DERRY CITY AND STRABANE DISTRICT COUNCIL LOCAL DEVELOPMENT PLAN (LDP) 2032



EVIDENCE BASE

Development Pressure Analysis (February 2017)

This Document is one in a series, which builds up to form the 'evidence base' that informs the preparation of the Local Development Plan (LDP).

The afore-mentioned evidence base will be continually updated, to additionally include the latest information, input from public engagement, statutory consultees, stakeholder groups, Sustainability Appraisal and from other Departments within the Council, including Community Planning.

The Evidence Base is published as a 'supporting document' in accordance with Article 10(a) and 15(a) of the Planning (LDP) Regulations (NI) 2015



Development Pressure Analysis for Derry City and Strabane District Council

Purpose:

The purpose of the pressure analysis is to assist in identifying areas in the district which are under particular pressure from residential and wind development. The analysis will identify sensitive landscapes (parts of the AONB) and will help identify areas of landscape that are particularly vulnerable to development. Such areas could be protected potentially with stronger rural policy.

'The countryside' as referred to in this paper is defined as the land outside of the settlement limits as identified in the Derry Area Plan 2011 and Strabane Area Plan 2001 and focuses upon single dwelling applications, replacement dwelling applications as well as wind energy development proposals.

1.0 Introduction to Paper

- 1.1 This Paper is one in a series, building up the evidence base that will inform the preparation of the Local Development Plan (LDP).
- 1.2 The Development Pressure Analysis seeks to identify areas where significant development pressure has occurred and/or where local rural character is under threat of significant change.
- 1.3 An outcome of the Development Pressure Analysis will be to allow the council to consider its options regarding countryside policy in the LDP. The options for controlling development pressure in the countryside include introducing Greenbelts or Countryside Policy Areas in sensitive areas experiencing development pressure.
- 1.4 It is important to note that other forms of development such as agriculture, mineral extraction and industrial type development can have an impact upon the visual amenity and character of the countryside as well.

2.0 Regional Planning Policy

- 2.1 The Strategic Planning Policy Statement (SPPS) for Northern Ireland places Sustainable Development at the heart of the planning system. The SPPS sets out the need to protect and enhance the built and natural environment, including landscape character. The SPPS states that our environment must be managed in a sustainable manner in accordance with the Northern Ireland Executives commitment to preserve and improve the built and natural environment and halt the loss of biodiversity.
- 2.2 The SPPS directs that policy approaches to new development in the countryside should reflect differences within the region, be sensitive to local needs and be sensitive to environmental issues including the ability of settlements and landscapes to absorb development. In doing so, this may involve recognising areas that are particularly sensitive to change and areas which have lower sensitivities and thus provide opportunities to accommodate sustainable development. All proposals for development in the countryside must be sited and designed to integrate sympathetically with their surroundings, including natural topography, and to meet other planning policy and environmental considerations, including the policy approach to cluster, consolidate and group new development with existing established buildings, and must not have an adverse impact on the rural character of the area.

Central Government Guidance

2.3 The Department for Infrastructure (DFI) published its guidance document Development Plan Practice Note 7 in April 2015. In relation to Development in the countryside it advises that the council should undertake an appraisal of the main plan area to establish the issues affecting the countryside and to determine the Plan Strategy approach to be undertaken to achieve its objectives for development in the countryside. This may include an appraisal of environmental assets, landscape character, areas of development pressure and settlements including potential for dispersed rural communities. Please refer to Paper 3: Countryside and Landscape Assessment (workshop 3) for an outline of the Landscape Character Areas across the District. The Development Pressure analysis will further supplement this.

3.0 Data Provision

The data used to inform the pressure analysis has been provided by DFI Analysis, Statistics and Research Branch. The Data consists of all rural (i.e. outside settlement development limits) residential applications that were decided or withdrawn between 2002/03 and Q2 of 2016/17 for the Derry City and Strabane District. From this data it was possible to extract specific information on applications for new build single dwellings and replacement dwellings, approved and refused allowing for a more specific analysis of this development type. Table 1 below shows the total number of single dwellings and replacement dwellings approved and refused in the district from 2002 to 2016. (excluding Reserved Matters).

