

BEFORE THE INDIAN CLAIMS COMMISSION

SAGINAW CHIPPEWA INDIAN TRIBE)	
OF MICHIGAN, ET AL.,)	
)	
Plaintiffs,)	
)	
v.)	Docket No. 57
)	
THE UNITED STATES OF AMERICA,)	
)	
Defendant.)	

Decided: May 16, 1973

ADDITIONAL FINDINGS OF FACT

On April 1, 1970, the Commission entered findings of fact numbered 1 through 11, conclusions of law, and an interlocutory order holding that the plaintiffs in Docket 57 are proper parties plaintiff to prosecute the claim herein presented, and that the plaintiffs were the owners by recognized title of the lands described in Article I of the Treaty of September 24, 1819 (7 Stat. 203) (hereinafter the Treaty of Saginaw). 22 Ind. Cl. Comm. 504 (1970).

The Commission's interlocutory order directed that the case proceed to a determination of (1) the acreage of the lands ceded, as described in Article I of the Treaty of Saginaw, less the reservations

as described in the treaty; (2) the fair market value of the ceded lands as of March 25, 1820; and (3) the consideration given for the cession.

After considering the evidence and the briefs and proposed findings of fact submitted by the parties, the Commission makes the following findings of fact which are supplemental to those previously made herein.

12. Description of Ceded Area - Location and Acreage.

The subject lands are located in the present State of Michigan and, with the exception of reservations set aside for the Indians, comprise all of Royce Area 111.

The 1819 Treaty of Saginaw described the area as follow:

ARTICLE I The Chippewa Nation of Indians, in consideration of the stipulations herein made on the part of the United States, do hereby forever cede to the United States the land comprehended within the following lines and boundaries: Beginning at a point in the present Indian boundary line, which runs due north from the mouth of the great Auglaize river, six miles south of the place where the base line, so called, intersects the same, thence, west, sixty miles; thence, in a direct line, to the head of Thunder Bay River; thence down the same, following the courses thereof, to the mouth; thence northeast, to the boundary line between the United States and the British Province of Upper Canada; thence with the same to the line established by the treaty of Detroit, in the year one thousand eight hundred and seven; thence, with the said line, to the place of beginning.

The "line established by the treaty of Detroit" in 1807 referred to in the aforesaid Article I is described as extending from

the mouth of the great Au Glaize river, thence running due north, until it intersects a parallell [sic] of latitude, to be drawn from the outlet of Lake Huron, which forms the river Sinclair; thence running north east the course, that may be found, will lead in a direct line, to White Rock, in Lake Huron, thence due east, until it intersects the boundary line between the United States and Upper Canada, in said lake, . . . [7 Stat. 105]

The area ceded by the 1819 treaty embraces Royce Area 111, plus so much of Lake Huron as is bounded (a) on the north by a straight line from the mouth of Thunder Bay River northeast to the international boundary line in Lake Huron, and (b) on the east by the international boundary line in Lake Huron, and (c) on the south by a straight line from White Rock, Michigan, due east to the international boundary line on Lake Huron, and (d) on the west by the west shore of Lake Huron.

This area encompassed the entire Saginaw Bay area and watershed. The parties agree that, exclusive of the Lake Huron waters and the reservations listed in Article 2 of the Treaty of Saginaw, it contains 7,417,400 acres.

13. Early History of Michigan - Original Inhabitants.

Michigan's original inhabitants were Indians who came to the area after the glacial period. Abundant archeological evidence indicates

that Michigan was the site of a succession of Indian cultures, some of which were highly developed. Hunting, fishing, and farming were the Indians' major activities, but there is evidence that they also were enterprising traders.

14. Early History of Michigan - French Period.

The French came to Michigan as early as 1622 for economic and religious reasons. Fur trading, which began about 1630, continued for more than two centuries and was still important at the time of the Treaty of Saginaw in 1819. The first traders and missionaries, who came to the Upper Peninsula, maintained trading and religious ties with the French centers in Montreal and Quebec.

Numerous wars between the French and British eventually culminated in the transfer of the area to Britain by virtue of the Treaty of 1763.

15. Early History of Michigan - British Period.

The British period began in 1763 and ended in 1796. There was considerable economic conflict between fur traders and settlers during this time. Chief Pontiac and his allies were repulsed in 1763, the American Revolution was successful, and the British ceded a vast amount of land in North America, including Michigan, to the United States by the Treaty of Paris, in 1783. The British ultimately surrendered Detroit and Michilimackinac in 1796.

