Before the mains came

Wembury's water supplies in the interwar years

David Pinder

Less than a hundred years ago, mains water supplies in the countryside were far from common. Inevitably, therefore, untold numbers of people were forced to continue to rely on wells and village pumps. But it was also true that, despite this lag in mains provision, some rural areas were able to benefit from local supply systems. This was particularly the case on landed estates whose owners had found it financially advantageous to exploit local water sources, for example by piping them to farms and sometimes settlements.[1]

Questions arising in relation to these local supplies relate to how exactly they were utilised and to what extent the benefits to the population were widespread. These issues can be explored in interwar Wembury in relation to the Langdon Estate. Centred on Langdon Court (Figure 1), this estate was expanded over the centuries by first the Calmady family (1555-1876) and then the Corys (1876-1927).[2]

Figure 1 Langdon Court south front and ornamental garden, 1927

As a result, in the early twentieth century it covered 820 hectares (2080 acres) – a substantial majority of the parish at that time. Like estates countrywide, however, Langdon's size could not shield it from Britain's decades-old agricultural depression, and in 1927 it was sold and broken up.[3] This necessitated the production of an extremely detailed sale catalogue and an equally informative estate map; together, these enable a detailed picture to be developed of how locally available water was exploited before a mains supply first arrived in Wembury on the eve of WWII.[4]

Acknowledgements: I am very grateful to Robert Rowland, a lifelong Wembury resident, farmer and local historian for sharing with me key documents and his extensive local knowledge. All OS maps used are out of copyright.

This article begins by outlining the Langdon Estate's setting: the local relief and the settlement pattern are of obvious importance with respect to water provision. The extent to which farms were, or were not, able to benefit from piped supplies is then compared with the experiences of ordinary families in the villages and hamlets. Further comparisons highlight the (unsurprisingly) high standards enjoyed by the estate owners. And a closing section reveals how new water-supply investments after the sale – but still before the mains came – were of crucial importance in deciding Wembury's development long into the future.

The setting

Standing on the South Devon coast, the Langdon Estate had 3 km of coastline and extended 2.5 km inland to the parish's northern boundary (Figure X). Much of the land comprised part of the undulating South Devon coastal plateau, which in the north of Wembury typically reaches heights of 100m and more above sea level.

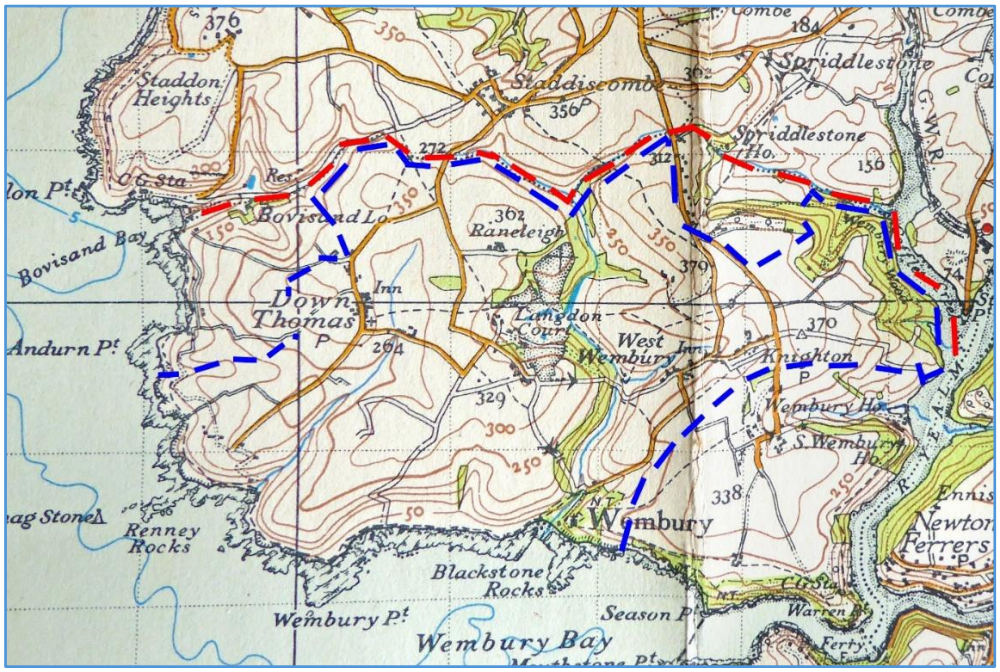

Figure 2 Wembury in 1927. Parish boundary shown in red; the Langdon Estate boundary in blue.

Fully revised in 1929, this 1" OS map was published in 1946 with minor revisions. The only additions in Wembury marked the National Trust's land on the cliffs and around the church and beach, acquired in 1938 and 1939 respectively.

From its highest parts, the plateau generally dips gently towards the sea, where it ends either as promontories or steep slopes overlooking low fields separating the upland from the shore. Importantly, however, the plateau is not intact, being deeply dissected by several streams, the most substantial being Wembury's mill stream. Fed by rivulets from a fan of tributary valleys in the estate's upper reaches, this ran north-south through the centre of the Langdon Estate to reach the sea at Wembury Beach.

Most settlement, where water demand was naturally greatest, was spread widely over the northern half of this highly accidented landscape. Down Thomas, a small street village, stood towards the west on the plateau; nearby, but a little lower, was the hamlet of Gabber. In the east a second street village, Knighton, occupied one of the mill stream's tributary valleys. Here, too, there was a neighbouring hamlet, West Wembury. Langdon Court, meanwhile, lay roughly mid-way between Down Thomas and Knighton. From here, positioned on a valley side, the estate owners enjoyed an open view over the mill stream towards the sea. Last, but not least, the farms were divided between the villages, the hamlets and the open country. Three were in Down Thomas, the other settlements had one each, and most of the remainder lay in the tributary valleys between Langdon and Knighton village. For readers unfamiliar with the area, Appendix 1 locates farms and settlements mentioned in the text.

Farm supplies

Piped water supplies for farms were most easily established towards the north-eastern part of the estate, where the headwaters of Wembury's mill stream had eroded deep valleys ideal for the emergence of springs. Home Farm, Spirewell Farm, Knighton Farm and Traine Farm all benefitted in this way by means of simple gravity-driven systems, although Traine Farm was admittedly something of a special case.

Figure 3 Plateau, tributary valley and Spirewell Farm

Spirewell Farm (Figure 3) provides an excellent example of how these gravity systems worked. In this case the water source was a spring which emerged at c. 85m above sea level, was diverted into a cistern and from there was piped down to the farmstead c. 10m below (Figure 4). There it supported both the needs of the farmyard and, via a branch pipe, those of the farmhouse as well. With a 10m fall, the supply was able to fill a header tank in the loft, and this in turn made possible other very welcome amenities: water on demand in the kitchen, a flush toilet and a bathroom providing both hot and cold running water.

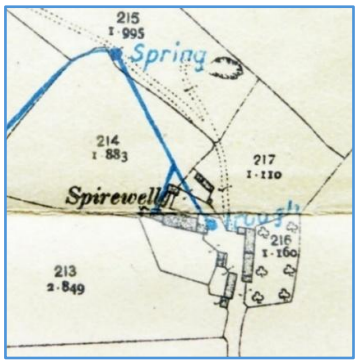

Figure 4 The estate map's diagram of Spirewell Farm's supply.

