Kielder Run

Steve Miller 07976 523602

Overall Distance 112 miles. Estimated duration 4 hours including 1 hour for lunch at The Grapes Hotel Newcastleton tel 013873 75245.

Petrol stations on Route, Chollerford, Kielder Village unmanned card only (pricey).

Brocksbushes tea room meet for 10 am leave 11am

Zero odemeter

Through tunnel exit

- 0.2 turn left
- 0.5 first exit on roundabout. A69 Carlisle
- 6.0 second exit on roundabout. A69 Carlisle
- 6.8 stay in right hand lane turn right A6079
- 10.0 turn left. B6320 Bellingham
- 10.3 second exit on roundabout B6320
- 21.6 turn left. Kielder
- 24.7 turn left Kielder
- 31.0 Hawkhope carpark. Photo shoot opportunity in front of reservoir
- 39.4 Kielder Village Petrol Station. Onto Deadwater.
- 45.9 turn left B6357
- 52.3 Stay left B6357 Newcastleton
- 54.0 Grapes Hotel Newcastleton for Lunch. Photoshoot opportunity outside hotel
- 61.4 Turn left B6318 Pento/Catlowdy/Crossings
- 72.7 stay left B6318 Gilsland
- 83.0 stay right B6318
- 83.1 turn left Greenhead remain on B6318
- 85.1 turn left remain on B6318
- 102.2 third exit B6318 (possible queuing)
- 106.9 third exit A68
- 109.0 exit left A69 Newcastle

112.0 first exit Brochsbushes Tea Rooms. More tea and cake.

Kielder Water is a large artificial reservoir in Northumberland in North East England. It is the largest artificial lake in the United Kingdom by capacity and it is surrounded by Kielder Forest, the largest man-made woodland in Europe. The scheme was planned in the late 1960s to satisfy an expected rise in demand for water to support a booming UK industrial economy. But the decline of traditional heavy industry, together with more water-efficient industrial processes and better control of water supply leakage, served to undermine the original justification for the reservoir and many came to criticise the government-funded project as a white elephant.

Kielder Water is owned by <u>Northumbrian Water</u>, and holds 200 billion litres (44 billion gallons, or 0.2 cubic km), making it the largest reservoir in the UK by capacity (<u>Rutland Water</u> is the largest by surface area). It has a 27.5-mile (44.3 km) shoreline.

After the scheme was approved by Parliament in 1974, work to build the reservoir and the dam in the Kielder Valley began in 1975. The reservoir and dam was designed for Northumbrian Water by consulting engineers Babtie, Shaw and Morton with Sir Frederick Gibberd and Partners as consulting architect. Earth moving and infrastructure construction was undertaken in a joint venture with AMEC and Balfour Beatty.

The design meant the loss of numerous farms and a school. The former <u>permanent way</u> of the <u>Border Counties Railway</u> was also taken away through the development of the reservoir.

Work was completed in 1981. <u>Elizabeth II</u> officially opened the project the following year. The valley took a further two years to fill with water completely

Kielder Water is also the site of England's largest <u>hydro electric</u> plant. It was opened by <u>Queen Elizabeth II</u> on 26 May 1982 and is owned by <u>Northumbrian Water</u>. In December 2005, <u>RWE Npower Renewables</u> bought the rights to operate the plant and sell the electricity generated by it, with a contract lasting until 2025. Following the takeover, the turbines were refurbished in 2005–2006, which increased the efficiency of the electricity generation. Controls were also updated, meaning that the plant can be operated from <u>Dolgarrog</u> in Wales.

The plant generates electricity using dual turbines which produce 6 megawatts (MW) of electricity. This comes from a combination of a 5.5 MW Kaplan turbine, which generates electricity when water release takes place, and a 500 kilowatt (kW) Francis turbine that generates constantly from the compensation flow of water from the reservoir into the North Tyne. This gives the reservoir an average production of 20,000 MWh of electricity per year, a saving of 8,600 tonnes of carbon dioxide per year compared to fossil fuel based methods of The reservoir's main use is to provide compensating discharges into the North Tyne to support abstractions of water further downstream. It also underpins the Kielder Transfer Scheme, whereby water can be transferred to the Wear and the Tees, to meet shortfalls in those areas. In recent years, Kielder Water has become increasingly important, with underground springs ensuring that it always remains at high levels, regardless of the prevailing climate condition. This means that while the south of England is often forced to implement drought strategies and hosepipe bans, north east England enjoys plentiful water supplies.

There are two main visitor centres at Kielder Water—Leaplish waterside park and Tower Knowe visitor centre—and other facilities at Kielder, Falstone and Stannersburn villages. It is also one of the region's major tourist venues, attracting more than 250,000 visitors a year who come to enjoy the wide range of leisure opportunities on offer.2