Year	No of single	No of	Total	No of single	No of	Total	Total no of
	dwellings	Replacement	approved	dwellings	replacement	refused	applications for
	approved	Dwellings	(approval	refused	dwellings		single dwellings
		approved	rate)		refused		& replacements
2002	134	52	186	37	4	41	227
			(81.9%)				
2003	259	84	343 (87.7%)	42	6	48	391
2004	228	78	306 (71.6%)	116	5	121	427
2005	437	111	548 (75.2%)	205	5	210	728
2006	249	76	325 (54.5%)	261	10	271	596
2007	55	67	122 (58.3%)	66	21	87	209
2008	49	58	107 (95.5%)	3	2	5	112
2009	86	67	153 (91%)	12	3	15	168
2010	84	53	137 (72.4%)	46	6	52	189
2011	84	29	113 (79.5%)	22	7	29	142
2012	72	24	96 (88%)	11	2	13	109
2013	38	15	53 (79%)	14	0	14	67
2014	35	33	68 (93.1%)	3	2	5	73
2015	33	24	57 (89%)	7	0	7	64
2016	53	13	66 (92%)	5	0	5	71
Total	1896	784	2680 (74.4%)	846	73	919	3599

Table 1 all applications approved and refused for single dwellings and replacement dwellings in the District (Excluding Reserved Matters) Source: DFI

3.1 Table 1 shows a significant increase in applications for single dwellings and replacements dwellings in 2005 (728). This reflects the high increase in applications submitted prior to the introduction of PPS14 in March 2006. It is likely that this was fuelled by public fears that stricter controls in the countryside were imminent. The number of applications received has gradually reduced since this peak. A number of different factors can be considered for this reduction in numbers, the recession in 2007, introduction of draft PPS21 November 2008, and the adoption of PPS21 June 2010 to present. Interestingly the approval rate remained high since 2008 ranging from 95.5% in 2008 to 92% in 2016 suggesting that the reduced number of applications is due to economic factors as opposed to planning policy.

4.0 **Summary of Analysis**

- 4.1 In the first instance, Map 1 (see Appendix) shows all applications for single dwellings (Full and Outline and including replacement dwellings) approved and refused in the countryside between 2002 and 2017. These are shown as a 'dot map' and provide an indication of the development pressure in the countryside. Map 2, then includes an additional layer which shows these dots in relation to environmental designations. This highlights the distribution of planning applications in proximity to areas of special protection. Map 3 highlights the distribution of the planning decisions and Landscape Character Areas across the District.
- 4.2 Secondly, Map 4 shows the results of a 'Hot Spot' Analysis, this is a spatial analysis tool within ArcGis, this tool identifies statistically significant spatial clusters of high values (hot spots) and low values (cold spots) using average nearest neighbour distance, the tool evaluates the distribution of all of these distances to create clusters. This is presented as 'Hot Spots' and 'Cold Spots', where there is a very high incidence of clustering (i.e 99% confidence measure) this appears as the darkest red colour on the map and diminishing hues of red/orange represent decreasing confidence measures of clustering. 'Cold Spots' are identified as dark blue with diminishing hues representing decreasing confidence. The data used in this analysis included all types of residential development ranging from housing extensions and alterations, replacement dwellings, new single dwellings and housing developments and included Outline, Full, and applications for CLUDs during this 15 year period.
- 4.3 This helped to identify areas where there is potential clustering and shows the distribution of development pressure caused by residential development throughout the District.
- 4.4 A more specific pressure analysis was also carried out. This sought to identify the development pressure caused by single dwellings (Outline and Full, approvals and refusals) throughout the district (Map 5). This helped to identify the distribution of planning decisions for single rural dwellings in the countryside and to identify where clustering was occurring.
- 4.5 Map 6 shows the distribution of planning decisions across the rural area cross-referenced against 10km grid squares throughout the District. Each square details the number of planning decisions for single rural dwellings found within each. This information coupled with the pressure analysis maps give an indication of the areas which are experiencing development pressure and those which are not. For example the central placed square encompassing Ballymagorry, Artigarvan, Glenmornan, Cloghcor, Donemana and Donaghedy has the highest number of applications in the whole district (360) and is also identified as a 'Hot Spot' for clustering in Maps 4 & 5.