Note: The supply pipe running south westwards from the spring was not part of the farm's supply and is discussed later.

Similarly, Knighton Farmhouse had a bathroom, this time on the ground floor, with hot and cold water and a washbasin, plus a flush toilet. And although Home Farm lacked a bathroom, its gravity supply still supported running water in the kitchen, a WC, the dairy and the washhouse. What is very evident, therefore, is that the benefits of these gravity-driven systems were not restricted to the farms' economics. They also meant substantial quality-of-life improvements for the tenant families.

Traine Farm

Simple gravity systems can only provide a reasonable supply if the water source is sufficiently higher than the consumption point. Unfortunately, this is not always the case. Traine Farm, just north of Knighton, had just this problem. In the early nineteenth century Traine's original farmhouse was replaced by a new house and farmyard higher up the hill. This provided much better accommodation, as well as an improved environment - but it also created a problem: the planned water source, a spring in the fields behind the new site, was not high enough to provide the farmstead with a good gravity supply.

To solve this problem, a pipe was led down from the spring to a tank built low down at the side of the house, from where it was pumped manually, using a farmyard pump that could deliver water to either the farmyard or the house (Figure 5).[5]

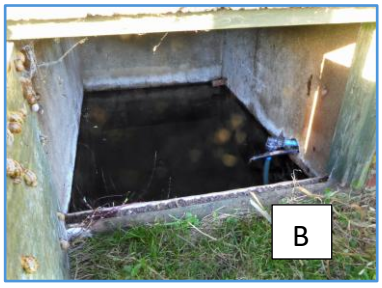

Figure 5 Traine's owner, Robert Rowland, and the main components of his farm's former supply system. A: buried cistern with stone slab cover, connected to B: reservoir excavated at the side of house, in turn connected to C: handpump serving the farmyard and house.

Unlike Knighton and Spirewell Farms, this solution did not mean that the hygiene facilities had been upgraded to include a bathroom – the Langdon sale catalogue simply stressed the availability of space for one. This may well have reflected difficulties in hand-pumping sufficient water into the house. Even so, the residents' quality-of-life gains - fresh water piped to the kitchen plus the benefit of a flush toilet – were significant.

Life on the plateau

Three estate holdings in Down Thomas – Taylor's Farm, Farm Barton and Prince Farm – experienced a difficulty similar to that at Traine, only more acutely.[6] Situated in the highest part of the parish, on the South Devon coastal plateau, the settlement had no surrounding hills from which springs could emerge. And, although the nearby hamlet of Gabber was set slightly lower, no local spring was strong enough to support its farm. Gravity-based supplies were therefore impossible and, given the fact that none of these holdings was particularly large, it is unlikely that providing supplies pumped from other parts of the estate was ever considered.

Figure 6 Farm Barton, Down Thomas

The farm's hand pump (arrowed) stood behind a covered stone water trough.

The fallback was to continue to rely on traditional wells, like so many farms in other parts of the country. There was, however, a degree of modernisation. As at Traine Farm, these wells were equipped with hand pumps serving both the farmyard trough and the house (Figure 6). Once more there were quality-of-life benefits for the families: Taylor's, Prince and Gabber Farms all had flush toilets. In other respects, however, housing conditions on these farms did not match those in the Knighton area. None of the Down Thomas farms could boast a bathroom; and at Farm Barton, where the farmhouse was divided into two workers' cottages, the toilets were still earth closets in the garden.

Raneleigh Farm

In the late-eighteenth century, Raneleigh Farm occupied today's Home Farm site, close to Langdon Court. Here it had a good gravity supply, but in 1800 it was relocated 550m to the north, where a large new farmstead was built (Figure 7). Good though it was, the downside of this new site was that, like the Down Thomas farms, it was on the plateau and therefore had to make do with a well. Early in the twentieth century, however, this situation changed completely when Raneleigh was provided with a substantial piped supply. Precisely when this occurred is unclear, but cartographic evidence indicates that it was not before 1905.

Figures 7 Raneleigh's substantial early-nineteenth-century farmhouse

The improved supply was achieved by the introduction of a hydraulic ram. This technology was developed at the end of the eighteenth century, and within a few decades became very popular because of its simplicity and effectiveness. Rams were usually domed steel cylinders comprising two chambers, one above the other, and two valves (Figure 8).

Figure 8 A typical hydraulic ram

This disused example, well protected by its brick housing, survives close to Soar Mill Cove, between Bolt Tail and Bolt Head on the South Devon coast. It stands adjacent to the public footpath from Bolberry Down to Malborough and is on National Trust access land. Easily inspected, it is approximately 600m ESE of the Bolberry Down car park and 780m NNW of the Cove.

Water from a spring above was carried by a drive pipe into the lower chamber, from which it initially flowed out again via a waste valve. But the force of the water then caused this valve's sudden closure, which in turn triggered a shock wave to recoil through the chamber. This 'hammer effect' blew open the second valve, forcing about a fifth of the water into the upper, pressure, chamber, from which it was forced into a delivery pipe leading to the water's destination. Once the shock wave was spent, the second valve closed, the first one reopened, the cycle began again and would continue to repeat endlessly. Simple though it was, the system was easily capable of raising water to heights far above the ram.[7]

The water source chosen to drive Raneleigh's ram was one we have encountered already – the spring supplying the farmyard and house at Spirewell. The position of this spring's cistern was ideal for the task because a deep valley stood between it and Raneleigh, allowing the water to build up its kinetic energy as it was piped downwards. In Figure 4 the start of this pipe has already been shown heading south-westwards from the spring. En route it was fed into another cistern, where water from a second spring was gathered, enabling the drive

pipe to carry the combined flow down the rest of the steep valley side to the ram (Figure 9). This was housed in a small hut built into the slope, a few metres above the valley bottom (Figure 10). And from there a 750-m delivery pipe raised the captured water 65m to the plateau and, ultimately, Raneleigh's storage tank.

