

## Section 3.0: Local Context / Environment & Appraisal

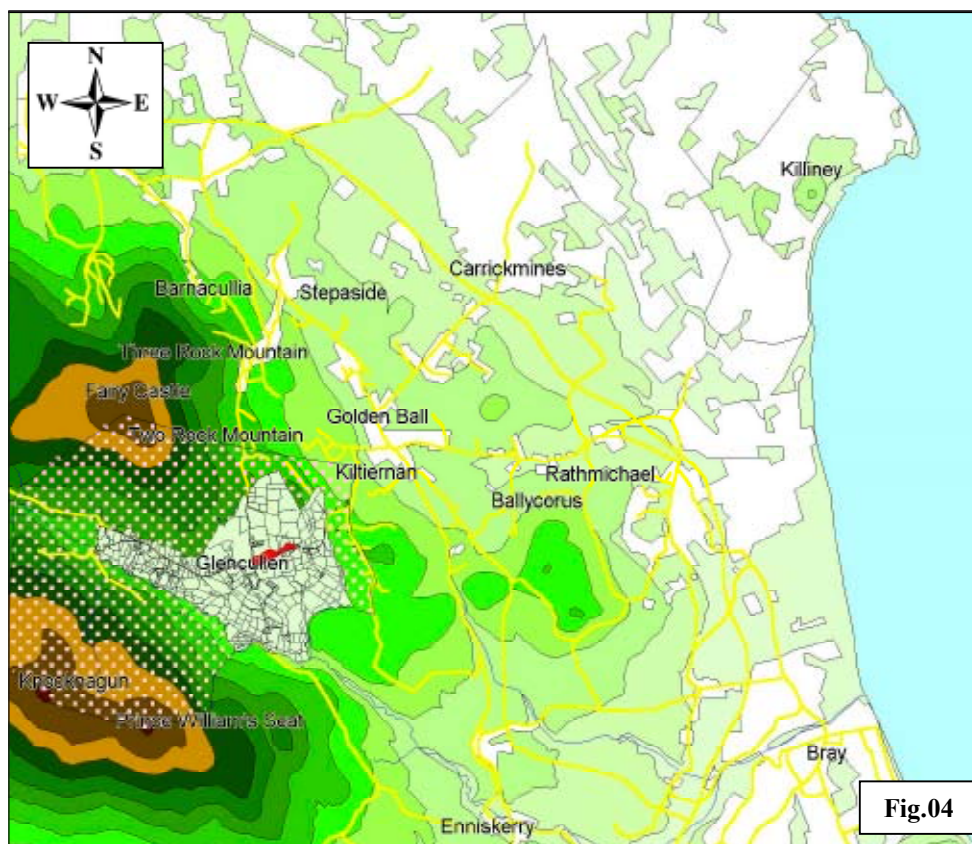
### 3.1 Local Context / Environment

Glencullen River Valley forms the landscape envelope within which the Plan area is located (the landscape envelope is denoted by yellow dots on Figure 4). The valley is contained by Two Rock Mountain (536 metres OD) and Newtown Hill (350 metres OD) to the north east and north respectively and by

Glendoo and Glencullen Mountain ranges (Prince Williams Seat 555 metres OD) to the southwest and south (see **Figure 4**).

Upland heathland, bogland and forestry feature on the surrounding uplands while the lower valley, particularly within the Plan area, is dominated by a matrix of field patterns delineated by stonewalls and hedgerows. Glencullen River (190 m OD at Glencullen Bridge) flows from the north west to the south east through this landscape along the southern side of the Plan area and forms the county boundary with County Wicklow where the valley begins to open onto the coastal plains in the southeast towards Enniskerry and Bray. Knocksink Wood, candidate Special Area of Conservation (cSAC) and Ballybetagh Bog, proposed Natural Heritage Area (pNHA), sites of european and national conservation sensitivity, lie within this landscape enclosure and partly within the Plan area (see **Figure 2**). The northern slopes of the valley contain, particularly within the Plan area, a strong imprint of human settlement including a wealth of archaeological sites and historic farming patterns. The Wicklow Way a long distance walking route of national

**Figure 4:** Local Context Map



importance, traverses the broader valley and the western part of the Plan area (see **Figure 2**). Dwelling houses, low intensity agriculture and recreational use (golf/pitch and putt courses) dominate land use in the Plan area.