16. Early History in Michigan - Early American Period.

Michigan was first governed by the Ordinance of 1785, which provided, among other things, for the sale of public land, and then by the Ordinance of 1787, which authorized a government for the Northwest Territory and provided for statehood eventually. In 1603 Michigan became part of Indiana Territory, and in 1805 achieved territorial status in its own right.

Detroit fell to the British in the War of 1812. After the defeat of the British, President Madison appointed Lewis Cass as territorial governor of Michigan and he took office on October 29, 1813.

17. Geography of Michigan and Royce Area 111 - Water.

Michigan consists of two large peninsulas situated among Lakes Erie, Huron, Michigan and Superior. It has the longest freshwater shoreline of any of the states bordering on the Great Lakes. In addition, there are some eleven thousand inland lakes scattered throughout the state. Water is in abundant supply.

The subject area is in the southern peninsula, which lies between Lake Michigan on the west and Lakes Huron and Erie on the east. Saginaw Bay juts far into the area from Lake Huron. From the early French days to the present time the Great Lakes have been important avenues of commerce.

Royce Area 111 contains half of the western shoreline of Lake Huron. It contains all or parts of many of the state's rivers,

including the Thunder Bay, Au Sable, Shiawassee, Cass and Maple Rivers, and tributaries and headwaters of the Grand and Kalamazoo Rivers. The Saginaw River is navigable for large vessels, and the other rivers played vital roles in early small boat travel and in the development of the lumber industry.

18. Geography of Michigan - Climate.

The Great Lakes modify the climate and stabilize the temperature of Royce Area 111. Because of prevailing westerly winds, Michigan winters are milder and summers cooler than identical latitudes in Wisconsin and Minnesota. Summer temperatures are moderate.

Rainfall is evenly distributed over the peninsula, with a large portion falling during the growing season. The precipitation in the subject area ranges from 26 to 34 inches per year, and consists of about equal portions of snow and rain.

19. Geography of Michigan - Land.

Twelve present day counties of the State of Michigan are located wholly within Royce Area 111, and sixteen others are partially within the area.

The distances from the easterly boundary line of the tract to Detroit range from 66 to 85 miles. This city and vicinity, according to the 1820 census, had a population of 6,633 out of the total population of 8,896 in Michigan Territory.

The northern part of the subject area consists of tableland ranging in height from 1200 to 1400 feet above sea level. The southern part

has a comparatively flat surface with average elevation of about 800 to 1,000 feet.

Michigan possesses six major land forms: moraines, till plains, outwash plains, lake clay plains, lake sand plains and rock outcrop areas. The moraines are rolling or rugged hills with intervening areas and a variety of soils ranging from good to poor fertility. The till plains are gently rolling lands which are generally fertile. The outwash plains, found mostly in northern Michigan, possess the poorest soil for agriculture, but were heavily forested as of the valuation date. The rock outcrop areas are located in the upper peninsula. The lake clay plains contain Michigan's richest agricultural lands.

Michigan land can be divided into four classifications of soil for agricultural purposes. First class soil possesses the highest natural fertility, the greatest durability under cultivation, and in general the most favorable topography. Second class soil is good farmland, although it is slightly inferior to first class land with respect to fertility, durability and topography. Third class soil has only a marginal agricultural potential. It may be adapted to a subsistence type of farming or to intensive farming for special crops on individual small tracts, depending upon location and other extrinsic factors. Fourth class soil is composed of the driest sands, the wet sands of lowest fertility and durability, most of the peat swamps, the steepest slopes, and rock outcrops.

The southern half of Royce Area 111 is almost entirely composed of first and second class soil, while about half of the northern portion

of the area consists of third and fourth class soil, and about half consists of first and second class soil.

Sandy soil, which is not regarded as first or second class agricultural soil, supported pine trees, particularly commercially valuable white pine. On the valuation date Royce Area 111 contained three to four million acres of pine coverage, predominantly in the northern half of the tract.

20. Early Reports About Michigan.

Most of the early accounts of what is now Michigan were favorable. Judge Augustus B. Woodward, in 1806, estimated that there were eighteen or twenty million acres of good land in the territory.

