# 3.1 Introduction

The modern Elan landscape is dominated by features associated with the decision made in the late 19<sup>th</sup> century to take water from the area to Birmingham.

Most eye-catching are the strong architectural lines of the Victorian dams and the constantly changing colours and dynamics of the reservoirs and their surrounding landscapes. The whole of the area reflects the change in management regime that came about when the entire landscape within the Elan water catchment area became managed with one focus in mind – capturing water for the use of the Birmingham Corporation.

The Elan Links area is not, however, dependent on the late Victorian water scheme to define its overall significance. Underlying and surrounding the dams and reservoirs is a landscape which is exceptionally rich in terms of its natural heritage, built heritage and cultural heritage.

The significance of the landscape is evidenced by the range of statutory and advisory designations which have been ascribed to it in modern times, in recognition of the important natural and human heritage of the area and to help preserve and enhance what is truly valuable.

The significance of the Elan Links area is also evidenced in the cultural material which survives, from folk traditions to literature and photographs and films, which chart the development and change of the human society which has occupied the landscape over the centuries. Often thought of as an intangible resource, elements of the cultural wealth of Elan Links are preserved in archives and collections, locally and nationally, and represent an almost untapped source of evidence which can bring us a much deeper understanding of the past and help explain some aspects of development of the landscape we see today.



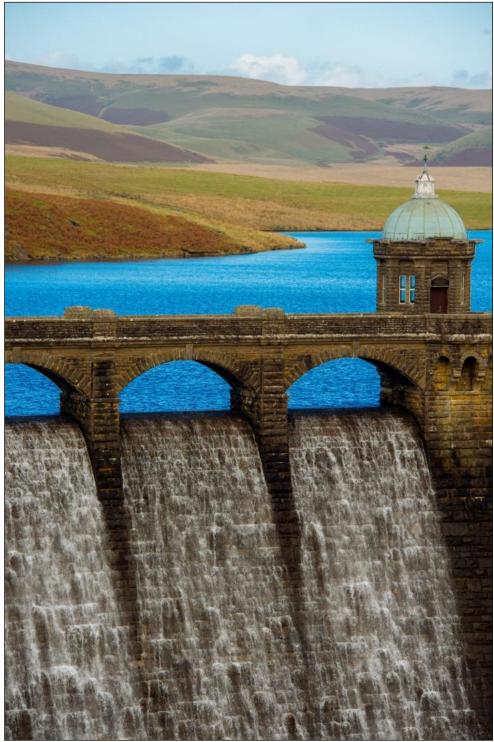


Figure 1: The Graig Goch Dam



#### 3.2 Natural Elan

Historically, the Elan Links landscape has been a remote and sparsely-populated upland area, dissected by the main valleys of the Elan and Claerwen, along which little settlement has occurred. For centuries, few people ventured through the area and its road network remained relatively undeveloped.

When the Birmingham Corporation acquired the area in the 1890s, their prime objective was to manage the landscape as a source of clean water for their city. There was no intention to despoil or pollute the landscape; the form of industrialisation represented by the dam building of that decade was therefore relatively benign in environmental terms. This activity also took place well before the main industrialisation of the agricultural industry had occurred, and well before the age of the motor car. It can be said that the creation of the Birmingham Corporation's estate in these uplands, fortuitously, has allowed for the preservation of a significant upland tract of high environmental value.

The stewardship of the estate for over a century, combined with the remoteness of the area, the survival of traditional farming systems, and the light footfall of human society, has allowed Elan to escape many of the changes which have affected similar, even adjacent landscapes. It is, perhaps, not by chance that immediately to the south, at the head of the Tywi valley, and immediately to the north, across the upper Ystwyth, the uplands are now dominated by vast coniferous plantations, and host significant wind farms. Whilst the extensive and important peat bogs of the Elan uplands largely continue to thrive and grow, those of nearby Pumlumon can be seen to have experienced desiccation and decline in modern times.

Within the boundary marking the watershed of the Elan Estate, the landscape is almost an island where the impacts of the modern world have been lessened to a sufficient degree to have retained traditional, herb-rich hay meadows, areas of ancient woodland and extensive upland pastures.

The quality of the natural environment is therefore reflected in the number and extent of designations introduced to protect and enhance the landscape, habitats, plant-life and bird and wildlife populations.

These have very different purposes and are worth outlining.



# 3.2.1 Special Area of Conservation - SAC

Special Areas of Conservation (SACs) have been chosen as areas that make a significant contribution to conserving habitats and wildlife species named in the EC Habitats Directive.

In the Elan Links project area 33% of the landscape is designated as a SAC. The western and southeastern parts of the area fall in the Elenydd SAC, (Site Code UK0012928). Smaller areas around the steeper slopes in the east of the area are part of the Coetiroedd Cwm Elan / Elan Valley Woodlands (Site Code UK0030145)

The Elenydd SAC is valued as the largest tract of blanket mire, or bog, within the upland block of central Wales.

Considerable areas of the habitat display signs of modification, with impoverished vegetation dominated by grasses and with reduced amounts of dwarf shrubs and widespread bog-mosses *Sphagnum* spp. Areas of good quality mire are typically fragmented by species-poor vegetation dominated by purple moor-grass *Molinia caerulea*. However, there are extensive stands of M18 *Erica tetralix – Sphagnum papillosum* mire that contain locally abundant bog-rosemary *Andromeda polifolia*, as well as areas of mire in which heather *Calluna vulgaris* and hare's-tail cottongrass *Eriophorum vaginatum* are dominant. Areas of hummock and hollow surface patterning are found locally.

The Elan Valley Woodland SAC is considered important for its old sessile oak wood as well as the presence of *Tilio-Acerion* or ash woodland on slopes, screes and ravines.

........ a series of woodland blocks with varying topography and underlying geology, and a wide range of structural types from dense closed canopy to open wood pasture with ancient trees, which support a rich invertebrate fauna. Sessile oak *Quercus petraea* predominates, with a typical upland acidic flora and rich lower plant assemblages including bryophytes such as *Bazzania trilobata*, *Plagiochila spinulosa* and *Saccogyna viticulosa*, and the lichens *Arthonia vinosa*, *Catillera sphaeroides* and *Thelotrema lepadinum*. The woods are also notable for their bird-life. They are all Special Protection Areas, and support breeding red kites *Milvus milvus*.



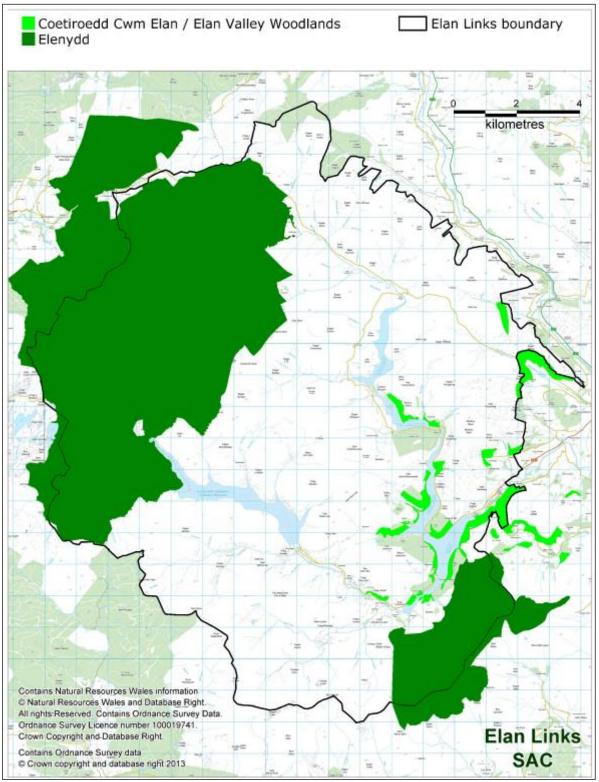


Figure 2: Special Areas of Conservation



# 3.2.2 Special Protection Area - SPA

Special Protection Areas are designated specifically to conserve wild birds that are listed as rare and vulnerable in the Birds Directive. They can also include sites in Wales where migratory birds stop-off on their journeys across the planet.

