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As of 11/20/2021

About the Organization:

The Hennepin-Overland Railway Historical Society, Inc. is a Minnesota perpetual non-profit exempt organization under §501(c)(3), Internal Revenue Code, formed for charitable purposes. Within our museum we operate model railroad displays, a library which includes historical railroading related documents and model railroading periodicals, and railroad artifact displays. We also operate a museum/hobby shop to defray the cost of maintaining our facility.

Our Mission:
Our mission is to provide entertainment and education for those interested in the history and operations of railroads.

Recipients Of Our Services:
Our facility is open for public visitation. Recipients of our services are any members of the public interested in learning about the history and/or operations of railroads, which have played and continue to play a significant yet often unheralded role in the development of our country from numerous cultural and economic perspectives. We also host meeting space for railroading organizations such as the University of Minnesota Model Railroad club.

Membership Information:
Our services could not happen without our volunteer members, who help fund our organization through membership fees. Membership is open to adults and junior members with a minimum age of 14. Work is done on a volunteer basis, and costs for constructing and operating the museum are borne by the Society.

Organization History:
It is the successor to an unincorporated association of railroad hobbyists formed in 1976 in Richfield. In 1985, the layout display (then 1,600 square feet) was moved and reassembled in 1987 to the Scale Model Supplies hobby store at Lexington and University in St. Paul. In 1996, enlarged to 2 levels, Hennepin-Overland began looking for its own facility and settled in 1997 on the current building at 2501 East 38th Street in Minneapolis. The display was then taken apart again and stored until the new space was refurbished. In July 1999, the display was opened in time for the National Model Railroad Association Convention (held in St. Paul).

About the Layout:

The Hennepin Overland Railroad is a 64 foot long by 24 foot wide operating model railroad display that is not based on any prototype; it is a freelance layout design. There is no particular era represented, though we try to use structures that date to the late steam era (1930-1960). Operations are conducted on 3 primary lines – an eastbound mainline, a westbound mainline, and a branch line, as well as an assortment of smaller spurs. The layout is comprised of a visible portion, and a lower-level portion that is used for staging. Trains travel between levels through the helix. Typically, a train spends about half its time in the invisible, "off-stage" portions of the layout.

Mains lines are basically a two-track loop enabling continuous running, although reverse loops in the small helix in the staging yards (under the farm) allows it to be operated as a two-track loop - to-loop main. In addition, a reverse loop at each entrance into the helix allows operators to run the main lines in a shortened loop-to-loop fashion without trains running down the helix and back up. Operationally the layout is set up so it can be operated by one person (albeit somewhat limited) or up to about 30 people. When completed, the layout is designed to allow up to ten trains running simultaneously on the mains and branch lines (if we can stay organized enough) not including local switching and industrial branches or commuters. During operating sessions, 15 or more locomotives or trains can potentially all move simultaneously. Features of the layout include a steel mill complex, two industrial warehouse branches, a grain terminal, a 6-track passenger depot that can hold 15 car trains, a full branch line that could also be run as a second interchanging railroad, a locomotive and car shop complex, a logging branch line, and a 1,500 car staging yard.

With an 11-scale mile mainline a train traveling 60 scale miles an hour would theoretically take 11 minutes to run the whole main line. In practice it takes about 15 to 18 minutes. A drag freight from the steam era would take around 30 to 40 minutes for a complete trip.

General Operating Parameters:
Our layout operates using a Digitrax digital command and control (DCC) system, and locomotives must be equipped with DCC decoders to function. Members are free to operate the layout anytime, subject to certain restrictions. Except for operating sessions, most of the locomotives and cars you see on the layout belong to members. The layout, scenery and structures belong to the Society. We do maintain some trains, that can be operated by members if they desire.

Layout Statistics:

MAIN LINE:	Double Track	
	38" minimum radius	
	#8 turnouts	
	l% grades on visible portion	
	1.5% grade maximum in helix	
	Length	overall - 11-scale miles
		visible - 5 scale miles
	train length	typically 20 - 30 cars
		staging yard capacity - about 40 cars/track
		maximum capacity - about 1,500 cars

A typical 6 axle model locomotive can pull about 20 cars each up the helix without helper units.