5.0 Locations of Development Pressure

- 5.1 Map 4 highlights the development pressure from all types of residential development facing the countryside over this 15 year period by identifying areas of high statistical clustering. This map is more likely a representation of the population distribution throughout the countryside, but nonetheless, a useful tool to indicate where the pressure is. These areas are:
 - 1. North of Strabane encompassing Ballymagorry, Artigarvin, Donemana, Cloghcor, Donaghedy, Glenmornan and Bready. The landscape of this area is identified in Map 3 as the Sperrins Foothills, Sperrin Mountain, Foyle Valley and part of Burngibbagh and Drumahoe. This area of clustering extends into the AONB to the east.
 - 2. To the North West, north and north east of Claudy and along the A6, a sizable area of clustering also extends into the AONB. The landscape character of this area is identified on Map 3 as Loughermore Hills and Sperrin Foothills.
 - 3. South of Clady along the Donegal border, here the landscape is identified as the Foyle Valley and Derg Valley.
 - 4. North and north west of Castlederg, this landscape is identified in Map 3 as in the Derg Valley.
 - 5. South of Castlederg, between Castlederg and Garvetagh this landscape is identified as the Derg Valley.
- 5.2 The Development Pressure Analysis Map 4 also identified areas where there is no significant clustering (90-95% Confidence). These areas are:
 - To the north east and south east of Derry between its development limit and the Donegal border and a linear track which runs along the Foyle River in a northern direction. Presumably as a result of the environmental designations in place along the river and the floodplain landscape and industrial zoning along the A2 to Coleraine. This landscape is identified as the Derry Slopes and Lough Foyle Valley Plain.
 - 2. There is a significant track of land to the south of the District which runs between Newtownstewart, Ardstraw, Douglas Bridge and north to Aghabrack. This landscape is identified as the Foyle Valley and Sperrin Mountains and Sperrin Foothills.
 - 3. East and south of Cranagh in the Glenelly Valley Landscape Character Area.
 - 4. South west corner of the District beyond Aghyaran in the Killeter Uplands Landscape Character Area.

Single Dwelling Development Pressure

5.3 Map 5 identifies 'hot spot 'and 'cold spot' areas where there is a high statistical confidence of clustering of single dwellings in the countryside. This analysis includes outline and full applications for single dwellings and replacement dwellings approved and refused in the countryside. The information presented in this map differs from that presented in Map 4 as the data used in Map 5 has been further broken down and categorised. There remain some similarities between both maps, these are as follows:

- 1. An area of clustering to the north of Strabane encompassing Ballymagorry and Artigarvan, Cloghcor and Glenmornan.
- 2. North and north east of Claudy to the upper side of the A6.
- 3. South of Clady adjacent to the Donegal border.
- 4. A small area to the east of Killen.
- 5.4 The spatial analysis on Map 5 also highlights two 'Cold Spot' areas, one is located to the north east of the Derry development limit between Derry and Eglinton and the other is located to the south west of Claudy.

Analysis of Residential Development Pressure.

- 5.5 From an analysis of the information presented in the Pressure Analysis Maps 4 and 5 it is clear that there are obvious pressures north of Strabane town along the A5 encompassing Artigarvan, Ballymagorry, Cloghcor and Donaghedy and then east into the foothills of the Sperrins toward Donemana. An extract from Map 6 can be seen below and details the distribution of the 360 planning applications which have been decided within this 10km grid square. This area has the highest amount of applications decided throughout the district. This could be on account of its proximity to Strabane and Derry, the proximity to the main road networks, the arterial road network, the landform which is relatively flat but rises to the east offering potential views of the Foyle Basin making this a popular location for development.
- The landscape may be determined to have a low sensitivity to development which could account for the clustering of planning approvals (Map 5). This pressure area has encroached into the AONB and warrants consideration over potential harm to the integrity of the character of this adjacent sensitive landscape. The main road between Artigarvan and Donemana was designated a Highway Policy Area in the Strabane Area Plan 2001 which may have helped to reduce the potential for development along this stretch of the AONB. Furthermore the Strabane Greenbelt designated in the SAP extends north from the Strabane development limit along the A5 to Ballymagorry and Artigarvan and could explain why development pressure is located in this area.

