

Meirionnydd Management Catchment Summary

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1. Background to the management catchment summary

This management catchment summary supports the 2015 updated **Western Wales River Basin Management Plan (RBMP)**. Along with detailed information on the **Water Watch Wales (WWW)** website, this summary will help to inform and support delivery of local environmental improvements to our groundwater, rivers, lakes, estuaries and coasts. Information on **WWW** can be found in Section 6.

Natural Resources Wales has adopted the ecosystem approach from catchment to coast. This means being more joined up in how we manage the environment and its natural resources to deliver economic, social and environmental benefits for a healthier, more resilient Wales. It means considering the environment as a whole, so that all those with an interest in the catchment weigh up the evidence and set priorities for the many competing demands on our natural resources in a more integrated way and achieve our shared ambition for the place.

The Water Framework Directive (WFD) provides a major overarching framework for river basin management. The Floods Directive sets out a strategic approach to flood risk management planning. An updated Flood Risk Management Plan (FRMP) has been produced in parallel to the 2015 updated **Western Wales RBMP Summary**. The FRMP details how we propose to manage flood risk across the river basin district by prioritising those communities that are most at risk of flooding and detailing the measures we intend to take to manage their risk.

The FRMP and the RBMP together will shape important decisions, direct investment and action, and deliver significant benefits to society and the environment.

2. The Meirionnydd Management Catchment

Figure 1. Meirionnydd Management Catchment map



Agriculture and forestry are the predominant land uses in the Meirionnydd management catchment which extends from Borth on the southwest coast to southern end of Llyn Trawsfynydd. The area covers the catchments of the Dyfi and the Mawddach, as well as the mountain range of Cadair Idris and a long coastal strip extending south from Harlech.

There are large areas of forestry in the Dyfi valley and to the north of Dolgellau, however elsewhere agriculture dominates, predominantly sheep farming in the upland areas. The area has a rich history in mining activity dating back to Roman times and abandoned metal mines give rise to elevated metal concentrations in parts of the catchment.

Much of the Meirionnydd catchment area lies within Snowdonia National Park. Wales' only UNESCO biosphere area is in the Dyfi Valley. In the Dyfi biosphere, communities work to balance the conservation of biodiversity with sustainable use of the area. There are several EU bathing waters in this catchment and shellfish beds in the Dyfi and Mawddach estuaries. Tourism is of great economic importance to the area and provides diverse leisure opportunities to enjoy the coastline, mountains and estuaries. There are also many coastal, estuarine and inland sites designated for conservation and biodiversity purposes.

In anticipation of the Environment Act, NRW undertook 3 area based trials in the Rhondda, Tawe and Dyfi between 2014 -16. The key learning from the trials has been captured. This learning has been important in framing the discussions as the Environment Bill was scrutinised, in developing the guidance underpinning the Act and in helping to prepare NRW for the requirements of the Act. The Dyfi is also one of three areas in Wales where we have been trialling an approach to natural resource planning/management. The purpose of the trials was to work with local stakeholders in determining how natural resources are best used and managed and to inform how we might develop Area Statements. A key element of this is understanding what roles our environment plays in supporting wider society. Our aim is to ensure that our environment is used sustainably, whilst at the same time we are responding to local needs, delivering benefits for people and business.

In January 2014 a Meirionnydd management catchment workshop was held at Coed Y Brenin Visitor Centre near Dolgellau. During this event the benefits of the catchment were captured. These included:

- High landscape value from the wild character of the uplands in the Rhinogs to the coastal scenery.
- Tourism and recreation safe beaches, range of recreation opportunities throughout catchment, though further scope to enhance recreation access to woodland and water.
- Forests and woodlands for their ecological richness e.g. Meirionnydd oakwoods but also for timber production, wood fuel, recreation and jobs. The potential impact of tree diseases on the landscape was also noted.
- Biodiversity salmonids, pearl mussels, coastal dune, woodland, riverine and upland habitats and species, reflected in SAC and SSSI designations
- Rural communities farming for sheep and beef, Welsh language, local tradition and enterprise.

Natural Resources Wales continues to work in partnership with a range of partners and sectors in innovative ways so that we can achieve even more together. A flavour of some of the projects that have been delivered within this management catchment over the last 3 years together with projects in development are included below:

For further information on projects please refer to WWW.