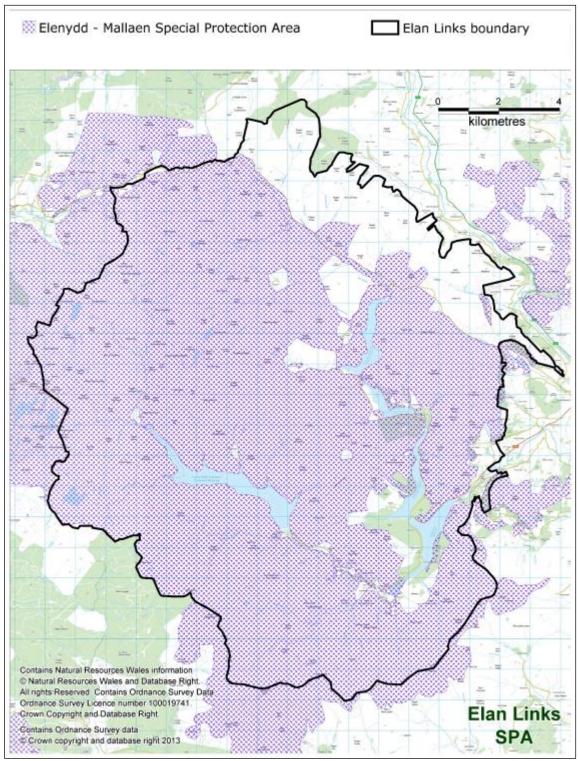
Nearly 80% of the Elan Links area lies within a SPA called Elenydd-Mallaen.

The Elenydd-Mallaen SPA is designated as particularly important for breeding raptors and supports Merlins *Falco columbarius* and Red Kites *Milvus milvus*. The diversity and quality of upland habitats provide an abundance of suitable feeding and nesting sites.



Figure 3: A Red Kite, a common site in the Elan Links area.









#### 3.2.3 Site of Special Scientific Interest – SSSI

Sites of Special Scientific Interest (SSSI) are legally protected in the UK under the <u>Wildlife and</u> <u>Countryside Act 1981</u>. They have been chosen as areas that are important as they support plants, animals and habitats that are rare, declining or unique or because they include the best examples of the geology of Wales.

SSSIs protect nearly 81% of the Elan Links project area.

The most extensive is the Elenydd SSSI which covers at least 79% of the Elan Links project area. It is designated for habitats and species, most notably for its range of breeding birds of upland and woodland, as well as its geological interest. It should be noted that most of the deciduous woodlands of the Elan Links landscape are not included in the Elenydd SSSI, but are instead covered by other SSSI designations.

This is one of the most important areas of hill land in Wales for nature conservation. It is of outstanding interest for its range of breeding birds of upland and woodland. Much of the hill vegetation is also of special interest.

The area is built of rocks of Silurian and Ordovician age, and the landform is typical of the 'slate uplands' of south-central Wales, with plateau separated by steep-sided valleys. The moorland plateau is largely covered by blanket bog vegetation. Purple moor-grass Molinia caerulea is the dominant plant of these hills, occurring in valley mires, on hill slopes and on the plateau tops. This dominance is possibly due to management effects of grazing and burning. On the better developed summit blanket bog there is less purple moor-grass and the vegetation may be dominated by hare's-tail cottongrass Eriophorum vaginatum or deergrass Trichophorum cespitosum, and locally heather Calluna vulgaris can be well represented or dominant. Where the water table is high, as on some watershed mires or in shallow depressions on hill slopes, these communities can be rich in bog-moss species Sphagnum spp., and support a range of higher plants including cranberry Vaccinium oxycoccus, cross-leaved heath Erica tetralix, common cottongrass Eriophorum angustifolium and bog asphodel Narthecium ossifragum. Bog-rosemary Andromeda polifolia, here near the southern end of its range, occurs in several locations. Three particularly interesting localities within the site are the watershed mires at the headwaters of the Rivers Elan and Claerwen, the well-developed pool and hummock mire at Cors Lwyd and the eroded, but still actively growing, mire complex at Cors Gôch. These areas support rare plant species.

The acid grasslands on the site tend to have a high representation of purple moor-grass, heath rush Juncus squarrosus or mat-grass Nardus stricta. Some freely drained areas support bent/fescue Agrostis/Festuca grassland and others have dwarf-shrub heath dominated by heather or bilberry Vaccinium myrtillus. Hillside and streamside flushes are botanically diverse and some support uncommon species, including two localities for bog orchid Hammarbya paludosa.

Crags, scree slopes and stream gorges provide contrasting habitat types that support species that would otherwise be suppressed by grazing, and in areas of high humidity support a spectrum of mosses characteristic of a type confined to the Western Atlantic seaboard. Some of the sessile oak woodlands and mixed woodlands included within the site for ornithological reasons are also of interest for the occurrence of unusual lichens. Mountain lakes within the site support a number of rare species, including water lobelia Lobelia dortmanna, and water-courses, together with their



riparian vegetation, are of botanical interest. An additional feature of scientific interest is the occurrence of plant species tolerant of heavy metals, which grow on old mine workings.

Elenydd is one of the two most important areas in Wales for upland bird species, the other site being Berwyn. It forms the feeding range for a large part of the British population of red kite, which in winter is dependent on the supplies of sheep carrion to be found on the sheepwalks. The availability of carrion also helps support what is probably the greatest density of ravens in Europe, and also large numbers of buzzard. Other raptors feeding or breeding in the upland areas include peregrine, merlin, hen harrier and short-eared owl. Red grouse breed in heather areas, ring ouzel frequent craggy areas, and the hill slopes support populations of wheatear, whinchat and stonechat. Lakes, reservoirs, rivers and streams provide a habitat for goosander, teal, dipper and common sandpiper. The summit plateau mire communities support important wader populations, with possibly the highest Welsh breeding populations of dunlin and golden plover. Valley mires have good populations of snipe, curlew and lapwing. The woodlands of Elenydd support an outstanding assemblage of breeding bird species. The broadleaved woodland has high populations of breeding summer migrants such as pied flycatcher, redstart and warblers, in addition to the resident species that include woodpeckers, tits, nuthatch and treecreeper. The coniferous woodland contributes additional species, in particular long-eared owl, sparrowhawk, siskin and crossbill. Raptors hunting the open hill breed in both semi-natural and plantation woodland.

The remaining SSSIs are mostly concentrated within the Elan Valley. They include sessile oak woodlands and mixed deciduous woodlands, often on steep valley slopes.

These include a rare area of surviving ancient woodland known as the Caban Lakeside Woodlands, along the western edge of Caban Coch Reservoir. Here, ancient oak trees survive and within the damp and humid environment of the woodland a large number of lower plant species are found, including a wide range of bryophytes and lichens.

Further examples such as Cerrig Gwalch, which is an example of mixed deciduous woodland along a steep, east-facing cliff overlooking the Wye valley to the north of Rhayader. The scrubby woodland includes birch, oak and rowan, whilst the regionally rare lichen *Peltigera apthosa* is found on rock outcrops along the cliff.

Coed yr Allt-goch, which is found on the valley slopes above the eastern bank of the Penygarreg Reservoir, is a good example of a sessile oak woodland, with even-aged trees, which displays the characteristics of a grazed upland oakwood. The flora of the woodland floor includes bent and fescue grasses, bracken, bilberry and heather.

Coedydd Glannau a Cwm Coel is another sessile oak woodland, divided into two separate areas on the slopes to the western side of the Garreg Ddu Reservoir. The Glannau woodland, to the north, is rather mixed and includes oak, sycamore and beech. Cwm Coel woodland, further to south, includes some large oaks and a herb-rich flora, with the southernmost part of the wood host to a number of fern species, lichens, mosses and liverworts.

There are also a number of small SSSIs in the Elan Valley which are characterised by wet or dry pastures and hay meadows, which are now much rarer in mid-Wales.



Caeau Troed-rhiw-drain is found on the slopes to the south west of Pen y Garreg Reservoir. It consists of herb-rich hay meadows, where a number of rare plant species are well represented, such as the wood bitter-vetch (*Vicia Orobus*), the greater butterfly-orchid (*Platanthera chlorantha*) and fragrant orchid (*Gymnadenia conopsea*).

Gweunydd Ty'n-y-llidiart covers a series of sloping, rough pasture fields to the west of Garreg-ddu Reservoir. The site displays a range of dry and damp unimproved pasture types once typical of the upland fringe in mid-Wales and over one hundred species of higher plants have been identified here.

The small field system at Caeau Penglaneinion, which is situated on a high, east-facing slope above Caban Coch reservoir is notable for the retention of traditional hay meadows which has many plant species present, including the wood bitter-vetch (*Vicia Orobus*) and the heath-spotted orchid (*Dactylorhiza maculata*).

