



Living Waters for Wales Update Spring 2017

Welcome to the sixth Water Framework Directive (WFD) update from Natural Resources Wales, filled with examples of projects which are delivering a better water environment for the people, environment and businesses of Wales. Be inspired and tell us your story. Contact [Jill Brown](#)

Award Winning Healthy Rivers Project

The aim of the Groundwork Wales Healthy Rivers program is to improve river habitats, enhance the local environment and realise the potential in urbanised areas to support fish populations by removing manmade barriers to migration, creating new habitats, improving connectivity and water quality. In doing so, this is helping to achieve good status under the WFD.

It engages local communities by offering volunteer opportunities, community river care days, training opportunities and involving primary schools to make them aware of the importance of the environment.

The project has grown from a small scale pilot in 2012, attracting further funding from Natural Resources Wales (Sustainable Fishery Programme, Competitive fund), South East Wales Rivers Trust, Caerphilly County Borough Council, Dŵr Cymru Welsh Water (WFD fund), Tesco and a few other local organisations. Other partners now include Blaenau Gwent County Borough Council and Keep Wales Tidy. However, the future is uncertain with funding constraints for all the partners concerned.

It is a great example of a project delivering multiple benefits; WFD, biodiversity, community engagement, educational awareness, flood risk, environmental management, health and well-being, sustainable management of natural resources and fisheries not just to meet the goals of Natural Resources Wales but other partner organisations with like-minded commitments. More detail can be found in the [Healthy Rivers Project Report](#).

For more information contact [Michael Clyde](#), NRW South East Wales Sustainable Fishery Project Manager and [Gail Devine](#) Groundwork Programme Manager.

Nant Cylla Community River Clean Up

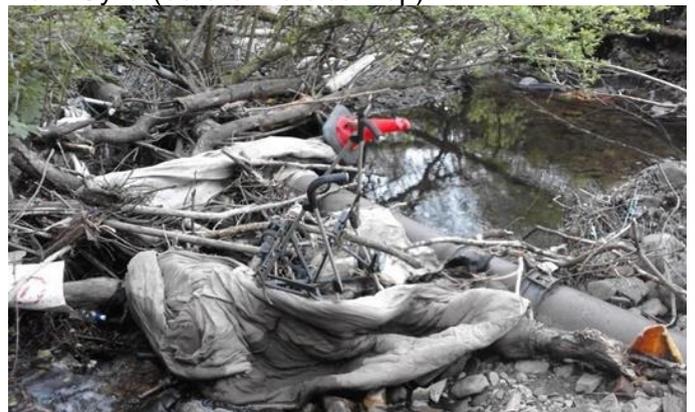
The Nant Cylla is a tributary of the River Rhymney and flows past a new housing development on the outskirts of Ystrad Mynach.

Local residents were concerned by the amount of litter and waste along the river so asked Healthy Rivers and Keep Wales Tidy to organise a river clean-up for the community. A sewer pipe crosses the river at this location which had been trapping large quantities of rubbish forming a barrier to fish migration along the river.

The Healthy Rivers Project and Keep Wales Tidy organised a river clean up on a Saturday morning so that local residents could take part in the clean-up. Twenty residents from the new housing development took part in the river clean up. They removed over 1.5 tonnes of litter and rubbish from the river which included fence panels, plastic sheeting, scaffold poles, push chairs, corrugated metal sheet, car tyres and traffic cones.

The river blockage was successfully removed and allowed free fish migration along the river. As soon as the blockage was removed, trout could be seen swimming under the pipe.

Nant Cylla (before the clean-up)



Nant Cylla (after the clean-up)



(Photo credits Michael Clyde)

The Healthy Rivers Project won the Urban Community Project category at the UK River Prize Award on 4 April 2017. The project was shortlisted for the overall prize. The [UK River Prize](#) is run by the River Restoration Centre.



Presentation of the Urban Community Project, UK River Prize Award (Photo credit Jill Howells)

Invasive Non-Native Species

The GB Non-Native Species Secretariat (GB NNS) held an Invasive Species Week on 27 March 2017. During the week, many organisations, groups and businesses including Natural Resources Wales, National Trust, Angling Trust and local action groups held events to raise awareness of Invasive Non-Native Species (INNS) to inspire people to take action to prevent their spread.

