

We discuss the expected overflow in a finite dam model for a class of master equations with separable kernels. For this class of master equations the integral equation for the expected amount of over flow can be transformed into an ordinary differential equation. The finite dam model for overflow is considered with barriers at $X = 0$ and $X = k$ (constant). The closed form solution for the expected amount of overflow before the dam becomes empty is arrived at. The results for expected amount of overflow with any number of emptiness in time t are also derived. In the above two cases the inputs into the dam are taken as random and the output (release rule) is taken as deterministic and linear. In another model the release is taken as proportional to the content of the dam.