**Photo 3:** Field pattern Fiery Lane



**Photo 4:** Heathland and Forestry on Glendoo Mountain

Glencullen is well known in Dublin and further a-field for its local public house and as an access point to recreational activities such as hill walking and golf. The largely unspoilt rural character of the area coupled with an attractive and historic village environment with spectacular views over the Glencullen / Glendoo Mountain Range, the Sugar Loafs and the river valley lands gives Glencullen a distinct sense of place. From the response to the Pre-Draft Consultation exercise (see **Appendix 1**) it is evident that there is a strong sense of community in Glencullen and that notwithstanding the lack of certain social infrastructure it functions reasonably well as a settlement.

## 3.2 Local Context / Environment Appraisal

A full context / environmental appraisal, as part of the Strategic Environmental Assessment (SEA) of the environment at Glencullen (biodiversity, population and human health, geology/soil, water, air and climate, material assets, cultural heritage and landscape), has been carried out to inform the Plan and

the findings are expressed in the accompanying **Environmental Report**. The following is a brief description of the current state of the environment at Glencullen (including environmental risks, threats, sensitivities and opportunities) with a summing up of its capacity to accommodate future local rural development. The following background reports informed the SEA and these are referred to in this Section where applicable.

- (1) Source Protection Plan for the Two Wellfields at Glencullen Co. Dublin, Eugene Daly Associates, November 2005.
- (2) Historical Landscape Character Assessment (HLCA) for the Glencullen Area, Dublin Institute of Technology (DIT) 2005.
- (3) Glencullen Household Survey 2005, Dún Laoghaire Rathdown, Brianan Nolan (UCD).
- (4) Landscape Visual Impact Assessment, Dún Laoghaire Rathdown, 2007.
- (5) Report on Groundwater Protection at Campbells Lane and The Moors at Glencullen Co. Dublin, Eugene Daly Associates, July 2007.

### 3.2.1 Population Profile

It is estimated that there are approximately 146 dwellings in the Plan area, housing a population between 400 and 500 people (based on the Glencullen Household Survey results (see **Appendix 4**) and having regard to the average household size in the County, Census 2006). The results of the Glencullen Household Survey reveal the following population profile for the Plan area (based on a 34% response rate). Almost 70% of residents are adults, while over 30% are children (pre-school, primary school and secondary school). An interesting finding is that just over 70% of the adult population or nearly 50% of the total population is aged between 19 and 55 years old. This age bracket includes a significant proportion of the household formation age group. Citizens of 65 years and over represent 10% of the total population. The average household size is approx. 3.9 persons.

The survey results also provided a picture of the travel-to-work / commuting pattern. Over two-thirds of the respondents' working population work outside the Plan area, including places such as Dublin city (25% of the total respondents' working population) and Sandyford (8%). Nearly one-third of the respondents' working population work in Glencullen, however the survey doesn't tell where or in what capacity. The Survey also revealed that 12% of surveyed households (or 12% of the respondents' working population) were involved in farming primarily on a part time basis, on farm size ranges from 15ha to over 60ha.

### 3.2.2 Existing Settlement Structure

According to the Historical Landscape Character Assessment (HLCA) for the Glencullen Area, Dublin Institute of Technology (DIT) 2005, Glencullen is a dispersed chapel-village type settlement. It comprises a village core, a series of rural clusters and more recent linear (ribbon) development (see **Section 4.8 Cultural Heritage of Environmental Report** for more detail).

#### (a) The village Core

The village Core - public buildings and houses - is focused for the most part along Ballybetagh Road, immediately east of the Glencullen crossroads (the crossroads of R116 and Ballyedmonduff/Bridge Road). The village core can also be said to encompass the classical Glencullen House and its demesne located to the south west of the crossroads which emerged around 1800 and which, it is understood, was the catalyst for the 19th Century settlement in this area. The major impetus in the settlement's development, however, took place in 1824 when the Roman Catholic Church and cemetery were laid out.



