Wales). This data has been picked up by the media and conservation groups and is now being widely reported. The River Teifi has the 9th highest number of sewage spills in the UK with 11,801 hours of spills being recorded in 2022.

The spills are reported in real time where they occur near bathing waters (e.g. Poppit Sands Beach) but such reporting is not currently available for other sewage works situated along the Teifi. Other spills are generated when the pipes become blocked, and in many cases these have been caused by inappropriate material being put into the network, for example wet wipes and fat from cooking.

The storm-water problem could be solved by separating the sewage system from the rainwater system. It is estimated that this will cost about £11 billion in Wales and £56 billion across the UK. The alternative is to build bigger sewage treatment works which will cost even more and have a significant carbon footprint.

At present Natural Resources Wales and Welsh Water are investigating the impact the spills are having on the environment (human and natural). The aim is to identify which CSO's are causing significant harm and to rectify the issue through investment.

Unless modernised during renovations many domestic septic tanks are not adequately maintained or regularly emptied. Overflows from these often enter the watercourses directly. Misconnections (where waste water has been directed into rainwater system) are also common especially in unregulated installations.

Invasive Species

The natural vegetation along the Teifi and its tributaries is being threatened by invasive species such as Japanese Knotweed and Himalayan balsam. These plants have vigorous growth, spread rapidly (particularly along rivers) and frequently smother native vegetation. They are illegal to plant or cause to grow in the wild, or to transport from the location that they are growing

A programme of control is underway, but this is starting at the head of the catchment and gradually working down stream. Himalayan balsam is easier to remove (it can be cut or uprooted before it comes into seed). Japanese knotweed requires specialist treatment with herbicides.

Support needed

In order to expand our campaign we need to raise funds. The funds will go to Public outreach i.e: Paying for the costs of meeting venue hire (we have had six public meetings in the year since we started in August 2022); leaflet and banner production; and web site hosting costs. Currently all these costs have been met by individuals and Ffynnone Resilience.

Funds are also needed for Citizen science water test kits to test for Phosphates and Nitrates as well as E.coli which gives an indication of sewage pollution.

There are many more projects that we would like to initiate or support with sufficient funds.

Please help us to continue our work to return the Teifi and all its tributaries to pristine condition.

To make a donation please pay using these details:

- Triodos Bank Sort Code 16-58-10
- Account name: Ffynnone- Community Resilience
- Account Number 21386536
- Please use reference STTLEF1

To join the Friends of the Teifi, visit the web page: https://www.teifi.one/contact/

Thank you.

Sewage and chemicals are polluting our river and not enough is being done to stop it. The Teifi has been the lifeblood of our area for centuries - it is madness that this desecration has been permitted to happen.

The 'Save the Teifi' group has been set up by Ffynnone Community Resilience to campaign and co-ordinate actions to return The Teifi to it's natural state. See inside for our detailed Aims and Objectives.

Aims and Objectives

The Save the Teifi Community Group has signed up to the Charter for Rivers associated with RiverActionUK (www.riveractionuk.com).

The overall aim is to Restore our Rivers and Freshwaters to Health by 2030.

In relation to the Teifi & its tributaries we are seeking to:-

- End Sewage Pollution
- Reduce the levels of harmful chemicals (e.g. nitrates and phosphates) to recommended limits
- Bringing Nature back from the brink
- Have bathing sites designated at key sites along the river
- Control invasive species
- Utilise Citizen Science to monitor river quality and holding polluters to account
- Encourage regulators and political parties to take action
- Work in partnership with communities, farmers, Welsh Water and Natural Resources Wales to restore the river and it's tributaries

Slurry runoff into the Plysgog enters the Teifi December 2022

Key Issues Explained

Clean Water

Clean water is defined as water which has a chemistry and biology which would be normal for a given area in the absence of human disturbance.

Phosphate Pollution

Much of the Teifi has high concentrations of phosphate which are above the recommended levels. These high levels promote the growth of algae and large aquatic plants which can reduce the level of oxygen in the water (eutrophication). High levels of phosphorous can also lead to algae blooms that produce toxins that are harmful to human and animal health. The phosphates mainly come from sewage treatment works (67%) and rural land use (28% - agriculture and the natural landscape). As a consequence no planning applications which will increase the volume of sewage in the catchment are currently being approved.

Welsh Water are putting in place an investment programme that will remove 95% of the phosphates generated from Sewage Treatment Works by 2030. They are also working with landowners to remove the remaining 5% of their contribution via natural land management schemes by 2035.

Other Chemical Pollution

Nitrates are another pollutant largely deriving from agriculture fertilizer runoff contributing to eutrophication. Welsh Government are introducing rules to reduce water pollution from agricultural sources (initially Oct 2022), but the implementation of these rules has been delayed several times over the last year and are still not in place.

Toxic Metals. Not a huge issue for the Teifi is pollution from mining. There are however places along the Teifi where pollution from toxic metals is still possible. NRW have reported on these.

Plastic pollution is a concern, and micro-plastic entering the environment has been widely reported. E.g. Farming practices using plastic to wrap hay can result in a lot of plastic sheet entering rivers.

Toxic 'forever chemicals' (PFAS – Polyfluoroalkyl substances) are widespread and have been linked to health problems in humans and wildlife (particularly otters) are associated with wastewater treatment works. PFAS are present in many brands of toilet paper.

Sewage Pollution

Sewage pollution of the natural environment comes from inadequate treatment leaving phosphate and ammonia in the effluent, overflows during wet weather, mis-connections and contamination with substances that cannot be easily removed.

Many sewage treatment works were built to handle the capacity of waste water 30-60 years ago. Despite extensive residential development across the area there is no spare capacity, and most works have no facility for removing phosphates. Waste water is often in the works for just a few hours, irrespective of seasonal temperature variations or the state of maintenance and efficiency of water treatment works. The system relies on testing and reporting by water companies to comply with loose parameters stated on permits. Investigation, planning and investment decisions are all lengthy process, taking years from identifying a problem to implementing a solution. There is insufficient monitoring by authorities, under-reporting and little to no enforcement around issues that may persist for decades.

Our sewerage system is designed so that during periods of heavy rain raw sewage diluted by storm water spills into the Teifi. This occurs because our waste water (toilets, kitchens, washing machines, baths) frequently combines with rainwater (roads, roofs, patios, parking spaces) and drains to the local sewage treatment works. The treatment works are designed so that if more sewage and rainwater arrives than it can cope with the excess spills/overflows via a combined sewer outfall (CSO) into the Teifi. If the spills did not take place the water would back up in the pipes and flood into our streets.

This system has been in place for decades with some of the sewers built in the Victorian era, but it's the lack of investment by water companies that is the major problem. However, recently government legislation has changed and as a result the water companies now have to monitor the spills/overflows and provide the data to the environmental regulator (NRW - Natural Resources