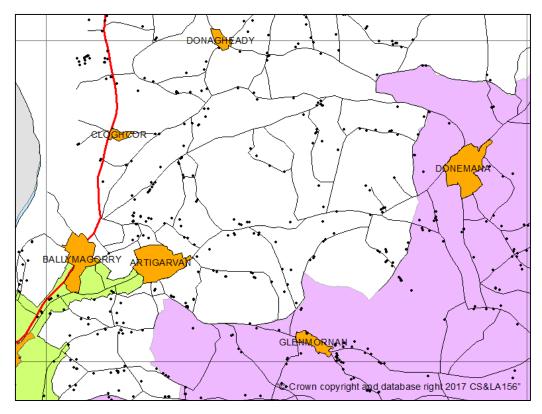


Fig 1. Extract from Map 6 highlighting Greenbelt (green) and AONB (Purple)

- 5.7 Fig 2 below is a closer inspection of Map 6 showing the Claudy Hot Spot area. It is located in proximity to the A6 which is a protected route potentially forcing dwellings to locate and access the properties off the arterial road network (Baranailt Road and Ballyhanedin Road). There also appears to be a cluster at the junction of Kilaloo and the Oughtagh Road and to the east of Claudy Village.
- 5.8 This is a central location to 4 main settlements in the area, Derry, Limavady, Claudy and Dungiven.

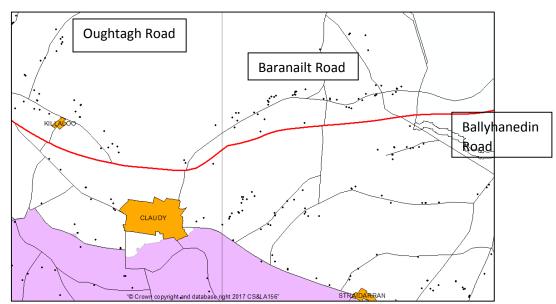


Fig 2. Extract from Map 6

5.9 An area to the south of Clady has been highlighted as a Hot Spot Area. On closer inspection Fig 3 below is an extract of Map 6 which shows a clustering of application decisions along the Lisdoo Road and Drumeagle Road. This could be on account of its relative proximity to Strabane and the road network. The main road between Clady and Strabane (Urney Road) was designated as a Highway Policy Area in the Strabane Area Plan (2001) and may account for a rather sparse pattern of road side development pressure along this stretch of Road. Similarly, the main road between Clady and Glebe (Bellspark Road) was also designated as a Highway Policy Area which shows a similar form of sparse roadside development. This could direct the development pressure along the remaining road networks if the surrounding landscape is not suitable to integrate development. Furthermore, a large tract of land surrounding Strabane and Sion Mills, extending south to Victoria Bridge west to Glebe was designated as Greenbelt in the SAP and could explain why development pressure is located toward Clady and the Donegal Border.

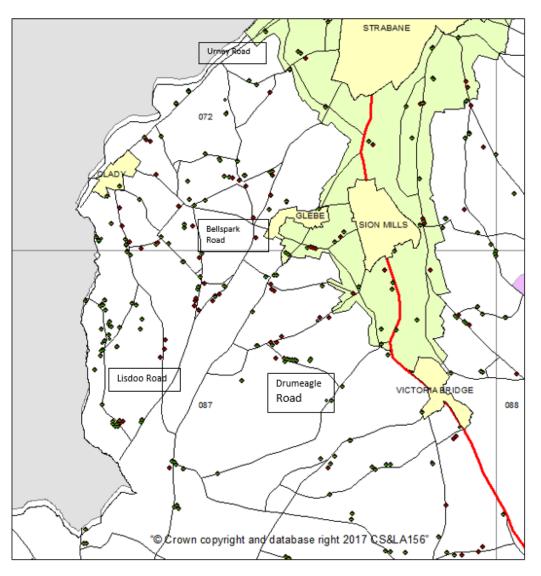


Fig 3. Extract from Map 6 showing greenbelt (green)

