

A83 Rest and Be Thankful

LTS EIAR VOLUME 4, APPENDIX 19.1 - ROAD DRAINAGE AND
THE WATER ENVIRONMENT LEGISLATION, POLICY AND
GUIDANCE

Transport Scotland

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19-1. Road Drainage and the Water Environment Legislation, Policy and Guidance

19-1.1. Legislation

A19-1.1.1. The following national and local legislation forms the background against which the assessment has been made.

Water Framework Directive

A19-1.1.2. The European Union (EU) Water Framework Directive (WFD) is retained under the [Retained EU Law \(Revocation and Reform\) Act 2023](#); and has been transposed into Scottish law by the '[Water Environment and Water Services \(Scotland\) Act 2003](#)' (the WEWS Act), sets targets for restoring and improving the ecological status of water bodies. The WEWS Act gives Scottish Ministers power to regulate activities in the water environment. This is achieved under [The Water Environment \(Controlled Activities\) \(Scotland\) Regulations 2011 \(2017 amendments\)](#), referred to as the CAR regulations. This legislation controls potential physical modifications such as engineering works and polluting activities within inland surface waters, as well as point source discharges, abstractions and impoundments.

A19-1.1.3. There are three different levels of authorisation under CAR: General Binding Rules (GBR), Registration and Licence (either Simple or Complex). The level of regulation increases as the risk from the activity being undertaken increases regarding the integrity and status of the water environment. CAR authorisations required for the construction of the Proposed Scheme are likely to range from GBRs covering short road drainage discharges, to Simple Licences for longer road drainage discharges (draining over 1km in length), as well as larger water feature crossings and realignments. Activities requiring CAR authorisation are required to be approved by the Scottish Environment Protection Agency (SEPA) prior to the start of construction.

A19-1.1.4. Under the WFD, the status of water is assessed using a range of quality indicators (physico-chemical, biological and hydromorphological) to give a holistic assessment of aquatic ecological health. The WFD includes five quality classes

(High, Good, Moderate, Poor and Bad) and establishes a requirement to identify and monitor a range of existing pressures on water bodies which may threaten the objectives of the WFD. The objectives of the WFD are for all water bodies to achieve or maintain an overall status of 'good' by 2027. Artificial or heavily modified water bodies have less stringent targets to meet, however, these water bodies need to achieve at least 'good ecological potential' over the same timescales.

- A19-1.1.5. Pressures recognised within the WFD are generally anthropogenic and may include land management, construction activities, point source discharges, abstractions and morphological alterations such as culverts, impoundments and channel straightening.
- A19-1.1.6. To help fulfil WFD aims, a new planning process referred to as 'River Basin Planning' has been implemented. This involves the production of a [River Basin Management Plan](#) (RBMP 2021 to 2027) for the Scotland River Basin District outlining how the water environment would be managed and improved to meet WFD objectives over time; with consideration given to WFD requirements during assessment of the importance of watercourses and selection of mitigation measures.
- A19-1.1.7. Engagement with Scottish Environment Protection Agency (SEPA) throughout this process has helped align expectations for WFD compliance and the need to maximise sustainability of the water environment and promote natural form and function where practicable.
- A19-1.1.8. The impacts of flooding are well documented and often devastating regarding cost of repairs, replacement of damaged property and of loss business. The Scottish Government is working to create a sustainable approach to flood risk management and the impact of climate change through implementation of the [Flood Risk Management \(Scotland\) Act 2009](#) (the Act) which transposes [European Directive 2007/60/EC](#) (i.e. the Floods Directive) into Scots Law.
- A19-1.1.9. The Act introduces a sustainable approach to flood risk management taking into consideration the impact of climate change. It creates a joined up and coordinated process to manage flood risk at both national and local level. As the regulator, SEPA has a strategic role in flood risk management and works closely with local

authorities, Scottish Water, and other responsible authorities to deliver flood risk management planning in Scotland.

A19-1.1.10. The National Flood Risk Assessment (NFRA) was the first step in developing a Flood Risk Management Strategy (FRMS) and the Local Flood Risk Management Plans (LFRMP), for Scotland. The assessment increased the understanding of the sources of flooding, allowing areas at the greatest risk to the impact of flooding to be identified. These have been identified as Potentially Vulnerable Areas (PVAs).