BRANCH LINE:	mostly single track	
	38" minimum radius	
	#6 turnouts	
	1% grades on visible portion (with some exceptions)	
	1.65% grade maximum. in helix	
	Length	overall – not yet measured
		visible – not yet measured
	train length	typical, 10 - 20 cars
		staging yard capacity - about 40 cars/track
		maximum capacity - TBD

Layout Features

The strange looking assembly under the logging camp is called the Helix due to its spiral nature. It is used to get trains into and out of the hidden storage tracks called the staging yards, located on the lower bench work. It contains approximately one-fourth of the mainline track of the layout. There are five tracks as follows:

Two West Bound Tracks (one up and one down)
Two East Bound Tracks (one up and one down)
One Branch Line Track (used both up and down)

The frame of the Helix is made of steel. Wood was cut by a laser saw, glued in three layers, with no space or gaps. Then it was glued into a half-circle storage and set aside until fourteen were made. Assembly was done by drilling holes for threaded rods, some over 24" long by 3/8" thick.

Total rods: 32 Main Rods, 20 washers per rod, some are less than 6" long. Number of nuts and bolts is over 680, washers used 680.

The size of the helix is 10 1/2 feet across and at the time of construction it was the biggest west of the Mississippi River.

Total time it took to make the helix was 2.5 years. On top of the helix is a logging camp done by a Professional landscaper who is widely known as one of the most talented model railroaders in the area. It contains over 1, 000 hand-made Ponderosa Pine trees.

The five helix tracks serve the following:
Outermost two: Main line to Centerville. Radit: 52%",
Grades: 1.36% elevations per tum: 4"
Travel Direction: Eastbound (up)
Travel Direction: Westbound (down)

Next two: Main line to Hennepin
Radit: 48 1/4",
Grades: 1.50%,
Elevation per tum: 4"
Travel Direction: Westbound (up), Radit: 46"
Grades 1.53%
Elevation per tum: 4"
Travel Direction: Westbound (up)
Travel Direction: Eastbound (down)

Innermost: Mountain Branch Line
Radit: 4 3 %"
Grade: 1.65%
Elevation per tum: 4"
Travel Direction: North and South Bound (up and down)

We also have a bypass track when we don't want to use the helix.

The Clothespin Canyon Trestle (just past the helix) is a custom-made work of art. It was constructed from clear pine, band sawed to $1/87^{th}$ of prototype (or HO scale) size. The only items purchased were nut and bolt sets manufactured by Grandt Line and Precision Scale.

Materials used were as follows:
Stringers, three 8"xl6" laminated in place.
Ties are 6"xl2" spaced 6" apart.
Bents, consist of three vertical posts 12"xl2"
Sills, are 8"x8" spaced 14 feet apart.
Horizontal struts are 6"x10"
All transverse and longitudinal braces are 4”x8”
Walkways are 4"x8"
Fire Barrel platforms are 6"x6"
There are 46 bents, the tallest being approximately 122 feet

122 vertical posts
840 transverse braces
1592 longitudinal braces
920 sills
2,820 bolt and nut sets
The left-hand bridge main beams are 8"x12"
Side frame is 4"x8"
Floor beams are 8"x10"
Cross timbers are 10"x10"
Side braces are 8"x 8"
The bridge consists of 4 main beams, 36 sub beams, 18 cross supports, 48 "x" braces, 18 tension rods, and 72 nut and bolt sets.
The bridge supports are 12"x12" posts with six posts to a support.
There are 12 posts, 26 sills, 22 cross braces, held by 52 nut and bolt sets.
Posts are connected with 108 side pars and 180 nuts and bolts sets.
The left-hand bridge consists of 4 main beams, 10 sub beams, 24 "x" braces. 10 tension rods, 20 nut and bolt sets and 21 ties.

Clothespin Canyon trestle was built by member Tom Jackson, for which he was awarded the designation of "Master Builder" by the National Model Railroad Association. This will always remind us of Tom, a Marine veteran of WWII, who passed away in January 2008.

