



Department  
for Environment  
Food & Rural Affairs

# Reservoir Safety

## Consultation on reservoir emergency on-site flood plans

June 2020





© Crown copyright 2020

This information is licensed under the Open Government Licence v3.0. To view this licence, visit [www.nationalarchives.gov.uk/doc/open-government-licence/](http://www.nationalarchives.gov.uk/doc/open-government-licence/)

This publication is available at [www.gov.uk/government/publications](http://www.gov.uk/government/publications)

Cover Photo: Ariel view of Spring Garden Dam, near Bishop Auckland, County Durham – a flood risk reservoir in operation, owned by the Environment Agency

Any enquiries regarding this publication should be sent to us at

[ReservoirFM@defra.gov.uk](mailto:ReservoirFM@defra.gov.uk)

[www.gov.uk/defra](http://www.gov.uk/defra)

# Contents

Introduction .....	4
Why we are consulting.....	5
How to respond.....	6
After the consultation .....	6
List of Consultation Questions .....	1
1 About you .....	1
2 Managing and maintaining a flood plan.....	1
3 Testing on-site flood plans .....	2
4 Updating guidance .....	2
5 Training to support emergency planning and incident response .....	3
6 Thank you .....	4
Confidentiality and data protection.....	4

# Introduction

In a written statement on 16 March 2020 the Secretary of State for Environment, Food and Rural Affairs stated that the government would consult on making a requirement for all large raised reservoirs (registered reservoirs) to have an emergency contingency plan (also known as an on-site flood plan) in place. The government considers such plans essential for maintaining public safety, and is considering making the requirement for such plans a legal obligation in England during 2020/21. This consultation covers England only.

On-site flood plans are designed to manage any risk posed that may result in an uncontrolled release of water from a reservoir that would, or might, cause flooding to the surrounding area and communities. Plans should include information on key contacts and the actions the reservoir undertaker, or their staff, would take on site to prevent, control or mitigate such a release. Plans should be informed by Reservoir Flood risk maps and complemented by local emergency plans to ensure preparedness for reservoir flood risks.

The government recognises that there are different types of reservoir, and that emergency plans will need to be unique to each reservoir and how it is operated. The purpose of this consultation is to help ensure that any new requirements to have an on-site flood plan for large raised reservoirs are proportionate to the type and classification of a reservoir and the likely impact of flood risk from a breach. The consultation also seeks views on training to support emergency planning and incident response for reservoir incidents.

This consultation does not specifically cover emergency community evacuation (off-site) flood plans which are held by emergency responders e.g. Local Resilience Forums, but recognises both plans will need to complement each other.

## Why we are consulting

We have an excellent reservoir safety record in the UK, and incidents like the spillway failure at Toddbrook Reservoir in August 2019 are rare. Swift action when the incident occurred was aided by the fact that both an on-site flood plan and a local flood evacuation plan were available and quickly activated.

Following on from that incident, Defra and the Environment Agency issued a survey to reservoir owners in England which sought information to gauge the state of emergency preparedness more generally for reservoirs regarding on-site flood plans.

Findings from the survey indicate a large proportion of large raised reservoirs already have on-site plans, but there are many that do not. We consider this position is not acceptable for public safety and are therefore considering making it a statutory requirement for all reservoirs regulated under the Reservoirs Act 1975 to have, and maintain, on-site flood plans.

The incident at Toddbrook Reservoir demonstrated the value of having emergency plans in place that can be activated quickly. The government considers that reservoir on-site flood plans are essential for public safety and reassurance that critical infrastructure is being responsibly managed. Under current legislation, there is a requirement for details of on-site flood plans to be recorded where they are in place. This requirement implies a strong presumption that large raised reservoirs do have a flood plan, but stops short of making it a legal obligation.

