Plan Change 29

Flood Hazard Overlays - Mapping

Hearing Presentation of Toby Kay and Damian Velluppillai

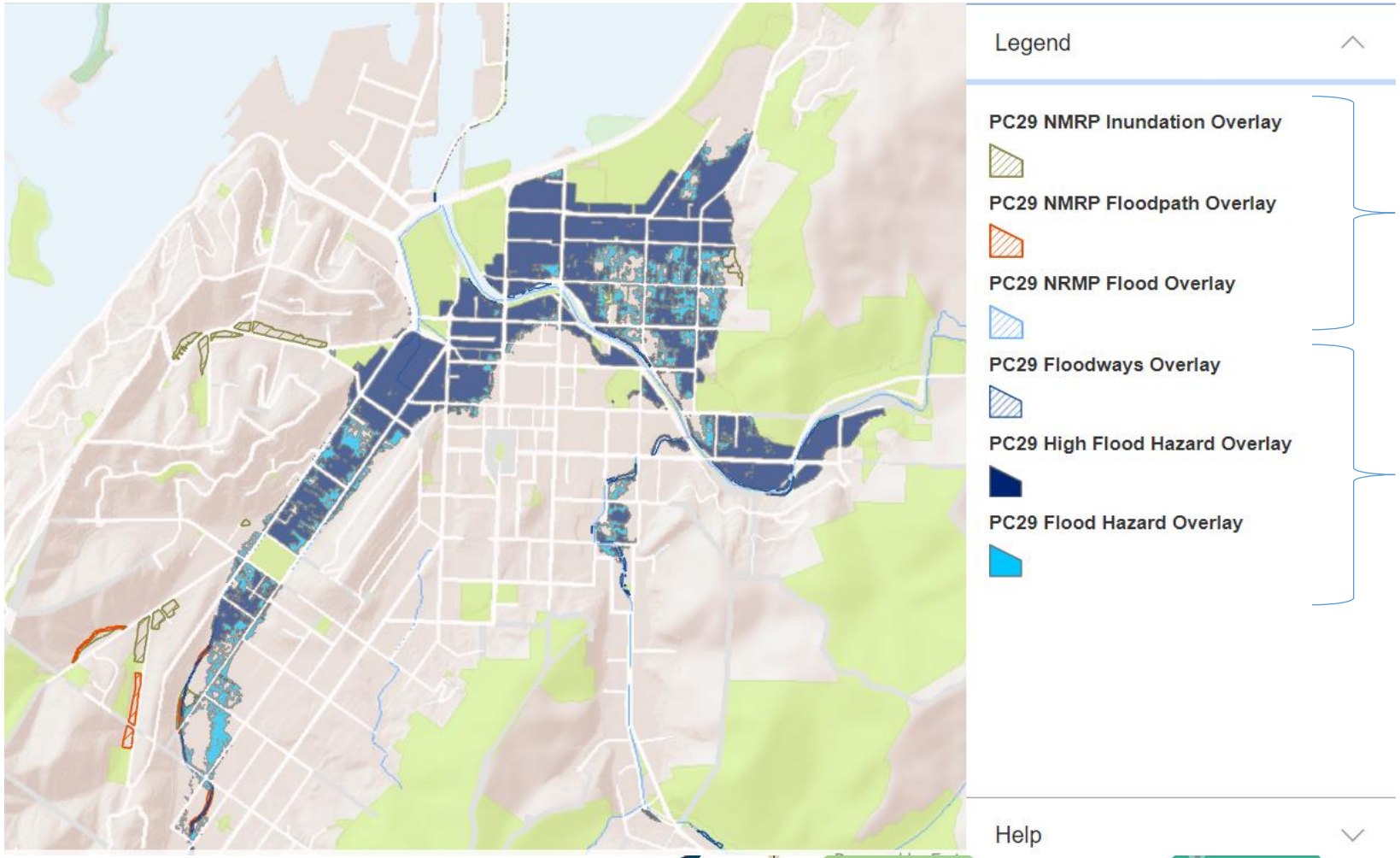




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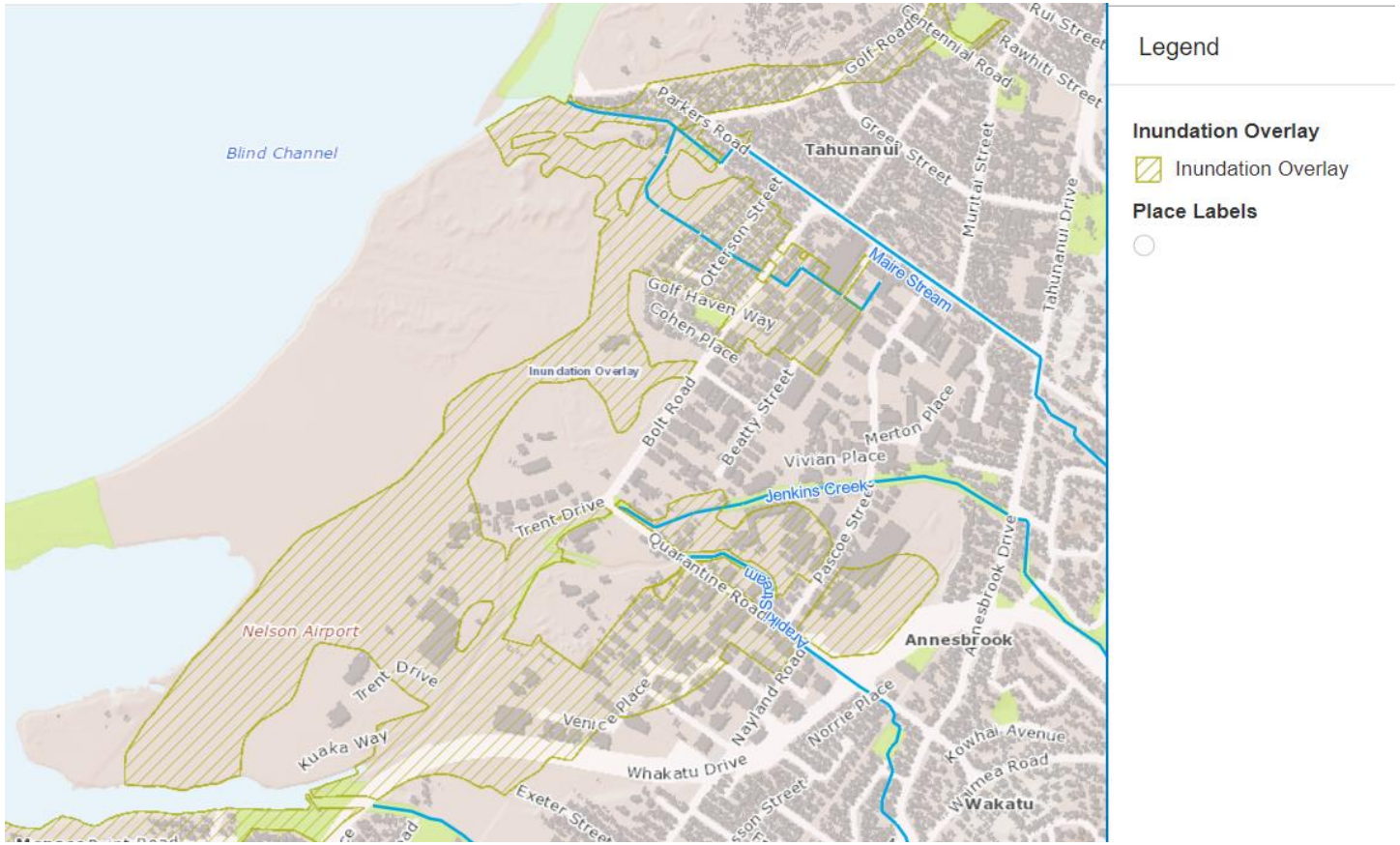
PC 29 Flood Hazard Overlays



Operative NRMP flood overlays (included in PC29)

New Flood Overlays added to PC29 (generated from river / stream flood models)

PC 29 – NRMP Inundation Overlay





The Inundation Overlay indicates areas which may be susceptible to localised stormwater flows, stormwater ponding, ponding of other floodwaters or tidal inundation. The overlay is based on historic observed data. The causes of localised ponding are highly site specific but generally relate to the presence of a low lying area where stormwater accumulates or tidal backwater effects prevent drainage.