Other accounts contained some negative information. Of these the Tiffin Report of 1815 has received the most historical attention. In 1815 Edward Tiffin, the Surveyor General of the region which included Michigan, sent surveyors to examine bounty lands allocated to the veterans of the War of 1812. The first surveyor to file a report characterized as swampland about half of the military bounty land in Michigan Territory and indicated that most of this land was unfit for agricultural use. Tiffin enclosed this report in a letter to the General Land Office. Because of this unfavorable information President Madison asked Congress to remove these lands from the lists of military bounty lands, and this was done. However, there is little evidence to indicate general public awareness of Tiffin's letter as of the valuation date.

In 1816, Governor Lewis Cass reported several applications for land bordering Detroit to the General Land Office, along with a favorable surveyor's report. President James Monroe visited Michigan on his national tour in 1817 and thereby focused national attention on the area and increased the nation's awareness of it. In his address of welcome, Major Charles Larned, secretary of Detroit's presidential reception committee, told the President that "all that was needed to open up the territory for wide settlement was establishment of representative government in the territory, the building of permanent roads, and making the public lands available for sale on the public market." Pl. Ex. V-52; Detroit Gazette, Aug. 16, 1817.

The Detroit Gazette noted the following in a report of November 21, 1817:

America affords no climate more favorable, nor soil more fertile than that of Michigan, for agriculture and the raising of stock; nor is there a market, where the husbandman is better rewarded for the products of his industry. All that we require is a good wholesome government and an industrious enterprising population, to render our country highly respectable and useful, not only to ourselves but in a national point of view. [Pl. Ex. V-55]

In 1818, five of Detroit's prominent citizens explored the land north and west of Detroit. Their report was favorable, but did not cover any part of Royce Area 111, which was more distant from Detroit.

During 1819 the Detroit Gazette continued to publicize the fertility of the soil of Michigan Territory, the abundance of timber, the advantageous climate and the boundless water resources.

The evidence shows that while some travelers characterized Michigan land as an "interminable swamp," most extolled the fertile soil and emphasized the potential of the land they encountered.

Prior to the Treaty of Saginaw, newspaper articles favorable to Detroit and its vicinity appeared in the eastern press. For example, in 1816 an article in the New York Evening Post, a New York City newspaper, suggested that there was no place in America which held out such strong inducements to mechanics and farmers as the city and vicinity of Detroit. During this period most publications which dealt with the subject depicted favorably the land and climate of Michigan Territory.

21. Contemporary views of Royce Area 111 - Letters, Newspapers, Travel Accounts.

At the time of the Treaty of Saginaw those participating in the negotiations were fully aware that the land to be ceded was of great value because of its geographical position, its good soil and its timber resources. Early in 1819, Governor Cass, in a letter to the Secretary of War, urged the Government to proceed with the negotiation because "the land in that quarter is of the first quality and will undoubtedly settle with great rapidity."

On February 25, 1819, Cass noted in a letter to the Secretary of War that "the Saginaw Bay and River and their branches in the Territory of Michigan water a country which is represented as highly valuable and fertile." On March 26, 1819, President Monroe and Secretary of War Calhoun signed a commission authorizing Cass to proceed with negotiations with the Chippewas for the Saginaw Bay country.

While the treaty was being negotiated, the Detroit Gazette published several letters which had been written to the paper

from Saginaw by some of the Detroit citizens who had accompanied Governor Cass to the negotiations. These letters stated that the Saginaw country "generally is represented to be delightful, having a first rate soil, . . ." Pl. Ex. V-73.

A more detailed description of the ceded land was published in the Detroit Gazette, dated October 1, 1819:

This cession, containing more than six million acres is very important to this Territory. The gentlemen who attended the treaty from this place concur in opinion respecting the quality and situation of the land and the natural advantages of the country. They represent the soil to be of the first quality, heavily timbered with immense forests of sugar tree and black walnut timber, and a large part of it equal in every point of view, to the Miami and Scioto bottoms in the state of Ohio. The Sagana is stated to be a fine large river navigable many miles from Sagana Bay for vessels of burthen, and far into the interior of the country for loaded boats. Five considerable streams unite at a place called La Fourche, to form this river, presenting an almost unexampled instance of a beautiful and highly fertile country being watered in the most bountiful manner. We anticipate a speedy migration to this tract, and a great increase of population and wealth to the territory. [Pl.Ex. V-74]

