



The diagram illustrates a fluid flow over a step. A horizontal blue line at the top represents the free surface of the fluid upstream of the step. A vertical blue line on the left is labeled  $y_0 = 1m$ . A thick black line represents the step, starting from a horizontal blue line at height  $y_1$  and extending upwards. The fluid surface downstream of the step is shown as a blue curve that starts at height  $y_1$  and rises to a height  $y_m$  at the right edge of the diagram. The horizontal blue line at height  $y_1$  is labeled  $y_1$  in the middle. The vertical blue line on the right is labeled  $y_m$ .

$$y_0 = 1m$$

$$y_1$$

$$y_m$$