

BEFORE THE INDIAN CLAIMS COMMISSION

THE MINNESOTA CHIPPEWA TRIBE, ET AL.,)	
ON BEHALF OF THE CHIPPEWA INDIANS)	
OF THE MISSISSIPPI AND LAKE)	
SUPERIOR,)	
)	
Plaintiffs,)	
)	Docket No. 18-C
v.)	
)	
THE UNITED STATES OF AMERICA,)	
)	
Defendant.)	

Decided: July 21, 1971

ADDITIONAL FINDINGS OF FACT

The Commission makes the following findings of fact which are supplemental to the findings numbered 1 through 11, previously entered herein, 19 Ind. Cl. Comm. 514 (1968).

12. The area under consideration was situated in the northwestern part of the present State of Wisconsin and in the eastern part of central Minnesota, and is shown as Royce Area No. 242 and that portion of Royce Area 220 in Wisconsin enclosed on three sides by Royce Area No. 242. The subject tract lay west of Lake Michigan and south of Lake Superior, its southern boundary lying 30 miles north of St. Paul and Minneapolis. The Mississippi River formed the western boundary of the area.

The date of valuation is June 15, 1838, the date the treaty of cession of July 29, 1837 (7 Stat. 536), was proclaimed.

13. The subject area was a gently rolling plain, well drained by a series of major rivers and their tributaries traversing the area and flowing southerly into the Mississippi River. Most of the land

was between 1,000 and 1,500 feet above sea level. Occasional hills and ridges were present, but as a whole the country was fairly level. The topography was favorable and attractive to settlers and suitable for forestry and agriculture.

The entire area was drained by the Mississippi River and there were five major river systems providing extensive waterways within the subject tract. From east to west were first, the Wisconsin River and its major tributaries, the Tomahawk, Big Rib, Little Rib, Big Eau Pleine, Little Eau Pleine, Prairie, Pine, Trapp, Eau Claire and Plover. Second was the Black River. Third was the Chippewa River and its major tributaries, the Red Cedar or Menomonie, on the west, the Eau Claire, Hay, Flambeau, Jump and Yellow on the east. Fourth was the St. Croix River and its major tributaries, the Apple, Sunrise, Claim, Snake, Kettle and Namakago. Fifth were the Rum River, really a part of the Mississippi River system, and the Mississippi River itself forming the extreme west boundary of the subject land.

The subject land had four-season weather and a temperate, continental climate favorable for habitation, timber operations and agriculture. The climate was quite similar to that of New York and New England. The average temperature ranged from 39°F in the north to 43°F in the southern portion of the subject area. The three summer months (June, July, August) averaged 65°F while the three winter months (December, January February) averaged 15°F. In most of the area the growing season extended from the second or third week in May to the second or third week in

September. The average annual precipitation was about 30 inches.

14. The Commission finds that there were 13,664,871 land and water acres in the subject tract. Of the 13,302,190 land acres in suit, 6,846,162 acres were pineland as of the times of survey. A minimum of 80% or 5,476,930 of these acres were white pineland. Our determination of the pineland acreage is based on the public land surveyors' field notes from 667 townships, from which notes the plaintiffs' witness, John William Trygg, a professional forester, constructed a timber type map showing where the original pinelands were located. The public land survey field notes contained detailed information concerning the name, diameter and precise location of all bearing trees and all line trees. On the basis of line trees identified by the surveyor as white or Norway pine, the land on that line was classified as pineland by Mr. Trygg.

The pineland represented the primary value of the subject lands. The cession was taken essentially for the purpose of acquiring the pineland. All of the subject area was within the original forest belt extending from the Atlantic seaboard. Pine formed the most conspicuous part of the mixed woodlands so that the name "pinery" was applied to the entire forest. White pine occurred in nearly all parts of the subject area. The subject tract also contained growths of timber such as jack pine, hardwoods, oak, birch, elm, basswood, maple and ash. The most important and valuable growths, however, were white and Norway pine. Norway pine formed but a very small part of the entire stand of

pine in the original forest. White pine was the most desirable and was cut almost to the exclusion of Norway pine prior to the 1870's.

