

Shrewsbury Weir

1. Weir pic**

Afon Hafren or The River Severn, is 220 miles long from the Bristol channel to its source in the Welsh hills at Plynlimon. In medieval times it was navigable for cargo and passengers way beyond Pool Quay, until a weir was built there by the Cistercian monks in order to provide a water supply for their mill.

Coracles, floats, picards, brigs, frigates, wherries, punts, barges, trows, boats, tugs and lighters. All these varied river craft have created commercial, industrial, military and passenger traffic both along and across the Severn over the centuries and it is said that the Severn has been the hardest working river in Britain. In 1773 a passenger journey by wherry boat from the Wherry Inn on Wyle Cop to Gloucester took two days, with an overnight stop at the Green Dragon inn in Worcester. Coming back upstream needed 3 days and 2 nights.

2Ferry pic**

In 1882 this ferryman on the Underdale ferry connecting the new Cherry orchard suburb with the town, earned 18/- per week and the passenger fare was a halfpenny single and you might have to wait in the cold and the rain while the ferry came across. In 1884 during the Royal Show that was held on the racecourse on Monkmoor Road this ferry really flourished, ferrying people to and from the town and station. It lasted 28 years until the weir was built which made a ferry ride impossible in the turbulence, and the new Castlefield Footbridge was built in its place in 1910.

3New bridge pic**

Shrewsbury is the highest of the main towns along the Severn and it has the most direct relationship with the river. Along with the castle Shrewsbury is completely surrounded by river and wherever you turn in the town, the river is never far away, even tho you may be confused by the direction of its flow!

Over the centuries Shrewsbury has seen wildlife, war, industry, commerce and commercial transport, leisure, death and pollution on its river.

But pollution was the issue that was about to alter the flow of the river.....

For centuries the river has been polluted.

Public latrines were erected in 1581 on the English and Welsh bridges emptying straight into the river. The town sewers also discharged into the river at 13 “mudholes” near the two bridges. And if your house wasn’t connected to the town sewers, then you could go and dump your waste directly into the river! ...as long as it was carried away by the current. You might call it the main drain. In times of drought, waste of all descriptions and odours was exposed, and was all over the river banks. It spoiled any paddling and swimming and fishing and washed back into the houses at the first hint of floods.

Not surprisingly people preferred to drink beer rather than water which may explain why there have been so many breweries in Shrewsbury.

4 **Pollution Pic 1881

By the turn of the C19/20 there was a growing awareness and public discussion of the poor sanitation and hygiene centred on the river, but Dysentery and TB (still called consumption), were rife. Increasingly public opinion was becoming aware that disease was linked with the water quality.

The new Coleham Pumping station came to the rescue in 1900 pumping sewage to special filter beds away from the river. But by then public tolerance was growing thin.

In Jan 1906, owing to “the disgraceful state of the river path in and around Sy” especially @ Dorset St in Castlefields, the Trustees of the Board of the Severn Towing Path voted £50 to the Sy Town Council to clean up the river path. The trustees reported that this £50 was “judiciously spent...but a drop in the ocean of need...”

By May 1906 the Sy Chronicle was leading the discussion. They encouraged STC to take action under the Rivers Pollution Act to stop the pollution of the river above the town. And they voiced criticisms from those who saw that the STC themselves were adding to the pollution with “semi liquid street sweepings” off Smithfield Road (presumably the cattle market) calling it a “cheap but nasty way of disposing of refuse”

Also in May 1906 at a meeting of the Sanitary Committee of STC Councillor Franklin pointed out that “Sy had medieval buildings there were proud of and medieval customs they were not so proud of”

For the more fortunate there were public standpipes with water fed from upland springs. For the most well off, there were promises of water direct to their houses from these sources. But if you didn't know better and couldn't pay, drinking water might still come from the river.

There were long discussions about the relative merits of using more upland spring water through conduits from the Pulverbatch area which would be expensive and wasteful, or of cleaning the river by dredging and filtration which was cheaper. Amazingly there were still people who felt the river water was safe to use directly.....or maybe they had no choice....

