

Silent Valley

Peace. Solitude. Adventure





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History of Silent Valley

Introduction

In 1933 the successful damming of the Kilkeel River valley was the end of 40 years of work started by Belfast City and District Water Commissioners. They were responsible for supplying water to the city of Belfast. This set in place the Mourne Wall and then the huge reservoir in “Silent Valley”. The reservoir was built to gather water from the mountains over most of the High Mournes. Silent Valley and Ben Crom reservoirs supply water for most of County Down and a large part of Belfast. The two dams are ringed by mountains - while the reservoir grounds contain the parkland, lakes and ponds which were part of the original landscape design. These areas are now open to the public. Today you can enjoy splendid mountain scenery, woodland walks, and a range of facilities (including an exhibition centre and coffee shop). The story of how the dam was built continues to fascinate visitors to Silent Valley.

Nature’s Building Forces

Unlike the rest of County Down, the Mournes are made of granite. The mountains were slowly formed around 50 million years ago when the much older sedimentary rocks weakened and gradually sank deeper into the earth’s crust. This allowed ‘younger’ granite to rise and replace the old rock on the surface in a dome shape. Granite is a hard, tough rock with a grainy appearance. Unfortunately it contains few natural minerals and develops a thin ‘peaty’ topsoil. So it only supports plants such as heather and certain grasses that can live in acidic conditions. Since the Mournes were formed they have gone through periods of extreme heat and cold, the most recent being a series of ice ages which ended 10,000 years ago. Glaciers in Silent Valley widened and deepened the valley and left the valley floor covered with glacial soil and rock which created major problems during the building of the dam.

In Search of Water Belfast’s Dilemma

As long ago as 1678 the Corporation of Belfast saw the need for a “plentiful supply of good water”. By the Industrial Revolution, a growing population and the growth of the linen, ship-building and engineering industries led to an increased demand on Belfast’s water supply. The Belfast Water Commissioners were forced to look for a new source beyond the Belfast hills that surround the city. The land around Slieve Binnian and Ben Crom was chosen as it was free from industry and pollution and had around 70 inches of rain each year.

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Increasing demand - the High Mournes

After a major survey of several possible sources of water, the Water Commissioners thought the uninhabited Mournes would provide a good source of water, and bought 9,000 acres of the High Mournes. Having a source in the mountains meant that water could run freely down to Belfast. They started an ambitious programme of work. The first stage was to divert the water from the Kilkeel and Annalong Rivers and transport the water through pipes to a new reservoir at Knockbracken (near Carryduff). This reservoir could store 100 million gallons of Mourne water.

The Dam Builders

The second stage was to build a dam across the Kilkeel River, in what had been called the Happy Valley. This project began in 1923. In the next 10 years the Mournes was a busy place with 2,000 local workmen, new quarries, huge steam pumps and a railway which brought men and materials from Annalong to the dam. At first the work went quickly, but because of saturated silt and huge boulders, difficulties arose. The dam was finally finished in 1933. The Water Commissioners didn't want to build a second reservoir in Annalong Valley because of the ground condition in the valley. Instead they dug a tunnel through Slieve Binnian to carry the water from the river into Silent Valley. The Slieve Binnian Tunnel took between 1947 and 1952 to finish and measures 7 feet x 8 feet (2.1 metres x 2.4 metres) and is nearly 2 1/4 miles (3.6 kilometres) long. In the 1950s there was a demand for more water as Belfast and other towns in County Down grew. This meant further development of the Upper Kilkeel River and its tributaries in the High Mournes. This was done by adding an extra reservoir high in the mountains beneath Ben Crom. This work took 3 years and the reservoir was finished in 1957. This dam is built of concrete, unlike the earth and rock dam of Silent Valley. The Silent and Annalong Valleys provide about 400,000 people with up to 140 million litres of water a day. We have also renewed and improved the unseen underground pipeline the Mourne Conduit – which carries the water to Belfast (56 kilometres).

