted from the 1862 Original Survey map



The 1847 map from the Owen Expedition clearly shows Benson Lake



The 1846 map from the A B Gray Map expedition shows several lakes below Rest Lake that would illustrate Benson Lake



Both Benson and Sturgeon Lakes share ideal sites for fish weirs and sturgeon spearing



The picture on the left is of a fish weir on a similar river,
the image on the right is the inlet of Sturgeon lake

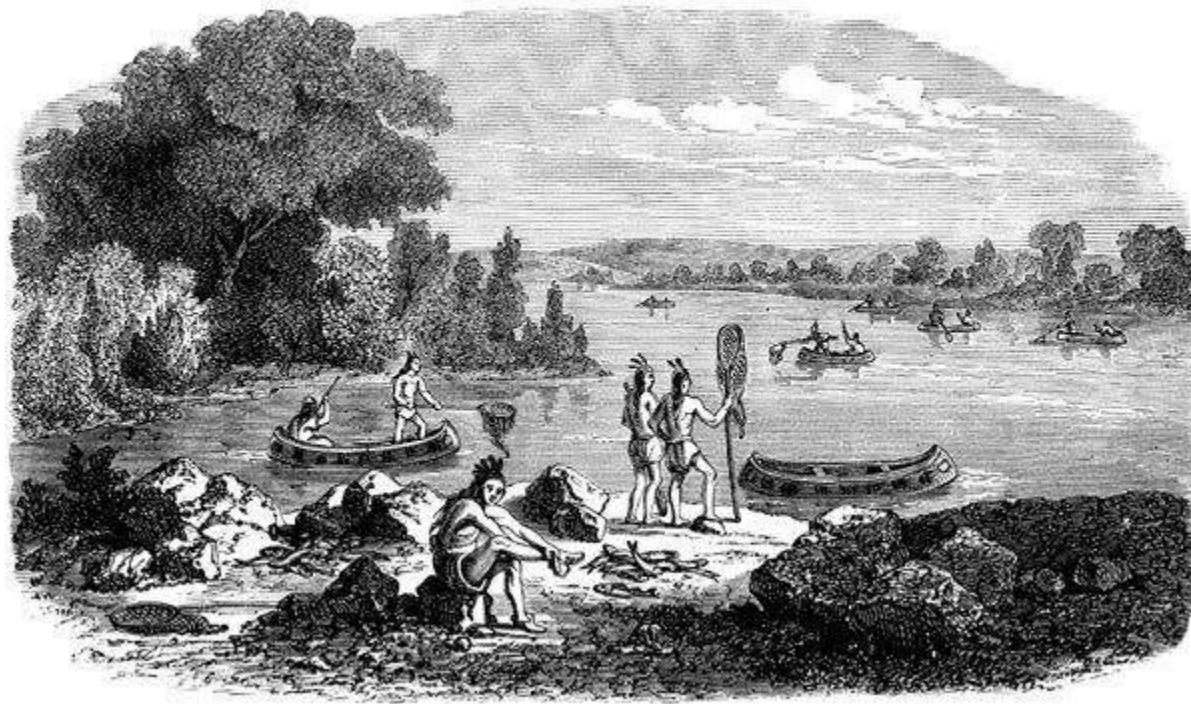


Satellite photo of Sturgeon Rapids and the old logging boom site. This rapids would be perfect for a fish weir.





Historic images of seasonal netting and spearing on rivers



Sturgeon Lake

- Did the Ojibwa use fish weirs to spear sturgeon in the rapids above and below the lake?
- Why did the DNR recreate the upper rapids and remove the logging boom structure?



The Original Surveys from 1862 and 1865 suggests incorrectly Sturgeon Lake was connected to Rest Lake without a river channel. The Surveys miss Statehouse Lake but do include Circle Lily Lake.



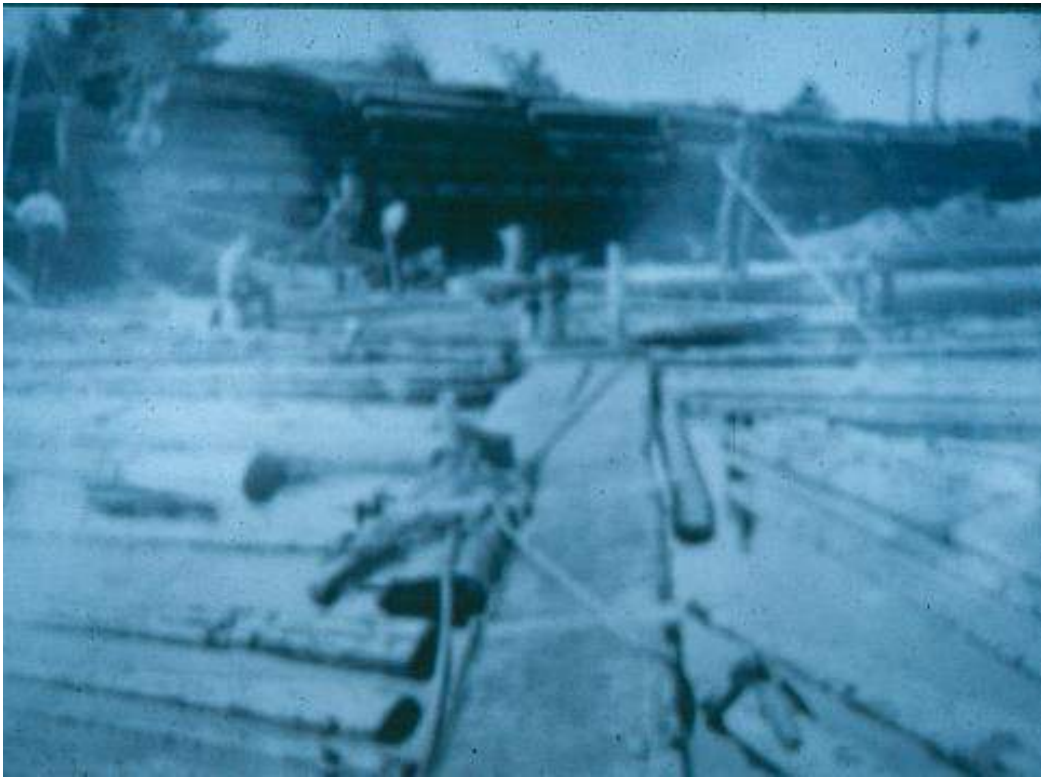
Sturgeon Lake's inlet was exaggerated in the 1865 Land Survey suggesting a wide river or narrow lake. In reality, this narrow river required a logging boom to sort logs to avoid log jams.



Moving large logs like white pine was difficult work. White pine was almost exclusively driven down river due to it's buoyancy. Some referred to white pine as "cork" pine because it floated so well.



On the left logging booms like this operation on Little Star Lake would hoist logs. Logs still remain on the bank of Sturgeon Rapids today.

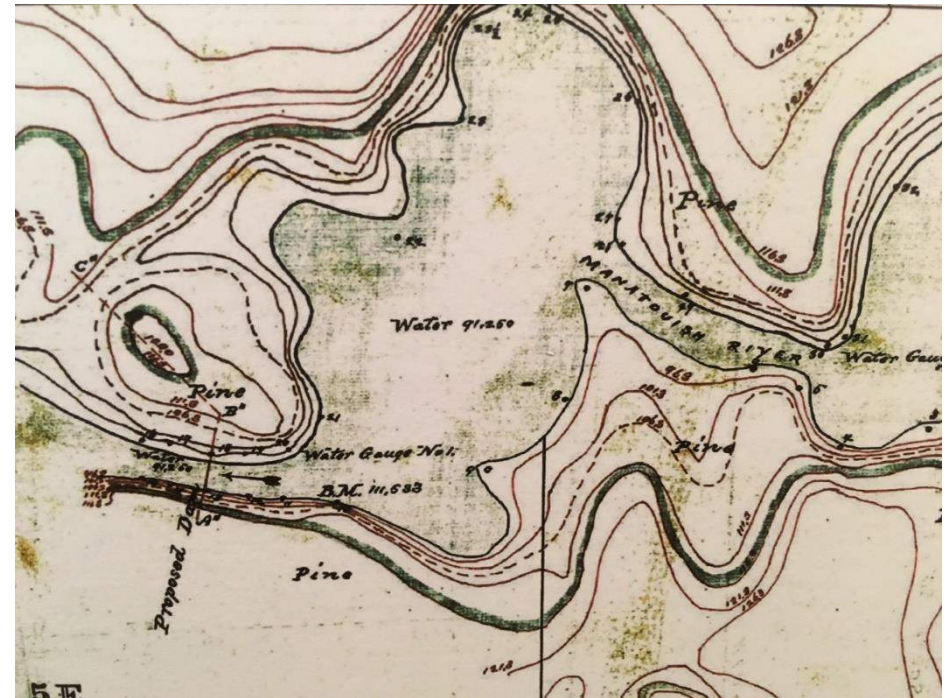


Sturgeon Lake on the left and the logging boom site on the rapids to the right. We need earlier pictures from the of the Sturgeon Rapids to better document this site.



Vance lake

- Why was the original dam site moved?
- Is the large stone in front of the DNR camp site a spirit stone?



This Spirits Stone “ the Pipe of the Manitou” from the headwaters of Lake Chetek is among the most famous in Wisconsin .



late 5

THE PIPE OF THE MANITOU

Chippewa Spirit Stone

Spirits Stones were the focus of early Wisconsin Archaeology

“The superstitions of the existing race of Indians are evidenced by their frequently selecting curiously wrought boulders of rock, called shin-ga-ba-wassins by the Algonquins. These boulders have the essential character of idols. They mark the locality of some supposed god of the air. They are sometimes distinguished by the use of pigments. They are generally waterworn masses upon which no chisel or labor of any kind has been employed except by the addition of Indian pigments.” (Hist. Ind. Tribes, v, 1, p. 94.)

