

# **Climate Crisis**

## **Brief - March 2022**



### **Our sewerage and the impact on our water ecosystems - rivers and oceans.**

Severn Trent state - Our average sewerage bill from Severn Trent for 2022/23 will be around £190 (52 pence per day). This pays for:

- Building and maintaining sewer pipes
- Pumping sewage to treatment works
- Treating sewage so that it is safe to return to the environment
- Sending cleaned and treated wastewater back into rivers and the sea
- Converting solid material from sewage into gas for energy

But what is the reality ?

In December 2021, Severn Trent was fined £1.5million by the Environment Agency for illegal sewage discharges following a major investigation into sewage treatment in November.

Severn Trent, one of the biggest listed water firms in the country, has been fined for discharges from four sewage treatment works in Worcestershire between February and August 2018.

Raw sewage repeatedly poured into the River Severn in Shrewsbury during heavy rain, a wildlife trust said.

Figures from the Rivers Trust showed sewage was released into the water more than 1,000 times in 2019.

In 2020 Severn Trent discharged sewage into our river systems 61,000 times.

For this performance Severn Trent's CEO Liv Garfield was paid £2.8m last year.

### **Background - Sewer systems in the 21st century**

In 1945 there were over 1,400 sewerage companies throughout England and Wales. These were merged in the Water Act of 1973, simplifying the structure to just ten regional water authorities.

Investment fell from £3.5 billion in 1974 to just £1.8 billion in 1985. The sector was privatised under the Water Act of 1989, and now 32 privately owned water and sewerage companies operate in the UK today.

Privatisation has led to a balancing act, where water companies seek sufficient profit to attract investment, while also keeping water bills low enough to provide a public service. Both the bills water companies can charge their customers, and the performance measures they must meet, are agreed with government regulators. As the UK's population grows, water usage increases, and climate change brings more rainfall in more intense bursts into sewers. This balancing act is becoming harder to maintain.

Water companies are allowed to release untreated waste water in allegedly rare circumstances when the system becomes overwhelmed, preventing damage to equipment and properties.

This is often due to very heavy rainfall, blockages and unexpected equipment failures.

Increasing sewage and rainwater flows mean these events are likely to become more frequent.

The amount of sewage companies are permitted to release is set by the regulators, but when companies fail to manage increased flows they may exceed the permits and be penalised with fines. If they try to hide or under-report these releases, the penalties are significantly larger. But the damage to the environment is often already done.

To reduce untreated releases and the environmental damage they cause, water companies are allegedly making efforts to address it. Though having spent too long on it, I could not find from Severn Trent sources as to how much they are spending per year on addressing the sewage discharge problems.

I did find:

\*Severn Trent said it was on track to invest over £500million in a programme to improve river quality - that is 0.5% of annual turnover but period unspecified.

\*Severn Trent has made a triple “carbon” pledge, which means that they hope to achieve zero emissions, 100 per cent renewable power and an all-electric fleet of vehicles by 2030.

**BUT** has little to do with the state of our rivers and oceans.

GOES Foundation. Edinburgh University state- “Life on earth depends upon healthy Oceans, we have 10 years to stop toxic chemical pollution, or life on earth may become impossible”

GOES: Our wastewater is treated to a secondary stage, this means that the water is biological treated and decanted. The systems allow toxic chemicals and microplastics to pass into the rivers and oceans. In addition whenever there is heavy rain, most of the water treatment is by-passed and raw sewage is discharged. You may think that wastewater is treated to a high standard, but in reality this is not the situation. Since the chemical and plastic revolution starting in the early 1950's the technology to treat wastewater hasn't changed and most of the systems are incapable of removing toxic chemicals, pharmaceuticals or plastic. Only about 10% of the wastewater treatment systems are fitted with tertiary treatment and less than 1% with AOP system to remove toxic chemicals.

If we were to treat all wastewater to a very high standard using tertiary treatment and AOP, we would eliminate most of the toxic chemicals and micro-plastics entering our oceans and this would be more than 50% of the battle against climate change. The added bonus is that we have a much cleaner and safer rivers, oceans and drinking water, and the one-off cost would be less than 100 Euro per person.

Around 80% of the world has no municipal wastewater treatment of raw sewage, we advocate the Eden Cycle system, or similar technology. The system eliminates pollution, recycles all the wastewater and produces fish and organic food. Total cost to eliminate pollution and provide most of the world with clean drinking water, approx 4 trillion Euro. This is a huge sum of money, but it is still 50% less than the cost of Covid.

## What you can do...

- Don't use toxic cosmetics and sun-block
- Buy organic food,
- Wear clothes from natural fibres
- Plant as many trees as possible
- protect wetlands, marshes, peat bogs, mangrove swamps and seagrass
- Lobby governments to properly treat municipal wastewater
- Stop atmospheric pollution
- Green Chemistry, make your own soap and cleaning products

**Residents are welcome to join our Grimley Parish Council climate crisis working party.**

The working party was set up by the parish council in late 2021 and consists of residents and parish councillors. The group works broadly within the remit of the climate declaration made by the parish council in 2008. The articles released by the group chair Cllr Dave Stanley are published at his own expense in the local parish magazine (and in the Worcester News (local newspaper)), are not voted upon by the councillors and are included on the parish council website in order to provoke thought and debate and encourage residents to educate themselves on the topics included.

Parish Clerk Lisa Stevens, 07950256363, [clerkgrimleypc@gmail.com](mailto:clerkgrimleypc@gmail.com)