



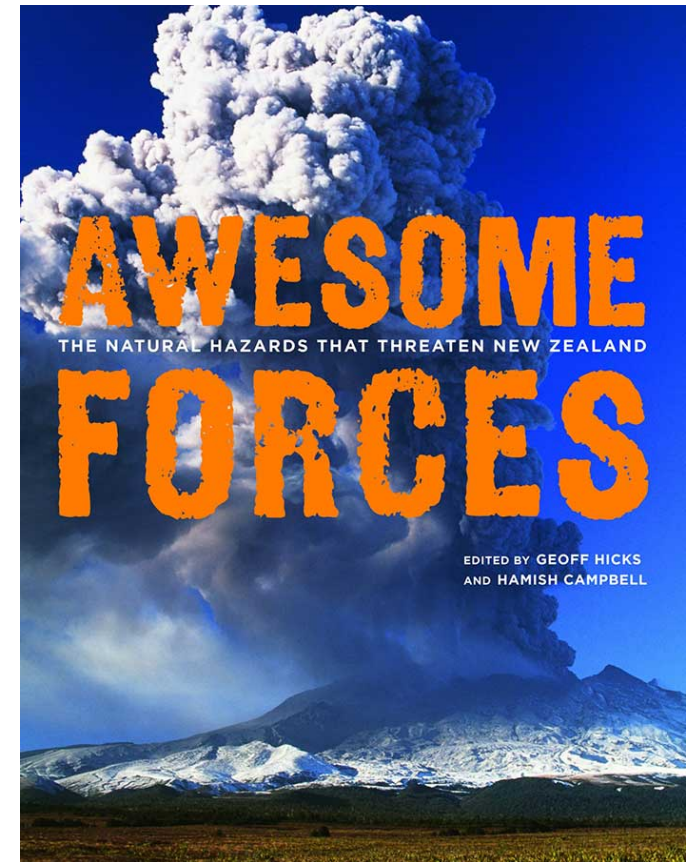
NATURAL HAZARDS

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The New Zealand Hazardscape

- Natural hazards represent a real risk for New Zealand
- Consequences and costs
- Growing vulnerability





