

The Dale Dike Dam disaster

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The Dale Dike Dam of Sheffield Waterworks was finished early in 1864 and filling of the new reservoir was almost complete when disaster struck on 11 March. A small crack in the earth embankment appeared, and later that stormy night there was a catastrophic failure, releasing 650 million gallons of water to roar down the valley into Sheffield. The flood drowned 250 people, and destroyed or damaged nearly 600 buildings and twenty bridges. It changed the area forever, but how did the Ordnance Survey react?

This part of Yorkshire had been surveyed at the six-inch scale nominally in 1850-51, but engraved sheet 287 (*figure 1*) was not published until 9 March 1855, before the project to supply Sheffield from a series of reservoirs had been developed. It records this remote Pennine area before it had been disturbed by the works. My copy of this map is blind-stamped with a printing date of June 1866, seven years after the contractors had moved in and over two years since the disaster; it had not apparently moved OS to make any changes. Thus far there is nothing unusual – apart from some limited attempt to add new railways and a smattering of other features (usually without any note or change to the imprint date), revision of published large-scale maps was non-existent at this period.

The dam was rebuilt in 1875 on a new site a little further up the valley, where it is still in use. I have another impression of Sheet 287 (*figure 2*) taken in September 1880, and by then the dam and reservoir had been added and named. But the depiction is clearly of the earlier works. So we might suppose that someone at OS had decided around 1863 or early 1864 to survey the new reservoir whilst it was under construction, including the intended final water line, and the revision sketch was passed to the engravers who, being fully occupied, were not able to add it to the plate until several years later. But if this was so, the disaster was national news and it is surprising that the revision went ahead unchanged. Even odder is the fact that the revised map also shows the fully completed Agden Reservoir nearby, which was still at an early stage of construction when the Dale Dike Dam failed. A true representation of the whole area including the rebuilt reservoir and the permanent changes wrought to the valley below the dam by the flood, was not available until the whole of Yorkshire was fully revised and republished in 1887-93.

It would be interesting to have details of other copies of Sheet 287 to try and pin down when the engraving was altered. The criteria and method for the sporadic revision of early OS mapping is still a largely unknown field, and episodes like this simply highlight the need for further research.