Wisconsin Archaeologist 1907 vol. 7 No 4 pp 166-167

THE MEDICINE STONE.

On the Lac du Flambeau Chippewa Reservation is the so-called "Medicine Stone," of which Mr. George A. West has kindly furnished the following brief description:

"A manitou rock is located in the north-west part of Lac du Flambeau about 200 yards from the nearest shore and stands fully six feet out of the water. It is sugar loaf in form, of trap rock with a number of natural cracks and depressions in some of which tobacco offerings were visible at the time of my visit in July, 1907. The older Indians, I was informed, never pass it without depositing a little tobacco there."

On the shore opposite the stone, which is of huge size, is located the Chippewa village. D. J. Hayes of Joliet, Illinois, who is well informed concerning these Indians, informs the writer that he was given to understand that the stone obtained its name from a former practice of the medicine men, who resorted to it for the purpose of preparing their medicine.

In Crawling Stone Lake, in Vilas County, is the "Crawling Stone," a rock which the Chippewa Indians are said to believe, is gradually creeping across the lake, being propelled by some hidden spirit.

Charles E Brown, "Wisconsin Spirit Stones"

Wisconsin Archeologist Vol 7, No 4

- P. 166 On the Lac du Flambeau Chippewa Reservation is the so- called "Medicine Stone," of which Mr. Gerrge A. Wc-st has kindly furnished the following brief description: "A manitou rock is located in the north-west part of Lac du Flambeau about 200 yards from the nearest shore and stands fully six feet out of the water. It is sugar loaf in form, of trap rock with a number of natural cracks and depressions in some of which tobacco offerings were visible at the time of my visit in July, 1907. The older Indians, I was informed, never pass it without depositing a little tobacco there."
- P. 167 On the shore opposite the stone, which is of huge size, is located the Chippewa village. D. J. Hayes of Joliet, Illinois, who is well informed concerning these Indians, informs the writer that he was given to understand that the stone obtained its name from a former practice of the medicine men, who re-- sorted to it for the purpose of preparing their medicine. In Crawling Stone Lake, in Vilas County, is the "Crawling Stone/" a rock which the Chippewa Indians are said to believe, is gradually creeping across the lake, being propelled by some hidden spirit.



On the left is Medicine Rock on Flambeau Lake, while on the right is a large rock on the inlet of Crawling Stone Lake that may be one of the “crawling stones”



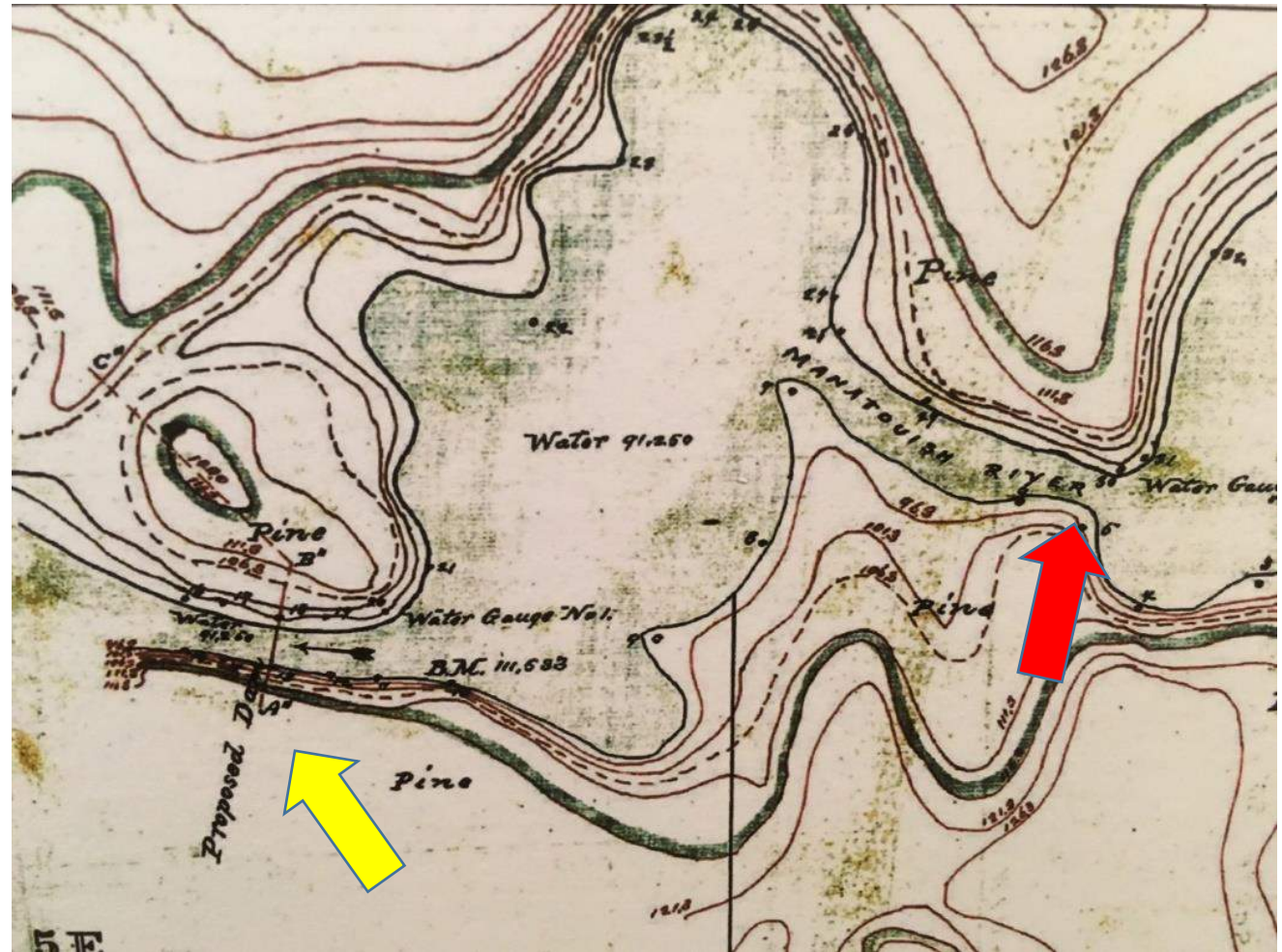
On Vance Lake an undocumented stone shares many characteristics of regional Spirit Stones



The large rock on Vance Lake stands alone as a unique rock near an Ojibwa settlement on Fox Island. The Manitowish River was the primary water route for American Indians like the Ojibwa for hundreds of years and this rock could be culturally significant, as a possible Spirit Stone.



The Rest Lake dam was to be constructed on the outlet of Vance Lake in 1878 and then abruptly moved in 1880.



The Rest Lake Dam was the largest on the Flambeau watershed p.1222

1222

REPORT OF THE CHIEF OF ENGINEERS.

REST LAKE RESERVOIR.

This is the most important of the three surveyed. The water can be raised 25 feet and the dam-site is an excellent one. The detail map will show its characteristics. Its capacity will exceed its supply, the former being 5,645,376,000 cubic feet, while the latter is 4,897,100,264 cubic feet. We can draw from this reservoir for a period of 90 days, per second, 730 cubic feet. The following is a recapitulation of the water that can be furnished from the three reservoirs surveyed :

More than 4 times the water of the other two dams combined p. 1222

Total supply furnished by the reservoirs examined this season on the headwaters of the Flambeau River, or, more properly, the East Fork of the Chippewa River.

	Manadonish River.	
	Supply.	Surplus.
RESERVOIR AT REST LAKE.	Cub. feet.	Cub. feet.
From this we can draw for a period of 90 days, per second	730
From reservoir at Turtle River we can draw for a period of 90 days, per second ...	82
While, could the surplus be elsewhere retained, we could add to the above, per second		436
From reservoir at Butternut Lake, for a like period, we can furnish	75
While, could we retain the surplus, we could add, per second		89
Total	887	525

The “original” dam on Vance Lake would have more than doubled the surface area of the chain p.1230

Reservoir at Rest Lake.

Supply :

Area of watershed, 212 square miles..... 5,910,220,800 square feet.

Average rainfall, 30 inches.

One-third rainfall, 10 inches=0.83 foot.

Amount of water available 4,905,483,264 cubic feet.

Capacity of reservoir, water-rise of dam, 25 feet.

Square feet.

Area of surface=9.5 square miles = 264,844,800

To which must be added 10 square miles..... 278,784,000

Cubic feet.

Now 264,844,800 by 7 feet depth = 1,853,913,600

And 278,784,000 by 10 feet depth..... = 2,787,840,000

4,641,753,600

Now also add for the 10 feet rise an area of 12 square miles = 334,540,800 square feet, which averages 3 feet depth = 1,003,622,400 cubic feet.