Table 1. Partnership projects in the management catchment

Project Name	Project Description	Partners	Funding sources
Map & eradicate invasive weeds.	In the Mawddach catchment members of the Prince Albert Angling Society worked to tackle invasive plant species and restore streamside habitat.	Prince Albert Angling Society	WFD Third Sector Organisations (TSO) Fund
Dyfi Living Rivers Project	On the Nant Gwydol & Dulas South Rivers partners worked together to restore river catchments.	Montgomeryshire Wildlife Trust, New Dovey Fishery Association, National Farmers Union of Wales.	WFD TSO Fund

Case study - Prince Albert Angling Society (PAAS) - Mapping & Eradicating Japanese knotweed & Himalayan balsam on the Hengwrt Estate

Working in partnership with NRW - PAAS successfully obtained funding to 'Map and Eradicate Invasive Weeds' on Hengwrt Estate waters on Afon Mawddach & Afon Wnion in May 2012. The funding was used for training volunteers and to purchase equipment to carry out the work.

Future plans include continuing work on the Hengwrt Estate (constant difficulties with window of opportunity e.g. time of year, weather, river conditions & tides), and extending it further to other PAAS waters within Meirionnydd.

There is a continual threat from surrounding areas that are untreated and the anglers are well aware that a whole catchment approach is required. They are in touch with others in the area e.g. NRW work to clear Japanese knotweed as part of the Dolgellau flood alleviation scheme and have linked in with Snowdonia National Park's "Snowdonia Japanese Knotweed Project" which could provide wider coordination for mapping and a future management strategy in the national park.



2.1 Key facts¹

We use the term water bodies to help understand and manage the water environment. A water body is part, or the whole, of a river, lake, ground water or coastal water. The number and type of water bodies in the management catchment is shown in the table below.

Table 2. Number and types of water bodies

Number of water bodies	Natural	Artificial	Heavily Modified	Total
River*	46	0	8	54

¹ There are differences in water bodies and protected area numbers compared to the first cycle plans and second cycle plans. This is due to changes in the water body network as well as refinement of the mapping methodologies and rules between water bodies, management catchments and protected areas.

Lake	6	0	5	11
Coastal	1	0	0	1
Estuarine	3	0	1	4
Groundwater	1	0	0	1
Total	57	0	14	71

^{*}River water bodies includes canals and surface water transfers

There are areas in the catchment where the water environment is recognised as being of particular importance, including rare wildlife habitats, bathing waters or areas around drinking water sources. These areas are known collectively as protected areas and are detailed in the table below.

Table 3. Number and type of protected area

Protected Area	Number
Bathing Waters	8
Drinking Water Protected Areas	9
Natura 2000 and Ramsar sites	14
Nitrate Vulnerable Zones	0ha
Shellfish Waters	2
Urban Waste Water Treatment Directive - Sensitive areas	0

3. Current Status of the water environment

We assess the condition of water bodies through monitoring which produces an overall classification. The current status for each water body is shown in figure 2. Note, since 2009, we have updated some of the systems we use to classify water bodies, including changes to some standards and water body boundaries.

Within this management catchment 39% of surface water bodies are at good overall classification status, 59% at moderate and 3% at poor overall status. There are no water bodies at high or bad overall status.

Cyfoeth Naturiol Cymru Natural Resources Wales Overall Status of Water Bodies in Meirionnydd The overall status shown for waterbodies on this map is the cycle 2, 2015 classification Legend **Overall Status** High Afon Mawddach Good Moderate Poor Bad Not assessed Waterbodies are coloured according to the legend above. Rivers, surface water transfers (SWT) and canals are shown as lines, lakes are shown as points and transitional and coastal waters are shown as areas. Lakes Rivers, canals or SWT Coastal or transitional ---- Wales England Border Tywyn Machynlleth Management catchment Other management catchments 0 2.75 5.5 **⊐** Km © Crown Copyright and database right 2016. Ordnance Survey licence number 100019741. © Hawlfraint a hawliau cronfa ddata'r Goron 2016. Rhif Trwydded yr Arolwg Ordnans 100019741. O Natural Resources Wales copyright and/or database right 2016. All rights reserved © Hawlfraint a/neu hawl cronfa wybodaeth Cyfoeth Naturiol Cymru 2016. Cedwir pob hawl. O Database Right/Copyright NERC - Centre for

Figure 2. Current status of the Meirionnydd Management Catchment (2015 classification)

Ecology & Hydrology.