The Mourne Wall

The Mourne Wall around the Mourne catchment provided jobs for people between 1904 and 1922. The wall stands up to 8 feet high and on average it is 3 feet wide. It is 22 miles long and connects the summits of 15 mountains. This wall is a monument to the skill of the men who built it.

Walking Trails at Silent Valley

Enjoy the tranquillity of Silent Valley Mountain Park in the heart of the Mourne Mountains. Follow a trail to submerge in the beauty of the park. Find out about the industrial heritage which gave rise to the magnificent dams and shaped the surrounding landscape.

Interest points 1-14

Podcasts 1-7 available to download from www.niwater.com/the-silent-valley-trails



Easy to complete, do not require special foot wear and accessible for all.



Mainly on paths, some of which are gravel and include steep steps.



Includes rough terrain and steeper gradients.



NATURE TRAIL

Distance: 1.8 km (1.1 miles)

Route description: Follow the Kilkeel River and former railway line used to transport men and machinery between the Silent Valley and Annalong. View the wildlife, such as dragonflies and damselflies and enjoy the lowland heathland under the boarded walkway.

BEN CROM DAM WALK

Distance: 10 km (6 miles)

Route description: This linear route follows the tarmac road from Silent Valley to Ben Crom Reservoir and passes the exit of the **Binnian Tunnel (9)**, which was built (1947-1952) to carry water from the Annalong River to Silent Valley. Teams worked from either end of the tunnel and when they met in the middle, they were only 5 cm apart!

Interest points

Silent Valley Dam (Built 1923-1933). To prevent water seeping through the dam a vertical core wall of 'puddled clay' was incorporated in the embankment. To prevent erosion under the dam a cut-off trench filled with concrete was required from the valley floor down to the bedrock. Notice the **Overflow (7)** and **Valve Tower (8)** as you pass the corner of the dam wall.

Ben Crom Dam (Built 1954-1957). After 5 km (3 miles), climb the 260 steps to the top of the dam wall where you can catch a glimpse of the Brandy Pad and Slieve Donard. Unlike Silent Valley, Ben Crom is a gravity dam as it depends on its weight for stability.



