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#### PART ONE POLICY

## POLICY WAT1 - FLUVIAL AND TIDAL FLOODING

PLANNING PERMISSION WILL ONLY BE GRANTED FOR NEW DEVELOPMENT WHICH WOULD NOT BE AT RISK FROM FLUVIAL OR TIDAL FLOODING, OR WHICH WOULD NOT INCREASE THESE RISKS TO OTHER DEVELOPMENTS.

#### POLICY WAT1 - REASONED JUSTIFICATION

19.1 Part of Wirral's two main river catchments, the Birket and the Fender Valley, are at risk of flooding, particularly during times of high rainfall and high tide in the River Mersey. Whilst this is rare, the Environment Agency has completed the improvement of the defensive bunds around the lower reaches of the two rivers. These improved bunds will better protect large parts of Leasowe and north Moreton, but development will have to be constrained in areas between the bunds and the river channels to ensure that the defences retain their integrity. In addition, low-lying land in north Wirral is protected from tidal flooding by the Wallasey Embankment.

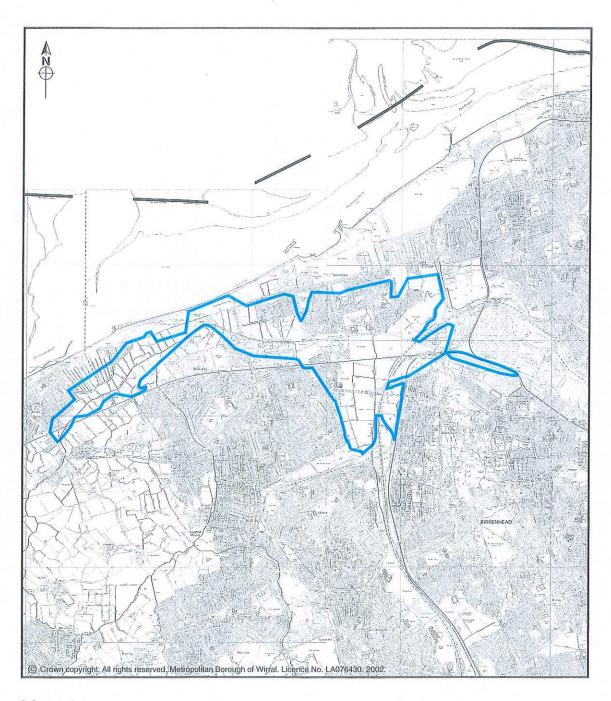
# Policy WA1 - Development and Flood Risk

The area identified as Washland is indicated on the Proposals Map:

- (i) Within Washland, development will not be permitted unless the developer is willing to provide compensatory storage and/ or flood protection to an appropriate standard as part of the development.
- (ii) Where land is (a) in an area protected from tidal flooding by embankments or (b) within a floodplain but at a lower risk of fluvial flooding and the land is protected by flood embankments, which are properly maintained and provide an acceptable standard of safety, development may be permitted, subject to consultation with the Environment Agency and where necessary the imposition of appropriate conditions, for example, with respect to minimum floor level.
- (iii) Development which would itself increase the risk of flooding to other properties or which would reduce the effectiveness or impede the maintenance of flood control structures or works will not be permitted.
- (iv) Development which would adversely affect the integrity and continuity of tidal and fluvial defences or which would compromise the access requirements for maintenance or emergency purposes will not be permitted.