So...The issue of river cleanliness needed to be addressed in early C20 as in early C21

In a letter to the Wellington Chronicle in Nov 1907, an American visitor wrote...."river water which of late has arrived in the matutinal bath in the form of a rich and creamy coffee coloured mixture.....the ordinary citizen does not require too much of the County of Salop dumped into his morning tub or into his boilers....I do think that your sanitary engineers ought to be able to eliminate the solid from the fluid better than this...I have noticed that you britishers are most extraordinary lamblike and patient in matters of this sort...out west there would soon be some healthy corpses around the waterworks and amongst the City Fathers with a corresponding enrichment of the soil in the local bone orchard"

The first mention I could find of the idea of raising the level of the river to tackle the problem was in the Chronicle in March 1907...

"The Sy Town Council have this week set their hands to a great work. They have favourably entertained a proposal to put a dam across the River Severn in the hope of killing two very important birds with one stone. It has long been recognised that the damming of the river would be a great boon to the town, first as improving the conditions favourable to public health by maintaining a fair depth of water throughout the town all the year round; and second as making boating on a long stretch of the stream easy and comfortable. The need of a dam for boating purposes has been more and more recognised during the last 2 or 3 years by advertising the attractions of the borough and

we ought now to see a really serious effort to accomplish an undertaking which many people think ought to have been carried out long since”

This does seem to make it seem that it boating and leisure were more important issues than pollution! And not surprisingly the boating community including Pengwern Boat Club and Shrewsbury School rowing club, lobbied hard in favour of a weir so that their summer rowing season was not spoiled.

However both objectives could be followed ...

In 1909 a Bill went before the British Parliament in London to authorise “a dam or weir (including therein a fish pass and a boat roller pass or a lock across the River Severn commencing on the N side of the river in the Parish of St Mary and terminating on the S side in the Parish of Holy Cross & St Giles and being in length 180 feet or thereabouts.”

The Bills wording continues....(and here comes the legal language) The Corporation “may construct and maintain all proper: embankments, dams, locks, sluices, bye washes, waste weirs, outfalls, discharge pipes, bridges, roads, roadways, approaches, gates, gauges, adits, shafts, tunnels, aqueducts,, culverts, cuts, catchwaters,, channels, conduits, stream diversions, drains, mainpipes, houses, buildings, engines, machinery, telegraphs, telephones and conveniences” and be responsible for “inspecting, maintaining, enlarging, repairing, cleansing, conducting, managing, working and using the same. Sounds like an entry in a thesaurus!

“After construction of such works the corporation shall **forever** maintain the same and keep them in good repair and allow them to be used without exacting any toll or payment”

The provision also included dredging and deepening of the river bed between the weir and Berwick 5 miles upstream to a minimum depth of 5 feet at summer levels.

5 Construction of the weir 1910**

A solid concrete weir was built across the River Severn at Shrewsbury between 1910/12. It was attached to the river bed by greenheart wood (a S American hardwood favoured in sea defence building). It took 2 years to build with a

large labour force. I have found no records of the actual building process but the photos show many workers in really risky looking poses. Oh for Health and safety! The weir maintained a suitable depth of water upstream at a nominal height for pleasure boating (punts and skiffs) around the loop of the river enclosing the town, both for Shrewsbury School and Pengwern Boat clubs, and also for local people and visitors for a stroll or promenade. This all tied in with the growing tourist trade brought to the town in the late C19 and early C20 by the growth of the railways

6Pic Construction of the weir 1911 (1)**

Of course the weir added to the problems of flooding upstream not excluding in 1910 when high water washed away some unfinished foundations of the weir during the building.

There was ongoing discussion of the pros and cons of this controversial project.

