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Sculpting the Public Land Base of Northern Minnesota: Past, Present and Future

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Sculpting the Public Land Base of Northern Minnesota: Past, Present & Future
Article One: Researching the History of Public Lands in the Arrowhead of Minnesota

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Abstract

Article One: Researching the History of the Public Lands in the Arrowhead of Minnesota

The State of Minnesota has 6.1 million acres of public lands (MNDNR). The majority of these lands are located in the Arrowhead Region of Northern Minnesota. The research question of “How did these lands come into state ownership?” will be evaluated in this article. The evaluation will include the part that nature played in their eventual status as public lands. Research will include exploring how the establishment and settling of Minnesota as a state dictated parts of public land designations.

The history of “How the logging and mining industries began” will begin to shed light on the biological boundaries of public lands. The history of agricultural efforts will also be analyzed as a significant reason for so much land eventually coming into public domain. Topography and its role will be explored.

The research question of “How can public administrators use past lessons for land use planning in the future?” will be studied in relation to early land use decisions by public administrators. Early key decisions by stakeholders and conservationists will also be studied. The formation and role of permanent school trust fund lands will also be discussed.

Article One: Researching the History of Public Lands in the Arrowhead of Minnesota

Introduction

The question of how northern Minnesota became so rich in public lands is complex. Solving this question requires investigating patterns of nature and decisions makers. History reveals that it involved nature and nurture, fortunate discoveries and unfortunate lack of planning. This article will contain research into how the formation of the state naturally and politically both played a part in forming the current land makeup of the Arrowhead region of northern Minnesota.

Natures Original Cuts, Shaping the Land

Millions of years ago a huge glacier known as the Keewatin Cap covered the great lakes. The ice flow carried rocks, pebbles, sand clays and a jumbled mixture known as drift. Enough fine material was left among the rocky terrain to support a fair forest. The glaciers carved out lakes and brought sediment forming different kinds of soils across what we now know as Minnesota. A distinct overlay of the coniferous, pine rich forests carve a cone shaped hook in the 14 northern counties commonly known as the Arrowhead of Minnesota. The Arrowhead would contain the majority of the states 11,000 lakes with Itasca County alone, containing 1100 of those lakes. Minnesota's plentiful waters have shaped the state's character. It has been estimated that there are 5,650 square miles of lake surface in Minnesota (Rottsolk, 1960).

More than a million years would have been what was needed to create the thick beds of slate iron and taconite that make up the region's extensive iron formation. It stretches

westward to Pokegama Lake in Itasca County and eastward to Birch Lake in St. Louis County (Lamppa, 2004).

The last great ice sheet in Minnesota dammed the outlet of the Red River. When it melted, it formed a large lake known as Lake Agassiz. A shallow arm of the lake extended as far east as Northwestern St. Louis County and covered several Arrowhead Counties. As the lake melted and drained to the north into the Hudson Bay, it left a great thickness of partially decayed vegetation in some places, creating the extensive areas of peat in northern Minnesota (Jessness & Nowell, 1935).

The random actions of glaciers would determine the natural vegetation patterns of Minnesota. The actions would dictate what can grow on any given site and determine the soils, topography and hydrology of the lands. The average growing season also plays a role. The average growing season in Minnesota varies from 90 days on the Iron Range to 160 days in southeast Minnesota.

The natural vegetation of Minnesota was documented between 1847 – 1907. The Arrowhead of Minnesota contained five main types of vegetation: Northern Hardwood, Great Lakes Pine, Jack Pine, Boreal Hardwood-Conifer and Peatlands. Maps of natural vegetation in Minnesota were prepared in 1929-1930 by Francis J. Marschner, a research assistant at the U.S. Department of Agriculture in Washington DC. His updated work is considered the foundation for the unique vegetation science in the region.

European Exploration

Trapping was the earliest harvest from these lands. Voyageurs would be the first to enjoy the bounties of the land. The fur trapping industry would also begin the earliest political negotiations with the original Native American populations. Relationships with the Chippewa in the Arrowhead were important to the success of the fur trade. Explorers and Expeditions that crossed the Arrowhead would lay the path for white settlement of northern Minnesota (Keillor, 2008).

The earliest documented explorers of Northern Minnesota were Radisson and Groseillers in 1654. Their expedition covered an east/west journey across the Arrowhead to the Red River Valley. The explorers noted the rich timber and water resources as a means of transportation. They also noted extreme wetlands and swamps which presented challenges to the expedition.

The leader of the first official United States military expedition was Lieutenant Zebulan Pike who traveled north to Cass Lake in 1806. On his way, he stopped in Grand Rapids at the foot of the falls where the Blandin Paper Mill is now located. The United States Government would later send Major S.H. Long to choose a site for a military fort in Minnesota. He chose the Fort Snelling site which overlooks the conjunction of the Minnesota and Mississippi Rivers. The purpose for this fort was not necessarily for military purposes as much as to ensure that the commerce of the fur trade continued without conflict (Blegen, 1975).

