Living Waters for Wales

Fifth Water Framework Directive Newsletter,



Spring 2012

Welcome to the fifth Wales Water Framework Directive (WFD) newsletter, filled with examples of projects which are delivering a better water environment for the people and wildlife of Wales. Be inspired and tell us your story. Contact Jill Brown

Being ambitious

Our ambition for Wales is to achieve 50% of all water bodies at Good ecological status/potential or better status by 2015.

In Wales, the 2011 update to the Water Framework Directive (WFD) classification showed that only 36% of surface water bodies (rivers, lakes, estuaries and coastal waters) achieved good or better. The assessment published in the River Basin Management Plans in 2009 was 31%.

This is the most complete WFD assessment to date. However, it is not directly comparable to the 2009 data, because we are two years through a three year programme. The results are based on monitoring data taken over the period 2008 to 2010.

We believe these results do indicate we are moving in the right direction, but the real test of change in status needs to be made at the end of the 6-yearly planning cycle in 2015. We need your continued commitment to deliver the solutions needed to achieve greater and sustained improvements to our water environment in Wales.

For further information on the WFD Classification visit our website: http://www.environment-agency.gov.uk/research/library/data/97343.asp
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The full dataset is available on Datashare: http://www.geostore.com/environment-agency. You will need to register for access first.

For other queries relating to WFD classifications please contact the National Customer Contact Centre enquiries@environment-agency.gov.uk or phone 03708 506 506.

The 'Top Ten' issues

We are delivering a programme of WFD investigations to identify the issues impacting Wales' water environment and the solutions. Our evidence base shows the top 10 issues impacting Wales' water environment are:

- 1. Agricultural Pollution
- 2. Artificial barriers to fish migration
- 3. Abandoned mines & contaminated land
- 4. Forestry
- 5. Acidification
- 6. Sewage discharges
- 7. Impoundments
- 8. Flood protection & land drainage
- 9. Urban & transport development
- 10. Surface water abstractions

We are working with the many different codeliverers who need to take action, including land managers, farms and businesses, water companies, the third sector (voluntary and charitable groups), local communities, planners and public bodies.

This newsletter includes examples of some of the work that is going on to solve these. If you have a story to tell, let us know and email Jill Brown



Tackling agricultural pollution

Farming is an important and valuable part of Wales' culture, economy and landscape, but poor practices on many farms are damaging our water environment. Agricultural pollution is an issue in 16% of our failing water bodies. We need farmers to improve their environmental performance and manage fertilizers, manure, sediment (soil), pesticides and livestock so that they do not impact our rivers, streams, lakes and coasts and ground waters.

Livestock Keep Out!

Fish populations are very vulnerable to the impacts of sediment. If large amounts of sediment are washed into a river, it can damage fish gills, reduce fish growth and suffocate salmon and trout eggs.

Erosion of river banks caused by the hooves and feet of farm livestock (known as poaching) is a common issue which increases the amount of sediment washed into rivers.

On the Dwr Ial (near Ruthin, Denbighshire) farmers and the Clwyd & Conwy Rivers Trust have worked in partnership to solve the sediment issue. They have fenced the riverside to keep farm animals away from the banks, built drinking bays, and stabilised banks by planting willow. This will reduce erosion and improve the habitat for fish.

For more information contact: Nichola Taylor



Fencing completed at Dwr Ial

Curing the Frothy Trothy

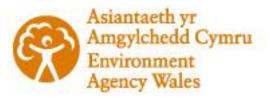
Last year we carried out a survey of the River Trothy (Monmouthshire) and found many farming issues impacting the water quality. We have been working with the farmers and Farming Unions to raise awareness and tackle issues.

By carrying out soil sampling, we have helped farmers improve nutrient management on their farms, which can save them money and reduce the risk of pollution. Some farms have fenced off streams and planted trees, and one dairy farm has created a wetland and reedbed which will reduce run-off from a farm road used by cattle during the summer. Over 25 farmers recently attended feedback sessions.

For more information contact: Ioan Williams

No fear with Glastir

Glastir is the new voluntary land management scheme for Wales. It pays land managers to help combat climate change, improve water management, and maintain and enhance biodiversity. We have worked with the



Countryside Council for Wales and Welsh Government to ensure that Glastir will help deliver a better water environment through its Targeted Element.

