

HISTORY OF THE WATER SUPPLY AND SEWERAGE OF RYDE, ISLE OF WIGHT TO 1868

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Abstract *The town of Ryde on the Isle of Wight (IOW) grew progressively from the 1780s but, like many United Kingdom urban settlements, was dogged by an inadequate water supply and poor sewerage. These defects persisted in Ryde until recent times. This article covers the period from William Player, Lord of the Manor, first selling building leases, until the dissolution of the Ryde Town Commissioners, following Ryde being granted Borough status. By 1868, Ryde Town Improvement Commissioners had obtained a water supply from 3 to nearly 4 miles south of the town, 'retrofitted' sewers, and the western and eastern outfalls had been extended to low tide mark. All this activity entailed four local Acts of Parliament, six government-inspector chaired inquiries and many meetings of the Improvement Commissioners. Minutes of the Ryde Town Commissioners have been preserved in the Records Office for the Isle of Wight, but many detailed supporting papers were not kept. However, key to research, copies of the Isle of Wight Observer (IWO, a Ryde-based newspaper), archived by the national newspaper library, are electronically searchable. Printed reports of some IOW government inquiries are also available.*

Keywords:

Ryde, local Acts of Parliament, Town Improvement Commissioners, water supply, sewerage, public health

Introduction

Ryde is a seaside town on the north-east coast of the IOW that blossomed largely because of its location, opposite Portsmouth. The construction of Ryde Pier (opened 1814) acted as a gateway to and from the IOW. The history of the water supply and sewerage of Ryde touches on geographical and geological constraints and opportunities; a commercial company; governance that was put in place to 'improve' the town; wealthy residents of Ryde and those generally considered the least, its poor.

Ashey and Ryde Manors

The ancient manorial (land ownership) rights for Ashey and Ryde were key to the development of the town of Ryde. The Manors became the property of the Player family and their descendants, the Brigstockes and Linds.

Ashey Manor, granted before 1228 to the Abbey of Wherwell, near Andover, was located between Binstead Stream and Monktonmead Brook, the sea and downs. Landing rights at Ryde formed part of the income of the Manor. After the dissolution of the monasteries, part of the Manor of Ashey was separated to form the Manor of Ryde.

In 1705, Henry Player (d.1711) of Alverstoke in Hampshire, established the IOW branch of his family, when he purchased the Manor of Ryde. His grandson William Player (1712-1792), initiated the urbanisation of Ryde and, after the death of his son George Player (1761-1843), the estate was divided in half and passed respectively to his grandson Dr James Player Lind, and via his granddaughter, to her husband, Captain Thomas Robert Brigstocke RN (see Table 1). In 1789, the Manor of Ashey was sold by Lord Mount Edgcumbe to the Bettesworths, who are memorialised by the name of a road in Ryde. They later sold it to George Player, thereby reuniting the Manors of Ashey and Ryde. There had been friction between the Bettesworths and Players as to shore rights. In 1811, the rights were adjudged by a jury at Winchester Assizes to belong to Mrs (Ann) Bettesworth.

Parish boundaries

In addition to the manorial boundaries that defined land ownership rights, parish boundaries were of great importance as these determined to whom inhabitants had to pay tithes and the amount of their Poor Law contribution. Originally, the developing settlement of Ryde was in the medieval parish of Newchurch that stretched from the north to south coast of the IOW and also included Ventnor. Later in 1866, the parish of Newchurch was divided (see Table 1).

1. Commencement of the urbanisation of Ryde, through to a petition for a Public Health Act (PHA 1848) Inquiry

The urbanisation of Ryde was initiated in the late 19th century by the uniting of the village of Upper Ryde (up to 150 feet above sea level) with Lower Ryde which fronted the sea. William Player laid out Union Street that linked the two villages and began selling annual leases for building plots. Unfortunately, the leases did not specify sufficient conditions or restrictions on the construction of wells, privies, cesspits, and mains drainage that would have ensured safe public health.

The first phase of the development of Ryde was firmly in the hands of its wealthy landowners and aristocratic residents. Apart from laying out roads and neighbourhoods, a first big innovation was Ryde Pier Company (RPC) that also had an interest in supplying water; not to households but, more lucratively, to passing ships. The establishment of Ryde Improvement Commissioners in 1829 was a next big initiative, although this did little to improve the water supply and sewerage of Ryde. In 1851, less wealthy ratepayers of Ryde (those not eligible to be Improvement Commissioners) petitioned for a PHA 1848 Inquiry.

Shallow wells and the necessity of a piped water supply from the downs

The Georgian and early Victorian residents of Ryde obtained their drinking water largely from shallow

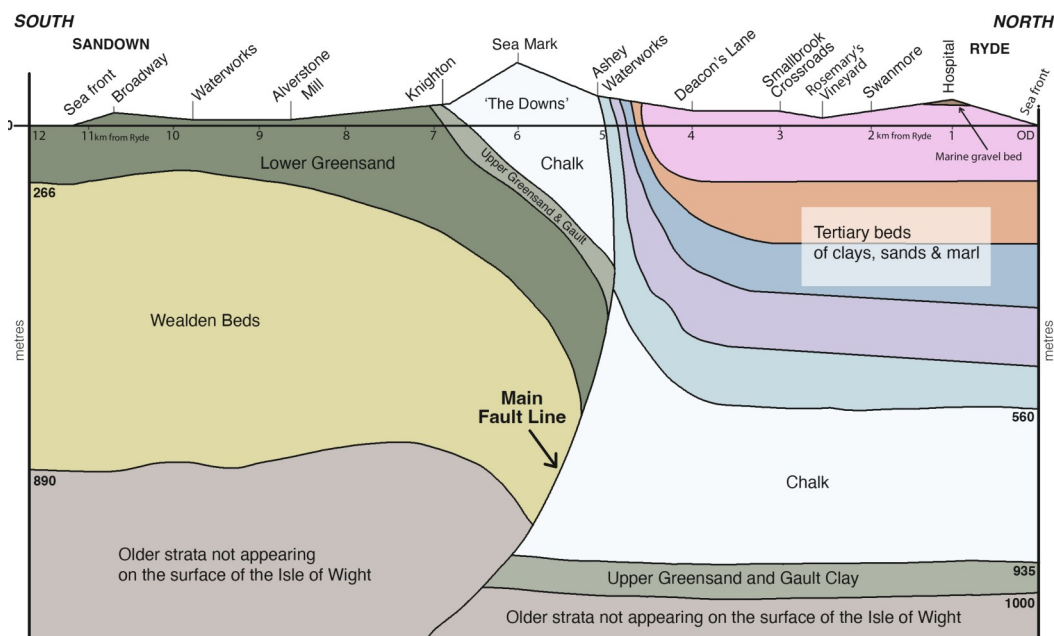


Fig. 1: Beneath Ryde, the chalk is more than 500 metres below Ordnance Datum. South of the main fault line, chalk has been folded up forming the central and south chalk downs. Between these two features, the chalk has been eroded away to expose Lower Greensand. North of the main fault, the Wealden Beds and Lower Greensand are absent.

wells (18 to 25 feet deep: see first Ranger report p68). Most wells were private, but some were communal/public. By that time, the lower Monktonmead Brook is likely to have been contaminated and unusable as a source of water. There was some utilisation in Ryde of roof-captured rainwater and the employment of workers in summer to cart water into the town. Of note, in the late 1840s, when the Isle of Wight Infirmary was constructed in the upper part of Ryde, anticipating that its well might not be adequate, two 700 gallon tanks were incorporated into the roof to store rainwater. In parts of Ryde where superficial gravels overlie impermeable clays, it was possible to construct wells. Rainfall percolating through the gravel collects in 'aquifers' where water could be accessed. Unfortunately, this supply was limited and, as the town grew, the water table became increasingly polluted from cesspits and drainage ditches. Eventually a sufficient and clean water supply for Ryde depended on piping water from the central Chalk Down/Greensand aquifer that lies to the south of Ryde (see Fig. 1 above). It should, however, be noted that the piped water supply of the west of Ryde cannot generally connect with the east of Ryde and vice versa, because the valley of the Monktonmead Brook imposes a gravitational barrier. This barrier also constrained sewerage arrangements for Ryde, with the west of Ryde draining via the western outfall, and those of eastern Ryde and east of Monktonmead Brook, draining via the eastern outfall (see Fig. 4, p17).

Cesspits and drains

Initially, sewage flowed into cesspits and ditches that would have been cleaned infrequently. In time, as the population grew and flushing toilets were installed by wealthier residents, cesspits for sewage became unsustainable. Some public sewers were constructed but they only reached high water mark. Unfortunately, at low tide this resulted in a stinking nuisance, but it was years before outfalls were

extended to low water mark. At no point, while Ryde had control of its water supply and sewerage, did it treat sewage to minimise the impact on the environment.

