

ENVIRONMENT AND OPEN SPACES

**An introductory Discussion paper on how the Dalston Neighbourhood Plan
might address protection of the natural environment.**

David Wilcock

Goal

To protect and enhance the natural and built environment and to maintain and improve the quality of life for people living in Dalston parish by protecting terrestrial and aquatic ecosystems against the damaging effects of any new development.

Aims

1. Protect open spaces in Dalston Parish which enhance the quality of life for people living in the parish and, on PC-owned land, maintain and increase local biodiversity through conservation and access management plans produced in partnership with conservation bodies.
2. Protect, enhance and conserve the rural character of landscape throughout the parish from which all settlements derive their rural character and, by maintaining existing footpath networks through voluntary and statutory partnerships, preserve the ease with which surrounding countryside, especially the River Caldeu corridor, can be seen and accessed from existing settlements.
3. Work with planning agencies to secure the use of local building stone in major building development so as to maintain the link between all communities and the local region.

4. Maintain the distinctive spatial identity of all village communities in the parish and, with particular reference to Dalston in this context, maintain the present open landscape character of the area north of the village.
5. Screen commercial woodlands with native trees, wherever possible, maintain public access to woodland walks along the river Caldew and elsewhere (e.g. Chalk Beck), and ensure that tree preservation orders (TPOs) are observed and that other suitable trees are identified for TPOs.
6. Identify, protect and enhance the industrial heritage of Dalston village and work with statutory agencies to protect all historically important buildings within the parish
7. Work with regulatory bodies to ensure that all development respects the high ecological status of the River Caldew and its national and international designations as a Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC). Take action to ensure that local knowledge about the river's ecology is passed on from present to future generations.
8. Work with regulatory bodies to support actions which minimise flooding in vulnerable built-up areas (e.g. Stockdalewath) and oppose new residential housing within the 1;100 year flood frequency zone as defined by the Environment Agency though not modifications to existing commercial and industrial premises in areas where no recent history of flooding has occurred.

Background to the above goal and aims:

The parish in its regional context:

In the booklet, “*Cumbria Landscape Character Guidance and Toolkit*” (Wain *et al*, 2011), landscape in the parish is described as ‘transitional’ between ‘lowland’ landscapes in the Solway basin and ‘upland’ landscapes of the North Cumbria Fells. Heights range between 25m on the River Caldew on the Northern parish boundary and 150m near High Head (NY 3410544). The parish lies in an area of undulating farmland dissected by the River Caldew and its tributaries, principally the River Roe. Pow Beck, a minor tributary of the River Caldew forms the east boundary of the parish for much of its length. Chalk Beck - its name derived from an earlier name for the river, Shalke Beck, and not at all reflecting any outcrops of chalk in the parish - is a small tributary of the River Wampool, independent of the River Caldew system. It forms the parish boundary in the West.

The River Caldew, from the Old English *cald ēa* or *Caldwr* (cold river) flows North through the parish from Welton to Dalston village. It occupies what was described 400 years ago as ‘flat ground in a pleasant, fruit-full, valley, environed all round with woody banks’ (*Winchester*). The woody banks and productive (i.e. ‘fruit-full’) agriculture are still evident today. Historically, the river has played an important role in village economic development and continues to do so.

Prominent features of the built environment in the parish include Dalston Hall, currently a hotel and restaurant which recently hosted a nine-hole golf course located in the parkland landscape. Dalston Hall has existed in various forms since Norman times when the barony of Dalston was first given to Robert de Dalston (*Winchester*, 2003) and the Hall became the principal seat of the Dalston

family. Land around the Hall may have been used since Roman times (*Bullock, 1992/3*). Rose Castle, overlooking the Caldew to the south of Dalston village and located in agricultural landscape studded with mature trees, has been the home of the Bishop of Carlisle since the thirteenth century. According to Denton, writing in 1647, it was first built by John Rose, the tenth Bishop of Carlisle though other writers believe its name reflects the red Triassic sandstone from which it, and many buildings throughout the parish, is mainly built. Today, it remains one of several very important architectural buildings in the parish.

