

Dear Stakeholders,

In 2021, Natural Resources Wales (NRW) published an assessment against tightened phosphorus targets recommended by the Joint Nature Conservation Committee (JNCC) in 2016 for the protection of Special Areas of Conservation (SAC) rivers. The assessment highlighted that a number of previously compliant rivers now failed to meet the more stringent phosphorus targets. To understand Dŵr Cymru Welsh Water's (DCWW) contribution to the phosphorus load to the rivers, and to assess any improvements we may need to make to our wastewater treatment works (WwTW) discharges, we have updated and re-calibrated our water quality models using the regulator and industry standard tool known as SAGIS (Source Apportionment Geographical Information System). This was a joint exercise run in collaboration with our environmental regulator. Today, I am pleased to publish key documents on our website relating to this modelling work and communicate the investment Dŵr Cymru is planning which will support the collaborative efforts to restore them to favourable conservation status whilst supporting the economic development Wales needs to be a thriving community.

Publication contents

SAGIS non-technical reports (5 documents covering Dee, Wye, Teifi, Cleddau and Usk)

These reports have been independently audited by a third party commissioned by our environmental regulator and although they contain potentially useful information on other sectors, they have been agreed for water industry planning use only. More information on this is available in each report.

Similar documents covering the 4 passing SACs are currently in audit with NRW and will be published at a later date.

Sector source apportionment data for all failing SAC river basins in DCWW's operational area (SAC and the non-SAC designated water bodies draining to them)

This data is at a waterbody level and will be provided in an excel format including a guide to understanding the apportionment data, relevant caveats and useful information.

Sector source apportionment outcome maps

Our SAGIS outputs are also be provided in PDF map format for each failing SAC catchment.

DCWW SAC phosphorus permit programme, screened into collaboration categories

We will publish a list, agreed with our regulator, of all our wastewater treatment works (WwTW) discharging to SAC catchments, both directly to the designated river and contributing tributaries. This list identifies where a phosphorus permit is required on our final effluent discharges. There is additional information to help guide collaboration with local authorities and other third parties (see Collaboration Guidance Pack).

SAGIS has been used to identify where DCWW needs to remove additional phosphorus in order to meet its 'fair share' of the improvements needed. This tells us where we should reduce the amount of phosphorus entering the SAC to help restore favourable status in the river. At some locations this means we need to install phosphorus removal technology, including nature-based solutions where appropriate, to our wastewater treatment works. At other locations we may be able to achieve the new limits without additional processes.

Where a reduction in phosphorus load is not required, we will agree a new 'backstop' permit limit to prevent deterioration in the water body. This means that every single DCWW WwTW discharging over 20m³/day to a SAC, or non-designated water body draining to a SAC, will meet a phosphorus permit condition by the end of our investment programme. Investment will be prioritised to tackle the largest phosphorus contributing sites first with the smaller sites later in the programme. We expect to complete the programme at the end of 2032.

It is important to understand that this programme is a major undertaking both logistically and financially, and as such will need to be delivered over several investment 5 yearly or Asset Management Plan (AMP) periods that will require agreement with OFWAT. As we progress through the agreement process with OFWAT for each investment period, we will provide more information on the specific delivery date of each scheme.

Collaboration guidance pack

Whilst our investment will remove a significant amount of phosphorus from our sewage, in most cases it will not result in SACs complying with the water quality targets on its own. This is not something that DCWW can do on its own and it will take the combined efforts of all the contributing sectors to achieve this. This is the reason why I wanted to highlight our interest in collaborating to improve the outcomes of our investment plans, either by removing nutrients more sustainably or through approaches that deliver wider environmental, carbon reduction or societal benefits.

This pack will detail the approach to collaborating with DCWW to undertake feasibility assessment(s) of Constructed Treatment Wetland(s) (CTW), which could be fed by DCWW treated final effluent. These sites have been screened into categories to highlight the different opportunities available however, please note these may be subject to change to align with NRW's review of permit process and an up-to-date headroom assessment following local planning authority involvement.

Investment Plans

In July 2022 I announced an additional £100m investment into River Water Quality, funded through our not-for-profit model, to add to our existing £836m investment plans. £60m of this extra investment has been allocated to removing phosphorus from WWTWs in addition to those already named within our current investment programme. These include schemes at – Monmouth, Llanfoist, Wolfscastle, Lampeter, Llanybydder, Brecon, Corwen and Letterston. At sites where we are already investing to remove phosphorus, and our modelling has identified the need for a future additional reduction in the phosphorus we will, where possible, deliver to these new tighter limits in one step. Further improvements are being planned now for future AMP periods including investment in other non-SAC water bodies to improve water quality. However our SAC phosphorus programme is based on modelling only and may change if new evidence comes to light.

Future steps

DCWW have published these guides, information and screening details in order to be open and honest with our customers, to play our part in efforts to restore our most sensitive rivers to favourable conservation status and help relieve pressure on communities, planning authorities, social housing providers and developers. They also highlight where we think there are collaboration opportunities you can work on with us to further protect our most sensitive rivers and streams.

We will be engaging with our regulators and local planning authorities through the Nutrient Management Boards (NMB). I believe the NMBs can provide a transparent overarching decision-making forum essential to the success of these and other catchment initiatives we need. I hope that, by playing our part in the NMBs, they can fulfil this function by providing the governance, strategic direction and local intelligence / decision making needed if we are to be successful in relieving the pressure on planning restrictions and restoring river quality.

Yours sincerely



Peter Perry
Chief Executive Officer