

= Numedal Line =

The Numedal Line (Norwegian : Numedalsbanen) is a 92 @. @ 8 @-@ kilometer (57 @. @ 7 mi) long railway line that runs up the Numedal valley between Kongsberg and Rødberg in Buskerud , Norway . Built and operated by the Norwegian State Railways , the non @-@ electrified , standard gauge line passes through the municipalities of Kongsberg , Flesberg , Rollag and Nore og Uvdal . It is now owned by the Norwegian National Rail Administration .

The first plans for a line through Numedal were launched after the Sørland Line reached in Kongsberg in 1871 . After it was decided that the Bergen Line would instead follow Hallingdal , the Numedal plans lay dead until it was decided that a railway was necessary to build two hydroelectric power stations near Rødberg . The plans were passed in 1918 , the first trains started running in 1924 and the line was officially opened in 1927 . At first all services were provided with steam locomotives , but from the 1930s diesel multiple units were used for passenger trains . The line was frequented with classes Cmd 16 , 86 , 87 and 91 . The last regular train ran in 1988 ; since , there has been sporadic freight service and some heritage trains running from Kongsberg to Rollag . Draisine rental is available on the section from Veggli to Rødberg .

In 2013 , Jernbaneverket reopened a 30km stretch between Kongsberg and Flesberg , to support the forestry industry . Following a derailment in April 2014 , the entire stretch was upgraded with new sleepers .

= = Route = =

The Numedal Line branches off from the Sørland Line at Kongsberg Station , which is located 99 @. @ 37 kilometers (61 @. @ 75 mi) from Oslo Central Station and 161 @. @ 9 meters (531 ft) above mean sea level (AMSL) . The line runs past four stops , Spiten , Pikerfoss , Gleda and Herbru , before reaching a branch to Svene Gravel Pit , 3 @. @ 48 kilometers (2 @. @ 16 mi) from Kongsberg . The line continues past the halts Ramsrud , Svene , Furuly and Toresplassen before reaching Lampeland Station , 10 @. @ 50 kilometers (6 @. @ 52 mi) from Kongsberg . The line then passes over Lyngdalselva on a 27 @-@ meter (89 ft) bridge and continues past the stops Fløtterud , Ruud , Vangestad and Eie before reaching the branch to the sawmill Numedal Bruk , 29 @. @ 69 kilometers (18 @. @ 45 mi) from Kongsberg , which is located just south of Flesberg Station .

The line continues past the stops Bjørnsrud , Bakkerud and Fossan before reaching the 228 @-@ meter (748 ft) Helle Tunnel and then Djupdal Station 40 @. @ 63 kilometers (25 @. @ 25 mi) after Kongsberg . The line then runs through the 78 @-@ meter (256 ft) Ulvik Tunnel and the 57 @-@ meter (187 ft) Gyrestigen Tunnel . It then passes the halt Selsteigen before running through the 44 @-@ meter (144 ft) Selsteigen Tunnel . After passing through the halt Kjome , the line reaches Rollag Station , which is 46 @. @ 80 kilometers (29 @. @ 08 mi) from Kongsberg . Since 1989 , this is the furthest north the line is kept operational , although the track remains all the way to Rødberg .

The line continues past the stops Tråen , Rollag kirke , Bråten , Sjorsåte , over the 65 @-@ meter (213 ft) Bruhaug Bridge , past the stops Laugi , Vamre , Risteigen and then passes over the river Veggli elv on a 30 @-@ meter (98 ft) long bridge . At 60 @. @ 81 kilometers (37 @. @ 79 mi) after Kongsberg the line reaches Veggli Station , before continuing past the stops Tveitkåsa , Kjerre , Fossebrekke and then through two tunnels , Gjeiteryggen I and Gjeiteryggen II , which are 572 meters (1 @, @ 877 ft) and 246 meters (807 ft) long , respectively . The line then passes by the stops Kravikfjord , Kittelsland , Eidsstrykken , a 30 @-@ meter (98 ft) bridge over Eidsåa , the stops Norefjord , Svendsrud and the 146 @-@ meter (479 ft) Rundberg Tunnel . The line then runs past the stop Midtstigen and Søndre Sandnes before running through five tunnels , named Sandnes I and II , Vrennedalen I and II , and Bondeberg , which are between 12 and 140 meters (39 and 459 ft) long . Just before Gvammen Station , which is 87 @. @ 39 kilometers (54 @. @ 30 mi) from Kongsberg , there is a branch to Nore II Power Station .

The line then runs through six tunnels , named Gvamsås I through V , and Hvilsten . These are between 156 and 16 metres (512 and 52 ft) long . The line then passes past Rødberg vokterbolig ,

which is 90 @. @ 92 kilometers (56 @. @ 50 mi) from Kongsberg and is , at 395 @. @ 0 metres (1 @, @ 295 @. @ 9 ft) AMSL the highest point on the line . The line then passes over Uvdalselva on a 35 @- @ meter (115 ft) combined road and rail bridge , before reaching Rødberg , 92 @. @ 84 kilometers (57 @. @ 69 mi) from Kongsberg .

= = History = =

With the construction of the Sørland Line to Kongsberg , which opened on 10 November 1871 , proposals were launched to extend the line up Numedal . On 16 August 1873 , a meeting was held between representatives from the municipalities in Numedal to discuss how they could convince national politicians to build the Bergen Line through Numedal . However , instead the Bergen Line was decided to run through Hallingdal . What finally spurred the construction was the construction of hydroelectric power stations in the valley . In 1907 , the government , through its power agency , had secured rights to build a power station in the rivers Numedalslågen and Tunnhovdfjorden . The state saw it as advantageous to build a railway through the valley to aid construction of Nore I and Nore II Power Station , despite the line not being on the railway plan . This was because machines weighing up to 40 tonnes (39 long tons ; 44 short tons) would have to be transported up the valley . The initial estimates for the line was a cost of 8 @. @ 3 million Norwegian krone (NOK) .

