

‘A watering hole with no water’

Janet Hargreaves

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Almost any history of Arnside will tell you that the point where the handful of dwellings on this stretch of the Kent estuary became a village of note was when the Furness Railway Company, through happenstance rather than design, built a station here in 1857. However, it is more accurate to say that the real moment of change came in the early 1880s: not from steam or rail, but from the provision of clean, piped water.

Arnside has rarely been short of water in general. The Kent washes its shores and between the rainfall, salt marshes and mosses it's a fairly wet place. Nevertheless, water pure enough to drink and cook with, and plentiful enough to provide for crops and livestock, was a precious commodity. Leighton Beck, canalised over centuries and flanking Arnside to the east, is the only sizable stream. The craggy limestone geology allows for rainwater to seep through the cracks and where it meets an impermeable water table, at sea level or 'perched' at a higher level, ponds and springs may form.

These have been used for millennia, either in their natural form, or augmented by dug troughs, holding tanks or pumps. The 25 houses, inns and farms recorded in the 1841 census had barely changed in 50 years and were strategically built to capitalise on these natural water supplies. An example is the house on the shore at Beachwood, where a spring on Redhills above flowed down the hill into the estuary at this point. At times the water was stored in a tank under what is now the small nature reserve next to the footpath and the outflow can still be seen in the retaining wall here. [photo] By the 1871 census the number of houses had increased to 41, and in the next 10 years to 1881 it doubled again to 82. By this time, Arnside had a pressing problemⁱ.

Whilst Arnside's water crisis pales into insignificance next to the public health disasters in the major towns and cities, legislation passed to address these issues affected house building in Arnside. The 1848 Public Health Act set standards for sanitation, clean water and the disposal of waste. Although this Act was not monitored or enforced for small towns like Arnside, it set a high bar, including the provision of a 'privy'. Increasingly an up-to-date house builder aimed to provide this convenience in the form of the recently rediscovered and patented mediaeval invention: the water closet (WC)ⁱⁱ. The Act failed to bring about the hoped-for reductions in mortality, so the 1866 Sanitary Act made the legislation compulsory. A newly built house now needed, amongst other improvements, to have a privy and the capacity to provide sufficient water to meet the household requirement, prior to getting a certificate of completionⁱⁱⁱ. Developments were overseen by the Rural Sanitary Authority, which for Arnside was based in Kendal. The monthly Board meetings were reported in the press and it is through this medium that Arnside's transition to modernity and the steadfast, long-suffering efforts of Mr Godfrey, the Sanitary Inspector, is related.

As the 1881 census shows, the 1870s was a busy decade for development in Arnside. Local businesses, in Arnside and elsewhere on the Furness Railway, recognised the potential of tourism to turn a profit, so were building to accommodate changing trade opportunities and a different class of visitor. From the mid-1870s, the issue of where and how the villages in what is now the Arnside and Silverdale AONB area were to be supplied with piped water were hotly debated^{iv}. Despite the piping of vast quantities of water from the Lake District to Manchester, the Thirlmere aqueduct engineered for this purpose was several miles away across difficult, limestone terrain: The cost, relative to the low population in the area was

judged to be prohibitively expensive. Three possible solutions for Arnside were tabled: to pipe water across from the Kendal area, to create a reservoir from a rain-supplied water source above Arnside or to link up with the new piped water scheme in Grange-Over Sands, supplied by their Newton Fell reservoir.

At the June Sanitary Board meeting, 1880, things came to a head as Mr Godfrey reported back his fact-finding visit to Arnside in May^v. He had managed to visit the majority of houses in Arnside and reported that in 16 of them 84 beds had been made up for visitors. He made a rough calculation that the resident population plus visitors, at its height was around 500. He states that 'nine or ten' more houses are in the process of building, with more to come. In terms of wells and springs he notes that there are only six supplying the whole area. Five of these are on private property with restricted access. Just one, the village pump on the corner of Church Hill and Silverdale Road, is public and available freely to all [picture]. Around 30 of the houses also collect rainwater, captured from the roof and stored in tanks. He arrived when Arnside was at crisis point: just at the start of the visitor season, for the second year in a row, the rainfall in the first half of the year had been low.

Mr Barker, proprietor of Saltcotes farm next to the station, could be said to be in the best position as three of the private sources were on his land. However, one had already run dry and another was rented out to the Furness Railway Company for 30 shillings per year to supply the station, tea rooms and cottages. 18 of the 30 tanks surveyed were empty, and a further 10 were running very low. Mr Godfrey reports that the village pump 'holds out well', with water being carted to houses, at a price, but that the building work is 'taxing its capacity to the utmost'. He holds forth the danger of disease due to the difficulty in gaining enough water to flush the newly created WCs and that Arnside is close to becoming a 'watering place without water'.

Over the next six months two public meetings were called in Arnside, to try to gauge the mood and reach an agreement. On the 28th June the Sanitary Board members met householders and prominent visitors in the Crown Hotel [now the Fighting Cocks]. The Kendal Mercury^{vi} reporter mischievously states: 'Arnside stands pre-eminently in the vanguard of those places to be desired for renovating and invigorating health or the luxury of recreation. Yet Arnside lacketh one thing – a plenty-full supply of heaven's free blessing – pure water'. He points out that the good people of Arnside, due to their dispute over cost, are in danger of being left behind in the competition for tourists, particularly by Grange Over Sands.