A Fictional History of The Hennepin Overland Railroad

In the mid 1880's the KANABEC STAGECOACH COMPANY was chartered to provide transport for people and goods between HENNEPIN and KANABEC. Almost immediately it became evident that crossing CLEARWATER MOUNTAIN by stagecoach was not practical. The charter was abandoned and a new one established for the HENNEPIN and KANABEC RAILWAY COMPANY and plans were immediately drawn up to bore through CLEARWATER MOUNTAIN. By 1890 the line was completed and was doing nicely.

So nicely in fact that the decision was made in 1893 to extend the line to a small developing town named BERGEN up in the CHIPPEWA MOUNTAINS, a bit of a way from the RED LAKE MINE, a small operating coal mine. But as it turned out BERGEN was a bit too far from the mine and not too many people wanted to live there. The company town near the mine was much more popular and many more people lived in it than in BERGEN. So the BERGEN town fathers struck a deal with the owners of the mine and the town was “moved" a bit north, merged with the company town and renamed NEW BERGEN. But the grades for the railway extension proved too steep to be practical. So, the "deal" was modified, and the mining company joined with the railroad to make a new tunnel through the mountain. The railroad was appropriately extended through the new tunnel to NEW BERGEN. Now up until the time the railroad came to town all the coal was hauled from the mine by wagon cart. Needless to say, the wagon cart owners were not happy about the railroad being so close. Their hauls became much shorter and their profits that much lower as the railroad took almost all the coal from NEW BERGEN to points south. However, many new markets opened on the railroad line and the mining business prospered. It soon became evident that the wagon carts could not keep up with the demand, so a spur was added to the mine. Many of the wagon cart businesses folded up, some with some rather strong "protests". But the mine prospered, the town prospered, and all seemed quite well.

About 1894 plans began being drawn up to extend the railroad to SIBLEY, a more substantial metropolitan area also on the other side of CLEARWATER MOUNTAIN and somewhat west of KANABEC. But disputes reigned supreme as no one could come to an agreement as to how the railroad was to get there, and how the financing would be arranged. So, some enterprising men got together and decided to start their own railroad - a nuisance railroad. A nuisance railroad is one a competitor builds to the same places as another railroad, but with no intention of ever using it. However, if it ever does get finished it could pose some serious competition. It is built with the sole intention of having the competition buy it out.

So, around 1895, after some wheeling and dealing, the HENNEPIN AND SIBLEY RAILROAD COMPANY was chartered to connect SIBLEY and HENNEPIN. (They had to say they were going to go between HENNEPIN and SIBLEY even though they were going to parallel the

HENNEPIN and KANABEC so they could get the charter). Since the HENNEPIN and KANABEC was built years earlier they got the choice right-of-way. The HENNEPIN and SIBLEY had to make do with what was left. There were two choices - south of the H & K there was a possible route, but it required a steep grade along with a tunnel, however it was a short tunnel - or north with a somewhat gentler grade but a noticeably longer tunnel. Now since this was a nuisance line the decision was obviously to go with the high-grade/short tunnel line, and work was started. However, one day some other serious investors with more far-reaching plans saw what was going on and realized the potential of this new line. Another deal was struck, more money as loaned, the first route was abandoned, and the low-grade route was built.

Much to the original owner's surprise the line soon became profitable so it was decided to extend the line Eastward to the village of St. Anthony with a stop in the town of WOBEGON in KEILLOR VALLEY between KOOCHICHING and OTTERTAIL MOUNTAINS. With the presence of the railroad both ST. ANTHONY and SIBLEY boomed. Hennepin did well too, but not as much as the other two. A small iron works started up on the Eastern outskirts of ST. ANTHONY near BENTON RIER, and a milling district began on the East side of town. The steel mill used coal from the mine at NEW BERGEN, limestone from SIBLEY, and ore from the open-pit mines at KANABEC. Scrap iron came in from wherever. The smelting iron was sent to finishing mills to the East although eventually some limited ingot and roll1ng facilities were added to the steel mill. Grain for the mills and elevators was brought in by rail from the fields around SIBLEY, and by truck from other local sources. It was then shipped East by rail to the flour mills in PENNINGTON.

