



# Seachange 05

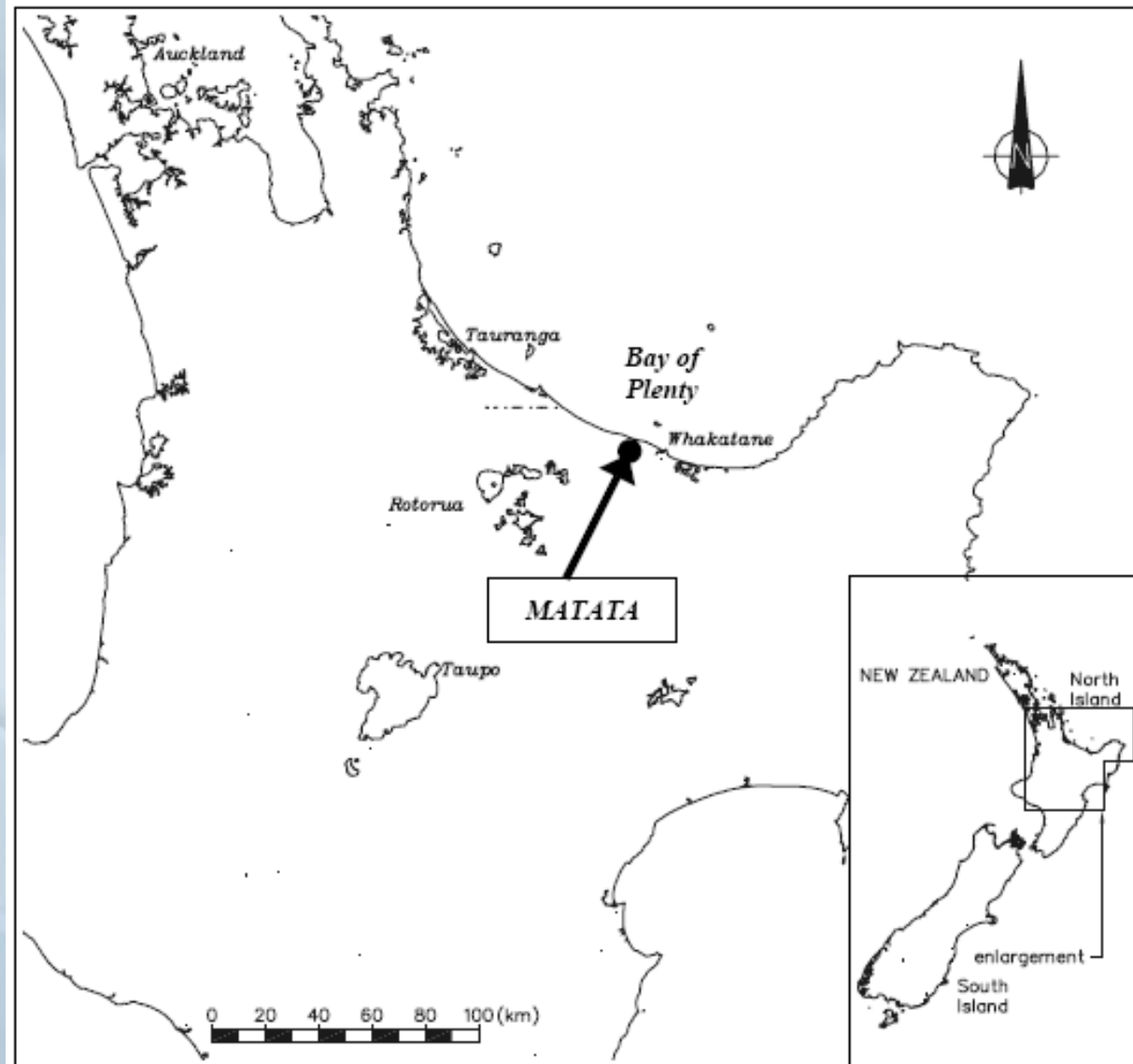


## The Matata Experience

### Hazard Identification and Management

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# The Matata Debris Flows







# The Matata Debris Flows





# Rainfall depths



## Awakaponga at Tarawera Gauge

- Historically recorded
  - 1 hour maximum: 40 mm
  - 24 hour maximum: 128 mm
- 18 May 2005
  - 1 hour maximum: 95 mm
  - 24 hour maximum: 308 mm
- Rainfall depth in the Matata hill catchments perhaps up to 30 % greater due to topographic effects

