

**Adventure Activities Licensing Service
InfoLog: August 2018**

Sluice Gate Incident

The incident

In 2017 three instructors were with a group of seven mixed ability paddlers who were, nevertheless, all considered capable of paddling Grade 1 moving water. One of the group had forgotten their spray deck, so one of the instructors gave the participant his own deck and then stayed on shore to provide bank support.

The trip included a shallow angled weir that is regularly paddled down the main flume. It is also possible to bounce down the easy angled face of the weir on either side of the flume. However, there is a water extraction sluice (for electricity generation) on the far (river) right hand side that presents a significant risk of entrapment. The pull of water into the sluice starts further along the weir than it might appear. This is especially the case at lower water levels. At higher flows, more of the water is going over the weir.

Before the group approached the weir one of the instructors gave a bankside brief while the other went to inspect the weir.

After most of the group had paddled the flume with an instructor, it became clear that the last two participants were not keen to go down. It was decided they would bounce down the face of the weir to the river right of the flume as an angler was preventing easy access down the left.

One of these participants correctly approached the top of the weir as instructed. However the other, against the direction of the instructor, decided to go further right toward the 'wing wall' of the sluice.

It quickly became apparent that this participant had been caught in the strong current that was flowing towards, and entering, the sluice. The instructor acted quickly, jumped out onto the weir, ran along the top of it and onto the 'wing wall', and shouted instructions to the participant. This worked to the point where the instructor could grab the participant's paddle and pull the participant to the side and out onto the wing wall. However, the boat entered the sluice, wedged in the first sluice gate and was destroyed.

This was potentially a very serious incident for both the adventure activity sector and energy providers. It should be noted that the incident could have resulted in serious injury, or a fatality, without the quick thinking and skills of the instructor.

Lessons Learned

- Sluice gates and water extraction points should always be treated with extreme caution.

- No matter how carefully you prepare before departure take spare kit with you – items such as spray decks can easily be forgotten and this can have serious consequences.
- Make sure any significant but competing risks are kept in context. In this case the choices were whether to keep well away from the fisherman or keep well away from the sluice.
- The flow into a sluice can start a considerable way from it and further than is often realised. In this case it started near the lip of the weir.
- Make sure everyone knows the plan – the line to be followed and the hazards to be avoided.