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4. The main challenges

We have carried out a programme of investigations to better understand the causes as to why water bodies are failing to meet the required standards. The results of our findings are summarised in Figure 3. The reasons for not achieving good status are listed under the Surface Water Management Issues (SWMI) in line with the updated RBMP. The graph below shows the number of water bodies listed under each SWMI to give an indication of the main issues in the management catchment, each water body may have more than one reason for not achieving good status.

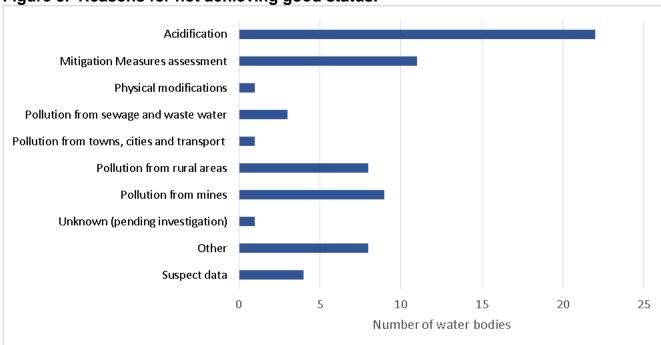


Figure 3. Reasons for not achieving good status.

Discharges from abandoned mines are a significant issue in this catchment particularly on the Dyfi and Mawddach where sources include the Dylife lead mine and Gwynfynydd gold mine respectively. Acidification due to atmospheric deposition sometimes exacerbated by natural conditions, mining or forestry is also identified as a problem in parts of the Dyfi and Mawddach. Acidification can cause toxic metals to leach out of the soils and enter rivers, which can cause problems to aquatic organisms. Bacteria from waste water treatment and diffuse sources pose a risk of bathing and shellfish waters failing to meet EC quality standards around the Meirionnydd coastline.

4.1 Feedback on challenges

We need to work together to ensure the overall aims of the Water Framework Directive are met, in order to work together effectively we need to agree on the issues and solutions. The following section includes some of the issues that were raised as part of the consultation and the catchment workshop, however it is not a full list.

- Invasive non-native species e.g. Japanese knotweed, Himalayan balsam, mink
- Recognition that phosphorus is a limited resource, need to minimise waste and recycle where possible
- Local concern about impacts from beachcombing and cockling, also tidal litter
- Need to resolve conflicting demands and uses of the environment to the satisfaction of all, for example access for fishing and canoeing.

- Flooding increased rate of run-off from the uplands as result of land management (farming and forestry). Water reaches lowlands quicker and causes problem when coincides with tidal flooding
- Pollution from abandoned metal mines
- Diffuse pollution from rural land management e.g. sediments, nutrients
- Decline in aquatic habitats and species
- Integration with other plans

4.2 Dyfi natural resource management trial

In anticipation of the Environment Act, NRW undertook 3 area based trials in the Rhondda, Tawe and Dyfi between 2014 -16. The key learning from the trials has been captured. This learning has been important in framing the discussions as the Environment Bill was scrutinised, in developing the guidance underpinning the Act and in helping to prepare NRW for the requirements of the Act. Further information about the trials can be found on the links below:

Rhondda: https://naturalresources.wales/about-us/how-we-work/natural-resource-management-in-the-rhondda/?lang=en

Tawe: https://naturalresources.wales/about-us/how-we-work/natural-resource-management-in-the-tawe/?lang=en

Dyfi: https://naturalresources.wales/about-us/how-we-work/natural-resource-management-in-the-dyfi/?lang=en

5. Objectives and measures

This section outlines what we are aiming to achieve and the measures that need to be put in place. We aim to develop a single integrated programme of measures by 2021 that meets Water Framework Directive objectives, including:

Prevent deterioration in status

Water body status will not be allowed to deteriorate from the current reported status.