Soldiers from Fort Snelling helped build Camp Ripley in 1849. Camp Ripley is located on the upper Mississippi below the mouth of the Crow Wing River. It was originally built to control the Winnebago tribe which had been displaced from Iowa. Grand Portage would serve as a central

hub for the fur trade. It was known as “the great carrying place.” The nearby Pigeon River served as a passable trek and became “a funnel of wealth for the continent” (Lass., 1983, p. 49).

Trading centers were also established across Northeastern Minnesota. There were posts on Bowstring Lake and White Oak Point along the Mississippi in Itasca County. The American Fur Company had a post on Lake Winnibigoshish. The Hudson Bay Company had run of the industry for many years until American Fur Companies began to compete with the British. It is estimated that millions of beaver, fox, lynx, bear otter, muskrat and wolf pelts must have been taken out (Rottsoik, 1960).

Opening the West: Minnesota becomes a Territory

The Louisiana Purchase in 1803 opened up 530,000,000 acres to settlement in North America. President Jefferson at the time was in a quandary. Jefferson had always advocated strict adherence to the Constitution, yet there was no provision empowering him to purchase territory. Because of public support and potential value of the Louisiana purchase for future growth potential for the United States, Jefferson decided to ignore the legalistic interpretation of the Constitution and forgo the passage of a Constitutional amendment to validate the purchase. This decision would ultimately contribute to the principle of implied powers of the federal government. Implied powers are political powers granted to the United States government that are not explicitly stated in the Constitution. They are implied because similar powers have set a precedent (Blegen, 1985).

Minnesota would then spend the next century building infrastructure and welcoming early settlers including immigrants. Minnesota became a territory in 1849. This legal incorporation

helped open the doors to investors and stability. The beginnings of railroads began ensuring economic centers to develop. By the 1850's the state had developed railroad fever and worked to build a system of rails connecting the East to the Midwest and the Upper Midwest; bringing people and progress to the areas along the way. Unfortunately, the Arrowhead was not included in this progress due to a lack of settlers and the wet conditions of the northern forest. (Blegen, 1985).

As the Minnesota territory was established, there was a strong curiosity about the source of the Mississippi River, Henry Rowe Schoolcraft was determined to locate the head of the river. In 1832, he led a group of thirty, including Ozanwindib, an Ojibway guide and interpreter. This expedition led him to a lake in what is now known as Hubbard County. This lake was formerly known as Elk Lake, but Schoolcraft promptly changed it to something of more nobility. Lake Itasca derived its name through the two words "veritas" meaning true and "caput" meaning head. The Mississippi would become an essential means of transportation in northern Minnesota becoming vital for industry (Lass, 1983).

Enabling Act and School Trust Lands Designated.

Minnesota entered the process for statehood as a major crisis was stirring in the country. The slavery issue was dividing the country and polarizing to political parties with the Republican party against slavery and the Democratic party in favor. It was feared by politicians Washington D.C. that Minnesota would be anti-slavery and would add two more Senators to side of the North. Despite opposition due to the concerns, Congress passed the Enabling Act on January 26, 1858 (Lass, 1983).

The Enabling Act defined the geographical boundaries of the state. It called for the election of delegates and the assembling of a constitutional convention and the establishment of a state government. It also offered federal grants for the purpose of granting public lands. These school trust lands included two sections (16 and 36) in each township for the use of schools. The proceeds and production from these lands were designated to be dispersed for the needs of local schools. (Blegen, 1985).

By 1900, many of the original School Trust Lands were quickly sold off as farmlands by southern Minnesota Counties to support schools. School Trust Fund Lands still play a significant role in Northeastern Minnesota. For example in 2019 they contributed \$36 million dollars to different school districts of the state from sales of timber and minerals. (mn.gov)

When government officials set aside these school trust fund lands, they signaled that they were not just setting up maps or territories, but also taking the effort to set up a society that values the education of all children. It was a government cost that all could agree upon. The stewardship of these lands is truly viewed as a trust by the governor's school trust fund lands office. While being public lands, their main purpose is to raise revenue for all school children in the state.

Minnesota Becomes a State

Congress passed the bill for admission making it a state on May 11, 1858. The news traveled by telegraph and steamboat. Minnesota entered the Union as the 32nd State on June 3, 1858. Henry Sibley was sworn in as the first Governor(Blegen, 1985).