In Jan 1911 The Chronicle reported that “a thoro inspection of the river weir at Sy shows that the structure has come triumphantly through the severe tests it has undergone during the recent abnormal floods” Also “there has been considerable erosion of the banks below the weir and these are to be strengthened”

7Construction pic 1911 (2)**

In Feb 1911 The Chronicle reported a query concerning the total outlay on various river improvements associated to the weir scheme. There was an obvious overspend on budget and an extra £7,000 had been requested. What is now the total outlay they asked.....I think we've heard this concern expressed about more recent transport projects....

8Pic Construction 1911 (3)**

In May 1911 The Chronicle reported the appreciation of the local boating communities: “Starting just above the weir there is now a stretch of 5 or 6 miles of water running most of the way thro beautiful scenery, upon which boating is safe, easy and pleasant”

In June 1911 there were two river drownings in one week and again questions were asked about the weir...is the river level now too deep?

9Finished weir Pic with boat pass**

Weirs are of course an obstacle to navigation and it was hoped and (approved in the Act of Parliament) to include a large lock gate or boat pass which would have allowed river trade and larger craft, and instead of a being barrier, the weir would offer a means of access via the boat pass. However a small wooden ramp was built instead, not for large craft but for smaller or flat bottomed boats to make their way up and down the river – the town council were blamed for choosing the simplest and cheapest option But of course it could be argued that this was no longer a necessary commercial transport route now that canals, railways and improved roads were providing faster and more convenient alternatives and river transport had declined.

10Weir with boat pass Castlefields 1950**

The boat pass eventually fell into disrepair and the fisherman seen here is standing on the remains of it in 1950.

Fish passes are a vital part of a weir construction as they encourage fish such as salmon and shad which migrate upstream, to reach their spawning grounds. They provide a low energy alternative to leaping the height of the weir giving a sort of staircase of water for them to swim along.

There were two fish passes built in 1911 one on either side of the Shrewsbury weir. In 2021 Shropshire Star reported an Environment Agency recommendation for a new fish pass to be built to replace the now defunct one on the Castlefields side of the weir. An Environment Agency spokesman reported that there is a crisis of low numbers of salmon in the river at Sy and that they are using up precious energy to leap when they should/could be conserving their energies for spawning further up river.

11Salmon leaping**

The following year 2022, there were reports of record numbers of salmon leaping again raising concerns with environmental experts because of salmon wasting their energy at a time of year when they will not be feeding.

I haven't been able to find any further reference to a plan for a new fish pass on the Castlefield side but last year we watched for weeks as extensive work was done to renovate the fish pass on the Underdale Rd side.

As in many rivers, there is ongoing concern about the polluted state of the river Severn despite the best intentions of the weir. In November 2023 The Shropshire Star reported that research by “Surfers Against Sewage” in Shrewsbury had concluded that water quality had dropped from ‘Sufficient’ to ‘Poor’ downstream of the many sewage overflows. Severn Trent Water is sadly frequently in the news concerning the release of raw sewage into the Severn especially in weather like we’ve been having this last week.

12 ** Hydro site

Weirs are an excellent source of water power. In 2015 the Shrewsbury Hydro Community Interest Company researched and planned for a hydroelectric scheme alongside the weir that would generate on average between 1.5 and 1.8 million kilowatt hours of electricity annually, saving up to 1,000 tonnes of CO2 emissions going into the atmosphere each year, compared to a conventional power station. All the necessary planning and environmental permissions were obtained, but there were delays because of the need to lease a small area of land alongside the weir for the underground water turbines and to relocate the fish pass. These delays meant that there was not enough time to complete the project with the benefit of the Government Feed in tariff and the project became unviable.

In 2021 the Shropshire Star reported that STC were reconsidering the project and allocated £30,000 for a new feasibility study, hoping to provide enough energy for 400 homes. Sadly it seems that the project has still missed out on the Feed in Tariff that would make it financially viable. Maybe a future government will change this.....

13&14Calm weir**

Meanwhile, I listen to the weir from my bedroom and marvel at the concept and engineering of it and the noise and beauty and power of it.... unless like this week there is no weir at all and the flood water rushes straight on by.