**Photo 5:** Village core – Church

#### (b) The Rural Clusters

The rural clusters are laid out, for the most part, along lanes perpendicular to the above referred main road axes. Some of these emerged from earlier (19<sup>th</sup> Century) rural settlement patterns (clachans) that are characteristic of this mountain area - settlement patterns more commonly found in the west of Ireland. The rural clusters are identified (from west to east) as:

- Boranaraltry Lane
- The Alleys
- Walsh's Lane
- Fiery Lane
- Brockey
- Ballybrack Road (Lands to the South of the Golf Club House)

- Campbells Lane
- The Moors



**Photo 6:** Rural clusters – Walshes Lane and the Alleys



**Photo 7:** Rural clusters – Walshes Lane

#### (c) The Linear Settlement Pattern

The linear settlement pattern along the main road axes (ribbon development) has become a more recent settlement feature of this area. It appears to have intensified from the 1950s onwards and is characterised by suburban type development (house design and site layout).

#### Conclusion

The rural cluster settlement pattern, which includes a number of traditional rural clusters or 'villages' (clachans) together with the village core, constitutes a significant settlement feature and an element of heritage of major importance in this area. Both the existing village core and traditional clachans are described further and assessed under 3.2.4 (b) below from both a settlement pattern and architectural heritage perspective.

### 3.2.3 Community Facilities, Services and Infrastructure

#### (a) Community Facilities and Services

The existing community facilities in Glencullen include: a church and a graveyard (permission granted to extend the latter), a newly extended primary school, a public library and a public house (Johnnie Fox's) (see **Section 4.7 Material Assets of Environmental Report** for more detail). Johnnie Fox's public house is a local landmark and plays an important role in the social and economic development of Glencullen. The public house is also well known for its contribution to Dublin's cultural tourism. These are located to the north-east of the crossroad in the village core. There is also a golf course and two pitch & putt courses, all centred around Glencullen village core. Finally there is a GAA playing pitch (Stars of Erin) located to the west of and outside the village core to the south of Ballybrack (Pineforest Road).



**Photo 8:** Community facilities - Library



**Photo 9:** Community facilities – Johnnie Fox's public house

In addition to these facilities there are a number of local committees and clubs, such as the local youth club, the local football team, mother & toddler group, the ladies club etc., operating in Glencullen. Over half of the respondents to the Glencullen Household Survey (see **Appendix 4**) indicated that they were involved in formal community activities of one sort or another in the area. From the Pre-Draft Public Consultation

(see **Appendix 1**) it has emerged that the local population would like more community facilities in the area including a local shop, while the Stars of Erin GAA Club indicated that it would welcome the opportunity to locate a clubhouse at the existing GAA pitch.

#### (b) Waste Water Facilities

There is no mains sewer in the Plan area. Foul waste is disposed of by discharge to septic tanks and proprietary treatment systems and associated percolation/soakaway areas. An exception to this is where waste is taken regularly from large septic tanks that service a small housing scheme (to the north of the crossroads) and the public house in the village. In view of the fact that the Council has no plans to connect Glencullen to a mains sewer, new development within the Plan area must be capable of being served by connections to individual wastewater treatment systems.

#### (c) Drinking Water

The village core and a significant part of its immediate environs are currently served by the Council's water supply scheme - a borehole water supply from a groundwater resource (see **Section 4.7 Material Assets of Environmental Report** for more detail). This is located in the village core to the south east of the crossroads. Domestic and farm water supplies elsewhere within the Plan area are served by connections to private individual wells.



**Photo 10:** Water pump Ballybetagh Road

As there is no mains sewer in the Plan area and as outlined above, wastewater generally discharges to ground, the Source Protection Plan (SPP) for Glencullen (see Section 2.3 above) outlines a comprehensive set of recommendations in respect of new development and groundwater protection within the identified Source Protection Plan area. These recommendations have been incorporated into the Plan.

There is a limited water supply from the referred groundwater resource and no other practical water supply for the Plan area. The possibility of providing a back-up mains supply from the Burrow Road Reservoir (to the north of the Plan area) is currently being considered by the Council and such a supply could be in place by 2010. This, however, would be designed to safeguard rather than augment or replace the current water supply. Water supply arrangements in the Plan area therefore point to the organic growth of settlement, in line with the current rate of development in the area (see Section 3.2.5 below).

Finally, outside of those areas served by the Council's water supply scheme new development proposals must adequately demonstrate that the development can be served by a potable water supply, with respect to water quality and quantity.