Rhos yr Hafod is found on a hillside to the north of Penygarreg Dam. It includes several fields and some adjacent upland, as well as some scrub and bracken. It is an outstanding example of herbrich hay meadow and pasture land, where some uncommon plant species are represented. Further north, the unimproved grassland at Caeau Hirnant, to the west of the Penygarreg Reservoir, is also species rich, including meadow grasses and open grassland species. Cae Aberglanhirin and Cae Henfron are further examples of a species-rich hay meadows.



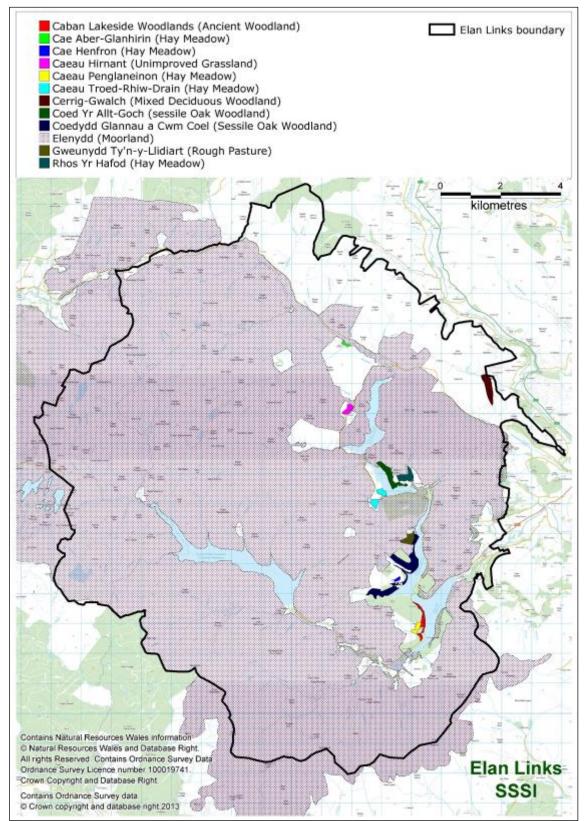


Figure 5: Land designated as a SSSI in the Elan Links area.



# 3.2.4 National Nature Reserve (NNR)

National Nature Reserves were set up to conserve areas and to allow people to study their wildlife, habitats or geological features. They are selected by Natural Resources Wales (NRW) under the National Parks and Access to the Countryside Act 1949, or under the Wildlife and Countryside Act 1981.

There is one National Nature Reserve, Claerwen, within the Elan Links project area, covering 3.7% of the total area.

This nature reserve covers some of the more remote parts of the Elan Links area where the bleak upland provides feeding or breeding grounds for birds like dunlin and golden plover.

The acid grassland with patches of blanket bog are ideal places for plants like bog mosses, bog rosemary, cotton grasses and heather, and grazing has been reduced in this area to protect them.



Figure 6: A Golden Plover.



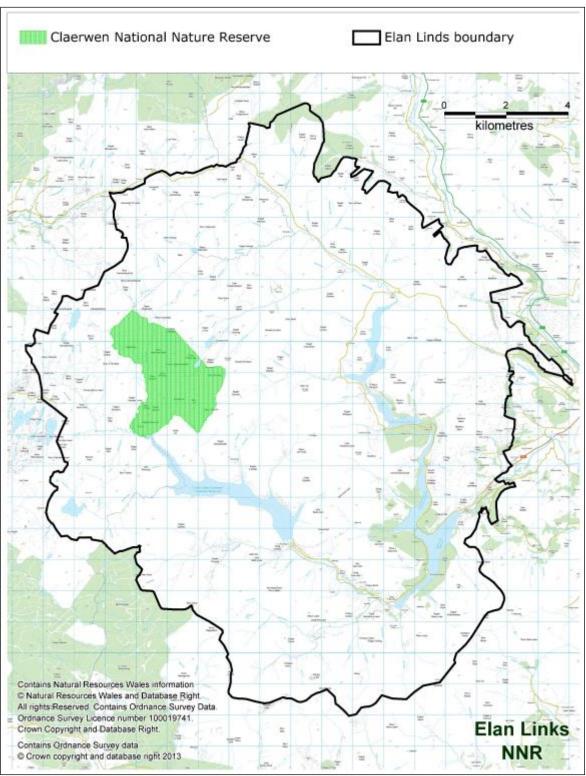


Figure 7: National Nature Reserve (NNR)



# 3.2.5 Ancient Woodland

The Ancient Woodland Inventory has developed over since the 1980s. It aims to identify woodlands that have had continuous woodland cover for several centuries. It has been shown that these woodlands are more ecologically diverse in general, and of a higher nature conservation value, than those developed more recently or those where woodland cover on the site has been intermittent. The Ancient Woodlands may also be culturally important.

There four categories of Ancient Woodland, two of which are present in the Elan links project area.

Ancient Semi-Natural Woodland (ASNW) – these are broadleaf woodlands comprising mainly native tree and shrub species which are believed to have been in existence for over 400 years. Plantation on Ancient Woodland Sites (PAWS) – these are sites which are believed to have been continuously wooded for over 400 years and currently have a canopy cover of more than 50 percent non-native conifer tree species.



Figure 8: Oak woodland in the Elan Valley.



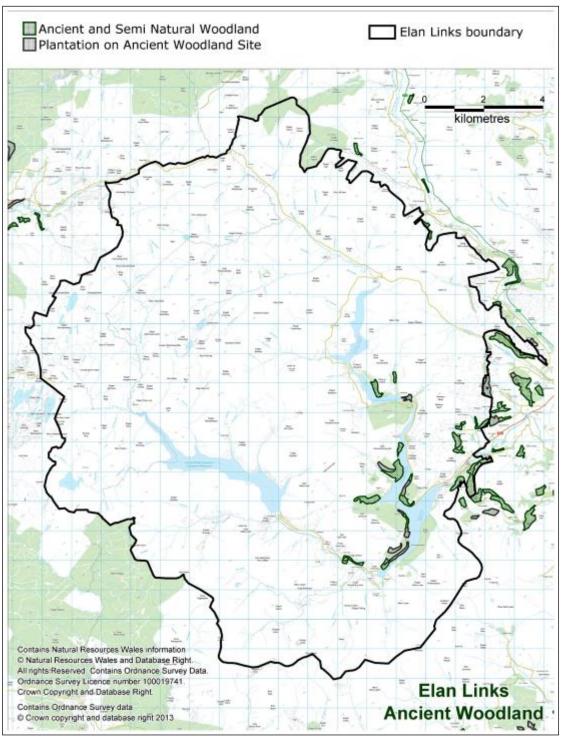


Figure 9: Ancient Woodland in the Elan Links area.



### 3.2.6 Regionally Important Geodiversity Sites - RIGS

RIGS or Regionally Important Geodiversity Sites are locations identified in Wales by locally developed criteria as being the most important places for the study of geology and geomorphology outside of those designated as SSSIs (RSNC, 1999, RIGS Handbook).

These are non-statutory but are considered to be a way of recognising and protecting important Earth science and landscape features for future generations to enjoy.

There are four RIGS within the Elan Links Area. These are the Claerwen Dam, Blaenycwm, Nant Cletwr and Bryniau Pica

The first three all show different rock formations dating back to the early Silurian period, 428,000 to 432,000 years ago, the sedimentary mudstones and grits laid down in seas that formally covered the area. In contrast at Bryniau Pica it is the more recent past, the last 10,000 years, which is of importance. Here the bog contains pollens that tell part of the story of the landscape as people have interacted with it. It also contains information about global events such as the eruption of an Icelandic volcano, around 6000 years ago

#### **Geological Conservation Review Sites**

The Geological Conservation Review began in 1977, with the aim of recording the most significant geological sites in Britain. By the conclusion of the main phase of the review in 1990, over 3,000 of the most important sites had been mapped, providing a representative sample of the geology and geomorphology of Britain. The record is still updated by the Statutory Nature Conservation Body to ensure it remains relevant and accurate.

There are four GCR sites within or partially within the Elan Links Area. These include the Afon Elan (GCR Code 2577), focused on the upper Elan Valley, which is included for its important fluvial geomorphology. The large, modern quarry north of the Caban Coch Reservoir, which was a source of building stone for the dam builders, is included for its fine exposure of Silurian bedrock of the Lower Llandovery Series (GCR Code 2566). The Gorslwyd Bog in included as the Elan Valley Bog (GCR Code 1925) for its importance as a Quaternary geological site, as are the glacial features along the northern side of the upper Ystwyth Valley at Cwm Du and Cwm Tinwen (GCR Code 1465), which extend into the Elan Links Area.



