

Comments from Newport Area Environment Group (NAEG)

on

Newport North Pembrokeshire Bathing Water Profile

(Given in red as follows)

September 2011

BATHING WATER PROFILE

We have produced a profile for each European designated bathing water in Wales. The profile gives information about the bathing water including any improvements made to provide better water quality for bathers. Bathing water profiles are a requirement of the revised Bathing Water Directive 2006/7/EC and supporting regulations.

All bathing water profiles will be reviewed and updated by May 2012. We would like your feedback and comments to contribute to this review.

If you wish to comment on the profile please send an email to bwpeaw@environment-agency.gov.uk between 24 March and 30 September 2011.

Newport North, Pembrokeshire, Wales

Image of the European designated bathing water located at Newport North, Pembrokeshire, Wales

The image above shows the European designated bathing water located at Newport North, Pembrokeshire, Wales

The image, including the Parrog side of the designated beach, is welcomed but this particular vantage point is misleading in illustrating rocks in the foreground rather than the sand which exists at Cwm. It also does not show the “*wide and sweeping*” beach (the wording used by the EA below) in all its magnificence

Designation details under the current Bathing Water Directive (76/1160/EEC)

Local Authority: Sir Benfro - Pembrokeshire **County** Council

Under The Bathing Water Regulations 2008 “Control” is defined as

“control of the land immediately adjacent to the bathing water which is normally used to access the bathing water from the landward side and, where the bathing water is tidal, control of such land above the high water mark”

The Pembrokeshire Coast National Park rents the foreshore from the Crown and owns and operates facilities serving the designated beach.

Year designated: 1988

It has never been clear to local people what exactly was designated.

It is stated below that the beach is 1.5 kilometres long, the image includes the Parrog side of the beach, and the map indicates the areas of sand which are actually used by bathers. Local opinion is that all these areas must be included within the designation. NAEG looks forward to working with the responsible Authorities in any review of designation to establish clarity.

Environment Agency Wales monitors and assesses bathing water quality at each designated bathing water in Wales annually between May and September. The

monitoring results and annual compliance are all published on the Environment Agency website via our interactive map service.

Bathing water map

Map image of the features potentially impacting on the European designated bathing water located at Newport North, Pembrokeshire, Wales

This map has been incorrect in respect of the situation in 2010/11, showing the location of the storm overflow/treated sewage works outfall before the combined pipe broke up in 2006. The temporary pipe installed in 2009 has discharged much closer to shore

The map is incorrect in not including the CSO at Parrog

The map does not include other streams meeting the River Nevern within Newport

Bathing water description

The beach is wide and sweeping, measuring some 1.5 kilometres in length, facing north west out into the Irish Sea, backed by agricultural land and the small town of Newport. The River Nevern (Afon Nyfer) divides the beach in two, with the Parrog on the south. The Cliffs to the north of the bathing water are designated as a Site of Special Scientific Interest, confirming the high conservation status of the Area.

The bathing water sample point lies at the centre of the beach.

The extent of the beach is as shown by areas of sand on the bathing water map above.

The sample point is not “*at the centre of the beach*” but lies towards the northern end of the beach between flags marking the extent of beach warden monitoring of bathing water safety. Bathers use the whole length of the beach including particularly points such as Pyg-y-benet and Cwm at its southern extremity. Measuring at the existing sample point does not give an indication of the bathing water quality for the whole area of beach popularly used.

Catchment map

Map image of the surface water catchment which may impact on the European designated bathing water located at Newport North, Pembrokeshire, Wales

A lot of the information on the map seems to be of little relevance, whilst at the same time there is no clear indication of what might impact on bathing water quality. For instance, streams draining into the River Nevern are not clear, nor are the “*numerous small streams and surface water drains which empty into the Bay*” shown, although these are mentioned by EAW below.

The many CSOs draining into the River Nevern or streams connecting to the Nevern are not marked, including two more that are actually within Newport at Parrog and the Elmes.

Catchment description

The natural drainage (hydrological) catchment surrounding the bathing water is highly agricultural, with the residential town of Newport located 1 kilometre to the south.

Pollution management

Water quality at a bathing water is dependent upon the type and area of land (the catchment) draining to the water and the activities undertaken in that catchment.

It is the Environment Agency's role to drive improvement of water quality at bathing waters that are at risk of failing European standards. The following sections give an indication of potential sources of pollution, conditions under which they may arise and measures put in place to improve water quality.

Streams and rivers

Streams and rivers are typically affected by sewage or industrial run off from further up the catchment.

Newport Sands is heavily influenced by the run off of freshwater from the River Nevern. This is illustrated by low salinity levels sometimes seen in bathing water quality samples, which have higher levels of bacteria.

The Nevern drains a large agricultural area, beginning east of Crymych, flowing around the Preseli hills, through Felindre Farchog and Nevern, before entering the sea at Newport. There are also numerous small streams and surface water drains which empty into the Bay, which may sometimes be a source of reduced water quality than usual, after heavy rainfall. High flows in streams, rivers and sewers due to heavy rainfall affects water quality in the Bay.

Our investigations

Environment Agency Wales continues to work with Pembrokeshire County Council and Dwr Cymru Welsh Water to identify sources of pollution around Newport North bathing water. Inspections are carried out by Environment Agency Wales in partnership with the local authority and the water company. These are carried out pre-season (before the 1st of May) and mid season if required (during the bathing water season).

EAW has been able to do a limited amount of sampling this year in addition to samples taken at the designated point. It is vital that this additional work continues and is expanded so that sources adversely affecting bathing water quality are identified.

Working with water companies

History

Environment Agency Wales has developed a good working relationship with Dwr Cymru Welsh Water and liaises regularly to identify problems that could affect bathing water quality.