#### (d) Transport Infrastructure

The following mountain roads serve the Plan area:

The regional road, Ballybetagh Road/Ballybrack Road (R116) runs east – west through the Plan area linking Kiltiernan via Glencullen Village to Tallaght. Notwithstanding the 6-year Road Objective associated with this road as per the County Development Plan, it is the Council's intention that this road will be subject to road maintenance proposals only. The Ballyedmonduff Road / Bridge Road is a local county road which runs in a north – south direction linking Glencullen with Sandyford/Stepaside area with Enniskerry Village in County Wicklow. In view of the above County Development Plan Objective, the Plan must contain policy measures which would ensure that future road works would respect existing natural and historical landscaping features in the Plan area.

The No. 44B Bus serves the Plan area. It leaves Killcross / Dundrum / Eglinton Road for Glencullen on weekdays and on Saturday with varying degrees of frequency. According to the Glencullen Household Survey Results (see **Appendix 4**), 30% of respondents use this bus route on a daily basis. In view of planning policy context of restraint that pertains to this area (see **Section 2.2 County Development Plan** policy, above) it is not considered that extra public transport measures are required to serve the Plan area.

### 3.2.4 Environmental Issues

#### (a) Landscape

The landscape at Glencullen is highly sensitive and its ability to accommodate development is limited. The landscape character of the area is described in the County Development Plan p.121-122 and this is reproduced in **Section 4.9 of the Environmental Report**. In order to assess the landscape's

capacity to accommodate rural development while retaining / enhancing its intrinsic character a *landscape visual impact assessment* was carried out as part of the strategic environmental assessment (SEA) in respect of the two landscape character areas pertaining to Glencullen: Landscape Character Area No.7: Glencullen Valley, and Landscape Character Area No.8: Glendoo Valley. This assessment identifies locations within the Plan area with the capacity to *visually* absorb new development, termed as 'visually robust locations'. This assessment took into account the specific strategies for landscape protection for the relevant landscape character areas (See **Section 2.2, Planning Policy Context**, above) and also County Development Plan policy in respect of the protection of views and prospects from all the main road axes in the Plan area (See **Section 2.2, Planning Policy Context**, above). Views from the Wicklow Way were also considered.



**Photo 11:** Landscape – view of Sugar Loaf from Fiery Lane



**Photo 12:** The Wicklow Way

In short there are very few “visually robust locations” / locations which have the ability to absorb development without interfering with those landscape characteristics and views and prospects which the County Development Plan seeks to protect (see **Figure 7** of the **Environmental Report**). In Landscape Character Area No.7: Glencullen Valley, ‘visually robust locations’ refer to certain lands which lie within the envelope of the village core and within the existing identified rural clusters - Fiery Lane, Brockey, Ballybrack Road cluster (lands to the South of the Golf Club House), Campbells Lane, The Moors. Due to the open and exposed aspect of Landscape Character Area

No.8: Glendoo Valley, no such ‘visually robust locations’ were identified in this area. Therefore very sensitively designed and well-integrated development only may be accommodated at existing rural clusters in this area - Boranaraltry Lane, The Alleys and Walsh’s Lane.

In order to accommodate rural development in the Plan area while protecting the landscape quality and character of same, the Plan must therefore:

- Reiterate current county development plan policies with respect to landscape protection in this area;
- Explicitly prohibit linear (ribbon / road frontage) development along the main road axes and consequently prevent the elongation of the village core / rural clusters;
- Protect the historical, ecological and heritage value of the landscape at Glencullen;
- Set out design guidelines to ensure that new development, in terms of its design and location, integrates well with its landscape context.

## (b) Cultural Heritage

There are a number of Protected Structures and Recorded Archaeological Monuments in the Plan area, which are listed in the County Development Plan and which benefit from protection. In addition to this, the settlement structure and cultural heritage of Glencullen has been studied and assessed in detail under the *Historic Landscape Character Assessment (HLCA) for the Glencullen area* (DIT, 2004). The key findings can be summarised as follows (see also **Section 4.8** of the *Environmental Report*).

### Glencullen village core

Glencullen village core comprises a small service node, which contains a range of significant Victorian style public buildings, including a church, school and library. Elsewhere the village morphology consists of individual houses in single large plots flanking both sides of the road axes. The architectural heritage is largely made up from a range of Victorian-era vernacular cottages and farm complexes, and Glencullen House and Demesne (c.1800).