On the HENNEPIN and KANABEC a few problems developed between HENNEPIN and NEW BERGEN. Helper service was frequently required on the grade between MILLER'S LAKE and NEW BERGEN. (Trains frequently exceeded the twenty car limit the line was originally designed for). Also, the coal mine was not doing well. About 1925 with availability of federal funds a decision was made to add electric helper service through tunnel #2 in the CHIPPEWA MOUNTAINS. a second track was added, and catenary was installed with completion in 1927. Service improved but the coal business did not. To make matters worse Black Monday was not too far away.

Meanwhile on the HENNEPIN & SIBLEY business was going quite well. So good in fact that the yard next to downtown St. ANTHONY was getting overloaded. The decision to expand to ST. ANTHONY proved to be a good one. So the board of directors voted to build a new yard about a couple of miles East, sort of centered between ST. ANTHONY and BENTON RIVER. The area that formed became known as CENTERVILLE. The land used by the old yard was used to expand the overcrowded passenger depot. Both were completed by 1926. Then the decision was made to bore through KITTSON MOUNTAIN to PENNINGTON and work was begun. Unfortunately, two things would lead to a near-fatal disaster for the HENNEPIN & KANABEC: an over-extension of credit, and the great stock market crash of 1929.

Now when the crash came the HENNEPIN & KANABEC all but folded. Its stock went down to almost nothing, and the loss of the coal business put it into bankruptcy. The HENNEPIN & SIBLEY being owned by private investors did not have stockholders to answer to, but the loss of

business all around did not make for good times. Nor did the losses of their investors in other areas. Work on the line to PENNINGTON was stopped and the HENNEPIN & SIBLEY became the not so proud owner of two rather long "caves ' One day the president of the H & K happened to meet one of the VPs of the H & S at Charlie's Barber Shop in New Bergen. They got to talking about their woes and Charlie, in a fleeting moment of wisdom, wondered aloud as to why they didn't just merge. "Seemed like a lot of the roads back East were." Both men said something along the lines of "Don't be a stupid idiot", and eventually went their ways. The idea seemed to stick with them both, and soon they began to realize that it wasn't that bad of an idea. Both companies got to talking and soon all those involved (well most of those involved) were in favor of the merger and legal proceedings were begun. On December 12, 1930, the HENNEPIN AND OVERLAND was formed. Soon additional monies were found, and the corporation began expanding. The line to PENNINGTON was completed, plus the old H & K was extended from NEW BERGEN via a switchback thru SUMMIT to WINDOM. The WINDON line only lasted a few years however, as the town was another mining town and the mine soon gave out. The line fell into disuse and maintenance was deferred to save costs. Soon the tunnel to Windom began to develop structural problems and was closed. Eventually some sections of the roof began to collapse. The line was considered terminated at SUMMIT, although a logging branch was begun off the switchback for an independent logging company in the late 1930's. Business between SIBLEY and PENNINGTON and flour mills in PENNINGTON brought in a lot of business. Soon the single-track main line began to show signs of inadequacy. In addition, the higher-grade line of the original H & S was proving to be a bottleneck. In early 1940's the old H & S was double tracked and around 1948 a new double track tunnel was bored through CLEARWATER MOUNTAIN just North of the old H&K. The old tunnel was kept, however, as a backup, and it could also be used by shorter, lighter trains to get around the now more common and heavier 40 to 50 car trains making the daily climb up the two-track main from SIBLEY. Not long after the double tracking was completed on the old H & K (now relegated to branch-line status) the helper service came sorely due for an overhaul. Now since electric helper service worked so well on some Western Roads, and maintenance was so much lower than steam power it was decided to electrify all the way from HENNEPIN YARD to SUMMIT. Along the way with this new electrification the locomotive service facility would be upgraded substantially. A second motor shop and a separate wheel shop would be built along with a series of ready-tracks and new service platforms.