The official state boundaries were created by a series of treaties and a few mistakes. The northern borders were created by the Treaty of Paris in 1783. It specified that the international boundary would go from Lake Superior by an all water route to the northwest point of Lake of the Woods and from there it was to proceed to the Mississippi River. This was a geographical impossibility caused by a flawed map made by John Mitchell in 1755. A gap was created when it was discovered that the Mississippi started south rather than northwest of the most northwest point of Lake of the Woods. At the Convention of 1818, they closed this boundary gap by agreeing on a boundary that divided the Louisiana Purchase and Canada. The treaty outlines a due north-south line running through the most northwest point of Lake of the Woods that would be a boundary to the 49th parallel (Blegen, 1985).

The reconciling of previous agreements resulted in the anomaly of Minnesota known as the Northwest Angle, or “the chimney”. In 1842, Secretary of State Daniel Webster and British Emissary Lord Ashburton met and formalized the Northwest angle resulting in the U.S. acquiring 123 square miles of land on the Canadian side of Lake of the Woods.

Wisconsin made a run at extending their border all the way to Lake Itasca, but Congress limited them to their current western border. They made a run for the entire St. Croix Valley and proposed their boundary running from the mouth of the Rum River to the St. Louis River. Residents of the St. Paul-Stillwater area did not want to be part of Wisconsin and were able to block this attempt.

Up until 1947, the borders of Michigan, Wisconsin and Minnesota did not have precise borders. At that time, they agreed on boundaries that outlined their Lake Superior waters. In

1990, the U.S. Census Bureau began adding adjoining waters to official state areas increasing 2,546 miles of shoreline and changing Minnesota's size and shape (Lass, 2014).

Minnesota Before European Settlement

Native Americans arrived long before European Settlers. Native American reservations that were eventually designated in the Arrowhead of Minnesota include Red Lake Nation, Fond Du Lac, Leech Lake, Bois Forte and Grand Portage Reservation (Wigard, 2014).

Before settlers could purchase the land, and before lumbermen could legally purchase timber stumpage, settlement needed to be made with the Native Americans. The Federal government bought lands, treaties were made, and reservations set aside. Early records indicate that the Sioux inhabited Minnesota long before the Ojibwe. Eventually the Ojibwe pushed the Sioux into Southern Minnesota. All tribes were moved west to avoid conflict with the Europeans.

Early Native Americans helped shape the land through accidental and intentional use of fire. Many fires were the results of their travel routes. It has been proven that fire was used as a tool for modifying landscapes and making habitat for game. Indigenous peoples used controlled burns to create an intentional mosaic of grasslands and forests.

Many Native American mounds have been found across Northern Minnesota. Lake Vermilion's Pike Bay Mound is thought to be one of the oldest. In primary burial grounds the dead were interred at or below ground level. In secondary burial the dead were interred somewhere else first and later moved to the mound of what is called "bundle burials." The

excavation at Pike Bay Mound revealed over 6,000 pieces of broken pottery, 12 projectile points, the bones of a bison and 32 human bones (Lamppa, 2004).

Smallpox played a tragic role in the interactions between indigenous people and Europeans. As smallpox outbreaks happened in Minnesota, it also took its toll on tribes. Some historians believe that it killed up to 95% of the native people of what is now the United States. Historians believe that smallpox may have played a role in the Tragedy at Big Sandy Lake. More than 5000 Indians from Michigan, Wisconsin and Minnesota were ordered to make the trek to Big Sandy Lake in Aitkin County, for provisions and annuity payments in treacherous conditions. Officials of the Minnesota Territory sought to relocate several bands of the tribe to areas west of the Mississippi. Due to delayed and inadequate payments and lack of supplies over 400 Ojibwe died of disease, starvation and cold. This tragedy assisted the bands in gaining widespread public support for permanent reservations in their traditional territories. (Wigerd, 2014).

Immigrants Settling the Lands

When the United States became a separate nation, a public domain was created by the cession to the federal government of lands. The problem confronting the new country was how to handle or dispose of this great public domain. Some viewed the public lands as a national resource that should provide public revenue. Others felt it should be settled quickly to stimulate the growth of the country. The public favored settling it quickly and therefore much of the land was placed in private ownership (Jessness & Nowell, 1935).

In 1862, under the Homestead Act, settlers were given land title to land in return for establishing residence and developing the land. It was cheap fertile land that drew settlers to Northeastern Minnesota. Any person who was the head of a family or twenty-one years of age and was a citizen of the United States could obtain no more than 160 acres for a fair price on proof that he had resided on and cultivated the land for five years (Dana, Allison, Cunningham; 1960).

Many of the lands in NE were not fertile enough to sustain profitable farms. The assumption that the lands could be cutover and efficiently converted in farmlands- was false. Immigrants would help shape public land base by choosing the most fertile lands, leaving the rocky and wet ground to eventually be managed by the state. This contributed to land use patterns that plague the state to this day because of the scattered management & forest fragmentation issues. Itasca County is an example of scattered ownership between private and public owners. This fragmentation makes landscape planning difficult for forestry and habitat purposes.

