

Abstract

Dam is a building that is built to hold or accommodate water, can also be built to hold and accommodate mine waste (tailings), or hold mud to form reservoirs (Government Regulation No. 37 of 2010 concerning Dams). The dam certainly has the potential to break (dambreak) so that it is dangerous for local residents. The dam is one of the shallow flows apart from tsunami, flooding in coastal cities, flows in river channel, tidal, etc. Shallow flows can be simulated using the Saint Venant better known as Shallow Water Equations (SWE). This model can produce surface gravity waves that propagate far from the location of the initial water movement and reflect them against the wall or water barrier. Through Dambreak Simulation using MoSV (Momentum cOnservative Saint-Venant) 2 Dimensions we can simulate and predict the movement of water movement or water rate when dambreak occurs and when it reaches a certain point so that it can be an early warning or early warning for local residents. This also can be a consideration for the dam construction design, for example is water barrier in the event of a dambreak.

Keywords: Shallow Flows, Shallow Water Equations, Saint Venant, Dambreak