

Cleddau and Pembrokeshire Coastal Rivers 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 Cleddau and Pembrokeshire Coastal Rivers Management Catchment

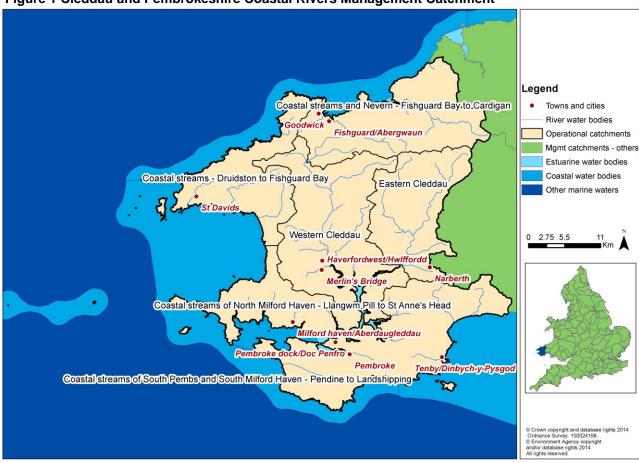


Figure 1 Cleddau and Pembrokeshire Coastal Rivers Management Catchment

The area covered by this management catchment summary includes the catchment areas of the rivers Eastern and Western Cleddau, the Milford Haven Waterway (the 'Haven'), and smaller rivers such as the Nevern, Gwaun, Solva and Ritec). The area stretches from Moylegrove, on the north Pembrokeshire coast, to just west of Pendine on the Carmarthenshire coast.

The area is largely of a lowland nature although the two larger rivers, the Eastern and Western Cleddau, drain partially from the Preseli Hills. The land is sparsely populated, for the most part, with urban development usually within the floodplains of the larger rivers, which has created a number of flooding problems. Straddling the Western Cleddau, the market town of Haverfordwest is the largest urban area, and serves as Pembrokeshire's administrative and commercial hub. Other significant urban areas are the coastal towns of Tenby, Pembroke Dock, Milford Haven, with its energy industry and port and Fishguard and, Pembroke which also offer ferry services to Ireland.

The catchment is characterised by intensive agriculture, mainly dairy farming, although sheep rearing and early potato growing are locally important. Dairy farming in particular plays an important part in the local economy. Pembrokeshire produces 50% of Welsh potatoes and 25% of Welsh milk.

Below their tidal limits, the Eastern and Western Cleddau join to form the Daugleddau, an extensive tidal reach of important ecological value. Downstream of the Cleddau Bridge, the

Daugleddau broadens into the Haven, one of the largest natural harbours in the world, offering deep water access and moorings. The port is the most important in Wales and one of the largest in the UK.

Although parts of Milford Haven and Neyland were initially developed due to a large, thriving fishing industry, the main industry within this area now relates to oil and gas around the Haven, with sea fishing significantly diminished. Both are a major contributor to the economy of Wales and are critical to the national infrastructure. The oil industry became established around the Haven in the 1960s and at one time included four oil refineries, an oil terminal and a 2000 megawatts oil fired power station. Now, only one oil refinery remains, operated by Valero (Pembroke). The other former refinery sites have been converted into liquid natural gas terminals, linking via a 197-mile high-pressure gas pipeline to the national gas network at Tirley in Gloucestershire or provide bulk petrochemical storage. Following some years after the 3-year demolition of the former oil-fired Pembroke power station, the new combined-cycle gas turbine station opened in September 2012.

The defence industry was previously prominent in the area although this too has declined. Despite closures, the Ministry of Defence is still a major employer locally and their ranges are very important in wildlife and conservation terms, one of the most notable being the Castlemartin Range.

Extractive industries have also diminished over time. The area was formerly important for mining and quarrying, with around 100 in operation at one time. These largely small scale operations were mostly seeking limestone or slate. The coal industry was important in Pembrokeshire in the last century although there are no environmental legacies of any significance arising from this.