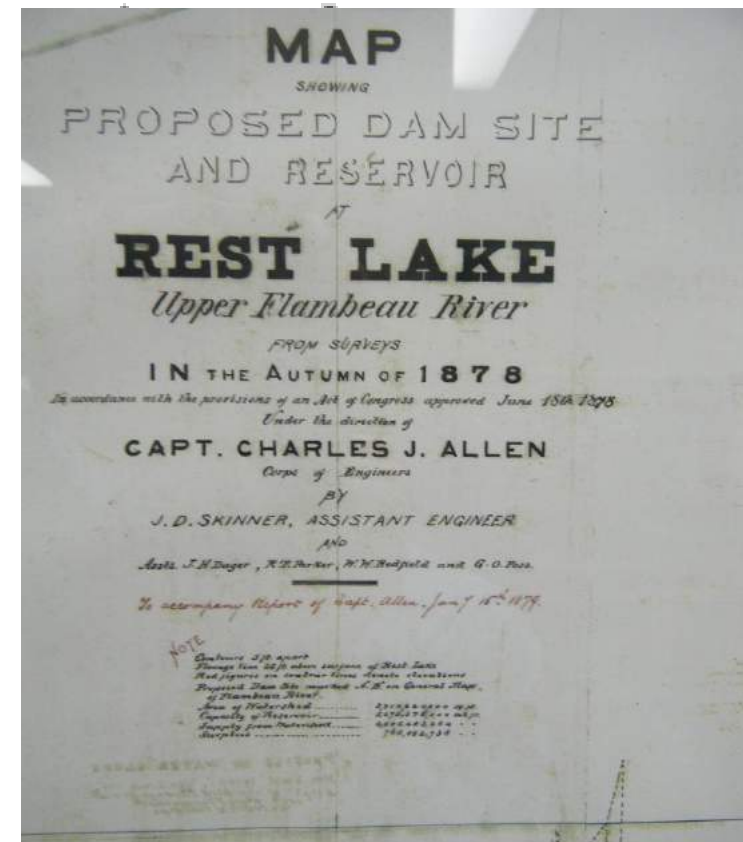
Cubic feet.

Total capacity 5,675,376,000

Total supply 4,905,483,264

For some unknown reason, this dam was never built
p. 1208.

Rest Lake reservoir, the next, to be created by a dam 25 feet high, will have a capacity of 5,661,462,400 cubic feet; the supply being 4,897,100,264 cubic feet.

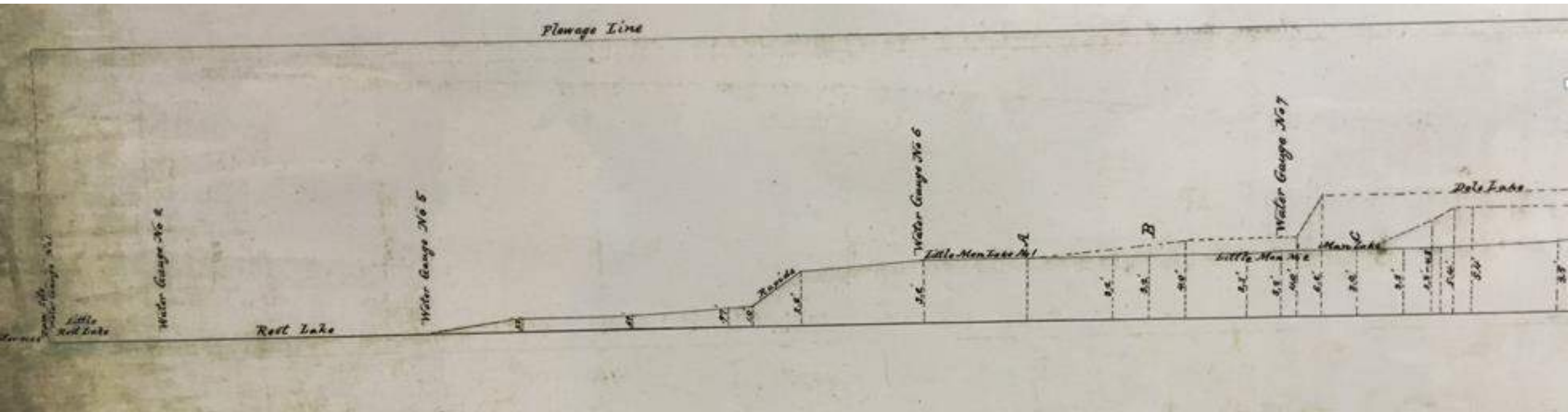


1880 House of Representatives 46th Congress Ex Doc.
No. 39

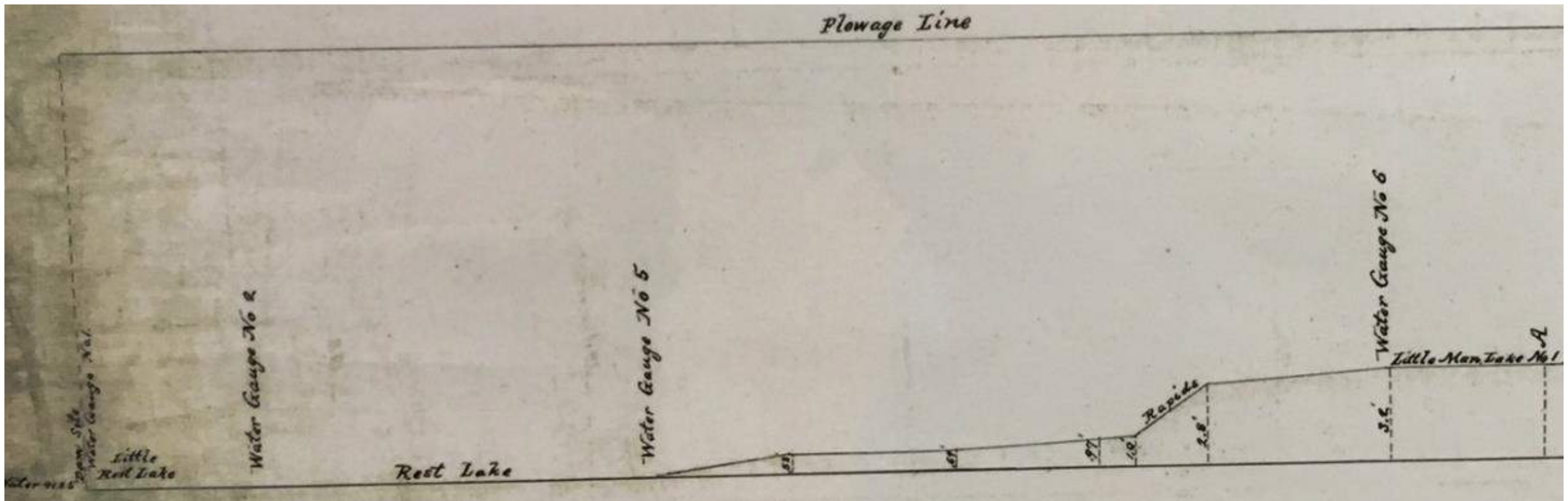
On the Manatouish River, at the outlet of Rest Lake. Proposed dam 15 feet in height and 250 feet in length.

Why did the dam site change in 1 year, when few in the area had any political influence and information traveled slowly?

The 1879 House of Representatives 45th Congress 3rd Session Doc. No. 54 also revealed the original water levels of each lake on the Manitowish chain which dramatically improves our understanding of how the lakes were impacted by the dam.

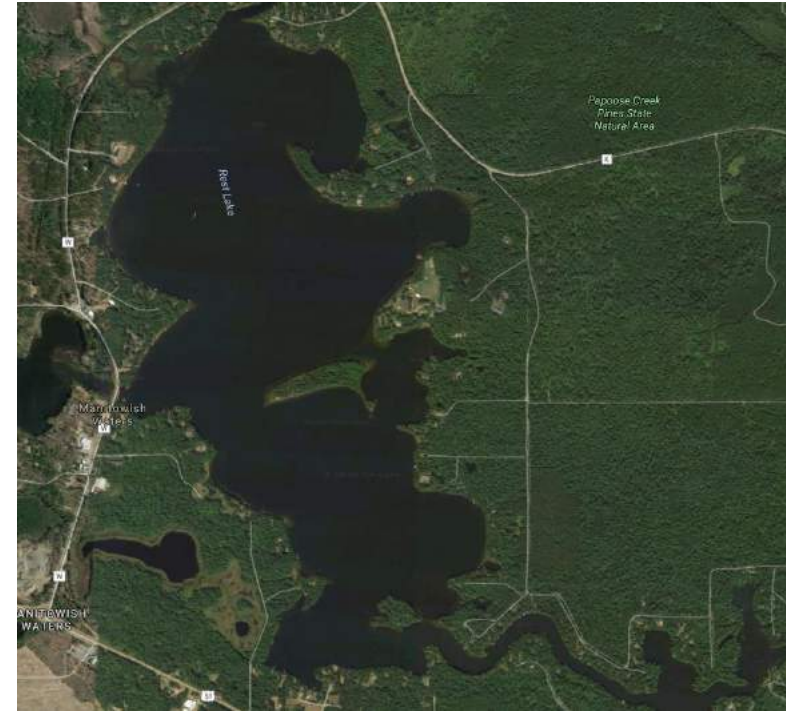


Vance (Little Rest Lake) and Rest Lake had the same water level. Therefore, Vance Lake represents the historic baseline water level for the chain of lakes.