All flood layer descriptions: PC 29 – Chapter 3 Administration AD11.3 Description of Overlays

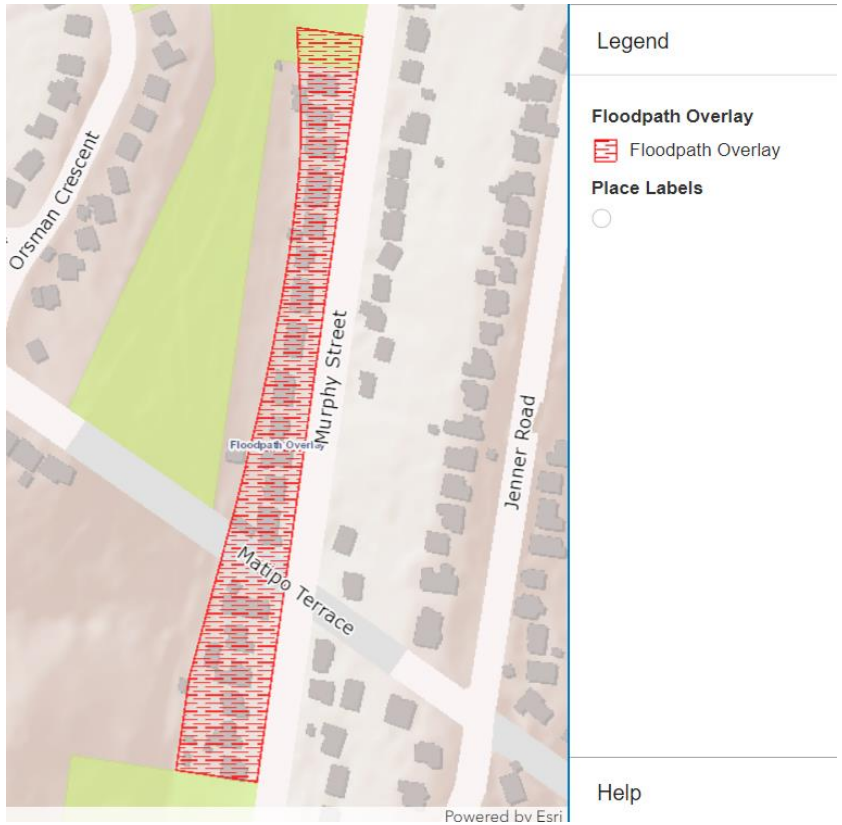
PC 29 NRMP Floodpath Overlay

June 2014



TRACY NEAL

DESTRUCTION: Heavy rain flooded this Murphy St driveway, and appears to have brought down a surrounding fence.



f. Flood Path Overlay

Indicates areas where the land may be subject to occasional flooding within flood paths and overflow channels of rivers and streams. The overlay is based on historic observed data. These areas have been differentiated from the inundation overlays because of the higher risks to safety and property associated with this type of hazard, particularly from the erosive or destructive force of moving floodwater. The Council is undertaking a long term programme of upgrading storm water drainage. As this work progresses the susceptibility of areas to flooding will change. Those purchasing or developing within the Flood Path Overlays should obtain the most up to date information available from the Council.