The potential value of Royce Area 111 was commented upon by Horatio Ball, one of the surveyors of part of the tract, in a letter of December 27, 1820, to Surveyor General Tiffin as follows:

. . . the sale of the Sagana lands seems to be greatly desired by the people of this Country. From my own observation of this Territory I think that the Sagana tract is the best adapted to farming of any part of the U.S. lands in the Territory. . . [Pl. Ex. V-3]

22. Settlement Pattern in Michigan and In Royce Area 111.

When Michigan became a territory in 1805 there were only four towns within its boundaries, Detroit, Sault Ste. Marie, Mackinac and Monroe. The census of 1810 showed a population of 4,528 in Michigan Territory, which included Wisconsin and that part of Minnesota east of the Mississippi River. As of that date, no land had been surveyed and none had been offered for sale. During the War of 1812 no one settled in the territory. Saginaw was settled in 1820 and was the first settlement in the subject area. It grew slowly between 1820 and 1830, but had grown substantially by 1840. Pontiac was laid out in 1818, and a fur trading post was started at Flint in 1819. (Both are south of the ceded area.) The 1820 census showed only 9,408 inhabitants in all of the Territory of Michigan. By 1830 the population of the Territory had reached 32,558. In 1834, a territorial census showed 87,278. In 1837 Michigan was granted statehood, and the 1840 federal census showed a population of 212,267. In 1850 Michigan's population was 397,965. Between 1830 and 1840 Michigan Territory had the fastest rate of growth of any territory or state in the United States.

23. Politics and Government.

The appointment in 1813 of Lewis Cass as territorial governor and his long tenure in that position until 1831 were significant factors in the growth of Michigan. The political stability which accompanied

his leadership encouraged the settlement of Royce Area 111. In 1819 Congress passed an act which allowed the territory to elect a delegate to Congress. A Congressional Enabling Act was passed in 1823 providing for a Michigan legislature. These acts contributed to the territory's growth and progress.

24. Water Transportation.

Water transportation was a singularly important factor in the settlement of Michigan Territory. Beginning around the year 1818, sailing ships and steamships were quite generally used in navigating the Great Lakes and some of the rivers and streams of Michigan Territory.

The settlement of the ceded area was greatly aided by the navigability of the Saginaw River, two good harbors further north at Tawas Bay and Thunder Bay, and easy access to the interior of the area by way of four major rivers flowing into Saginaw Bay.

Construction on the Erie Canal started in 1817. Its completion in 1825 was a most significant factor in the opening of Michigan to settlement. Prior to the completion of the canal, there was no through water transportation to New York City. Access to eastern markets was by the circuitous St. Lawrence riverway, then the only existing water route. Use of this route required unloading, portaging and reloading the goods at Niagara Falls. Easy, inexpensive access for emigrants to the west and favorable freight rates to eastern markets were assured by the completion of the canal. At the time that the Treaty of Saginaw was being negotiated, the potential positive effect of the canal on Michigan's development was widely recognized.

The first steamship on the Great Lakes, the Walk-in-the-Water, arrived in Detroit on August 27, 1818. The significance of steam navigation for travel, emigration and trade, was appreciated by prospective settlers from the east and by the inhabitants of Michigan prior to the Treaty of Saginaw. The succeeding years, particularly after the completion of the Erie Canal, confirmed the optimistic expectation that steam navigation would be a major factor in the development of Michigan.

25. Land Transportation.

The first improvements in aid of land transportation were the trails made by the Indians. They were located on high ground along watersheds, and would run to fishing grounds. The trails linked the Indian villages and numerous rivers of the state. Saginaw was a center of Indian travel. Six important Indian trails went through Royce Area 111. These trails were the only overland transportation routes available in 1820, and they necessarily provided limited ingress and egress to the subject area. Construction of a road from Detroit to Saginaw had started by 1820, but by 1826 this road was only partially constructed and often in poor condition. After the War of 1812, three passable roads were constructed connecting Detroit with Ohio.

Although railroads were anticipated during the Michigan territorial period, railroad construction did not begin until the 1830's. The first railroad in Michigan Territory commenced operations on November 2, 1836, and ran between Toledo, Ohio, and Adrian, Michigan.

26. Trade and Commerce.

At the time of the Treaty of Saginaw, trade and commerce in Michigan were centered in Detroit which possessed a small but vigorous economy, and gave promise of future growth and development. In June of 1818, the territory's first bank, the Bank of Michigan, was established there.