Rest Lake

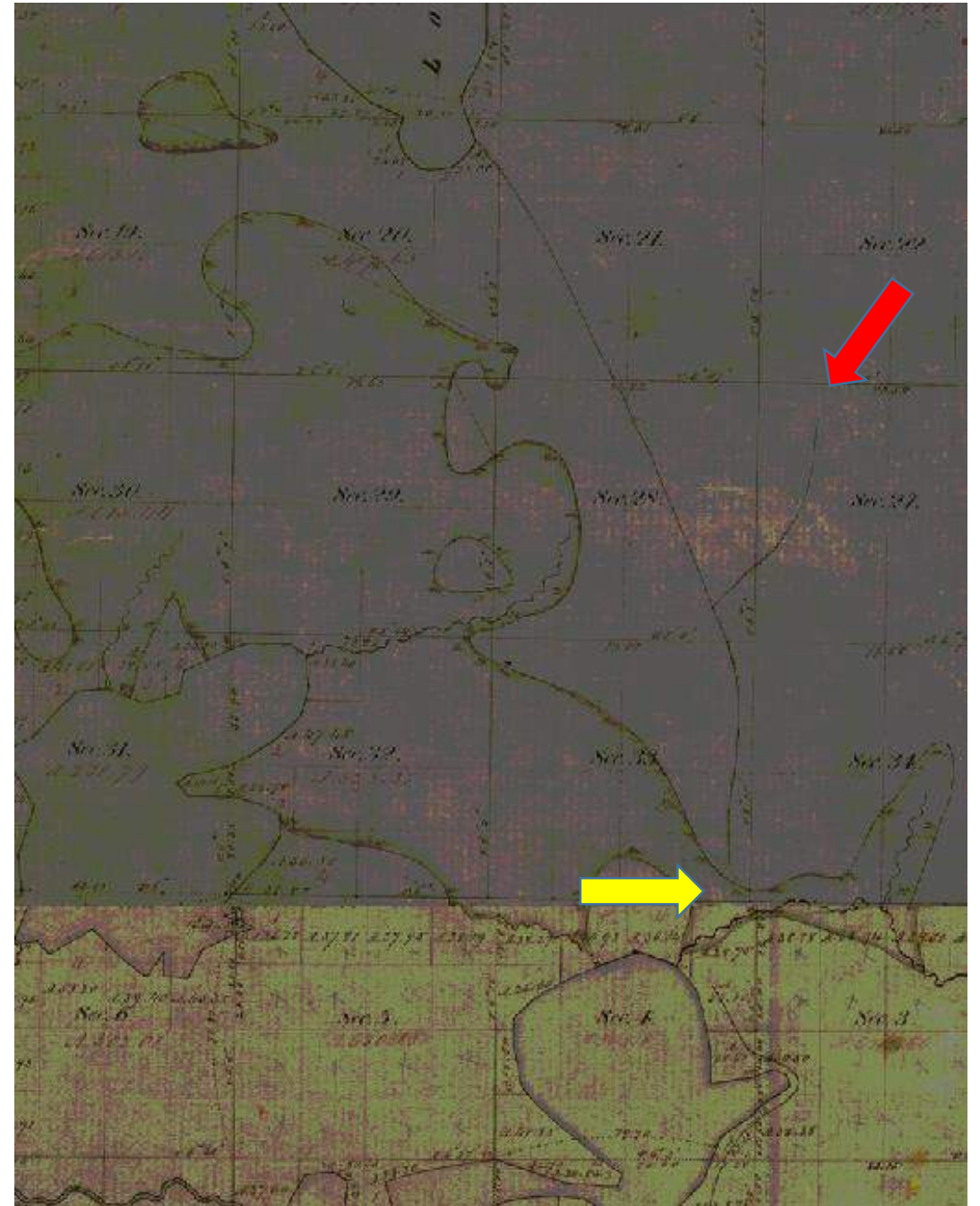
- What was the precise route of the portage trail to South Turtle Lake?
- How different would the chain be if the original dam of 25 feet was build based on the 1879 survey verses the 1880 dam construction approval of 15 feet.
- Was Rest Lake the 1846 Cross Lake from the AB Gray geologists and the home of Lac Du Flambeau chief White Thunder?
- Where did the floating island on Rest Lake come from?
- Why did they open a second outlet of Rest Lake?
- Where were the rapids entering Rest Lake?



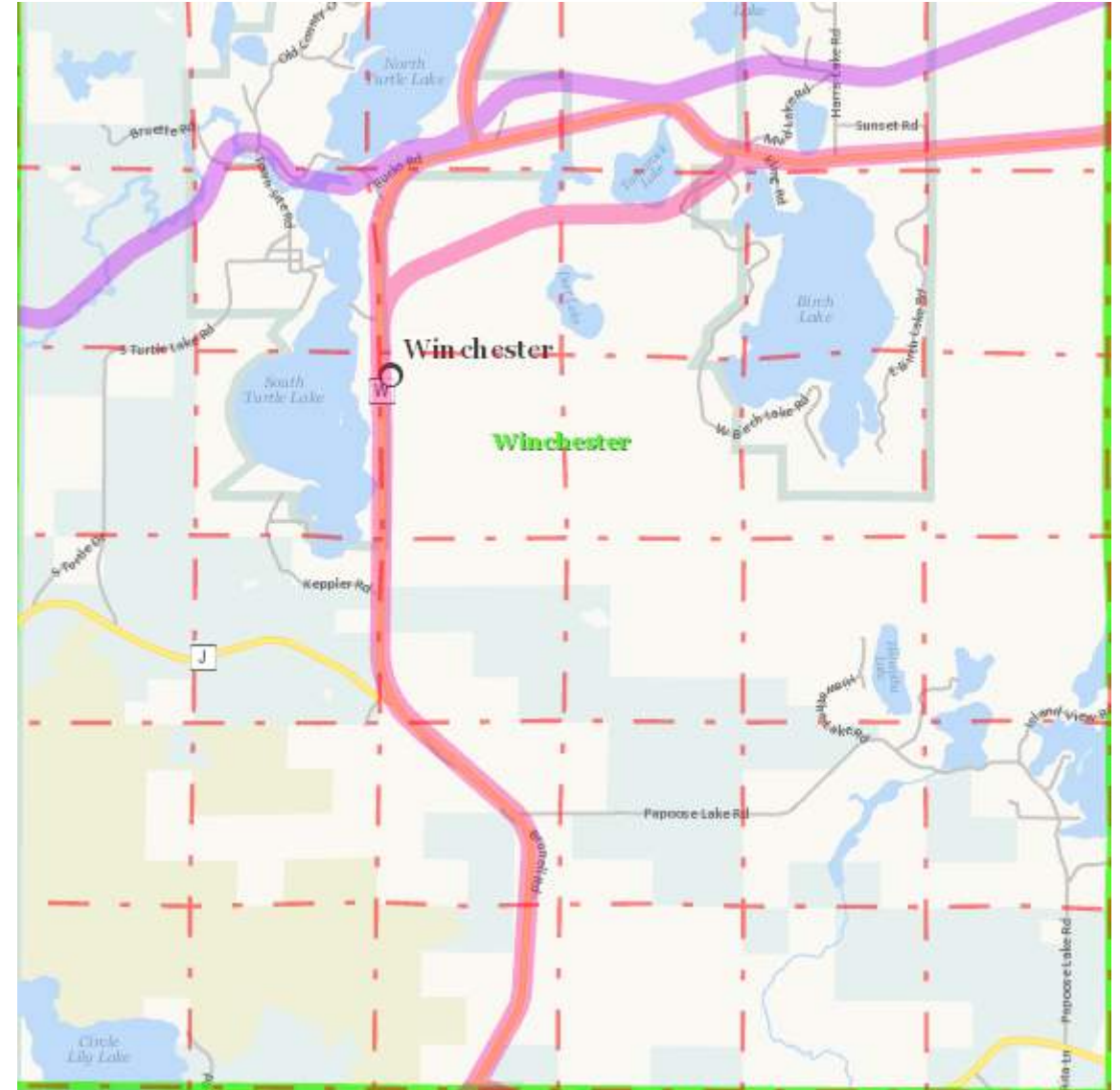
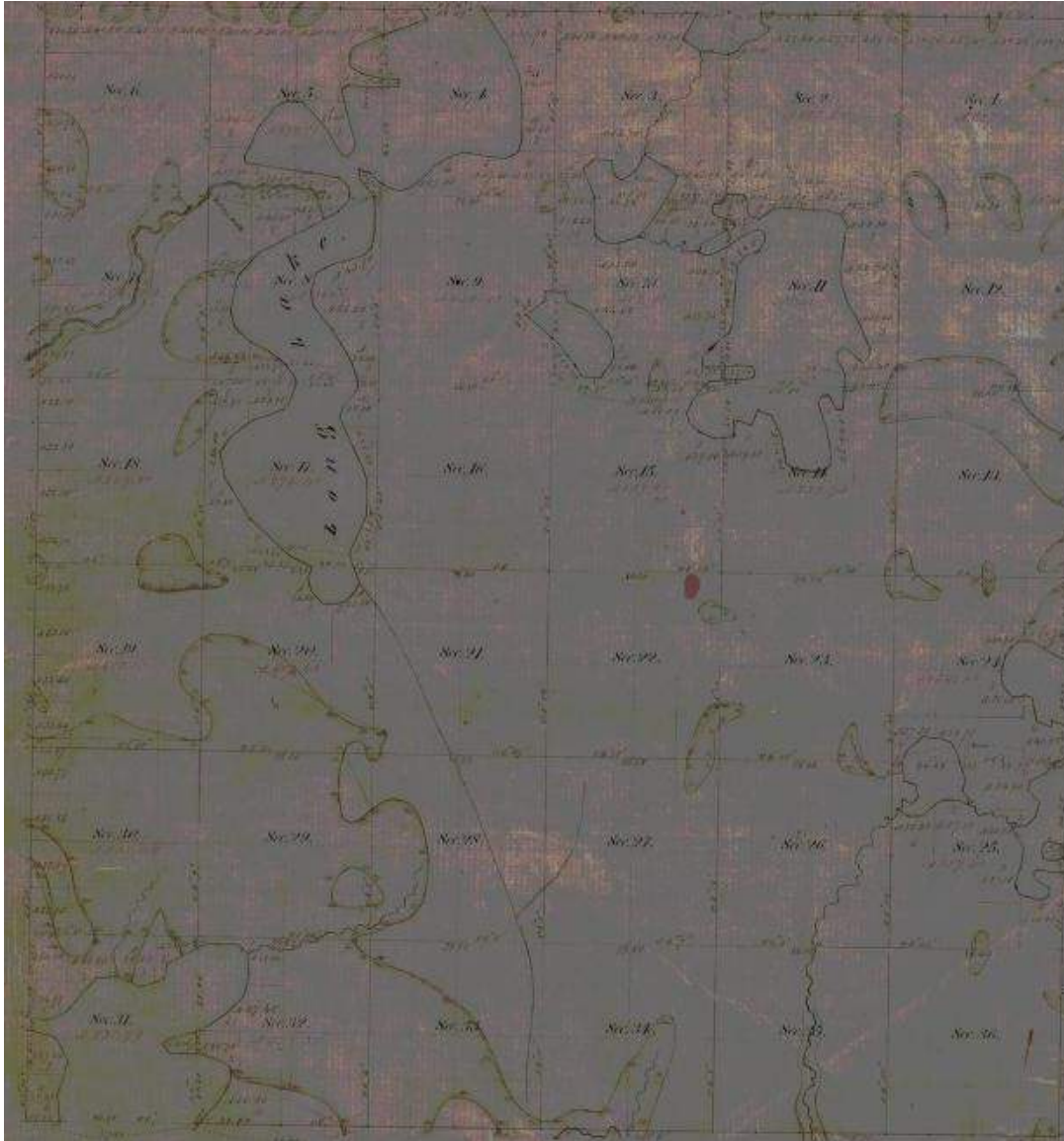
This 1847 map from the Owen Expedition illustrates the portage trail from Rest Lake heading to South Turtle Lake.



