

In essence, at Ahipara, this scenario merely makes the inundation deeper and more extensive (alongshore and inland) and water speeds are generally higher across a larger area. As a worse case scenario this highlights the need for effective evacuation planning and the need to retreat well inland and away from the stream channel. Maps showing maximum inundation and maximum water speed for the $M_w9.0$ Tonga-Kermadec subduction zone tsunami for the three sea levels are given in Figures 40, 41 and 42.



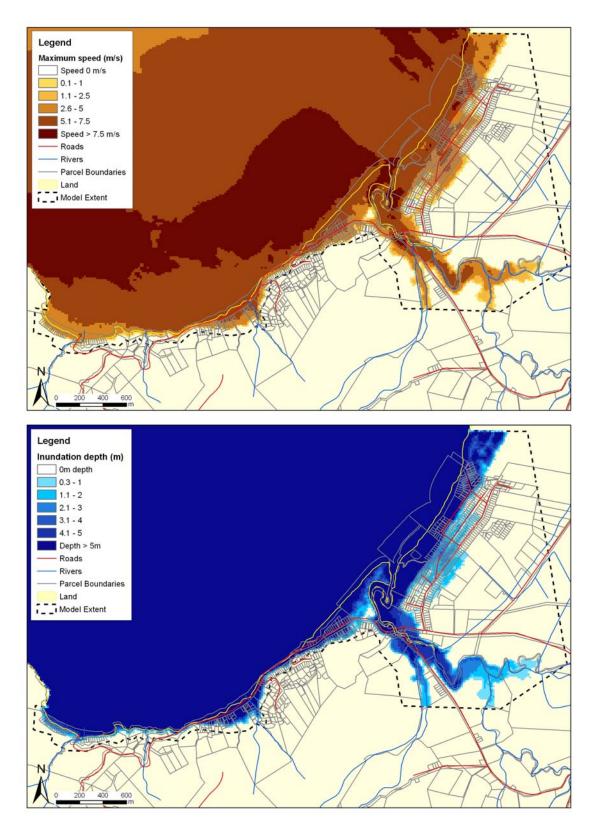


Figure 40: Ahipara: Maximum inundation speed (upper) and depth (lower) plots for the M_w9.0 Tonga-Kermadec subduction zone scenario at MHWS (to extent of LIDAR).



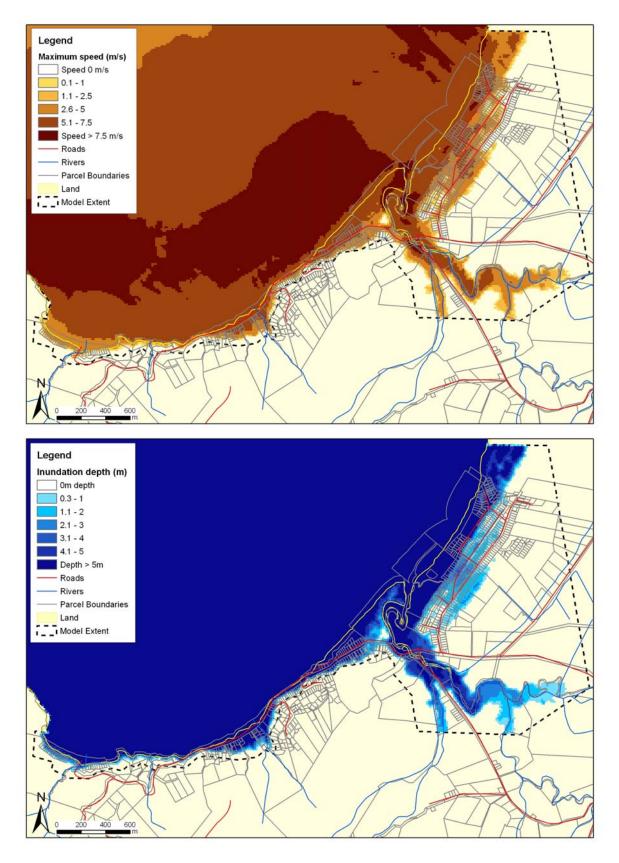


Figure 41:Ahipara: Maximum inundation speed (upper) and depth (lower) plots for the $M_w9.0$
Tonga-Kermadec subduction zone scenario at MHWS + 30cm (to extent of LIDAR).



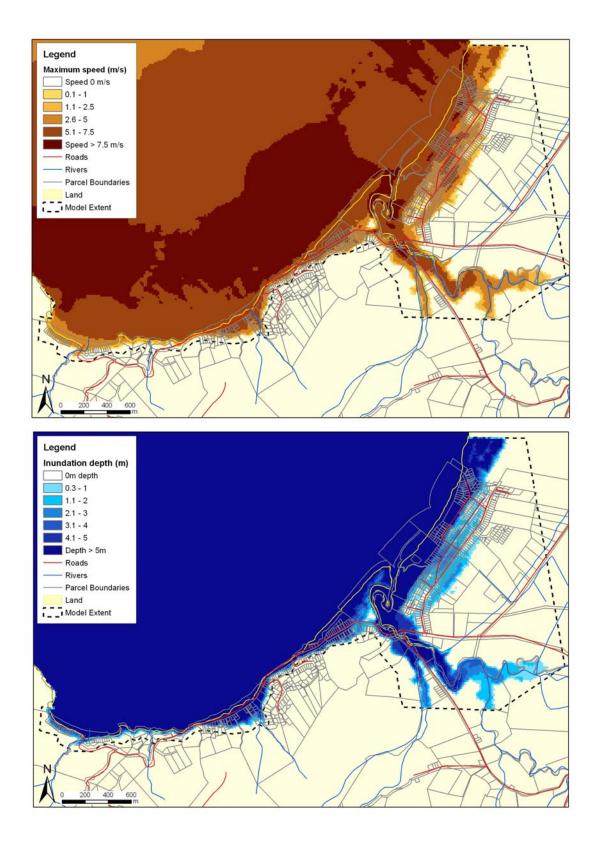


Figure 42:Ahipara: Maximum inundation speed (upper) and depth (lower) plots for the Mw9.0Tonga-Kermadec subduction zone scenario at MHWS + 50cm (to extent of LIDAR).