

Clean Environment and Tranquillity

Introduction

The overall area of “undisturbed” land in the AONB has decreased since 1997, from 85% to 71%.

Traffic has increased on the A499 since 1997 with related Environmental side-effects.

Many structures (masts and wind turbines) have recently been erected.

Many street lights have been replaced with LED in 2016/17

Tranquillity is a characteristic which is recognised and appreciated more in these busy times. Tranquillity is not easily measured but it is a combination of peace from engine and industrial noise, low traffic movement and other intrusions and not much light to disturb the night's darkness. Therefore it is a combination of many factors that creates an atmosphere of tranquillity and by now, such areas are relatively rare throughout the UK, even though there are large areas in Scotland.

Tranquillity or peace has been recognised as one of the Llŷn AONB’s qualities during the preparation of the original Management Plan in 2004/5. It’s certain that the area’s distant and remote nature is partly responsible for this and means that there are no significant industrial or infrastructural developments and only a little intrusion by traffic and machines. Also, the population is relatively low – around 6,000 – considering the surface area.

As well as this, the environmental quality of the soil, air, water and sea water on the whole is high in Llŷn with low levels of pollution. Therefore the area has an image of a clean environment which is an advantage for local people and attracts visitors. However, it is important to maintain, and if possible, improve the local environment’s condition by limiting activities that creates pollution and encourage activities that are pollution free – such as alternative methods of travelling.

For the purpose of the Management Plan of the AONB, the following was set as a Strategic Aim:

Strategic Aim

TO MAINTAIN AND IMPROVE THE PRESENT LEVEL OF CLEANLINESS, PEACE AND SECURITY SO THAT RESIDENTS AND VISITORS ENJOY BETTER WELLBEING AND QUALITY OF LIFE

Special Characteristics

Pollution-free air

The air here in Llŷn is clean and pollution-free. The area has an image of somewhere people can enjoy being outside and enjoy the fresh air of the countryside and coast. There are no large industries, plants or power stations in the area. Event though there is no specific information for this area, the Gwynedd Environment Condition Report (2004) contained information for the County and confirmed that levels of air pollution was low or very low (the four main type of air pollution are Sulphur Dioxide, Particulates, Nitrogen Oxides and Carbon Monoxides). No major changes are foreseen since the preparation of the Report.

It seems that pollution levels continue to lower on a national level. However, emissions still take place through many sources and affect the land, air and water thus affecting people, habitats and species. Local measures and projects on a small scale can help to reduce emissions and air pollution.

Clean Water

On the whole, the water quality is good in the area. The main issues affecting water quality rural areas such as Llŷn are pollutants such as acid rain, artificial fertilizer and slurry outflow. Natural Resources Wales are responsible for maintaining the quality of freshwater and coastal water in Wales.

Freshwater - The quality of rivers and streams in the area are good but a Natural Resources Wales recording system sometimes shows problems with river waters in Llŷn, mainly by pollution flowing into rivers. The main problems are:

- Pollution flowing from the land (mainly agricultural land);
- An overflow of agricultural fertilizer and pesticides, sewage and industrial water;
- Acid rain.

There is much information about the quality of river water in Gwynedd included in the Gwynedd Information Pack, The Environment Agency (2008). Only 1 river within the AONB was large enough to monitor – Afon Soch.

This river scores very highly in terms of biology and chemistry whilst pollutant and phosphate levels are quite low/moderate. There are no major failings in terms of river water quality stated in the General River Quality Assessment (Environment Agency).

To date, there are no Nitrate Vulnerable Zones in Llŷn.

Drinking Water – Welsh Water are responsible for ensuring a clean and reliable provision of drinking water. In terms of a local supply, Llŷn lies within the Llŷn- Harlech district by Welsh Water. There is no present or future shortage in this area. This is supported by the Environment Agency that stated that there is over 20% surplus in the area (Ofwat data 2008).

Bathing Water – The quality of Llŷn's beaches are reflected by the number of beaches awarded with international and national beach awards. They are amongst the cleanest, safest and organized throughout the UK and many have received awards based on the quality of the water and facilities. The beaches of Aberdaron, Abersoch and Pwllheli for example are Blue Flag beaches.

On a national level, reports confirm that the quality of bathing waters in Wales is very good as a result of improvements in sewage disposal and treatment. At times, rainfall creates an overflow from agricultural and some of that is polluted water. The Marine Conservation Society predicts that these problems will continue due to climate change and are hopeful that Welsh Water, Welsh Government and Green Seas will aid the improvement of the situation. The Marine Conservation Society recommends changes in farming, improving sewerage systems and constant monitoring.