Aim 1: The protection of open spaces and biodiversity

The main public open space in the parish is The Green in Dalston village which provides direct access to the river and a local recreational amenity. But there are others such as the Showground on which the Dalston Annual Show is held annually. Many open spaces are small but form an integral part of the parish's rich biodiversity, which includes some 800 recorded species (Tullie House Museum). A June, 2013 survey of eight small open spaces in the parish by local members of the Botanical Society of The British Isles commented on the richness of the flora and expressed the hope that suitable measures will continue to be taken to protect and encourage what is a considerable asset to the village. The wildflower meadow, a small open area at Forge Green near the parish council offices, is the subject of a beautiful film made by a local resident celebrating the web of natural life which can exist if such places are managed properly. Hedgerows, many of them now more than 200 years old and dating from the first agricultural enclosures in 1803, are the main form of field boundary and are a very important element of the parish's

rich plant communities. Important and valuable linear ecological resources also exist in the form of mixed woodland habitats which still line the banks of the River Caldew, River Roe, Chalk Beck and Pow Beck. Hedgerows and riverine woodland together form extremely valuable wildlife habitats and corridors for the movement of many birds and animals, still including red squirrels, and represent very important ecological resources with high biodiversity of plant and animal life.

Sowerby Wood, covering more than 1km² South of the Carlisle - Thursby Road immediately to the South-West of Lingy Close, is also an area of diverse deciduous and coniferous woodland supporting a quite complex range of habitats important for wildlife, particularly birds. Currently under private ownership significant areas of this woodland are have recently been clear felled and public access appears not to be encouraged. The group views the area of woodland as one of the parish's most significant ecological resources and would welcome opportunities to take part in the development of practical conservation policies of benefit to the community alongside sustainable commercial development.

Private gardens are also a feature of the parish. A strong interest in gardening exists, the parish gardening club having a membership of over 80 drawn not only from Dalston village but from Gaitskill, Raughton Head, and Cumdivock as well. The last five years has seen the development of a garden at Dalston station by a handful of parish volunteers which is now formally recognised by the Royal Horticultural Society as being of a quality one grade below the highest they award for such projects.

Land in the North- Western part of the parish is part of the River Wampool catchment which drains, independently of the Eden system, into the Solway Firth. Commercial extraction of fluvio-glacial sands and gravel takes place at Cardewlees and the parish is hopeful that it might be possible to establish a wetland and wildlife refuge here when extraction stops, as required by restoration plans issued when planning approval for extraction was originally granted.

In 2008 and 2009 the Parish council also expressed its support for a foot/cycle and or path/bridleway link from Dalston village to Cardewlees Quarry as part of the restoration work. This would be an important recreational asset to the parish and the PC still strongly supports this proposal.

A rich flora is the basis for a rich fauna and open spaces in the parish abound with insect and bird life, all of which the parish values highly and wishes to maintain and enhance for the quality of life they afford to residents and visitors alike.

Aim 2. Protect the rural character of landscape and access to countryside

Easy access to local countryside from all parish communities is a much-valued amenity throughout the parish. Many people in the parish walk regularly, often with their dogs, and walking is an activity to be encouraged for public health reasons as well as personal enjoyment. Walking groups such as that from Carlisle's University of the Third Age (U3A), which runs three such groups, make regular use of Dalston's car parking facilities as a base from

which to take 3-10 mile walks around village footpaths, including the Cumbria Way which runs through the parish, following the River Caldew for much of its length. A network of footpaths around Dalston village and the various parish townships, often the legacy of millworkers making their way to and from work, provides important recreational countryside access for parish residents and are well-used. These footpaths are greatly valued and looked after by local residents. The Red Spearlands Footpath Group is a voluntary organisation based in the parish which regularly surveys the status of this footpath network and promotes and organises walks for the parish community. The group also records deficiencies in rights of way and passes information to the parish council as appropriate.

Aim 3. Use of local building stone in new building wherever possible:

The parish rests on Permo-Triassic rocks and a small area of older Carboniferous rocks near Gaitsgill overlain by glacial boulder clay and fluvioglacial gravels. Prominent outcrops of Permo-Triassic sandstones occur at several places, notably on the bed of the River Caldew in Dalston village and at Chalk Beck. This sandstone has been used as a building stone since Roman times (*Mannix and Whellan, p.371*) and is a distinctive feature of older buildings throughout the parish. It is hoped that use of this building stone will be continued in contemporary and future buildings as a means of maintaining historical continuity with the past.

Aim 4. Maintain spatial identity of village communities:

Land Use in Dalston village is mainly residential with some light industry. Dalston village and the larger rural community settlements in the parish –

Lingey Close, Gaitsgill, Raughton Head, Stockdalewath - are clearly demarcated from the surrounding countryside and need to be maintained. This is felt particularly strongly in the case of the Northern approaches to Dalston village along the B5299 where open landscape presently separates Carlisle quite clearly from Dalston village. This group would like this area of open landscape to maintain its present character.

