

Reservoir operation and management – a guidance note for owners

Purpose of this guidance note

This guidance note sets out the aim of the British Dam Society to increase awareness of the information available on dam safety and operation for reservoir owners.

Reservoirs are man-made lakes, formed by constructing one or more dam structures. Dams are typically formed by embankments made of compacted earth. Reservoirs provide a wide range of benefits to their owners and form part of our environment and heritage. In the UK there are many thousands of reservoirs. Similarly, there are thousands of reservoir owners.

Without some care and maintenance, dams deteriorate over time. Large reservoirs are regulated to ensure that suitable provisions are made to keep these dams adequately safe from a failure that might cause a flood; endangering public and property. However, several small reservoirs in the UK have breached in recent times but fortunately there has been no loss of life from reservoir-related flooding for nearly 100 years, largely due to better knowledge and understanding.

The British Dam Society (BDS) recognises that not all reservoir owners have the knowledge and resources to operate and maintain their dams safely, and that there are many who could benefit from guidance on how to manage their reservoirs better.

Some reservoir owners, such as water companies, have the knowledge and resources at their disposal to operate and maintain their assets safely. Through the BDS, their experience is shared with others for the benefit of promoting the safety of UK dams.

What is the British Dam Society?

The BDS is a charity and an associated society of the Institution of Civil Engineers. We exist to:

“advance the education of the public and the profession in technical subjects relating to planning, design, construction, maintenance, operation, safety, environmental and social issues.”

Our members include reservoir owners, dam engineers and other specialists, but anyone can be a member of the BDS, with most being engaged in operating and looking after reservoirs. We bring together the UK reservoir community to share ideas and best practice. You can find out more about what we do and other useful information at www.britishdams.org.

Where can I get advice on keeping my dam safe?

Basic information is available on our website and membership provides access to the Members' Area of the website and our resources including a quarterly magazine *Dams and Reservoirs*.

If your reservoir is regulated by law, you are likely to have been required to appoint a Supervising Panel Engineer (SupE). It is the role of the SupE to promote the safe operation of the reservoir by working with you to maintain accurate records, monitor the safety of the dam and to help you manage potential risks which can change over time. Your SupE should be contacted immediately if you have any question or concern regarding the safety of your reservoir.

If your reservoir is not regulated, or it is a 'lower risk' reservoir unlikely to pose a risk to life, there will be no legal obligation on you to appoint a SupE. However, you may find it helpful to appoint a SupE (or any other panel engineer) for advice. A full list of current SupE's can be found on the

government website (www.gov.uk). Whilst these specialist engineers exist primarily to supervise regulated reservoirs they are often available to offer advice to owners of unregulated reservoirs. Regardless of regulation, all owners have a duty of care under civil law to maintain their structures in a safe condition to prevent harm to others.

Other sources of information

If you would like to read about dam safety or reservoir management, there are many good resources available. As well as the British Dam Society the following organisations might be able to offer advice on reservoir operation and management.

- Country Landowners Association
- National Farmers Union/ Farmers Union of Wales
- Angling Trust
- Historic England/CADW/Historic Scotland

If you require advice on your obligations under reservoir safety legislation in specific UK countries, each one has a website with useful [guidance](#). You can also contact the relevant enforcement authority as shown in the table below.

Reservoir location	Enforcement authority	Contact
England	Environment Agency	Reservoirs@environment-agency.gov.uk Tel: 03708 506506
Wales	Natural Resources Wales	reservoirs@naturalresourceswales.gov.uk Tel: 03000 653000 www.naturalresources.wales/ReservoirSafety
Scotland	Scottish Environment Protection Agency	reservoirs@sepa.org.uk Tel. 03000 996699 (Reservoir regulatory unit)
Northern Ireland	Reservoirs Act (Northern Ireland) 2015 not yet fully commenced	reservoirs.registry@infrastructure-ni.gov.uk Tel: 02886 768342

The relevant UK reservoir safety legislation is shown in the table below:

Reservoir location	Legislation
England	The Reservoirs Act 1975 (with Regulations applicable to England)
Wales	The Reservoirs Act 1975 (with Regulations applicable to Wales)
Scotland	The Reservoirs (Scotland) Act 2011
Northern Ireland	Reservoirs Act (Northern Ireland) 2015 (not yet fully commenced)
Jersey	Reservoirs (Jersey) Law 1996