Clean soil

Llŷn is an agricultural area and the land has been farmed for generations. There is good quality soil on lower lands (2, 3a 3b) which is a valuable national asset for stock and crop production as well as maintaining wildlife. Also, due to that absence of industries and plants, the level of pollution in soil is low even though there are some individual sites where pollution is present following mining operations. Even though there are many historic landfill sites in the area, by 2009 there were no such sites within the AONB.

By now there is better understanding of the need to protect the land and soil. Legislations and systems have been adopted to assess soil quality, reclaim polluted land and prevent further pollution. The aim in Llŷn is to maintain the soil's high quality and rationalise the use of fertilizer and chemicals.

Peace and Quiet

Llŷn is a place of peace and quiet due to its coastal and rural nature and the absence of large industries and plants. This was confirmed in a report commissioned by Countryside Council for Wales in 1997 to assess quiet areas in Wales. The study considered the main categories of development that creates disturbance such as traffic, towns and villages, electrical structures, railways and airports. Also, locations of some specific developments were recorded that affect the tranquillity such as quarries, masts, wind farms, clay pigeon shoots, personal water crafts and racing boats. A map summarising the finding of this Study was included in the original Management Plan.

In this Report much of Llŷn was defined as a Quiet Area or tier C (low levels of disturbance). Also, Trwyn y Penrhyn and an area near Clynnog have been designated as areas with little sky glow. The Study showed that some noisy activities (mainly marine activities) were apparent on the south coast around Abersoch and Llanbedrog.

In 2009, CCW commissioned Land Use Consultants to assess from new the whole of Wales. For this work, the aim was to follow the methodology used previously to compare. The Study found that there is around 11,600km square of Quiet Area in Wales (around 55% of the country's land area) but that there was a reduction of 1,500km square

(around 6% of Wales' land area). See www.stats.wales.gov.uk for more information.

Dark skies at night

There is a connection between peace and quiet and light levels. As expected, there is a high volume of light at night in urban areas compared to a low volume in rural areas such as Llŷn. It is by now a realisation that areas with low volumes of light at night are getting scarcer in the UK. To acknowledge the significance of this, Welsh Government is supporting a campaign by the British Astronomical Association for Dark Skies.

By now, substantial night light is recognised as pollution. Not only does the direct light affect the natural dark sky but also, artificial lights affect the ecosystems that influence the health of people and wildlife.

Another matter is the electricity used to provide these lights. There are opportunities to make financial and environmental savings by reducing the use of lights and also changing to LED lamps and lights. Also, some Local Authorities have presented plans to switch off some street lights during the night to in order to make financial savings thus making environmental gains also.

It was stated in the original Management Plan that substantial parts of the AONB remain unpolluted by lights. Of course there are lights in towns and on some roads. Also there are floodlights at Clwb Chwaraeon Bodegreos and Ysgol Botwnnog – which are outside the AONB but visible from afar when in use.

By studying the Report to the condition of the environment in Wales, the situation in both 2009 and 1997 can be compared. In general, there is a reduction of 6% or 1,500 km² of peaceful areas in Wales. In terms of the Llŷn AONB, by 2009 the general tranquillity of the area shows pockets in and around Llithfaen, Tudweiliog, Rhiw, Llanengan, and the slopes of Garn Fadrun. It is unclear if these if these pockets are a decline recognised as a result of individual developments or if they are part of a longer term pattern. No further work has been undertaken to see if there is any changes in the situation.

Key Issues

Transport and Motoring

Due to Llŷn's rural nature, most of the residents naturally depend on motors for everyday use. Also, there is substantial increase during the holiday seasons in traffic levels as many Tourists travel by car. This is seen mainly obvious in the Abersoch and Pwllheli areas with congestions during the busiest months. An increase in traffic and congestion increases air pollution.

Less travelling in cars and an increase in travelling more sustainably would benefit in terms of pollution and create benefits in terms of health. Therefore it is believed that there are opportunities to promote sustainable means of travelling by displaying timetables and other relevant information. Current means such as the Cambrian Railway

and Llŷn Coastal Bus are convenient means and it is vital to work together and effective marketing.

It is believed that cycling can offer opportunities to reduce travelling in cars and be beneficial in terms of health. To coincide with this, the AONB Service has recently launched a new leaflet about Cycle Routes in Llŷn. It's important to develop further opportunities to cycle in the area by providing suitable paths and promoting.

Rubbish

Rubbish and dog fouling on footpaths, picnic areas, and parking areas are a problem and harmful to the area's image as clean and tidy. To date, this is not a big problem but there is a slight increase in cases and cuts in funding could mean less bins and wardens to oversee.

Placing more bins in prominent places could help, as well as raising awareness of the AONB and its special qualities and how harmful it is to rid waste irresponsibly. Previous project such as Tidy Towns have worked well with schools to create signs to try and tackle dog fouling problems.