The Reservoirs Act 1975 makes provision for the Secretary of State to make a Ministerial Direction<sup>1</sup> to require reservoir undertakers (owners and operators) to have flood plans. In order to make a Ministerial Direction, the Reservoirs Act 1975 requires the Secretary of State to consult the reservoir undertakers concerned, the Environment Agency, local authorities in whose area the reservoir is situated, emergency services in whose area the reservoir is situated and others as the Secretary of State considers appropriate.

In this instance a Ministerial Direction is proposed to be made later in 2020/21. The mechanism for this will be a notice sent to reservoir undertakers who are on the public register held by the Environment Agency. A Direction would cover all of the large raised reservoirs for which an undertaker is responsible. We expect that a Direction would explain the key information that must be in a plan, and the information that can be shared. Plans will be expected to be prepared in consultation

---

<sup>1</sup> See sections 12A-12B of the Reservoirs Act 1975, as amended by the Water Act 2003 and the [Flood and Water Management Act 2010](#).

with a reservoir engineer. For High Risk reservoirs this means the Supervising Engineer and for other large raised reservoirs a qualified civil Engineer (ie a reservoir panel engineer) engaged for this purpose.

The flood plans will need to be filed with the Environment Agency, together with certification from the reservoir Engineer that the requirements of the Ministerial Direction are satisfied.

The Direction would set out how the plan should be filed with the Environment Agency, and the information in the plan which needs to be shared with Local Resilience Forums and local authorities. In principle the information likely to be shared would be similar to the summary information described in the 2013 Regulations<sup>2</sup> known as the “prescribed form of record” for a flood plan.

This consultation seeks views on:

- managing and maintaining a flood plan
- how frequently a flood plan should be tested
- updating guidance about preparing a flood plan
- training that may be needed to support emergency planning and incident response

## How to respond

The Consultation is online on Gov.uk will run for 8 weeks from 16 June 2020 and will close on 10 August 2020. Please complete the online consultation and submit your response.

You can also email your response to the Reservoir Safety team in Defra:

[Reservoirfm@defra.gov.uk](mailto:Reservoirfm@defra.gov.uk)

Due to the ongoing situation with coronavirus we regret that we are not able to offer a postal option for responses as staff are working from home.

## After the consultation

Defra will use the information from this consultation to inform a Ministerial Direction, and any implementation needs.

---

<sup>2</sup> The Reservoirs Act 1975 (Capacity, Registration, Prescribed Forms, etc.) (England) Regulations 2013

# List of Consultation Questions

## 1 About you

1 What is your name?

2 What is your organisation?

3 What is your role regarding reservoirs?

4 Do you want to be kept informed about the outcomes from this consultation?

## 2 Managing and maintaining a flood plan

We consider that on-site flood plans should be proportionate to the type and classification of each reservoir and likely impact of flood risk from a breach.

As a minimum, we believe that plans should include the following information:

- the measures that are in place in order to cope with/plan for emergencies and ahead of or during severe weather events
- key actions to be taken by the undertaker, and/or their staff, to prevent an uncontrolled release and to mitigate the effects of a flood
- actions to be taken in the event of an uncontrolled release
- likely area of flooding (in reference to flood risk maps)
- how and when the flood plan should be tested
- key contacts in an emergency (e.g. in undertaker's organisation, neighbours, relevant local authorities, Local Resilience Forums (LRF) and the Environment Agency)

For High Risk reservoirs, we consider that plans should be specific to the type of reservoir and include full details of risks or circumstances that would trigger emergency action, including instructions for drawing down the reservoir and other emergency measures eg access to specialist equipment. Plans will need to be made in consultation with the Supervising Engineer for the reservoir.

For Non High Risk reservoirs, plans will need to be made in consultation with a qualified civil Engineer.

## **5 Do you agree with the minimum information proposed for inclusion in a reservoir emergency flood plan?**

**If no, please state what information should be excluded.**

**Is there any other information that you think should be included as a minimum?**

We consider that plans should be regularly maintained and updated as necessary, in consultation with the relevant Engineer. We propose that plans should be reviewed annually for High Risk reservoirs, and reviewed at least every 2 years for other large raised reservoirs. In reviewing a plan we propose that information should be sought from the relevant local authority to check if there any changes in level of risk e.g. new buildings, infrastructure that may be affected, and to ensure that on-site plans and off-site plans held by local authorities and LRFs complement each other.