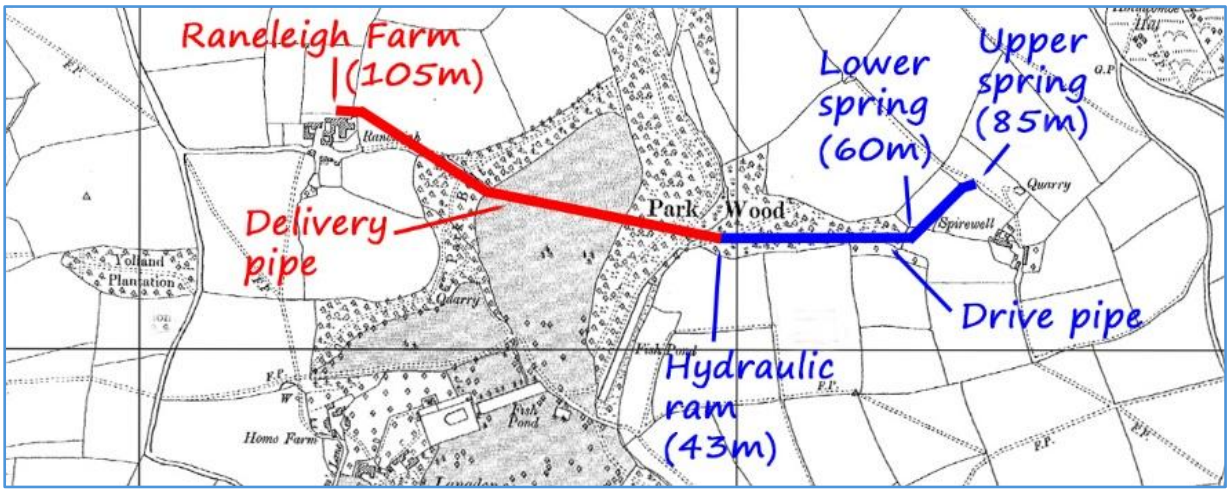

Figure 9 Raneleigh Farm's ram-based supply system. Heights estimated from current OS 1:25,000 map. Total distance source to consumption point, c. 1200m

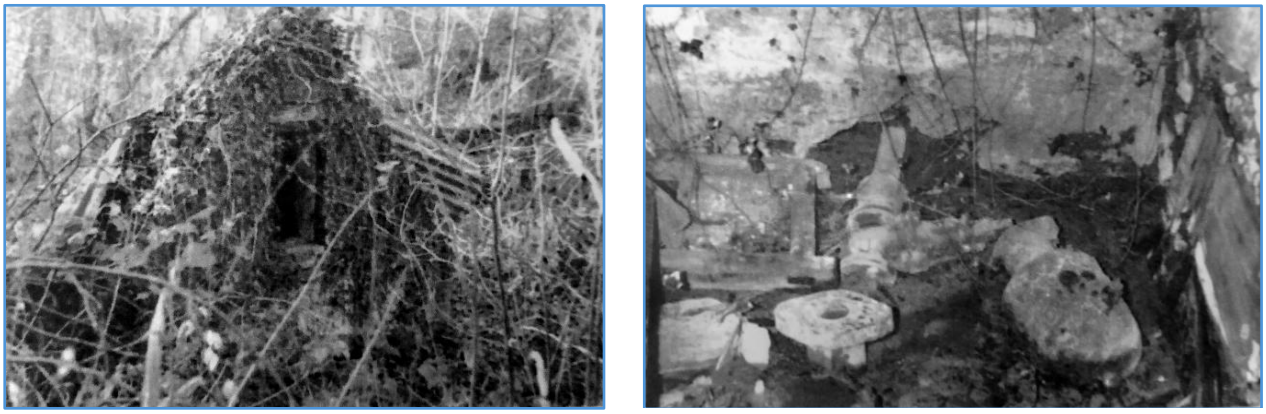

Figure 10 The ram's overgrown hut (left) and the ram itself (right) in the mid-1970s. The scattered components inside the hut included the domed pressure chamberf, right, lying on its side; its mounting, left foreground; and the drive pipe entering at the rear.

Testimony to the ram's effectiveness is provided by the farm's description in the 1927 sale catalogue. Numerous farm buildings, including eight cow houses, were listed, typically with water laid on. And the occupants of the unusually large farmhouse benefitted from a bathroom (hot and cold plus a flush toilet), as well as two additional flush toilets, one inside and the other outside. These facilities put Raneleigh at least in the same league as the well-appointed gravity-supplied farms in the nearby valleys; indeed, it may well have been better equipped.

What lay behind this special treatment? In part it was a question of scale. Extending over 231 acres, Raneleigh was one of the estate's two large farms – equal to Down Thomas's three farms combined. Moreover, the tenant – R E Cocks – also ran three other Langdon Estate holdings, Home Farm, Farm Barton and Higher Ford Farm, adding another 213 acres to his total. Beyond this, however, Cocks' business strategy was of central importance: he was the owner of a dairy in Plymouth and the milk he produced in Wembury formed part of his supply. Raneleigh alone could handle a hundred-strong herd; dairying on that scale required clean, ample reliable water supplies.[8]

The provision of Raneleigh's improved water supply is our first encounter with a recurring theme: shared water resources. This was so common on the estate that almost all significant sources were divided between at least two consumers; only the farms relying on wells, and Traine Farm's spring, were exceptions to this rule. Dividing the resource in this way might appear difficult. Why should one farm business relinquish water to another? One key fact enabled sharing to become normal: water rights throughout the estate belonged to the estate owner, who could therefore decide how the available resources should be deployed to benefit businesses and the community.

Cottage life

The focus so far has been on how supplies to farms were improved. For two reasons – cost and capacity – the story was very different for the numerous families in cottages. Their homes, like the farms, belonged to the estate, but there was no incentive for the estate owners to pipe water to each dwelling. Estate economics around the country were very poor, and the cost of supplying water to individual cottages would have been uneconomic. Moreover, the natural outcome would have been to boost demand, rapidly exceeding the capacity of local springs. The result was that most people had to rely on time-honoured supply methods, particularly the communal village pump and taps by the roadside.

In Down Thomas the solution was a hand pump. Long-since disappeared, its recess can still be seen in the wall almost opposite today's Mussel Inn (Figure 11) Because the pump would have required some sort of reservoir, it seems likely that the original supply was a well, later improved by fitting the pump, just as had happened at the nearby Down Thomas farms.[9]

Figure 11 The Down Thomas village pump recess, left, and the southern end of the village, 200m from the pump

In Knighton, the part of the parish with springs able to provide a gravity feed, the chief communal supply was a tap located towards the bottom of Knighton Hill. Delivering water to this tap was not difficult. Knighton Farm – just over the road – had a good supply provided by a spring on the hill between Traine and Knighton farmsteads. All that was necessary was to lay a pipe from the farmyard under the road to the tap. Although there is now no trace of it, a drawing by Peter Lugar gives a good idea of what the tap was like. Today the site is marked by a small grass verge on one side of the road and Tap Cottage on the other (Figure 12).

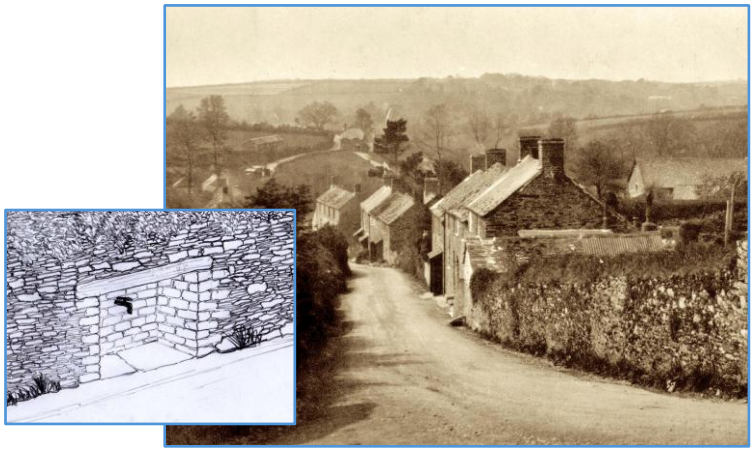

Figure 12 Knighton Hill, c.1920 Tap Cottage can be seen at the bottom of the hill; the tap stood opposite. Inset: Peter Lugar's drawing of the tap as he recalled it.