The fur trade was the dominant factor in Michigan's economy. Reports of 1817 indicated that furs made up the principal portion of Michigan's exports. In 1819, imports were estimated at \$150,000, and in the same year the value of the furs which were exported was far greater. In 1822 it was estimated that more than \$300,000 worth of were exported from Detroit. After the mid-1820's the fur trade steadily de-

27. Fishing.

There was an abundance of fine fish in Michigan waters. Sturgeon, whitefish and trout were plentiful in the Detroit River, Lake St. Clair, Lake Huron, the Au Sable River and at Mackinac. The economic value of the fishing industry was recognized early, and it flourished as settlement progressed.

28. Trade and Commerce in Royce Area 111.

The economy of the subject area was confined to fur trading as of the valuation date. The Saginaw Valley, occupying most of Royce Area 111, was one of the six prominent fur trading sections in Michigan. One early settler, in recalling the Saginaw area before 1820, reported:

It was the paradise of the hunter and trader, the animals from which the choicest of fur is obtained, such as the beaver, otter, fisher, marten, mink and muskrat were found there in great abundance, also deer and bears, and elk, and moose were found at the headwaters of the streams that empty into the Saginaw. [Pl. Ex. V-45: A Miller, "Saginaw One Hundred Years Ago," 17 Michigan Pioneer and Historical Collection 448 (2d ed. 1910).]

The principal obstacle to development of the subject area at this period was its isolation. Land transportation was limited to the Indian trails, and water transportation was as yet primitive and undeveloped.

29. Lumbering.

The lumber industry in Michigan came into being as a result of the demand for lumber created by the Detroit fire of 1805, which virtually destroyed the town.

The State of Michigan subsequently became a leading source of lumber as markets developed for its vast quantities of timber, which could be moved efficiently and economically on its streams and rivers to the shores of the Great Lakes. From there water transportation was available to the markets of New York and Ohio, and the prairie states to the west. During the 1850's Michigan emerged as a major supplier of lumber.

30. Early Timber Prices.

The following prices of timber products were listed in the Detroit Gazette on three different dates in 1817, 1818, and 1823 as follows:

<u>(Per 1000 Bd. Ft.)</u>	<u>August 8, 1817</u>	<u>August 14, 1818</u>	<u>February 28, 1820</u>
Pine boards	\$25	\$15 - \$20	\$8 - \$12.50
Oak boards	-	-	\$12.50
Plank	\$40	\$15 - \$20	-
Shingles (1,000)	\$4	\$3.50 - \$4	\$1.75
Scuntling (1,000)	-	-	\$9
Lath	\$5	\$5	\$10
Cord	\$4/cord	\$3/cord	-
Square timber	-	-	\$.08/foot

In Ohio in 1820, uncut logs were valued at one dollar each and the price of lumber at Ohio mills was about \$7.00 per thousand board feet.

31. Agriculture. By 1820 a small agricultural market existed in the lower peninsula, with its headquarters in Detroit. The possibility of considerable expansion of this market, once the Erie Canal was opened, was recognized by settlers, and encouraged immigration to the area.

Agriculture expanded into the counties west of Detroit and into the area that is now Saginaw County during the 1830's and 1840's. By 1850 Michigan's agriculture was flourishing. Wheat, rye, corn, oats, and potatoes were the major crops.

32. Minerals.

In 1820 there was no indication of the presence in the tract of minerals in commercially significant quantities. Consequently, mineral value was not a component of the area's fair market value on the valuation date.

33. Highest and Best Use.

The parties are in agreement, and the Commission finds on the basis of all the evidence that, on March 25, 1820, the subject tract was best suited for timber operations in the northern part of the area, and for agriculture in the southern part of the area.

34. Land Policies - Treaties.

The United States sought to acquire title to the Indian land before it was settled by its citizens. Title to most of the land in what is now the State of Michigan was obtained through a succession of treaties made between 1807 and 1842. By the valuation date all land south of Royce 111 had been purchased by the United States. By the time Michigan was admitted to the Union in 1837, only the western part of the upper peninsula, plus several small reservations, had not been ceded.