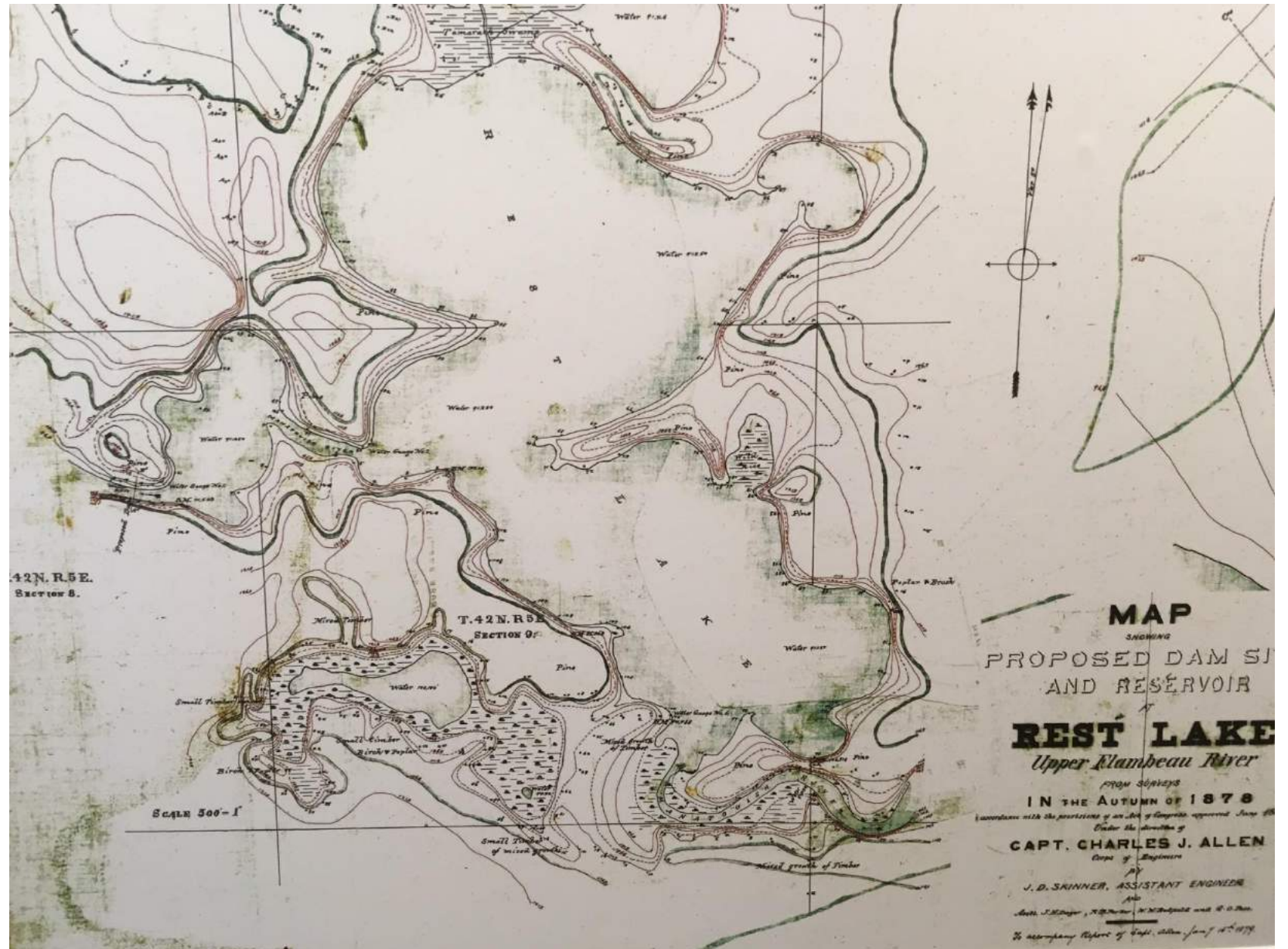
This 1862 map or the portage from Rest Lake to South Turtle Lake also illustrates the route with greater precision. Note the Yellow arrow illustrates that Papoose Creek It also locates a sugar bush in what is now the Winman Trails.



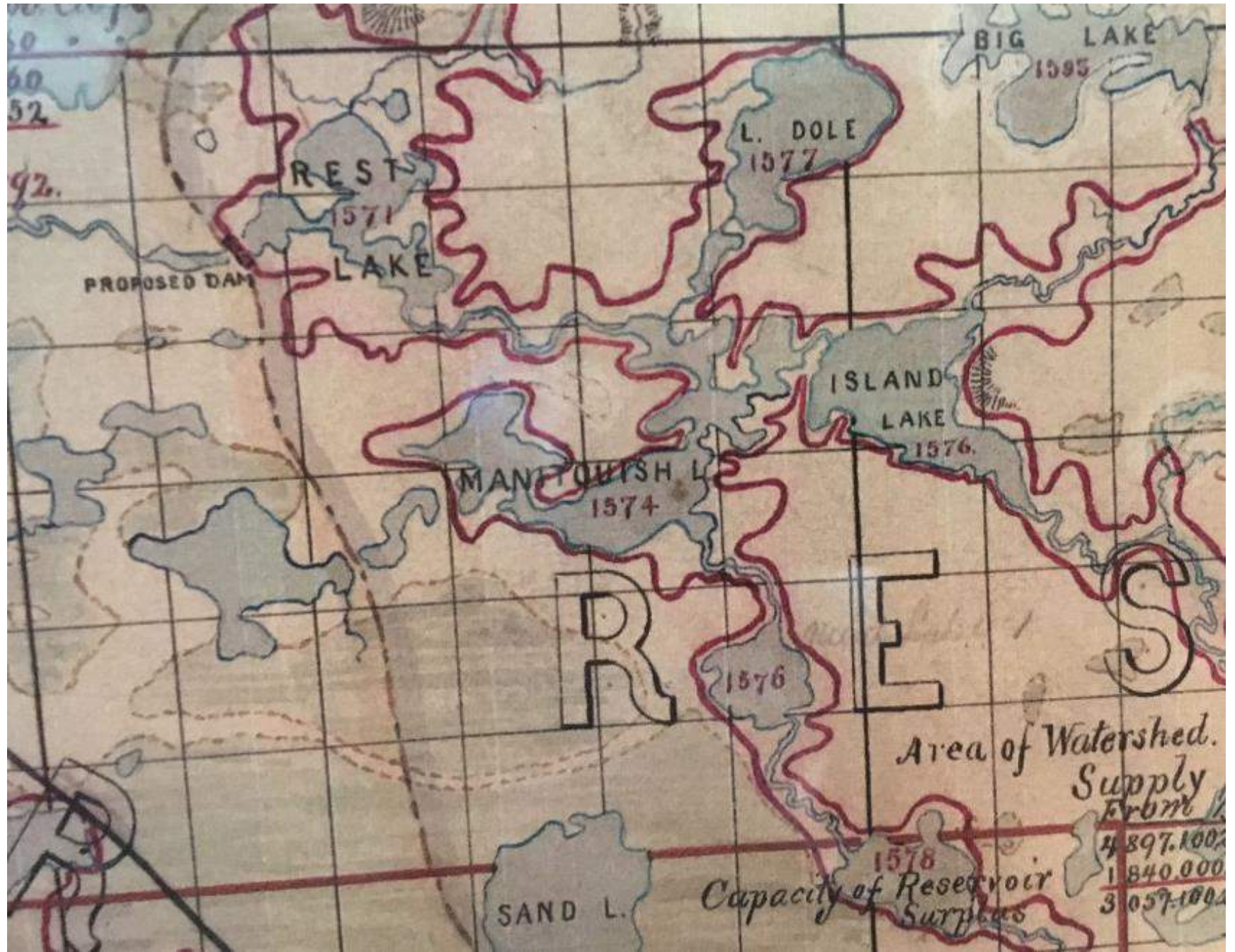
Today, county Highway W closely follows the portage trail