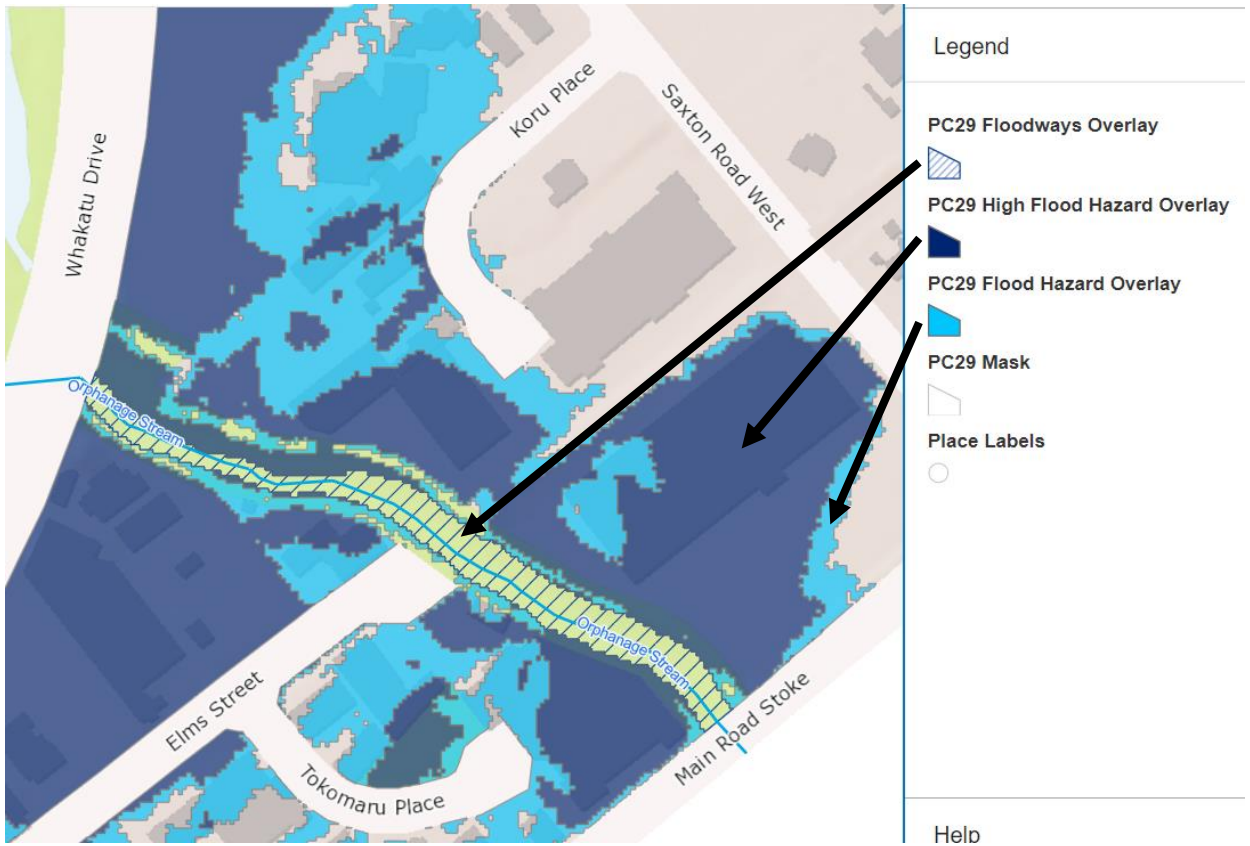
PC 29 NRMP Flood Overlay

Glenduan



Indicates areas in the residential areas of Glenduan and Todds Valley, Rural Zone and Conservation Zone where land may be subject to flooding or hazards caused by running water such as debris flows on steam fans and the change in the position of creeks, but insufficient information is available to allocate it to the Inundation Overlay or Flood Paths Overlay.

PC 29 High Flood Hazard, Flood Hazard Floodway Overlays



The High Flood Hazard Overlay identifies areas where flooding in the 1% AEP event at 2130 is greater than or equal to 0.3m deep and/or velocity is equal to or more than 2m/s.

The Flood Hazard Overlay identifies areas where flooding in the 1% AEP event at 2130 is up to 0.3m deep and velocity is less than 2m/s.