Litter can also be seen on our beaches, with some carried here in stormy weather. There is a chance here to raise awareness with boat users on how to rid waste responsibly in the correct manner. Keep Wales Tidy hold cleaning events from time to time on beaches with volunteers such as in Porth Neigwl and any such project is to be encouraged and supported.

Even though there is no factual evidence to confirm this, there seems to be more fly tipping on roadsides also, following the reduction in waste collection services and the lack of a waste/rubbish recycling Centre in Llŷn. Again, there are opportunities to raise awareness and educate. Also, there is a scope to raise awareness about disposing farm waste more carefully thus reducing environmental side-effects.

Water Pollution

On the whole, cases of water pollution are rare in the area and there have been improvements in the quality of freshwater, drinking water and bathing water following legislations, regulations and new treatment works. There is uncertainty about the exact situation in terms of sewage discharge into the sea and perhaps there is a case for reviewing the situation. Lower quality bathing water could mean problems if applying for beach awards such as Blue Flag and Green Flag. Lack of funding also could prevent applying for such awards.

Water quality needs to be measured and maintained and Welsh Water needs to continue to work effectively within the AONB.

Tourism Activities on Beaches

There are numerous reports over recent years about power boats, personal water crafts etc. affecting others and the environment around them. This can mean creating noise, conflict between different users and an effect on wildlife. In order to respond to this, Gwynedd Council has created a system to register personal water crafts for many years and this has created an improvement. Also, the Gwynedd Marine Code has been published recently (2016) and is aimed at users of the sea and encourages them to be vigilant in terms of marine wildlife and not to disturb animals, fish and water.

New Developments

With some new developments, additional lights will be installed to service the building. In terms of individual houses, this is not a big problem but is more significant in housing estates. Also, lights can be installed on new commercial buildings and there are some examples of significant lights e.g. the new Fire Station at Nefyn. Lights can also be installed around farm buildings thus disturbing the night sky in rural areas.

Policies

- PP 1.** ENCOURAGE AND PROMOTE PUBLIC TRANSPORT VENTURES AND THEIR USE AND OTHER MEANS OF SUSTAINABLE TRAVEL DUE TO THE ENVIRONMENTAL BENEFITS AND OPPORTUNITIES IN TERMS OF HEALTH AND WELLBEING.

Travelling in motors can create air pollution and congestion during busy holiday periods. The AONB Service, in cooperation with other organisations, will promote public transport as a way of travelling around the area (buses and the Cambrian Railway). Also there are opportunities to increase other means of sustainable travel – cycling in particular. The AONB Service therefore will promote cycling in particular as a way of travelling locally.

- PP 2.** COOPERATING TO MAINTAIN AND IMPROVE THE QUALITY OF SOIL AND WATER IN THE AREA

Although the quality of water and soil in the area is high, it is important to maintain the situation and make some improvements wherever possible. The aim is to work with other departments in Gwynedd Council and agencies such as Welsh Water, Natural Resources Wales and Welsh Government as well as site owners to achieve this. Also, it is believed that applications should be made for awards such as Blue / Green Flag – to reflect the high quality of the water and resources in some areas.

- PP 3.** LIMIT NOISE LEVELS AND LIGHT AT NIGHT WITHIN THE AONB AND NEARBY AND PROMOTE THE USE OF EFFICIENT ENERGY AND LOW IMPACT STREET/OUTSIDE LIGHTS

Tranquillity and dark skies are features related to the Llŷn AONB and the policy aims to limit developments that would have an impact on them. On the whole, noise is not a problem but present lights and brand new ones can affect the night sky. Conditions will be recommended therefore to control lights in connection with new developments and

encourage owners to assess current lights to see if there are opportunities to reduce lights or install lights that have less impact.

PP 4. PROMOTE LOCAL CLEANLINESS LEVELS BY ENCOURAGING REUSING, RECYCLING AND DISPOSING RUBBISH RESPONSIBLY.

Even though there are some small areas of rubbish from time to time, fly tipping is not a major problem even though there were changes in rubbish collection services and reductions in the opening hours of local recycling depots. The AONB Service will cooperate with other departments in the Council and others such as Keep Wales Tidy to clear sites, educate landowners about reducing and recycling and take enforcement steps when necessary.

PP 5. RAISE AWARENESS ABOUT THE NEGATIVE EFFECTS AND DANGER TO HEALTH OF DOG FOULING AND ENCOURAGE OWNERS TO BE MORE RESPONSIBLE.

As well as being dangerous to health, dog fouling is a nuisance and creates a negative impression about a location or a path. Although there is no factual information to confirm, it seems that dog numbers are increasing in the area and that this is an increasing problem. The aim is to cooperate with the Environmental Health department and other organisations to recognise places with problems and to implement campaigns to raise awareness and enforce to improve the situation.