Monktonmead Brook, its catchment, the Downs and catchment of the Eastern Yar

Monktonmead Brook is a small river that flows from springs located at the foot of the chalk down (Ashy Down), three miles south of Ryde. As it approaches the sea, the brook originally entered a marsh that marked the eastern boundary of William Player's Manor, and also the boundary between Newchurch, the parish in which Ryde developed and the neighbouring parish of St Helens. However, as Ryde developed, the marsh was drained and building extended east of this boundary as the 'unincorporated' neighbourhoods of St John's, Oakfield and the Strand.

As can be seen from Fig. 3 (p16), the rainwater catchment for Monktonmead Brook is located north of the central chalk downs, between that for Blackbridge Brook and the lower Eastern Yar. James Easton, who later recommended Ashy as a water source for Ryde (see Table 3, p18), failed to recognise that the catchment for Monktonmead Brook, and the spring at Ashy, is very much smaller than that providing water to Carisbrooke which he held up as an exemplar. Neither did he recognise the extensive catchment of the Eastern Yar. When put to the test by the construction of a waterworks, in summer Ashy proved inadequate for the needs of Ryde.

The catchment for the Eastern Yar commences in the far south of the Island at St Catherine's Down. The upper Eastern Yar eventually flows through a 'breach' in the downs to reach Bembridge Harbour and the sea. A number of mills are located on the Eastern Yar, including Knighton and Alverstone mills. Water from Knighton mill pond flows on to Alverstone mill pond and eventually to Bembridge Harbour.

The Ryde Pier Company (RPC)

During the days of sail, many ocean-going boats moored off Ryde and required supplies of fresh water, especially before setting off on a long voyage. Apparently, with the permission of the Lord of the Manor, various entrepreneurs in Ryde capitalised on this by obtaining water from wells established in the town. They presumably filled barrels and rowed these out to anchored ships.

RPC was established in 1812 and shareholders obtained a local Act of Parliament to build a pier across Ryde sands. The sands extend more than 600m from the high water mark and present an obstacle, apart from at high tide, to the landing of passengers from boats.

RPC shareholders noted the water supply business as a potential lucrative side-line and included within their Act the objective of 'supplying fresh water to ships and vessels'.

Maycock and Silsbury (2005), who researched RPC minutes in the National Archives noted:

At its first Board meeting, RPC decided to buy out the existing waterwork business of John Cooper, James Denham and William Baker, but this took until the late 1820s to complete.

During the 1830s, RPC constructed waterworks in the upper town (see Table 2), but these were not a long-term success and the ground was subsequently reinstated.

William Ranger (see Table 3) noted in the report of his first Inquiry:

In 1841, RPC formed a reservoir towards the top of the town (p12). Several of the public wells had been '*stopped up or the supply almost entirely abstracted by the extended RPC works*' (p19).

In 1844, RPC leased its waterworks for supplying ships to Jonathan Dashwood (see Table 3). He was permitted to supply the water that remained to houses in Ryde. At some point, as related to the Ranger Inquiry (p 19), the quantity and quality of water to supply ships diminished and vessels began diverting to Portsmouth for supplies, even though this entailed travelling extra distance. It was noted that this had a knock-on to other businesses in Ryde that lost the trade of visiting seafarers.

At its outset, RPC had to overcome financial difficulties and raise funds to invest successively in extensions of the pier, a pier head and later a pier tramway. Nevertheless, the company became profitable and for many years dominated the economic life of Ryde.

Ryde initiates local government - Ryde's first two local Improvement Acts

At the end of the 18th and into the first part of the 19th century, there was rapid development of towns in Britain, as was the case on the IOW. Although some IOW towns developed within ancient corporations, e.g. Brading, these had little or no 'local government capacity' to respond to urbanisation. In particular, they were unable to impose rates for investment in necessary community projects. To achieve these objectives, towns had to

draft (and pay for) local Acts of Parliament that set out what 'improvement' could and could not be undertaken, all within strict geographical boundaries. Local Acts stipulated who could make decisions, generally ratepayers who 'qualified' on the basis of wealth, rather than being elected. On the IOW, local Acts were initiated by:

1786 Newport - Paving, Repairing, Cleaning, Lighting and Watching

1816 Cowes - Improvement and Market

1829 Ryde - Improvement and Market

1844 Ventnor - Improvement and Market

First Ryde Improvement Act (1829)

Further research might or might not reveal precisely who initiated the Ryde Improvement and Market Act 1829, but its cost (£870) became a charge against all ratepayers, rich and poor. Unfortunately, statistical summaries for the 1831 and 1841 census do not give population counts for the town of Ryde. The 1829 Act qualified any ratepayer who had real or personal property of £1000 or more to act as a Town Improvement Commissioner (about 60 or 70 qualified), but business (meetings of the Commissioners) was generally transacted by about 12 persons. Later in 1851, Ryde ratepayers consisted of 1423 households (see Table 4, p19 of this paper). Ryde Improvement and Market Act (1829) comprises 119 clauses and, like other local Acts, mainly relates to pavements in the town, regulating nuisance trades, lighting, security and the establishment of a market.

From the outset, the main focus of Ryde Improvement Commissioners was the provision of a town hall and market. This consumed almost all of the money the Commissioners could borrow based on the security of the rates, and then further borrowing based on the security of what they had built. Very little money was left for public health improvement. A piped public water supply was not contemplated by the Commissioners, there being a number of public wells in Ryde. Sewers were debated, but at this time, construction was limited.

None of the clauses of the 1829 Ryde Act relate specifically to sewerage or have the margin heading 'sewers'. Present and future gutters, drains, sewers and watercourses had to be kept in repair (clause XV) and there is a clause relating to the pollution of rivers (clause XLIV). Water pipes are mentioned but in connection with the potential for water to be contaminated by gas (clause XLII - the Ryde Gas Company was not established until 1838).

Second Ryde Improvement Act (1847)

In 1847, in order to create more 'financial headroom', Ryde Improvement Commissioners obtained a second local Act. This Act had only 22 clauses, none relating to water supply or sewerage, but generally about increasing the amount that the Improvement Commissioners could borrow and therefore spend. The Act was in operation for seven years, until 1854, alongside unamended parts of the first Ryde Act. There was some increase in public health spending, although the Improvement Commissioners remained restricted in what they could do, even had they wanted to.

2. 'Ranger' Inquiries, rejection by Ryde of provisions of PHA 1848, a third Ryde local Improvement Act and establishment of Ashey waterworks

In 1848, Parliament passed a Public Health Act (PHA 1848), partly because it was evident that the country was going to be swept by a second pandemic of cholera (the first occurred in 1832), but also as an alternative means for a District or Town to gain public health-orientated local government without the expense of obtaining their own local Act of Parliament. PHA 1848 established a London-based General Board of Health (GBH) (for five years only) and set out draft clauses that local (i.e. District or Town) Boards of Health could adopt. However, the Act could be imposed by the GBH if the mortality of a locality exceeded an average of 23 per 1000 over seven years, or if, after an Inquiry, local residents requested a local Board.

On the IOW, inquiries were petitioned for by residents of Whippingham (1850) West Cowes (1850), and in 1851, Ryde. All three of the IOW inquiries were chaired by William Ranger (1800-1863), Superintending Inspector, appointed by the GBH.

First Ryde Ranger Inquiry (1851)

William Ranger's Inquiry in Ryde was conducted over 5 days from 10th to 14th December 1851. The Inquiry had been petitioned for by 144 ratepayers of Ryde, and *not* the Town Improvement Commissioners. The intention of the petitioners was reportedly the adoption of PHA 1848 provisions, and establishment of an elected local Board of Health to replace the Improvement Commissioners. Driven by the GBH, adoption of PHA 1848 would undoubtedly have resulted in expenditure on a piped water supply and improved sewerage, although how this would have been achieved, including from where water would have been sourced for Ryde, can only be speculation. Charles Colenutt and others, including George Butler, the editor of IWO, favoured abstraction at Alverstone Millpond as the best water source for Ryde and this opinion was later endorsed by Henry Austin, GBH's engineer. However, to advocate Alverstone, it was necessary to argue that the benefits of sourcing a 'guaranteed' large volume of water outweighed additional pumping costs (say, compared to sourcing water at Ashey) and the expense of treating water from Alverstone, it being 'river' rather than 'spring'. Apart from George Butler, there was no persistent or persuasive voice for Alverstone as Ryde's optimum source.