35. Land Policies - Surveys.

Before land was sold by the United States it was surveyed. General Land Office records show that as of September 30, 1819, 72,805,092 acres of land in the Northwest Territory had been surveyed, and 18,601,930 acres had been sold, leaving 54,203,162 acres of surveyed land available for settlement, for school lands and for other purposes. Government surveying in Michigan's lower peninsula began in 1815. The first survey in Royce 111, which was of a small tract near Saginaw Bay, was completed in 1822. The entire ceded area had been surveyed by 1839.

By 1821 more than two and one-half million acres had been surveyed in Michigan's lower peninsula, and by 1825 most of the southern third

of the lower peninsula had been surveyed. By 1831 about ten million acres, which was somewhere near half of the area in Michigan Territory which had been ceded by the Indians to that date, had been surveyed. By 1851 all of the state had been surveyed.

36. Land Policies - Land Laws.

The transfer of public lands to private ownership was governed successively by two federal laws, the Land Act of 1800 and the Land Act of 1820. Under the 1800 Act, plots of not less than 320 acres were sold for \$2.00 per acre. One fourth of the purchase price had to be paid with the execution of the contract, and the remainder had to be paid in three equal annual installments. A discount of 8 percent was allowed if the entire amount was paid at the time of purchase, and the purchaser's interest was subject to forfeiture if he failed to pay the installment payments when due.

The 1820 Act provided for the sale of land for \$1.25 per acre in parcels of not less than 80 acres. The passage of this act, in the same year that the Treaty of Saginaw was ratified, created a more favorable situation for purchase of land and stimulated demand in subsequent years.

37. Sale of Public Lands in Michigan.

The first sale of government land in Michigan Territory occurred in 1818. On July 24, 1818, the Detroit Gazette reported that the average price obtained for land in Michigan Territory at this sale was about \$4.00 per acre. The nature of the land was not specified,

but it was disclosed that it was located in the Detroit area. Two months later, when the first sale of public lands closed, the average price was a little over two dollars and fifty cents per acre.

Sales at the Detroit land office were brisk in 1821, and land in the area east of the Saginaw River was placed on sale as early as 1822. In 1823 the New York Spectator, a newspaper published in New York City, pointed out that land in Michigan Territory could be purchased at \$1.25 per acre, when lands in western New York, south of the Erie Canal, were valued at \$10 to \$20 per acre.

38. Large Land Transactions Outside of Michigan.

Defendant submitted the following evidence of several land transactions involving vast acreages. Under the land ordinance of 1785, a grant of 5,000,000 acres along the Ohio River was made in 1787 to the Ohio Land Company for 16 cents per acre. In 1792, a grant of 1,000,000 acres in Ohio was made to one John Symmes for 16 cents per acre. In 1792, Robert Morris sold 3,000,000 acres in western New York to the Holland Land Company for about 34 cents per acre. In 1792, the State of New York sold 3,934,899 acres to one William Constable for about 16 cents per acre. The largest known transfer of Maine timber land occurred in 1793 when Massachusetts sold 2,107,396 acres to one William Bingham for 12-1/2 cents per acre. In 1795, the Connecticut Land Company purchased from the State of Connecticut its Western Reserve, located in Ohio Territory. The tract consisted of slightly less than

3,000,000 acres and sold for 40 cents per acre. In 1795 and 1796, Robert Morris bought approximately 6,000,000 acres of frontier land in several different states at 50 cents per acre. In 1834, the British Government sold 847,661 acres of land in lower Canada to the British American Land Company for about 65 cents per acre.

39. Interest Rates.

Interest rates were from five to seven per cent before and through the valuation date herein. Defendant concluded that the 6% figure was most appropriate and plaintiff accepted the figure. The evidence supports the conclusion that the going rate of interest on deferred payments on land purchases was 6%.

In 1818 there were investors in land who stated that they hoped to earn a profit of 15% on their investments. However, the Holland Land Company, a major speculator in wilderness land, was receiving 5 to 6% on its investments.

40. Plaintiff's Expert Witness and His Estimate of Value.

Mr. J. W. Trygg, a specialist in land use consultation and real estate appraisals, submitted a written report for the plaintiffs in which he estimated the fair market value of land in Royce Area 111, as of March 25, 1820. The report utilized the township plats and field survey notes of the United States surveyors, who surveyed the subject lands between 1821 and 1841. Mr. Trygg summarized the data collected by them, showing their measurements of land and water, land classifications, soil ratings for agricultural lands, and forest resources, with tabulations of the acreage for each.

