Ystradfellte Scour Valve Operation: Effects on the Porth Yr Ogof Caves
(informal report by DCWW)

This report summarises the scour valve operation at Ystradfellte Reservoir on the morning of 22nd October 2026 and its effects on the downstream river and Porth Yr Ogof cave system.

At 0430, [DCWW staff] began opening the scour discharge cone valve at the base of the dam. The valve took 90 minutes to open fully. At 0600, [the DCWW manager] was notified and sent a video showing full flow from the valve into the river.

They then began closing the valve, which took 70 minutes and was completed at 0710.

[DCWW Observers] arrived at the main entrance to the Porth Yr Ogof caves at 0630 to monitor river levels immediately upstream of the cave. Instead of deploying the planned gauge stick, we observed the water level against selected rock outcrops and how the river behaved around them.

On arrival, the river was high, with water lapping onto sections of the rock walkway and spilling over others. Cavers use this walkway as a guide when assessing whether it is safe to enter the cave.

We recorded several videos and photographs with the time taken of the river level, some of which are included in this report.



0633 Looking downstream to the main entrance



0634 Image directly into the main entrance



0634 Image looking across the river at the main cave entrance



0635 Image looking upstream from the cave entrance



0640 Image slightly upstream of the cave entrance, note the flows around the large rock

The river level appeared to recede from shortly after our arrival at 0630. We therefore believe the release travelled downstream faster than expected and that we may have missed its peak, at around 0600.

Steve Rayner from SWOAPG arrived on site at 0800. The river level continued to fall, and we remained until 0900, when levels had returned to normal.



0836 Image slightly further upstream, note flows around the large rock have receded



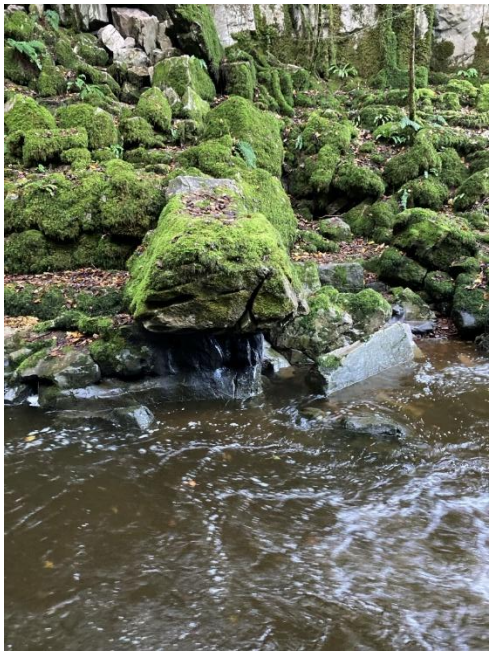
0836 Image looking downstream from the start of the rock walkway



0836 Image upstream from the start of the rock walkway

To support continued monitoring during reservoir releases, we are considering installing a 1 metre gauge board at the location below, subject to landowner approval. This would provide a fixed reference for accurate, consistent monitoring of river levels and a useful reference point for all cave users.

Proposed location of the fixed gauge board to measure river levels



Discussions during and after the release concluded that discharge directly affects river levels at the cave entrance, particularly after heavy rain. The release also appeared to reach the caves sooner than expected: approximately one and a half hours rather than the anticipated two hours.

We will arrange further flow monitoring during the next planned release in April 2027.