As an Inquiry Chairman, William Ranger would not have been impartial and the text of his 96 page first Ryde report is inevitably influenced by his allegiance to the GBH. Nevertheless, there appears to have been consensus in Ryde that Ranger's grim depiction of poor local public health was accurate, even though there was no agreement over his recommended solutions. Written and verbal evidence was given to the Inquiry by the 'better-off', including wealthy homeowners and those renting large establishments. They made clear that the lack of a safe, clean water supply, and poor sewerage, also affected the privileged. How poor public health

was affecting and killing the poor was detailed by doctors and the clergy. In particular, Benjamin Barrow, the lead surgeon in Ryde, gave detailed descriptions of the circumstances in which the poor were living. The following is taken from the evidence given by Mr Barrow:

'In some cases the house-well and the privy were not more than a foot apart, the supply, it must be remembered, being drawn from the surface, so that much of the impurity of the soil-pit forced its way into the water which the people drank, cooked, and washed in for six months in the year. He had discovered the infiltration of the foetid liquid from being called upon to examine the water in a well of this description; the investigation led to the detection of a considerable quantity of animal matter, and he found that the amount of impurity increased or diminished according to the yield of the well'.

Barrow was one of the original 144 to petition for the Ranger Inquiry. Subsequently he became an Improvement Commissioner and an opponent of George Butler and the IWO (see Table 3).

At the Inquiry, both Dr Lind and Captain Brigstocke, the Freeholders and Lords of the Soil said they favoured the welfare of the town. Captain Brigstocke, RN., JP. stated:

'that he was one of the lords of the soil, and that he had lived in Ryde for about twenty-eight years. He took a great interest in the welfare of the town, and as a large owner of property, he was most anxious to see its welfare promoted'.

'He considered that the water supply should be furnished pure in quality, abundant in quantity, and at the least possible expense. The present supply had none of these requisites, and the local Act was perfectly inoperative to benefit their condition in this respect'.

'The present waterworks (Upper Ryde) were never constructed with the idea of supplying the town. The fact was, that the Pier Company finding themselves short of what they required, took powers for a larger and better supply: it was then that the inhabitants expressed a wish for more water, and the Pier Company agreed to give them what was left, after they had taken as much as they required'.

As the main commercial company within Ryde, and with experience of supplying water, RPC might have taken a lead in obtaining a supply from the central downs, but their priorities were elsewhere, including making money by supplying ships with water, not Ryde residents. RPC did contemplate a private act to supply water but only in 1852, at the last minute just before a third (1853) local Act was passed.

Jonathan Dashwood (see Table 3) presented a plan to William Ranger's Inquiry for supplementing the water supply of Ryde by obtaining additional water from Quarry Springs and Monktonmead Brook, although he conceded that the water supply in Ryde would continue to be intermittent (i.e. set hours of the day), rather than 'continuous'. William Ranger did not find this plan credible or acceptable.

The Ranger report did not criticise the Town Commissioners directly, but the inadequate public

health provisions of the first and second local Acts were criticised. The authors of these Acts were not disclosed but undoubtedly included Commissioners then in office. Key identified shortfalls included not being able to compel householders to connect their drains to public sewers that were laid and an inability to construct outfalls beyond the high tide mark which was the northern town boundary. It should be noted that William Ranger was of the view that disposal of sewage into the sea via outfalls was undesirable. Instead, sewage should be processed and used as fertiliser on nearby agricultural land.

Ranger did not document any significant opposition being presented during his Inquiry, in particular, to more investment being made in obtaining a water supply from the downs and for improved sewerage. He did concede that detailed proposals needed to be worked up and costed and, although he could not say what the exact cost would be, he was certain that it would be affordable. Based on his experience, Ranger anticipated that the greatest opposition would not necessarily come from those most well-off, but rather from the owners of housing occupied by the poor (see Table 4). This is presumably because these owners would find it difficult to recover their increased costs.

William Ranger recommended that Ryde should adopt PHA 1848 provisions and a government Order was prepared to that end, but implementation of the Order was left to the ratepayers of Ryde (see Table 1). Ranger noted that the mortality rate for Ryde was 25 per 1000, above the threshold of 23 per 1000 for imposing PHA 1848, but he accepted that 'many invalids resort to Ryde' at a time when 'their chances of recovery are all but hopeless' and that this contribution to the mortality rate was difficult to determine and apply the necessary correction.

Second Ryde Ranger Inquiry (1852)

As noted above, the original eastern border of Ryde was Monktonmead Brook but, as the population increased, an expansion in housing extended beyond this watercourse. The inclusion of these additional individuals within the remit of the Ryde Town Commissioners (with implied responsibility of supplying water and adequate sewerage) was debated in 1852 by a second Inquiry chaired by William Ranger. Inclusion was argued for on the grounds that if inhabitants outside the town boundary were left at risk of outbreaks of infection through drinking contaminated water, infection would inevitably be imported and affect existing residents of Ryde. Extension of the boundary was argued against by some wealthy house owners who would be included but had large grounds with their own private wells. They objected to paying higher rates. Extension was also objected to by some, on the grounds that they would be subsidising newcomers. Although occurring many years later, it is ironic that in 1933, as the result of a central government 'efficiency reform' of local government, the Urban District Council of St Helens was incorporated into the Borough of Ryde, along with a range of water supply and sewerage challenges.

Rejection by Ryde of PHA 1848 provisions

During and following the first two Inquiries chaired by William Ranger, the Town Commissioners and ratepayers (reportedly a majority) were opposed to adoption of PHA 1848 provisions. The reasons for this included: not wanting to pay higher rates, even for an improved water supply and sewerage; not wanting to expand the boundary of Ryde; and wanting to maintain independence from central government. However, those opposed to adoption had to concede that Ryde needed water from an external source (and an improved gas supply). As an alternative, a compromise third Ryde local Improvement Act was proposed, including provision to elect Commissioners. Over twelve months of debate and politicking, the public health party conceded that they had been unable to galvanise sufficient support for the adoption of PHA 1848 and a third Act was better than the *status quo*. In the interim, a number of private capital schemes to supply water to Ryde were proposed. One got as far as advertising in newspapers the intention of seeking a local Act of Parliament but progress stalled, leaving the Improvement Commissioners and public funding to provide for Ryde.

Third Ryde local Improvement Act (1854)

The third Ryde local Improvement Act of 1854 increased the boundary of the Improvement Commissioners from 1½ square miles to 1¾ square miles, although most of the increase was foreshore (see Table 5). The new Commissioners appointed Francis Newman as their surveyor (see Table 3), who apart from one brief break, was to serve Ryde for many years.

After they were constituted under the 1854 Act, the new Commissioners established a water sub-committee. This reported on 30th of September 1854 that they had appointed and taken advice from Mr Easton (see Table 3) and account of the 'opinions and feelings of ratepayers'. Even though Quarry Spring (see Table 2) was not mentioned in the newspaper notice for the 1854 Act, the committee took time to conclude that as a source it was likely to prove insufficient; and in any case it would cost more than Ashey. The committee further confirmed that the estimated capital and revenue costs of Ashey (£15,500/£524) would be less than Alverstone (£23,000/£900). Mr Easton advised that

'his most decided opinion (indeed that he would guarantee) that an abundant supply of water, sufficient for all the requirements present and future of the town, could be procured from the Bloodstone (Ashey) source'.

The committee selected Ashey by 13 votes to 8, with one abstention. Mr Barrow (see Table 3) voted for Ashey stating,

'he had always been an advocate for the Alverstone source, but after Mr Easton's assurances and the expressed feelings of the public, he did not hesitate to support the immediate adoption of the report of the committee'.