15. Initially, timber was cut for lumber to meet the needs of the military forts in the area, Fort Snelling (St. Paul), Fort Winnebago (Portage, Wis.) and Fort Crawford (Prairie du Chien, Wis.). This early lumbering activity was by arrangement with the Indians and with the approval of the Indian agent, or under permit issued by the Secretary of War. Commencing in 1819, there were reports of sawmills being constructed on the Mississippi near Fort Snelling, and on the Black and Wisconsin Rivers, and of efforts to establish additional mills to meet the demand for lumber.

Lumbering became the most important industry in Wisconsin and Minnesota during the 1840's. By 1853 the pineries of Wisconsin furnished most of the lumber for the markets of the valleys of the Mississippi and its western affluents. The early development of the pine lumber industry in the subject area is summarized below for each of the major river valleys in the subject area.

In 1837 the St. Croix valley, later divided between Minnesota and Wisconsin, was all in Wisconsin Territory and lay almost wholly within the 1837 treaty area. It contained the first Minnesota pineland ceded by the Indians. Even before the 1837 treaty was proclaimed, local entrepreneurs undertook by means of preemption claims to control the strategic water falls at the Dalles on the St. Croix and the head of navigation. Cutting commenced on the St. Croix in the winter of 1837-1838 before the treaty had been proclaimed and the first logs were floated down the St. Croix

to the Mississippi.

In 1839, the first commercial sawmill on the Minnesota side of the St. Croix began operation at Marine, 20 miles below St. Croix Falls, located within the subject area. The subject area furnished most of the logs feeding the mills on the St. Croix Boom. There were 5 million board feet of logs scaled there in 1840, 20 million in 1845, and 90 million in 1850. Other mills followed. The markets to the south were the Mississippi River towns and St. Louis. In 1844, the first sawmill at Stillwater, Minnesota, on the St. Croix, went into operation taking its stock from the 1837 treaty area. In 1846 and 1847, mills began operation at Osceola, within the subject land, and Arcola just south of the subject land.

The timber of the St. Croix was principally white pine interspersed with Norway. St. Croix was a good stream for driving logs. Substantial timber was cut from the St. Croix and its tributaries by the time the surveyors reached the land in the 1850's.

In 1840 it was estimated that 20 billion board feet of pine timber stood in the Chippewa River Valley, within the subject area. This valley rapidly became the most important area of the Wisconsin lumber industry. Prior to the 1837 treaty, several sawmills were operating in the valley. One had been established in 1819 on the Yellow River and one on the Red Cedar River, a tributary of the Chippewa River, in 1828. By 1847 there were five mills and seven saws on the Chippewa River and its tributaries. They produced 5.4 million feet of lumber plus lathing and shingles. The

chief sawmill town was Chippewa Falls where lumbering commenced in 1836, followed by Eau Claire, 12 miles down river, both in the subject area.

The basin of the Black River lay between the Wisconsin and Chippewa Rivers. On its upper course, it flowed through Taylor and Clark counties in the subject area. Clark County contained one of the largest bodies of pine in Wisconsin. A number of sawmills were constructed in the valley. In 1847 there were 13 mills running 16 saws on the Black River and its tributaries and turning out 6.3 million board feet of lumber and 1.5 million shingles annually.

The Wisconsin River and its principal tributaries were large enough to float logs and lumber, and mills were located on all of them. Commercial lumbering was developing rapidly on the Wisconsin River in 1837. By 1840, 1841, and 1842 there were 24 mills producing 6.2 million, 7.8 million, and 8.5 million board feet of lumber, respectively, plus millions of shingles and laths. By 1847 the region had 24 mills operating 45 saws, delivering 19.5 million board feet of lumber and 3 million shingles.

St. Anthony Falls in the Mississippi at Minneapolis, was about 40 miles from the pine forests of the Rum River. The day after the 1837 treaty was proclaimed, a preemption claim was filed on the east bank of the Mississippi to control the water power of the falls, and in 1848 a patent issued. In 1847 a timber cruiser following an inspection trip of the Rum River to its source in Lake Mille Lacs reported a great supply of white pine. In 1848 a sawmill was constructed at St. Anthony and commenced operations cutting Rum River white pine, producing from

500,000 to 700,000 board feet of lumber the first year. Until 1857 nearly all the logging was on the Rum River and its tributaries.

