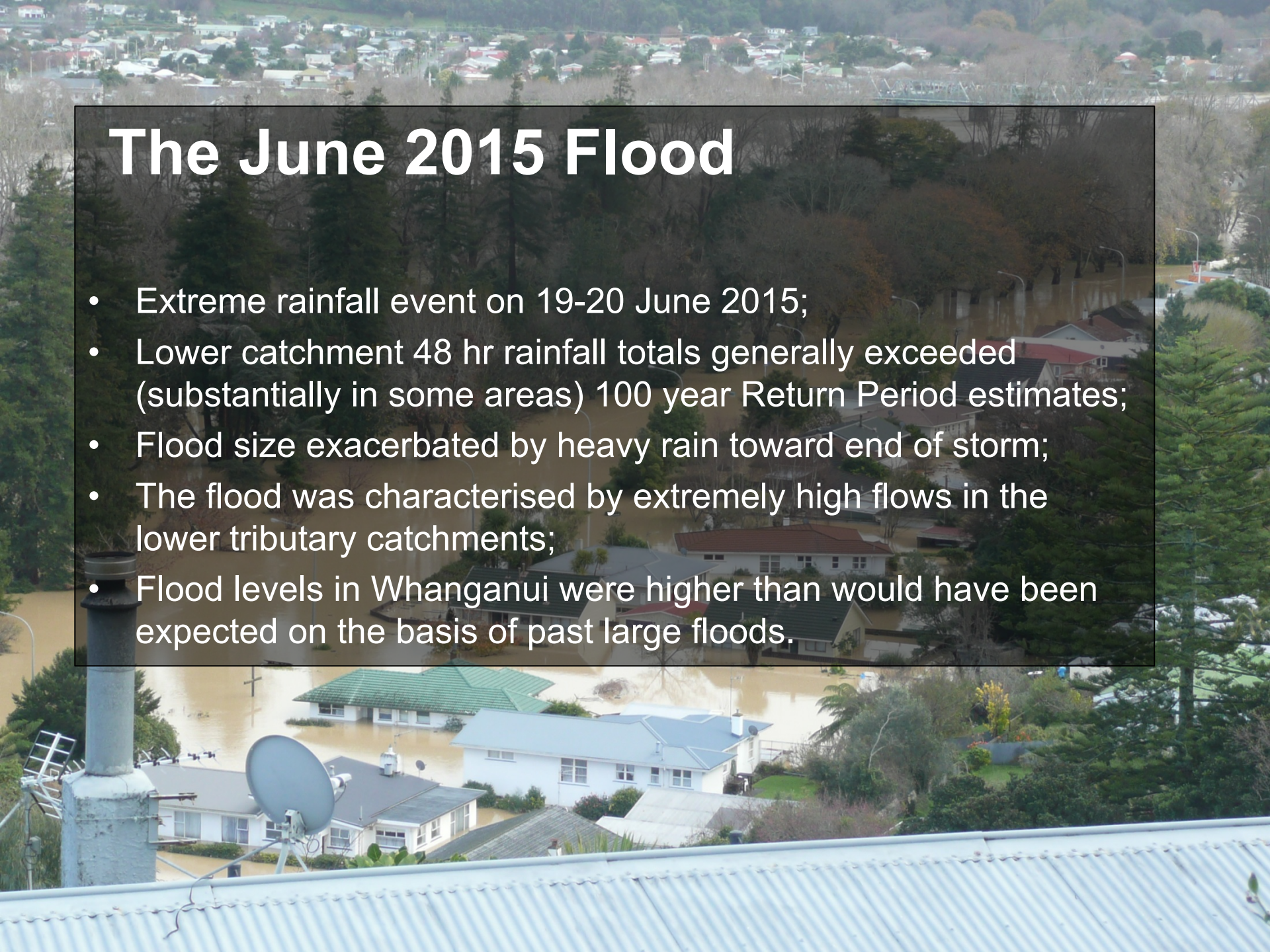


The June 2015 Flood

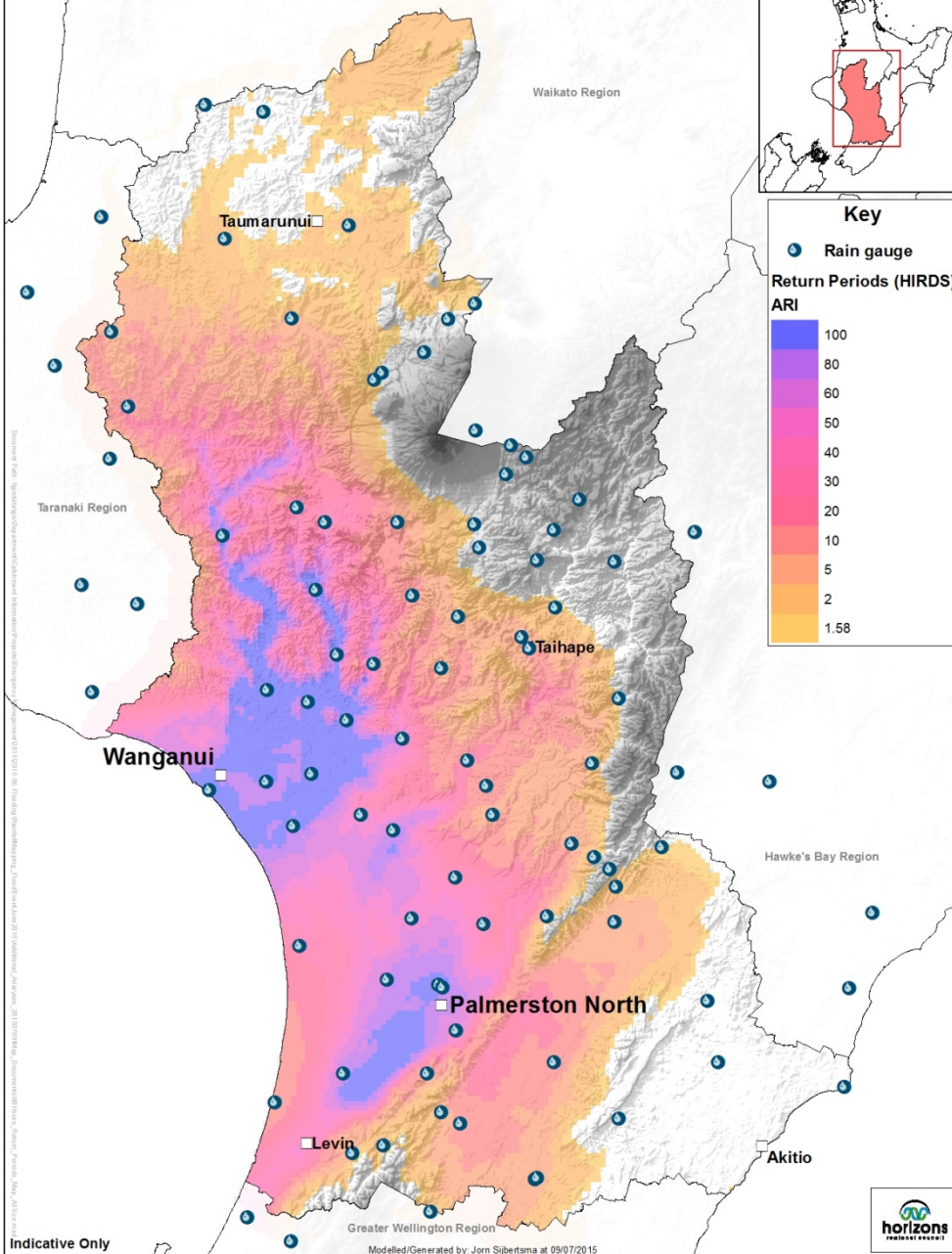
- Extreme rainfall event on 19-20 June 2015;
- Lower catchment 48 hr rainfall totals generally exceeded (substantially in some areas) 100 year Return Period estimates;
- Flood size exacerbated by heavy rain toward end of storm;
- The flood was characterised by extremely high flows in the lower tributary catchments;
- Flood levels in Whanganui were higher than would have been expected on the basis of past large floods.



Rainfall Event June 2015 (19 - 21 June)

Return Periods of 48 Hour Rainfall Maximums

Horizons Region



The June 2015 flood

- Flood size at Te Rewa/Paetawa was 4755 cumecs;
- Highest recorded in 58 years and higher than all historical estimations from 1858 to 1940;
- Flood has an estimated return period of 85 years, or a 1.2% probability of being exceeded in any year;
- Flood size at Town Bridge assessed as 5150 cumecs;
- Estimated return period of 130 years , or 0.77% probability of being exceeded in any one year;
- Favourable sea conditions made the event less severe for Balgownie.

The June 2015 flood

- Total damage cost difficult to determine but estimated to lie in the range \$7M to \$15M;
- Flood model updated to reflect particular aspects (size, rainfall distribution) of June 2015 event;
- Design flood levels at all locations within the City and for all return periods, are now higher than previously assessed;
- Comparison of riverbed profiles surveyed after the event with those recorded in 1995 concludes that the flood-carrying capacity of the river has not changed ie silt accumulations visible in sections of the river haven't affected flood levels.