19-1.2. Policy

National Planning Framework 4

A19-1.2.1. This assessment has taken account of the Scottish Government's National Planning Framework 4 (NPF4), published in February 2023.

A19-1.2.2. NPF4 has an emphasis on Tackling the climate and nature crises (Policy 1) with Climate mitigation and adaptation (Policy 2) another important theme, with the intent of this policy *"to encourage, promote and facilitate development that minimises emissions and adapts to the current and future impacts of climate change."*

A19-1.2.3. Policy 22, Flood risk and water management - has specific relevance for the Road Drainage and the Water Environment (RDWE) assessment, and provides the following statements:

A19-1.2.4. Development proposals at risk of flooding or in a flood risk area will only be supported if they are for:

- essential infrastructure where the location is required for operational reasons
- water compatible uses
- redevelopment of an existing building or site for an equal or less vulnerable use and
- redevelopment of previously used sites in built up areas where the Local Development Plan (LDP) has identified a need to bring these into positive use and where proposals demonstrate that long-term safety and resilience can be secured in accordance with relevant SEPA advice.

A19-1.2.5. Transports proposals and travel networks are identified in NPF4 as Essential infrastructure. Therefore, Essential Infrastructure is the classification that has been adopted for the Proposed Scheme. Any standing advice regarding Essential infrastructure classification is consequently treated as applicable to the Proposed Scheme.

A19-1.2.6. The protection offered by an existing formal flood protection scheme or one under construction has been considered when determining flood risk. In such cases, it will be demonstrated by the applicant that:

- all risks of flooding are understood and addressed
- there is no reduction in floodplain capacity, increased risk for others, or a need for future flood protection schemes
- the development remains safe and operational during floods
- flood resistant and resilient materials and construction methods are used and
- future adaptations can be made to accommodate the effects of climate change.

A19-1.2.7. Development proposals will:

- not increase the risk of surface water flooding to others, or itself be at risk
- manage all rain and surface water through sustainable drainage systems (SuDS), which should form part of and integrate with proposed and existing blue-green infrastructure. All proposals should presume no surface water connection to the combined sewer and
- seek to minimise the area of impermeable surface.

A19-1.2.8. Development proposals which create, expand or enhance opportunities for natural flood risk management, including blue and green infrastructure to attenuate flows and manage water quality, will be supported under NPF4; as will those which enhance biodiversity under Policy 3. Further biodiversity project information is provided in Chapter 11: Biodiversity, plus associated technical appendices.

Flood Management Plans

A19-1.2.9. Flood Risk Management Plans (FRMPs) (previously known as Flood Risk Management Strategies) and local flood risk management plans are developed on a six yearly under the [Flood Risk Management \(Scotland\) Act 2009](#). FRMPs for Scotland have been developed to ensure all efforts to reduce flood risk are coordinated. The plans outline the long-term ambition by setting objectives and

identifying actions. There are multiple organisations responsible for flood risk management and the plans focus their efforts to where the risk of flooding and benefits of actions are greatest. SEPA, as Scotland's Strategic flood risk management authority are responsible for the developing and publishing of the FRMPs and certain Lead Local Authorities are responsible for the development of Local Flood Risk Management Plans. Local Flood Risk Management Plans take each FRMPs and turn it into a local delivery plan. The local plans provide more detail on how the actions set out in the flood risk management plans for 2022-2028 will be delivered including who will lead them and how the actions will be coordinated with other organisations. They also provide further information on when the actions will take place and how they will be funded.

[Clyde and Loch Lomond Local Plan District Local Flood Risk Management Plan](#)

A19-1.2.10. The Local Flood Risk Management Plan for the Clyde and Loch Lomond Local Plan District Local Flood Risk Management Plan is for Cycle 2 and will be delivered between 2022 and 2028, building on the work undertaken during Cycle 1 (2016 – 2022), this applies to the majority of the Proposed Scheme.

[Highland and Argyll Local Flood Risk Management Plan](#)

A19-1.2.11. To the north of the Rest and Be Thankful Car Park, the Proposed Scheme is within the Highland and Argyll Local Flood Risk Management Plan 2022 -2028. The area of the Proposed Scheme is not noted in either local plan as a Potential Vulnerable Area (PVA) therefore there are no specific actions currently in place for this area in relation to flood risk.

19-1.3. Guidance and Standards

A19-1.3.1. Key national and local planning guidance relevant to the RDWE has been summarised below.