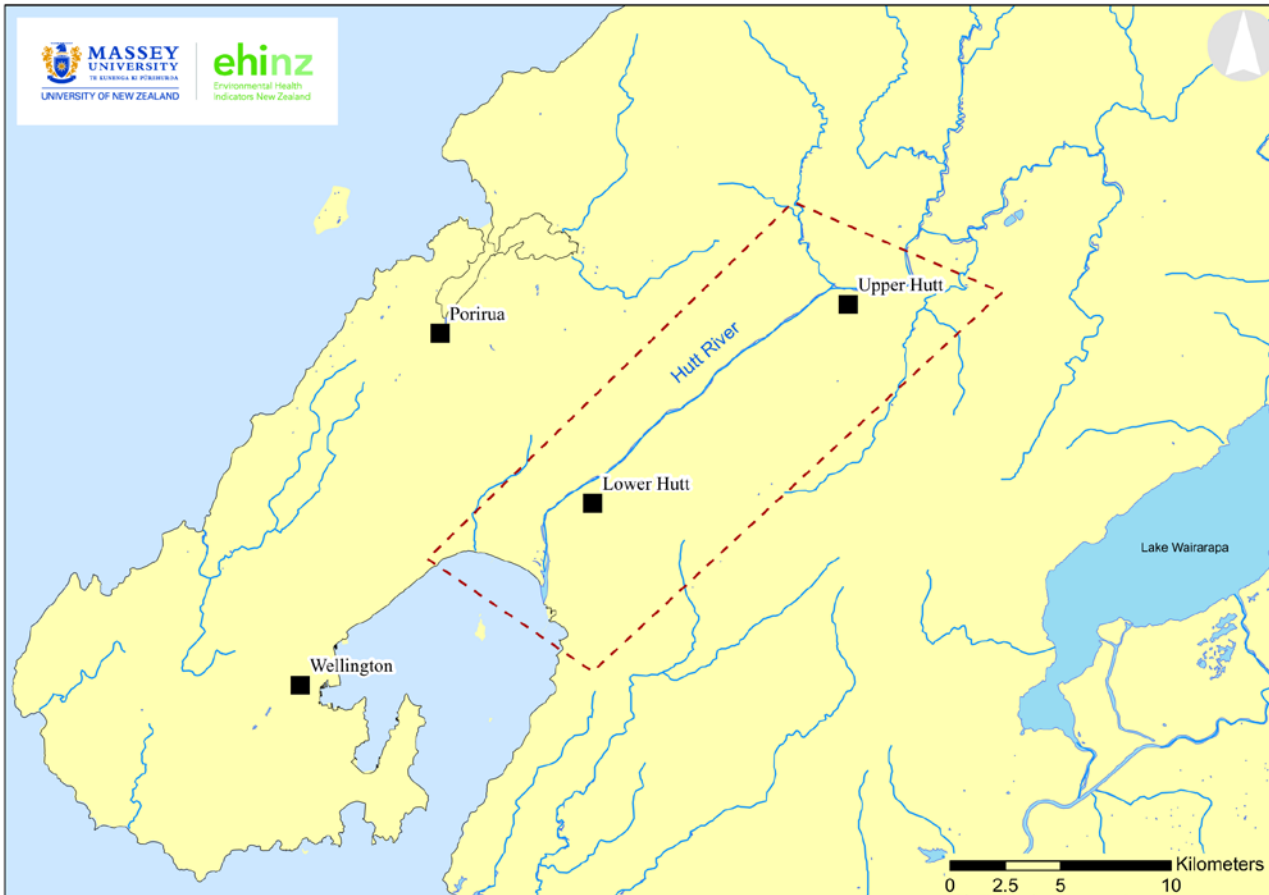
Flood vulnerability

- Most frequent natural hazard in New Zealand
- Second most costly natural hazard
- Two-thirds of the population live in flood-prone areas

“A flood event becomes a hazard only when it impacts or has potential for impacting human use and occupancy on the floodplain”

(Ericksen, 1986)

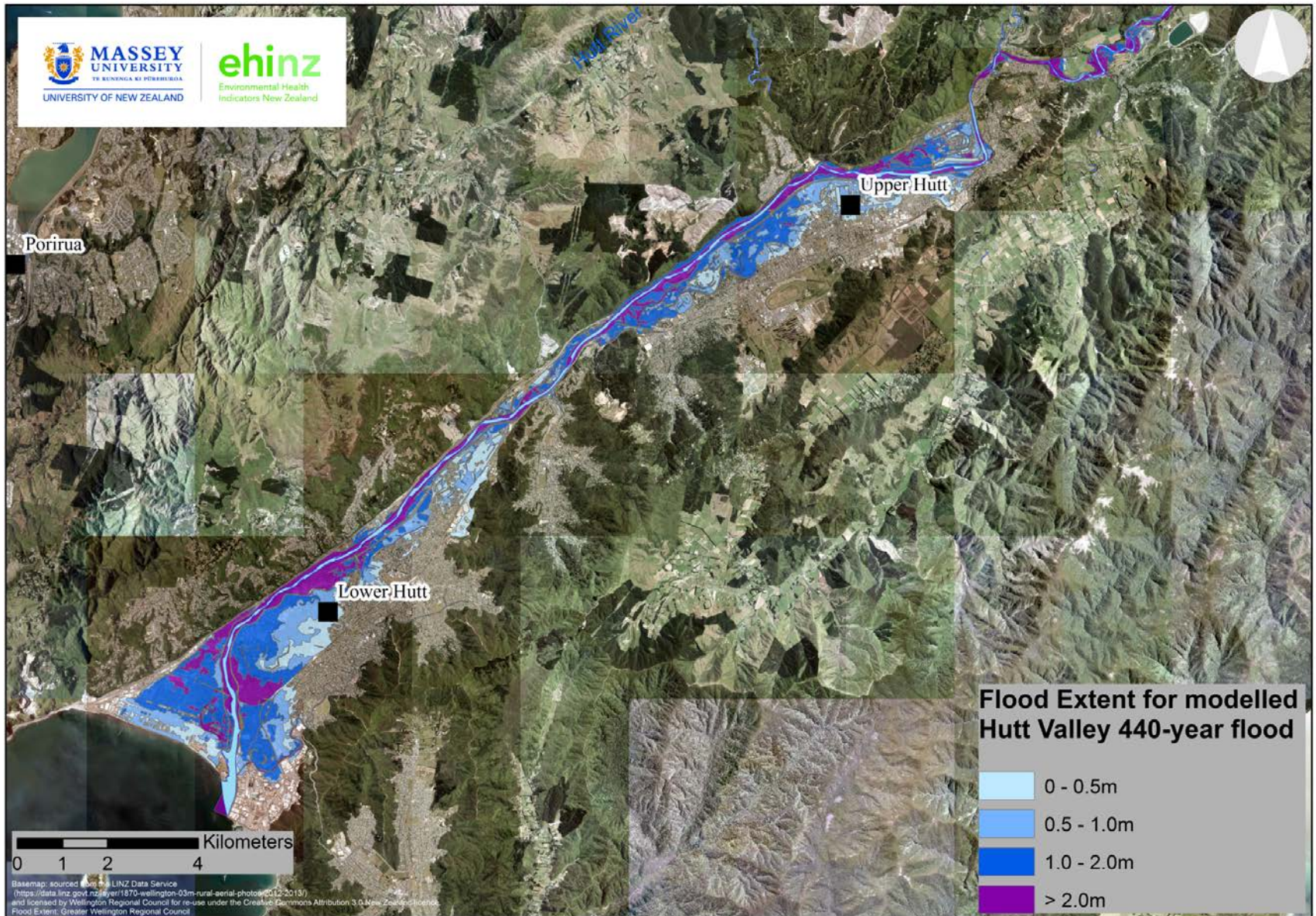
Case study: Assess the population living in flood prone areas in the Hutt Valley



