#### 2. FLOOD DEFENCE AND THE WATER ENVIRONMENT

## (i) The Environment Agency indicative

- 2.1 The Environment Agency was created by the Environment Act 1995 and became operational on 1 April 1996, bringing together the responsibilities of the National Rivers Authority (NRA), Her Majesty's Inspectorate of Pollution (HMIP), the Waste Regulation Authorities (WRA) and several units from the Department of the Environment. In addition to the Environment Agency headquarters based in Bristol, eight regions have been created which are further divided into Areas. Dacorum is in the North East Area of the Thames Region.
- 2.2 The responsibilities of the Environment Agency include:
  - flood defence and land drainage;
  - pollution control:
  - improvement in the quality of air, land and water;
  - water resource management;
  - recreation and navigation;
  - fisheries and conservation; and
  - sea defence.
- 2.3 The Agency is also required to protect and enhance the whole environment. The Thames Region has published "Thames Environment 21" to identify the key environmental issues the Agency wishes to see addressed through the land use planning system. It gives guidance in principle on how detrimental effects can be minimised and beneficial effects enhanced at a strategic level. The application of the Strategy is followed through in LEAPs (Local Environment Agency Plans) - a development of the former Catchment Management Plans of the NRA. These are non-statutory and draw together the responsibilities into an integrated plan of action subject to review after five years. In Dacorum, the area north of Tring is included in the Thame Valley LEAP, and the rest of the Borough is in the Colne Valley LEAP.
- In order to ensure a co-ordinated approach and promote better integration of the Agency's work, a "Memorandum of Understanding" has been signed between the Agency and the Local Authority Associations. Topic-based protocols, including one on land use planning, are to be drawn up covering activities on which close liaison is imperative. The Agency's actual controls in respect of development are limited, and it is dependent on the planning system to ensure protection of the environment and prevent future problems arising as a result of development.

# (ii) River Catchment Planning

- 2.5 River catchment planning is necessary to maintain, conserve and enhance the total river environment through effective land use and resource planning.
- 2.6 Catchments involve complex interactions between land, water, flora and fauna, and human activity. In many cases human activities have had considerable impact on the functioning and integrity of these natural systems; for example, through urban developments in the flood plain, by abstracting water from rivers and groundwater aquifers, and by discharging wastes to land and rivers. The adverse effects of these activities can be seen in increasing incidents and risks of flooding, deteriorating water quality, loss of water-related habitats, and water shortage problems. The aim of catchment planning is to ensure that the essential natural systems function effectively.
- 2.7 Whilst the Environment Agency is well placed to monitor, regulate and influence some of the factors responsible for the functioning of the hydrological system, especially in relation to the river corridor itself, it has very little control over the mechanisms which determine land use change on a catchment-wide basis. Local authorities, which make decisions on land use change, should be aware of possible catchment impacts of development, particularly those occurring outside their boundaries.

#### (iii) Rivers in Dacorum

- 2.8 There are two "main" rivers which run through the Borough, the Gade and the Bulbourne. The term "main" river is used to describe any watercourse which is designated as such on maps held by the Ministry of Agriculture, Fisheries and Food. The term also applies to structures which control or regulate the flow of these watercourses. The Environment Agency has direct powers and duties relating to main rivers under the Land Drainage Act 1991 and the Water Act 1989.
- In order to carry out its duties successfully, the Environment Agency must be notified of any proposed work or activity that could affect these rivers, and in appropriate cases prior consent from the Agency must be obtained. The Environment Agency's written consent is required for works in, over, under or within 8 metres of the brink of a main river separately from the granting of planning permission. Therefore, if a main river is affected, proposals having valid planning permission cannot be carried out if appropriate land drainage consent has not been granted.