A19-1.3.2. [The Design Manual for Roads and Bridges \(DMRB\)](#) provides a structure for consistent UK-wide guidance on standards and advice for the design and assessment processes for motorways and trunk roads. Key documents applied to various RDWE tasks and reports are as follows:

LA 101 - Introduction to environment assessment

A19-1.3.3. Sets out the over-arching requirements and principles that form an introduction to the environmental assessment of motorway and all-purpose trunk roads.

LA 104 – Environmental assessment and monitoring

A19-1.3.4. Sets out the requirements for environmental assessment of projects, including reporting and monitoring of significant adverse environmental effects.

LA 113 - Road Drainage and the Water Environment,

A19-1.3.5. The Standard sets out the requirements associated with the assessment and management of potential environmental impacts on the water environment from highway construction, operation, improvement and maintenance;

CD 529 – Design of outfall and culvert details

A19-1.3.6. This guidance details the requirements and advice for the design of outfalls and culverts and explains how the guidance in that applies to motorways and all-purpose trunk roads. It is supplementary to the Construction Industry Research and Information Association (CIRIA) guidance document [C786](#) listed below; and

CD 356 – Design of highway structures for hydraulic action,

A19-1.3.7. The guidance provides information on the hydraulic aspects of the design of structures in or over rivers, estuaries and flood plains.

A19-1.3.8. Several relevant guidance documents published by CIRIA have been referred to in the preparation of this work, including:

CIRIA Control of Water Pollution from Linear Construction Sites, Technical Guidance

A19-1.3.9. The guidance provides detailed guidance on managing and mitigating the environmental impacts of water pollution associated with linear construction projects such as roads, railways, pipelines, and utilities.

CIRIA C753 - The SuDS Manual

A19-1.3.10. The guidance provides comprehensive guidance on the planning, design, construction, operation, and maintenance of SuDS in the UK.

C786 – Culvert, screen and outfall manual

A19-1.3.11. The guidance which supplements the outfall and culvert design sections of DMRB LA 113 – listed above.

CIRIA Culvert, Screen and Outfall manual (C786F)

A19-1.3.12. Provides guidance on the adoption of a 'whole life' approach to the design and operation of culverts, screens and outfalls.

A19-1.3.13. SEPA have also published several relevant guidance documents that have been referenced to inform the design, assessment procedures, and consultation undertaken for the Proposed Scheme, including:

CAR A Practical Guide

A19-1.3.14. The Practical Guide (to the CAR Regs) provides comprehensive guidance on complying with environmental regulations related to activities that have the potential to cause water pollution or impact the water environment in Scotland.

Technical Flood Risk Guidance for Stakeholders

A19-1.3.15. This technical guidance outlines SEPA requirements for undertaking a Flood Risk Assessment and is currently being reviewed and updated in line with NPF4.

Flood Risk Standing Advice for Planning Authorities

A19-1.3.16. SEPA Flood Risk Standing Advice for Planning Authorities and Developers for lower risk applications.

Climate change allowances for flood risk assessment in land use planning, Version 4

A19-1.3.17. The guidance outlines the climate change uplifts that are applicable regionally across Scotland;

Flood Modelling Guidance for Responsible Authorities

A19-1.3.18. Details provides guidance on considerations for flood modelling.

Guidance for Transport Infrastructure Projects (WAT-SG-93)

A19-1.3.19. Provides guidance on the requirements of the CAR regulations in relation to major construction, improvement or maintenance works relating to transport infrastructure.

[Regulation of Licence Level Engineering Activities \(WAT-RM-02\)](#)

A19-1.3.20. Provides advice and guidance on the process of applying to carry-out a controlled activity.

[Good Practice Guide: Engineering in the Water Environment River Crossings \(WAT-SG-25\)](#)

A19-1.3.21. Provides advice on selecting sustainable engineering solutions that minimise harm to the water environment.

[Engineering in the water environment good practice guide: Sediment management \(WAT-SG-26\)](#)

A19-1.3.22. Provides advice on selecting sustainable engineering solutions that minimise harm to the water environment; and

[Sediment Management Authorisation \(WAT-SG-78\)](#)

A19-1.3.23. This guidance replaces [[Culverting of Watercourses \(WAT-PS-06-02\)](#)] and provides guidance on undertaking sediment removal in a justified, co-ordinated and sustainable manner, with minimal impact on biological diversity and natural river processes.