

Reservoirs: Glossary

This glossary is to support the Scottish Environment Protection Agency's (SEPA) reservoir regulatory duties, assigned under the Reservoirs (Scotland) Act 2011.

| Term | Acronym | Definition |
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| Breach scenario | | A breach scenario is a situation where there is a complete failure of a dam and all the water is released. |
| Cascade | | Where water does or could flow between a number of different reservoirs often within the same valley or glen |
| Crest level | | The elevation at which the uppermost surface of a dam sits (not including any parapet wall or railing etc.) |
| Civil sanctions | | An enforcement intervention that can be applied directly by the regulator. |
| Controlled Reservoir | | A controlled reservoir is a structure designed or used for collecting water which is capable of holding 10,000 cubic meters or more of water above the natural level of any part of the surrounding land. The term also applies to a combination of more than one structure or area where more than 10,000m ³ water does or could flow between them or where there could be an uncontrolled release of water greater than 10,000m ³ from the combination |
| Dam | | A dam is a man-made barrier usually built across a river to hold back water forming a lake or reservoir behind it. It can be constructed from concrete or natural materials like earth and rock. |
| Dam type | | The primary types of dam include arch, gravity, buttress, gravity arch, service or embankment. |
| Engineer certificates | | These are produced by panel engineers who are responsible for inspecting and monitoring a reservoir. |
| Engineer reports | | Report produced by inspecting engineers following reservoir inspections that will recommend what actions (if any) must be taken by the reservoir manager to maintain or improve reservoir integrity. |
| First risk designation | | The risk designation ('high', 'medium' or 'low') is assigned to a reservoir once the period for representations has ended (see "Provisional risk designation" below). |
| Flood Risk Management (Scotland) Act 2009 | FRM Act | Legislation which transposes the European Commission Floods Directive into Scots Law and aims to reduce the adverse consequences of flooding on communities, the environment, cultural heritage and economic activity. |
| Grid reference | | A grid reference is a combination of letters and numbers used to locate a feature on a map. For example, an 8 figure grid reference is formed of 2 letters & 8 numbers, e.g. NN 1234 5678. |
| Hazard | | A situation with the potential to result in harm. A hazard does not necessarily lead to harm. |

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| Impoundment | | Any dam, weir, or other works by which water may be impounded (i.e. collected and stored); or any works diverting waters in connection with the construction or alteration of any dam, weir or other works. Raising the level of an existing natural loch is also considered an impoundment. A pond or loch created by excavation below the pre-existing ground level (e.g. a dug pond or flooded quarry) is not included. |
| Incident Reporting | | Reservoir Managers are required to report to SEPA incidents that have occurred at their reservoir. |
| Inspecting Engineer | | A Panel engineer appointed by the Reservoir Manager of a high risk or medium risk reservoir to carry out an inspection. |
| Inundation map | | A map showing areas that would likely be affected by flooding from uncontrolled releases of water from a reservoir. |
| Local Authorities | | Local authorities were the regulators of reservoir safety before SEPA took over in 2016. |
| Nominated reservoir manager | | Nominated to act on behalf of multiple reservoir managers and may act as a central point of contact in correspondence with SEPA. All individual reservoir managers are still legally responsible for complying with regulation. |
| Panel Engineer | | Panel engineers are a group of specialist civil engineers appointed by Scottish Ministers in consultation with the Institution of Civil Engineers. They undertake the supervision of construction of reservoirs and the ongoing supervision, monitoring and inspection of reservoirs. It is the responsibility of the reservoir manager to appoint panel engineers for their reservoirs. |
| Primary purpose of stored water | | The primary purpose of water stored in a reservoir include: agriculture, industrial/commercial, environmental service, fish production, flood defence, hydropower, private drinking water supply or public drinking water supply. |
| Provisional risk designation | | SEPA is required to give a provisional risk designation to all registered controlled reservoirs as soon as practicable once registered. Reservoir managers are able to make a representation to SEPA within two months, if they are dissatisfied with the risk assigned to their reservoir. |
| Public register | | The public register is one of the legislative requirements that SEPA has acquired through the Reservoir (Scotland) Act 2011. SEPA must establish and maintain and make available to the public a controlled reservoirs register which contains specific information on each reservoir. |
| Registration | | The Reservoir Manager of a controlled reservoir must register the reservoir with SEPA. |
| Registration period | | This is the period of time when a Reservoir Manager can register their Reservoir with SEPA. |

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| Regulatory Authority | | Through the phased implementation of the Reservoir (Scotland) Act 2011, SEPA is now the regulatory authority for reservoir safety in Scotland, providing regulation, advice and guidance to the industry. |
| Representation | | If a Reservoir Manager is dissatisfied with the risk designation assigned to their reservoir following SEPA's provisional risk designation, they can make a representation to SEPA explaining why they feel that the risk designation is wrong. |
| Reservoir | | A reservoir is generally understood to be a place where water is retained usually by a man-made structure to be reserved, for such purposes as electricity generation, irrigation, water supply or flood storage. |
| Reservoir Manager | | A Reservoir Manager is the operator, user or owner of the reservoir and has ultimate responsibility for its safety. |
| Reservoir Owner | | The Reservoir Owner may be different to the Reservoir Manager in certain cases e.g. where the reservoir has been leased from a landowner for commercial or recreational purposes and the tenant of the lease, if responsible for managing the reservoir, becomes the Reservoir Manager. |
| Reservoir Reference Number | | This is the number that SEPA assigns to a reservoir to help identify it following registration with SEPA. It should be used in all correspondence with SEPA |
| Reservoir (Scotland) Act 1975 | | The legislation under which reservoir safety was previously regulated, prior to 1 April 2016. Under the Reservoirs Act 1975 local authorities were responsible for the registration and regulation of reservoirs. |
| Reservoir (Scotland) Act 2011 | | The current legislation under which reservoir safety is regulated, replacing the Reservoirs Act 1975. The responsibility for regulating reservoir safety has been transferred from local authorities to the Scottish Environment Protection Agency (SEPA). |
| Reservoir Type | | The different types of reservoir include impounding, non-impounding or service reservoir. |
| Review | | A Reservoir Manager may seek to have their reservoir's risk designation reviewed if, following a representation, they are still dissatisfied with the risk designation given to their reservoir. SEPA is also required to undertake a review of a reservoir's risk designation when it considers it to be no longer appropriate or by the end of the period of six years |
| Risk | | A combination of both the likelihood and consequences of an event. |
| Risk Designation | | The Reservoirs (Scotland) Act 2011 requires SEPA to assign a risk designation of either 'high', 'medium', or 'low' to all controlled reservoirs. The risk designation will be based on the potential impacts on a variety of receptors from an uncontrolled release of water. 'High' risk sites will receive a greater level of regulation than either 'medium' or 'low'. |

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| Supervising Engineer | | A Panel engineer appointed by the reservoir manager of high and medium risk reservoirs to visit and monitor matters as required. |
| Top water level (mAOD) | | This is related to the volume of water that is usually stored in the reservoir and it is defined by the height of the lowest fixed spillway crest. |
| Undertaker | | In terms of the Reservoirs Act 1975, the “undertaker” is the person or organisation with responsibility for a reservoir. The “Reservoir Manager” replaces the “undertaker” and is responsible for registering each controlled reservoir under the Reservoirs (Scotland) Act 2011. |