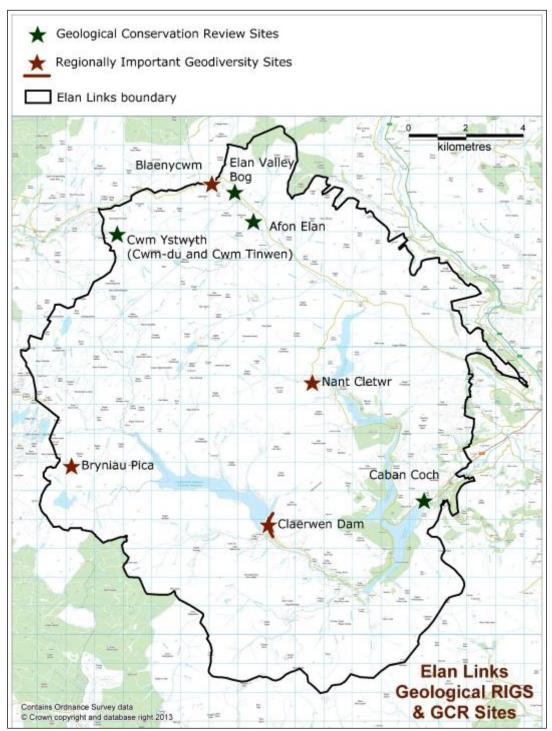


Figure 10: Regionally Important Geodiversity Sites and Geological Conservation Review Sites



# 3.2.7 International Dark Sky Park - IDSP

The International Dark-Sky Association (IDA) started the Dark Skies program in 2001. Under this program, the majority of the Elan Links project area has been recognised as an International Dark Sky Park (IDSP) since July 2015.

This designation is given to a landscape possessing an exceptional, or distinguished, quality of starry nights and a nocturnal environment that is specifically protected for its scientific, natural, educational, cultural heritage, and/or public enjoyment.

The land within the IDSP may be publicly or privately owned but the landowner(s) must consent to the right of permanent, ongoing public access to specific areas included in the IDA designation. The IDSP covers 85% of the Elan Links Project Area.

Aware of the significance of the areas dark skies, and the importance of preserving them, the Elan Valley Trust has taken steps to secure the sky quality with a lighting plan. They also raise awareness of the importance of the quality of the darkness at night in the area.



Figure 11: A starry night above the Elan Valley.



### 3.3 Historic Elan

#### **Built Heritage**

The importance of the Elan Valley's reservoir scheme cannot be understated. The International Committee for the Conservation of The Industrial Heritage (TICCIH) has started initial, international, work on World Heritage Studies of the Water Supply industry. The Secretary General of TICCIH, Stephen Hughes, has stated that;

"The Elan Valley Dams & Aqueduct Water-supply scheme is of international significance. The scale and sophistication of the late nineteenth century complex of several reservoirs and stone dams in two valleys connected by two tunnels to a large 73 mile long aqueduct is unique. The advanced engineering incorporating a series of inverted syphons with ornate valve houses, high and long aqueduct viaducts and a rare submerged dam and high viaduct in innovative in concept and of global heritage value."

### 3.3.1 Historic Landscapes

Almost the whole of the Elan Links area is included in the Register of Landscapes of Historic Interest in Wales.

The Dyfed Archaeological Trust has defined a large upland area, including land on both sides of the Ceredigion/Powys border and covering the Elenydd hills, as the Cambrian Mountains Historic Landscape. They have only described the western, Ceredigion, portion of this area, however.

In their definition of the Cambrian Mountains Historic Landscape, the Dyfed Archaeological Trust note that much of this area was held by Strata Florida Abbey as monastic grange land in medieval times, which became private estate land following the break up of the monastic holding after the Dissolution in the 1530s.

The Clwyd-Powys Archaeological Trust have defined a similar area within their Elan Valley Historic Landscape. This area includes the Elenydd uplands, as well as the lower-lying land along the Elan and Claerwen valleys, as well as parts of the Cwmdeuddwr lowlands as far as, but not including, Rhayader.

A total of 9 Historic Landscape Character Areas have been defined for the Elan Valley Historic Landscape. These include one large area called Elenydd, which reflects the importance of the Elenydd uplands. Smaller landscape areas have also been defined to cover The Elan Valley Reservoirs, Deuddwr, Carn Gafallt, Cwm Dulas, Claerwen, with two very small areas also defined to include the Dalrhiw mining landscape, the Cwm Elan Mine and the Arts & Crafts style workers' settlement at Elan Village.



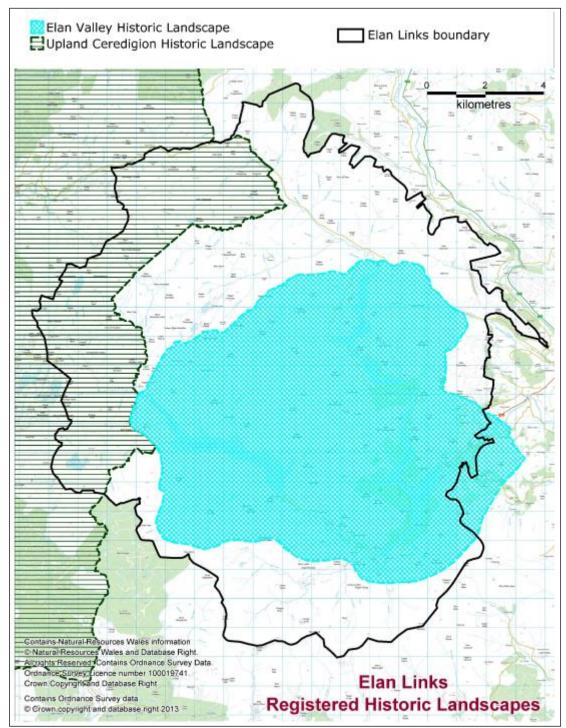


Figure 11: The Registered Historic Landscapes of the Elan Valley and Upland Ceredigion.



# 3.3.2 Scheduled Monuments

Scheduled Monuments are archaeological sites considered to be of national importance. Statutory protection of ancient monuments began as early as 1882, when the Ancient Monuments Protection Act was passed by parliament. The Ancient Monument and Archaeological Areas Act of 1979 expanded the protection of important monuments, supported in Wales by the Welsh Office Circular 60/96. In more recent times, devolution has seen responsibility for protected sites transferred to Welsh Government Ministers, advised by Cadw. Many scheduled monuments have management agreements between the landowner and Cadw to protect them. The most recent legislation is the Historic Environment (Wales) Act (2016) and there are now over 4,000 Scheduled Monuments across Wales.

There are over 40 Scheduled Monuments in the Elan Links area, reflecting the most important monuments and features in the landscape. These are dominated by Bronze Age burial sites, due to the presence of many funerary cairns on the higher ground above the Elan and Claerwen valleys. A prehistoric settlement and a Roman military camp are also scheduled here, as well medieval dwellings and post-medieval industrial sites (such as metal mines) and 20<sup>th</sup> century military structures.

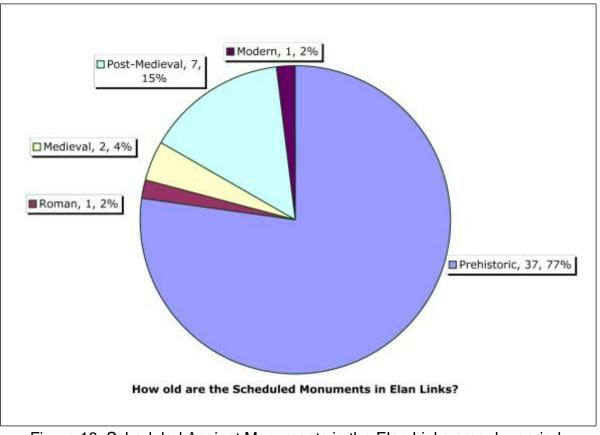


Figure 18: Scheduled Ancient Monuments in the Elan Links area, by period.





Figure 19: Carn Wen, a Bronze Age cairn which is a Scheduled Ancient Monument.