16. Most of the lands in the cession area were not surveyed until the 1850's and were not offered for public sale until then. Moreover, lumber entrepreneurs often did not purchase the lands which they cut, preferring instead to cut timber illicitly from lands belonging to the Federal Government, the Indians, the schools, or the states. When timber lands were purchased, it was usually at the government price of \$1.25 an acre. Between 1848 and 1855, there were approximately 3,535,575 acres of public land in the subject area sold for \$4,308,714.10 or an average of \$1.21 per acre.

Much of the pinelands was illegally disposed of as agricultural land by fraudulent entry under the preemption and homestead laws. A large amount of the pine was stolen from the public domain or taken under false claim. The Act of April 24, 1820 (3 Stat. 366), which remained in effect until 1889, permitted the sale of surveyed public lands at public auction. Those lands not sold at the auction could be purchased at the minimum price. Such purchases were termed private sales. When pineland was surveyed and offered pursuant to the 1820 Act, collusion was common among the timbermen purchasers at public auctions to keep the price down. Lands not sold at the auctions immediately became available at the minimum price. Sometimes force was used to prevent bids above the minimum.

The Pre-emption Act of September 4, 1841 (5 Stat. 455), offered the right to purchase 160 acres of land at the minimum price before any public sale. The purchaser was required to settle on the land, construct a dwelling and improve the land for his own use and not for speculation or for the benefit of another. Widespread entries on the pineland were made under the preemption laws without visible occupation of the land claimed. The preemptions were used as a cover for frauds. The preemption law allowed the individual farmer to stake out a claim on the public domain before the land came up for auction. By employing such a farmer as its dummy, a lumber company could obtain the staked claim before competitors could get it. A preemption claim could be purchased also from a farmer who was not a hireling but a legal entrant for the land; such a transaction too, obviated the necessity of facing competitors at a public sale. The Free Homestead Act of May 20, 1862 (12 Stat. 392), which allowed the homesteader to purchase his entry at the usual minimum price after living on it for six months, was later used in the same way.

17. Settlers generally preferred land in the river valleys near wooded lands. They sought out the hardwood forest areas interspersed with openings on the edge of larger prairies. Substantial portions of the subject land fell in this category and were valuable for agriculture. As of the valuation date the presence of hardwood trees was regarded as evidence of good agricultural soil. The hardwood trees provided timber for fuel and construction, another advantage over prairie land.

In the main, agricultural products were grown for local consumption and for markets along the Mississippi. The rapid expansion of the lumber industry in the subject area provided a substantial market for agricultural products. The interplay of the two industries, lumbering and farming, was a distinctive feature of northern Wisconsin history. The first settlers worked their farms during the growing season and worked in the woods in the winter. The timber development of the area took precedence. Agricultural development came second. There were 4,723,972.24 acres of land suitable for agriculture and 1,732,055 acres of swampland in the subject area.

The 1840 census showed that 212,116 bushels of wheat, 11,062 bushels of barley and 406,514 bushels of oats, had been grown in Wisconsin in 1839. In the next decade Wisconsin agriculture expanded at a great rate. In 1849, there were over one million acres of improved farm land and nearly two million acres of unimproved farm land. Wheat production was 4.3 million bushels, and oat production was 3.4 million bushels. Livestock had a value of \$4.9 million.

The soil ratings in the subject area were: 783,339 acres first rate, 6,419,884 acres second rate, and 6,098,967 third rate.

18. In 1830, the territories of Wisconsin and Minnesota had a population of about 5,000. By 1840 about 31,000 people were in Wisconsin Territory. Population growth continued at a rapid pace through the next decade. Between 1840 and 1850, Wisconsin's population increased tenfold, from 30,945 to 305,391.

From 1832 onward, settlers were moving into southeastern Wisconsin. Counties such as Milwaukee, Racine, Sheboygan, Rock, and Jefferson, virtually uninhabited in 1830, each had from 1,000 to 5,000 settlers by 1839, and 15,000 to 30,000 by 1849. Other counties, such as Fond du Lac, Dodge and Dane, with only a few hundred inhabitants in 1839, increased to 15,000 to 200,000 ten years later. Prior to the 1837 treaty, all land in Minnesota was Indian except for about 100,000 acres acquired in 1805 for a military reserve. There were practically no non-Indian residents. The 1850 census for Minnesota showed a population of 6,077 non-Indians in nine counties. Following the 1851 cessions of Minnesota land from the Sioux, the population increased rapidly. In 1854 it was 32,000; 1855, 40,000; 1856, 100,000; and 1857, 150,037.