Aim 5. Woodland enhancement and protection

Woodland forms an important element of the parish landscape with small but ecologically- and recreationally-significant woodland corridors along the River Caldew for example. Oak, ash, hazel and other broadleaved, deciduous, species also occur in hedgerows. Many of these are now getting old and may not naturally be replaced. The parish wishes to encourage the planting of more deciduous planting in hedgerows to ensure successful succession of new tree species when old ones die or have to be cut down. Commercial woodlands exist in the parish, for example at Lingey, but are not extensive or dominant features of the landscape. A significant number of trees and some woodland are the subject of tree preservation orders which need to be observed rigorously to maintain and improve the wooded appearance of village communities.

Aim 6. Industrial heritage:

As long ago as 1829, contemporary accounts described the River Caldew as having “upon its well-wooded banks four large cotton mills, an iron-forge, a flax mill, and two corn mills most of which are in Buckhowbank township’

(Mann, 1976). Four cotton mills had become three by 1847 (Mann, 1974) and only a two-storey version of what was once a four-storey cotton mill now remains of all this industrial activity on the east bank of the River Caldew between Dalston and Buckabank. In 1767 there was also a dye-house (Bullock, 1992/93). Today's other reminders of this important nineteenth century industrial enclave in Dalston village include the Parish Council building at Forge Green, a network of millraces, and two small residential roads called Walk Mill and Bishop's Mill, presumably the approximate locations of a former fulling mill and a mill owned by and in the gift of the Bishop of Carlisle.

This part of the village, with its important industrial archaeology and social history is also one of the parish's important recreational resources, much used as a daily route for walking and cycling to and from Dalston's shops by residents in Buckabank and Hawksdale. Recreational interest in it would be improved and enhanced by public information boards about the role of the river in the village's history. These are to be considered when finance is available but maintaining the existing character of this part of the parish is a high planning priority.

Aim 7. All development to respect the high ecological status of the River Caldew.

Besides its historical and recreational importance to the parish the River Caldew is of national and international ecological importance, even though many of its important former ecological habitats for aquatic and amphibian wildlife, such as embayments, were lost during the 1950s and 1960s when older local residents recall changes to the river in order to improve agricultural

output. As part of the River Eden system it was declared an SSSI (Site of Special Scientific Interest) in 1993 under the UK's Wildlife and Countryside Act, 1981 and in 2004 it became an SAC (Special Area of Conservation) under the European Union's 1992 Habitats Directive. As such, it has nationally and internationally recognised conservation objectives, designed to maintain the river 'in favourable condition' as a habitat for several specifically mentioned aquatic species of flora and fauna: eg. water crowfoot communities; Atlantic salmon and bullhead; sea, river and brook lamprey; otter; residual alluvial woodland. The Caldew is known to have salmon and bullhead and might have lamprey. Native crayfish were not observed during a 2012 survey, though abundant sightings of the invasive American signal crayfish have been unofficially reported near Bell Bridge, on the Southern boundary of the PC. Other recognised threats to the ecology and wildlife of the river system include the spread of the highly invasive Japanese Knotweed along many stretches of the Caldew, residential housing growth within the catchment and contamination from industrial and agricultural point sources as well as diffuse agricultural pollution (*Locke and Robinson, 2003*). Bank erosion is also a recognised problem throughout the Caldew catchment contributing to the silting up of what are essentially gravel-bed rivers, with consequent damage to food chains in the rivers on which protected fish species rely. Removal of gravel from the river for use as aggregate, particularly at Buckabank, is a practice also thought to damage the river ecosystem and the parish supports the EA in discouraging it. The Pow Beck, on the road from Dalston to Durdar, hosts continuous water quality monitoring equipment, part of a DEFRA funded demonstration research project in the Eden catchment "to

evaluate whether water pollution can be reduced through farming practice and agricultural land measures while maintaining farm productivity and profitability". This is one of only four such DEFRA funded research projects in England, one measure of how important and vulnerable water quality on the Eden system is thought to be.