Figure 20: Esgair Perfedd Roman Fort, a Scheduled Ancient Monument.



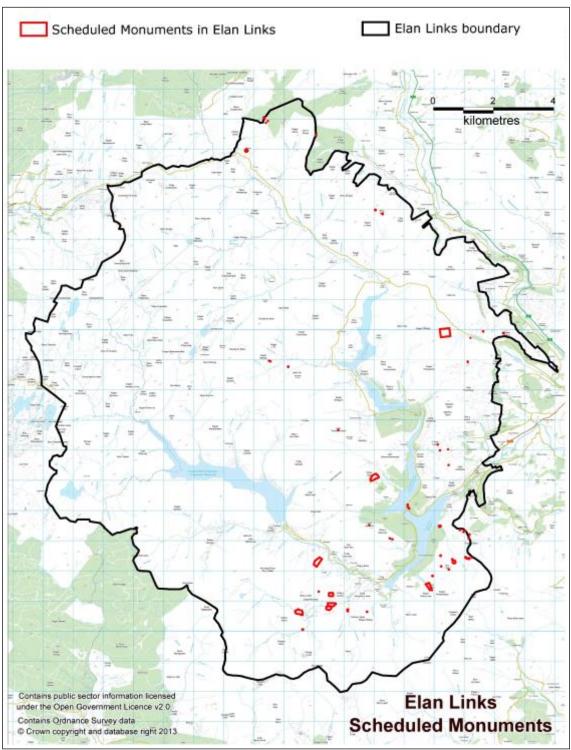


Figure 21: Location of Scheduled Monuments in the Elan Links area.



#### 3.3.3 Listed Buildings

The National Assembly for Wales is required by law to compile lists of buildings of special architectural or historic interest. The buildings on these lists are protected and alterations to them have to be agreed and approved. Cadw, part of the Welsh Assembly Government, compile the lists.

There are 34 Listed Buildings in the Elan Links project area. Most of these are clustered around the reservoirs and reflect the stunning Victorian architecture of the dams and their associated infrastructure. These structures are of national and international importance.

A cluster of listed buildings is also found at Elan Village, which was built for maintenance workers associated with the dam scheme. It was constructed as a permanent replacement for the wooden "navvies" village used to accommodate those who built the dams. The village was built in the Arts and Crafts style and was designed by Buckland, Haywood and Farmer, architects, of Birmingham. Most of the original settlement still survives, making Elan Village of the most significant architectural gems in of central Wales. It is also the only example of a purpose-built Arts and Crafts model village in Wales.



Figure 22: The Claerwen Dam, which is a Listed Building.



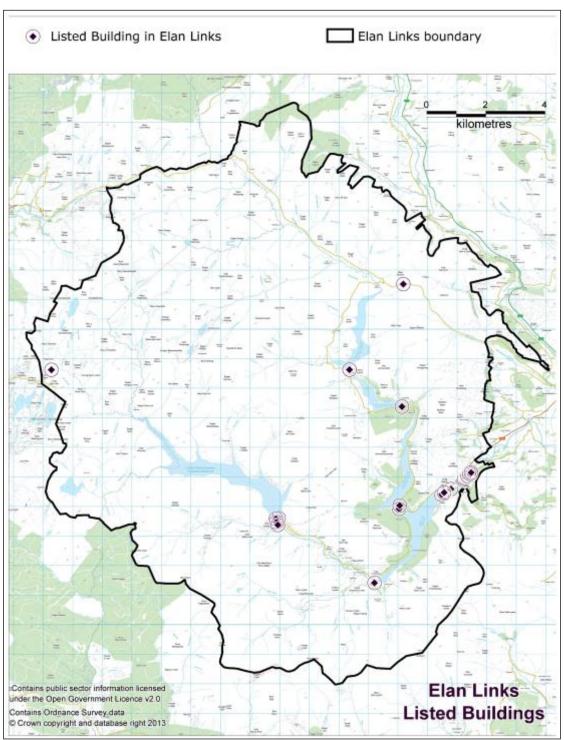


Figure 23: Listed Buildings in the Elan Links area.



## 3.4 Cultural Elan

The Elan Links area has tremendous cultural significance, expressed through a range of media, ranging from ancient craftsmanship to more recent literary associations.

There are no designations or protections for the cultural heritage of Elan Links, of course, apart from those relevant to architectural expressions of culture, which are included within the field of "built heritage" (such as the Arts & Crafts settlement at Elan Village),

The cultural legacy is instead preserved and protected in manuscripts, published and unpublished works, poetry, art, photographs and film and the memories of those who have lived, worked or spent time in this remarkable area.

The sources available to us are surprising rich. Some are surprisingly ancient. Some reside in scattered collections which are not widely known, some are easily available in modern publications or, increasingly, through the internet.

The cultural resource relates to three distinctive periods in the history of the Elan Links area which, when considered together, give an overview of the significance of the cultural associations of this special landscape.

3.4.1 Old Elan: Before the dam builders

#### Myth and Legend

There are several interesting associations between the Elan Links area and some of the great myths and legends of Wales.

The Elan Links uplands have historically formed an important part of the region known as Elenydd. Elenydd is specifically named in one of the great stories contained in the body of medieval Welsh folk tales known as the Mabinogi, which were written down in the late 14<sup>th</sup> or early 15<sup>th</sup> century, but based on much older folk tales. In the story of Math son of Mathonwy, *Elenit* is named on the route taken by magical pigs driven by Math from south to north Wales. He had cheated Pwyll, Prince of Dyfed to give him a herd of swine which he had himself received from the King of the Underworld and raced across Wales with the pigs before his deception was revealed;

A'r nos honno y kerdyssant hyt ygwarthaf Keredigyawn, y lle a elwir etwa o achaus hynny Mochtref. A thrannoeth y kymeryssant eu hynt; dros Elenit y doethant. A'r nos honno y buant y rwng Keri ac Arwystli, yn y dref a elwir heuyt o achaus hynny Mochtref. That night they reached the limits of Ceredigion, to the place known thereafter as Mochtref. The next night they moved on: across Elenydd. And that night they were to be found between Ceri and Arwystli, in the town also known as Mochtref as a result.

When the 16<sup>th</sup> century antiquarian John Leland visited the hills of the area, he made a very rare and significant record of a local myth known to herdsmen who tended their animals on the upland pastures around Claerddu. These men related to him a story about the giant, Arthur, who at one time would have come to the river to wash his hands in a particular pool. The herdsmen took Leland to show him the pool, and modern visitors can today visit the exact place Leland met the herdsmen and make their own search of the river to try to identify the pool he was shown.



# Material culture

The documented human history of the Elan Links area extends back well over 5,000 years to the Neolithic period, reflected in pollen evidence contained in the Gors Lwyd bog in the upper Elan Valley which shows that early populations were probably burning natural woodland in the area to open the landscape up to agriculture and grazing. For most of the next 5,000 years the archaeological record alone tells a fragmentary story of human interaction with the lands within the Elan watershed. This record is restricted to physical remnants of monuments or structures built by societies which are long forgotten, from Bronze Age communities, who buried their dead under cairns on the hills of the area, to Roman soldiers who built their marching camp on Esgair Perfedd over 1,900 years ago.

There are also rare finds of artefacts dating to early times found in the wider district, including tools, weapons and personal jewellery. Examples of these range from a hoard of four Bronze Age socketed axe-heads found during the construction of the Caban Coch dam in 1895 to four beautiful, Bronze Age, gold neck torques found just outside the Elan Links area on Carn Gafallt during the 1950s. Roman jewellery of the 1<sup>st</sup> or 2<sup>nd</sup> century AD, which included a beautiful gold necklet, bracelet and ring, was found in a rock crevice by a local labourer on Gwastedyn Hill, Rhayader in 1899. These discoveries cast more light on the sophistication of the material culture of the early peoples who interacted with the Elan Links landscape.

### Early travellers

The written, historical record for the Elan Links area begins Medieval times, some 800 years ago, when the first few references to the area come into our view. These descriptions are of great significance and relate directly to Strata Florida Abbey. The earliest is a brief description of the Elan uplands by Giraldus Cambrensis (Gerald of Wales) dating to his visit to Strata Florida in 1188. He refers to the hills by their Norman name of *Moruge*, as well as the Welsh version, Elenydd, which is still used today.

A more detailed description was given of the landscape around the upper Claerddu valley by the antiquarian John Leland around 1538, who had also visited the soon-to-close abbey. Leland makes a very rare record about encountering some of the inhabitants of the Elan Links uplands, herdsmen who lived in small *hafod* cottages close to the Claerddu river.