Some distance down the road, Knighton had a second supply. This was on the slope which today runs down the side of the store and post office, but in 1927 ran between two orchards. Known as 'the shoot', Figure 13 shows it to have been a cistern from which water flowed constantly via a spout. Where the water came from is unclear, because the shoot was on Wembury House Estate land and consequently was not included in the Langdon catalogue. It may have been piped some distance, but it could equally easily have been fed directly by a spring.

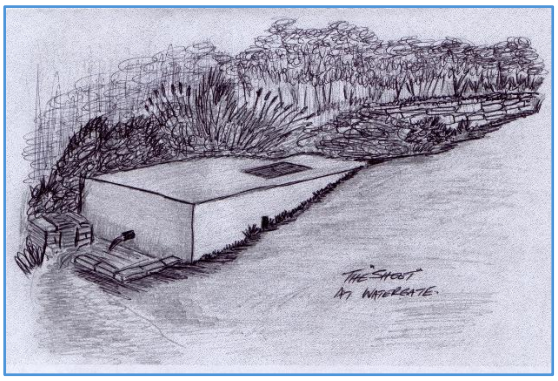

Figure 13 Peter Lugar's drawing of 'the shoot' as he recalled it

Two other small clusters of cottages also needed fresh water. These were at West Wembury, the southern extension of Knighton, and Gabber near Down Thomas. Their experiences illustrate very clearly the extent to which very local circumstances influenced the nature of water provision.

Although Gabber - a collection of seven cottages and a farmstead - was only a 300m walk from Down Thomas, unlike the latter it was not forced to rely on a village pump. Because it was located slightly below the plateau surface, minor springs were able to emerge in the fields behind and above the hamlet, enabling it to have the only piped water supply in this

part of the estate (Figure 14). As in Knighton, the Gabber supply did not serve individual cottages. Nor was it connected to Gabber Farm, a possible reason being that the supply was too weak to replace the farm's pumped well. Instead, it ran from a cistern in the fields to Gabber Lane, and from there to a communal tap opposite the cottages. These were all within 50m of the tap which, somewhat remarkably, still survives.

Figure 14 Gabber's cottage supply map, left, and the remains of the tap's alcove, right. What is left of the tap can just be seen protruding from the stonework.

Despite the fact that West Wembury was only a short distance down the road from Knighton, here the small community had neither a tap nor a pump. The likely cause was a lack of adequate local springs; in their absence, it is unclear how the four families living here obtained their supplies. Uncharacteristically, the estate sale documents give no clues. One possibility is that a nearby well, marked on some Ordnance Survey maps, was the source, but water may also have been fetched from West Wembury Farm. This was only 65 m away from the most distant cottage and, like Gabber Farm, had a pumped well supply (Figure 15).

Figure 15 West Wembury Cottages c. 1909 (right) and West Wembury Farm, 1927

While the precise nature of public water provision varied somewhat from one part of the estate to another, for cottage families the variants all shared one obvious drawback. The water had to be carried home and, even over short distances, this was likely to limit the amount that could be used. It is known that in some cases the problem was partially overcome by collecting rainwater from roofs, but how common this was is unclear.[10] In any case, limits on the amount of fresh water available would have had a significant impact on the quality of life. There could be no running water in cottage kitchens, no bathrooms and no flush toilets – the best a cottage family could hope for was an earth closet in the garden or yard for its sanitation. In consequence, it is highly likely that the lack of more modern facilities adversely affected hygiene and health.[11] In contrast, as we have seen, almost all farmhouse families enjoyed some, or all, of these benefits.

This was the reality of the link between social status and quality of life, a link which becomes even clearer when cottage life is compared with one property in the heart of Knighton. This was built for the use of family members by the Calmadys when they owned the estate. Misleadingly called 'The Cottage' in the Langdon sale catalogue, this substantial residence (Figure 16) had been provided with a pumped water supply. How this was achieved is discussed later, but here the central point is the quality of the services it supported.

Figure 16 The Cottage, Knighton, 1927

Downstairs there was a WC with basin and hot and cold running water; a kitchen and scullery, also with hot and cold; and a wash house. Upstairs, where there were five bedrooms, further facilities included a bathroom, naturally with hot and cold, and an additional WC.[12] The contrast with genuine cottages literally across the road was stark.

Meanwhile at Langdon Court

It is no surprise to learn from the sale catalogue that Langdon Court possessed facilities far superior to those anywhere else on the estate – even those of 'The Cottage'. The accommodation for family and guests had at least four flush toilets, and possibly five, plus two bathrooms. Both these bathrooms, and the handbasins in the toilets, had hot and cold running water. And an extra level of comfort was provided by a central-heating system. Behind the scenes, the quality facilities extended well beyond the large kitchen and its hot and cold supplies. In particular, the servants had two flush toilets, plus their own bathroom, once again with hot and cold. Even the original stable block, partially converted to suit the needs of the early twentieth century, had improvements including a piped water supply and a heating system to warm the two garages.

Was all this simply a reflection of the Cory family's great wealth? Possibly, but one other consideration is important. They had previously lived in London's Bloomsbury and had been part of high society, with a social milieu ranging from the Bloomsbury Group to royalty. It seems highly unlikely that this life would simply have been abandoned with the move to Wembury. Indeed, the fact that Edward VII and his brother Prince Arthur, were entertained at Langdon surely suggests that the previous ties remained strong (Figure 17).