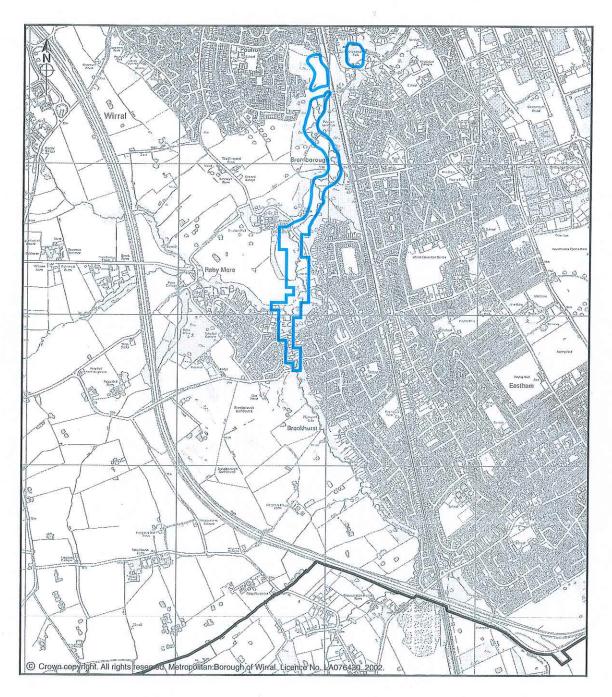
#### POLICY WA1 - REASONED JUSTIFICATION

- 19.2 The Proposals Map shows two areas in north Wirral which are low-lying and potentially at risk of flooding from the River Birket and from the River Fender. The Environment Agency has constructed bunds along the line of Birket, from Tarran Industrial Estate to the confluence with the River Fender, which will greatly reduce the risk of flooding to areas between the bunds and the natural limit of the flood plain.
- 19.3 The Proposals Map indicates areas of Washland areas of floodplain where water will continue to inundate in times of flood along part of the courses of the River Birket and the River Fender. This Washland is a combination of the natural floodplain unrestricted in extent notably the upper Birket upstream of Moreton, and natural floodplain restricted in extent by artificial features such as the M53 Motorway embankments and constructed flood defence works. The flood defence works provide protection to some residential and commercial areas against flood levels up to that likely to occur once in a one hundred year period.
- 19.4 The areas of Washland, whether or not enclosed by these defences, as shown on the Proposals Map, must be kept clear of development which obstructs the flow of floodwater. Within areas of Washland, open space uses such as playing fields, golf courses, parks and nature reserves are acceptable, but built development will only be permitted if a compensatory amount of washland is provided elsewhere and the development is designed so as to mitigate the risk of flooding.
- 19.5 Outside of the Environment Agency flood defences, there remains a residual risk of flooding should the defences fail or a level of flooding occur which exceeds their design capacity. This wider area equates to the natural floodplains of the River Birket and of the River Fender and is shown on Map 4. Within this area, the second criterion of Policy WA1 indicates that development proposals will be subject to consultation with the Environment Agency and consent may be subject to the imposition of appropriate conditions. In the short term, any development on land within this area should be subject to the completion of the Birket/ Fender Environment Agency flood defences.
- 19.6 Map 5 shows an additional area of flood risk along the course of the River Dibbin in Bromborough to which Policy WA1 will also apply.
- 19.7 Much of the land around Moreton is additionally protected from flooding by the Wallasey Embankment, as shown on Map 6, and the integrity of the Embankment should not be damaged by inappropriate development. A site at the corner of Pasture Road/ Leasowe Road has been identified as an area where tidal water storage may occur following overtopping of the Wallasey Embankment in extreme tidal and weather conditions. Any development on