Dŵr Cymru Welsh Water (DCWW) supply the area with potable water and also raw water to some industry. Their major abstractions are at Canaston on the Eastern Cleddau, which provides water for most of South Pembrokeshire, and Crow Hill on the Western Cleddau. Llys y Fran reservoir on the Syfynwy (a tributary of the Eastern Cleddau) is used to regulate flows in the Eastern Cleddau to enable abstraction at Canaston at times of low river flows. Although a large proportion of the total licensed abstraction relates to industrial use, most of the usage is low consumption, with the water being returned back to rivers and estuaries. The majority of licensed abstractions (by number) in the area are for spray irrigation and most of these are for filling winter storage reservoirs and so do not have an impact on low river flows.

There are three main migratory salmonid rivers in the area, the Nevern, Eastern and Western Cleddau. Almost all the streams and rivers are abundant in brown trout, with smaller coastal streams, such as the Solva and Gwaun, containing smaller stocks of both salmon and sea trout. There are also a number of thriving still water fisheries that have developed for trout and coarse fish. There are two net fisheries within the area, the last remaining compass net fishery in England and Wales on the Eastern and Western Cleddau and a single seine net is operational on the Nevern estuary.

There is commercial fishing for sea fish and shellfish. Pacific oysters were cultured in the Haven up to around a decade or so ago in the Carew/Cresswell area and native oyster beds are widespread from Milford Haven town up to Picton Point. These are dredged commercially, the annual harvest being generally not more than 10 tonnes. Cockles and mussels, whilst present within the area, are not currently exploited commercially.

Pembrokeshire is renowned as a holiday area, with the population increasing two-fold during the peak season. Coastal towns, such as Tenby and Saundersfoot, being especially popular with tourists. Bordered on three sides by the sea, the water environment is one of Pembrokeshire's greatest assets. It is fringed by spectacular sandy beaches, rugged cliffs, and wooded estuaries. Water sports are mostly restricted to the tidal and coastal areas, although canoeing and sailing are practised at Llys-y-frân Reservoir. The Pembrokeshire Coast National Park and surrounding waters are the centre of a wide variety of activity. Throughout the Daugleddau and the Haven, recreational and commercial boating, jet-skiing and water-skiing are popular. Off the coastal beaches, because of the prevailing conditions, surfing and windsurfing have become one of the most popular activities. Some of the best SCUBA diving sites in Wales are to be found in this region too, with Dale, St Bride's Bay and Skomer popular. And with 29 European Union designated bathing waters, swimming is a popular activity. Tourism has been valued at worth over £500 million to the economy.

The river and estuary is a Special Area of Conservation as is approximately 75% of Pembrokeshire's 186 mile coastline. The un-spoilt natural landscape and healthy water environment attracts visitors and the local economy relies heavily on this tourism with £470 million in tourist revenue in 2011 (Pembrokeshire County Council STEAM report, 2011). The Pembrokeshire Marine SAC is the third largest marine SAC in the UK, covering an area of 138,069 hectares. The site extends from near Abereiddy in north Pembrokeshire all the way round to Manorbier in South Pembrokeshire and includes the coast of the islands of Ramsey, Skomer, Grassholm, Skokholm, the Bishops and Clerks, and The Smalls (21 miles offshore). It also encompasses almost the entire Milford Haven Waterway. The Skomer Marine Nature Reserve (the only MNR in Wales) also occurs within the site.

On 31 March 2014 a Cleddau and Pembrokeshire Coastal Rivers management catchment workshop was held at Bluestone National Park Resort, Narberth. During this event the benefits of the catchment were captured. These included:

- Natural beauty and landscape
- Wildlife and biodiversity
- Vibrant rural community and economy
- Leisure and cultural opportunities
- Coastline, seascape and marine environment

We continue to work in collaboration 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 in the following table and presented as case studies within this summary document:

For further information on projects please refer to WWW.