5.10 To the west of Castlederg there appears to be an area which has experienced a significant amount of planning decisions over this 15 year period, the 10km grid

square which largely encompasses this area has the 2nd highest number of planning decisions in the district (280). Figure 4 below highlights that there appears to be development pressure along the arterial routes. There is a linear cluster along the main route between Castlederg and Killen (The Castlegore and Learmore Roads). This route was designated as a Highway Policy Area in the SAP which protected the roadside fields from development. A consequence of this has seen development pressure relocated from the along the main road to a fields distance back off the main road and it would appear to have encouraged pressure for development along the Laghel Road. A portion of the Drumquin Road and the Strabane Road were also designed as Highway Policy Areas. This appears to have encouraged a more sparse form of development along these roads.

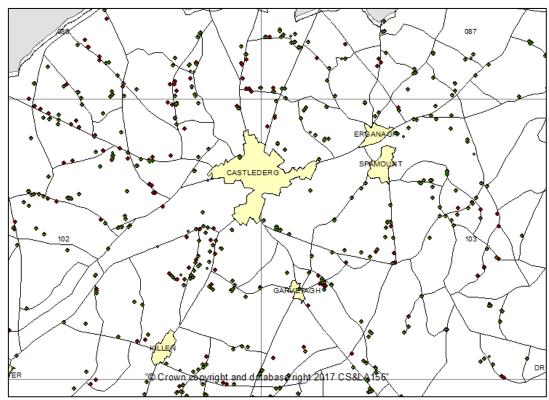


Fig 4. Extract from Map 6

5.11 It is important to note that large areas of open countryside exist with very little development pressure which in most cases can be attributable to high inaccessible terrain and environmentally sensitive areas. An example of this would be the Sperrin Mountains. As you can see below the there is a low density pattern of planning applications across the highest parts of the mountains, conversely development is more focused along the low lying arterial routes thoroughfares to Cranagh, Plumbride and Aghabrack which are more suitable areas for development.

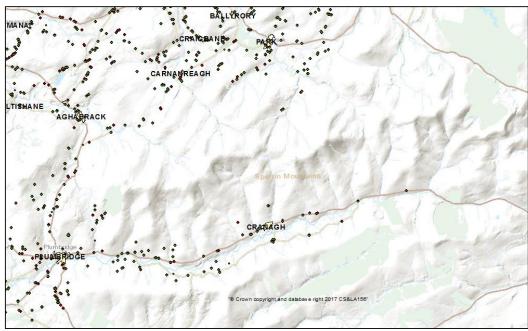


Fig 5. Extract from Map 6 within Sperrins AONB (purple)

5.12 To contain urban sprawl of Derry City the Derry Area Plan designated a greenbelt area surrounding the city and its small settlements. In addition to containing the urban sprawl and preventing the city and its small settlements from coalescing, a knock on effect has been it that it has limited the development of single dwellings.

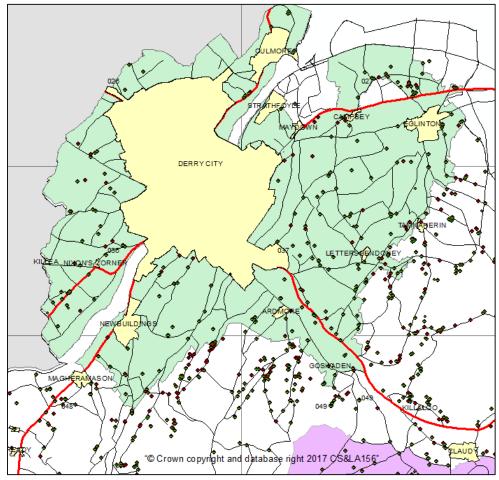


Fig 6. Extract from Map 6 showing Greenbelt

In Conclusion

5.13 By in large Development Pressure appears to be reduced in the areas previously designated as Greenbelt and Policy Areas in the Derry Area Plan and Strabane Area Plan and to a large extent along the roads designated as Highway Protection Areas. However it is important to note that this may have encouraged development to concentrate in undesignated areas. For example, to the north of Strabane Greenbelt (Ballymagorry, Artigarvan, Cloghcor etc) and south of the Strabane, Sion Mills and Victoria Bridge greenbelt area (south of Clady) there appears to be greater development pressure.