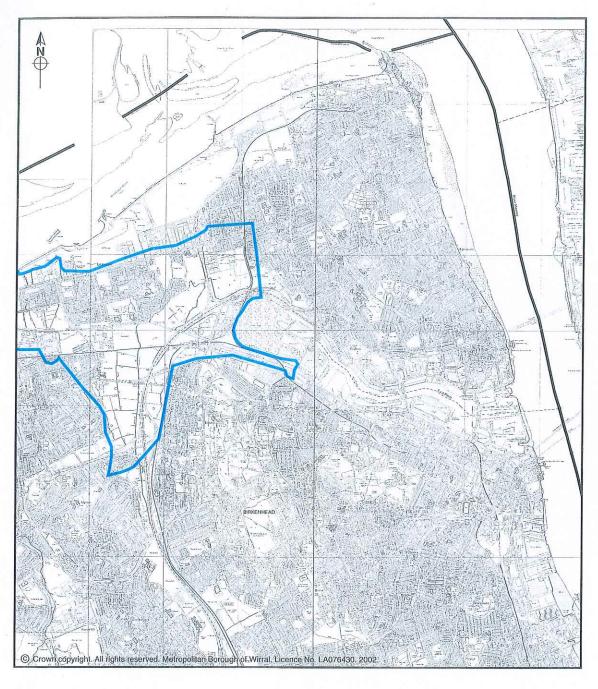
Map 4

# 1 in 100 Year Flood Risk Area - North Wirral



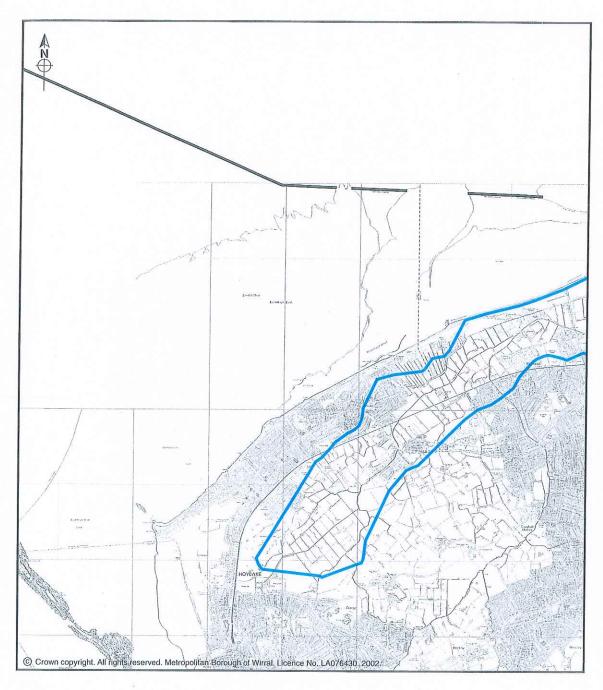
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# 1 in 100 Year Flood Risk Area - Dibbinsdale



Map 6a

# Land Protected by the Wallasey Embankment



Map 6b

# Land Protected by the Wallasey Embankment

this site would need to incorporate engineering measures which not only protected the site from flooding but did not place existing built development at greater risk.

## Policy WA2 - Development and Land Drainage

- (i) Where proposed developments are on land of such a size or nature relative to receiving watercourses that there could be a significant increase in surface water run-off from the area, or are situated in an area where the Environment Agency has indicated that there may be drainage problems, consultation with the Environment Agency or the local Land Drainage Authority will be required and conditions may be imposed requiring storage within the surface water system.
- (ii) In assessing development proposals, the Local Planning Authority will seek to maintain and enhance the natural character of wetlands, groundwaters, ponds, rivers and their margins. In particular, the culverting of watercourses will be discouraged, in order to preserve the natural storage provided and to avoid future maintenance difficulties.

#### POLICY WA2 - REASONED JUSTIFICATION

- 19.8 Upstream of the areas protected by the embankments on the River Birket and the River Fender and their tributary streams, and in other river catchments such as the River Dibbin in the south of the Borough, large developments may have an effect on the run-off to these tributaries. This effect will also impact on water levels and the character of watercourses downstream. Where this effect is likely to be significant, for example, in their potential effect on the River Fender and/ or the River Birket, conditions may be required on applications for development which will provide for surface water run-off controls such as attenuation tanks of over-sized drains.
- 19.9 Watercourses and areas of standing water are important wildlife habitats and provide for many leisure pursuits. It is important, therefore, to protect and enhance their natural character. In addition, the Environment Agency have access rights to many water areas and their margins for maintenance, which must also be protected.