Table 1. Partnership projects in the management catchment

Project Name	Project Description	Partners	Funding sources
Llys y Fran	A project to train volunteers to engage with farms and carry out soil sampling to inform future WFD improvements.	DCWW, Pembrokeshire Rivers Trust	WFD Third Sector Organisations Fund, Dwr Cymru/Welsh Water (DCWW),

# 2.1 Key facts<sup>1</sup>

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*	43	0	2	45
Lake	3	0	2	5
Coastal	5	0	0	5
Estuarine	4	0	0	4
Groundwater	2	0	0	2
Total	57	0	4	61

<sup>\*</sup>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	19
Drinking Water Protected Areas	11
Natura 2000 and Ramsar sites	14
Nitrate Vulnerable Zones	1560ha
Shellfish Waters	1
Urban Waste Water Treatment Directive - Sensitive areas	0

<sup>&</sup>lt;sup>1</sup> 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.

# 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 42% of surface water bodies are at good overall classification status, 51% at moderate, 5% at poor and 2% at bad overall status. There are no water bodies at high overall status.

We believe that Milford Haven water bodies are sensitive to nutrient pollution and consideration of data demonstrates the Milford Haven Inner water body meets the criteria for designation under the provisions of the Nitrates Directive; the recommendation has been put forward for consideration by Welsh Government who will consult upon this matter and ultimately make the decision for or against designation.

Figure 2. The current status of the Cleddau and Pembrokeshire Coastal Rivers Management Catchment (2015 classification) Cyfoeth Naturiol Cymru Natural Resources Wales Overall Status of Water Bodies in Cleddau and Pembrokeshire Coastal Rivers The overall status shown for waterbodies on this map is the cycle 2, 2015 classification Legend **Overall Status** High Good Moderate Poor Afon Nyfer Bad

Haverfordwest

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.

Rivers, canals or SWT

Coastal or transitional ---- Wales England Border

> Management catchment Other management catchments

> > **⊐** Km

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- Centre for Ecology & Hydrology.

Lakes

0 3.25 6.5

# Case study

Milford Haven Waterway and the Daugleddau Special Areas of Conservation are in unfavourable status and several of the corresponding Water Framework Directive stretches are at moderate status for water quality. The biggest factor affecting water quality is high nutrient levels. NRW have a scientific body of evidence that, simply put, the Haven is "full" and there is no capacity for new discharges. We declared the Milford Haven Catchment at amber risk of becoming a Nitrate Vulnerable Zone; amber status is a term recognised by Welsh Government and stakeholders such as industry and the farming unions.

A scheme with the First Milk Dairy in Haverfordwest was developed to offset or bank nutrient reduction credits in order to instigate a new treatment plant. Nutrient reduction takes the form in funding nutrient minimisation plans for dozens of farms in the Daugleddau catchment.

# 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.

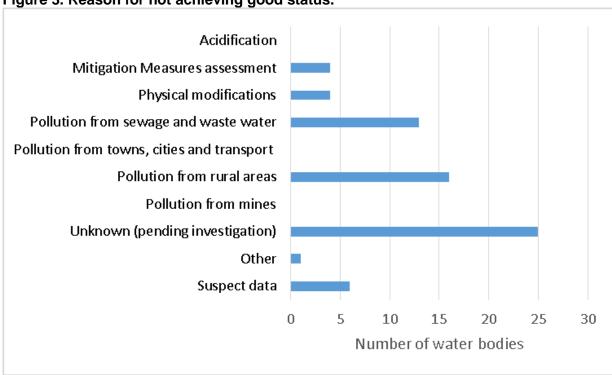


Figure 3. Reason for not achieving good status.

Our investigations have identified six water bodies that are failing because of **agriculture** and rural land management, including the Nevern, Western Cleddau and Syfynwy and another 11 that are very likely to be failing due to this pressure. **Artificial barriers** which prevent fish migrating and reaching their spawning grounds are a reason for failure in three rivers including Westfield Pill, Pembroke River and Cartlett Brook. **Discharges from** wastewater treatment works is identified as a reason for failure on the Anghof, and four others including Narbeth Brook and Brandy Brook are very likely to have this as a reason for failure.