The people themselves are in a tricky position and by no means united; the meeting opened to 'a fire of questions and statements of a slightly contradictory character'. Everyone wanted more water and almost no one was self-sufficient. No one was happy with the taxation, in the form of local Rates, needed to fund the innovation. Although the anticipated revenue from visitors would more than compensate, it's still a gamble. The Reverend C W Shepherd, with his 10-strong household epitomises the class of visitor Arnside desires to attract. He sums up the dilemma in asking the rhetorical question: what is a 'sufficient supply of water?'. For him, this includes his daily bath, which he is sorry to report he is obliged to manage without and assumes such behaviour is seen as a luxury in Arnside.

The meeting reached deadlock with the decision to investigate options further only carried by the Chair's casting vote. There followed several months of haggling terms over quantity, price and access. Fears that the initial calculation of 3,000 gallons a day, averaged over the year, would not accommodate a peak of 10,000 gallons a day at the height of the season were countered by the Grange Board assurances that water was plentiful enough for all. The laying of a 3-inch pipe using the route of the railway across the Kent viaduct was agreed with

the Furness Railway Company for a fee of £10 per mile. Finally, in December the second public meeting approved the Grange scheme, and the creation of a separate 'Arnside Highways District' in order to manage the necessary legislation for water management and sewage disposal^{vii}. The Ulverston Advertiser picked up the story and reported in March 1881 that the motion was carried and the work could start^{viii}.

Over the coming year pipes were laid and the scheme came into operation early 1882. However, this was another difficult year for the residents and visitors in Arnside, the trouble-shooting sanitary inspector Mr Godfrey and the contractors he was employing. In its first quarter of operation the main water pipe was beset by leaks and poor function, and no one was happy. An interesting economic argument was presented when Grange Board proposed fining the Kent Board £30, for lost water and inconvenience due to burst pipes. This was a huge sum, and would have almost doubled their revenue for the year. Kendal admitted liability, but argued that Grange had lost nothing, because the water was not due to be sold to anyone else, and Arnside had gained nothing, so a fine was unreasonable. It appears no decision was reached on this matter^{ix}.

In October 1882 two further problems led to a meeting of 30 'concerned' ratepayers^x. Firstly, the supply continued to fail because of leaking pipes and more money was needed to lay additional pipes at Redhills. Mr Godfrey was yet again in the firing line as the competency of the engineers and the adequacy of the pipe width were both questioned. Secondly, adding insult to injury, on the previous Sunday the water suddenly came on again for a few hours, flooding several uninformed households, before ceasing just as quickly. It appears that one of the pinch points for the system was spanning the 100-yard open spar on the viaduct, which needed to maintain the water supply to Arnside whilst still letting river traffic through. A temporary section had been created restoring the link to Grange, only to be broken, almost immediately, by an unsuspecting, or careless boat.

Modern historical accounts often paint a romantic picture of the skill and ingenuity of Victorian civil engineering, but it did not always go to plan and it may be that the entrepreneurial spirit of the Arnside engineers exceeded their knowledge and resources. In their defence, the supply of water and management of waste continued to be a challenge long after the Victorian era, with the Silverdale area not connected until 1938^{xi}.

The contract with Grange was signed for 28 years, it remained difficult and was replaced by a route from the Lupton reservoir near Kendal in 1906. During the Grange years further pipe work was laid, sewers and draining was improved and Arnside prospered. Increased and better accommodation, a growing number of schools and an Educational Institute did indeed justify its claim to be a 'watering hole' destination where the estuary, the woodland lilies, the remarkable landscape and the Lake District views could be enjoyed by all.

ⁱ Census numbers vary slightly depending on sources, partially due to changing local boundaries. The numbers used here are from the research notes in the [Arnside Archive](#) of Dennis Bradbury, collated for his 2002 book: Arnside: A Guide and Community History.

ⁱⁱ The British association of urological Surgeons offers a fascinating short history of the WC: https://www.baus.org.uk/museum/164/a_brief_history_of_the_flush_toilet

ⁱⁱⁱ 1848 Public Health Act: <https://websearch.parliament.uk/?q=1848%20Public%20Health%20Act> ; 1866 Sanitary Act: <https://websearch.parliament.uk/?q=1866+sanitary+act+>

^{iv} Silverdale's Water Supply 1800 – 1940. MD Wright, 1993 access at: <http://www.mourholme.co.uk/users/UserFiles/File/Silverdales%20Water%20Supply%201800-1940%20md%20Wright%201993.pdf>

^v Kendal Mercury 11.06.1880 Kent Rural Sanitary Authority

^{vi} Kendal Mercury 02.07.1880 Arnside Water Supply

^{vii} Kendal Mercury 17.12.1880 Government enquiry at Arnside

^{viii} Soulby's Ulverston Advertiser and General Intelligencer 10.03.1881

^{ix} Soulby's Ulverston Advertiser and general Intelligencer 13.07.1882

^x Soulby's Ulverston Advertiser and general Intelligencer 05.10.1882

^{xi} Wright 1993