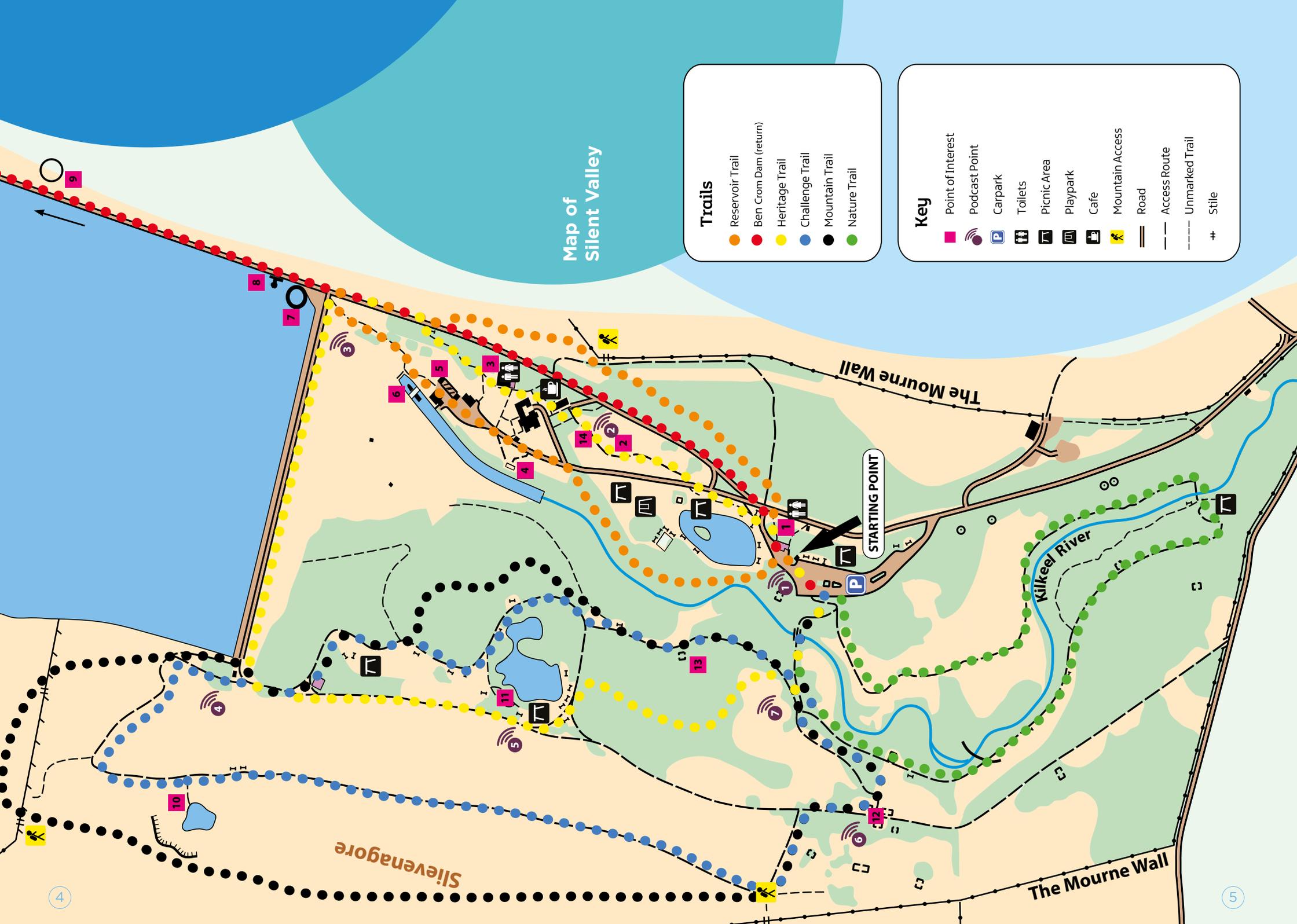
Map of Silent Valley

Trails

- Reservoir Trail
- Ben Crom Dam (return)
- Heritage Trail
- Challenge Trail
- Mountain Trail
- Nature Trail

Key

- Point of Interest
- 📶 Podcast Point
- P Carpark
- ♿ Toilets
- 🍴 Picnic Area
- 🎡 Playpark
- ☕ Cafe
- 🚶 Mountain Access
- Road
- Access Route
- Unmarked Trail
- + Stile



Walking Trails at Silent Valley continued:

HERITAGE TRAIL

Distance: 2.8 km (1.75 miles)

Route description: Circular route including views over the dam into the mountains. Find out more about Silent Valley at the **Interpretive Centre (3)**, which was the site of the original Police Station.

Interest points

Public Art Piece - "The Mourne Hand" (1) Incorporates the story of stone, water and the resilient, skilled men of Mourne who built the dam with "hands like shovels". **Memorial (2)** Commemorating the men who tragically lost their lives in the construction of the reservoirs.

Watertown House (14) An original house provided for the dam workers

RESERVOIR TRAIL

Distance: 1.6 km (1 mile)

Route description: This trail highlights the engineering hub of the dam and gives a taste of the high Mournes with a backdrop of the Mourne Wall (built 1904- 1922) which defines the boundary of NI Water's catchment area, stretching over 22 miles and 15 peaks.

Interest points

Model of 'cut off trenches' (4) A trench had to be built into the earth to prevent water seepage going under the dam.

Filter Plant (5) This facility was used to screen raw water, a process that is now carried out by the Drumaroad Water Treatment Works. **Boat House (6)** Water overflow from the dam is directed under the dam wall to the Boat House where it joins the Kilkeel River. **Overflow (7)** A massive plug hole, 13.3m deep, prevents the dam from flowing over. **Valve Tower (8)** This controls the out flow of water from the dam.