While most newcomers to Minnesota sought farmland, thousands of others were attracted by lumbering and iron mining. Anyone who made such a homestead claim had to live on their land the better part of a year, erect buildings and clear enough ground for gardens to support a family. After fourteen months he could buy the land at \$1.25 an acre. Homesteaders also had the option of living on the land for five years and obtain it free. Two witnesses were required to ascertain that he had lived off of the land as claimed (Blegen, 1985).

The legislature developed recruitment programs for Sweden and Norway. Much recruitment came by word of mouth with immigrants sending mail to relatives encouraging them to come

to America. The Iron Range of Northeastern Minnesota came to be known as the “melting pot.” In time, the largest wave of immigration from southern and Eastern Europe reached the United States, by that time the best agricultural lands of the state were taken. For those latecomers the greatest opportunities were in Northern Minnesota (Lamppa, 2004).

The Mesabi Range, located in St. Louis County and Itasca County, became a mosaic of eastern Europeans. The area hungered for thousands of unskilled workers to extract ore. During the 1890’s the streets of places like Virginia, Hibbing, and Chisholm were filled with Finns, Ukrainians, Yugoslavs, Italians, Bulgarians, Hungarians and many other people. All had come to the Arrowhead in search of a better life. They would help to form a diverse society that valued differences. They shared food, faith and culture to come together to make the Iron Range (Lass, 1983).

The Ax and Saw Begin to Carve out the Public Land Base

The draw to the Arrowhead region of Minnesota was influenced by the abundance of white pine trees. Prior to European settlement of North America, white pine was prominent both along the North Atlantic coast, throughout New England, and all the way along the Great Lakes region into Minnesota. As eastern wood supplies and were depleted, the northern Minnesota became very attractive (Rajala, 1998).

“The earliest inhabitants depended on the forest for food and shelter. They used the wood and they lived off of the land. They sometimes set fire to it; it sometimes roared back with vengeance. The forest was their friend and sometimes their enemy. It was always a place of beauty and respect” (Forester, 2004, p. 187).

Homesteaders were anxious to clear the land and stake their claim in one of the great wilderness frontiers of North America. As white pine was depleted on the East Coast, the search for new sources moved westward. Minnesota turned into a magnet for prominent lumbermen such as Pillsbury and Weyerhaeuser. During this century of logging, lumber barons would purchase enormous tracts, cut them over and allow them to go tax forfeit.

By far the most influential factor in determining the public land base in northern Minnesota was the outline of the coniferous forest. Unlike other regions formed by railroads, this the northern region was formed by logging. (Keillor 77) . Logging began in the 1850's peaked by the 1880s and was over by the early 1900's.

While the forests were being logged, many wood using industries such as planing mills, paper mills and factories were attracted to Minnesota. At the peak of logging operations in the state there were approximately 500 wood using plants. Wood products went way beyond boards. They included shingles, materials for doors, wagons, and barrels. Railroad cars were made of wood and even early automobiles. Sawdust was used in a variety of ways including as fuel and floor coverings. At the height of production, the annual cut amounted to approximately two and three-tenth billion board feet and has an estimated value in excess of fifty million dollars (Jessness & Nowell;1935).

Logging camps emerged in the northern forests of Minnesota. The earliest camps were composed of simple shanties with wood stoves. Camps eventually progressed to have bunkhouses, cook houses, dining halls and more. Men would live in these camps up to nine

months at a time, working from sunrise to sundown and adhering by strict company rules. They would pass time in evenings playing cards, singing, smoking pipes and chewing snuff.

Logging camps moved and employed mostly a bachelor work force, which generally had little interest or ability to settle down. Local communities would sometimes fear the lumberjacks coming into town to burn off steam and spend their paychecks. Small towns sprouted in the Arrowhead around the logging industry. Keillor asserts that “some inhabitants likely wished they had not- when the laid-off lumberjacks poured in during late spring. Townsfolk kept children indoors and respectable women avoided the illicit business district prone to lumberjacks sleeping off benders in haylofts, horse stalls, alleys, and sheds” (Keillor, 2008, p. 79).

International Falls, Cloquet, Virginia and Grand Rapids became towns with major milling operations. These timber industry hubs would continue to shape public lands for decades to come by supplying a market for wood fiber. Even after the white pines had been depleted, these industries would utilize other species of timber from the wood basket of northern Minnesota. Lumber from Minnesota would help build the Midwest.

While the reputation of loggers has always had colorful images, there is no doubt the role they played in shaping Northern Minnesota. The contributions assisted in forming society and industry. Blegan describes the workers as “men of fiber and will; and the stereotype of the lumberjack stumbling along skid road does injustice to the sturdiness of the bearded workers who cleared the forests” (Blegan, 1985, p.318).