In stating the basis for his conclusion as to the fair market value of the subject lands in 1820, Mr. Trygg said that he considered the highest and best use of the land as it would have been seen by the 1820 hypothetical buyer. Mr. Trygg said that such a buyer should have taken into account the suitability of climate for habitation and crops, the quality of the soil, fish, wild game and fur bearing animals, the existence of timber and water transportation facilities, the general economic environment, the extent and stability of markets, the coming of civilization, settlement patterns, land sales and other pertinent factors.

Mr. Trygg concluded that, as of the valuation date, the highest and best use of about one-half of Royce Area 111 was for agriculture, and that such use for the other one-half was for the harvesting of timber, particularly white and Norway pine.

Two methods were used by Mr. Trygg to determine the volume of merchantable pine timber in the area. The first was the sample cruise method which required the reconstruction of sample plots of the pine timber within a definable pine land area as of 1820. The public land surveyors' field notes were used to reconstruct the sample plots. These field notes contained records of the bearing trees that the surveyors used in locating the survey corners, bearing trees being trees that were selected by them as reference trees, which in all cases were identified by species and size. Line trees were trees which happened to be growing precisely on the line extending from one survey corner to another. The

surveyor measured and recorded in his field notes the diameter of every line tree, as encountered on the line between survey corners. This furnished a cross-section of the trees in the forest and an average size of the trees therein. The field notes contained the distances (radii) from the bearing trees to the survey corners and permitted arithmetical calculations to fix the size of the circular sample plot with the survey corner as the center.

Using the International Table, a standard lumber table, the diameter of the bearing trees was converted into board feet of lumber which could be sawed from such trees. Since the pine bearing trees were deliberately selected by the surveyor as younger trees, they were smaller than the average of pine line trees. Therefore, the number of board feet in the average pine bearing tree in the sample plots was adjusted upward by a percentage factor to compensate for the small size of all of them. The size of the separate plots and the adjusted number of board feet in each bearing tree were determined in order to calculate the average number of board feet per acre of pine, within the land classified as pine lands, in order to reflect the average condition of the forest.

By the sample cruise method, Mr. Trygg estimated that there were as of the valuation date, a total of 36,395,089,145 board feet of pine, in acreage classified as pine land, and 5,388,392,730 board feet of pine in other timber lands located within the subject tract.

The timber census harvest method was based on a study by George

W. Hotchkiss which was compiled in 1898. Mr. Hotchkiss investigated and tabulated the pine and hardwood production from the forests of Wisconsin, Minnesota and Michigan. Using the Hotchkiss study, Mr. Trygg estimated that 41,893,614,205 board feet of pine and 12,950,000,000 board feet of hardwood were produced from Royce Area 111.

Mr. Trygg's opinion was that the total merchantable standing timber, within Royce 111, as of the date of valuation, contained not less than 42,000,000,000 board feet of pine, consisting of about 85% white pine and 15% Norway pine, and 12,500,000,000 board feet of hardwood timber.

Mr. Trygg's conclusion was that the subject lands, as a unit, had a fair market value of \$16,500,000 as of the valuation date.

41. Defendant's Expert Witness and His Estimate of Value.

Mr. Gordon E. Elmquist, a qualified real estate appraiser and expert witness, submitted a written report for the defendant which estimated the fair market value of the subject tract as of the valuation date. Mr. Elmquist found that little was factually known about the subject property as of the valuation date, and that the willing buyer of Royce Area 111 would have been more interested in the future development of Michigan Territory than in the immediate returns of the fur industry.

The appraiser concluded that the highest and best use for the northern half of the subject area, involving the pine lands, would be for commercial lumbering operations. He stated that although commercial

lumbering did not contribute to the utilization of the area in 1820, the timber nevertheless had a potential value which could be realized some years in the future. He found that the highest and best use for the southern half of the area was subsistence farming.

Mr. Elmquist based his valuation of the tract on comparable sales of large tracts made in various locations throughout the United States, or alternatively, on government sales of small tracts. He found that, as of the appraisal date, the area was largely unknown, unsurveyed and inaccessible, and he therefore considered only transactions which involved similar conditions. His conclusion, which he reached by use of the sales above described, which he deemed to be comparable, was that Royce Area 111 had a fair market value of 55 cents per acre on March 25, 1820.

