TERRESTRIAL ENVIRONMENT AND BIODIVERSITY

Integration at a Policy Level

Land use practices directly influence our quality of life, particularly in relation to where we live, the surrounding environment and the associated infrastructure and services we require. Residential and other land use patterns are driven by spatial planning decisions, development pressure and consumer preferences, which often do not fully consider the resultant impact on soil, air and water, ambient noise and the fragmentation of habitats. How we use the land resource available to us has direct impacts on soil quality and biodiversity.

While there is an increasing body of national policy and legislation on biodiversity, significant work remains in ensuring protection of Ireland's habitats and species, improving integration of biodiversity concerns into sectoral policies, and increasing awareness of the importance of biodiversity conservation among the general public.

Soil function and biodiversity are often closely interlinked, yet policies and legislation on the protection of soil are very limited at national level. The development of such policy and legislation is urgently required. It is important that the functions of soil and its suitability for specific purposes be recognised and taken into account in the framing of land use policies.

The issues of spatial planning, land use, soil quality and the conservation of biodiversity are intertwined and interdependent, and this should be reflected in integrated national policies. Overall a more proactive and positive approach to the improvement of the terrestrial environment is required.

Integration at a Strategy Level

A number of plans relevant to land use have been issued or updated recently, e.g. the National Spatial Strategy 2002–2020, the National Sustainable Development Strategy and the National Development Plan 2007–2013. However, the results of immediate implementation of the above strategies are not apparent. For example, recent land use change data for the Dublin area (2000–2006) indicate that peripheral development of urban areas is continuing with associated increase in commuting distances, travel times and greenhouse gas production, etc. Rural areas have experienced large-scale construction of single rural dwellings, the suburbanisation of villages close to towns and cities, and the decline of more remote rural communities, leading to less sustainable living settlement patterns.

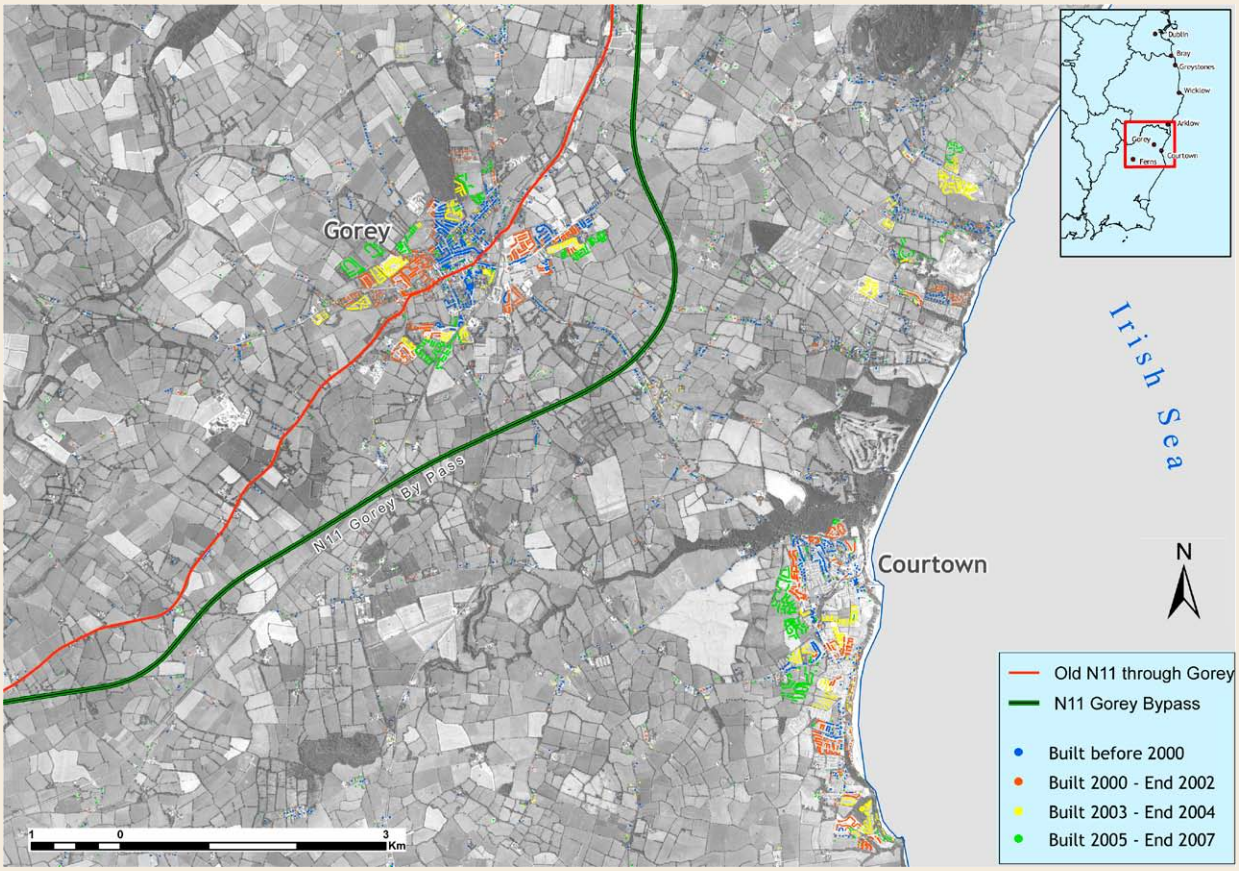
An example of the rapid expansion of residential development is provided in Map and Figure S5.1 for the Gorey area of North Wexford. The response to this situation has included the release of strategy documents on sustainable urban and rural housing (incorporated into guidelines for planning authorities), and an urban design manual best practice guide. These are welcome developments, but there is a need to ensure that national development/spatial strategies integrate and give more weight to environmental issues. The effective implementation of such an integrated strategy will depend on the allocation of sufficient resources to spatial planning, biodiversity conservation and soil management – areas that at the moment appear significantly under-resourced.