Mining Begins -Early Prospects and Discoveries

In 1873, Michigan Senator Zach Chandler sponsored a bill in Congress to remove Michigan, Wisconsin and Minnesota from the strict mineral codes. At that point, Minnesota's Iron Country was open to entry under prevailing homestead and pre-emption laws. The minerals rights went with the lands.

Throughout the 1880s, despite age-old rumors of mineral wealth and confirmed findings of iron ore, there was little speculation about the iron mining potential for northern Minnesota. Early prospectors such as George Stuntz of Duluth were convinced of the valuable iron ore deposits near Vermillion. He turned to Charlemagne Tower, an attorney for Pennsylvania iron mining companies. Along with George Stone, they organized the Minnesota Iron Company, and opened the Soudan Mine. The Minnesota Iron Company would be the first to ship ore from Soudan near Lake Vermillion out of Two Harbors in 1884. Their success attracted more prospecting, and soon interest turned to the Mesabi Range. The Chippewa had named these hills Mesabe, meaning sleeping giant. East Coast businessman Lewis Merritt focused on this area and was the first to find ore there in 1890 (Lass, 1983).

The Merritt family had a great run in the mining industry but neither the capital nor enough business experience to see their projects through. The Merritt family was eventually extended credit by American businessman John Rockefeller , who ended up taking over their interests. Additional Minnesota businessmen would eventually become involved. Steel magnet Henry Oliver would open mines in Itasca County . John Greenway would develop not just the Canisteo

Mine, but also the City of Coleraine. Similarly, Frank Hibbing would develop mines and the City of Hibbing (Lass, 1983).

Mineral rights still play a huge factor in the Arrowhead today. The State of Minnesota has protected itself by not allowing its state mineral rights to be severed from parcels. In early years of statehood both federal and state government included mineral rights in their conveyance of land. An 1889 law allowed the state to retain the mineral rights on land sales. The State of Minnesota is the largest single owner of mineral rights, controlling 24% of all rights. The state manages mineral rights for the permanent school trust fund. The majority of minerals in the state are owned by private parties (MNDNR).

The Mesabi ore body itself would stretch over 110 miles and one to three miles long from Babbitt in the east to Grand Rapids in the west. The Mesabi was different from the other iron ranges in the fact that the ore was soft like soil, laying close to the surface allowing for strip mining. By the turn of the century, the Mesabi had become the greatest source of iron in the United States. The taming of the iron ranges coincided with the final days of Minnesota's agricultural frontier and the lumberman's run on the coniferous forests. By the turn of the century the public land base patterns had been established and would help dictate Minnesota's future (Lass, 1983).

Fire and Changes on the Horizon

By 1905 the logging boom was mostly over. Hundreds of thousands of acres had been clear cut and the logging barons had allowed them to go to tax forfeit. It had been assumed that these lands could be converted to agricultural lands. Unfortunately, much of the soils of the

northern forests were not favorable to profitable farming. Adding to the issue was the shortened growing season of the Arrowhead. Northern Minnesota is home to International Falls, known as the “Ice Box of the Nation” and the town of Embarrass, which is notable as the coldest place in Minnesota, with an average temperature of 34.5 degrees (MNDNR).

Another burning issue was the fire fuels left behind from years of clearcutting. The dried branches and unusable trunks left after logging led to catastrophic fires that fed on gasses it created that raced along the canopies of unlogged areas. Gasses are caused by unburned material that is thermally degraded producing volatile gases that mix with air to form a combustible mixture ahead of the flaming front (MNDNR). These fires were often sparked by trains and several years of draught conditions.

The Arrowhead itself is in a high floristic zone meaning the boreal forests can create fire fuels and growth cycles susceptible to wildfires. There has been extensive research done on how presettlement fires shaped the landscape and native plant communities. Fires were common and often used as a tool for managing landscapes (MNDNR).

The Hinckley Fire Of 1894 killed 418 people. The Cloquet Fire of 1918 killed another 453 people. There were other disastrous forest fires that ravaged Chisholm in 1908 Baudette, in 1910 and Moose Lake during this period. Legislators were compelled to begin to create a fire protection system in Minnesota. In 1895 Christopher Andrews was named the first Chief Fire Warden conservationist (Forester, 2004).

The Birth of Conservation

General Christopher Andrews was a prominent Minnesotan who had achieved the rank of general during the civil war and was appointed United States Minister to Sweden and Norway in 1869. As Andrews traveled throughout Sweden, he noted the curious checkerboard pattern in forests and that Swedes utilized. "They were applying a formula for perpetual forests at the very time Minnesotans were cutting down the white pine with little thought of a pineless posterity (Blegen, 1975, p. 404). When he returned in 1877, he promoted his conservation views, preached about the dangers of fires and advocated for forestry research stations. He continued to voice his matured philosophy of perpetual forests (Blegen, 1975).

