

HYDRAULIC DESIGN OF A DAM

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ABSTRACT

Hydraulic design of a dam is a design that calculates the water flow in and out from the dam. Monthly rainfall data are used to determine the inflow of water to the dam with catchments area that had been set early. The demand of water for the area is very important to determine the water storage for the dam and the discharge of the flow to the spillway. Hydraulic jump will occur at the spillway where the flow is critical.

The project consists of stability analysis and the design of hydraulic structure of a dam. The hydraulic structure consists of spillway, and scour basin of the dam. Therefore, the forces acting on the dam and the factor of safety have been taken in the scope of design. The outcome of the design has to be balance and able to avoid failure. Types of failure are also being considered in the design.