**Photo 13:** Glencullen Village Core - Johnnie Fox’s outbuildings



**Photo 14:** Glencullen Village Core – Old School House

The village has a rich vernacular based street-scape that contributes to its character. The most significant elements include: a narrow carriageway with a single footpath, extensive stone-built front boundary walling, formal gateways, mature sylvan landscapes, and the views of the surrounding landscape.

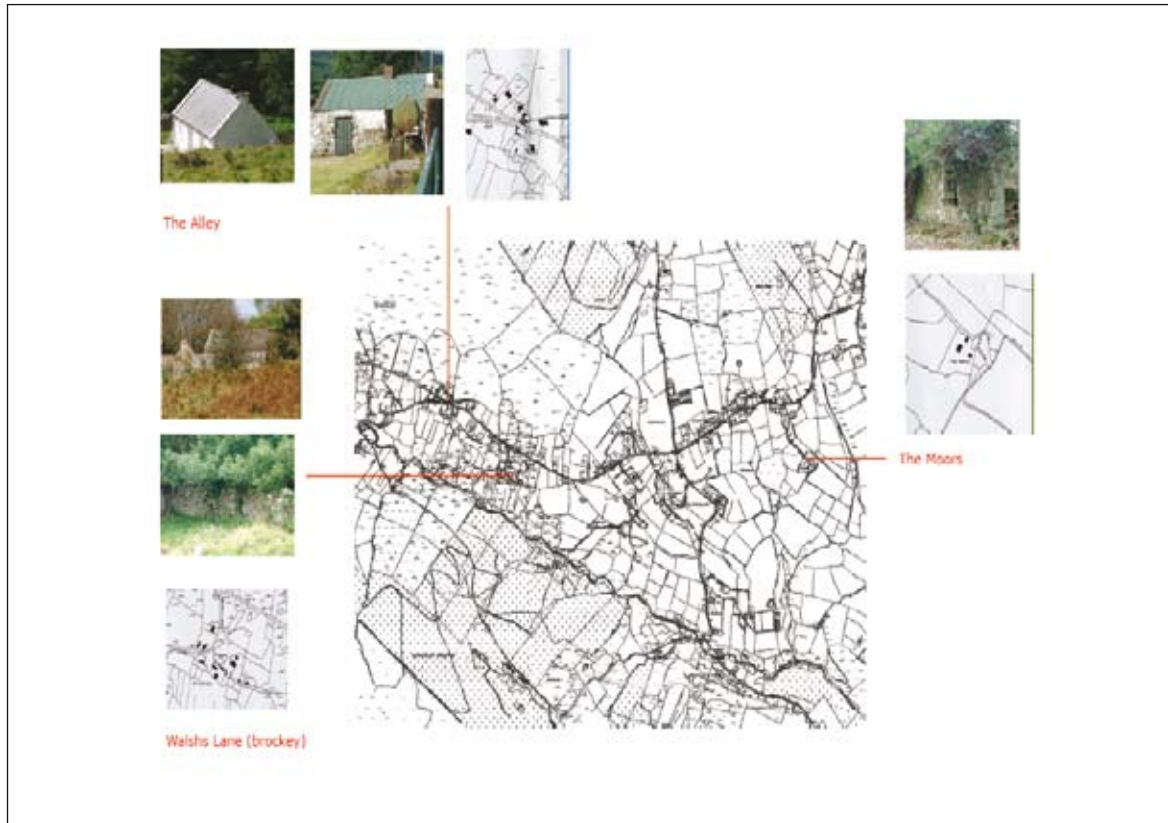
### Traditional clachans

The Plan area contains three traditional clachan sites: The Alleys, The Moors and Walsh’s Lane. A clachan is a type of a traditional farming settlement found mostly in mountainous or coastal regions of Ireland. Clachans are in the tradition of the continental agricultural system where the population live in villages some distance from their land holdings. A clachan is essentially a cluster of farm dwellings where the houses and outbuildings are grouped informally and tightly around one another. The layout is influenced by topography and patterns of land ownership. It also represents an example of a settlement pattern with favourable micro-climate and energy conservation characteristics.