Andrews would serve as fire chief warden for 10 years and as forestry commissioner for six more years before being named secretary of the newly created state forestry board. Andrews was successful in achieving at least a philosophical acceptance of his belief that forests should occupy only land unsuited for agriculture and cutting should never exceed annual growth, and that the forests should continually be renewed through reforestation (Lass, 2004).

Creation of Federal Forests in Minnesota

Partly because of the influence of Andrews and other Minnesota conservationist, the federal government reserved forest tracts under the Morris Act of 1902. While Roosevelt was president two massive national forests in Minnesota were created known today as the Chippewa and Superior National Forests. These two forests would end of up comprising one sixth of the state's total forested areas (Lass, 1983).

At the turn of the century in 1900, Andrews petitioned Congress to create a forest reserve at Cass Lake. These 225,000 acres would eventually be known as the Chippewa National Forest in 1908. It was the first federal forest to be managed by forestry principles. At the same time the Minnesota legislature also established the North Central Agricultural Experiment Station at the Minnesota College of Agriculture in Grand Rapids, and so began the state's first practical expression of forestry "on the ground" (Forester, 2004).

The Chippewa National Forest has a rich history involving the Civilian Conservation, the Leech Lake Band of Ojibwe and Anishinabwe culture. The Chippewa is the only National Forest formed to benefit Indian people. The boundaries encompass 1.6 million acres and is the largest bald eagle breeding ground in the lower 48 states. Over a hundred miles of the Mississippi River curves through the forest, and it contains over 440,000 acres of wetlands contributing to quality drinking water for Minnesota. It is estimated that over 25% of drinking water is sourced from northern Minnesota (Blegen, 1975).

The Superior National Forest was established in 1909 by President Theodore Roosevelt. It has an area of 3,900,000 acres. The one -million- acre Boundary Waters Canoe Area Wilderness (BWCA) lies within its boundaries. The heart of this area was set aside in 1926. In 1930, the Shipstead-Nolan Act banned the lease of lands, prohibited logging and formation of dams. In 1938 the area's borders were expanded to create roughly the borders of present day and it was renamed the Superior Roadless Primitive Area.

In 1978, President Carter signed a law that placed further restrictions on logging, travel, motor use. Lumber mills that relied on this timber source closed down, along with resorts and

small businesses. “Forest service bulldozers put down berms blocking access across all of the roads and removed most culverts bridges and roads. No vehicles or any motors of any kind were allowed including chainsaws, snowmobiles or airplanes were allowed in the wilderness” (Forester, 2004, p. 154). This has been a cause of generational conflict by those who lost their access and livelihoods.

In the 1920’s only 40 percent of the land within the Superior National Forest’s Boundaries were publicly owned. By the 1930’s many of the lumbermen abandoned cutover property for taxes. The national forest picked up 60 percent of once privately held lands. The USFS paid no state or county taxes but promised the county 25 percent of slim receipts. Only one-fourth of it had been logged when the depression began. Due to lack of roads, timber planners forgot the BWCA and surrounding areas. Without roads, timber could not be moved out (Lass, 1983).

The Wilderness Act of 1964 made the Boundary Waters Canoe area part of the new National Wilderness Preservation System and became an “instant wilderness.” The act left much of the management, specifically logging and motorboat use in the hands of the Secretary of Agriculture (Forester, 2004). Local business and political leaders advocated for more access and control.

Prior to his death in 1978, Senator Hubert H. Humphrey sponsored legislation to designate the Boundary Waters Wilderness Act. President Jimmy Carter signed the Act on October 21, 1978. Congressman James Oberstar advocated for making the center a recreation area with the 600,000 acres to the east and west to be designated wilderness (Forester, 2014). As with any compromise, there were disappointed people on both sides of the BWCA issue. It remains an

extremely controversial public asset today (Lass, 1983). One side would like to see it remain as untouched, pristine wilderness, while others would like to see managed forests and better access to the resources present in the BWCA.

Agricultural Efforts

Farming efforts in northeastern Minnesota were just beginning in 1880 and early were built around dairy farming. Butter was a principle product and was cultivated by climate conditions that favored grasses and clovers on the rocky terrain. On land that was tillable- oats and barley were the small grain crops extensively grown. Corn could only be grown on the edges of the area. Pasturing and hay crops were utilized for feeding farm animals. In the Duluth vicinity and the iron range truck crops such as cabbage, carrots, rutabagas, tomatoes and peas were produced (Jessness & Nowell, 1935).

Having family gardens often made the difference between homesteaders making it or not. Immigrants from Europe brought generational knowledge and skills that were utilized in growing gardens. Root crops, such as potatoes, that could be stored for long winters were especially critical for settlers. Rutabagas ranked high in digestible feed per acre and were often fed to dairy cattle, creating odd flavored milk (Rottsoik, 1960).