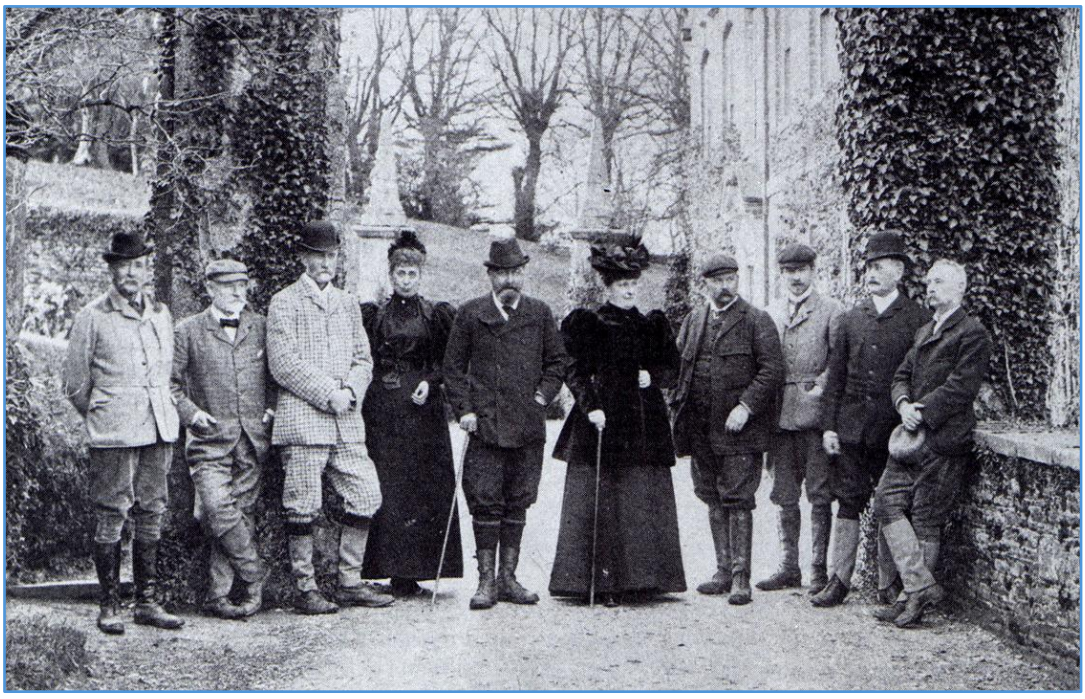

Figure 17 An early twentieth century shooting party at Langdon. The party includes Edward VII and Queen Alexandra, fifth and fourth from left respectively, plus two admirals and a general – ample testimony to the nature of the Cory's social circle. Estate owner Richard Cory is on the extreme right; his wife Bessie is fifth from the right.

No less than three water supplies were needed to meet the demands made by the extensive facilities and - no doubt - the high expectations of residents and guests (Figure 18). One was a straightforward gravity-driven system: a capped well in the field immediately over the road

from Langdon Barton Farm. From this high point, a 200m-long pipe connected it directly to the Court c. 20m below.

A second supply was also gravity driven but was more complex. Its source was a brick-built cistern fed by springs rising in a field above Home Farm. This supported a small network supplying both the farm and Langdon Court's various needs. One of these was Langdon Lodge, where the Cory's head gardener and chauffeur lived; another was the Court's stable block, now partially converted into garages; and the third was the house itself.

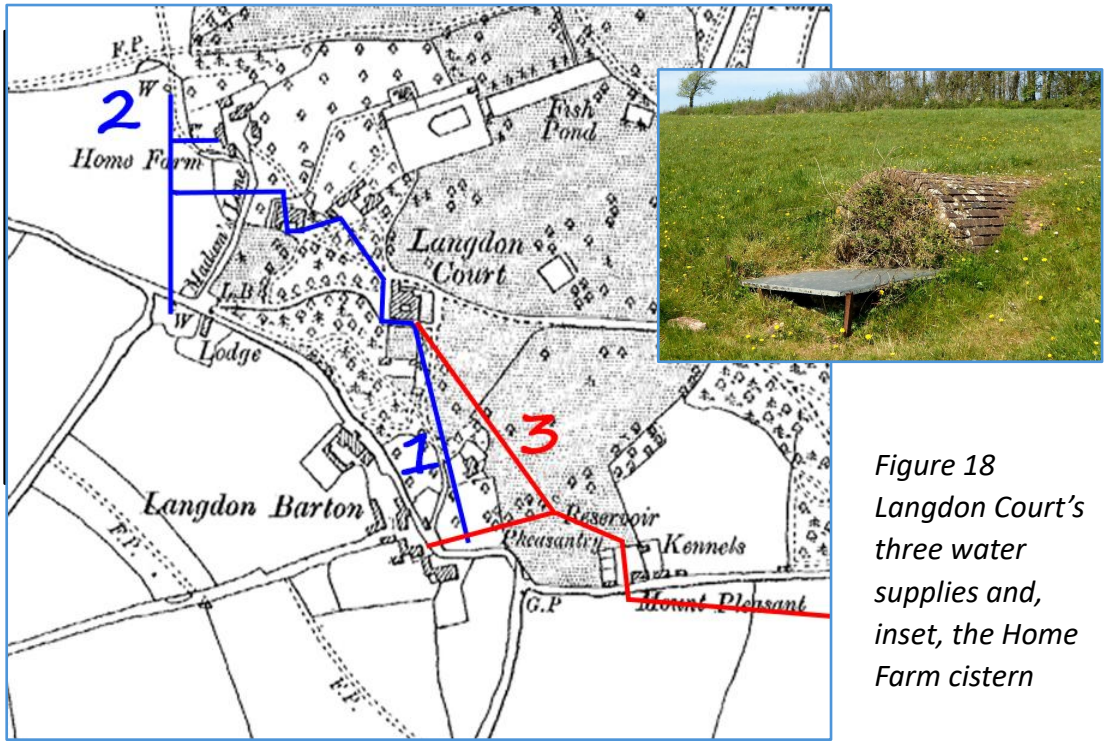

Figure 18 Langdon Court's three water supplies and, inset, the Home Farm cistern

***Blue** = gravity-driven; **red** = pumped*

Key heights: Langdon Court 70m; Supply 1: Well near Langdon Barton 90m; Supply 2: Cistern above Home Farm 83m; Langdon stables 65m; Langdon Lodge 80m; Supply 3: Reservoir 95m.

The final supply, which also served the house via a covered reservoir, might easily be mistaken for a standard gravity supply. In fact it was quite different: the reservoir did not capture a spring and was not a well; instead it was fed by water pumped from the mill stream at Ford, rising over 60m in the process. As with the network based on the Home Farm spring, this supply was shared. Most was divided between Langdon Barton Farm and the Court, with the reservoir serving simply to direct the flow to both destinations. And it is probable that, between Ford and the reservoir, the estate's gamekeeper was able to draw water from a tank close to his accommodation at Mount Pleasant.

Although this third supply was pumped – perhaps giving an impression of modernity - it was not considered to be the most important one for the Court. Instead, the estate sale

catalogue makes it clear that the well close to Langdon Barton Farm was considered to be the chief source. While this could mean that the well was particularly productive and reliable, it could also reflect the fact that water from both the Home Farm network and the pumped system was shared with other consumers. The Court's exclusive use of piped water from a traditional well could easily have been considered a significant advantage to highlight for prospective purchasers.

From mill stream to plateau

The pipe leading from the mill stream to Langdon was one of two branches comprising the estate's most extensive water network, the other being a rather longer pipe heading for the plateau beyond Knighton (Figure 19). After leaving Ford, the Langdon arm immediately headed steeply up hill, running westwards through woodland and fields to Mount Pleasant, the plateau and, ultimately, Langdon Court. The Knighton branch, meanwhile, rose more steadily through the fields to reach the village immediately behind the Jubilee Inn (today's Odd Wheel). From there the route ran under the road and crossed land now occupied by the village hall and school, before heading north to reach the plateau beyond the settlement. The pipes' combined length was around 2.3km, divided one third / two thirds between Langdon and Knighton.