Shortly after
1880 the first
government
sponsored dam
was created on
Rest Lake

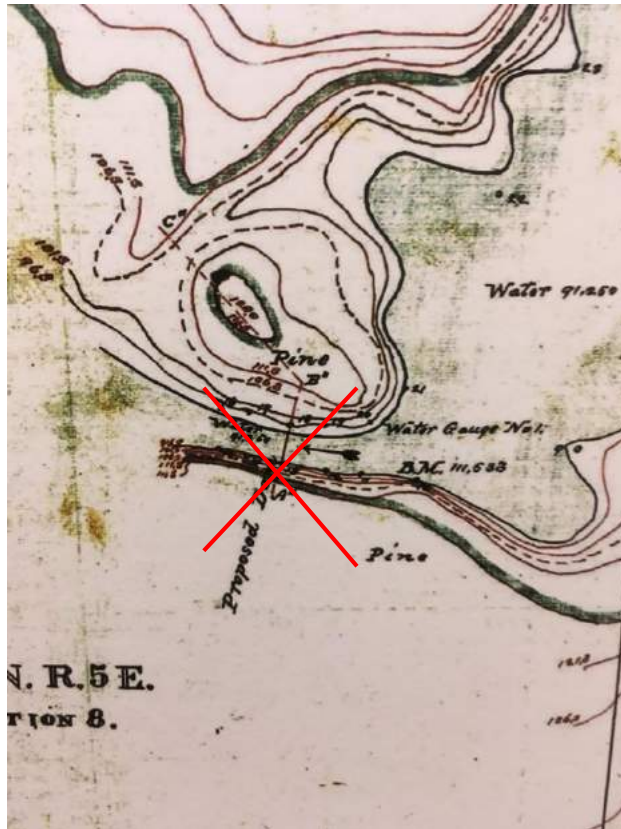


This recently discovered map solves one of the historic mysteries, because in 1878 the Army Corps of Engineers drew in red the new shore line of the 25 foot dam on Vance Lake. Would this dam have impacted your property?



1880 House of Representatives 46th Congress Ex Doc. No. 39

1. On the Manatouish River, at the outlet of Rest Lake. Proposed dam 15 feet in height and 250 feet in length.



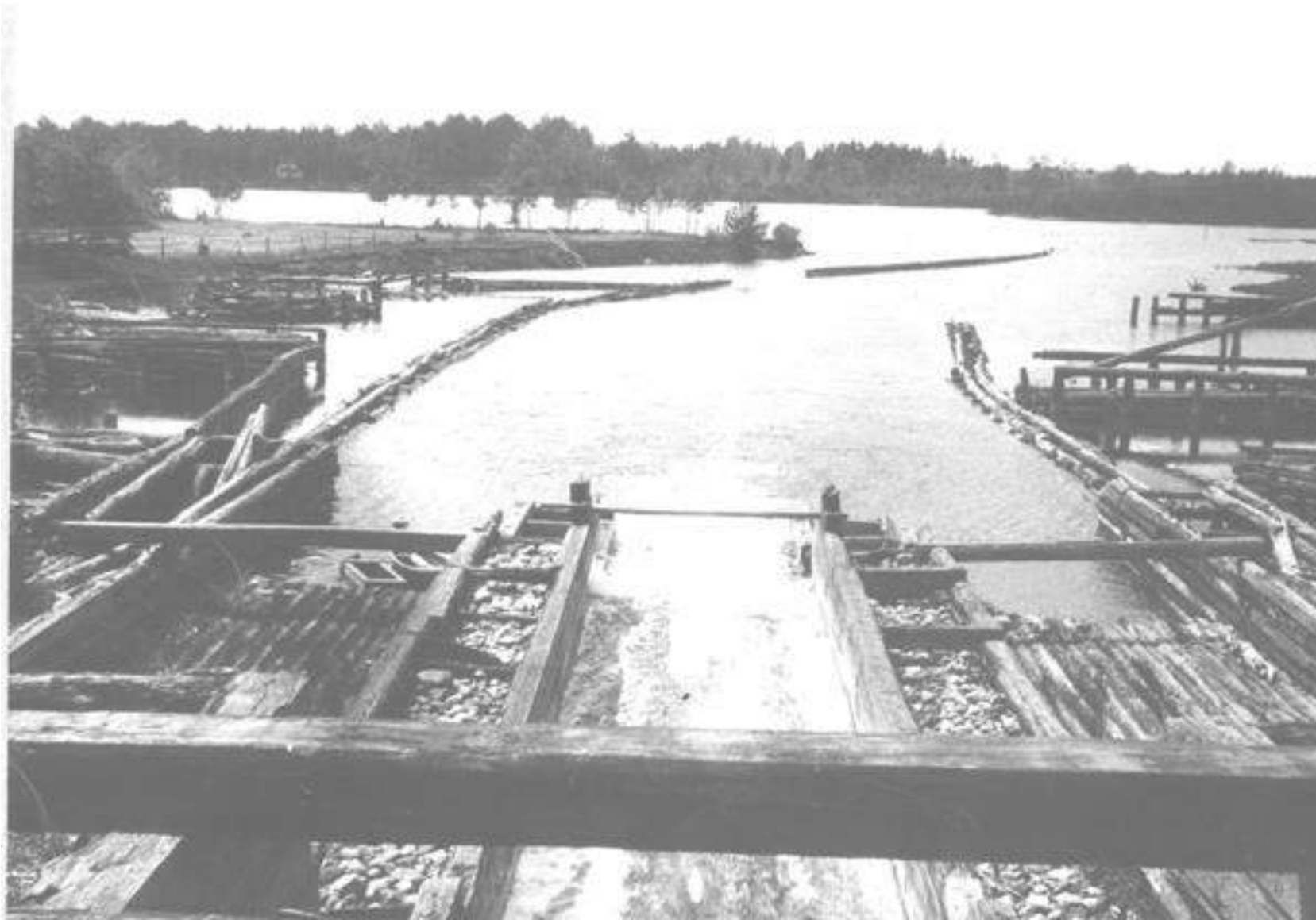
After the “new” dam was built at the turn of the 20th century this article from 1902 illustrates that water variations of 12 feet or more were destroying cultural resources on Fox Island

Exploration of a Mound on Fox Island in Rest Lake, Vilas County.

Upon the western shore of Fox Island in Rest Lake in Vilas County, Wisconsin, there is located a group of four circular and oval mounds. The first of these occupies the top of the bank at the extreme northern end of the island, which is of an irregular oval shape about 20 acres in extent and covered with underbrush and a scattering growth of pine trees.

About one-half of this mound, which is 4 feet in height and which was originally probably 50 feet in diameter, has been cut away by the action of the waters of the lake which are dammed every spring to permit of logging operations. By this means, the level of the lake is raised 12 or more feet during the season.

Early Manitowish Waters Dam



Newer Manitowish Waters Dam



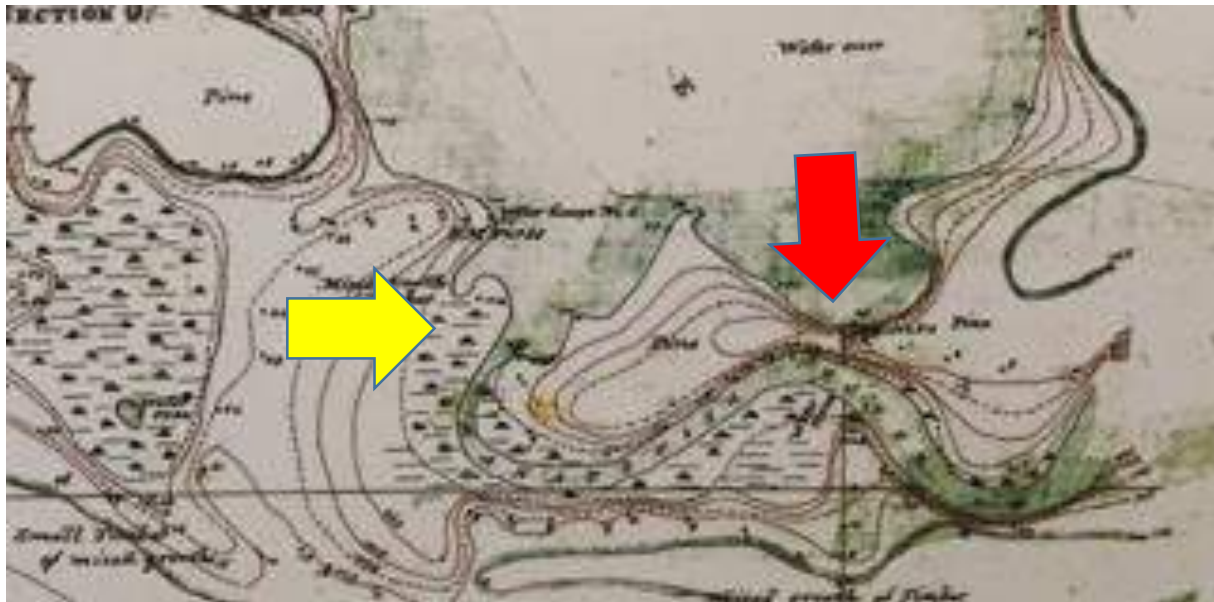
Current Manitowish Waters Dam



Why was this second inlet to Rest Lake created and how did they move so much earth?