In 1838 there were no roads, railroads, or canals serving the area to be valued. In the southern part of Wisconsin there were a few small trails and military roads. Thus, the people of interior Wisconsin and Minnesota depended mainly on the rivers for transportation.

19. In general, prices rose only moderately during the 1830's, and were stable--even declining--during the 1840's. Wholesale price indexes for various commodities in the period show that price levels in 1850 were a few points below those for 1830. The effects of the depression of 1837 were short-lived, since by 1839 or 1840 prices had returned to a predepression level. During the period when business in general was depressed throughout the country, the upper Wisconsin region

in the subject area enjoyed a boom, founded on the lumber industry following the Menominee and Chippewa cessions in 1837.

20. Mr. Robert Nathan, an economist, testifying for the plaintiffs, gave in evidence his report, supporting exhibits, testimony and his opinion on the fair market value of the subject land on June 15, 1838.

Mr. Nathan valued the land for its two highest and most valuable uses as timber and agricultural land. A study was made of the economics of the time, the population, the trend in lumber prices, the demand for lumber, stumpage sales, costs of logging, transportation, interest rates and other factors essential to determine fair market value. The witness accepted the acreages, land classifications and timber volumes prepared by Mr. Trygg.

Mr. Nathan employed two approaches to value, one based on future income derived from the timber (referred to as Approach "A"), and the other based on the prices of stumpage and timber land (referred to as approach "B"). The relevant data was tabulated in his report. The witness assumed that the prospective buyer would receive full fee title, and that the sale would be a fair one between an informed buyer and seller, with neither under compulsion to buy or sell.

The major reliance was on the future income approach (Approach A). The value of pine stumpage was represented by the difference between the price of pine lumber less all costs of production and a reasonable profit that would recover the investment plus a return on the investment. The witness considered the several factors essential to the application

of the future income approach. In Mr. Nathan's opinion the prospective purchaser would have estimated the potential market for lumber and would have concluded that the subject areas would supply 85% to 90% of the Mississippi River market through 1870. The price for lumber was estimated at \$20 per mbf delivered to the market. Projected sales from 1839 to 1888 were 30,495,722,000 board feet of lumber. All costs from the tree to the boards of lumber delivered were estimated at \$10 per mbf.

The net cash inflow was the difference between all costs and gross receipts. It included a depletion charge so that the buyer would receive the return of his capital plus a return on the investment. The witness considered 50 years a reasonable period for exploitation of the area. The net cash flow was discounted at 10% to reflect the time lag between the investment and the return. At the 10% rate, the investment would be returned in 17 years, and at the 8% rate in 21 years. Approach A, representing the present value of future income, indicated a value of \$14 million to \$23 million depending on whether 8% or 10% was used.

Approach B depended on sales of pineland and pine stumpage. Such data were meager. Pineland prices for the subject land and for other land were gathered for the period 1828-1875. These prices were discounted to the 1838 price level by application of the wholesale price index to take into account the increase in prices during this period. Discounted to 1838 levels, the prices indicated a median value of \$4.24 per acre of pineland. Pine stumpage prices, similarly

discounted, indicated a value of \$2.07 per acre. Using a rounded figure of 6,800,000 pineland acres, Mr. Nathan concluded that the pinelands had a fair market value ranging from \$2.50 to \$3.50 per acre.

We have examined the data used by Mr. Nathan and have noted a number of deficiencies. With respect to the "sales" listed by Mr. Nathan the first is noted as occurring in the "1830's". It was a newspaper item (October 5, 1839) stating that land agents of Massachusetts and Maine had just sold two and a half townships of timberland on the Penobscot River, in Maine, at a price from "\$1.50 to \$2.00 per acre." The second transaction was not a cash sale but a trade of "village" property for four hundred acres of pineland with a sawmill close to Flint, Michigan. The "timberland" was reported as really being valuable agricultural lands, and the entire property was "valued" at three thousand dollars. The "transactions" listed as items 13 and 14 were obtained from a catalog of the St. Mary's Falls Ship Canal Co., offering to sell the Company's land in Northern Michigan. One paragraph of the catalog stated:

Groups of lands containing from 3,000 to 10,000 acres, having a locality on the streams, and extending back from two to three miles, may be obtained at prices from 5 to 8 dollars per acre. (Plaintiff's Ex. N-91: p. 15.)