Contracts were let for construction of waterworks at Ashey but the IWO was indignant that Easton and Amos (E & A, see Tables 1 & 2) were given the

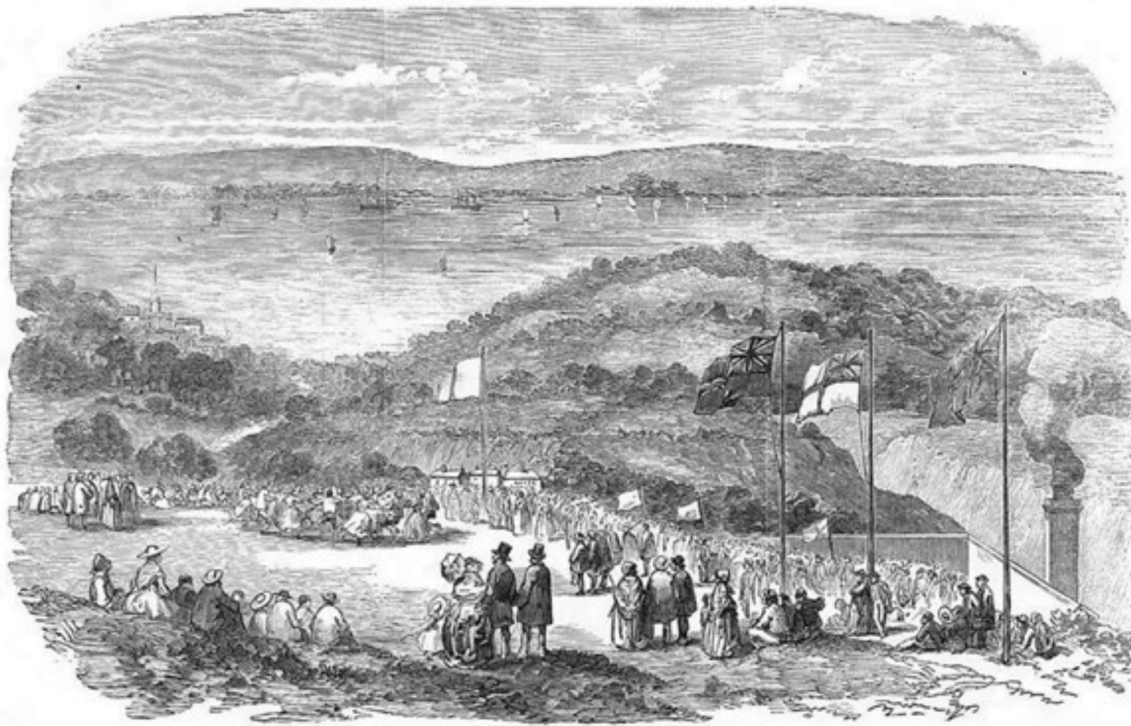


Fig. 2: Fête at Ryde, Isle of Wight - inauguration of the waterworks. View from the new waterworks at Ashey, north towards the Solent. The chimney is of a steam engine boiler house. Residents and children attending the opening can be seen in the centre. On the right, in the distance, is Ryde. The steeple is on St Thomas Church tower. It was removed in 1947
(From *The Illustrated London News*)

contract for a steam engine, although theirs was not the lowest tender. Just before completion of the works, the IWO reported (16 June 1855)

'The Water Committee beg to assure the Board (of Commissioners) that there is no foundation whatever for the various reports which have been circulating that the wells at Ashey are dry, or that the water has almost entirely disappeared. They believe that there is at this time quite as much water as at any period since the wells have been sunk, and which, when completed they have no doubt will be found to yield quite sufficient for the requirements of the town'.

In the event, this reassurance turned out to be false and the rumours true.

A celebration for the new Waterworks was held on Thursday 28th June 1855, when a procession of carriages, dignitaries and more than a thousand children processed from the centre of Ryde to Ashey. At the works there was a band, speeches and refreshments, before the procession returned to Ryde. That evening there was a banquet at the Town Hall. However, in spite of the celebrations, and due to problems with pipes, a partial supply did not reach Ryde until Friday 7th September, when the fountain in front of the Town Hall was turned on.

3. Failure of Ashey waterworks, adoption of the Local Government Act 1858 (LGA 1858), Ryde Waterworks Act and establishment of Knighton waterworks

Jubilation over Ryde's Ashey waterworks was short-lived in that although the water supply to Ryde was plentiful over winter, during the summer there was severe shortage. Looking back at this period, William Pullen, the clerk to the Improvement Commissioners related:

The Ashey waterworks

'were completed in 1855, and the supply commenced in December of that year. In the summer of 1857 the first complaints of the supply being inadequate reached the ears of the Commissioners, who at once consulted their engineer, Mr. Easton, and by his advice they deepened their wells at Bloodstone springs, and ran galleries (adits) for the purpose of intercepting the water at the cost of £2,600. In September, 1859, the supply of water became very scarce, and the Commissioners determined to apply to Parliament for additional powers. The supply was then reduced to two hours every alternate day, the total supply for the two days being only 104,000 gallons, and they were obliged to refuse to supply water for any other purpose than for strictly domestic use. They could not supply the higher levels of Ryde at all from want of pressure'.

During summers in the late 1850s, the inhabitants of Ryde again had to resort to shallow wells within the town, with the risk of disease transmitted by polluted water. As indicated above by William Pullen, towards the end of 1859, Ryde Improvement Commissioners reluctantly had to concede that further increasing the depth and driving adits from the wells at Ashey, during most summers was not going to produce sufficient water for Ryde. The debate about whether to go to Alverstoke or Quarry Springs was reopened, but this time Knighton was the third choice: Ryde had already been to Ashey. Because of the perceived urgency of the situation, the Commissioners were prepared to pay for a new local Act of Parliament, but hoped that if they adopted LGA 1858, they could obtain a *gratis* Government Order (that gave equivalent powers). LGA 1858 had

replaced PHA 1848 and entailed less central government control; this had been a reason why Ryde had previously refused to adopt PHA 1848.

In 1860, William Ranger held a third Inquiry, this time to consider the LGA 1858 Order that Ryde had requested although, at that point, the Commissioners were still undecided over Alverstone, Quarry Springs or Knighton. Many ratepayers favoured Quarry Springs; being the closest, they felt sure it would be the cheapest. Later that year, government law officers concluded they could not issue a LGA 1858 Order, as because Ryde had adopted the Act late in the year, it made application before empowered to do so. Later in 1860, Ryde Improvement Commissioners promoted a fourth local Improvement Bill, but this failed.

In 1861, the Commissioners promoted a further Bill, and the House of Commons committee on the preamble to the Bill sat on March 15th 1861. The IWO report on the proceedings noted that at least three witnesses were called:

William Henry Pullen who was clerk to the Improvement Commissioners noted that the Commissioners had

'decided over and over again that they must have an auxiliary water supply.' Also 'they had not taken any water from the Alverstone springs (implying that under their third Act, they had a right to do so), as the feeling of the inhabitants of Ryde was against it, in consequence of the character of the water.'

Mr Riddett, past chairman of the Commissioners, related

'Alverstone springs were very bad, and the water could not be used without an expensive system of filtration. When he saw the Alverstone springs the water was of the colour of coffee – it was most disgusting. The water certainly might be filtered, but it could never be so good as pure water, it possessed qualities filtration could not remove. The Knighton water was harder than the Alverstone water. It was certainly an advantage to have soft water for washing, but softness would not counterbalance impurity.'

Mr Thurlow, the present chairman of the Commissioners, stated

'there would be no difficulty in filtering the Alverstone water beyond the expense. He should have taken it if it had not been for the Knighton springs, which were so much better. The extra expense to filter the Alverstone springs would be £1,200 more than the £7,000 now proposed to be raised (for waterworks at Knighton).'

Also in 1860, it became evident that Thomas Webster (see Table 3) was likely to succeed in obtaining a local Act (the Isle of Wight Waterworks Act 1861) and this would prevent Ryde accessing Alverstone (had they wanted to). Yet again, the Commissioners explored the practicalities of Quarry Springs as a source for Ryde, but finally concluded it would not suffice, leaving the town with Knighton and the expense of a fourth local Act – Ryde Waterworks Act 1861 (RWA 1861).

Knighton Waterworks

There was no grand opening of Knighton water works. In September 1861, a temporary, portable

steam engine began pumping water, abstracted from the Knighton millpond, over the downs to the reservoir at Ashe. This provided Ryde with a welcome additional 120,000 gallons of water a day. However, pumping was soon stopped by an injunction taken out by Thomas Webster, who wanted his claim for compensation resolved before Knighton waterworks operated. Later a permanent steam pump was relocated to Knighton from Ashe (see Table 2).

In 1862, William Ranger held his fourth and final Inquiry in Ryde, as borrowing allowed under RWA 1861 had been exceeded. The Commissioners needed a further £3500, to cover compensation owed to Thomas Webster and the Carters (owners of Knighton Mill). The IWO was very critical of poor attendance at the one-day Inquiry. J. H. Hearn, a ratepayer, objected to the payments on legal grounds, but nothing came of this.

By the beginning of 1865, concern was expressed that at the peak of summer, the existing steam engine at Knighton was having to pump for 14 hours a day, to keep up with Ryde's demand for water. This was putting the engine at risk and the consequences, if the engine failed, were deemed to be catastrophic. In response, the Commissioners applied for an Order under LGA 1858 to increase borrowing for a new engine, and an Inquiry was held by Robert Morgan (not William Ranger) on 29th March 1865. In September 1865, James Easton undertook a site visit and produced a plan for upgrading Knighton waterworks. A new engine was supplied by Landale and Dale of Kirkcaldy, at a cost of £3000. The engine's nominal duty was 40 horsepower, but could extend to 80 horsepower. It pumped 400 gallons a minute to the reservoir at Ashe, 300 feet above. The volume was equivalent to 300,000 gallons in 24 hours, almost twice Ryde's existing consumption. The new engine started work on 22nd November 1866, with the old engine remaining in reserve.

