

## FIGURES OMITTED FROM THE OFFICER REPORT FROM TONY OLIVER FLOOD ISSUES FOR KAIAPOI

Flood Hazard Definitions (from Earth Science Australia,  
[http://earthsci.org/J\\_Flood\\_4/flood/J\\_Flood\\_7.html](http://earthsci.org/J_Flood_4/flood/J_Flood_7.html) sourced 020205).

Hazard Category	Characteristics
Low	Floodwaters typically less than 1 m and not flowing with high velocity. Adults can wade.
High – wading unsafe	Depths and/or velocity are sufficiently high that wading is not possible, risk of drowning.
High – depth	Floodwaters are > 1 m but are not flowing with high velocity. Damage to building contents, large trucks able to evacuate.
High - floodway	Areas where there is deep water flowing with a high velocity. Truck evacuation not possible, structural damage to light framed houses, high risk to life.
Extreme	Typically areas where the velocity is >2 m/s. All buildings likely to be destroyed, high probability of death.

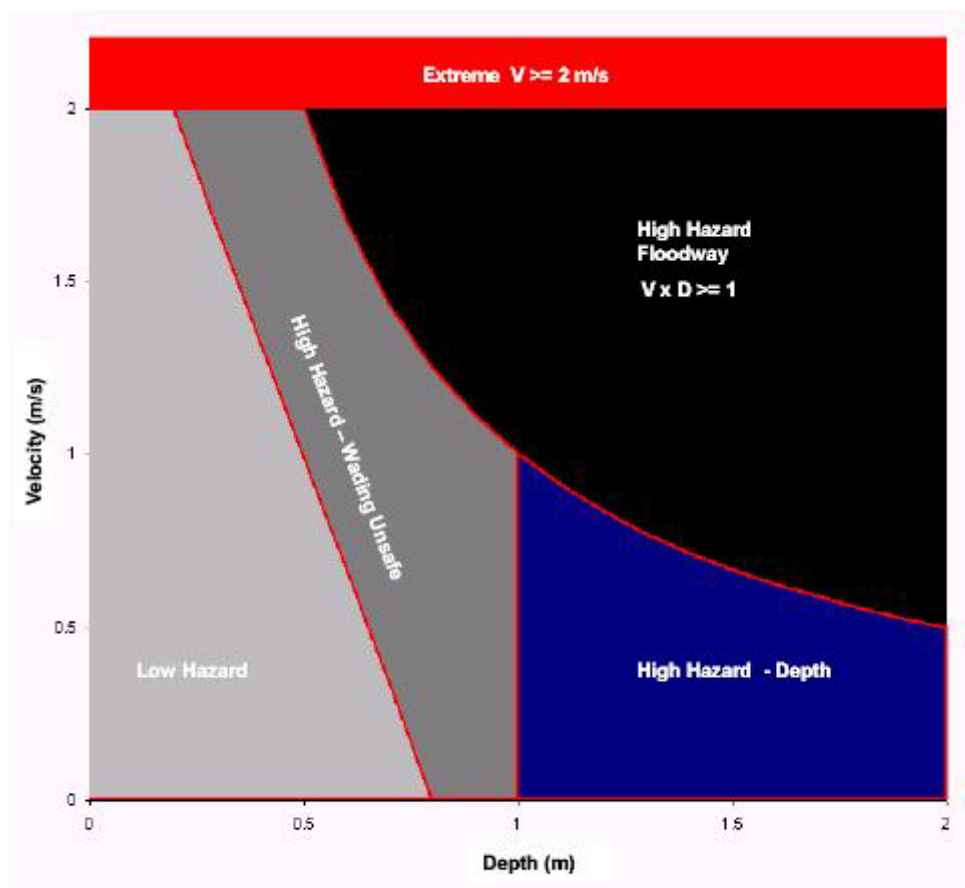


Figure 9.3 Definition of Recommended Flood Hazard Categories

<b>Flood Risk</b>				
AEP = Annual Exceedance Probability i.e. the chance of a flood that size occurring in any one year				
<b>Event</b>	<b>Probability of occurring in period</b>			
% AEP (return period)	10 yr period	30 yr period	70 yr period	
5% (20 yr)	40%	80%	97%	
2% (50 yr)	20%	50%	77%	
1% (100yr)	10%	25%	50%	
0.5%(200yr)	5%	15%	33%	
0.2% (500yr)	2%	6%	12%	
For example there is 25% chance that a 1% AEP (100 year return period)flood will occur within a 30 year period				