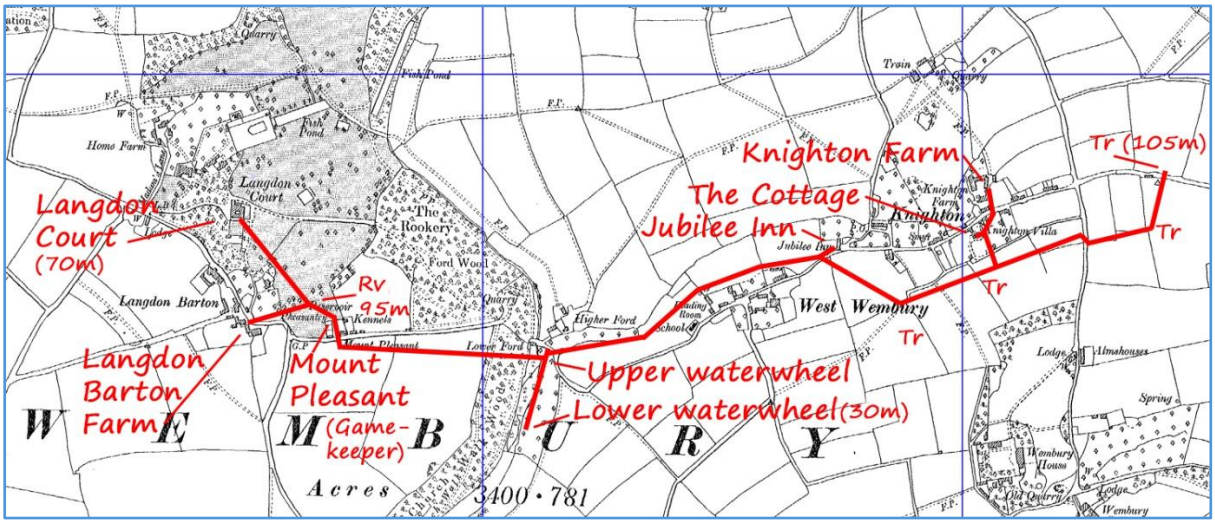

Figure 19 The mill stream network's pumped supply and consumption points.
Tr = cattle trough; Rv = covered reservoir

Both branches were dependent on water taken from the mill stream by pumps powered by two waterwheels.[13] One was located immediately south of the road through Ford, where the two branches went their separate ways. The other stood about 200m downstream, from where it pumped abstracted water back upstream to supplement the first wheel's output. Their works were housed in two small huts which the estate map shows were positioned slightly east of the mill stream. This suggests that the water to drive them was delivered by a leat running from higher up the valley. Although there is now no trace of these works, the remains of the huts – together with their dismantled equipment – still lay in the field in the mid-1970s (Figure 20).

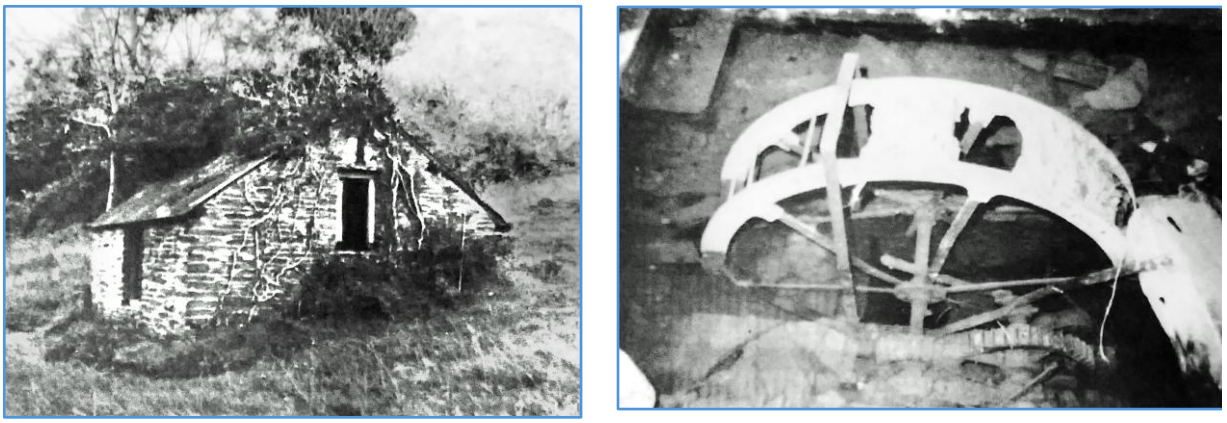

Figure 20 Mid-1970s photos of a Lower Ford pumping hut (left) and surviving machinery (right)

As discussed earlier, the Langdon branch served the Court, Langdon Barton Farm and the gamekeeper's premises at Mount Pleasant. Their counterparts in Knighton were the Jubilee Inn (now the Odd Wheel); 'The Cottage', contrasted above with Knighton's typical cottages because of the high standard of its facilities; and Knighton Farm. There the pumped supply augmented what was available from the farm's own spring and also fed four cattle troughs in the lower and upper parts of the farm.

The estate catalogue made much of this system, variously describing the two branches as the Principal Water Supply and the Mains. It was no doubt much appreciated by all its beneficiaries, but was it sufficiently important to justify such accolades? Apart from Knighton Farm's cattle troughs, the system delivered to only six locations. Although water management on the estate was chiefly focused on supporting agriculture, only two farms benefitted from this pumped supply. And at three of the six destinations – Langdon Court, Mount Pleasant and 'The Cottage' in Knighton – the supply did not assist agriculture; instead it helped maintain the lifestyle of the estate's owners and relatives. It is true that there were probably some social benefits, particularly in Knighton. There the Jubilee Inn must have performed an important community role (though for men rather than women). Also, it is possible that the pumped supply to Knighton Farm allowed part of the farm's spring water to be diverted to the communal tap without difficulty. Even so, while the system certainly provides an interesting demonstration of what could be achieved by local investment, implying that it had a dominant function in the estate as a whole smacks of estate agent's hype.

Aftermath

Barely ten years after the estate sale, Plympton Rural District Council connected Wembury to its municipal supply network. It might be assumed, therefore, that the very varied situation described above - one of wide contrasts between the amenities enjoyed in different locations and by different social groups – simply records an era nearing its end. However, this was by no means the full story; the years following the sale were not simply a time when Wembury waited until better supplies arrived. Instead, important new projects, which

could not wait for the arrival of a municipal supply, were launched. As the final section of this article reveals, these schemes unexpectedly opened a new chapter in the exploitation of local supplies, in the process steering Wembury's long-term development in an entirely new direction.

Soon after the estate was sold and broken up, two new water sources were exploited by incoming landowners.[14] In one sense these offered nothing new: both were basic gravity-powered supplies – relatively cheap to install and very cheap to run. Yet in other respects they were fundamentally different to what had gone before, especially in terms of their objectives. Rather than supporting the *status quo* – the rural economy and the lifestyle of the estate owner's family – the sole purpose of the new investments was to profit by bringing about far-reaching change.

The driving force for both schemes was that much of the estate's land on and near the coast had potential for residential development. To this end, Archibald Knight devised a scheme to develop housing around Church Road in the east of the former estate. At this time Church Road was still no more than a lane leading to the beach, in the process bisecting West Wembury Farm. No original plan has survived, but there is no doubt that Knight saw lucrative opportunities: selling land for small housing estates built on fields adjacent to the lane, and also for ribbon development along it. Similarly, but on a grander scale, Robert Stansell invested in the west by purchasing Wembury Point and Heybrook Brake, an adjoining valley dominated by rough ground. This whole area now became *The Heybrook Bay and Wembury Point Building Estate,* envisaging no less than three hundred building plots, a hotel and, a little later, two modest holiday camps on the scheme's 'parkland' (Figure 21).