#### 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 workshop and the RBMP consultation: however it is not a full list.

- Flooding water and asset management.
- Diffuse rural pollution / land management, including nutrients, pesticides and sediment.
- Forestry felling issues sediment mobilisation, acidification.

- Community engagement, awareness-raising and communications.
- INNS (Invasive Non-Native Species), especially Killer Shrimp, Himalayan Balsam and Japanese Knotweed.
- Urban Diffuse pollution
- Decline in aquatic habitats and species

# 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 **WWW**,

**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 fall into 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
Address air pollution	Emissions controls to reduce nitrogen and acidic deposition. Some overlap with "acidification restoration".	9
Address point source pollution	Investigate and regulate pollution from point sources. Overlaps with "reduce pollution from sewage discharges" and "other waste water discharges".	11
Complete first cycle investigation	All ongoing WFD investigations from first cycle programme.	5
Drainage and water level management	Investigate and implement changes to land drainage regimes and structures to restore water levels.	25
Dredging and silt management	Includes reducing siltation at source through land management, and implementing sustainable dredging and silt disposal regimes.	6
Improve fish passage and habitat	Remove or modify barriers to fish passage	4
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.	27
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.	38
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	5
Mitigate impacts of flood and coastal defences	Reduce impacts of flood defence structures and operations - improve connectivity, habitat, and morphology by implementing 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.	6
Mitigate impacts of shipping, navigation and dredging	Assess and implement options for adapting dredging regimes and reducing the impacts of physical modifications.	7

Measure	Description	No. of water bodies
New Investigation	Includes investigations for all new failures, deterioration, and drinking water protected areas.	35
Other sustainable land and marine management practices	Includes measures to mitigate impacts from construction and maintenance of infrastructure, including within military training sites.	5
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.	3
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.	7
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).	2
Sustainable access and recreation management	Reduce the impacts of erosion, disturbance and damage from both water-based and terrestrial access, including tackling illegal offroading.	7
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.	45
Sustainable fisheries management	Includes measures for both freshwater and marine fisheries to reduce and mitigate impacts	3
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.	10
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.	4

Measure	Description	No. of water bodies
Waste management	Includes appropriate management of spoil and sludge, illegal fly-tipping and litter	7

Details for specific local measures can be found on **WWW**, some examples of actions already under way include:

- Schemes to improve fish passage at Westfield Pill and Canaston weir, East Cleddau
- Habitat improvements by Pembrokeshire Rivers Trust and Afonydd Cymru in collaboration with Natural resources Wales
- Farmers and landowners are working with our catchment officers to improve land management for the benefit of the water environment.

## Case study – Westfield Pil - Fish pass project 2012

- The Rosemarket Stream is a coastal stream that discharges into the tidal Cleddau estuary at Neyland marina, Pembrokeshire. The Rosemarket Stream failed Water Framework Directive criterion for both eels and salmonids (2010 diagnostics).
- A WFD 'walkover survey' conducted by Fisheries Team identified pipes set into the lower bund at Westfield Pil as being an obstruction to upstream fish migration. This obstruction was thought to be a significant factor in preventing the WFD's objectives from being met.
- In 2012, a collaborative partnership project between NRW and Pembrokeshire County Council replaced the old bund and pipes with a 'super active baffle' Larinier fish pass and bristle mat eel pass.
- The fish pass has improved access for a wide variety of fish species including: Eels; lamprey; trout; salmon; mullet; bass & flounder.
- Further fish passage improvements have been undertaken on the Rosemarket Stream in partnership with Pembrokeshire Rivers Trust. This work will help to ensure that WFD objectives are met by 2027.