While heads of household were working in the mining and logging industries, family farms were often managed by wives and children. The sale of eggs and other farm commodities often was the difference in margin of northeastern family farm survival.

Another incentive for promoting farming was lumber companies wanting to sell their cutover land than have it remain on the tax rolls. It was natural for them and others who believed that

northern Minnesota could become another agricultural frontier to encourage cutover farming. This claim was strengthened during the period of 1820-1920 because there were many opportunities to sell local farm products to loggers and miners. Thousands of small farms were started in the hit and miss least rocky portions of the old forest zone. In the 1920's the rapid closing of frontier lumbering and agricultural depression ruined thousands of farmers who ended up abandoning their land and passing them to the state as tax delinquent lands (Lass, 1985).

Drainage & Ditching Create Con-Con Public Lands

Extensive drainage of wetlands in the peat region of northern Minnesota for agricultural purposes was undertaken in the early years of the present century. This development was encouraged by the legislature which facilitated the organization and operation of drainage districts that became taxing districts. The Volstead Act was passed in 1908 making lands subject to provisions of state laws relating to the drainage of lands for agriculture. Charges were legally assessed against public lands. (Dana, Allison, Cunningham; 1960).

The aftermath of this attempt to farmlands unsuitable for agriculture was expensive. Crop failures, inadequate financial resources, and heavy taxes led to such a crisis of tax delinquency that the state had to come to the rescue of northern counties. These areas became known as "conservation areas"(Lass, 1985).

Minnesota's Consolidated Conservation (Con-Con) lands are located in the counties of Aitkin, Beltrami, Koochiching, Lake of the Woods, Mahnommen, Marshall and Roseau. They became state owned through tax forfeiture in 1929, 1931, and 1933. The unsuitability of the land for

farming and the Great Depression contributed to the massive abandonment. This created defaults on the payments of the bonds placing several of these counties in danger of bankruptcy. The state prevented this from happening by taking on the \$4,750,000 of debt and in turn was given clear title of the 1.6 million acres of lands known today as the Con-Con lands. (leg.state.mn). The following is from the legislative act enabling this transfer.

“Whereas pursuant to such laws relating to drainage ditches the counties of Beltrami, Lake of the Woods, and Koochiching have heretofore incurred obligations to finance and refinance such ditches upon lands which it now appears were and are not suitable for agriculture, and the assessments levied upon lands supposedly benefitted thereby cannot be collected in a sum sufficient to pay such bonds and the result in confiscatory rates such that the taxes so levied would not be paid, and Whereas, default in the payment of such bonds in such counties is imminent, and municipal corporations would thereby be damaged, resulting in greatly added interest charges on all public financing for many years to come, and Whereas, certain lands in said counties hereinafter described will become available for state ownership and administration for use as a wild life preserve and hunting ground and other state purposes and will produce revenues to assist in relieving the tax burdens and preventing such bond default” (Jessness & Nowell, 1935, p. 113).

The Governor and Legislature Commission Studies

In 1931, 48% of the taxable land in the Arrowhead (almost 7 million acres) was tax delinquent. Northern Minnesota was declared one of the Nation’s most critical social and economic problems. In 1934, Governor Floyd Olson established a committee on land utilization

in the 14 Arrowhead Counties. It was discovered that taxes were being collected on less than half of the state's forestland. It was discovered that 70 percent or more of the land was in arrears. Governor Olson wrote: "Minnesota finds itself face to face with a new public domain. This new public domain is no longer a rich timbered land, such as once was... but land largely stripped of its natural wealth, for the most burned over and is of low value. The solution of the land problem of our state is by far the biggest conservation problem today, because it underlies all other phases of conservation" (Forester, 2004, p.143-144).

Governor Olson appointed a Committee on Land Utilization to address the imminent reversion of millions of acres of tax-delinquent cutover land and to present suggestions for the economic and social reconstruction of the region. Hindsight criticism had been directed at past policies of land disposal that did not have proper discrimination in their application. It was clear that land disposal should have been based more on the characteristics and qualities of the land. The lack of forest planning was also highlighted. After stands of timber had been removed, efforts were quickly made to sell the forest lands and open it up for settlement as quickly as possible. This resulted in extremely scattered development that led to infrastructure concerns including the cost of building roads to remote homes and busing children to school.

Public expenditures were further scrutinized, citing the need for creation of schools and local governments. Plans for the future were based on growth providing the means to pay for these services. If debts were incurred and the tax base failed to grow, failure was imminent. Not only could the tax base fail, but it may have actually decreased as in the case of timber crops that had been harvested (Jessness & Nowell, 1935).

As the excitement for drainage and irrigation projects grew, they were expected to pay for themselves through future value. Inadvisable projects were undertaken which drained local governments and therefore turned extended the burden to the state, which makes it a concern of the broader citizens.