#### PART ONE POLICY

## POLICY WAT2 - PROTECTION OF THE WATER ENVIRONMENT

WHERE APPROPRIATE AND PARTICULARLY IN VULNERABLE AREAS, THE LOCAL PLANNING AUTHORITY WILL IMPOSE LAND-USE PLANNING CONTROLS AND OBLIGATIONS DIRECTED AT THE PREVENTION OF THE POLLUTION OF WATERCOURSES AND GROUNDWATER.

#### POLICY WAT2 - REASONED JUSTIFICATION

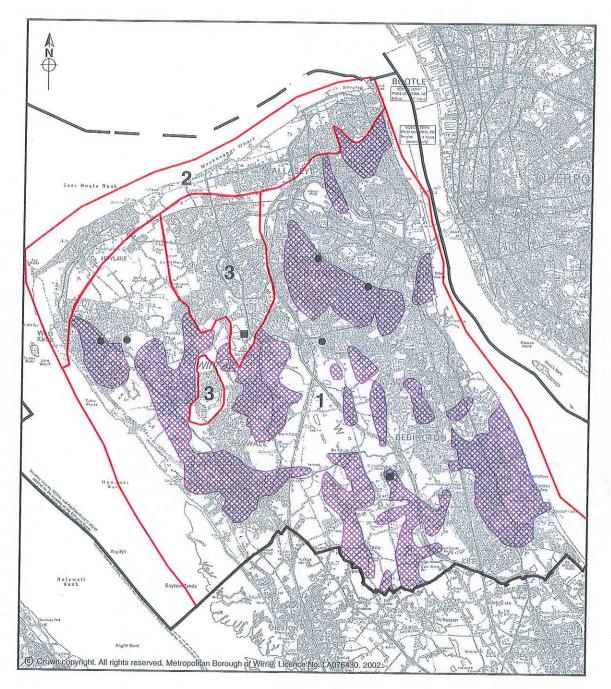
19.10 The prevention of pollution of watercourses and sources of groundwater is becoming increasingly important. This is supported by EC directives on water quality objectives. The UDP can assist by controlling land-uses likely to cause harm to the water environment, thereby complementing the pollution control aims of other regulatory bodies.

# Policy WA3 - Development and Groundwater Protection

In considering proposals for development, the Local Planning Authority will have regard to the need to protect sources of groundwater. The Local Planning Authority may require consultation with the Environment Agency and may impose conditions and obligations directed at preventing derogation in terms of both quality and quantity. Particular attention will be paid to proposals for mineral extraction, waste disposal, industrial and chemical processes.

#### POLICY WA3 - REASONED JUSTIFICATION

- 19.11 Much of Wirral is founded on sandstone which forms a major aquifer. Groundwater sources within this aquifer need to be protected, to maintain water supplies from acquifers (13% of water abstracted in Wirral and Ellesmere Port and Neston), to feed surface waters through springs and by base flows to rivers.
- 19.12 However, groundwater is often at risk not only from point sources but from diffuse sources of pollution which accumulate over many years, such as from the landfilling of wastes and the application of fertilizers and pesticides. If groundwater becomes polluted, it is difficult to rehabilitate because slow rates of groundwater flow and low microbiological activity limit any self-purification. It is, therefore, better to prevent or reduce the risk of groundwater contamination than to deal with it's consequences. Mineral extraction and changes in land-use may also affect the availability of groundwater resources by restricting recharge and diverting flow.
- 19.13 The Environment Agency has extensive powers over the protection of such areas and these are supported by the control of potentially polluting development through the UDP. Development and the use of land is one consistent element in the list of potential threats to the quality of groundwater; land-use planning policies can, therefore, play a significant role in effective groundwater protection.
- 19.14 The concept of groundwater vulnerability recognises that risks of pollution from a given activity are greater in certain hydrological, geological and soil situations than others. The Environment Agency has mapped groundwater vulnerability for the Wirral and has identified major aquifers within these, high



Map 7

# **Groundwater Vulnerability**

- Public water supply borehole
- Hospital water supply borehole
- Principle recharge area

- Groundwater vulnerability unit boundaries
- 1 Major Aquifer (Sherwood)
- 2 Major Aquifer (Superficial wind blown sand)
- 3 Non-aquifer (Mercia Mudstones)

vulnerability or "principle recharge areas". These are illustrated on Map 7. These areas are particularly vulnerable to pollution by agricultural and industrial activities and by urban development in general.