In terms of design, clachans would have originally been built as thatched houses and outbuildings surrounded by little gardens (‘gorts’). The houses would be simple-plan, direct-entry, 2 to 3-bay, single storey, with rough-rendered rubble-stone walls connected to stone outbuildings. Natural and local materials were used. In terms of both settlement structure and design, clachans constitute a heritage feature worth protecting and reviving.

In terms of settlement structure then, Glencullen could be seen as having two major different settlement patterns that are significant from the heritage point of view – village core and clachans. It is worth noting, however, that the unifying features of both settlement patterns are simple house design forms and detailing, as well as good integration within the landscape. These qualities must inform all new development in Glencullen and the proliferation of un-planned, unsympathetic, ribbon and/or suburban development, which is out of character with the traditional settlement pattern and not in keeping with the rural/landscape/architectural historic qualities of the area, should be discouraged.

**Figure 5:** Clachans



### Architectural Heritage and Archaeology

In addition to the above, there are a number of Protected Structures and Recorded Archaeological Monuments in Glencullen. Protected Structures within the Plan area (from the Record of Protected Structures - RPS) are listed below and shown on **Figure 2**:

- Glencullen Bridge
- Carnegie Library
- St. Patrick's Church
- Original Catholic Church
- Glencullen House



**Photo 15:** Protected structure - Glencullen House

Recorded Archaeological Monuments are shown on **Figure 2** and are listed in **Appendix 5**. Recorded Monuments, including the areas of archaeological constraint circled around them, are protected under Section 12 of the National Monuments (Amendment) Act 1994. The archaeological heritage of the plan area includes, along with the Recorded Monuments, and a National Monument (Glencullen Standing Stone), all previously unknown archaeology that becomes known.

In addition to the above, the *Historic Landscape Character Assessment (HLCA)* identified several buildings of special local, historical or architectural interest that deserve preservation and/or protection (See also **Section 4.8.5** of the *Environmental Report*). These buildings/complexes include the above referred clachan structures and also farm complexes, individual vernacular buildings, derelict buildings, Victorian buildings etc. Many of these buildings are derelict (including the clachans) and could disappear from the landscape if no action is taken. Inappropriate changes to vernacular architecture can destroy these heritage features.



**Photo 16:** Vernacular Farm complex in the Village Core

### (c) Sites of Conservation Sensitivity

The Plan area includes parts of two sites of conservation sensitivity – Knocksink Wood a *candidate Special Area of Conservation (cSAC)* and Ballybetagh Bog, a *proposed Natural Heritage Area (pNHA)*. These designated sites are shown on **Figure 2** and briefly described below. See also **Section 4.2** of the *Environmental Report*.

#### *Knocksink Wood (cSAC; Site Code 000725)*

Knocksink Wood (cSAC) is situated in the Glencullen River Valley along Glencullen River to the south-east of Glencullen village core. The site (Special Area of Conservation) is a prime wildlife/habitat conservation area and is considered to be important on an Irish as well as European level. According to the Department of the Environment, Heritage and Local Government (DoEHLG) Site Synopsis this woodland contains petrifying springs and wet alluvial forest, and is listed as a priority habitat on Annex I of the EU Habitats Directive. It also contains a number of scarce or rare plants (see more detail in Section 4.2, *Environmental Report*).

#### *Ballybetagh Bog (pNHA; Site Code 001202)*

Natural Heritage Areas (NHAs) are areas of conservation value for ecological and/or geological/geomorphological heritage in Ireland, the designation and protection of which are nationally mandated under the Wildlife (Amendment) Act 2000. Ballybetagh Bog (pNHA) is located to the east of Glencullen village core and to the south of Ballybetagh Road.

The site comprises three separate areas of marshland, two of which lie wholly within the Plan area. According to the DoEHLG Site Synopsis its main interest lies in its historical value – it is renowned for the number of skeletons of the extinct Giant Irish Deer and fossils (see more details in Section 4.2, *Environmental Report*).

According to the Department of the Environment Heritage and Local Government (DOEHLG) both of these sites of conservation sensitivity contain wetland habitats. Development at or near the sites and changes in water quality, levels and flows could significantly affect these sites. Any settlement location strategy must therefore have cognisance of the vulnerabilities of these sites.