Late in the 1940's the RED LAKE COAL MINE, which had been dormant for almost twenty years was discovered to be extremely close to a major series of coal veins. Since this mine was already there it was determined it was cheaper to use the old shafts than to drill new ones. So the mine was re-opened.

In 1952 the car shops were moved from CENTERVILLE to HENNEPIN where the railroad had undeveloped land still unused from the merger. The land at CENTERVILLE was sold for industrial use. The diesel shops at CENTERVILLE were upgraded and the old motor shop at HENNEPIN was re-outfitted for diesel service. The service rack was upgraded to two tracks. The two-track main through BENTON was retained to serve the steel mill but was reduced to single track.

In the mid-50's in an attempt to modernize the company a new logo was developed, and the name was shortened to the HENNEPIN OVERLAND.

Millers Lake
Around 1958 a couple of guys got the idea of diverting the stream that runs through the old JOHNSON FARM to make a small lake a bit to the North. They were going to stock it with fish and try to get some tourists. Old man Johnson didn't mind. "Stupid cows don't use it anyway", he said. "And I could do with an occasional day of fishin". So, Miller and Long dug their ditch and moved the stream. But after the next storm the swift currents eroded their channel, and the stream worked its way back to the old stream bed. Miller and Long routed it back to the lake again and this time made the banks much sturdier. It seemed like now it was going to hold. They decided to call the place MILLER'S LAKE as Long was not fond of the teasing he got at the local tavern after the rain incident. Soon the lake started to reach a reasonable size and Miller went out to the fish hatchery and got some stock for his lake. People started showing up and fishing was not too bad. Then one August day a real hummer of a storm blew up and wouldn't you know it--the stream again eroded its way back to its original route through old Johnson's farm.

This left Miller with a rather interesting problem. Seems the water was leaving his lake, and none was coming in. And the fish not being equipped with travel agents, didn't quite get the message to go where the water was. So, there was this large muddy lake but with hundreds and hundreds of fish flapping around. Miller tried to get as many people as he could to come out and get some for dinner ... and and breakfast .... and dinner ... as he could. Even some of the local animal's sort of helped out. But everyone soon got real tired of fish at every meal and the rest just sat there ... in the hot August heat.

Seemed like for two weeks you could tell when the wind was blowing across Miller s Lake. Miller never did get the ambition to try to divert the stream again. And any time anyone mentioned the lake to him he'd just mutter something about not foolin' with mother nature.

Construction of the Clothespin Canyon Trestle - By Tom Jackson
Early in 1990, the Coos Bay Lumber Company decided to extend its logging line south to a new lumbering area called "Camp Two". The Hennepin Overland Railroad Company commissioned a survey crew to lay out the extension of the route and reported the following:

A new Howe Truss Bridge would be required to span the Hennepin Overland's line from New Bergen to the Howdeep Coal Mines. Two routes were available from that point to the new timber camp. One could swing east and onto a road-bed cut thru the Omagosh Mountains then south to the camp, or a trestle could be built to span the massive "Clothespin Canyon Gorge" and then continue up the gorge with a tunnel bored through "Dispatch Mountain" to the camp. Lumber being plentiful in the area, Coos Bay Management decided to build a trestle across the gorge, as cutting a road-bed through the Omagosh Mountains would be labor intensive and more expensive than a trestle. Plans called for a trestle 960 feet long, and a staggering 224 feet above the floor of the gorge. The railroad would also need two bridges over existing lines and the main trestle would have to be built on a 1% grade with a 20 degree "S" curve in it. This sharp curve could be easily negotiated by the Climaxs, Shays, and Heislers that would be using this route.

Construction was started on March 9, 1990 and trestle-work commenced at approximately 150 feet south of the site of the new Howe truss bridge. Trestle-work continued until a new bridge was required to span the Hennepin Overlands "Mexico Connection" spur which connects the City of Wobegon with the Summit branch line near the Smashem & Bashem Scrap Metal Company. This bridge consisted of four main beams, 8" x 12", 36 sub beams, 18 cross supports, 48 "x" braces, 18 tension rods and 72 nut and bolt sets. The bridge is supported by 12 x 12 posts with six posts to a support. There are 24 posts, 26 sills and 22 cross braces held by 52 nut & bolt sets. Posts are connected with 108 bars and 180 nut & bolt sets.