Natural Resources Wales promoted biosecurity training, recording sightings and raised awareness of alert species, for example, the Asian hornet to staff throughout Wales. For more information on INNS including biosecurity e-learning, how and where to record, alert species and resources for local action groups see the [GB NNS](#) website.



NRW INNS event (photo credit Hilary Foster)

Tackling failing water bodies

The Fisheries Technical Team have looked at three water bodies with fish failures in South West area that are identified as 'target' water bodies in the Western Wales River Basin Management Plan.

On the Pelenna in the Afan catchment, 8 obstructions to fish passage were found, ranging from forestry culverts to perched bridge ramps. Fish easement scopes have been developed by the team, and whilst some remedial actions have been identified for third parties to implement in order to deal with the obstructions, project funding will be required to address the remainder, which is currently being explored.

A survey of the Burry Pill on North Gower identified a number of issues where riparian habitat could be improved, along with several contributors to siltation. This has assisted the local Natural Resources Management team in pursuing appropriate remedial actions.

On the Eastern Cleddau, 15 large log jams causing various degrees of fish passage obstruction were found within Longford Brook. There were also channel re-alignment issues and poached cattle drinking areas. Remedial actions have been identified, but require funding. For further information contact [Trevor West](#)

Community shows its love for Llyn Padarn

'Loving our Lake' began in 2012 funded by Dŵr Cymru Welsh Water through the WFD. An important requirement of the WFD is considered in relation to eutrophication of freshwater bodies, which impacts upon biodiversity and in extreme cases results in algal blooms.

In 2009, Llyn Padarn suffered a severe algal bloom, impacting upon the local economy, community and wildlife. Without reductions in the amount of nutrients entering the lake the threat of further algal blooms

remained. As a part of the collaborative approach to reduce nutrient pressures on the lake ecosystem 'Loving our Lake' used Community Based Social Marketing techniques to promote three key behaviours;

- Switch to phosphate-free dishwasher detergent
- Empty septic tanks every 1-2 years
- Stop the Block: only flush human waste and toilet tissue down the toilet

By encouraging the adoption and embedding of these behaviours within the local community and businesses it was envisaged that they will contribute to a reduction in the levels of nutrients in the lake. It also encourages the community and visitors alike to be more aware of the lake ecosystem and the importance of conserving its ecology. Furthermore, by raising awareness of the complexity of managing the lake, the work of the statutory agencies has been more widely appreciated and understood.

Many interventions were trialled during the project and lessons learnt, for example;

- Llyn Padarn is a SSSI designated for its unique population of Arctic Charr, however, most people never get to see the beautiful fish they are helping to protect. An amazing Charr video posted on www.facebook.com/llynpadarn reached over 33,000 people.
- As well as awareness raising and prompts to behaviour change, 'Loving our Lake' has trialled a number of initiatives designed to reduce nutrient/pollution inputs from specific sources, for example;
- 'Looking after your septic tank: A guide and logbook for householders' - sent out to all households in the Llyn Padarn catchment who are not on mains drainage, the text has formed the basis for national guidance.
- Drain markers for surface water drains: these bilingual gully markers state 'only rain down the drain', acting as a reminder that disposing of substances other than water down street/yard drains can cause pollution.
- 'Pollution prevention guidance for small businesses': printed on waterproof paper, this booklet is designed to hang on business notice boards as a permanent reference source for staff.

Tony Harrington, Director of Environment Dŵr Cymru Welsh Water said: 'We are pleased to have been able to work with our third sector partners on driving this project forward. It has helped us understand one of the communities we serve much better, and engage to produce a more sustainable

outcome for them, one we hope they will be proud to see handed to the next generation.'

Since 2015 the project has been funded by Dŵr Cymru Welsh Water and Natural Resources Wales. Funding comes to an end in March 2017 and although 'on the ground' activities will stop, its social media presence will continue for the foreseeable future.

For further information contact emma@snowdonia-active.com.



Photo credit Emma Edwards-Jones

Reconnecting Green and Blue Infrastructure

The Lower Swansea Valley, in the Tawe flood plain, was an area of extensive industrial activity between the 18th and 20th centuries. Today, it is redeveloped and is now home to a large retail and commercial estate of regional significance to the Welsh economy.