Achieve the objectives for protected areas

Achieve the standards set by the relevant directive under which they were designated. For water dependent Natura 2000 sites we will aim to achieve conservation objectives, achieving good status by 2021 is a milestone towards this objective.

• Aim to achieve good overall status for surface and ground waters Implement measures to achieve good overall status where they are technically feasible and not disproportionately costly.

5.1 Measures

We have reviewed the reasons why water bodies are failing to achieve objectives and identified required measures. Measures are divided into two groups:

National measures apply to the whole of Wales, or the United Kingdom. In general these set the legislative, policy or strategic approach. Examples include a national ban on using a particular chemical or a national strategy for prioritising and funding the remediation of abandoned mines. A list of planned national measures is available in the updated RBMP and Water Watch Wales,

Local measures are specific to the river basin district or a part of it. For example, the removal of invasive plants along a length of designated river or a local campaign targeting misconnections across an industrial estate. Many of the actions listed will also have multiple benefits. For example, sustainable urban drainage (SuDs) schemes help to reduce urban pollution, sewage pollution and changes to water levels. The table below summarises the types of local measures required for the management catchment, based on RNAG and protected area requirements. It includes actions from the N2K Actions database that will help the SAC/SPA/Ramsar to achieve favourable conservation status for water dependant features; for example: implementation of appropriate coastal management.

The high level categories describe the types of action required and broadly the options that are available, including voluntary and regulatory measures. At the local scale some of the options described might not be considered appropriate. There is overlap between some categories. The table also shows the number of water bodies that require the measure type, the water body numbers in this table should be used as a guide to show the significance of the issue in the catchment, and these numbers will change through the course of the 6 year programme. Up to date Reasons for Not Achieving Good (RNAGs) data is available on WWW and should be referred to before scoping local measures.

Table 4. Summary of required local measures in the management catchment.

Measure	Description	No. of water bodies
Acidification restoration	Emissions controls and upland restoration: blocking drainage, restoring blanket bog, within forestry	11

Measure	Description	No. of water bodies
	plantation blocking forest drains and establishing native trees within the riparian zone, liming options. Some overlap with "address air pollution".	
Address air pollution	Emissions controls to reduce nitrogen and acidic deposition. Some overlap with "acidification restoration".	15
Address point source pollution	Investigate and regulate pollution from point sources. Overlaps with "reduce pollution from sewage discharges" and "other waste water discharges".	12
Complete first cycle investigation	All ongoing WFD investigations from first cycle programme.	31
Drainage and water level management	Investigate and implement changes to land drainage regimes and structures to restore water levels.	21
Dredging and silt management	Includes reducing siltation at source through land management, and implementing sustainable dredging and silt disposal regimes.	7
Improve fish passage and habitat	Remove or modify barriers to fish passage	10
Improve flows and water levels	Reduce impacts of regulated flows and abstractions, restore more natural flow regimes, implement options to improve water levels, such as water efficiency and recycling measures, alternative sources and supplies.	12
Manage invasive non-native species	Eradication and/or management of invasive non-native species in line with current national invasive species Action Plans. Includes biosecurity good practice, such as "CHECK-CLEAN-DRY" and Be Plant Wise.	31
Mine water and contaminated land remediation	Coal and metal mine, and contaminated land remediation - including passive and active mine water treatment, capping of spoil, removal of wastes to landfill, and channel diversion	13
Mitigate impacts of flood and coastal defences	Reduce impacts of flood defence structures and operations - improve connectivity, habitat, and morphology by implementing	6