The original inlet is marked in yellow and the man made outlet is marked in red



Lake view of the man made inlet to Rest Lake



Until recently Rest Lake had a floating island that was dislodged from the lake bed



The floating island was about an acre in size and had large tamarack trees in the center



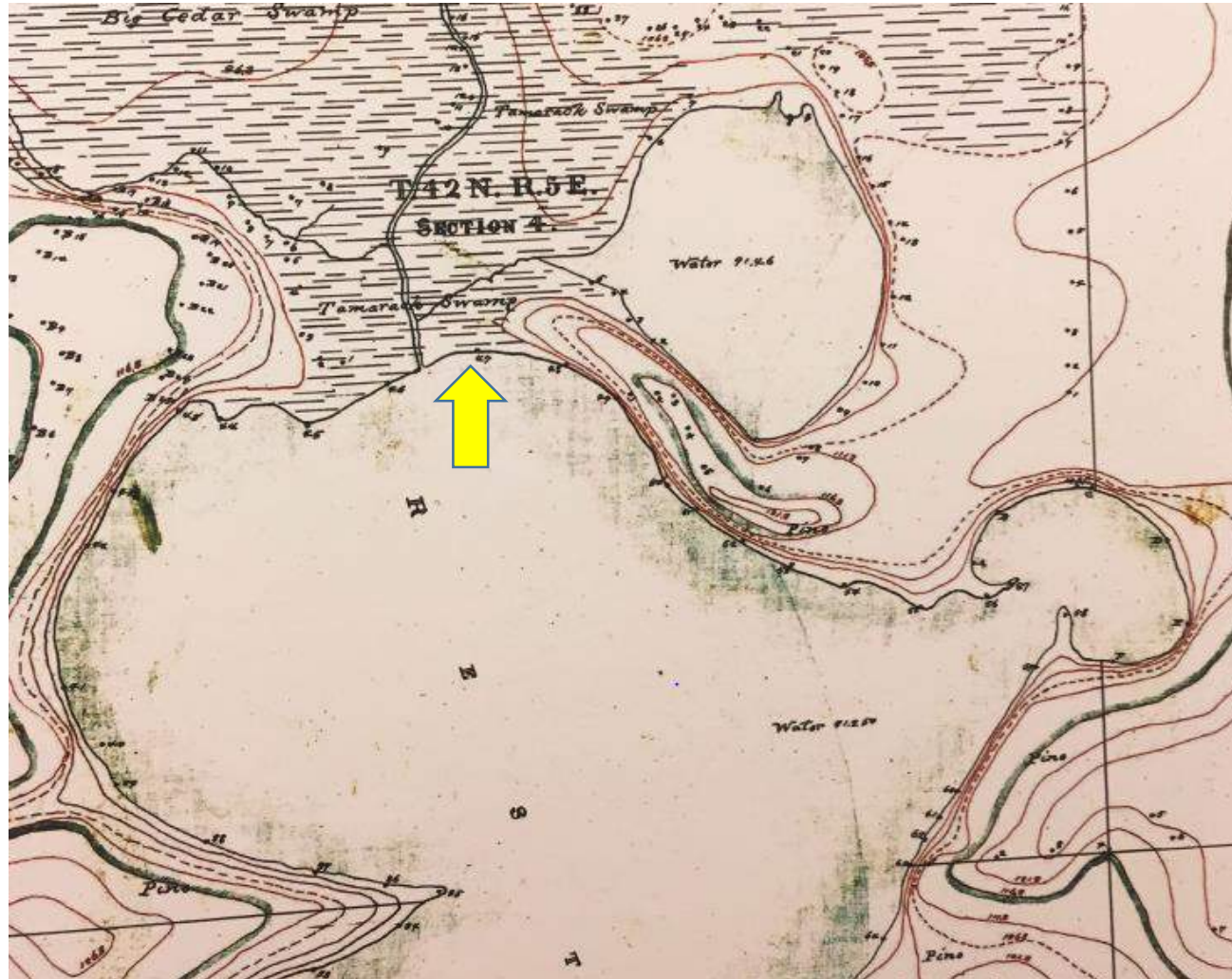
Every so often the island would break it's moorings and drift around the lake. Note the locals in the 1960's try to push the island with several motor boats. Do you think this plan worked?



Occasionally, pieces of the island would break off and float around as well



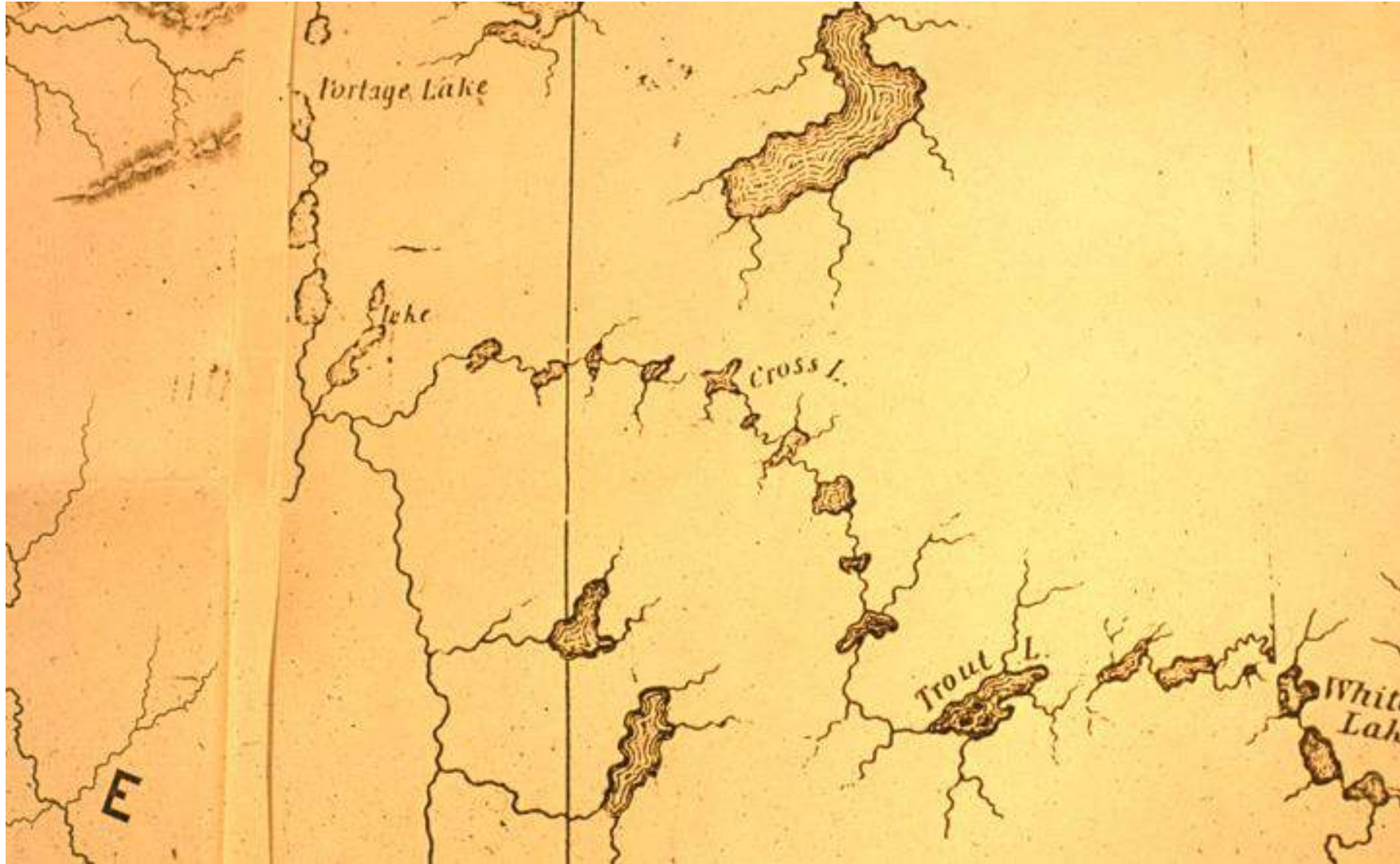
Longtime guide Bob McClellan felt that the bogs on the north end of the lake was the source for the floating island. The Turtle Flambeau Flowage has similar floating bog islands.



A.B Gray Geologist traveling from 6 Pause Portage to Cross Lake in 1846

In the evening we entered "Cross" lake from the river - so called by the Indians from its resembling a cross in shape - and encamped upon a high point of land jutting out and forming one of the arms of the cross. Upon this point are two large wigwams and several acres of ground cleared and cultivated, being the summer residence of "White Thunder," a tall and athletic looking Indian. He had reached home the day before from the payment of La Point, and received us in a very friendly manner. Here he lives with his brother, in the possession of all around him, no one seeking to molest or disturb him. Unlike civilized man in this respect, the Indian fears not his neighbor; he leaves his wigwam unprotected – his canoe, his net, or trap, without a guard - conscious that no brother of the tribe will disturb his property. It is a singular fact, that one Indian will not steal or plunder from another of the same band, although they all agree in taking what they can from the white man or stranger, and whenever an opportunity offers.

The location of Cross Lake is on the Manitowish Chain which is a huge mystery. One of the 3 possible locations is Rest Lake.



Arguably the most impactful treaty on the region was signed by White Thunder and he was recognized as a chief from Lac Du Flambeau.

TREATY WITH THE CHIPPEWA, 1837.

July 29, 1837. | 7 Stat., 536. | Proclamation, June 15, 1838.