The survival of such early sources gives tremendous time depth to the cultural value of the Elan Links landscape, as we can revisit the paths trod by these early figures and look at the landscape through their eyes. Leland's description, for example, is sufficiently detailed to allow us to retrace his steps and find the ruins of the cottages where his informants lived all those centuries ago. Such a literary association literally brings the landscape to life.

#### Later Travellers

By the 18<sup>th</sup> century it had become fashionable amongst the richer classes to undertake tours of scenic and romantic landscapes, which included the mountainous areas of Wales. The road between Rhayader and Cwmystwyth was quite well-travelled as it was one of the relatively few accessible east-west passes through the Cambrian Mountains. Many of these travellers kept diaries of their Welsh adventures, some of which were soon published or have been preserved in later journals.

Amongst those who passed through this landscape were renowned figures such as the scientist Michael Faraday, who travelled along the road from Rhayader to Cwmystwyth in 1819. Faraday



noted the "concave forms" of the great hills and the "lively little cattle with myriads of sheep" on the mountain pastures. Like most of those who travelled this road, he passed through a landscape that was relatively devoid of interest to them, without significant landmarks.

The Rhayader to Cwmystwyth road was one of the easier roads of the district, however, especially as it was improved as a turnpike road by the early 19<sup>th</sup> century. The roads which followed the Elan and Claerwen river valleys into the heart of the Elan Links landscape were not such easy routes and as a result appear to have been less frequented by travellers. These roads led into a far more striking and varied landscape, which included views of the mansions at Nantgwyllt and Cwm Elan and the small hamlet at Cwm Elan.

One eminent observer who took the trouble to walk through the lower and central Elan valley was Benjamin Heath Malkin, in 1803. His description of the scene gives us a view into the landscape that was lost to the reservoir scheme less than a century later, and also emphasises the early attraction of the Elan Valley to outsiders, such as the Grove family who has come to settle at Cwm Elan House;

"The road sometimes passes through groves of oak, with naked points and mountainous projections impending over their tops... My guide was surprised on our arrival at Mr Groves's, the principal seat in Cwmeland, at seeing the clover ready for the scythe, nearly at the summit of the hills, which a short time ago were without a trace of vegetation. Mr Groves is a Wiltshire gentleman, who purchased ten thousand of these almost worthless acres a few years since, and is making a paradise of the wilderness... The scenery beyond becomes wilder, the path runs along the side of a rock, down which rushes a mountain brook... at this point the Eland assumes a new aspect. The rocks choke it, it forces a passage through the curving gullies: the deep gulph of water becomes black and terrific... the foot passenger leaves it to cross some cultivated lands, and comes suddenly upon it again, to pass a truly Alpine bridge of planks from rock to rock... After rain, the fury of this torrent, confined for several miles within a rocky chasm, is awful in the extreme."

This wild and romantic scene was undoubtedly part of the attraction for the poet Shelley, whose brief association with the area is one of its most significant cultural associations. He was a cousin of the Groves family of Cwm Elan and spent some time in the valley himself. Shelley may have written one poem during his time in the valley but his fondness of the place was expressed in his letters, not in his poetic works. He arrived in the valley in 1812 with his new bride, Harriet, with the intention of buying Nantgwyllt farm and establishing a sanctuary for himself and like-minded friends, what he called in a letter written on June 2<sup>nd</sup> 1812 an "asylum of distressed virtue, the rendezvous of the friends of liberty and the truth." His anticipation as he negotiated for the place was evident. "I am at present in an unpleasant state of suspense with regard to this affair, as so eligible an opportunity for settling in a cheap, retired, romantic spot will scarcely occur again."

Shelley's association with Elan is celebrated by a sculpture entitled "*Prometheus Unbound*", the title from one of his best known works, which stands outside the entrance of the Elan Visitor Centre.

Today the arts play a significant part in many lives, both for local residents and visitors. The area is visited by professional and part time artists and crafts people who draw inspiration from Elan's



landscapes and stories for their work. Some have settled locally although their economic outlets are based away from the area both nationally and internationally.

Local arts organisation, CARAD have run many arts and heritage projects in the valley to record its stories, as well as residents participating in projects in Rhayader. Local creativity and increased understanding of the importance of people's stories continues with much of the outcome of their outreach projects being housed in Rhayader Community Museum and Gallery, itself a CARAD project. The organisation uses the arts as a tool to interpret and make accessible these stories. It also showcases local creative talent. There are now many local groups for artist and craftspeople in the wider area.

The Arts Council of Wales with Dwr Cymru ran a three year artist's residency scheme 'Apt Elan' to highlight not only the heritage and historic significance of Elan's unique location, but also to celebrate and increase its current relevance to contemporary Welsh culture.

Television and film companies are increasingly using the area as technology makes the Valley more accessible.

### Social History

Before the Birmingham Corporation took control of the Elan Links landscape, this was a remote and sparsely populated upland area, where old traditions were maintained and Welsh was still the language heard around the hearths of many of the farms and cottages of the district. The Cwm Elan estate dominated the area, focused on the heart of the Elan Valley, where the ancient residence of Nant Gwyllt still stood and a small village existed with its own church and chapel.

One former resident of that small village documented her memories of the place, as it was in the late 19<sup>th</sup> century, before the dam building scheme was begun. In "Cwmdeuddwr Memories" Hetty Price's recollections were published by the Radnorshire Society in 1948, preserving forever an account of a "happy friendly way of life" in a community that was swept away by the water scheme. Her account is rich and informative, covering many aspects of life in the valley in the 1880s;

"...just by the Church was the Mill, a lovely quaint old wheel fed by a brook, to saw all the timber for the Estate, and also to grind the oats and barley into oatmeal and flummery stuff, and the rest into meal for the pigs. Nearly every farmer took their grain to be done in the autumn. There was also a kiln to dry the grain. It was done by night, and most of the young men around would congregate and have a good time around the large fire that was kept up all night..." (Radnorshire Society Transactions, 1948, p.47).

Despite the loss of this rather idyllic rural community to the construction of the Elan dams when Hettie Price was still a child, we are compensated to some extent by the work of Eustace Tickell, a civil engineer who supervised the project to build Pen y Garreg Dam. During this time, he endeavoured to sketch many of the sights and scenes in the Elan Valley "...to commemorate scenes in one of the most charming valleys in Great Britain. Scenes which are soon to be lost for ever, submerged beneath the waters of a series of lakes...".

Fortunately, Tickell was an able artists and he captured some of the places familiar to Hettie Price. He sketched a number of views of the valley, several houses, including Nantgwyllt, as well as the



old church. His work was published in "The Vale of Nantgwilt – A submerged valley" in 1894, which is one of the cultural gems of the Elan Links area.

One significant monument to the great change that occurred in the 1890s is the church of Nantgwyllt, which was built by the Birmingham Corporation just above the southwestern end of the Garreg-ddu dam. It replaced the old chapel-of-ease of Nantgwyllt, which had disappeared beneath the reservoir. Within the church are four remarkable gargolyes, representing four key individuals in the Elan Valley water scheme, namely Anthony Lees (Secretary of the Water Department), James Mansergh (Chief Engineer), Alderman Lawley Parker (Chairman of Birmingham Water Committee) and Stephen Williams (Architect).



The four men commemorated at Nantgwyllt church (from a poster within the church)



# 3.4.2 Transformation: The Elan Valley Water Scheme

#### Documents and archives

The 1890s saw a huge transformation in the nature of the society and landscape of the Elan Links area. The Birmingham Corporation Water Act was passed by Parliament in 1892 and allowed the Corporation to begin the compulsory purchase of the land within the entire watershed of the Elan river. This was undertaken rapidly, and by 1893 construction had already begun on the first dams.

The history of this period is now the preserve of archives and history books, as the last of the generations who lived through those times would have passed away several decades ago. Nevertheless, the construction of the dams has left a rich cultural legacy, for the entire process was well documented, although the extent of the archived record is largely unassessed at present.

Substantial collections of documents, plans and photographs relating to the Water Scheme and the subsequent management of the resource, including the management of the Elan Valley Estate, are held by Birmingham City and the Elan Valley Trust. Welsh Water has also deposited substantial material with the Powys County Archives in Llandrindod Wells. Radnorshire Museum, also in Llandrindod Wells has an extensive photographic collection, which includes photographs relating to the workers' settlement at Elan Village. A smaller collection of material of relevance is held by CARAD at Rhayader Museum, whilst the National Monuments Record held by the Royal Commission on Ancient and Historical Monuments in Wales also has much material relating to buildings, structures and archaeological sites within the Elan Links area.