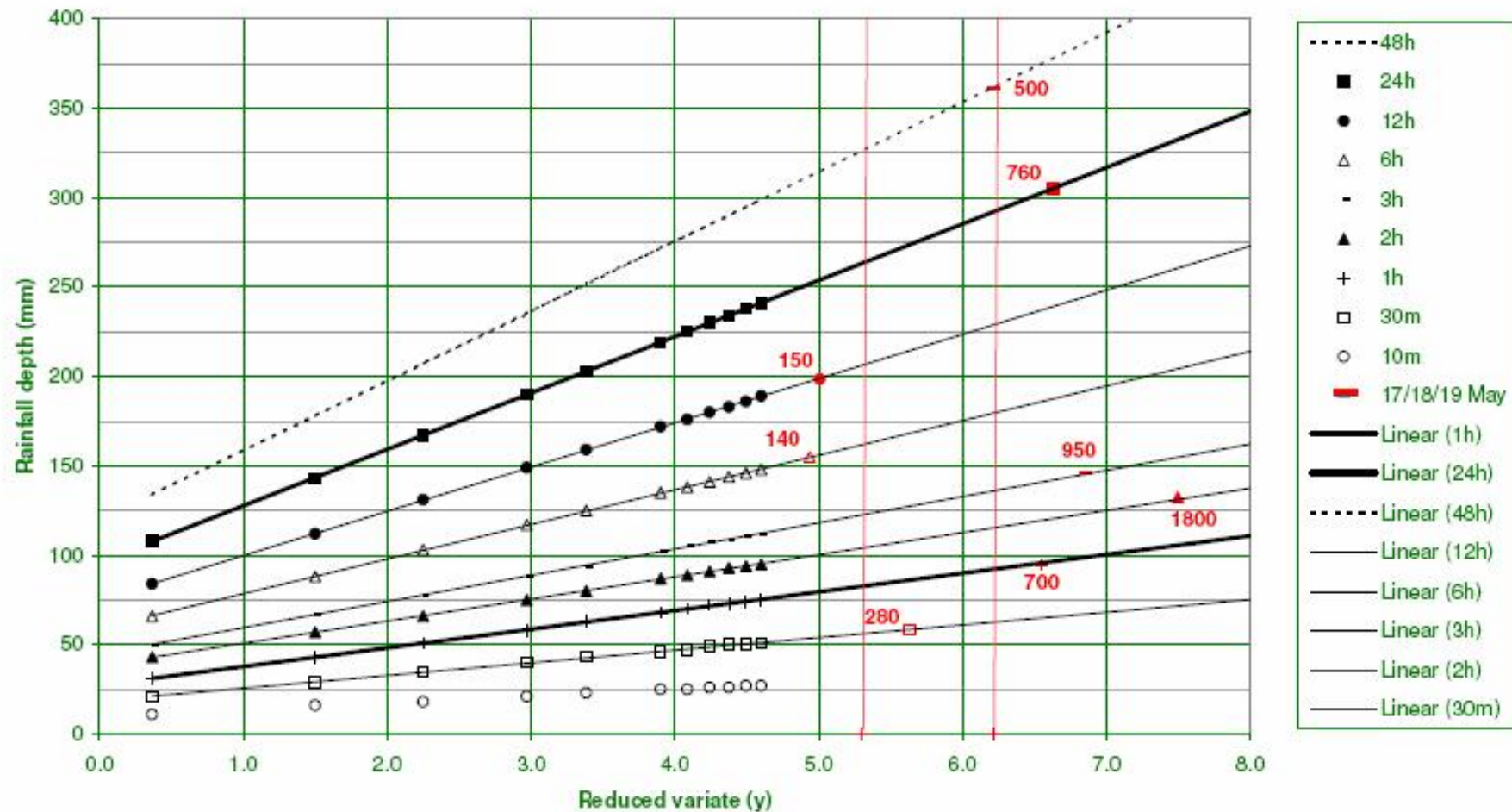




# Rainfall Return Periods



HIRDS v 1.5 Awakaponga rainfall





# Event summary



- Rainfall maybe 20 % greater than expected 100 year rainfall
- Estimate of rainfall return period in the range 200 years to 500 years
- Water flows in streams up to twice theoretical 100 year flows
- Water and debris flows up to maybe twenty times estimated 100 year flood flows



# Hazard Identification



To increase councils' ability to control associated risks

- Gap analysis of hazards in the district and the level of information available about those hazards
- Review the adequacy of hazard information, and determine whether the information available is suitable for managing hazards
- Ensure that the District Plan monitoring requirements are being undertaken, that the level of monitoring outlined is appropriate, and that the results of monitoring are being used with respect to hazard identification and management





# Risk Management



To increase ability to control development where the state of hazards is unknown:

- Review monitoring requirements in the District Plan with respect to natural hazards
- Review general plan provisions to determine whether the controls currently available allow sufficient control where the extent of the hazards is unknown
- Plan changes/ Variations
  - reference information about hazards held by Regional Council and possibly by CDEM Groups
  - Consider restricted discretionary activity status as a minimum for all subdivision consents to provide greater control



# The Matata experience



- Extent and nature of hazard unrealised
- Need to identify gaps in information and monitor hazards for better management and control of activities
- General plan provisions to control risks where the extent of the hazards is unknown
- Need to determine appropriate level of protection
- Coordination between Councils and government groups





# Thank you