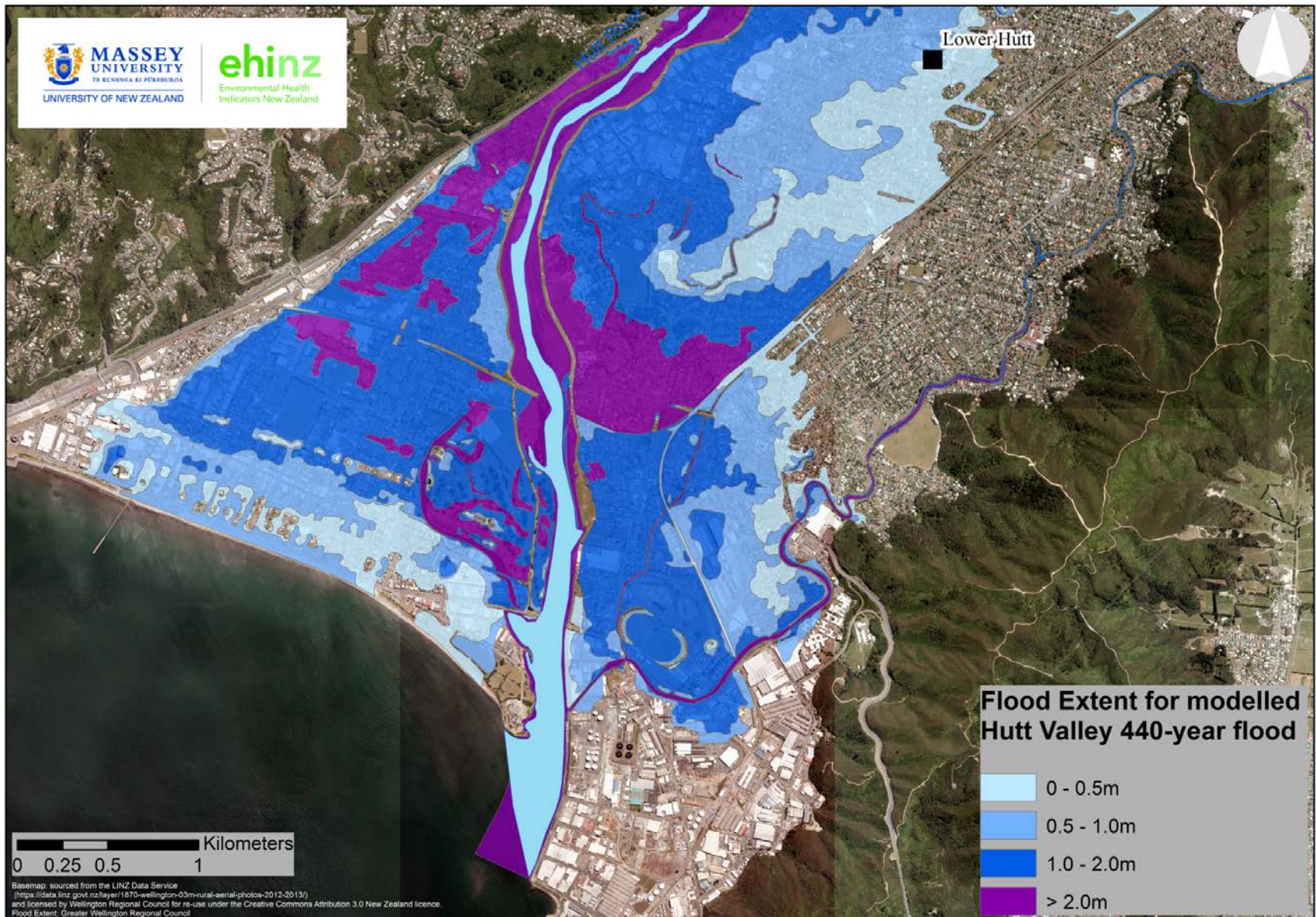
Study area

- Hutt River is 54km long
- Long flooding history
- Most densely populated floodplain
- 106,000 residents in the Hutt Valley
- ~ 75,000 floodplain occupants (estimated in 2000)
- \$6 billion worth of public and private property

Flood extent in the Hutt Valley



Flood extent in the Hutt Valley



Case study: Assess the population living in flood prone areas in the Hutt Valley

Who is at risk?

- Age, gender, ethnicity
- Deprivation levels
- Key facilities e.g. early childhood centres, primary schools, aged-care facilities