MOUNTAIN TRAIL

Distance: 3.4km (2 miles)

Route description: Enjoy the stunning scenery along this trail which incorporates steep climbs through typical Mourne upland habitat and woodland trails. Look out for the **Watertown Site (12)** and the **Pugmill (13)**.

CHALLENGE TRAIL

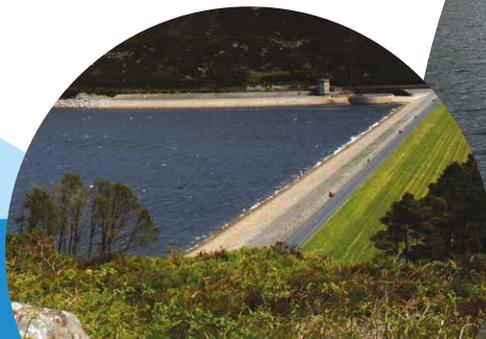
Distance: 3km (1.9 miles)

Route description: This scenic trail passes through some steep upland habitat and park woodland.

Interest points

Quarry Viewpoint (10) Cornish workers came here to prospect for silver and lead. Their singing and laughter may be the reason why the Silent Valley was formerly known as 'Happy Valley'. A great place to see the heather bloom or glimpse birdlife such as Ravens, Wheatears, Skylarks and if you're lucky, Peregrine Falcons. Rest at the **Shelter Seats (11)** by Sally Lough which replicate those used by the stone cutters to protect them from the bitter wind and rain.

Watertown Site (12) A temporary village known as 'Watertown' was constructed to house the 2000 strong workforce. At its peak it had a shop, cinema, hospital and dance hall as well as the first street lights powered by electricity, on the island of Ireland. **Pugmill (13)** Clay was ground up here to remove stones to ensure it was watertight to build the dam embankment wall.



Events and Nature at Silent Valley

Annual Events

Northern Ireland Water organise annual family fun days throughout the year at the Silent Valley Mountain Park. The scale of activities organised for these events will ensure that there is something to suit everyone. NI Water welcome the public to this beautiful Mountain Park where they can enjoy the splendid mountain scenery, woodland walks as well as peace, solitude and adventure. The programme of events offers a range of activities including exploring the biodiversity within the Park, traditional crafts, music on the lawn, while true peace and tranquillity can be found among the many hill walks and nature trails. Visitors will be encouraged to get outdoors, taking part in physical pursuits whilst enjoying the ever changing seasons.

Wildlife

The combination of mountain, moorland and woodland makes Silent Valley an ideal place for seeing a range of Mourne plants and other wildlife. A spectacular heather bloom colours the valley sides during summer when dragonflies, lizards and naturally-reared mountain birds such as Wheatears, Ravens and occasionally Red Grouse and Falcons can be seen. The woods, lawns and ponds of the reservoir grounds contain different types of birds as well as many interesting heath and wetland plants (particularly at Sally Lough). There is a healthy Badger population. Other legendary beasts are reputed to live in nearby mountain lakes – particularly Lough Shannagh.



Facilities at Silent Valley

Hours:

The reservoir grounds are open daily from 10am until 6.30pm (summer) and 10am until 4pm (Oct – April).

Traffic regulations and parking:

Vehicle access is possible only through the main gates located on Head Road. A charge is payable at the entrance. Drivers are required to obey the one-way traffic system which leads to a single large car-park at the south end of the reservoir grounds. From here further access is on foot only.

Café:

Please visit www.niwater.com for more information.

Visitor Centre:

Close by the café is the Visitor Centre where an informative exhibition explains Silent Valley's development using photographs, models and video. Admission is free and the Centre is open during normal Silent Valley opening hours.

Conference Room:

A conference room is available for hire all year round. Enquiries to be made to waterline@niwater.com

Bye-Laws:

These are designed to safeguard your enjoyment of Silent Valley as well as to protect the area itself. Please observe them and follow the country code. Dogs should be kept on a lead.

Administration:

Silent Valley is administered by Northern Ireland Water (NIW).



NI Water would like to acknowledge its partners in this project.



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