Floodway Overlay

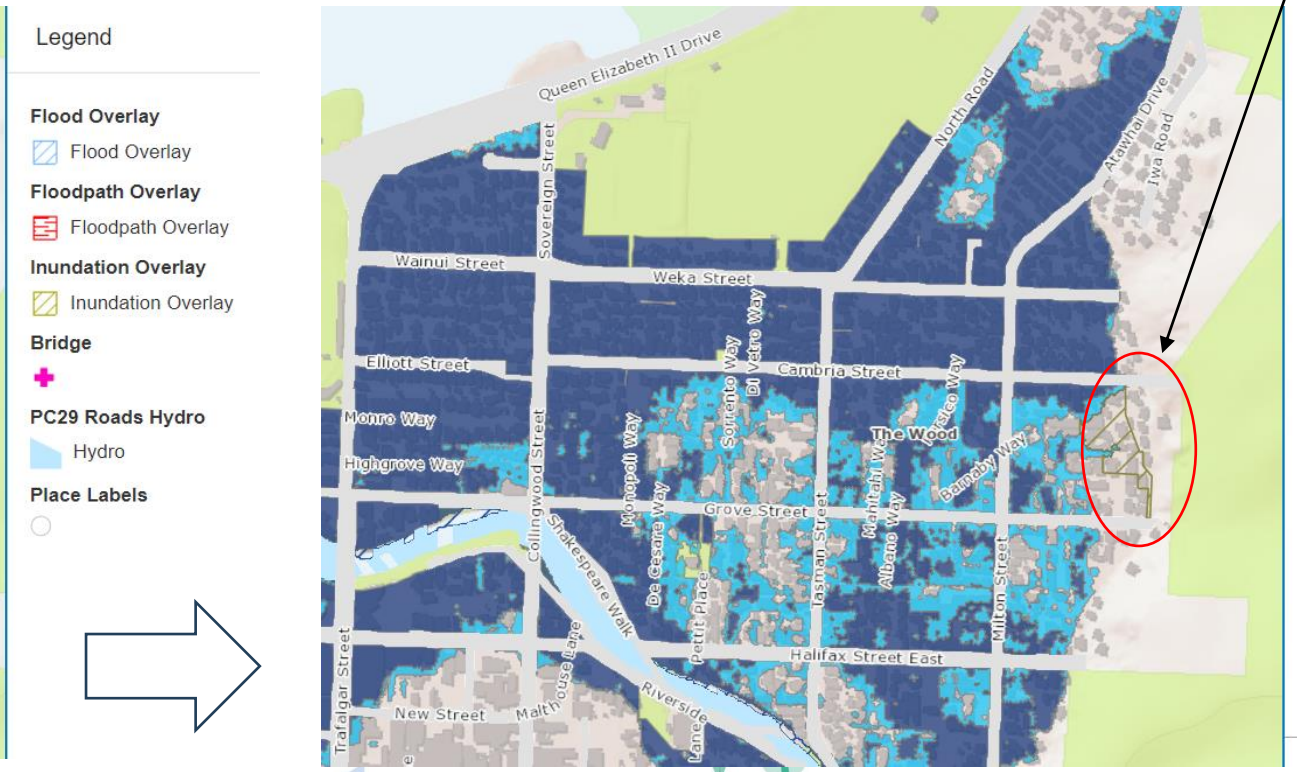
The overlay identifies the river channel areas.