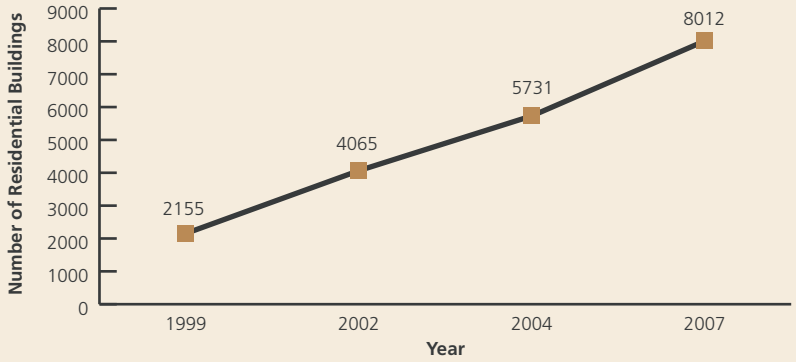
Data Required for Better Decision-making

Evaluation of the effects of policies and strategies has been hampered by the dearth of quality information on land use, biodiversity and soil quality at the required level of detail. In general there is insufficient base data for benchmarking plans, programmes and strategies. For example, there is a lack of detailed high-resolution land cover and habitat mapping data fit for national use, and of co-ordinated monitoring methodologies. Also, there is a general assumption that soil quality is acceptable but there is no empirical evidence to support this – there is no detailed information at national level on soil types and distribution.

More comprehensive spatial information on biodiversity needs to be available to regulatory authorities to ensure that account is taken of biodiversity concerns in the discharge of their statutory functions. The establishment of the National Biodiversity Data Centre will assist in filling the information gap on biodiversity and in determining how biodiversity may respond to, for example, climate change, land use change or biodiversity protection measures.

Map and Figure S5.1 Increase in Number of Residential Dwellings, Gorey and Surrounding Area 1999-2007 (Source: Data: An Post GeoDirectory; Analysis: EPA)





Map and Figure S5.1 show the increase in the number of residential dwellings in the Gorey and Courtown area of northeast Wexford between 1999 and 2007. There has been a 372 per cent increase over the period, from 2155 dwellings in 1999 to 8012 dwellings in 2007, which represents an annual average growth rate of 18 per cent per annum.