

Reservoirs (Scotland) Act 2011: Risk Designation



In this briefing you will find information about:

- Reservoir risk designation
- Assessing the adverse consequences of an uncontrolled release of water
- A proportionate approach to reservoir regulation
- Further information

1. Reservoir risk designation

Amongst the changes introduced by the Reservoirs (Scotland) Act 2011 (the 2011 Act) is the requirement for SEPA to assign a risk designation to each registered reservoir. The 2011 Act states that the risk designation should take account of the consequence of an uncontrolled release of water from the reservoir as well as the probability of such a release. However, as there is currently no industry agreed standard for assessing the probability of an uncontrolled release that can be applied consistently at a national scale, SEPA will initially be basing the risk designation on the consequence aspect alone.

The risk designation categories that are to be assigned are high, medium or low.

Although a reservoir may be assigned a high risk designation it does not mean that the structure is likely to fail. It means that there are certain receptors that are in the downstream area, which would, in the unlikely event of an uncontrolled release of water, be impacted. These receptors can range from domestic properties to 'A' roads or ancient scheduled monuments.

Flooding from reservoirs is very unlikely to occur and there has been no loss of life from reservoir failure in the UK since reservoir safety legislation was introduced in 1930.

To support the risk designation process, flood inundation maps will be produced for existing reservoirs registered under the Reservoirs Act 1975 (The 1975 Act). These maps will show the extent of potential flooding and will be made publicly available when SEPA's register of controlled reservoirs goes live in October 2015.

The approach to risk designation has been developed in consultation with the industry through the Reservoirs Technical Review Group.

It's important to remember that the risk designation is not a reflection on the current management or condition of the reservoir. It considers the potential impact on the surrounding area if flooding occurred.

2. Assessing the adverse consequences of an uncontrolled release of water

The approach to assessing the adverse consequences of an uncontrolled release of water draws on many of the methods and datasets that SEPA used for the National Flood Risk Assessment (2011). This ensures that the risk of flooding from all sources is assessed in a consistent manner. It takes into account the consequences on human health, economic activity, the environment and cultural heritage. These aspects have been split into the 7 following groupings.

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Receptor	Description
1. Human health: people	Potential risk to life attributed directly to an uncontrolled release of water. This does not include potential injuries, illness or risk to life resulting from secondary issues.
2. Human health: community	Important facilities that could cause community disruption if affected e.g. schools.
3. Economic activity: businesses	No. of business properties and the estimated weighted annual average damage of property
4. Economic activity: transport	Roads, railways and airports
5. Economic activity: agriculture	Agricultural land and forestry areas
6. Environment	Designated areas and their vulnerability to flooding
7. Cultural heritage	Cultural sites such as UNESCO World Heritage Sites

When undertaking the risk designation process, SEPA has taken a precautionary approach where there is uncertainty that human life would *not* be threatened in the event of an uncontrolled release of water.

Following the registration of a reservoir, SEPA is required to notify the reservoir manager with a provisional risk designation. Following this, a reservoir manager has 2 months in which to make a representation to SEPA if they feel the risk designation is incorrect. Following the end of the two month period SEPA will notify the reservoir manager, taking account of any representations, to inform them of the risk designation.

3. A proportionate approach to reservoir regulation

The 2011 Act introduces a more proportionate approach to regulation for the reservoir industry. Reservoirs designated as high risk will be subject to more regulation than those in the medium and low risk category.

Reservoirs Act 1975	Reservoirs (Scotland) Act 2011	
All sites required to appoint a Supervising Engineer to be available 24/7 & undertake regular inspections. All sites required to appoint an Inspecting Engineer at least once every 10 years (or when recommended by Supervising Engineer).	High Risk	Required to appoint a Supervising Engineer at all times. Required to appoint an Inspecting Engineer at least once every 10 years (or when recommended by Supervising Engineer).
	Medium Risk	Required to appoint a Supervising Engineer at all times. Only required to appoint an Inspecting Engineer when recommended by Supervising Engineer
	Low Risk	No statutory requirement to appoint either a Supervising or Inspecting Engineer

Reservoirs of high risk designation will only be required to maintain their existing statutory level of inspection and monitoring, as per the 1975 Act. The level of statutory monitoring and inspection will reduce across those sites designated as medium or low risk.

4. Further information

For enquiries relating to the current regulation of your reservoir please contact your local authority.

For further information about the 2011 Act and its implementation contact SEPA at reservoirs@sepa.org.uk.