As touched on in Tables 1 and 2, there were many subsequent developments at Knighton, but these are outside the time range of this article.

Ryde debates the inclusion of St John's and Haylands within its boundary, but encounters legal difficulties of its own making

Late in 1866, the Ryde Town Commissioners petitioned central government for an Order under LGA 1858, for the inclusion of St John's and Haylands within an extended boundary for Ryde. As noted above, a previous extension of the boundary of Ryde had been considered by the second (1852) Ranger Inquiry, and this extension was later included in the third (1854) Ryde local Act (see Table 5). This time the elected Commissioners were proactively working out of enlightened self-interest, in that they perceived a risk of infectious disease being imported into Ryde from adjacent neighbourhoods that lacked a piped water supply and had inadequate sewerage. An Order was issued in 1867, but Ryde found that it could not implement it because the newly incorporating neighbourhood would have been subject to LGA 1858, but not to the local Ryde Acts that were still in force. This would have created an anomaly with the existing town.

4. Borough status conferred on Ryde and demise of the Ryde Improvement Commissioners

For some time there had been debate over whether Ryde should seek to become a Borough. Since Medieval times, Newport had historic Borough status yet, in the nineteenth century, Ryde was the faster growing town. In 1868, Borough status was granted to the town of Ryde, by Royal Charter. This measure did not actually abolish the Ryde Improvement Commissioners but, after 39 years in existence, they voluntarily transferred their assets and responsibilities to the new Borough. However, some clauses of the local Ryde Acts continued to operate and caused unnecessary expense and inconvenience. These were finally repealed in 1876, by a Provisional Order of the Local Government Board that was confirmed by a subsequent national Act of Parliament.

Unfortunately the Borough of Ryde continued to have difficulties with its water supply and its 'Centenary Handbook, 1868 to 1968' (Bird, 1968) noted:

Many were the promises and disappointments in this endeavour.

The Ashey Waterworks were constructed in 1855, and a great celebration was held to inaugurate the supply to the town, but the promise of an adequate supply from this source was soon disproved, and a further source was developed at the Mill Well and in the Greensand at Knighton on the South side of the Down. Here again, the promise of adequate supplies was doomed to disappointment in periods of drought, and many schemes were tried in an endeavour to improve a supply which at times was so lacking as to constitute a serious threat to the health and welfare of the Borough.

The supply was augmented in the year 1946 by linking up with the Sandown-Shanklin supply from the river Yar, and sufficient quantities were maintained by the joint authorities up to the date of the formation of the Isle of Wight Water Board, who became responsible on 1st April, 1951, for the control of the whole of the public water supplies throughout the Isle of Wight.

Conclusions

The initial water supply of Ryde was mainly shallow wells within the town. Most wells were private. There were some public wells, although it is unclear how these were regulated and or protected, if at all.

The original (1829-1847) Town Improvement Commissioners prioritised a market building/town hall, and had little money left over for public health provision.

Eventually it became apparent that an adequate water supply for Ryde depended on piping water from the central chalk downs.

Had it secured Alverstoke as a water source, Ryde could have had abundant water, but this would have deprived, and might have adversely affected, the development of Sandown and surrounding districts. As it was, in turn, Ashey and Knighton proved inadequate for the water demands of Ryde.

Eventually in 1876, remaining local Acts had to be repealed/amended as they were impeding the governance and progress of Ryde.

Post World War 2, an adequate water supply for Ryde required sourcing water from Sandown-Shanklin UDC. More recently for the IOW as a whole, demand has outstripped supply and this has necessitated the importation of water from the mainland (via under Solent pipes).

Throughout its history, sewerage solutions for the IOW have been driven by local interests and short term gains. There could have been more environmentally friendly solutions, but at a cost.

Some questions not answered by this article

Who were the main instigators of Ryde's first Improvement Act 1829? Were 'business interests' the driver, with the Player family neither objecting nor acquiescing?

Why was so much prominence given to Ryde Town Hall? Was there perceived potential to make money from a Market or 'prestige' competition with Newport?

Who were the main petitioners for the first Ranger Inquiry? This is difficult to research as it was prior to the re-establishment of IWO.

The boundary of Ryde Borough, when it was incorporated in 1868, was it the same as for the 1854 Act, i.e. when were St John's and Haylands included?

Why was James Easton retained from 1854 to 1866 by the Improvement Commissioners and not held accountable for the selection of Ashey?

Acknowledgements

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Table 1: Timeline of water supply to Ryde, Isle of Wight

1781	Lord of the Manor, William Player initiated the urbanisation of Ryde by laying out Union Street and selling <i>annual</i> leases for building plots. Unfortunately, the lease conditions were insufficient to ensure the safe disposal of sewage.
1810	Jane Player's Act of Parliament extended granting of leases to 3 lives or 99 years. After the death of her son George in 1843, the manor of Ryde was divided into two parts, controlled respectively by her grandson, Dr James Player Lind, and the husband of her grand-daughter, Captain Brigstocke RN. 'Lords of the Soil'.
1812	Ryde Pier Act. Ryde Pier was one of the first to be constructed in the UK. It allowed passengers to disembark at low tide and walk dry-footed to shore. As an additional money-making venture, Ryde Pier Company (RPC) noted the potential of selling water to passing ships. After a delay, the company bought out the existing Ryde waterworks of John Cooper and partners. In the 1830s, RPC constructed a waterworks in upper Ryde, including a number of wells, reservoirs and a main supply pipe down the hill and along the pier. In the first instance, these works were constructed to supply ships. Later, surplus water was piped to subscribing residents.
1813	IOW Roads and Highways Act established Highways Commissioners and unified all IOW roads, apart from those in the Borough of Newport and West Cowes. Ryde rate payers subsequently argued they were paying £700 annually to the Highway Commissioners but receiving repairs in Ryde to the value of only £300 (First Ranger report p 59).
1829	Ryde Improvement and Market Act established Ryde Improvement Commissioners, but their main focus became Ryde town hall and marketplace, with little money left for the provision of public sewers etc. The Commissioners had no powers to compel households and businesses to join their premises to public drains that were constructed.
1844	RPC waterworks were leased to Mr Jonathan G. Dashwood. Previously, Dashwood sank a well on his own property on the Strand and installed a steam pump. However, the combined supply was still insufficient to keep pace with the growth of the town. Inadequate sewers and poor supply of piped water left many continuing to draw water from wells at risk of contamination from nearby cesspits.
1847	Second Ryde Improvement Act released Ryde Commissioners from having to pay off 1/20 th annually of the money they had borrowed under the 1829 Act. The new Act also allowed them to discontinue contributing to Highway Commissioners roads outside Ryde, and be responsible for their roads only. Spending on sewers increased, but the Commissioners were constrained by the absence of a power to construct outfalls beyond the high-water mark (northern town boundary).
1849	UK Cholera Pandemic resulted in 64 deaths in Ryde. The death rate in Newport IOW was slightly higher.
1840s	The West Outfall extension to low water-mark was constructed through a voluntary subscription, as a wooden trunk at a cost £125 (First Ranger report p 8 & 59). This proved to be only partially effective because of unfavourable currents at the point of discharge. The East Outfall to low water mark was constructed later than the Western Outfall, but when, and how it was funded has not been identified.
1851	First Ryde Inquiry , chaired by William Ranger, was petitioned for by 'Public Health Party Memorialists'. The resulting report documented the inadequate water supply and deficient sewerage of Ryde and recommended adoption of Public Health Act (PHA)1848 and significant expenditure on water supply and sewerage.
1852	Second Ryde Inquiry , also chaired by William Ranger, recommended inclusion of Oakfield and the Strand within Ryde Commissioners' boundary.
1852	Alverstone , south of the Downs, had been suggested as an abstraction source by Charles Colenutt and others to the first Ranger Inquiry (p 22). Henry Austin, Consulting Engineer to the Government Board of Health (GBH), visited and recommended Alverstone over Ashey. Ashey was closer to Ryde, spring rather than river and thus cleaner, but its potential volume was questionable.
1852	A number of private company water schemes for Ryde that would require Parliamentary local Acts were proposed, including one for Ashey that engaged Easton and Amos (E & A) as engineers, a scheme for Alverstone that purported to have philanthropic intent, and a scheme by RPC. The Ashey scheme got as far as giving formal notice in newspapers.
1852	St Helens Vestry meeting objected to a proposal to include Oakfield and the Strand within the jurisdiction of Ryde Town Commissioners, arguing St Helens already had a sufficient water supply and drainage.