- 2.10 There are many miles of non-main river watercourses within the Borough ranging from the Bourne Gutter to small drainage ditches, for which the Borough has its own statutory powers under the Land Drainage Act 1991 and the Public Health Act 1936.
- 2.11 Both the Gade and Bulbourne have areas of low lying land adjacent to them which are shown on statutory maps as "land liable to flood". Dacorum Borough Council has undertaken its own updating research to supplement this standard flood risk information. This will be taken into account in dealing with planning applications.

### (iv) Flood Risk and Protection of the Flood Plain

2.12 Recognising the susceptibility of land flooding is a material planning consideration. Flood plains have a natural role as a form of flood defence therefore they should be protected to avoid creating any unnecessary damage by increasing the risk of flooding. The flood plain is generally the area of low lying land adjacent to a watercourse which is liable to flood under certain conditions. These areas are shown on the indicative flood plain map, which provides an indication where control of development is required. These maps are to be used as a basis for consultation and not the sole basis for decisions. Flood risk should be taken into account in the planning of developments as Planning Policy Guidance Note 25 advises. A risk-based approach should be adopted for assessing all proposals for development in, or affecting, flood risk areas. The Flood Risk Assessment criteria are outlined in Policy 107 (Development in Areas of Flood Risk). Within high risk areas development should generally be avoided. However if development is permitted appropriate flood defence measures need to be included. Existing developments on the flood plain are themselves at risk from flooding, and also reduce the capacity of the available flood plain and impede the flow of water, thereby increasing the risk of flooding elsewhere. Appropriate flood protection (defined by the Council in consultation with the Environment Agency) will be required in the redevelopment of such areas, and intensification of development, or raising the level of the land will be unacceptable. Section 136 of the Water Act 1989 defines the duties related to flood defences. (see also Policy 124: Water Conservation and Sustainable Drainage Systems).

### (v) Surface Water Run-Off

2.13 Unless carefully sited and designed, new development or the redevelopment of existing urban areas can exacerbate the problems of flooding, erosion and pollution in areas downstream

through an increase in run-off from additional impermeable surfaces, such as roofs and paved surfaces. The Council will therefore consult the Environment Agency and Thames Water Utilities Ltd where appropriate to assess the impact of any proposals in their areas which appear likely to have flood risk or other significant adverse surface water run-off consequences on the total river environment prior to the granting of planning permission. Where development is permitted which is likely to increase the risk of flooding, it must include appropriate attenuation measures defined by the Council in consultation with the Environment Agency. Source control is encouraged by the Agency and includes measures such as permeable surfaces, swales and French drains (rather than gutters and gulley pots), and detention lakes or ponds which have the additional benefit of creating new wetland habitats (see "A Guide to Sustainable Urban Drainage" published by the Environment Agency and the Scottish Environment Protection Agency. Provision of water butts in new developments will help reduce dependence on mains water for gardening/landscape maintenance purposes.

2.14 It should also be noted that disposal of surface water into a canal is not a right. Discharge may be permitted, depending on existing capacity, and would be subject to an agreement and/or licence. Further advice can be obtained from the Commercial Department, British Waterways, Brindley House, Corner Hall, Hemel Hempstead.

## (vi) Works affecting Watercourses

- All types of works in, under, over and adjacent to watercourses need to be properly evaluated and receive any necessary statutory consents. Uncontrolled works may lead to effects such as an increased risk of flooding, erosion of the watercourse, increased danger to the public, restricted access for maintenance purposes and damage to the water environment.
- 2.16 The Council, in consultation with the Environment Agency Thames Region, will consider the likely impacts of drainage proposals in accordance with the provisions of Statutory Instrument 1988 No. 1217 'The Land Drainage Improvement Works (Assessment of Environmental Effects) Regulations 1988'.

### (vii) Town and Country Planning Liaison Procedures

2.17 Effective liaison between the Environment Agency and the local planning authorities is essential if the aim of conserving and enhancing the water environment is to be achieved. The Council has a statutory obligation to consult the Environment Agency in accordance with the General Development Orders

and will carry out these consultations in conformity with the Environment Agency Thames Region document entitled Town and Country Planning Liaison Procedures.