The Lower Swansea Valley flood risk management scheme was located 2 miles north of Swansea City Centre and reduces the risk of flooding to some 300 businesses and homes. Over a 4km reach, the River Tawe's capacity has been increased by creating more space for water to flow, removing restrictions to flow and raising low spots along the river banks. The flood embankments have been set back from the river to create a 6 hectare natural wetland habitat (see picture). Protecting and restoring wildlife habitats is an important issue for the WFD. There were also specific creation targets, including new areas of wet grassland, wildflower meadow and wet woodland.

The work was developed through a collaborative partnership with the City and County of Swansea and completed in 2014. As the major landowner and stakeholder, the local authority helped to ensure that the scheme not only delivered the flood defence objectives but would also enhance the environment and landscape. The creation of a natural wetland provides the necessary environmental requirements to enhance the ecological status of the River Tawe. This demonstrates how WFD can deliver integrated solutions to improve the environment for people, the economy and wildlife of Wales. For further information contact [Mark Davies](#)



**Naturalised wetland, Lower Swansea valley
(photo credits Mark Davies)**

Improving habitat for salmon and sea trout in Denbighshire

The free passage of migratory fish is a key activity under the WFD. Along the rivers and streams of Wales, there are many structures such as weirs, bridge foundations and culverts which prevent or hinder fish from swimming upstream to spawn. Some of Wales' failing waters are caused by these barriers.

In 2003, a fish pass was built at Bontuchel on the River Clywedog a tributary of the River Clwyd and it was thought that this would open up 15km of new spawning habitat for fish. However, the Bontuchel fish pass had only opened up 8km of spawning habitat as a high percentage of fish could not travel beyond another barrier upstream.

The Clwyd, Conwy and Gwynedd Rivers Trust approached Natural Resources Wales to investigate if any work could be undertaken to create more access upstream. The Trust suggested the removal of a partial barrier on the River Clywedog, a major spawning tributary on the Clwyd. This work was completed last year to create steps and pools so fish can recolonise this tributary. The Trust funded the work as they had funds available from a net fishery buy out several years ago. The completed project now allows salmon and sea trout to reach an additional 7km of spawning area. All of this was achieved with the help of the Clwyd, Conwy and Gwynedd Rivers Trust. For more information contact, [Alan Winstone](#) Trust Chair and [Richard Pierce](#), NRW Fisheries Officer.

Clywedog Fish Easement (before)



Clywedog Fish Easement (after)



Photo credits Richard Pierce

Working together to improve the water environment

Dŵr Cymru Welsh Water welcomes the opportunity to encourage and support projects proposed by the third sector that will help deliver WFD outcomes and objectives with respect to Dŵr Cymru Welsh Water's interests within its supply area. 'Loving our Lake' and the Healthy Rivers project were both funded by Dŵr Cymru Welsh Water's funding scheme.

Applicants are invited to develop proposals in line with the objectives set out. Dŵr Cymru Welsh Water are keen to support projects that will deliver positive outcomes under the WFD and thereby deliver best value solutions for communities and the environment. Contact the Environment Team at (wfd@dwrcymru.com) to express your interest in applying for financial support to deliver a project.

Free pesticide disposal scheme to protect water quality launched

Dŵr Cymru Welsh Water has launched a new initiative to encourage farmers, growers and landowners in targeted areas to consider 'smarter' ways of weed, pest and disease control that do not impact on people, water or wildlife. PestSmart, a joint initiative between Dŵr Cymru Welsh Water and Natural Resources Wales. It is supported by the Welsh Government and the agriculture and environment sectors and encourages people to consider the way they manage their land to help improve raw water quality before it reaches water treatment works.

The free and confidential pesticides disposal scheme is available for land managers in the Teifi, Upper Wye, Towy, Pendine, Cefni and Alaw catchments and is available for a limited time on a first come, first served basis.

Bob Vaughan, NRW's Sustainable Land Use Manager said, "Protecting our natural resources of water, soil and air is essential for a sustainable environment. And whilst we know that pesticides play an essential and everyday role for farmers and land managers in Wales they can have a serious impact on our environment unless they are stored, used and disposed of correctly.