1853 to 1854	Adoption of PHA1848 was favoured by the Isle of Wight Observer (IWO) and 'Public Health Party Memorialists', but opposed by the Health Commissioners and as reported in newspapers, by the majority of ratepayers. The GBH eventually issued a draft Order for adoption of PHA 1848, but allowed Ryde to decide whether to implement this or not, instead of adoption of PHA 1848. In 1854 Ryde Commissioners obtained a further (third) local Improvement Act . The new Act was drafted to be as similar to PHA 1848 as possible, but without conceding formal central government control. New Commissioners were to be elected, rather than automatically qualifying on the basis of wealth. The new (1854) Commissioners continued gradual investment in sewers. They appointed E & A as their consulting engineers. Following advice of E & A, Commissioners selected Asheys as the new water source for Ryde. RPC and JG Dashwood were compensated for their redundant waterworks. The IWO (24 Dec 1853) was, however, concerned that the drafting of the third Act was more in favour of the interests of landowners than those of individual residents.
1855	Asheys waterworks opened July 1855 and supply reached Ryde September - December 1855. During summer, the supply from Asheys proved inadequate, in spite of subsequently deepening and extending adits from the base of the wells.
1859	Ryde Commissioners adopted the Local Government Act 1858 (LGA1858), largely as a consequence of water shortage. This legislation had replaced PHA 1848 and entailed less central government control. Under LGA 1858, Ryde made application for an Order for compulsory acquisition of Alverstoke, Knighton or Quarry Springs, and increased borrowing to construct new waterworks. As it was considered the application might fail, at the same time the Commissioners gave notice of a local Act, citing the same three location options. Many ratepayers favoured Quarry Springs. Mr Barrow proposed a private company to obtain an 'auxiliary' supply for Ryde, but this initiative was rejected by fellow Commissioners.
1860	Third Ryde Inquiry , again chaired by William Ranger, debated the Commissioners' application for an Order. Subsequently, central government law officers concluded that because Ryde's adoption of LGA1858 was late, an Order could not be issued in the time-frame Ryde required. During 1860, a private Ryde Waterworks Bill, was promoted by the Improvement Commissioners, but it failed.
1860	Thomas Webster and others formed a private company to abstract water at Alverstoke to supply Sandown & surrounding districts. Subsequently, they obtained the Isle of Wight Waterworks Act 1861.
1861	Ryde Waterworks Act 1861 (RWA1861) was obtained by the Ryde Commissioners. This facilitated construction of a waterworks at Knighton and more borrowing. The Act entailed pumping water from Knighton to Asheys, for onward distribution to Ryde. However, demand in summer soon exceeded supply, and Ryde continued to be short of water.
1862	Fourth Ryde Inquiry , chaired by William Ranger made application to further increase borrowing. Costs, including compensation to Thomas Webster and the Carters (owners of Knighton Mill), as abstraction had exceeded the provisions of RWA1861.
1865	Fifth Ryde Inquiry , chaired by Robert Morgan, debated borrowing for a new engine at Knighton, upgrading the two Ryde outfalls to iron pipes, paving of the Esplanade, and inclusion of St John's within the town boundary.
1866	A more powerful pump installed at Knighton , with the old pump retained as a backup.
1866	The Newchurch Parish Act 1866 divided the parish of Newchurch into three, with the north portion becoming the parish of Ryde.
1867	Sixth Ryde Inquiry , chaired by Robert Morgan, further debated inclusion of St John's and Haylands within the Town Commission boundary. An Order was issued, but could not be implemented.
1868	Borough status conferred by Royal Charter on Ryde , following a number of years of debate over its potential advantages and disadvantages. Later that year, Ryde Commissioners voluntarily transferred their assets and responsibilities to the new Borough.
1872	Public Health Act 1872 . Ryde became an Urban Sanitary District.
1876	Provisional Order of the Local Government Board , later confirmed by an Act, repealed, altered, and amended certain sections of the Ryde Improvement Act 1854 and Ryde Water Act 1861. These redundant pieces of legislation were entailing additional expenditure and impeding progress.
1881	Dr Ballard's report on the 'Sanitary Conditions and Administration of the Isle of Wight' was published. It found Ryde largely satisfactory from a sanitary perspective, but surprisingly did not highlight the inadequacy of its water supply.
1888	Supply obtained at Knighton at depth from Lower Greensand . The high iron content had to be 'treated'.
1933	Ryde Borough Council absorbed St Helens Urban District Council (UDC) under local government reorganisation.

1946	Additional water for Ryde obtained from Sandown-and Shanklin UDC , largely from Alverstone.
1951	Isle of Wight Water Board took over responsibility for water supply from IOW local authorities.
1974	Southern Water took over responsibility for sewerage from IOW local authorities.

Table 2 : Water Sources that supplied Ryde

Waterworks of Cooper, Denham and Baker. Little is known about early Ryde entrepreneurs who established a waterworks in lower Ryde, based on shallow wells, and sold water predominantly to passing ships. Later these works were acquired by RPC.

Upper Ryde waterworks. These were constructed by RPC to collect and store water by developing a number of existing wells in the superficial gravels. At the time, there was a complaint that construction of the works diminished flow in adjacent public wells. The works was located in the area of what is now West Street and John Street. The water (presumably untreated) was piped down the hill to the pier, and then along the same, to supply ships. Later the works was leased to J G Dashwood, who supplied water not required by ships to houses by pipe. The subsequent development of a waterworks at Ashey made the upper Ryde works redundant. Under the 1854 local Act, RPC was compensated, and these former works were subsequently built over.

Strand waterworks. These works were established in the 1830s/40s by J. G. Dashwood (see Table 1). They consisted of a well 63 feet deep (19.2m) and a steam pump to draw water. The Strand is marked on the map overleaf (Fig.3.) If undertaken at this point, a borehole of over 500 metres would be required to reach the underlying chalk.

Quarry Springs. At the time that Ashey was being considered (1852/3), Quarry Springs was noted as a potential source for Ryde, and then again at the time Knighton was contemplated (1859). As can be seen from the map, Quarry Springs is located conveniently close to the town of Ryde. The quarry was owned by Dr Lind and comprised of Bembridge limestone. Based on a modern understanding of geology, it is certain that the quarry site would not have yielded significant quantities of water for Ryde.

Ashey waterworks. These were constructed with powers obtained in the 1854 Ryde Local Improvement Act. There was a natural spring close to the site but, rather than collect from the spring directly, an intercepting well was dug and water was drawn by a steam pump. The site itself encompasses two distinct types of geology. To the south there is chalk that consists of almost vertical strata, due to folding. To the north lies 'clay', that is younger than the chalk. It appears that initially it was planned to dig a single well 30 feet deep in the chalk. At some point this was changed to two wells, one in the chalk and one in the clay, each with a steam pump.

Very soon after the official opening in July 1855, it became apparent that during summer Ashey could not provide the quantity of water that Ryde required. In an effort to increase supply, the clay well was deepened and adits were dug at its base. Unfortunately, in spite of considerable expenditure, significantly increased flow was not obtained. It can be seen from the map that the catchment of Monktonmead is relatively small; however, prior to construction of the Ashey works, this was an unrecognised constraint.

Ashey became the location of a large service reservoir that supplied Ryde by gravity. Initially, no treatment of water was undertaken at Ashey.

Knighton waterworks. The site is located south of the Downs and works were constructed with powers obtained in the 1861 Ryde Waterworks Act. Knighton was resorted to because sufficient water could not be obtained at Ashey and the alternative of Alverstone (see below) was a river source. Public opinion and the Commissioners were opposed to the additional cost of filtration, some maintaining that filtration could not fully purify this source. Prior to the construction of waterworks, Knighton was the location of a mill powered by water from a nearby spring. Water naturally flowed from Knighton to Alverstone and then onto Brading Haven and the sea. Initially in 1861, water was abstracted from Knighton mill pond and pumped, using a temporary steam pump, over the downs to the reservoir at Ashey. Later a pump was relocated from Ashey clay well to Knighton. Subsequently a well was dug at the site of the mill so the spring water was intercepted, improving the quality of the water, as this eliminated surface flow to the mill ponds. In 1866, as pumping capacity had become the key constraint, a more powerful pump was installed at Knighton. Later in 1888, a deep well was dug into lower Greensand. Water from this source required treatment to reduce its high iron content. Unfortunately, the supply from Knighton could not keep up with demand and, in spite of subsequent developments, Ryde remained continually short of water.

