"What is the probability of the Kauaeranga Spillway being in use within the next 6 hours?"



Model co-developed with Waikato Regional Council



Scenario: Civil Defence must decide if and when to evacuate hospital on the other side of the spillway

General likelihood at any given hour is 81% no rain

Likelihood of Spillway operation = 0%



Heavy rainfall event (1 hr) exceeding ARI5 threshold

Likelihood of Spillway operation = 46%



Rainfall over past 24 hrs now exceeds ARI 5 level

Likelihood of Spillway operation = 66%



River height now exceeds 10.2 m

Likelihood of Spillway operation = 83%



River flow now exceeds 700 m³ (ARI 5 design)

Likelihood of Spillway operation = 94%