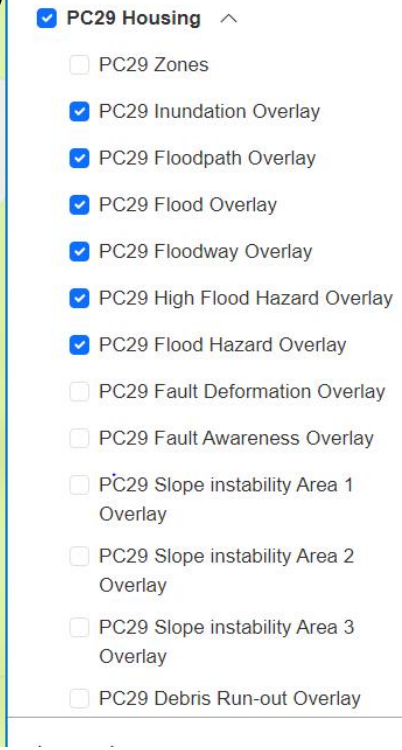


Extent of NRMP flood overlays reduced in many areas

Inundation overlay retained due to hillslope runoff

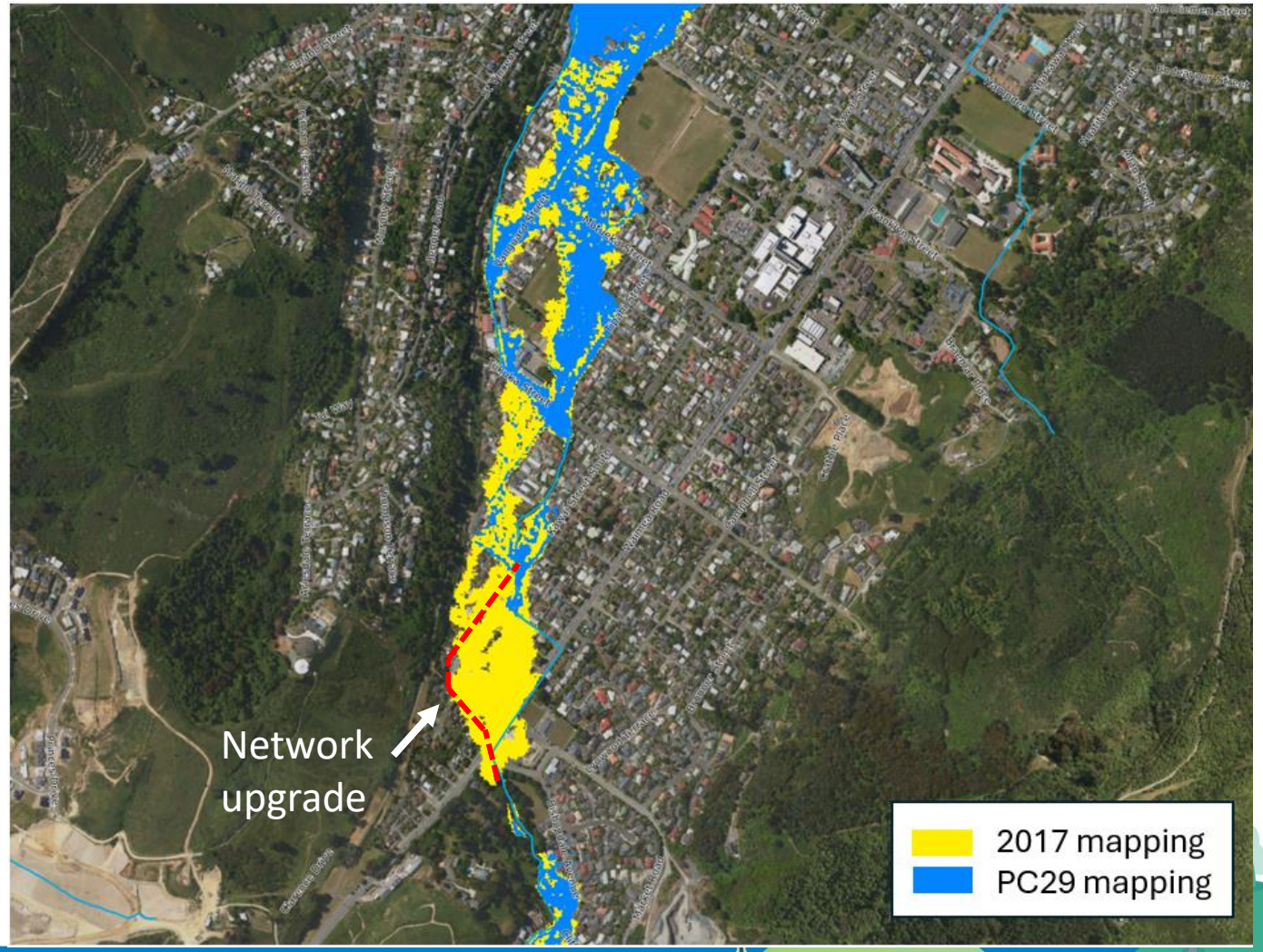








Mitigation of Flood Risk – Network Capacity Upgrades



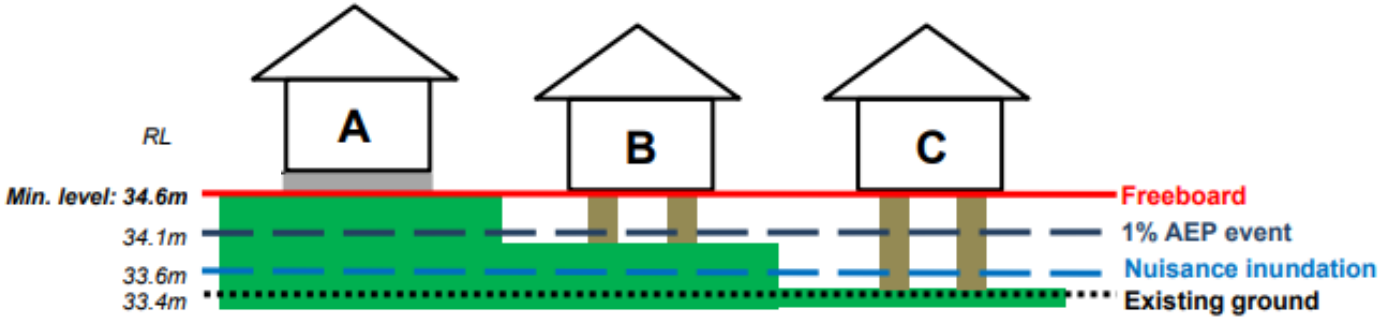


Flooding in Nelson. Photo: RNZ

Mitigation of Flood Risk – New Development

Inundation Practice Note

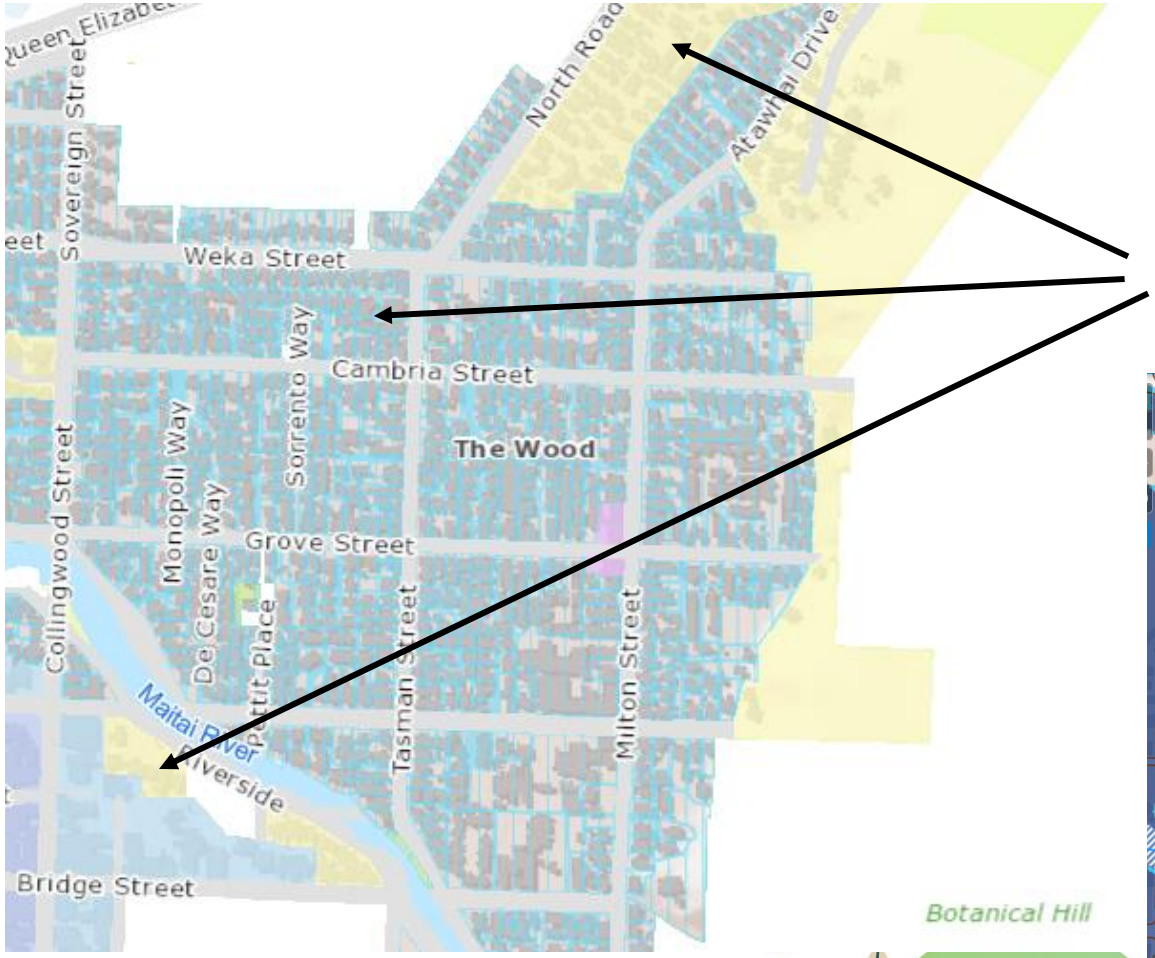
Figure 5: Examples of options for raising ground and/or floor levels



Options	
A	Subdivision or buildings on river floodplains, freshwater ponding areas, and in seawater inundation locations (either by wave run-up or ponding on lower-lying land), where filling for a building platform can be undertaken and there are less than minor adverse effects off-site.
B	Buildings on river floodplains, freshwater ponding areas and in seawater inundation locations, where filling for a building platform can be undertaken to a small degree to reduce nuisance inundation (for example a 20% AEP event) without adverse effects off-site occurring but where filling for a building platform has more than minor adverse effects off-site.
C	Buildings on river floodplains, freshwater ponding areas and in seawater inundation locations, where any filling for a building platform has more than minor adverse effects off-site.

Option A:
New property titles created through subdivision should provide functional land where a building platform can be established that is free from inundation.

Existing residential zoning retained due to Hazard Risk



Existing residential zoning retained