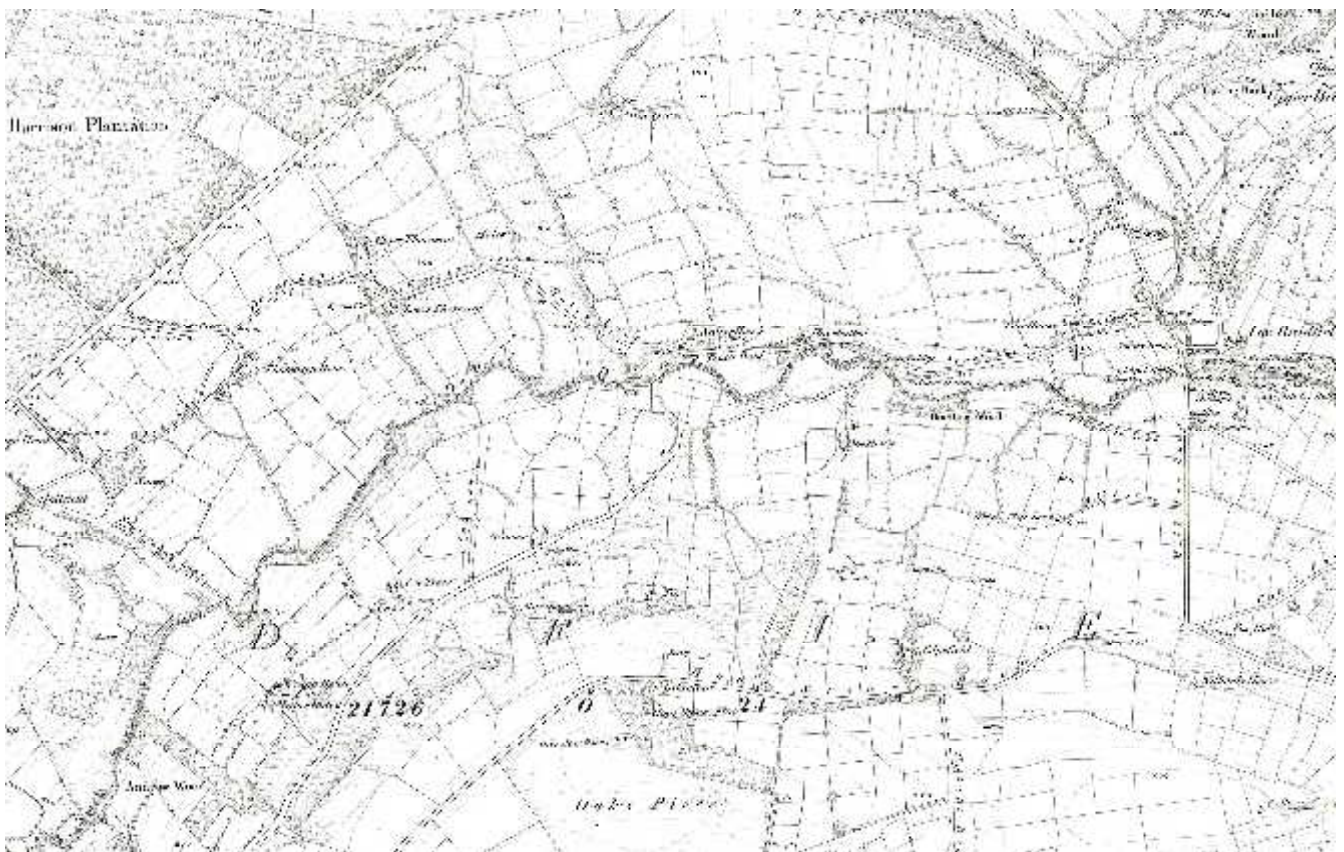


Figure 1. Part of Yorkshire Sheet 287 as originally published.

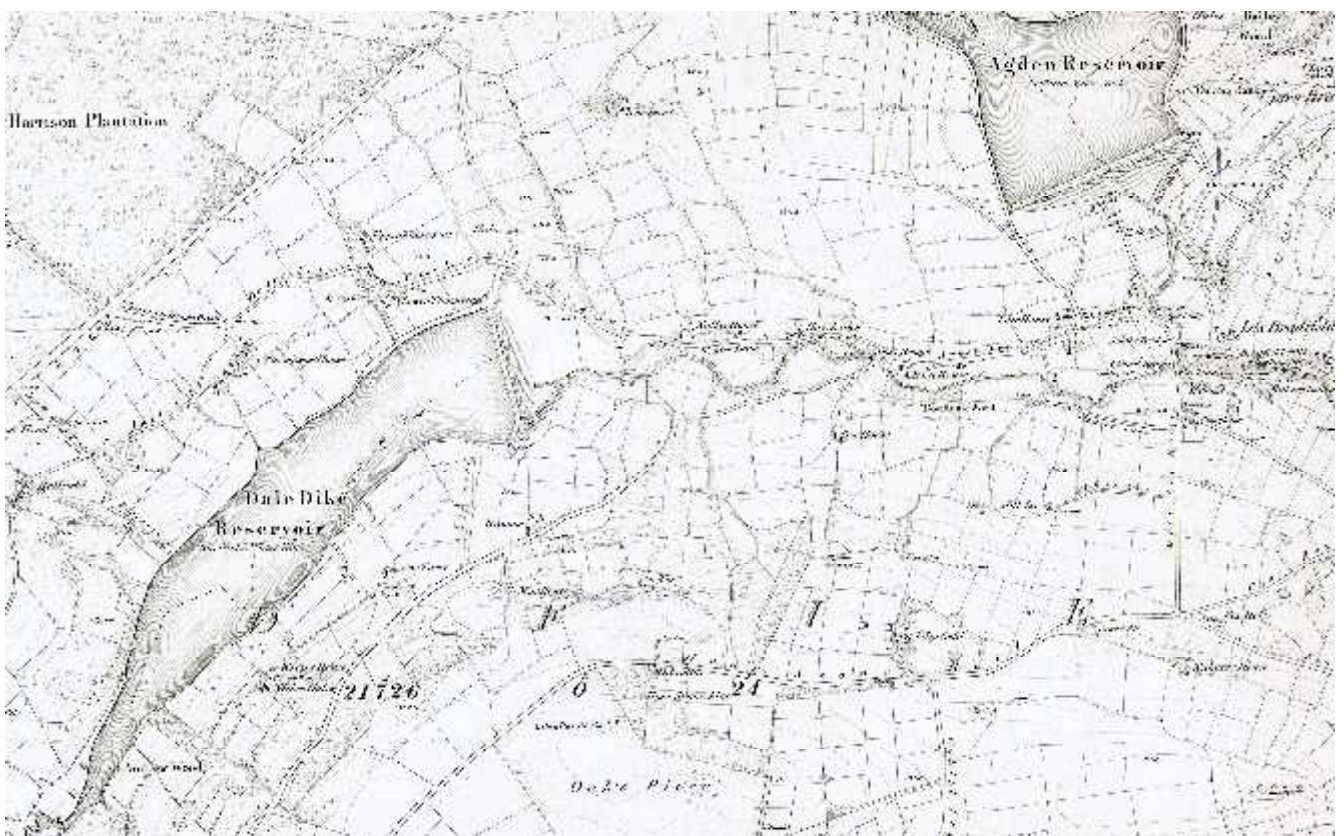


Figure 2. The same area after reservoirs had been added.