At a more human level, the census returns of the late 19<sup>th</sup> and early 20<sup>th</sup> century document the social and cultural change which suddenly swept through the area. The 1891 census returns for the parishes of Llansanffraid Cwmdeuddwr in Radnorshire and its neighbouring parishes to the west in Ceredigion provide a snapshot of rural society on the eve of its great transformation. It was a society inhabited chiefly by farmers, shepherds, labourers, those engaged in rural employment or workers on landed estates.

A decade later in 1901, the Birmingham Corporation had received parliamentary assent for its Water Scheme, purchased the necessary lands and constructed the bulk of its dams and reservoirs. The 1901 Census for the parish of Llansantffraid Cwmdeuddwr therefore presents a picture of a markedly different society. The rural population now lived alongside an industrial community of engineers, masons, railwaymen and their families. By 1911, the construction phase well behind them, a new generation of engineers and maintenance workers lived in Elan Village and in cottages around the district, ensuring the smooth operation of the Water Scheme. The census records are therefore a valuable source of information available to study the society which developed around the Water Scheme.

#### Modern published works

A number of books have been published which relate the story of the Water Scheme, a good example of which is "The Building of the Elan Valley Dams" by Rita Morton (1997) which is considered to be a useful source book, gathering together key material relating to the history of the Elan dams.

Another valuable publication is Sid Wright's "Up the Claerwen" (1948) which includes much information on the traditional farming society of the Claerwen valley before work began on the construction of the last of the great dams of the Elan Links area, the Claerwen Dam, in 1946. The



author spent a great deal of time living with the farming people of the valley and their way of life is ably recounted. The book also touches on the history and landscape of the wider district and the continuing role of Birmingham in the new development.

Another important publication is "Good Men and True: the lives and tales of the shepherds of md Wales" written by Erwyd Howells and published in 2005. This volume is not specific to the Elan Links area, but includes chapters about shepherding families who inhabited farms within the Elan Estate such as Glanhirin, Aberglanhirin, Botalog and Hirnant. It is rich with tales of these hardy characters and draws on a considerable amount of family and oral history.

The scope and significance of oral history within the Elan Links area is likely to be high, albeit largely untapped at present. Many of the farming families of the district have been on the land for several generations and can recount many stories relating to people and events. A good example of this is a story related by local resident at a consultation event held during October 2016, which described the day a Luftwaffe aircraft dropped bombs on a local farm. During fieldwork projects in the past, Trysor have encountered farmers within the Elan Links area who can describe the evidence for American artillery practice in the landscape, dating back to the Second World War, as well as show locations where the American's set up camp during the conflict. Oral evidence invariably declines in quality with the passing of the generations, and capturing what is known amongst the older generations of local residents is one of the heritage priorities for Elan Links.

The 20<sup>th</sup> century has brought new media to help record history of course. One of the best examples of this was the decision of the National Museum of Wales during the mid-20<sup>th</sup> century to commission a film recording the traditional art of peat cutting. The industry had all but died out by the time the film was made, but some of the peat cutters of old brought their tools out of retirement and recreated the traditional method of peat cutting for the cameras. This film has been shown to the public by Rhayader Museum in recent years.



# 3.4.3 Access and Recreation: The Modern View of Elan

One of the most significant aspects of the Elan Links area is that it is highly accessible.

We are now used to the concept of "Right to Roam". Since 2005 when the Countryside and Rights of Way Act (CRoW) came into force nearly a fifth of Wales is now Open Access where people can explore beyond footpaths.

In the Elan Links area though the right of public access has been part of the area's history since the Birmingham Corporation Act of 1892 which, as a concession, gave people rights of access to the commons.

The Elan Links area is viewed as being remote, but is relatively well served by the road network. Good roads give access to the Elan and Claerwen valleys, with a main east-west route also passing from the Wye Valley, along the upper Elan Valley into the Ystwyth Valley in Ceredigion. These roads are popular with day trippers from a wide area and in the summer months can be exceptionally busy.

The regular flow of road traffic bringing visitors into the Elan Links area means that there is some provision of parking facilities, convenient for the dams and reservoirs of the Elan and Claerwen valleys. There is also a popular Visitor Centre at Elan Village, which has interpretations of the history and landscape of the Elan Estate as well as a cafe.

Over 154,000 people a year visit the Elan Valley Visitor Centre. Visitors come from a variety of places and for a variety of reasons. Most stay close to the dramatic scenery of valleys and reservoirs. Some venture into the more remote areas, to explore the stunning landscapes and rich natural and human heritage of the district. It is landscape well-suited for hill-walking, mountain biking and pony-trekking and the Elan Estate organise a programme of guided walks and activities throughout the year.

Despite the relative popularity of the Elan Links area, footfall is currently very much focused on the more easily accessible landscapes of the Elan and Claerwen valleys. However, the wider landscape also has much to offer, with appropriate consultation and planning. It is evident that the visitor experience could be enhanced and the range of activities and attractions could be broadened. This could allow for a sustainable and appropriate growth in visitor numbers, the length of visitor stays and the nature of interactions with the Elan Links landscape.





Figure 24: During a consultation at the Elan Valley visitor centre, people were asked to mark the furthest place they had walked within the Elan Links area. The results showed that people do venture into the remoter parts of the area.





Figure 25: Pony trekking in Elenydd.



Figure 26: Mountain biking in the Elan Valley.





Figure 27: A word map derived from comments made by members of the public during a consultation event at the Elan Valley Visitor Centre in 2016.



# 3.5 LANDMAP and Elan

# LANDMAP

LANDMAP is a landscape resource for Wales which records and evaluates landscape characteristics, qualities and influences. It is designed to assist transparent, sustainable decision-making and natural resource planning from local to national levels.

LANDMAP includes five consistent, quality assured spatial datasets relating to the;

- Cultural Landscape
- Geological Landscape
- Landscape Habitats
- Visual and Sensory
- Historic Landscape

The Cultural Landscape of the Elan Links area has been evaluated to be of Outstanding or High value. The entire upland block on the Ceredigion side of the county boundary is of Outstanding value, as are the landscapes of the Claerwen and Elan Valleys in Powys, due to the influence of the renowned reservoir and dam complexes in each valley. The remainder of the Elan Links landscape in Powys has if of High value.

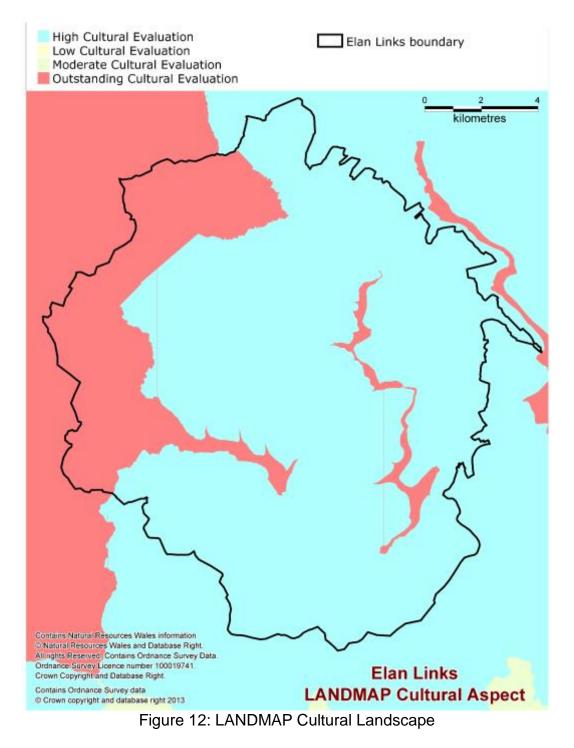
The Geological Landscape of the Elan Links area is generally classed as being of High value, with areas of Outstanding value also included. The area is of considerable geological interest, being underlain by Silurian and Ordovician bedrock, with some metal ores present which have been commercially exploited in the past, as well as evidence of glacial processes and active peat bog development.

