




DUMFRIES AND GALLOWAY COUNCIL

Local Development Plan

Supplementary Guidance

Adopted 1st December 2014

Protection of Water Margins

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Dumfries & Galloway COUNCIL

DUMFRIES AND GALLOWAY LOCAL DEVELOPMENT PLAN SUPPLEMENTARY GUIDANCE

PROTECTION OF WATER MARGINS

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Introduction

The purpose of this Supplementary Guidance is to provide further information in respect of Local Development Plan policy NE12: Protection of Water Margins, particularly in relation to buffer strips adjacent to water bodies. A buffer strip is an area of land maintained in permanent vegetation that helps to control soil and water quality and has other environmental benefits.

Buffer strips alongside all types of water bodies are important in protecting and promoting biodiversity and in improving water quality and run-off. The effectiveness of a buffer strip will be influenced by the width of the buffer, its characteristics and how it is managed.

Local Development Plan Policy
Policy NE12:
Protection of Water Margins

Where new development is proposed adjacent to or in the vicinity of waterbodies (a distinct and significant volume of water. For example, for surface water: a lake, a reservoir, a river or part of a river, a stream or part of a stream), the water margins will, subject to Policy NE11 and Section 18 of the Flood Risk Management (Scotland) Act 2009, be protected unless there are compelling reasons to justify why this should not be done.

Further detail is provided in supplementary guidance.

Legislative Context

Buffer strips will help to achieve the Water Framework Directive's statutory aim of good ecological status of our water environment by 2015. The Water Framework Directive is transposed into Scottish legislation through the Water Environment and Water Services (Scotland) Act 2003 (WEWS Act). The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) gives effect to the requirements of section 20 of the WEWS Act for controls over certain activities for the protection of the water environment. These can include:

a. Activities liable to cause pollution of the water environment;
b. Abstraction of water from bodies of surface water or groundwater;
c. The construction, alteration or operation of impounding works in bodies of surface water;
d. Building, engineering or other works in, or in the vicinity of, any body of inland surface water; or
e. Activities connected with any activities specified in paragraphs (a) to (d).

The Value of Buffer Strips

Buffer strips alongside water bodies are valuable for the following reasons:

- They reduce run-off into water bodies by storing water and releasing it more slowly, and therefore reducing flooding;
- They are essential in allowing access for the maintenance and inspection of water bodies, and for dealing with pollution incidents;
- They provide space for natural fluvial processes such as channel shape and planform (the outline of the river viewed from above).
- adjustment which help restore and maintain the natural dynamic balance of river systems and associated habitats;
- they can contribute towards open space allocations;
- vegetation stabilises banks and reduces soil erosion by:
    - Providing a habitat for plants and animals and can form part of a habitat network;
    - Providing opportunities for access;
    - Helping to improve water quality by filtering run-off before it enters the water body;
    - Providing opportunities to undertake restoration of straightened or realigned water bodies in the future; and
    - Improving the visual landscape of the area.

Recommended Width of Buffer Strips

The optimum width of a buffer strip adjacent to water bodies will be affected by the width of the water body, site conditions and topography. Buffer strips should be proportional to the bed width of the water body and should be a minimum of 6m with up to 20m+ on either side for larger water bodies such as the Rivers Dee and Nith (see Table 1). The general rule is that the bigger the water body, the more space will be required for restoration.

- **Semi-natural Habitat** - if present and adjacent to a water body (e.g. riparian woodland), the whole of this habitat should be protected, regardless of width.
- **Steeply sloping ground** – run-off will be faster and a wider buffer will be required.
- **Straightened / realigned water bodies** - where there are opportunities to undertake restoration of straightened or realigned water bodies, a wider buffer may be required.
- **Still water** – for example, lochs and ponds, the margin should be between 6m and 20m wide, depending on the size of the water body with larger areas having a wider buffer.
- **Ditches** – for smaller ditches there is some discretion to reduce the buffer strip to a minimum of 3m depending on requirements for access for maintenance.
- **Bridge abutments** - where possible bridge abutments must be a sufficient distance back from a river bank to allow for future river movement, and where appropriate access under the structure.

Areas at risk of disturbance by fluvial processes will require a geomorphological assessment in order to assess the appropriate buffer strip.

The following Table 1 is supported by the Scottish Environment Protection Agency (SEPA) and Scottish Natural Heritage (SNH). It provides guidelines only, as the width will be dependent on site size, plus, other conditions such as the nature and topography of the surrounding land.

Table 1: Guidelines for Width of Buffer Strips

Width of water Body	*Width of Buffer Strip*
Less than 1m	6m buffer
1-5m	6-12m
5-15m	12-20m
15m+	20m+

(The specific widths in this document are intended for forest developments only).

The Scottish Planning Policy states that development should not be permitted where there is a significant probability of it being affected by flooding, increase the probability of flooding elsewhere, or affect the storage capacity of a functional flood plain. This overrides the buffer width recommendations made in this supplementary guidance.

Further information on buffer widths can be found on the Forestry Commission's 'Forests and water' UK Forestry Standard (page 24, Table 5.1) at: http://www.forestry.gov.uk/pdf/FCGL007.pdf/$FILE/FCGL007.pdf

or on the Scottish Government's 'Prevention of Environmental Pollution from Agricultural Activity' (PEPFAA) A Code of Good Practice' at: http://www.scotland.gov.uk/Resource/Doc/37428/0014235.pdf

Creating a Buffer Strip

The characteristics of a buffer strip will influence its effectiveness. During the development phase buffer strips should be fenced off and vegetation should be left undisturbed and this is particularly so where wetlands, woodland, grassland or other semi-improved habitats are present. Only in exceptional circumstances should the vegetation within a buffer strip be removed, and only then for landscaping if required. Within a buffer strip, all works should be carried out in accordance with SEPA Pollution Prevention Guidelines.

If the land forming the buffer strip is arable or improved grassland, there may be some merit in sowing with a grassland or wildflower mix. This should be made up of indigenous species, where possible from a local source.

Some planting of locally native trees and shrubs can enhance a buffer strip and can help to stabilise banks and limit erosion. However, care must be taken to ensure that new planted areas do not cause hydraulic issues downstream in a river.

Overhanging trees create shade and the leaf litter can provide shelter and food for invertebrates.

Care should be taken to avoid too much planting with at least 50% of the water body left open to sunlight during the summer when leaves are on the trees. It is important to avoid gaps in buffer strips in order to provide continuity of habitat.

The creation of hard standing such as vehicle access track should be avoided within buffer strips as this will increase run-off, however, pedestrian access with permeable surfaces is generally acceptable.

Management of Buffer Strips

Management prescriptions will be site specific and should be included in any Landscape Maintenance Plan. In general, the preference would be to leave buffer strips as natural areas with limited management of the vegetation. This will avoid build up of leaf litter, development of scrub, and in the case of rivers, risk of blockages in the channel downstream.

More intensive management of some areas may be appropriate for particular uses such as access and recreation.

Wherever possible buffer strips should be retained with open space for the development to ensure long term protection.

Further information on creating and managing buffer strips can be found at SEPA's Good Practice Guide for 'Riparian Vegetation Management': http://www.sepa.org.uk/water/water_regulation/guidance/engineering.aspx

Further Information and Useful Contacts

Dumfries & Galloway Council
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