Alverstone. Alverstone Mill had been proposed in 1851, at the first Ranger enquiry, as an abstraction site to supply Ryde. The disadvantages of this proposal was that Alverstone is south of the downs, and piping and pumping would have cost more than, say, from Ashey. In addition, as a river source, to make it drinkable, water from Alverstone required treatment. Nevertheless, Alverstone became the source for Thomas Webster's 'Isle of Wight Waterworks', that for many years successfully supplied Sandown and surrounding districts. Ironically, under an agreement between local authorities, from 1946, Alverstone supplemented the supply of Ryde.



Fig. 3: Map showing water sources for Ryde with inset showing the sewers and outfalls in Ryde

West outfall. Constructed in the 1840s as the outfall (final common drain) for most of the original town of Ryde, but with the exception of its eastern margins.

East outfall. Constructed later than the west outfall, it drained the eastern margin of the town that sloped down to Monktonmead Brook and also the neighbourhoods that developed east of this river. Subsequently, both western and eastern outfalls were extended to low water and still later, replaced with iron pipes.

Prior to 144 ratepayers of Ryde petitioning for an enquiry under PHA 1848, key individuals concerned with the water supply and sewerage of Ryde are difficult to identify. Initially the supply of water was in private hands and J. G. Dashwood was a key individual (see below), but clearly there were other front-line workers, including water carriers etc. On the

other hand, while it is evident that Ryde Improvement Commissioners failed to regulate and provide effective sewerage for Ryde, who the key responsible individuals were, and the involvement they had in RPC which for a time prioritised the supply of water to passing ships, requires further research.

Table 3: Some of the key individuals involved with the water supply and sewerage of Ryde

Benjamin Barrow (1814-1901). In 1848, aged 34, Benjamin Barrow moved to Ryde and became its lead surgeon and a renowned medical practitioner. Later in 1881, when the British Medical Association held its national annual meeting at Ryde, Barrow was President. He was also a prominent local politician, being elected Mayor of Ryde on nine occasions and before there was a requirement for a formal appointment, he acted as honorary Medical Officer of Health.

Although his independence would have been open to question, the account he gave to the first Ranger Inquiry made clear his detailed knowledge of the public health hazards of Ryde and the state of the poor. With respect to Ryde's water supply, Barrow was one of the original campaigners ('memorialists') for adoption of PHA 1848 and was in favour of selection of Alverstone as the water source for Ryde (see p9 of this article).

Having become an Improvement Commissioner and listened to public opinion, Barrow switched his allegiance to, and defended, Ashley. In this he was strongly criticised by George Butler/IWO. When the first weekly edition of the re-launched IWO had been published, readers were disappointed that there was no report of the weather of the previous week, as there was in other local papers. Benjamin Barrow came to the rescue, as for some time he had been making daily records of the weather at his residence in Ryde. However, in March 1855, Barrow fell out with George Butler/IWO and ceased sending reports to the newspaper, although for a time he continued recording the weather.

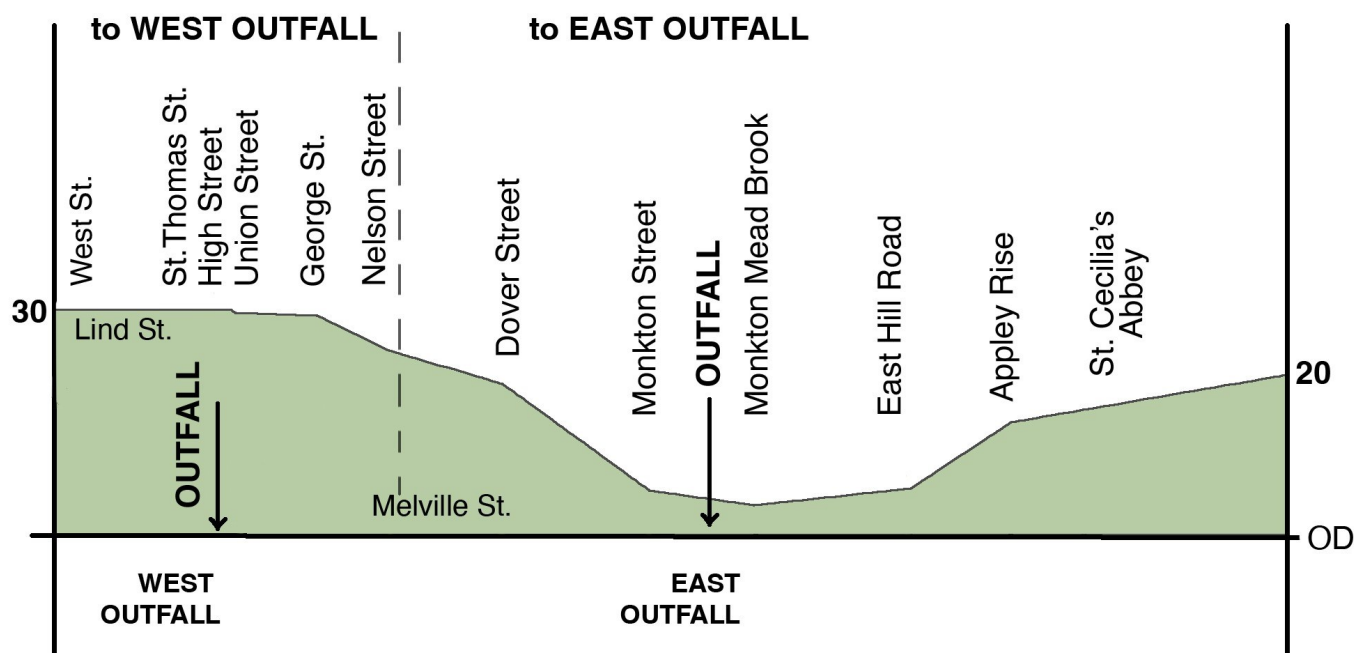


Fig. 4a: Cross section of Ryde North

The section shows how properties from West Street, the High Street and George Street are collected at Lind Street and Cross Street and taken downhill under the roads leading to the Esplanade and the West outfall.

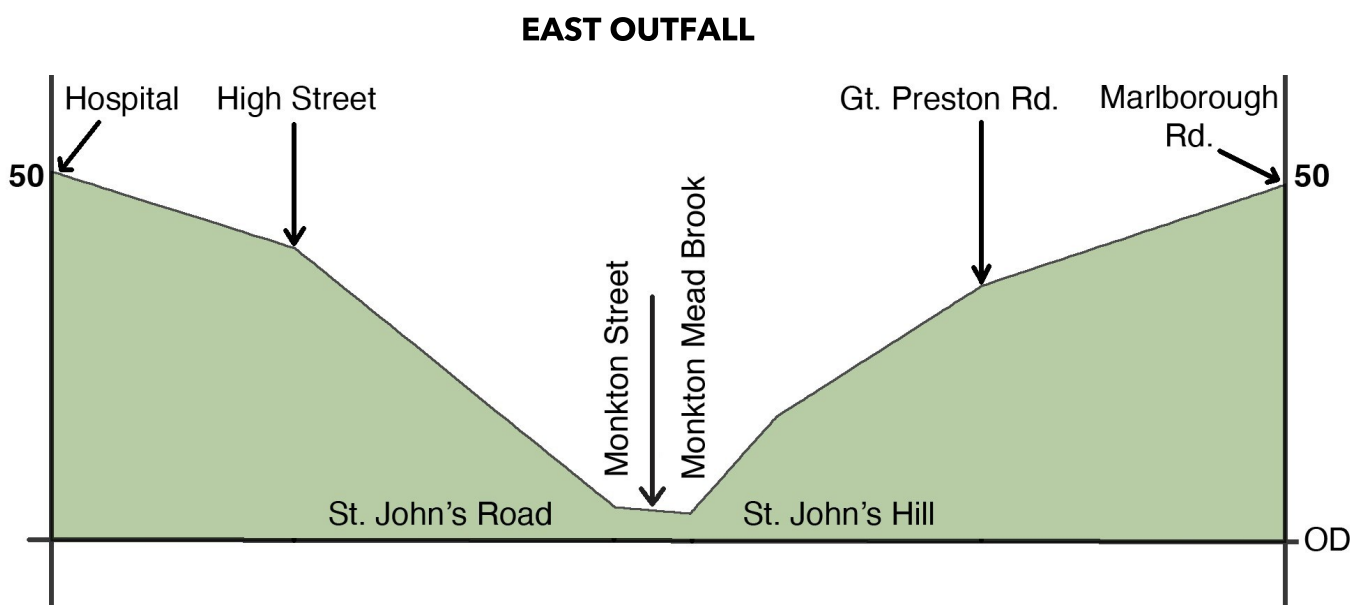


Fig. 4b: Cross section of Ryde South

The properties on a line from the Hospital to St John's Road and down to the Monkton Mead, as well as Oakfield and Elmfield, are collected by sewers which run alongside the brook to The Strand then out to low water mark as the East outfall.

