Basic Details

Publish Date

27 February 2026

Case ID#

3361

Title

Spillway defect / rutting identified following heavy rainfall

Nation

Wales

Regulator Reference No.

81

Legal Status

Statutory

Reservoir Type

Impounding

Reservoir Capacity

100,000 - 499,999m3

Year of Construction

< 1800

Main Construction Type

Earth fill embankment

Dam Height

5 - 9.99 metres

Dam Flood Category

A

Hazard Class

High-risk reservoir

Reservoir Use

- Recreation or general amenity

Owner Type

Public body

Incident Details

Date & Time of Incident

15 December 2025 - 12:00

Date Incident Closed

17 December 2025

Observations that Caused the Incident to be Declared

- Slope or face deformation (slippage, cracking, slumps, mounds, depressions)

Describe the Incident

Rutting of the grassed area along the spillway footpath. Voids formed behind the spillway bank walls. Missing blockwork identified on the spillway walls during the S12 inspection.

Supporting Photos

Photo 1: Spillway bend just downstream of bridge. Note this is low spot and is holding water.

Photo 2: Earth that has built up in the spillway channel prior to cleaning.

Photo 4: Poor condition on masonry on right hand side of spillway channel.

Causes and Impacts

Natural Processes which Initiated or Contributed to the Incident

- Heavy/persistent rain (no flood)

Main Contributing Factors to the Incident Occurring

Dam Factors

- Deterioration of materials
- Instability
- Spillway or overflow - blockage

External Factors

- None

Shortcomings

- Maintenance shortcoming
- Surveillance shortcoming

Root Cause of the Incident

Very intense rainfall combined with missing/deteriorated blockwork, which allowed water to leave the spillway and erode soil behind the walls. Earlier identification limited escalation, but post-storm inspections could further mitigate future incidents.

Impacts on the Reservoir

- None - near miss
- Other (describe below)

Supporting Photos

No images provided.

Supporting Contributions and Studies

Human Factors which Influenced the Incident

Contributing: None identified.

Mitigating: Early detection during the S12 inspection. Immediate infilling of voids with stone material.

Instrumentation at the Reservoir

No relevant instrumentation was present or used during the incident. (N/A recorded for instrumentation usage)

Was Instrumentation Effective?

Not Applicable

Assistance by External Parties and Impacts on Downstream Population

No emergency services were alerted. No downstream population impacts or communications were required.

Summary of Studies or Investigations Undertaken

Defects identified during the S12 inspection. Review of recent intense rainfall events that likely contributed to rutting. Analysis concluded missing blockwork may have allowed water to escape the spillway channel and cause soil washout.

Supporting Photos

No images provided.

Lessons Learnt

Lesson 1

Greater emphasis required on scheduling inspections after periods of intense rainfall. Maintenance shortcomings identified (missing blockwork). Surveillance shortcomings identified (issue found during routine inspection rather than targeted post-storm checks).

Lesson 2

Lesson 3

Lesson 4

Closing Comments

Supporting Photos

No images provided.

Information provided has been sent from reservoir owners and engineers, and cleansed of personal information by the enforcement authority. We cannot guarantee the accuracy of the data, but if you find an error please contact the relevant enforcement authority.