

CULVERTING

ADVICE FOR PLANNING OFFICERS AND APPLICANTS SEEKING PLANNING PERMISSION FOR DEVELOPMENTS WHICH INCLUDE THE CULVERTING OF A WATERWAY.

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INTRODUCTION

The Northern Ireland Environment Agency (NIEA) Water Management Unit (WMU) has responsibility for the protection of the water environment. WMU is empowered to protect the water environment by a number of pieces of legislation, most notably the Water Framework Directive.

DAERA Inland Fisheries may require a developer to obtain statutory authorisation for culverting operations under section 48 of the Fisheries Act (Northern Ireland) 1966 (as amended). An authorisation may include conditions regarding the timings of works, construction methodologies, culvert design, fish removal etc.

Culverts can have a range of harmful localised and catchment wide impacts on the water environment. WMU therefore have a statutory duty to ensure that such impacts are avoided, reduced or remedied.

WMU POSITION ON CULVERTS

WMU is opposed to any culverting operation that may result in the deterioration of the ecological status of a waterbody, or will prevent a waterbody meeting its water quality objectives under the Water Framework Directive.

The following points are from the Strategic Planning Policy Statement (SPPS) for Northern Ireland 2015 on culverting and should be adhered to when considering a culverting proposal:

Artificial Modification of Watercourses

6.124 While culverting may in some instances alleviate local flood risk, it cannot eliminate it and often increases the flood risk downstream by the accumulation of higher flows. The artificial modification of watercourses through culverting or canalisation is also widely considered to be environmentally unsustainable as such operations can adversely impact upon landscape quality, ecological integrity and biodiversity of watercourses.

6.125 Planning authorities should only permit the artificial modification of a watercourse in the exceptional circumstances where culverting of a short length of a watercourse (usually less than 10m) is necessary to provide access to a development site (or part thereof), or where such operations are necessary for engineering reasons unconnected with any development proposal.

The SPPS can be viewed using the following link:

http://www.planningni.gov.uk/index/policy/spps_28_september_2015-3.pdf

Where culverting is proposed it must currently comply with Planning Policy Statement 15: Planning and Flood Risk Policy FLD 4.

JUSTIFICATION

Badly designed, installed or sited culverts can significantly impact upon the water environment, for example:

- Disruption to river continuity;
- Acts as a barrier to fish and mammal passage
- Loss of bed and bank side habitat;
- Impacts on hydromorphology;
- Exacerbate pollution issues;
- Are obstacles to future restoration;

Whereas a single culvert can significantly impact upon a waterway the cumulative impact of piecemeal culverting can also have significant implications for the future status of a waterbody.

The construction of new culverts in a waterway should therefore be avoided unless no practicable alternative exists. A waterway, as defined under the Water (Northern Ireland) Order 1999, includes the channel or bed of a waterway which is dry for periods throughout the year.

Recommendations Conditions and Informatives

Conditions

Condition: Should there be an intention to culvert a watercourse, a Construction Method Statement (CMS), for works in, near or liable to affect any waterway as defined by the Water (Northern Ireland) Order 1999, must be submitted to the Planning Authority, for consultation with NIEA and Inland Fisheries, at least 8 weeks prior to the commencement of the works or phase of works. The CMS should include all necessary pollution prevention measures to protect the water environment during the development of this proposal.

Reason: To ensure effective avoidance and mitigation measures have been planned for the protection of the water environment.

Informatives

1. Details of mitigating measures to address the environmental impacts of the construction and operation of any culvert on the aquatic environment should be presented in a Construction Method Statement. The Construction Industry Research and Information Association (CIRIA) have published a document titled 'Culvert Design and Operation Guidance C689'.

For further CIRIA information please use the following link:

<http://www.ciria.org/default.aspx>

2. For advice on Construction Method Statements the applicant should consult NIEA Standing Advice Note No. 4 – Pollution Prevention Guidance.
3. The applicant must comply with the Control of Pollution (Oil Storage) Regulations (Northern Ireland) 2010.
4. Effective mitigation measures must be in place to protect the water environment and surrounding water bodies from any discharge into them that may damage ecological status and to ensure that the Water Framework Directive (WFD) objectives for the water body are not compromised nor the WFD objectives in other downstream water bodies in the same and other catchments.
5. It is an offence under the Water (Northern Ireland) Order 1999 to discharge or deposit, whether knowingly or otherwise, any poisonous, noxious or polluting matter so that it enters a waterway or water in any underground strata. Conviction of such an offence may incur a fine of up to £20,000 and / or three months imprisonment.
6. Culverting operations may require statutory authorisation under section 48 of the Fisheries Act (Northern Ireland) 1966.
7. A hydromorphology guidance booklet titled Surface Water Alterations Handbook can be downloaded from the following webpage:

<https://www.daera-ni.gov.uk/publications/surface-water-alterations-handbook>



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