There was no indication how much, if any, of the land was sold. But Mr. Nathan has listed this as a transaction of 3,000 to 10,000 acres, and the range in price per acre as \$5.00 to \$8.00.

The transaction listed as item 15 purported to be a sale in 1863 of 240 acres for \$2,781.00 or an average of \$11.59 per acre. The supporting evidence was a letter written for the purpose of promoting a sale of all the writer's pineland. In the letter he stated that he had recently refused an offer of \$2,781.00 for 240 acres.

Item number 29 was obtained from an advertisement in 1874 for pinelands in Minnesota at prices from \$4.50 to \$12.50 per acre. All of these "prices" were discounted to 1838 values and used by Mr. Nathan in computing his \$4.24 median price per acre.

In determining the value of agricultural land in the subject area, Mr. Nathan noted that agricultural land was favorably located, accessible to markets and plentifully supplied with hardwoods. Comparable land in Wisconsin south of the subject area sold for the public land price of \$1.25 per acre during the period 1835-1840. The witness considered that the subject agricultural lands would bring no less. The witness determined that the swampland had value as an adjunct to the timber business in that it facilitated logging operations. Swampland often grew hay and had islands of valuable pine and other timber. Some of it was suitable for subsistence farming after drainage. Mr. Nathan gave in evidence his opinion that as of June 15, 1838, the fair market value of the subject area was \$28 million or about \$2.00 per acre.

21. The defendant's expert appraisal witness was Walter R. Kuehnle, a professional real estate appraiser. In estimating the acreage in the

subject pinelands the witness referred to vegetation maps of Wisconsin and Minnesota prepared by Robert W. Finley, as part of his doctoral thesis, and by F. J. Marshner, an agricultural economist. From a study of forest association types on these maps Mr. Kuehnle found 1,787,000 acres of Wisconsin and Minnesota pineland in the valuation area. Mr. Kuehnle's second method of determining the amount of pineland in the valuation area involved a study of the original township plats and the general descriptions thereon. From an analysis of these records concerning classified lands and the lands sold therefrom by private entries up to 1875, it appeared to Mr. Kuehnle that there were 1,817,000 acres of pineland in the valuation area.

A third approach to the estimation by Mr. Kuehnle of the pinelands in the valuation area was from sales data. By 1875 most of the desirable pineland had been sold. Since white pine alone was considered valuable, it was assumed that the sales to 1875 were for white pineland. These sales showed a total acreage of 2,395,640 acres for the valuation area. Thus, from the above three approaches, Mr. Kuehnle stated that there were no more than 2,500,000 acres of pineland in the area which would have been considered accessible to an 1838 purchaser.

Mr. Kuehnle's approach to acreage and valuation of the subject tract included a consideration of the physical characteristics of the land and economic conditions of the times. He noted that a willing and able purchaser in 1838 would have been motivated by the possibilities of resale in competition with other offerings. The

purchaser would have concluded that since so much comparable land was, and would remain, on the market at the public lands price, the most a subsequent retail purchaser would be willing to pay would be \$1.25 an acre.

The selling costs, as determined by Mr. Kuehnle, would have been 2.07 cents for survey per acre, 5.32 cents for sales and management costs per acre, 6.25 cents per acre for the first 5 years tax allowance, and 3.57 cents per acre school section 16 allocation. Thus the best price per acre that the 1838 purchaser could have paid in order to break even, according to the witness, was \$1.0776 per acre or rounded off to \$1.10 per acre. Mr. Kuehnle noted that the purchaser would actually have lost at this price because he would have put up his money in 1838 and subsequently lost the interest he could have earned elsewhere.

The 1838 purchaser would have been aware, Mr. Kuehnle believed, that there would be a holding period of 5 to 10 years before sufficient demand would exist to warrant beginning to place the entire valuation area on the market for sale at retail. The more accessible white pineland and adjacent dry farm land, however, could have been marketed fairly soon to relatively small lumbermen and land speculators.

From an analysis of the sales of public lands in Michigan, which were similar type lands, the purchaser, Mr. Kuehnle said, could have safely assumed an annual sales rate averaging 3 percent of the total land offered for sale. It would have been logical to assume, Mr. Kuehnle