"We are pleased to work with Dŵr Cymru Welsh Water and Chemclear to help land managers safely dispose of their unused, unwanted and unlicensed chemicals and we encourage them to sign up and take advantage of this scheme".

Ian Christie, Managing Director of Water Services at Dŵr Cymru Welsh Water said, "Our routine raw water monitoring programme has detected increasing traces of pesticides in areas we have never seen them before. While these levels are too low to pose a risk to those drinking the water, they are enough to breach rigorous drinking water standards so we want to work with land managers to take action to address this issue together.

To register, visit www.dwrcymru.com/pestsmart or call 01286 832964 by 31 May 2017. Your details will be passed on to an independent waste contractor who will contact you for further details before

collecting your unwanted pesticides and herbicides on a pre-arranged date.

Details of the disposal scheme were featured on Ffermio on 8 May 2017 and is available through iplayer.

Summary of progress

2016 was the first year of the River Basin Management Plan for the second cycle. A delivery plan has been produced to set out the overall approach that makes commitments to national measures, local measures and a programme of investigations. Progress will be tracked based on the operational delivery plan, tracking the Programme of Measures for our strategic commitments and monitoring the environmental improvements in water bodies by 2021.

National Measures

All national measures to improve ecological status must be made operational within three years of the RMP being published. National measures will be reviewed and updated as necessary. New or revised measures are to be made operational by 22 December 2018. We are tracking delivery of the national programme to meet the progress target for Western Wales and Dee river basin districts.

Local Measures

Delivery Plans are being developed for locally targeted measures in the North, South West and South East Wales Areas.

Key areas of work:

Classification

Natural Resources Wales is moving to a triennial classification for rivers, lakes, coasts and estuaries. The next reporting will be in 2018 using 2014-2016 data and will feed into the Programme of Measures reporting to Europe. Groundwater reporting remains on a 1 in 6 year basis and will be reported in 2021 with the other water body types using 2017-2019 data.

There are some potential changes for the classification of certain river types that were protected under the Freshwater Fish Directive. The decision on whether to introduce the relevant Dissolved Oxygen standard for these rivers is yet to be finalised. We will continue to work the Environment Agency to ensure that the best outcomes for the cross border river basin districts are achieved.

Monitoring Programme

Natural Resources Wales is currently reviewing the approach and timescales for the monitoring

programme, this includes additional monitoring specifically for WFD. We are working to ensure that any opportunities to work with Water Companies and the Coal Authority on investigative monitoring are maximised. Further details will be shared when available.

What's next?

We will continue to track progress with delivery of national and local measures and the investigations programme.

We need to build on the Delivery Plan for year 2 of the River Basin Management Plans to enable partners and stakeholders to work more collaboratively. This is a key priority for Year 2.

The updated River Basin Management Plans (RBMPs) are available here:
<https://naturalresources.wales/evidence-and-data/research-and-reports/water-reports/river-basin-management-plans-published/?lang=en>

The next statutory consultation will be the Working Together consultation in 2018 which will be followed by the Significant Water Management Issues consultation prior to developing the river basin management plans for the third cycle. Both Natural Resources Wales and the Environment Agency are considering the approach for this work.

Forward Look

The Dee and Western Wales Liaison Panels met during May. The Panels will meet next during the autumn. Minutes are available on the [website](#)

Severn Liaison Panel:

Liaison Panels in England have been disbanded, with the final round of meetings being held in March 2017. Local arrangements, involving catchment partnerships and area teams are being put in place to replace the English only river basin scale meetings.

For more information on the RBMPs: contact: [Ceri Jones](#) River Basin Programme Manager.

Visit the Natural Resources Wales website for more information.

<http://naturalresourceswales.gov.uk/splash?orig=/>

[Water Watch Wales Map Gallery](#)

Help your local environment by reporting pollution incidents, illegal waste tipping, poaching, fish in distress, or danger to the natural environment to Natural Resources Wales via the 24 hour free phone number 0300 065 3000 (press 1 for 24 hour service).

We're looking to promote stories of delivering improvements to the water environment. Make us aware of any activities that you or your organisation is doing to help improve Wales' waters. If you want to contribute to or receive future newsletters - contact [Jill Brown](#)