Chiefs. From Lac De Flambeau:

Pish-ka-ga-ghe, or the White Crow,

Na-wa-ge-wa, or the Knee,

O-ge-ma-ga, or the Dandy,

Pa-se-quam-jis, or the Commissioner,



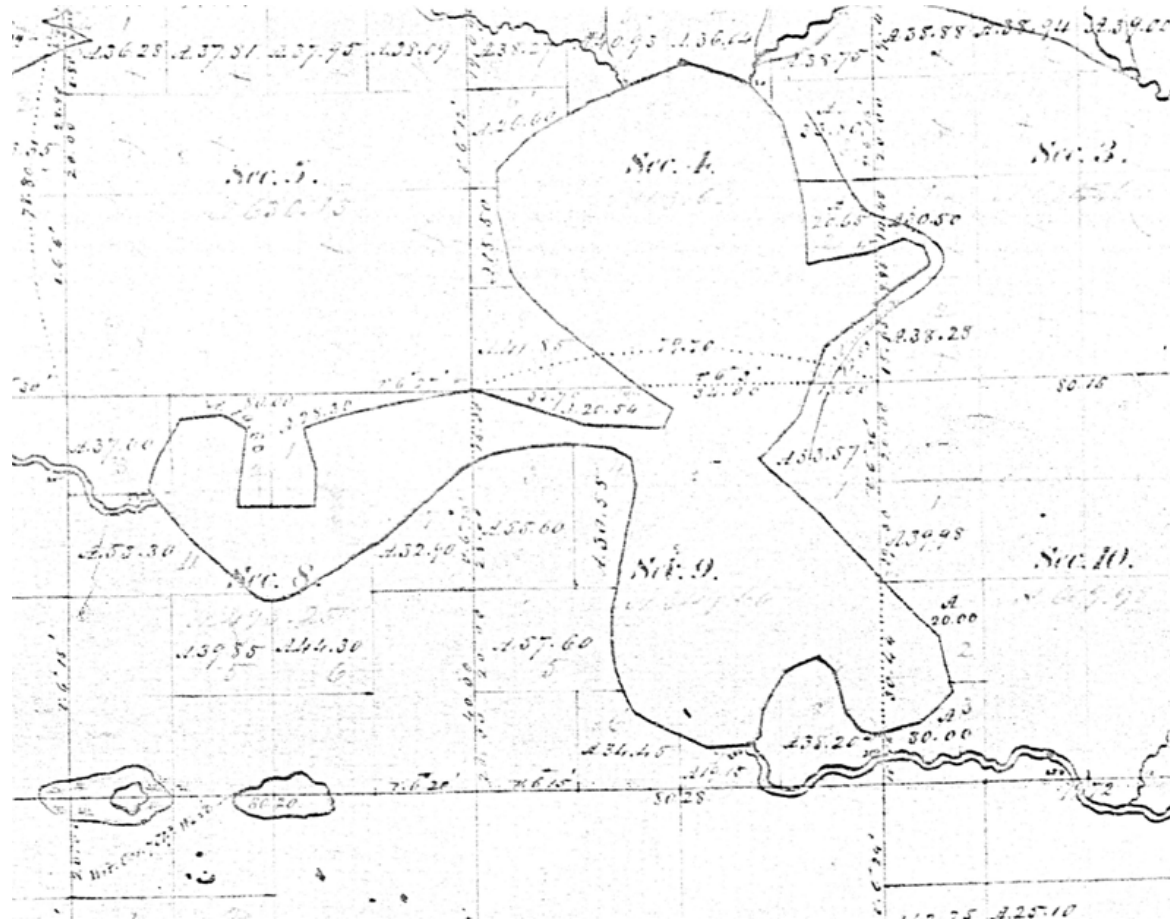
Wa-be-ne-me, or the White Thunder

The **Midewiwin** tradition of religion was based in large part around medicine and healing. White Thunder may have been a leader in this important cultural tradition.

After a detention of a day and a half at this encampment, (our guide stopping with the other Indians to join in a "medicine dance" for the cure of a sick pappoose,) we continued the ascent of the Chippewa, and in the afternoon, at 5 o'clock, came to Trout lake, where our tents were pitched upon the bank, in a beautiful pine grove, a short distance above "Kenisteno's" lodge, near the outlet of the lake.



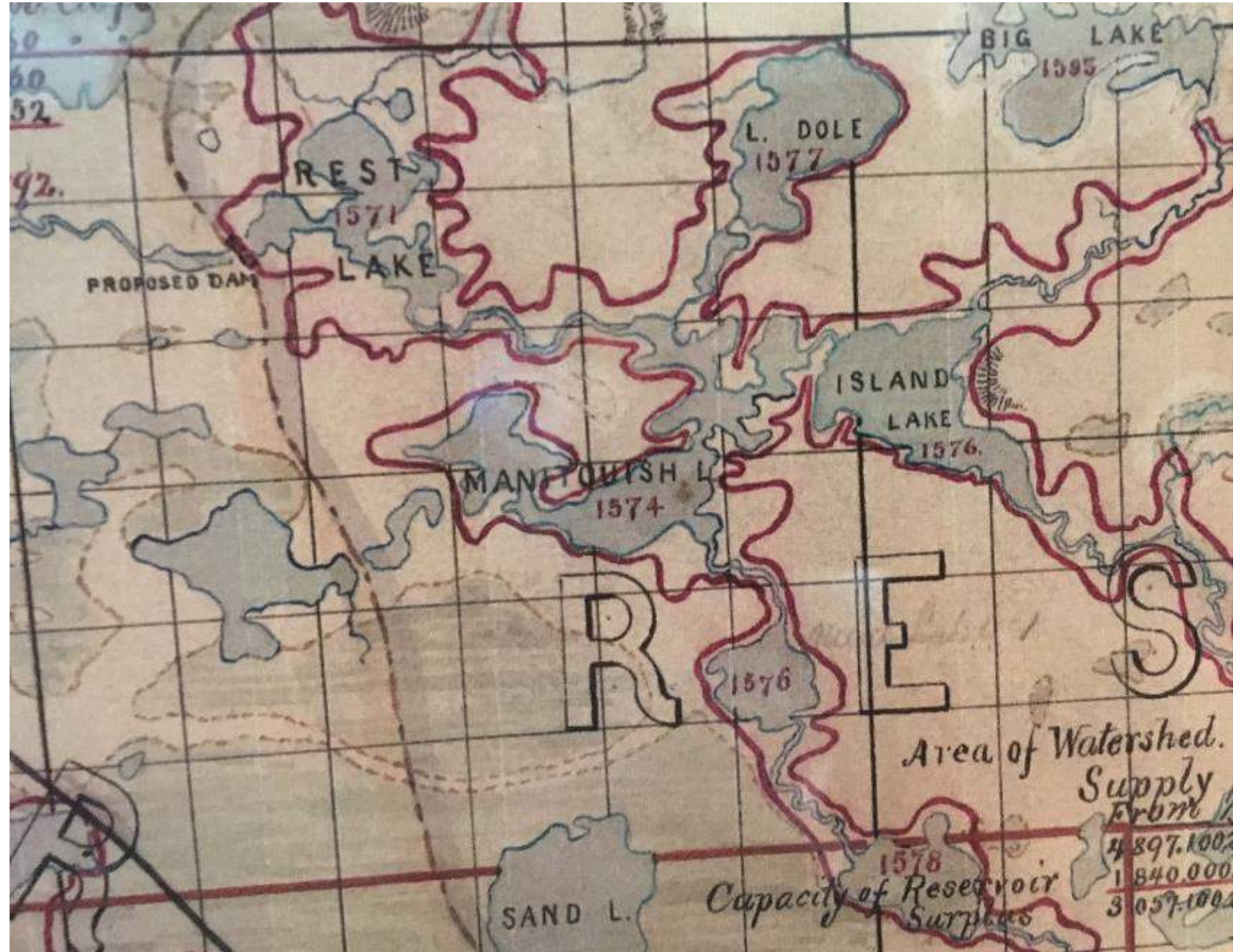
Does this 1862 map of Rest Lake resemble a cross?



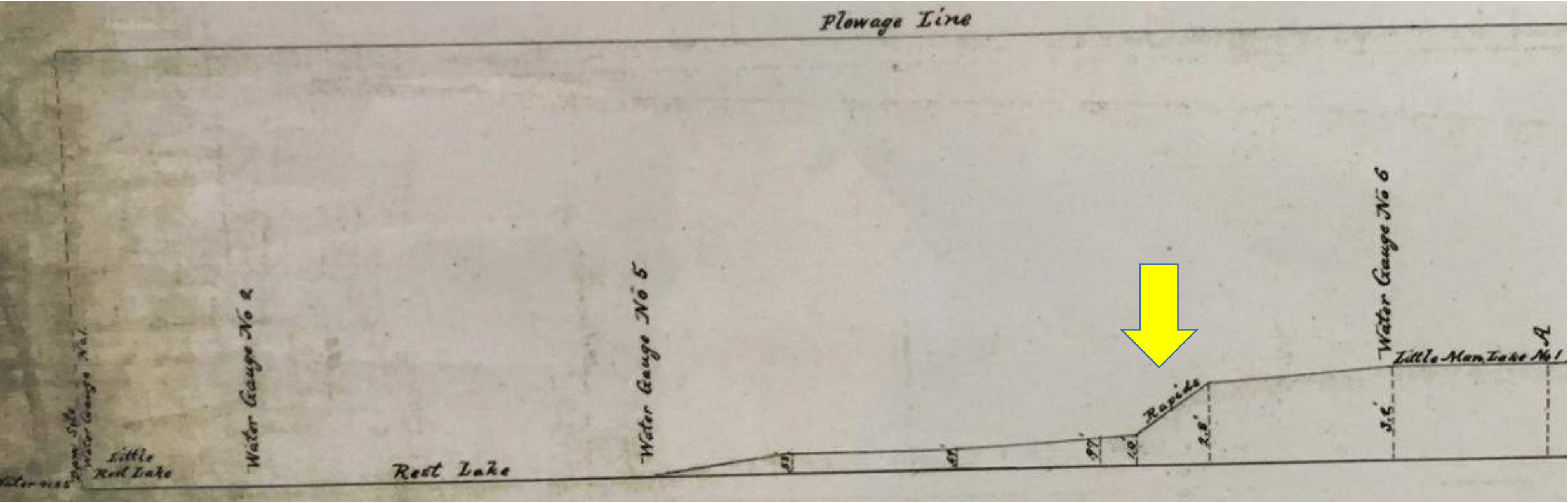
Does this 1878 map of Rest Lake resemble a cross?



Using the 1878 watershed map suggest which lake most resembles a cross?



Can you
locate the
rapids on
the Rest
Lake
channel?



The End of Presentation 1