Measure	Description	No. of water bodies
	options through capital and maintenance programmes, such as soft engineering, opening culverts, upgrading tidal flaps, changing dredging and vegetation management. Includes the national habitat creation programme to address coastal squeeze.	
Mitigate impacts of water resource impoundments	Assess and implement options for improving fish passage and habitat.	2
New Investigation	Includes investigations for all new failures, deterioration, and drinking water protected areas.	42
Other sustainable land and marine management practices	Includes measures to mitigate impacts from construction and maintenance of infrastructure, including within military training sites (includes both active and redundant military sites).	1
Reduce pollution from other waste water discharges	Reduce pollution from other (non- sewage) point sources, both regulated and unregulated. Investigate and implement basic pollution prevention measures, including provision of up to date advice and guidance, such as correct handling and storage of chemicals and waste, management of trade effluent, and regulation.	1
Reduce pollution from septic tanks	Target actions to ensure septic tanks are maintained correctly. Where necessary issue formal works notices to owners to relocate or replace tanks and soakaways.	1
Reduce pollution from sewage discharges	Reducing pollution from continuous and intermittent discharges, includes additional treatment at sewage treatment works (e.g. phosphate stripping), investigating and tackling sewer blockages, and implementing sustainable drainage to reduce surface water drainage to sewers.	1
Specific habitat and feature works	Restoration and/or conservation of specific habitat and features, including natural (e.g. caves, geological outcrops) and human structures (e.g. bridges, ruins).	21

Measure	Description	No. of water bodies
Sustainable access and recreation management	Reduce the impacts of erosion, disturbance and damage from both water-based and terrestrial access, including tackling illegal off-roading.	29
Sustainable agricultural practices	Implement basic and additional measures such as correct management of slurry, silage, fuel oil, and agricultural chemicals; clean and dirty water separation; nutrient management planning; buffer strips and riparian fencing; cover crops and soil management. In N2K sites changes to grazing regimes may be required, includes scrub management. Within NVZs comply with storage and spreading regulations.	38
Sustainable fisheries management	Includes measures for both freshwater and marine fisheries to reduce and mitigate impacts	12
Sustainable woodland and forestry management	Restore the riparian zone, disconnect forest drains, monitor the effectiveness of the 5 principle risks associated with forestry and use forestry and woodland to reduce diffuse pollution.	27
Tackle misconnections and urban diffuse pollution	Investigate and solve misconnections to surface water drains (at residential and commercial properties) and implement sustainable drainage schemes (SuDs) to reduce diffuse pollution.	2
Waste management	Includes appropriate management of spoil and sludge, illegal fly-tipping and litter	12

Details for specific local measures can be found on **WWW**, some examples of actions that are already under way in the Meirionnydd catchment include:

- Welsh Water and private sewage dischargers are ensuring appropriate treatment of waste water.
- We have conducted pollution prevention campaigns in the Dyfi and Mawddach estuaries, sampling and visiting private properties and farms, to address diffuse sources of organic and bacterial pollution.
- We are monitoring the Mawddach to determine the extent of the pollution from the Copper Bog and Gwynfynydd Gold Mine, as part of work to develop feasible measures to address the issue.

- Natural Resources Wales is improving forest management to reduce the impact of acidification and protect rivers from sediment and remove barriers to fish migration
- On the Dyfi floodplain, we are working to restore natural processes to manage flooding and restore water levels in wetlands. This will benefit the internationally protected Cors Fochno bog and remove the long-term need to restore the flood banks, which are in poor condition.
- Snowdonia National Park Authority and partners are beginning work to develop a Japanese knotweed strategy.
- Afon Eden LIFE+ Project "Pearls in Peril" Large collaborative project with European Commission, Scottish Natural Heritage, SNPA, NWTRA and others. This programme includes fencing works to manage siltation and diffuse pollution, habitat restoration and creation ongoing to 2016/17.
- Natural Resources Wales is investigating potential impacts of abstraction on the ecology of the Eden and working with abstractors to find solutions.

Natural Resources Wales has worked with partners on the Angell, Dulas North, Nant Gwydol and Dulas South – middle water bodies as part of our focus during the first river basin cycle.

5.2 Feedback on priorities and solutions

Concerns on current status raised as part of the consultation and at the workshop have been highlighted in Section 4, solutions and priorities were also discussed. Of the issues raised, the following solutions were flagged:

- Increase capacity of uplands to retain water.
 Suggested solutions include: creating new storage areas, improved incentives either by better targeting of agri-environment schemes (Glastir and Glastir Woodlands) or other form of payment for ecosystem services, increased tree planting, soil and peat restoration. Use new aerator technology and plant different grass varieties. Solutions involve landowners (farming and forestry including NRW) and their advisors, as well as WG, NRW and NGOs but needs a lead. Potential role for insurance industry if can reduce flood risk. Multiple benefits of this approach, particularly if carried out at a catchment scale.
- Diffuse pollution from rural land management.
 Suggested solutions include: Provide more advice to farmers and landowners on tree planting possibly through a trial in part of catchment and on manure spreading; provide improved guidance to reduce pollution from septic tanks; need for agri-environment schemes to be longer term
- Pollution from abandoned metal mines.
 Suggested solutions include: Exclude stock from some areas, use specialist seed mixes or geotextile matting to encourage vegetation cover and reduce run-off from exposed spoil, re-align watercourses where needed, consider alternatives such as bio char, but remember unique biodiversity associated with some of the old mine areas. Snowdonia National Park Authority may be able to assist locally, continue work with NRW, WG, DEFRA, Coal Authorities and Universities to develop solutions and best practice.
- Need to resolve conflicting demands and uses of the environment to the satisfaction of all, for example access for fishing and canoeing.

Suggested solutions include: Use learning from elsewhere and trial in Meirionnydd e.g. Scottish model or Glaslyn system where gauges show river level is appropriate for canoeing, agreeing access and exit points for canoeists, dialogue needed between landowners, fishing clubs and Governing Body of the Sports, education required for both canoeists and anglers.

Decline in aquatic habitats and species Suggested solutions included: restoration of peat bogs and ditch blocking to hold back the water, riparian habitat restoration to act as buffer strip from land runoff and help prevent erosion.

Integration with other plans Suggested solutions included: Implementation plan showing lead organisations – better integration with Local Authority Plans and other stakeholder delivery plans.

5.3 Target areas for 2015-21

We have worked across Natural Resources Wales to develop an affordable programme of local and national measures, based upon our current understanding of existing resources. Our focus is:

- Preventing deterioration in all water bodies
- Within the Western Wales RBD improving compliance with good overall status in 21 water bodies that are currently moderate/poor, and also improving 4 poor water bodies to moderate.
- Targeting measures locally in an integrated way to deliver environmental improvements in WFD water bodies and Protected Areas, including areas protected for water habitats and species.
- Identifying where element level improvements will be achieved during the second cycle, but where further measures will be required to deliver an overall ecological status change.
- Developing our approach to natural resource management by working at a local catchment level and capturing the wider benefits delivered through WFD.

The summary provided below is not comprehensive, it provides a snapshot of the information currently available, and will be updated periodically – please refer to **WWW** for further information.

Table 5. Water bodies in the Meirionnydd management catchment that NRW will target to achieve an improvement in status by 2021

Water body ID	Name	Target status	Details
GB110064048830 GB31035056	Ysgethin Llyn Eiddew-mawr	Good by 2021	For further information on the target water bodies please refer to WWW

Investigations programme

All water bodies for which the cause of adverse impact is as yet unknown require investigation. This applies in the case of both failing water bodies and those that have deteriorated over the first cycle.

Natura 2000 programme – actions underway/planned

The RBMP programme of measures must include any measures necessary to achieve compliance with standards and objectives for Natura 2000 (N2K) sites listed in the register of protected areas.

The list below is a summary of sites where Prioritised Improvement Plans (PIP) measures are planned /underway. It does not summarise all the required actions. (Further information can be obtained by contacting NRW:

enquiries@naturalresourceswales.gov.uk)

The number of planned actions is low partly because it is difficult to assess what might be funded beyond 2015/16. Our ambition for the second cycle will develop as opportunities/resources become available. We have identified a further 94 priority actions in the Meirionnydd Management Catchment which can be taken forward when opportunities arise.

We have also worked with stakeholders to develop and plan a number of strategic actions to support delivery of N2K objectives. These are included within the updated Programme of Measures

The table below shows the Natura 2000 sites that have actions that are planned or underway, further information on the actions can be found on the **WWW** website.

Table 6. List of N2K sites with measures planned or underway

	Underway	
N2K site	Planned	
Berwyn	2	
Cors Fochno	17	
Pen Llyn ar Sarnau/Lleyn Peninsula and the)	
Sarnau	3	

Know Your River - Salmon and Sea Trout Catchment Plan

NRW collects a range of specific salmonid data for management purposes and this is presented in the local Salmon and Sea Trout Catchment Summaries. Salmonid specific tools, measures and data acquisition such as electrofishing results, declared catches and annual salmon egg deposition estimates are used to guide ongoing investment in fish passage and habitat restoration schemes. The summaries are updated annually and ensure that there is effective prioritisation in waterbodies to improve salmonid fisheries. The planned actions are always delivered in association with partners and contribute to enhancement and protection of this valuable resource in Wales. Further information can be obtained by contacting NRW: enquiries@naturalresourceswales.gov.uk)

Flood Risk Management Plan Measures

Further information on local measures is available in the catchment summary section of the updated FRMP.