The 1932 University of Minnesota Land Use study addressed and acknowledged for the first time that the agricultural prospects of northern counties were not as good as had been previously thought. Other applicable economic factors for agriculture were soberly addressed such as soil, climate, transportation, competing areas and costs of development (Dana, Cunningham, Allison; 1960).

A direct outcome of the 1932 University of Minnesota Land Use study included the designation of 26 new state forests that have directly supported the timber industry in the region. These efforts were supplemented by the “New Deal” reforestation work done by the Civilian Conservation Corps. The CCC workers planted 125 million trees in the region (Rottsohlk, 1960).

The study also foreshadowed the current Payment in Lieu of Taxes (PILT) payments to counties, which is a local government aid program to compensate counties for loss of tax base from public lands. **“Some have urged that the state should make an annual payment to local units of government in lieu of taxes on land controlled by the state. Some would extend this policy to tax delinquent land generally. But such an arrangement , it will be seen would be purely arbitrary; payments would have no relationship to local needs or to the state’s responsibility to obligate itself to such annual payments. Where land is taken over by the**

state for a specific purpose, settlement with the local units on the basis of its reasonable value I such use may be justified. It would also seem reasonable to require that such payments be applied first to existing local debt rather than to current operating expenses”

(Jessness & Nowell, 1935, 127-128). The current PILT model was put into place in 1979.

Conclusion and Analysis

By the time Minnesota celebrated its centennial in 1958, the public land base in Minnesota was mostly set. The first hundred years of statehood had set the stage for a very large public land base in Northern Minnesota. Though the path to this ownership was far from strategic or planned, public administrators have done their best to mitigate earlier twists and turns in its history.

The natural resource economics of the region had experienced intense patterns of boom & busts during the earliest years incentivizing public administrators to engage in extensive land use planning including the key decisions to dedicate federal and state forests. What began as tax forfeited lands, became global treasures that would eventually be utilized to maintain the natural resource economy.

The ups and downs of the natural resource economy of the Arrowhead have endowed and challenged its management. The global nature of the timber and steel industry have fluctuated greatly. In spite of this, Northern Minnesota has never failed to return wealth to its inhabitants and visitors by its beautiful atmosphere.

Professor Lowry Nelson, Sociologist at the University of Minnesota described in this way:

“No part of Minnesota has a history garlanded with more romance or enlivened by greater

adventure. The beauty of the north country through its wild life, mines, modern paper mills and shipping is pure. This is witnessed by the fact that every summer tens of thousands of people go north for rest and recreation. The region is one of parks and forests managed as a resource for the people" (Blegen, 1975, p. 567).

Blegen asserts: "If northern farming conditions contrast unfavorably with those compared to other regions of the state, the Emersonian law of compensation seems to operate. There are compensatory values to state and country in northern nature, with all its resources. Consolation there is also the assurance that Americans are concerned about retaining for posterity some parts of the primeval life woven into the natural history of the lands and waters of the north country"(Blegen, 1975, p. 526).

Research of the history of northern Minnesota reveals that in spite of busts and booms of the area, the public lands designated were the result of nature's ability to dictate topography and man's ability to engage in both proactive and reactive land use planning.

References

- Blegen, T. (1975). *Minnesota, A History of the State*. Minneapolis, MN: UM Press.
- Dana, T; Allison, J; Cunningham, R. (1960). *Minnesota Lands, Ownership, Use, and Management of Forests and Related Lands*. Narbeth, PA: The Livingston Publishing Company.
- Forester, J. (2004). *The Forest for the Trees, How Humans Shaped the North Woods*.
St. Paul, MN: Minnesota Historical Society Press.
- Jessness, B; & Nowell, R. (1935). *A Program for Land Use in Northern Minnesota: A Type Study in Land Utilization*. St. Paul, MN: The University of Minnesota Press.
- Keillor, S. (2008). *Shaping Minnesota's Identity: 150 Years of State History*.
Lakeville, MN: Pogo Press.
- Lampaa, M. (2004). *Minnesota's Iron Country: Rich Ore, Rich Lives*.
Duluth, MN: Lake Superior Port Cities Publishing Inc.
- Lass, W. (1983). *Minnesota, A History*. New York, NY: W.W. Norton & Company.
- MNDNR. (2020). Retrieved from <https://www.dnr.state.mn.us>
- Rajala, J. (1998). *Bringing Back the White Pines*. Duluth, MN: Pro Print.
- Rottsolk, J. (1960). *Pines, Mines, and Lakes: The Story of Itasca County, Minnesota*. Itasca County Historical Society. St. Paul, MN. Minnesota Historical Society Press.j
- Wingerd, M. (2014). *North Country: The Making of Minnesota*. Minneapolis: UM Press.