6.0 Wind Energy Pressure Analysis

- 6.1 The data used to inform the Wind Energy pressure analysis has been provided by DFI Analysis, Statistics and Research Branch. The Data consists of all applications for Wind Energy which include Wind Farms and Single Turbines that were decided between 2002/03 and Q2 of 2016/17 for the Derry City and Strabane District. This data is presented as a Dot Map (Map7&8) to demonstrate the distribution of this type of development across the countryside and in relation to the Landscape Character Areas to help identify areas/landscapes under threat from cumulative impacts.
- 6.2 Electricity generated by onshore wind farms is the most established, large scale source of renewable energy in NI. At present in the Derry City and Strabane District, there are 17 wind farms which have been approved, there are a further 6 under consideration (as of May 2017). Until very recently single turbines have dominated renewable energy applications.
- 6.3 The table below details the number of applications received for single turbines in the District between the period 2002 to 2017. The total number received is 293 in this 15 year period of which 213 were approved and 80 refused. Applications for single wind turbines received peaked in 2010 and has seen a gradual decrease in numbers until 2014 with the most notable reduction being between 2014 and 2015.

Year	No. Applications Received	Approved	Refused	Total
2002	2	2	0	2
2003	2	2	0	2
2004	5	5	0	5
2005	2	2	0	2
2006	3	3	0	3
2007	7	6	1	7
2008	13	13	0	13
2009	9	9	0	9
2010	78	63	15	78
2011	56	42	14	56
2012	54	34	20	54
2013	32	20	12	32
2014	23	9	14	23
2015	7	3	4	7
2016	No info	-	-	-
2017	No info	-	-	-
Total	293	213	80	293

Data provided by DFI

6.4 The tables below shows the number of applications received for Wind Farms (two or more turbines) in the District. There are 17 wind farms which have received planning permission with a further 6 proposals under consideration and 1 under appeal. See Tables 2, 3 and 4 below.

Appr	Approved Applications					
Nos	Planning	Name	No. of	Capacity (MW)		
	Reference		Turbines			
4	J/1994/0220/F	Bessy Bell	10	5		

6	J/1993/0286/F	Owenreagh	10	5
14	J/2004/1015/F	Owenreagh II	6	5.1
18	J/2004/0295/f	Bin Mountain	6	9
29	J/2005/0133/F	Crighshane	14	28
36	J/2005/0358/F	ChurchHill	8	16
8	B/2000/0118/F	Altahullion	20	26
25	A/2004/1243/F	Curryfree	6	15
22	A/2004/1130/F	Slievekirk	12	27.6
34	J/2005/0211/F	Carrickatane	9	27
28	J/2005/0104/F	Tievenamenta	15	45
56	J/2006/0883/F	Seegronan	16	14
99	A/2009/0868/F	Monnaboy	4	10
79	J/2008/0088/F	Slieveglass	3	6.9
33	A/2005/0223/F	Eglish	6	15
115	A/2011/0202/F	Slieve Kirk (ext)	5	15
86	J/2008/0240/F	Meénakeeran	4	12
145	A/2014/0630/F	Ballyhanedin	8	24

Table 2 Existing and extant planning approvals for wind farm development in the District (Derry City and Strabane District Council Local Development Plan May 2017

Current Applications					
Nos	Reference	Name	No. of Turbines	Capacity (MW)	
70	J/2007/0667/F	Gronan	4	9.2	
102	J/2010/0481/F	Craignagapple	9	20.7	
107	J/2011/0082/F	Crighshane Ext	5	11.5	
122	A/2012/0401/F	Barr Cregg	7	17.5	
133	J/2013/0183/F	Church Hill Ext.	1	2.3	
138	J/2013/0287/F	Meenamullan	5	12.5	
145	A/2014/0630/F	Ballyhanendin	8	24	

Table 3 Current applications for wind farm development (Derry City and Strabane District Council Local Development Plan May 2017.)