George Butler (1820 -1865) was born in Ryde, attended its National School and established a printing and book binding business. In 1852, he re-launched the IWO and became editor, although he contributed much of the copy. Butler was fiercely critical of many of Ryde's politicians and aristocracy. In respect of the water supply, Butler favoured:

- The Ranger Inquiry recommendations/ adoption of PHA 1848
- Sourcing water from Alverstone rather than Asheys
- Awarding the contract for steam pumps to the lowest tender, rather than to E & A
- He also supported the opinions of George Morey over those of James Easton

Charles Colenutt (1813-1902). His obituary in the County Press noted: *'We have to record the death this morning (Friday) at his residence, Windsor Lodge, of Mr Charles Colenutt, who had almost completed his 89th year. Mr Colenutt, for a period upward of half a century, was one of the most prominent and influential men in Ryde and to him must be accorded much of the praise which those who directed the destinies of the town in the early stage of its career deserve. He was not a native of the place, although he belonged to the Island family which has lived here for so many generations, but came here at an early age, and served his apprenticeship with the late Mr Cutler. As long ago as 1841, however, he was in business as a brewer and wine and spirit merchant. As a businessman Mr Colenutt added keenness to industry. He was one of the members of the old Board of Commissioners, and was, we believe, the last of that little band who put their hands into their pockets and, at considerable personal expense, secured for the town the magnificent water supply we now enjoy. No doubt had they been less unselfish and had turned themselves into a company, they would each have made a fortune at the expense of the town. They did not do this, however, but secured the water works for the town, and by so doing deserve to be ever held in remembrance by its inhabitants. Although a member of the old Commissioners, Mr Charles Colenutt, we believe, did not secure a seat on the Council when the town was first incorporated, but did after the troubles of the infantile Corporation had subsided. For many years he was a very useful member of the Public Works and other committees. He was elevated to the Aldermanic Bench in due course and served the office of Mayor with credit to himself and satisfaction of the inhabitants, in the years 1879-80, and again in 1883. He was the oldest member of the Bench of Borough Magistrates. For many years he was a director the Pier Company, in which position his business acumen contributed to steer the company through a serious crisis, and to establish its prosperity. In his prime, Mr Charles Colenutt was one the finest men in Ryde. He stood some 6ft 3in in height, and was of a remarkably powerful physique, but for some years past, failing sight and the infirmities of his advanced age have compelled him to live very retired'.*

Jonathan Guy Dashwood (1806 -1859) was part of an important Ryde family that migrated from Whippingham. After his death, J. G. Dashwood was described in a legal notice as a 'plumber, painter, glazier and paper hanger', but unfortunately there was no obituary containing further detail. Earlier, Dashwood had developed a waterworks on his premises on The Strand and leased the RPC upper Ryde waterworks (see Tables 1 and 2). Dashwood presented a plan to William Ranger's Inquiry for improving the water supply of Ryde by obtaining water from Quarry Springs and Monktonmead Brook, but William Ranger did not find this plan credible. Later, Dashwood argued for Asheys as a source, warning residents in a pamphlet against Alverstone, as based on findings made on Thames water 'river water could never be microscopically pure' (IWO termed this 'Dashwood's Manifesto'). Consequent to the third local Act, Dashwood was compensated for investment he had made in supplying Ryde with water.

James Easton (1797-1871) was an engineer and partner of Easton & Amos, a manufacturer of steam engines. Initially engaged by a prospective private company to develop Asheys, he went on to persuade the Ryde (1854 local Act) Commissioners to select Asheys, initially giving them a guarantee of 300,000 gallons of water a day. Later he was released from this guarantee. Easton supplied two steam engines for Asheys, although he had not given the lowest tender. He continued to work for Ryde Commissioners, even after it became clear that Asheys had failed. Easton retired from his firm in 1866.

Mr George Morey (c1811-1860) lived in Ryde and in 1854 issued a pamphlet advocating that the lower $\frac{3}{4}$ of Ryde should be supplied by gravity from the spring at Asheys, without digging a well, and the upper $\frac{1}{4}$ should be supplied by moving Dashwood's existing pump from The Strand to Quarry Springs. Morey maintained that Asheys would never have enough water to supply the whole of Ryde, no matter how much digging was undertaken at that site.

Francis Newman (1831-1904) was noted by the County Press to be a native of the Isle of Wight, although subsequently his place of birth and education have not been determined. He was appointed in 1854 by the Ryde Improvement Commissioners as their surveyor and remained in post, apart from a short gap, until he was appointed as County Surveyor. Together with E & A and other consultants, Newman was responsible for Ryde's water supply and sewerage, along with the development of the Esplanade and Cemetery. In 1867, he was the architect of an extension of the town hall. In addition to his work as surveyor, Newman was a prominent promoter of the volunteer military movement in Ryde, a founder of the Ryde School of Science and Art and a senior Freemason.

William Henry Pullen (d.1879, aged 53). His IWO obituary noted *'It is with sincere regret we record the death of Mr. W. H. Pullen, for many years Clerk to the Board of Commissioners, and Town Clerk when the charter of incorporation was obtained. He retained the office of Town Clerk till the proposed purchase of the Gas Works created so much ill-feeling. The innuendos then thrown out against Mr. Pullen with respect to the Town Accounts by many members of the Ratepayers' Association were keenly felt by him, and when that party took the direction of affairs Mr. Pullen resigned office. The subsequent investigation of the accounts showed how unjust these*

aspersions were, and that Mr. Pullen had been a good and faithful servant of the town. Since he resigned office, however, his health has been gradually declining. He had always suffered from a spinal complaint, and of late years this seemed aggravated by other disorders. His death was, however, very sudden at the last. He was seized with an apoplectic fit on Saturday afternoon and on Sunday morning he expired. The funeral took place on Wednesday morning, when the following gentlemen testified their respect by attending at the Cemetery: Dr. Beaton, Alderman J. Dashwood, Mr. F. Newman (Borough Surveyor), Mr. E. Hopgood (Town Clerk), Mr. J. Flux (Clerk to the School Board), Councillors Riddett and Allen, Mr. Pack, and Mr. Flowers. The chief mourners were Mr. Allen and Mr. E. Joyce. The service at the grave was performed by the Rev. J. Thomas’.

William Ranger (1800-1863) was initially a mainland builder and surveyor. From 1848, he was appointed a Superintending Inspector to the GBH. In this role he undertook ‘preliminary’ inquiries into petitions from districts to adopt PHA 1848 and, for districts that had adopted PHA 1848/LGA 1858, requests for Provisional Orders. His published reports give important insights into the sanitary state of the districts he inspected, including Ryde.

Thomas Webster (1810-1875) was a barrister and authority on patent law who acquired property on the IOW. He purchased Alverstone Mill, he later conceded, as an investment because he perceived that it would become key to the water supply of the east of the Island. Through his business dealings, Thomas Webster was generally considered ‘not a friend of Ryde’. His son Richard Webster became the first and only Lord Alverstone.

Table 4a: Rateable value of the houses of the town of Ryde reported to the First Ranger Inquiry

Rateable value	Number of houses
Under £2	18
£2 to under £4	154
£4 to under £6	296
£6 to under £8	199
£8 to under £10	95
£10 to under £20	289
£20 to under £30	178
£30 to under £40	73
£40 to under £50	51
£50 to under £60	22
£60 to under £70	19
£70 to under £80	7
£80 to under £90	10
£90 to under £100	5
£100 and over	7
Total	1423

Table 4b: Analysis of rateable values of houses of the town of Ryde reported to the First Ranger Inquiry

Total rateable value	£22,887
Mean rateable value	£16.08
Median rateable value	£8.94
Range of rateable values	£178
25 th percentile	£5.24
75 th percentile	£20.90
Interquartile range	£15.66
Upper outlier limit	£44.39
Number of outliers	96

Table 5: Area, length of roads, houses and rateable value of the Town of Ryde, sometime before and after enactment of the third (1854) local Ryde Improvement Act, and then at January 1858

	Prior to 1854 Act	Post 1854 Act	Jan 1858
Area	1½ square miles	1½ square miles	1½ square miles
Roads	9 miles 1 furlong 125 yards	10 miles 5 yards	11 miles 4 furlong 71 yards
Houses	1423	1554	1656
Rateable assessment	£22,887	£28,675	£30,265 10s