The second technique used by Mr. Elmquist to appraise the value of Royce Area 111 consisted of a developmental approach, based on prices of government sales of small tracts. As we have noted in finding 35 above, government tracts could be obtained until 1820 on credit at \$2.00 per acre. But in July 1820, under the Land Act of 1820, the price was reduced to \$1.25 per acre. The appraiser found that as of March 25, 1820, the valuation date, the reduction which occurred the following July was generally anticipated. He therefore used the price of \$1.25 per acre as the government price.

He added 3 cents per acre to adjust for the increased prices obtainable by auction bidding. He then deducted certain costs to arrive at a

price a developer would be willing to pay for the land in 1820. These costs included expenditures averaging 16 cents per acre for property development, engineering (including surveying) expenses, taxes, insurance, salesmen's commissions, establishment of land offices, and miscellaneous costs. Nineteen cents per acre was deducted for expected profit, which was estimated to be 15% of investment. 2.8% of the salable acres were set aside for school purposes, and an additional 30% which was the estimated proportion of third and fourth class agricultural lands was eliminated. Mr. Elmquist based his calculations on a twenty year sales program, using a rate of interest of six percent. Considering all of these factors, Mr. Elmquist determined that the tract had a fair market value on the valuation date of 34 cents per acre.

However, since the supply of government land far exceeded the demand, the appraiser noted that \$1.25 per acre was an artificial starting point, and agreed that no speculator would have known how much usable land was available in the tract.

Mr. Elmquist concluded that a prudent investor would have anticipated a twenty-year resale period for the subject tract, and a constant sales price over the resale period. He also assumed that the northern half of Royce Area 111 would be sold in small tracts and that the lands with third and fourth class agricultural soil were worthless.

Relying on Mr. Elmquist's analysis, the defendant in his brief

valued the subject lands at \$0.445 per acre, contending that a buyer could have obtained \$0.55 per acre by selling one-half of the land in large parcels for timber, and \$0.34 per acre by selling the other one-half in small parcels to settlers for agriculture.

42. Consideration

Plaintiffs received \$97,409.14, under the 1819 treaty, supra, of which only the annuity payments disbursed under article 4 of the treaty constituted consideration for the land cession herein. Article 4 provided that plaintiffs would receive the sum of \$1,000 annually. This amount was paid by defendant until 1855, at which time plaintiffs surrendered their annuity rights in accord with the provisions of the treaty of August 2, 1855, 11 Stat. 366, between the parties.

The GAO report shows \$36,000 disbursed, as annuity payments, under article 4. However, the Commission, in Saginaw Chippewa Indian Tribe v. United States, Docket 13-1, 2 Ind. Cl. Comm. 416 (1953), valued the annuity surrendered under the 1855 treaty at \$16,667.

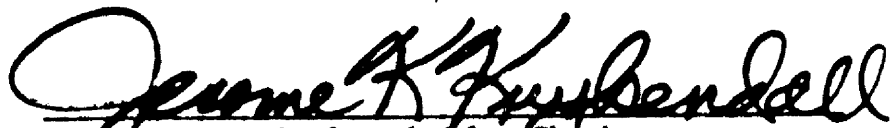
Conclusions of Law


Upon the foregoing findings of fact and the record as a whole, the Commission concludes:

1. On March 25, 1820, the subject tract had a value of \$8,160,000.

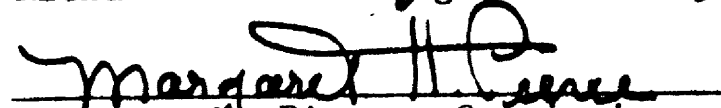
2. The consideration of \$16,667 received by plaintiffs under the Treaty of September 19, 1819 (7 Stat. 203) for lands having a fair market value of \$8,160,000 was so grossly inadequate as to render that consideration unconscionable within the meaning of Clause 3, Section 2 of the Indian Claims Commission Act.

3. Plaintiffs are entitled to recover from the defendant the sum of \$8,143,333 for and on behalf of the Saginaw Chippewa Indian Tribe of Michigan and the Saginaw, Swan Creek and Black River groups or bands of Chippewa Indians, less the offsets, if any, to which defendant may be entitled under the provisions of the Indian Claims Commission Act.


Jerome K. Kuykendall, Chairman


John T. Vance, Commissioner


Richard W. Yarborough, Commissioner


Margaret M. Pierce, Commissioner


Brantley Blue, Commissioner