Local people value the beauty, wildlife, and high recreational value of an essentially clean river. Trout, migrating salmon, dippers, wagtails, otters can all be seen by the keen-eyed, and Dalston Parish Council has always tried to play a role in maintaining, even enhancing, river bank stability, water quality and wildlife by its own policies, wherever possible (*e.g. Dalston Parish Council, 2005 (a) and (b)*). A small but active body of local people also make extremely valuable contributions to the development of a local knowledge-base about the parish's river systems and their conservation, both individually and through organisations such as the Eden Rivers Trust (ERT), established in 1996, and the Ive and Roe Conservation Society which is linked to the ERT. These organisations rely on the expertise of a community of older parishioners and the PC perceives an urgent need for a ten-year programme of environmental education for younger people within the parish, perhaps including the involvement of local schools in the monitoring and ecological assessment of the parish's rivers, woodlands and wetlands.

In keeping with the local community's historical interest in and attempts to maintain the River Caldw as a natural resource of high quality, the first cotton mill in Dalston at Mill Eilers in Buckabank, is today the location for Cowens, an environmental consultancy based at the mill, which is hosting attempts to re-introduce the concept of small-scale renewable energy from

rivers for the benefit of local communities. Cowens are developing the use of efficient modern turbine designs to draw energy from rivers like the Caldey, with low potential energy heads. Excess energy generated by the turbine and surplus to demand at Cowens will be fed into the Grid. "It is estimated that thousands of small-scale hydroelectric schemes such as the one planned for Ellers Mill could power 850,000 homes and produce 1.5% of the UK's electricity needs" (*Daily Telegraph, September 15, 2012*).

Integral to this scheme is the proper maintenance of the head-controlling weir on the River Caldey, at Hawksdale above Dalston, and the proper management of millraces, themselves valuable elements of the village's important industrial heritage between Buckabank and Dalston. The PC supports environmentally-sensitive industrial development based on river flow energy of the type being developed in the parish and feels that the industrial history, character and recreational opportunities provided by this riverside enclave is retained and managed sensitively and imaginatively.

Aim 8. Support actions which minimize flooding

Flooding in Dalston parish, and Dalston village, has not been a major problem, despite the recent history of flooding in the lower Eden valley and the Environment Agency's classification of much of the Green in Dalston village as lying within the 1:100 year flood limit, which gives all housing in this zone a theoretical 1% chance of flooding every year. New building in the parish, however, should be located using the precautionary principle, which argues for it to be located outside the 1; 100 year flood limit. Modifications to existing industrial buildings within the 1:100 year flood limit which have no

record of recent flooding and which might enhance local employment opportunities however, need not be prohibited.

One community which is subject to local flooding is Stockdalewath. The largest flood here in recent memory took place as recently as 2013 and the EA estimates that 25-50 properties here and at Thistlewood are at risk from the 1% annual probability flood event. A Roe Catchment Community Water Management Group was established in 2013 by local residents to study and suggest solutions for this problem which the Parish Council ranks as one of its immediate priorities.

In conclusion, there is a long history of active interest and concern within the parish for management of its high quality natural and built environment which are, perhaps, the greatest assets any community can possess. Interest and concern is maintained today and all sensible, future, development within the parish will respect it.

References

- Bullock, P.J. (ed.), 1992/3, *A History of Dalston parish from early times*, 59pp (with appendices)
- Dalston Parish Council, 2005 (a), *Dalston Design Statement*, 15pp.
- Dalston Parish, 2005 (b), *Dalston Parish Plan 2005-2015*, 30pp.
- Environment Agency, 2009, *Summary Report, Eden Catchment Flood Management Plan*, 24pp.
- Locke, E and Robinson, M, 2003, *The River Eden cSAC conservation Strategy*, *English Nature*, 79pp.
- Mannix and Whellan, 1847, *History, Gazetteer and Directory of Cumberland*, Facsimile edited by Michael Mann, 1974
- Winchester, A.L with M. Wane, 2003, *Thomas Denton: a Perambulation of Cumberland 1687-1688, including descriptions of Westmorland, The Isle of Man and Ireland*, *Cumberland and Westmorland Archaeological and Antiquarian Society Record Series Vol. XVI*, p. 254
- Parson and White's *History, Gazetteer and Directory of Cumberland and Westmorland*, 1829. Facsimile edition published by Michael Moon, 1976
- Daily Telegraph, September 15, 2012, *Energy Firm to harness the power of rivers*
- Tullie House Museum, *Virtual fauna of Lakeland*, www.lakelandwildlife.co.uk.

- Wain, J, et al, 2011, *Cumbria Landscape Character Guidance and Toolkit, Part Two, Landscape Character Toolkit*, Cumbria County Council, 37pp.

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