During a pre-season inspection by Environment Agency Wales in 2008, a damaged long sea outfall was discovered. Environment Agency Wales has since worked with the water company to ensure an effective temporary repair is in place. The water company has agreed that the long outfall into the sea will be constructed by 31st of August, 2011.

There was no “*temporary repair*” in the sense that the original pipe then continued to function to discharge to the consented point. A temporary replacement short outfall was installed, discharging much closer to shore.

The subsequent work on constructing a new long sea outfall is now complete and the location of the storm overflow/treated sewage works outfall should again be as

before the combined pipe broke up in 2006, meaning the attached Bathing Water Map is currently correct in this respect.

Sewage treatment works outfalls

Discharges from sewage treatment works have improved substantially in England and Wales since the 1980s.

There are a number of storm, emergency, and surface water outfalls that discharge into the bay. The waste water from Newport is biologically treated to protect water quality, at a relatively new sewage treatment works. This discharges into Newport Bay. The only continuous discharge from the Newport system is for treated final effluent, via a long sea outfall.

This latter statement is only now (in September 2011) correct, as in 2006 the "*long sea outfall*" (our emphasis) was defunct and from 2009 replaced by a much shorter temporary pipe. A new Long Sea Outfall is now in place.

Emergency/storm overflows

The majority of sewers in England and Wales are "combined sewers" and carry both sewage and surface water from roofs and drains. A storm overflow operates during heavy rainfall when the sewerage system becomes overwhelmed by the amount of surface water. The overflow prevents sewage from backing up pipes and flooding properties and gardens. An emergency overflow will only operate infrequently, for example due to pump failure or blockage in the sewerage system.

Discharges from storm overflows can occur within the vicinity of the bathing water. These discharges occur when heavy rainfall overwhelms the sewage system and causes diluted sewage to spill. This protects domestic properties in Newport from being flooded by sewage during heavy rainfall.

CSOs

As stated above under "Catchment Map", the many CSOs - the discharges from which enter (or eventually enter) the River Nevern - are not listed, nor is their impact analysed.

Only one CSO within the catchment area currently has telemetry to monitor discharges. This is the CSO through which biologically treated effluent flows from Newport Treatment Works.

Working with Local Authorities

Heavy rain falling on pavements and roads often flows into surface water drains or highway drains, ending up in local rivers and, ultimately, the sea. The quality of bathing water may be adversely affected as a result of such events.

Environment Agency Wales and Pembrokeshire County Council have been working together to improve the bathing water quality at Newport Sands for a number of years.

Environment Agency Wales meets with Newport Town Council and Newport Area Environment Group (NAEG) to ensure Councillors and residents are kept informed of possible issues impacting water quality, and to discuss concerns.

NAEG has been pleased to cooperate with EAW, PCC, and Newport Town Council and hopes close cooperation will continue, especially in preparation of information to the public about water quality and potential sources of pollution by the 2012 season.

Misconnections

Modern sewerage systems have two separate systems, one takes foul sewage to sewage treatment, the other takes rainwater runoff through surface water drains to rivers, lakes and the sea. Misconnections occur when waste water pipes are plumbed into surface water drains instead of the foul water sewerage system. This can give rise to pollution when the waste water is discharged directly to the environment through the surface water drain. For example, a washing machine or toilet may be incorrectly plumbed so that it discharges to the surface drain rather than the foul sewage drain.

Newport has a combined system In this day and age, it should never have happened that an upgraded system was installed and a modern Tx works was built at a high point outside Newport, requiring pumping both sewage and rainwater run off up hill for treatment and relying on the operation of not only the CSO via a Long Sea Outfall at Cwm but also at the CSOs at Parrog and the Elmes to protect *“domestic properties in Newport from being flooded by sewage during heavy rainfall”* NAEG has campaigned for increased storage tank capacity to completely avoid even diluted sewage into the sea, but to no avail.

Working with the farming community

Significant areas of pastureland, occupied by livestock, feature in the largely agricultural catchment of Newport.

Environment Agency Wales is working with a number of farmers to tackle potential pollution sources at Newport Sands. A program of farm visits is carried out each year to monitor farming methods and share best practice.

Working with private owners

Environment Agency Wales places a high value on public participation in helping to trace sources of pollution. Residents of Newport have been given water quality sample bottles and gloves, to collect water samples, if they believe it may be contaminated. When collected, samples are analysed at Environment Agency Laboratories.

Dogs and horses on Newport Beach itself are not mentioned though EAW often mentions this to be a problem in possibly affecting sample results

Algae

Seaweed (macroalgae) and phytoplankton (microscopic algae) are a natural part of the marine and freshwater environment. Below we note whether these have been recorded in quantities sufficient to be a nuisance.

This bathing water does not have a history of large amounts of seaweed (macroalgae). Phytoplankton(microscopic algae) naturally increase in number at certain times of the year. This process is known as a phytoplankton bloom. This bathing water does not have a history of phytoplankton blooms.

It is NAEG's understanding that members of the public have been told by the County Council that a brown scum, which is not infrequently present, is not sewage, as they fear, but a bloom due to phytoplankton.

Further information

The Water Framework Directive (WFD) establishes a common approach to managing water within the European Community. The environmental objectives for the WFD will be delivered through the actions described in the River Basin Management Plans (RBMPs). Actions identified in the RBMPs for other improvements, also contribute to improvements in bathing water quality. The River Basin Management Plans are published on the Environment Agency website
A glossary for this profile is available on the Environment Agency website.

Written: February 2011 Next update: April 2012

All bathing water profiles will be reviewed and updated by May 2012. We would like your feedback and comments to contribute to this review. If you wish to comment on the profile please send us an email to bwpeaw@environment-agency.gov.uk between 24 March and 30 September 2011.

(NAEG Comments September 2011)