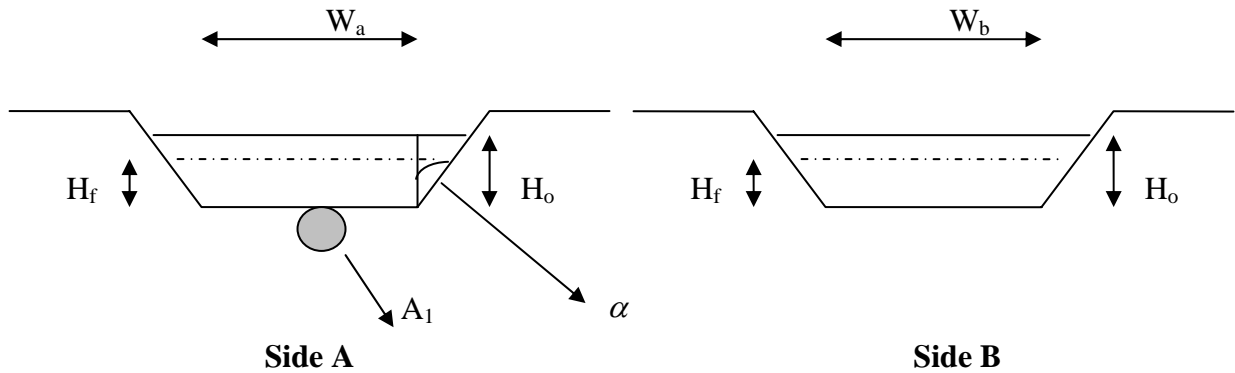




Discharge Duration of Common Pond



$$t = \frac{1}{A_1 \sqrt{2g}} \left[\begin{aligned} &2W_a W_b (h_o^{1/2} - h_f^{1/2}) + \frac{4}{3} W_a (\tan \alpha) (h_o^{3/2} - h_f^{3/2}) \\ &+ \frac{4}{3} W_b (\tan \alpha) (h_o^{3/2} - h_f^{3/2}) + \frac{8}{5} (\tan^2 \alpha) (h_o^{5/2} - h_f^{5/2}) \end{aligned} \right]$$

$$g = 9.81 \frac{m}{s^2}$$

$$A_1 = \text{Discharge_Outlet_Area}$$

$$t = \text{Second}$$