### (d) Glencullen River and Tributaries

Glencullen River is a pristine / unpolluted river. It is designated as Salmonid waters and it is similarly designated as being associated with a candidate Special Area of Conservation (Knocksink Wood). The river is therefore a valuable wildlife resource for freshwater invertebrates, fish, birds, mammals etc. In addition to this the river is also the sole source of drinking water for Enniskerry Village and its environs (Co. Wicklow). The raw water supply intake points for same are located within the Plan area. Consequently from a water quality and biodiversity perspective, the river's protection from contamination is paramount (see **Section 4.5 Water** of the *Environmental Report*).



**Photo 17:** Glencullen River

In view of the unserved nature of the area, and given that groundwater and a number of small tributaries flow from the uplands through the Plan area down into the river, the river is vulnerable to contamination from wastewater treatment plants installed with new development and extra loading on existing systems outside of the Source Protection Plan area (SPPA). In



view of this it is necessary to devise protection measures to protect the Enniskerry potable water supply and the overall biological quality of the River.

### Enniskerry potable water supply

The intake points for the Enniskerry Water Supply are located on the main Glencullen River and on a nearby tributary (at Brockey). The Council's Environment Department recommends (having consulted with Wicklow County Council) that waste water treatment systems, catering for single houses and small developments be sited no less than 200 metres from any part of the Glencullen River (including Brockey Tributary) and no less than 100 metres from any part of the other tributaries, located upstream of the referred intake locations. Such a policy measure would ensure the protection of the potable water supply and the overall water quality of the river from Brockey (south of Glencullen Village Core) to Boranaraltry Lane (the west of the Plan area). Likewise, however, such a policy measure affects the development potential of lands within said area including the identified rural clusters at Boranaraltry Lane and The Alleys.

### Biological Quality of Glencullen River

Downstream of the raw water supply intake points for the Enniskerry Water Supply and outside of the Source Protection Plan Area (SPPA) the principle threat to the biological quality of Glencullen river is from wastewater treatment plants installed with new development and extra loading on existing systems in the identified rural clusters at The Moors (southern section) and Campbell's Lane. This is because tributaries of Glencullen River flow through these clusters and these clusters are serviced by wells. In view of this the Council commissioned Eugene Daly Associates (Groundwater, Hydrological & Environmental Consultants) in July 2007 to prepare a brief report on the conditions that should be considered for any proposed developments in these clusters. The following recommendations were made for these clusters:

- Only single dwelling unit developments;
- Only adequately maintained treatment systems other than conventional septic tank systems, as described by the EPA (Wastewater Treatment Manual – Treatment Systems for Single Houses, EPA (2000) as amended) are installed;
- In moderately large sites of at least 0.5 ha in area and where all of the percolation area boundaries are at least 25m from the site boundaries. This condition is required due to the low permeability of the subsoils in the area, to protect surface waters and ensure attenuation takes place within the development area.
- Any new percolation areas should be located at least 75 m up gradient (60 m in the case of Campbells Lane) or 45m

down gradient (30m in the case of Campbells Lane) of existing water supply wells.

- That site investigations be undertaken to confirm that there is at least 3m of low permeability subsoils beneath the site and that the ground is suitable for a percolation area. The required investigations should be supervised by a hydrogeologist or geotechnical engineer with professional accreditation in Ireland.
- No landspreading or nutrient application within 50 m of a groundwater source other than that deposited by grazing animals.

## 3.2.5 Planning History and Housing Demand

In the period between 1996 to May 2007 there have been 144 planning applications in the Plan area (an average of 14 applications per year). This includes applications for one-off rural housing, family flats, extensions, replacement dwellings, playing pitch, playschool, burial grounds, kennels, stables, pottery workshops, etc. (see **Appendix 5**). Not all of these applications were granted permission. Over half of these applications were for one-off rural housing.

The analysis of the planning history for the Plan area shows that housing demand in Glencullen is locally generated. In the period between 1996 to May 2007 there were 76 planning applications made for one-off housing (most of them within the period 1997-2001). Of this total, 21 applications were granted. On average, this represents 7 applications for one-off housing per year, with two grants per year (see also **Appendix 5**).

The Glencullen Survey gives some indication of the future potential demand for housing in the short-to-mid-term period. The Survey Results (based on 34% response rate of the entire local population) indicated that 30 people intend to apply for planning permission for a house in Glencullen within a six-year period (see **Appendix 4**). However the environmental carrying capacity of the area is limited as demonstrated above and therefore the following local settlement location strategy is proposed.