On 3 August 1918 , the line was passed by the Parliament of Norway and it was decided that the line was to be built with standard gauge , which by then had become the norm . The decision was controversial , as the line was expected to have little traffic and would therefore not be profitable . A minority of the parliamentarians instead wanted the line to be built with narrow gauge to reduce construction costs . The state required that local municipalities and counties contributed to some of the investment costs . NOK 1 @. @ 2 million was paid by Buskerud County Municipality , while NOK 2 @. @ 17 million was paid by the various municipalities . The largest amounts were paid by Flesberg with NOK 635 @, @ 000 , Nore with NOK 615 @, @ 000 and Rollag with NOK 517 @, @ 000 , while Uvdal paid NOK 198 @, @ 000 , Kongsberg NOK 125 @, @ 000 and Drammen NOK 80 @, @ 000 .

Siting commenced in 1918 , and by 1919 , an administration for the works had been established in Kongsberg . Construction commenced on 2 July 1920 , between Fossan and Bratterud . However , there quickly arose a strike , resulting in construction not being taken up until March 1921 . Final approval by parliament was first made on 20 July 1921 . Most of the construction was done using hand tools . 543 @, @ 000 cubic meters (19 @, @ 200 @, @ 000 cu ft) of earth was moved , 217 @, @ 000 cubic meters (7 @, @ 700 @, @ 000 cu ft) of rock was blasted and 2 @. @ 3 kilometers (1 @. @ 4 mi) of tunnel were built . 190 @, @ 000 cubic meters (6 @, @ 700 @, @ 000 cu ft) of ballast stone were used , most of it from the gravel pits at Bevergrenda , Guribråten and Stevningsmogen , Tjuvhaugen and Skarpsmoen . The whole construction used seven million work hours and for the tunneling , each work hour gave 7 millimetres (0 @. @ 28 in) of progress . Most of the tracks were used from other railways . Five of the station buildings , at Vangestad , Flesberg , Djupdal , Tråen and Kravikfjord , were workmen 's sheds which had been placed on a foundation .

From 1924 , the railway was taken partially into use . Trains could run the 36 kilometers (22 mi) from Kongsberg to Bakkerød from 15 November 1924 , the 65 kilometers (40 mi) to Kjærre from 1 December 1925 and to Rødberg from 1 December 1926 . These trains included transport of 950 tonnes (930 long tons ; 1 @, @ 050 short tons) of cement and 590 tonnes (580 long tons ; 650 short tons) for the railway bridges . In total 4 @, @ 300 wagon loads were transported before the official opening , of which about half was for the power stations . Because of the delay of building the line , it could only be used during part of the construction period for the power stations .

The official opening took place on 19 November 1927 by King Haakon VII . When the line opened there were 21 manned station on the line . Up to 70 people worked on the line , in addition to station employees . In 1932 , the operations were rationalized , cutting costs from NOK 426 @, @ 000 to NOK 310 @, @ 000 per year . This involved removing the station masters at fifteen stations and replacing them with a clerk .

Initially , all trains on the line were hauled by steam locomotives , in particular NSB Class 20 and

NSB Class 21 brought in used from other lines . The first diesel multiple units were taken into use in the 1930s , with the line seeing the use of both NSB Class Cmb 16 and Kristine Valdresdatter . During World War II , the line was again entirely hauled by steam locomotives and the service was reduced considerably . By 1945 , there were three round trips per week , but after the war ended , the frequency increased and by 1947 there were four daily round trips . Various classes of multiple units have been used , including NSB Class 86 , NSB Class 87 and NSB Class 91 . During the 1950s , there were sometimes also trains that operated just from Kongsberg to Veggli .

Because the conductors and engineers often knew where the locals lived or were headed , trains would make non @-@ scheduled stops to disembark passengers to allow them a shorter walk . In the 1960s , the number of round trips was reduced to three per day , allowing the whole service to be operated with a single unit . NSB used steam power for freight trains until 1970 , when NSB 's last scheduled steam locomotive service hauled a gravel train from Svene to Kongsberg . For a short period during the 1980s , there were also school trains , but as this forced NSB to operate two multiple units on the line , it proved too expensive and was soon afterwards again provided by bus .

Discussion about closing the line started in the 1950s , and the line became a candidate every time NSB and the parliament discussed closures . In 1988 , the parliament decided to close many Norwegian lines , including the Numedal Line , although it was decided that the section from Kongsberg to Rollag was to be kept for freight traffic . The last passenger train operated on 31 December 1988 and the line north of Rollag was officially closed on 1 January 1989 . By the time the line closed in 1989 , manning remained at only three stations : Flesberg , Veggli and Rødberg . NSB retained some traffic south of Flesberg ; in 1993 the company hauled 30 @,@ 000 tonnes (30 @,@ 000 long tons ; 33 @,@ 000 short tons) of gravel and 25 @,@ 000 tonnes (25 @,@ 000 long tons ; 28 @,@ 000 short tons) of lumber along the line .

After the closure , the non @-@ profit organization Friends of the Numedal Line was established and offered occasional heritage rides along the line . It maintains the tracks between Rollag and Rødberg and offers draisine rental between Veggli and Rødberg . Irregular transport from the gravel pit at Svene and the sawmill Numedal Bruk at Flesberg . The latter is operated by Tågåkeriet i Bergslagen and hauls lumber from Uddevalla , Sweden . The stretch from Flesberg to Rødberg is suggested preserved by the Norwegian Directorate for Cultural Heritage .