Applic	ation Under Appeal			
Nos	Reference	Name	No. of Turbines	Capacity
				(MW)
122	A/2012/0401/F	Barr Cregg	7	17.5

Table 4 Applications under appeal for wind farm development (Derry City and Strabane District Council Local Development Plan May 2017).

6.5 Northern Ireland has met its PFG target of 20% renewable energy consumption by 2015. However, we must still strive to meet the target of 40% set out by the Strategic Energy Framework by 2020. Wind energy provides the greatest contribution toward renewable energy consumption however the decline in wind energy applications continues due to the reduction in Government funding (ROCs Scheme closure 2016.)

Distribution Across The District

- 6.6 The location of wind farms across the district as you would expect are located on higher land and primarily foothill locations (150m and above in elevation). There appears to be a higher concentration of Wind Farms located centrally within the District in the Sperrin Foothills. There also appears to be a higher concentration of wind farm development along the southern boundaries of the district within the Killeter Uplands.
- 6.7 Eglish Mountain Wind Farm and Owenreagh Wind Farm are located within the AONB.
- 6.8 Single wind turbines appear to cluster more in the north of the district but there appears to be a higher number of single turbines spread across the south of the District. In the north of the District and to the south of the Derry city development limit there appears to be a small cluster of single turbines located along the elevated Trench Road in the Burngibbagh and Drumahoe LCA. To the north west of the district in the Loughermore Hill LCA there appears to be another cluster of single turbines to the north of the Baranailt Road. This landscape rises to the north and with a backdrop of Loughermore Hill and forestry development, this landscape lends itself to wind energy development and it is also in proximity to the Glenshane Road and Baranailt Road network. All of these factors could explain why this area appears to be under development pressure from wind energy.

- 6.9 North and west of the small settlement Craigban within the Sperrin Foothills LAC, there appears to be a small cluster of single turbines. These are located on higher ground but on the south side of a range of foothills and in the foreground of the Sperrins. The location of these turbines was found to be most suitable as they would not be visible from the A6 and would have a backdrop of the higher Sperrins landscape.
- 6.10 Another small cluster exists within the Sperrins Foothills LCA to the south of the existing Slieve Kirk Wind farm, on a lower and falling landscape.
- 6.11 Furthermore, access to infrastructure in terms of Grid connection is a factor which would cause single turbines to clusters.
- 6.12 There is a notable area of single turbines to the north of Glenmornan within the Sperrin Foothill LCA at Barron Hill. The majority of these approvals are just outside the AONB with 4 located within the AONB.
- 6.13 To the south of the District there appears to be more single turbines spread across a smaller area, with a higher density of distribution along the north of the Derg Valley LCA from Castlederg to Sion Mills. This pressure could be on account of the upland valley which make up the landscape of this area.
- 6.14 Wind energy production is influenced by a number of limiting factors which has affected the distribution of wind energy development across the district. Limiting factors such as the City of Derry Airport safety zone, environmental designations, bog, forestry, infrastructure/access to the Grid, landscapes etc has resulted in areas where this type of development cannot feasibly locate.

7.0 Conclusion

- 7.1 A broad over view of the development pressure from both single rural dwellings and wind energy development indicates that in general, areas which were designated as AONB, ASSI, RAMSAR, Greenbelt, CPA have experienced less development pressure. As a consequence areas without any designation were put under more pressure.
- 7.2 With a consensus among Council members that sustainable forms of development should be encouraged within the countryside, policy is required to protect sensitive landscapes and areas identified as experiencing development pressure from single dwellings and or turbines.
- 7.3 Development has encroached into the AONB, in areas where this is happening further assessment is required to ascertain the visual impact this has had on the surrounding landscape.

Options for the LDP

Policy in the countryside must strike a balance between sustaining rural vibrancy and be sensitive to environmental issues. The Development Pressure Analysis has highlighted residential and wind energy development trends across our district and why these are potentially happening. If more restrictive policy is required to protect the countryside from harmful development tends there are 3 options:

- 1. Designate areas of Greenbelt around the settlement limits.
- 2. Designate Greenbelt or Policy Areas along Roads.
- 3. Designate location specific Greenbelts in areas experiencing development pressure.

Appendix