### 5.2 Feedback on priorities and solutions

Concerns on current status raised at the workshop have been highlighted in Section 3, solutions and priorities were also discussed. In respect of some of the issues raised, the following solutions were flagged:

- Diffuse rural pollution / land management.
  - **Suggested solutions:** Improve Glastir uptake through reduction of 'red tape'; educate land managers in win-win solutions, particularly highlighting financial incentives; investigate poor application of buffer strips; alternative uses for slurry; improved partnership working; targeted education in impact of pesticide/herbicide use on drinking water quality.
- Community engagement, awareness-raising and communications.
   Suggested solutions: Rivers Trust can assist in identification of priority issues;
   volunteer-assisted tree-planting initiatives; sources of industry-related funding identified.
- INNS (Invasive Non Native Species)
   Suggested solutions: National guidance/strategy urgently required; further volunteer initiatives.
- Decline in aquatic habitats and species
   Suggested solutions: 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.
- Urban Diffuse Pollution
   Suggested solutions: Sustainable Urban Drainage Systems to be made a requirement under planning regulations

#### **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 Cleddau and Pembrokeshire Coastal Rivers management catchment that NRW will target to achieve an improvement in status by 2021

Water body ID	Name	Target status	Details
GB110061030680	Longford Brook - HW to conf with E. Cleddau		For further information on
GB110061038300	Syfynwy - headwaters to Llys-y-fran	Good by 2021	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 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 18 priority actions in the Cleddau and Pembrokeshire Coastal Rivers 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 measure planned or underway

N2k site	Planned	Underway
Pembrokeshire Bat Sites and Bosherston		
Lakes/Safleoedd Ystlum Sir Benf	1	1
Pembrokeshire Marine/Sir Benfro Forol		1
Preseli		1

### Flood Risk Management Plan Actions

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

#### 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: <a href="mailto:enquiries@naturalresourceswales.gov.uk">enquiries@naturalresourceswales.gov.uk</a>)

### 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 investigation and improvement schemes

Water body ID	Name	Outcome
GB110061031330	Cartlett Brook - HW to conf with W. Cleddau	No deterioration schemes
GB110061030770	Ford's Lake - HW to tidal limit, Wiseman's Bridge	
GB110061038510	Nyfer - headwaters to confluence with Brynberian	
GB110061031180	Camrose Brook - headwaters to conf with W. Cleddau	
GB110061025050	Pembroke - headwaters to tidal limit	Investigation into how water company assets contribute to
GB110061031170	Pelcomb Brook - headwaters to conf with W. Cleddau	RNAGS
GB110061031160	Brandy Brook - headwaters to tidal limit	
GB110061038610	Nant Duad - headwaters to confluence with Nyfer	
GB110061038680	Cleddau N headwaters to conf with Nant y Bugail	
GB110061031340	W. Cleddau – Anghof conf to Cartlett Brook conf	
GB110061038300	Syfynwy - headwaters to Llys-y-fran	Investigations into risks to drinking water quality

Water body ID	Name	Outcome
GB531006114100	Milford Haven Inner	Coastal and network modelling to enable planning of how to meet WFD shellfish requirements.
GB611008590003	Pembrokeshire South	Investigations into impact from
GB641008220000	Milford Haven Outer	assets on designated bathing
GB511006115200	Nyfer	beaches.

# **5.4 Alternative objectives**

We have identified 23% of water bodies where because of the nature of the problem or the required measures we propose 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	13	Castlemartin Corse - headwaters to tidal limit Pembroke - headwaters to tidal limit Ritec - headwaters to tidal limit Ford's Lake - HW to tidal limit, Wiseman's Bridge New Inn Stream - headwaters to tidal limit Winterton Marsh - HW to TL, Nr Pickleridge Lagoon Cresswell River, headwaters to tidal limit Huberston Pill - headwaters to tidal limit Westfield Pill - headwaters to tidal limit Westfield Pill - headwaters to conf with h Cleddau Nyfer - headwaters to confluence with Brynberian Nant Duad - headwaters to confluence with Nyfer NYFER
Less stringent objective	Background condition	1	W Cleddau - headwaters to conf with Cleddau North

### 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, trusts & 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.
- Crowd funding 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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