This year we are working with more than a hundred farmers who have joined Glastir in catchments identified as a priority for water. For each farm, we are producing a Water Management Plan and a Nutrient Management Plan. These plans will help farmers reduce their impact on the local water environment by changing to more sustainable agricultural practices.

For more information email: Zoe Frogbrook

Removing artificial barriers to fish migration

Salmon are forever

Along the rivers and streams of Wales, there are many structures such as weirs, bridge foundations and culverts which prevent migratory fish from swimming upstream to spawn. 11% of Wales' failing waters are caused by these barriers.

The Salmon for Tomorrow project aims to remove barriers to fish migration and improve their habitat. It is a partnership between Environment Agency Wales, Afonydd Cyrmu and Rivers Trusts and is funded by the European Fisheries Fund and the Welsh Government.

In November 2011, Salmon for Tomorrow completed a new fish pass at Caergwle Weir, on the River Alyn (near Mold), which will benefit 22km of river upstream. Last year the

project opened up a total of 299km of river across Wales.

For more information contact: <u>Julian Bray</u> or go to Salmon for tomorrow project



Fish Pass at Caergwle Weir

Tackling abandoned mines & contaminated land

Cockles and mining alive alive oh

The industrial history of Wales has left its mark on the water environment. Pollution from abandoned mines, spoil heaps and old industrial sites impact water quality and fish populations in 10% of failing water bodies. In particular, water draining from old mines can contain high concentrations of metals such as iron, zinc and lead which are toxic to fish.

At the abandoned Cwm Rheidol mine (near Aberystwyth) we are piloting a new treatment process which uses gravity and a mixture of waste products, including cockle shells and compost to remove poisonous metals from mine waters which eventually flow into the River Rheidol.



For more information contact Paul Edwards



Pilot plant substrate before flooding

Tackling forestry issues If you go down to the woods today

Forestry plantations and operations can damage our water environment. The main issues are pollution of streams and rivers with sediment during planting and harvesting of trees, use of pesticides which are highly toxic to insects which live in water, and culverts and bridges which prevent the migration of fish. 7% of Wales' failing water bodies are impacted by forestry.

We are working with Forestry Commission Wales (FCW) to improve our understanding of their impacts on the water environment and the solutions they need to deliver. In the Coed y Cymoedd Forest District (South Wales), FCW and Neath Port Talbot Council are carrying out surveys which will identify issues. These will be used to develop work programmes which will improve the way they manage habitats on river and stream banks and tackle issues such as invasive species.

For more information contact John Wheadon.

Plant a tree, help a fish

Trees are good for the water environment. River banks provide shading which is important for fish and they can act as a buffer strip to reduce the risk of pollution from adjacent land.

We are working with the Woodland Trust in sites across Wales to restore the health of streams by planting native trees on fenced river banks. Contact <u>Kyle</u> Young for more information.

No more holes, just voles

In the Marteg catchment (Upper Wye near Rhayader), the Radnorshire Wildlife Trust are delivering an exciting Living Landscapes project. The Trust is working with partners, including FCW and the local community to create a wet woodland and marshy landscape, by blocking drainage ditches and changing land management. The habitat will benefit local fish and water vole populations and is also a valuable resource for local school children learning about the environment.

For more information contact Darylle Hardy at Radnorshire Wildlife Trust

Reducing the impact of the built environment

Wales is a rural country, but our towns, cities, industry, roads and built landscape still impact on the water environment. Urban and transport developments have modified many of our water bodies, flood protection structures



have been built, drainage changed, and new sources of pollution introduced.

Developing green and blue cities

Water Sensitive Urban Design (WSUD) is a holistic approach to planning development within the limits of the water environment which has been implemented in Australia, the US and Europe. We are working with the Construction Industry Research and Information Association, Dŵr Cymru Welsh Water, housing associations, local authorities and communities to undertake a scoping study and develop the business case for water sensitive urban design in Wales. We believe WSUD can help us more cost-effectively manage water resources, reduce flood risk, and enhance biodiversity in the face of climate change. Pilot studies are being developed to support evaluation of the benefits from this approach.

For more information contact Aaron Burton

Dee Day!