With regard to Landscape Habitats, the western and southern sides of the Elan Links area, as well as parts of the central area are of Outstanding value as they include Special Areas of Conservation and contain a "wealth of upland habitats including: heath and blanket mire, acid grassland, flushes and small lakes and pools" and "host a range of significant species including breeding raptors." The remainder of the Elan Links uplands, to the east, have a High value due to their extensive, unimproved grasslands and upland bogs which are of importance for breeding birds. Smaller areas within the Elan Valley bring more variety to the habitats of the area. For example, the central Elan Valley, dominated by the Elan reservoirs, is of Outstanding importance for its hay meadows, pastures and woodlands, whilst Llanerch Cawr, along the southern edge of the Caban Coch reservoir, is a small area of Western acidic oak woodland, scrub and grassland.

The Elan Links Historic Landscape is evaluated as being of Outstanding quality. Again, much of the area falls within the upland block, designated as the Cambrian Mountains on the Ceredigion side of the county boundary and as Elenydd and Carnau (to the north and south of the Claerwen valley respectively) on the Powys side of the boundary. Both these large upland areas are valued for their archaeological value, which ranges from Bronze Age burial sites, to medieval and later settlements and some metal mines of more recent date. The Elan Valley Historic Landscape Character Area is focused on the Elan Valley reservoirs and dams, as well as the workers' village at Elan Village and adjoining farmland and valley side woodlands. The Claerwen Reservoir has been defined as a separate area, as has the small area of farmland and woodland at Llanerch Cawr, to the southern side of the Claerwen valley.



The fifth landscape category, Visual and Sensory, evaluates most of the Elan Links area as being of High importance. This includes large upland areas defined as the Cambrian Mountains (Ceredigion), Cambrian Mountains Plateau Tops and Bryn Glas & Bryn Moel Uplands. The Elan and Claerwen valleys, characterised by landscapes dominated by reservoirs and wooded or afforested valley slopes are evaluated as being of Outstanding Visual and Sensory importance.



Pobl - Natur - Dŵr Pecele - Nature - Water

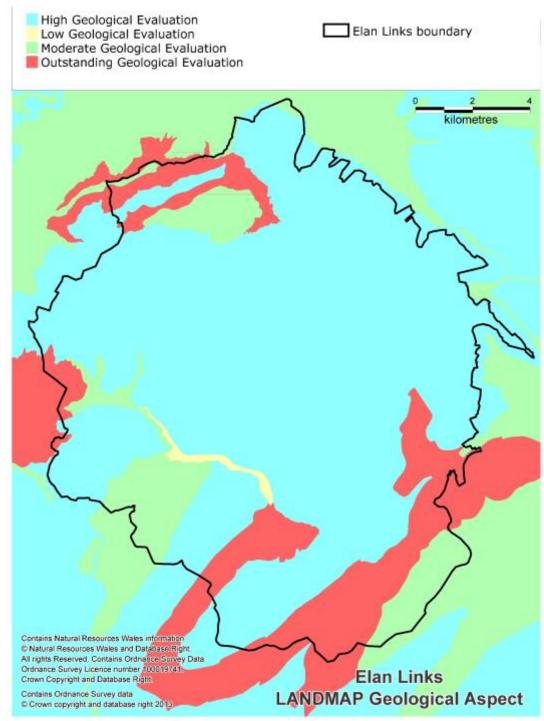


Figure 13: LANDMAP Geological Landscape



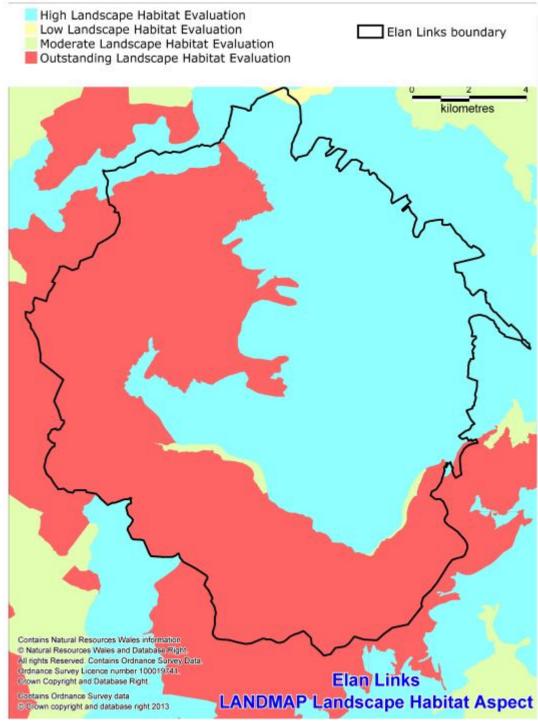
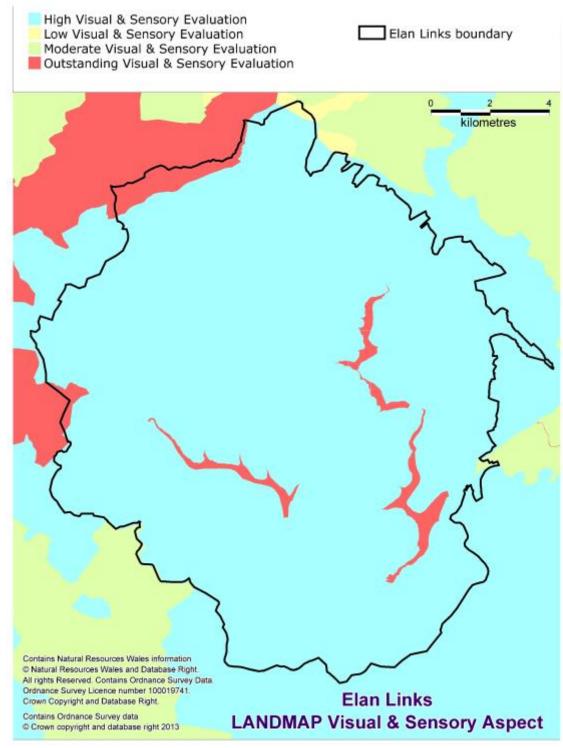


Figure 14: LANDMAP Landscape Habitat









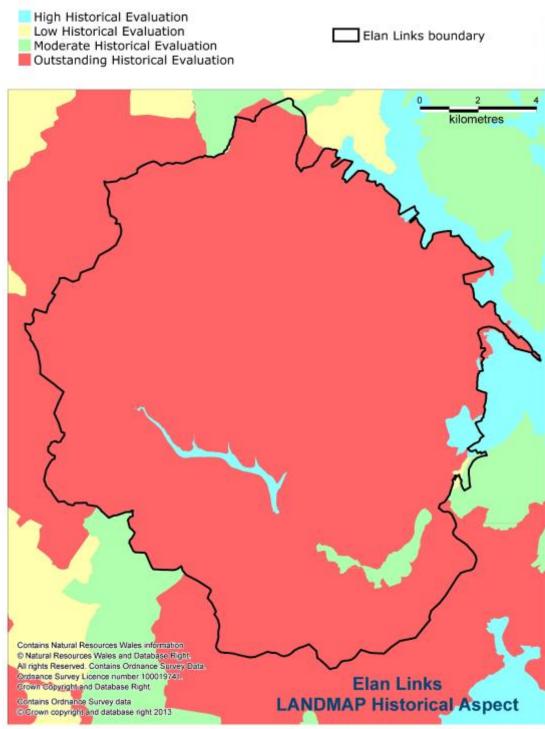


Figure 16: LANDMAP Historical Landscape



### 3.5.1 Powys Special Landscape Area – SLA

Natural Resources Wales have issued a Guidance Note (1) which describes how LANDMAP can be applied at a county level by Local Planning Authorities, through the definition of Special Landscape Areas. Guidance Note 1 states that;

"Special Landscape Areas (SLAs) are... a non-statutory designation applied by local planning authorities to define those areas that are of high landscape importance within their administrative boundaries. Areas can be defined as being of high landscape importance for their intrinsic physical, environmental, visual, cultural and historic value in today's landscape."

LANDMAP has been used by Powys County Council to guide the definition of Special Landscape Areas which cover the entire area of Elan Links in Powys. This comprises three Special Landscape Areas, namely LCA BL12 (Bryn Glas Uplands), LCA BL13 (Claerwen Valley Reservoirs) and LCA R15 (Elenydd Hills).

LANDMAP has also been used by Ceredigion County Council to define its own Special Landscape Areas. The portion of Elan Links which lies on the Ceredigion side of the county boundary is therefore part of the extensive North Ceredigion Uplands Special Landscape Area (SLA12).