**6 How frequently should an on-site flood plan be updated for a high risk reservoir? Please include a rationale for your proposed frequency.**

**7 How frequently should an on-site flood plan be updated for a non-high risk reservoir? Please include a rationale for your proposed frequency.**

**8 What changes or events might mean the on-site flood plan should be updated sooner?**

## **3 Testing on-site flood plans**

Implementing a Ministerial Direction would trigger a legal requirement for the flood plan to be tested periodically as directed by the reservoir Engineer. For high risk reservoirs this will be the Supervising Engineer or Inspecting Engineer, and for other reservoirs by a qualified civil engineer engaged for that purpose by the undertaker. The Environment Agency will develop/update guidance about testing flood plans. We expect on-site flood plans to be tested on a regular cycle and when there are changes in operating staff or engineers.

**9 How frequently should a flood plan be tested? Please include a rationale for your proposed frequency**

## **4 Updating guidance**

The Guidance for preparing a flood plan

<https://www.gov.uk/government/publications/reservoir-emergencies-on-site-plan> will be



refreshed. We invite views on any parts of the guidance that need updating or where new guidance is needed, in particular for different types of reservoirs.

**10 What aspects of the current guidance are not clear?**

**11 What is missing from the current guidance?**

**12 Do you have any further comments on how the guidance for preparing on-site flood plans might be improved?**

## **5 Training to support emergency planning and incident response**

A Direction would not include requirements for training, however in order for any emergency on-site plan to be effective, training for reservoir undertakers, engineers, and operating staff is essential. We also suggest that some training with local responders (e.g. LRF members) would be beneficial.

- to know how and when to take the actions set out in the on-site flood plan
- to better understand the impacts from severe weather and other emergency triggers
- how to write, implement and test on-site plans,
- to ensure on-site and off-site planning complement each other to manage flood risks in the vicinity of the reservoir
- to understand areas at risk of flooding (e.g. interpreting flood risk maps)

**13 Do you agree that training for undertakers and their staff, engineers, local authority emergency planners and emergency services is necessary?**

**14 If Yes - What should be included in the training?**

**15 Who should be responsible for developing and delivering the training?**

**16 In what format should the training be made available?**

**17 Could/should training be added/ linked to existing continuing professional development (CPD) courses? If so please state which courses.**

## **6 Thank you**

We would like to thank you for participating in this consultation.

**18 If you have any further comments you wish to make, please add them here and submit your response.**

## **Confidentiality and data protection**

This consultation document and consultation process have been planned to adhere to the Consultation Principles issued by the Cabinet Office. Representative groups are asked to give a summary of the people and organisations they represent and where relevant who else they have consulted in reaching their conclusions when they respond. Information provided in response to this consultation, including personal data, may be published or disclosed in accordance with the access to information regimes these are primarily the Environmental Information Regulations 2004 (EIRs), the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 2018 (DPA). We have obligations, mainly under the EIRs, FOIA and DPA, to disclose information to particular recipients or to the public in certain circumstances. If you want the information that you provide to be treated as confidential, please be aware that, as a public authority, the Department is bound by the Freedom of Information Act and may therefore be obliged to disclose all or some of the information you provide. In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances.

An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department. This consultation is being conducted in line with

the Cabinet Office “Consultation Principles” and be found at:

[www.gov.uk/government/publications/consultationprinciples-guidance](http://www.gov.uk/government/publications/consultationprinciples-guidance).

If you have any comments or complaints about the consultation process, please address them to: Consultation Coordinator Area 6B, 6th Floor Nobel House 17 Smith Square, London, SW1P 3JR.

Or email: [consultation.coordinator@defra.gov.uk](mailto:consultation.coordinator@defra.gov.uk)