Work continued until a smaller bridge was required to span the final gap to "Clothespin Canyon". This bridge consists of 4 main beams, 10 sub beams, 24 "x" braces, ten tension rods, 20 nut & bolt sets and 21 ties.

The huge "S" curve trestle was built on 46 bents, the tallest being approximately 224 feet high, 122 vertical posts, 840 transverse braces, 1592 longitudinal braces, 920 sills, and 2820 nut & bolt sets. Stringers to support the rail ties are three 16' x 24' timbers supporting 10 x 10 ties spaced 6 inches apart. Each bent consists of three vertical 12' x 12' posts connected by 6' x 8' sills spaced 14 feet apart. Horizontal struts are 8 x 8's. All transverse and longitudinal "x" braces are 4 x 8's. The walkways are 4 x 8 and the fire-barrel platforms are 6 x 6 foot creosoted planks.

Construction was completed on May 6, 1991, just 14 months after the initial decision to build the trestle was made.

The “Clothespin Canyon" trestle is made entirely o£ pine, band-sawed to scale size and required approximately 840 man hours to construct.

Railway Comes to Wobegon

The railroad took its sweet time arriving. The Northern Pacific reached St. Cloud and continued north along the Mississippi to Little Falls and the Great Northern swung west through St. Joseph, Avon, Albany, and Freeport, while the Soo Line ran northeast from Albany to just south of Little Falls, the three lines making a triangle and each missing the town by miles. The handsome depot built to lure the lines sat empty and its platform opened onto a field of alfalfa where a tiny sign on a post stood, which said "W".

The ultimate connection to the town in 1885, the so-called "Lake Wobegon Spur," was a mistake on the railroad's part, a siding that took a sharp angle due to misplaced surveyors' stakes and that kept going for sixteen miles in an attempt to find its way back to the main line. When the track crew reached Wobegon, which was not on their map, they simply stopped and returned to St. Cloud by horse-drawn wagon, leaving the track where it was, a quarter-mile south of town, ending in thick brush by the depot. (The depot was moved south on skids to reach the end of the line.). A district superintendent was fired for his negligence, the spur appears on G.N. maps as a dotted line marked "See Code", but there is no code. The company nonetheless began regular shipping over the spur that year.

In 1948 the HENNEPIN OVERLAND bored a new double track tunnel through Clearwater Mountain and found themselves in Keillor Valley and the town of Wobegon, neither of which were on any map. The valley provided a good location for a long passing siding and a connection to the GN, so the Hennepin Overland added Wobegon to its stops and built sidings to the Braasch Brewery and other industries located in the area. The Hennepin Overland has provided Wobegon with freight and passenger service since that date.

Centerville

Located in Centerville are the facilities for servicing, repairing and storage of steam locomotives. Diesel repair facilities were also located here before the Hennepin Yard facilities were built. Re-motoring diesel locomotives is still done at the machine shop. If you look closely you can see a new diesel engine being unloaded. from a flat car in front.of the machine shop. There is a large freight yard for making up outbound freight trains and also sorting out inbound fright cars for industries located in the Centerville Industrial area. A large storage yard for commuter trains also exists in the hidden tracks beneath the main line. In addition to the engine servicing facilities there are also several industries as follows: Centerville Refinery, Sal M Onella Canning Company, Centerville Machine Company, Scrattch and Dhent Van Lines, and the Nice Ice Refrigeration Company. At the East End of Centerville, is Mobius Junction where freight train main lines diverge and head into Centerville while Passenger Trains continue ahead into the St. Anthony Passenger Depot area. After passing through Centerville freight trains enter a tunnel below St. Anthony and do not emerge until they reach the village of Hastings and gradually climb back up to main line level and rejoin the passenger lines at Trapper Junction.