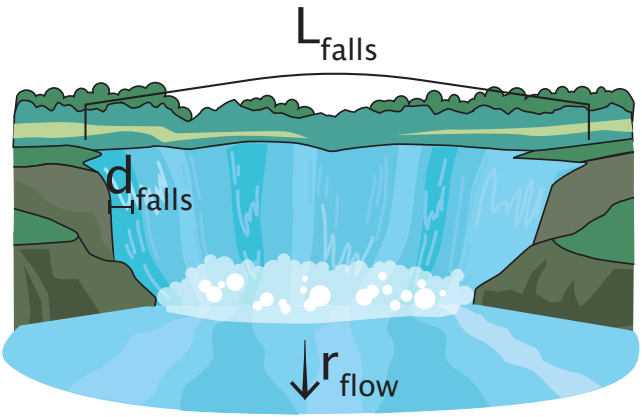
# DRAINAGE RATE OF NIAGARA FALLS




$$L_{falls} \approx 10^3 \text{ m}$$

$$r_{flow} \approx f \text{ m / sec}$$

$$d_{falls} \approx 1 \text{ m}$$

$$v_{discharge} \approx L_{falls} \times d_{falls} \times v_{flow}$$

$$\approx 10^3 \text{ m} \times 1 \text{ m} \times \frac{f \text{ m}}{\text{sec}}$$

$$\approx f \times 10^3 \text{ m / sec}$$

$$V_{discharge} \approx \frac{f \times 10^3 \text{ m}^3}{\text{sec}} \times \frac{10^3 \text{ L}}{\text{m}^3} \times \frac{f \times 10^7 \text{ sec}}{\text{year}} \approx 10^{14} \text{ L / year}$$