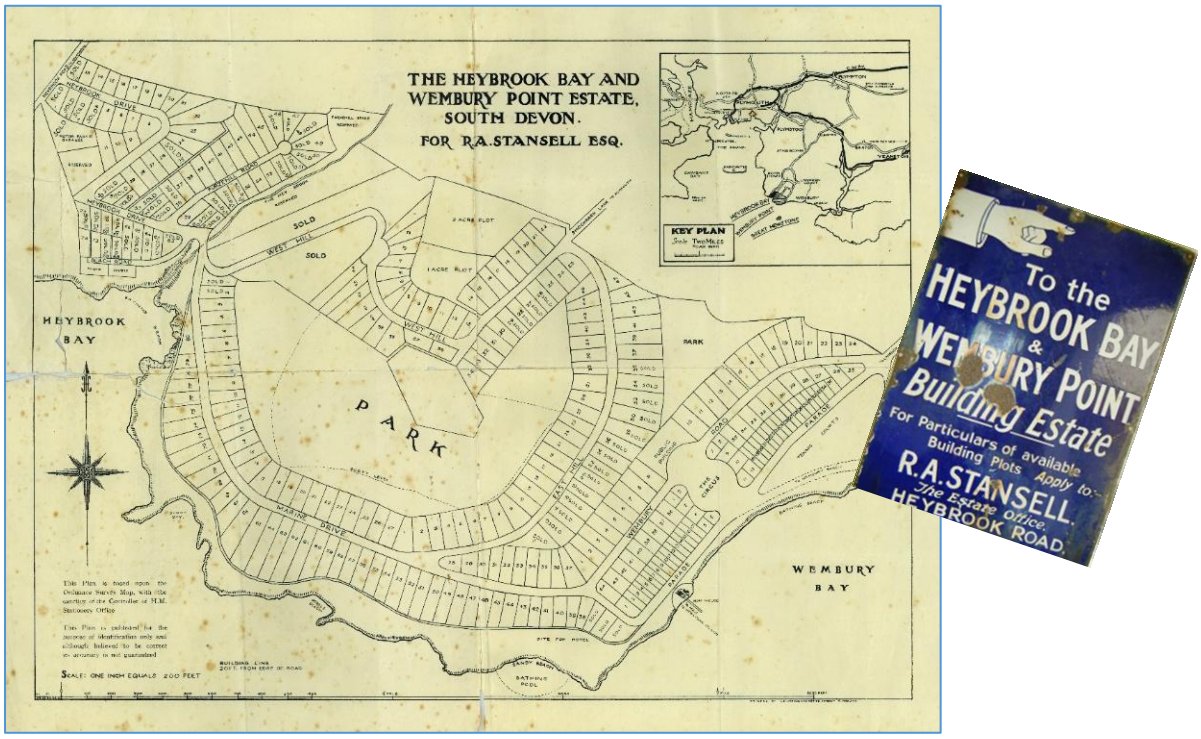

Figure 21 Original map and road sign for the intended development of Heybrook Bay and Wembury Point

Providing a water supply good enough to support the early development of Heybrook Bay was relatively straightforward. Robert Stansell purchased a spring on neighbouring Prince Farm, collected it in a cistern and ran a pipeline a short distance down the gently sloping plateau to a large storage tank overlooking the Brake. For Archibald Knight, matters were not so simple. His initial aim was to tap into the pumped supply from Lower Ford to Knighton, but the negotiations failed. However, as the new owner of West Wembury and Traine Farms, he was able to pipe a supply from the springs behind Traine farmhouse to a cylindrical tank at the highest point on Church Road (Figure 22). This route was relatively complex, running for over 1km and having to traverse two valleys and two hills (Figure 23).

Figure 22 A cylindrical reservoir of the type which would have stood at the top of Church Road. This rare example survives at the highest point on Wembury's Churchwood Valley chalet park.

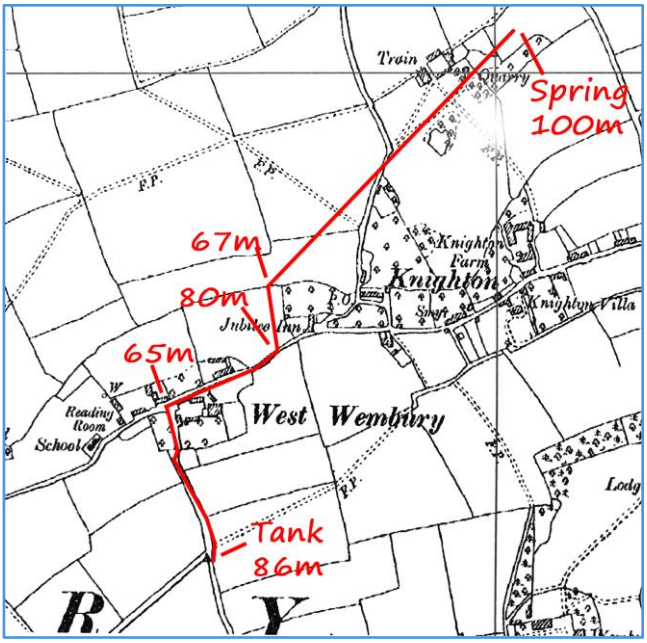

Figure 23 Route and heights of the Church Road water supply.

It would be wrong to assume that these residential supplies approximated to modern standards. The gravity feed from both reservoirs meant that water pressures in the delivery networks serving both new localities were low. Even in the early days, capacity was often insufficient at peak times. And water quality could leave much to be desired: the supply from Traine Farm, for example, was very prone to silting. Yet, as Figures 24 and 25 demonstrate, both Heybrook Bay and Church Road steadily developed as the 1930s progressed.[15]

Because of this growth, when Plympton Rural District Council provided the first mains supply in the late 1930s, both these new residential areas had to be served. This inevitably generated additional housing, despite continuing problems of peak capacity and pressure.[16] Then, in 1957, a major supply upgrade opened the way for much more development around

the same cores; most of this came to fruition the 1970s, when Heybrook Bay grew inland and estates on either side of the Church Road axis almost completely consumed what was left of West Wembury Farm.

Figure 24 Heybrook Bay in the mid-1930s (above)

Figure 25 Main clusters of 1930s development along Church Road (right). This RAF photograph was taken in December, 1946 but, because of wartime building restrictions, essentially gives the late-1930s picture.

Taking the long view, therefore, the local water-supply projects undertaken by just two individual speculators established the framework on which Wembury's future settlement pattern was based.[17] But their decisions did not simply decide where housing would be located. They also brought about far-reaching social change which was arguably even more significant. Housing development brought incomers with no connection to agriculture, who ultimately became the large majority in the parish. Whereas the community had been dominated by farming for centuries, providing water for Heybrook Bay and Church Road set in motion a process which, by the 1980s, changed local society fundamentally.