Water company programme

Within the 2015 RBMP; there are a number of measures required of Water Companies. A funding allocation for these measures was included in company business plans submitted to Ofwat for the 2015-20 period. Natural Resources Wales and the Environment Agency have published a revised National Environment Plan detailing all water company measures. The National Environment Programme details improvements required to comply with all water quality legislation.

An outline of the measures included within this management catchment can be found in the table below, further information can be found on the **WWW** website.

Table 7. Water company investigations and improvement schemes

Water body ID	Name	Outcome
GB110064048440	Dysynni - lower	Investigations into risks to
GB110064048610	Cerist	drinking water quality
GB110064048530	Dysynni - upper	
GB110064048830	Ysgethin	
GB110064054600	Artro - upper	
GB511006407000	Dyfi & Leri	Coastal and network modelling to
GB511006407100	Mawddach	enable planning of how to meet WFD shellfish requirements.
GB621009600000	Cardigan Bay North	Investigations into impact from assets on designated bathing beaches.

5.4 Alternative objectives

We have identified 28% of water bodies where because of the nature of the problem or the required measures we have an extended deadline or less stringent objective (less than good). In each case we have provided a justification.

Table 8 Alternative objectives and justifications

Alternative objective	Justifications	Number of water bodies	Water body
Extended deadline	Cause of adverse impact unknown	2	Leri – lower Llyn Gelli Gain
	Ecological recovery time	17	Einion Nantcol Llyfnant Pennal Fathew Dysynni – lower Cadair Dysynni – upper Dulas North Cerist Cywarch Mawddach – lower Gamlan Mawddach - middle Crawcwellt South Mawddach – upper Eden - upper
Less stringent objective	No known technical solution is available	1	Meirionnydd Groundwater body

5.5 Opportunities for partnerships

There are several external funding opportunities, which could support projects that contribute towards Water Framework Directive outcomes. Each fund has its own priorities, budgetary allocation and application process. Types of funding for consideration include:

- Lottery Funding such as Heritage Lottery Fund, Postcode Lottery and BIG Lottery Fund which have a range of programmes from £5000 up to £millions.
- Charities, Trust & Foundations there are many of these operating and they often have a specific focus – either geographically or topically and will support local charities and projects.
- Businesses and sponsorship opportunities including making the most of the Welsh carrier bag charge!
- Public bodies Local Authorities, Welsh Government, UK Government and NRW may have annual funding opportunities or one-off competitions for their priority areas.
- Crowdfunding gathering support from a wide range and number of funders, often
 including individuals and usually using the internet to raise awareness for a specific
 project needing funds.

 Trading – Increasingly funders are looking to support organisations with longer term sustainability in mind so developing trading opportunities can be something to consider too.

Your local County Voluntary Council and Wales Council for Voluntary Action will have up to date information on opportunities such as these as well as a host of other support available.

6. Water Watch Wales

During the implementation phase of the 2009 RBMP many of our partners and stakeholders requested access to data and information to assist them in helping to deliver local environmental improvements. Many stakeholders felt that the first plan was difficult to navigate and access information at a local scale. Consequently with both the support and input from the river basin district liaison panels a web based tool has been developed called Water Watch Wales. This is an interactive spatial web-based tool that provides supporting information and data layers.

We will continue to develop this tool and see it as a critical link between the more strategic RBMP and local delivery. It enables the user to access information on:

- classification data at the water body scale
- reasons for not achieving good status
- objectives
- measures/actions, including protected area information
- partnership projects

Data can be retrieved in a number of formats (spreadsheets and summary reports). A user guide together with frequently asked questions is included with the tool and can be accessed from a link on the home page.

Link to home page: waterwatchwales.naturalresourceswales.gov.uk



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