Businesses of all shapes and sizes need to be aware of how to manage their impacts on the water environment. Water is an essential resource for all businesses and many handle and store materials that can be toxic if they get into the water environment - oils, chemicals and even milk are pollutants, which can cause damage.

During March, we are running an awareness campaign in the Dee River Basin District. We will use green dye to show how quickly pollution can travel from a drain into the river. We want businesses to ensure they have a pollution plan which in the event of an accident

will help minimise loss of materials, whilst protecting human health and the environment.

For more information contact: Lynda Bigland

Float my moat

We are working with Dŵr Cymru Welsh Water and Monmouthshire County Council on a long term plan to restore the Nedern Brook in the historic town of Caldicot. The brook which flows through the castle grounds has been damaged by wrongly connected drains which pollute its waters and a build up of silt in the stream bed, mainly due to land management issues.

We have worked with the water company and local authority to solve drain misconnections and repaired riverside fences to prevent livestock damaging the banks. Recently, sediment was removed from 5km of the brook improving the flow of water.

A healthier and more attractive brook, will be good for local tourism, people and wildlife.



Nedern Brook - before removal of silt...





... and after removal of silt

For further information: contact Jeremy Tanner

Yellow fish found on road!

Keep Wales Tidy will raise awareness of the impacts pollution from our roads and urban areas can have on our rivers. The 'Yellow Fish Campaign' will engage school children, businesses and the public by painting yellow fish next to drains.

Contact Kyle Young for more information.

And finally...

Register your Septic Tank

Poorly maintained septic tanks are contributing to poor water quality in rivers, lakes and coastal waters. There is also a danger that pollution from septic tanks could contaminate private water supplies from wells, boreholes and springs.

More than 25,000 people in Wales have now registered their septic tank or small package treatment plant. We have written to 90,000 people who may have a septic tank to tell them about the requirement to register under regulations introduced in 2010. We are also

working with local authorities to contact as many people as possible.

By knowing the location of septic tanks, we can check for any that are poorly maintained that could be the cause of pollution. You can also help by making your friends, neighbours and family members aware of this requirement.

For the majority of people, registration is a simple, free of charge process and a one off requirement. You can register on our website or call 03708 506 506 and ask to speak to an advisor.

Supporting Third Sector Delivery

We recognise the Third Sector (voluntary and charitable organisations) have an important role to play in delivering many environmental improvements. If you are part of a third sector group and have an idea for a project which will deliver improvements to our water environment and are looking for funding, contact Angela Ellis, External Funding Officer for more information.

Invasive Weeds Conference

Thanks to the Welsh Dee Trust for organising an Invasive Weeds Conference during February 2012. The event was well attended by a varied range of organisations and groups. Discussion focussed on how to tackle invaders such as Japanese Knotweed, Himalayan Balsam, and Giant Hogweed and the value of riverside corridors. A Steering Group was established to help develop a catchment- wide management plan and programme of work for next year and beyond. The Trust are keen to share information from the day. Visit The Welsh Dee Trust.



Forward Look for 2012

12 to 18 March: Climate Change Week
13 March: Western Wales Liaison Panel

15 March: Severn Liaison Panel 31 March: (8.30-9.30am) Earth Hour 05 June: World Environment Day

18 to 22 June : Sustainable Energy Week

19 Sept: Dee Liaison Panel

26 Sept: Western Wales Liaison Panel

For more information on your River Basin District Contact:

<u>Ceri Jones</u> for Dee and Western Wales <u>Chris Tidridge</u> for the Severn.

Want environmental information on your area?

Visit 'What's in My Back Yard'

Report Pollution Incidents

Help your local environment by reporting any incidents of pollution, illegal tipping of waste, poaching, fish in distress, or danger to the natural environment to Environment Agency Wales, via the 24 hour free phone number 0800 80 70 60.

How your business can help the environment?

Visit NetRegs guidance on environmental topics and guidance for businesses go to NETREGS is on the move. For more information go to the Business Wales website

WFD made simple

The Living Waters Wales video can be viewed on our Facebook page:

https://www.facebook.com/pages/Environment-Agency-Wales-Asiantaeth-yr-Amgylchedd-Cymru/176369212377249 We're looking to promote stories of delivering improvements to the water environment. Make us aware of any activities that you or your organisation are doing to help improve Wales' waters.

If you want to contribute to or receive future newsletters - contact Jill Brown

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