NOTES

[1] As late as the early 1940s, a government survey found that piped water, either from the mains or an estate supply, was only available in 50% of farmhouses and 39% of farm buildings in England. Devon's figures were substantially worse: only 25% of farmhouses and 17% of buildings had any form of piped water. Similarly, while 42% of English farmhouses relied on a well, in Devon the figure was 71%. See Finnegan, O and Glover, G (2014) *British Farm Surveys 1941 to 1943,* List and Index Society, v 354, Table A 14.

[2] Whereas the Calmadys were landed gentry, the Corys' wealth was new money. Richard Cory had made a fortune trading coal into the ever-increasing London market.

[3] For an introduction to the agricultural depression and its consequences, see O'rourke, K H, Prados de la Escosura, L and Daudin, G (2010) 'Trade and Empire' pp 96-121 in Bradley, S and O'rourke, K H (eds) *The Cambridge Economic History of Modern Europe: v I Globlization, 1870-1914,* Cambridge University Press. Also Perren, R (1995) *Agriculture in Depression, 1870-1940,* Cambridge University Press.

[4] The Langdon Estate sale catalogue and its accompanying map can be downloaded from Wembury Local History Society's website.

[5] When the first mains supply reached Wembury, just before WWII, Traine Farm was an early adopter. As a result, the supply based on spring water became a supplementary source. But when Fred and Marjorie Rowland took over in 1942, they discovered that the mains water had very low pressure and the spring water could not be pumped. Because it was assumed that the pump had failed, their fallback was to switch to rainwater collected from the roof and stored in a large tank (see also Note 9). It was not until 1963, a drought year, that the real problem with the spring water was established. The previous tenant, Farmer Sheperd, disgruntled at having to move out, had put the system out of action by screwing a cap over the outlet pipe from the reservoir. The original pump has subsequently been moved but, if a replacement was fitted today, the system would work once more.

[6] There were two other farms in Down Thomas – Home Farm and Paige's. These did not belong to the Langdon Estate, but it is highly likely that they experienced the same supply problem.

[7] For more on the history of the hydraulic ram, search online for greenandcarter.com and then click on About Us.

[8] Nationally, the importance of good water supplies and hygienic production facilities was set out as early as 1885 in the government's *Dairy Cowsheds and Milkshops Order.* However, its provisions were not made mandatory and it fell to local authorities and individuals such as Cocks to decide whether to comply with its provisions, See Wild, P (2025) 'Clara Ann Whiteley (1880 – 1900): the role of milk in an untimely death', *The Local Historian,* v 55, pp 117-124 and particularly 118-9.

[9] It is possible that the source for this well was a rare local spring: Spring Cottage stands just over the road from the pump site.

[10] There could be pitfalls when using rainwater tanks. For example, the Snell family ran a smallholding in Hollacombe where their tank was the only water supply. In drought conditions it would empty and water would have to be fetched in containers from a spring in their woodland some distance away . While this was inconvenient, the Rowland family's experience at Traine Farm was alarming. When they took over in 1942 an inspection of their tank revealed the remains of the previous farmer's drowned collie dog.

[11] Rural health officials certainly believed in the link between illness on the one hand and poor water supplies, inadequate cesspits, faulty drains and earth closets on the other. See Wild, P (2025) 'Clara Ann Whiteley (1880 – 1900): the role of milk in an untimely death', *The Local Historian,* v 55, pp 117-124. But it was the Women's Institute which provided damning nationwide data. Having first raised the issue in 1918, in the late 1930s the Institute conducted a nationwide survey of sanitary facilities in rural homes and schools. Although WWII delayed publication of the results, when they finally emerged in 1944 they shocked the nation. In no less than 3,500 parishes conditions were 'woefully inadequate'. A third of the countryside still lacked a mains supply of clean piped water, and the consequent reliance on cesspits and earth closets had 'medieval' echoes. See Coulthard, S (2024) *A Brief History of the Countryside in 100 objects,* Harper North, pp 269-70.

[12] It does not appear that members of the Cory family lived in The Cottage. In the early twentieth century, for example, it was occupied by a prominent Plymouth solicitor and his family. However, Bay Cottage, at the bottom of Church Road, was occupied in the 1920s by Barbara and Patrick Crohan, Barbara being the Corys' daughter. Because they wished to continue living there, Bay Cottage was excluded from the estate sale. Consequently, it did not feature in the sale catalogue, and there is therefore no record of its facilities. However, it seems safe to assume that they were good because, like The Cottage, it had a piped water supply, which in this case came from prolific springs in the fields higher than the house and on the other side of Church Road.

[13] The Ordnance Survey's six-inch map of 1907 shows that the system had previously been powered by a ram located close to the road through Ford. The most likely reason for its replacement by older technology is that the mill stream falls gently at this point. Consequently, the kinetic energy of the stream water piped to the ram

may have been insufficient to enable it to meet the system's demand at that time. It is also possible that the ram was not retired but transferred to drive Raneleigh's supply. The early twentieth-century timing is right for the relocation to that site, and the spring water piped down the steep valley side from above Spirewell would have generated substantially more kinetic energy than the mill stream.

[14] The speculator who purchased and broke up the estate aimed to make his profit chiefly by selling land for housing development. The sale catalogue is consequently peppered with references to the development potential of different parts of the estate. The most substantial of these was the land around Wembury Bay, which magically became a 'Resort'. Because of a local appeal, this never occurred (see the article *Wembury Mill – an illustrated history* on the WLHS website). It is worth noting, however, that the speculator went so far as to design the water supply that would make development possible. This involved piping water from the north of the estate down to a reservoir above the bay. Details are provided in the sale catalogue's Conditions of Sale.

[15] Initial development around Church Road was not all standard housing. The area in fact became a mixture of typical prewar bungalows and huts. This contrasted with the situation at Heybrook Bay, where Robert Stansell required permanent properties to be built. Despite their basic facilities, some of the Church Road chalets survived well into the late-twentieth century. In April 1976 Mrs Manley, of Mewstone View, Collier's Close, was given permission to live in hers for the rest of her life. Similarly, Mrs Rose of Longmead, Church Road, occupied hers until her death in 1997. See the *South Devon Times,* 2.2.1976 and Pinder, D 'New residents, changing community' in Pinder, D, ed 2022, *Wembury in the 1950s*, Wembury Local History Society. The latter is downloadable from the WLHS website.

[16] It is likely that these problems meant that the switch to mains water was a process rather than a short, sharp event. For example, some farms may well have responded by using both the mains and their traditional supplies, as at Traine. And it is possible that connection and consumption costs delayed the uptake of mains water for some low-income families.

[17] Evidence that this was seen as the future is to be found as early as 1943 in Watson and Abercrombie's *A Plan for Plymouth.* Published in response to the Plymouth blitz, the *Plan* proposed that Wembury should receive substantial overspill, focused on the two emerging growth areas. Heybrook Bay and Down Thomas would have a population of around 4,000 and Knighton / Church Road about half that. However, these proposals were not pursued after the war.

Appendix 1 Locations and farms figuring in the text