19.15 Policy WA3 attempts to complement Environment Agency powers and duties by using land-use planning powers to assist in protecting the groundwater resource as a whole and in particular these principal recharge areas. A distinction needs to be made between the general protection of the groundwater resources and the specific protection which may be needed for individual sources. It is possible to define the source catchment area of an aquifer. This is the area of land needed to sustain groundwater abstraction by natural recharge. The Environment Agency is in the process of defining groundwater source protection zones. These can rarely be regarded as definitive and maps will not be published, although information will be available from the Environment Agency. Consideration of source protection zones should therefore be regarded as additional to the general consideration of groundwater vulnerability.

## Policy WA4 - Safeguarding Water Resources

In considering proposals for development, the Local Planning Authority will look to safeguard water resources and water supply to water users, unless it can be demonstrated that there are adequate water resources which already exist or will be provided in time to serve the development.

#### POLICY WA4 - REASONED JUSTIFICATION

19.16 Within the Borough, there has been a drop in the water table over recent years. This has had a consequential effect on many still water ponds and other water bodies within Wirral. It is thought that this has been in part due to over-abstraction of groundwater resources and the porous nature of the substrata in the area generally. Consequently, the Local Planning Authority will seek to ensure that new development will not have a detrimental effect on existing resources and abstractors.

## Policy WA5 - Protecting Surface Waters

The Local Planning Authority will only permit development which:

- (i) includes satisfactory arrangements for the disposal of foul sewage, trade effluent or contaminated surface water;
- (ii) does not exacerbate existing problems such as premature or increased frequency of discharges through storm sewer overflows due to inadequate infrastructure or lack of sewer capacity; and
- (iii) will not lead to spillage or leakage of stored oils or chemicals or other potentially polluting substances.

#### POLICY WA5 - REASONED JUSTIFICATION

19.17 For historic reasons, Wirral in common with much of the North West Region has a sewer system which is, or is becoming in parts, overloaded. Further development may lead to water pollution unless additional infrastructure is provided. In some cases, development may have to be phased where it is clear that foul sewers and sewage treatment works of adequate capacity and design are needed to serve the development.

# Policy WA6 - Development Within River Corridors

In considering proposals for development within river corridors, the Local Planning Authority will have regard to the need to conserve or enhance the natural character of those watercourses or encourage appropriate water-based or waterside recreation. In addition, adequate provision should be made to secure permanent areas for river maintenance purposes.

#### POLICY WA6 - REASONED JUSTIFICATION

19.18 River corridors are of great importance for water resources, nature conservation, fisheries and recreation and often make a significant contribution to the character of the landscape. Appropriate development can often result in an improvement in the quality of public access, natural habitats and water quality.

# Policy WA7 - Heswall Drainage Catchment Area

Proposals for uses likely to generate extra sewage discharges will be subject to a condition preventing the implementation of the permission until the commissioning of the improvements to the Target Road Sewage Works in Heswall.

#### POLICY WA7 - REASONED JUSTIFICATION

19.19 There has been a long-standing problem of pollution in the Dee Estuary resulting from discharges from Target Road Sewage Works and associated sewerage systems. Planning consent has now been granted for improvements to the Sewage Works, and thus the previous embargo on new development which would have generated extra sewage discharges can now be lifted, subject to the imposition of a "Grampian" condition preventing the implementation of new consents until the improvements to the Sewage Works are commissioned.