

4.5.3. Inundation Maps – M_w9.0 Tonga-Kermadec subduction zone

This worse case scenario indicates inundation across almost the entire LIDAR grid. There is a significant difference between inundation and water speeds compared with the $M_w8.5$ scenario. There is little further to add other than the implications for evacuation planning and the need to ensure community awareness of effective evacuation procedures. 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 49, 50 and 51.



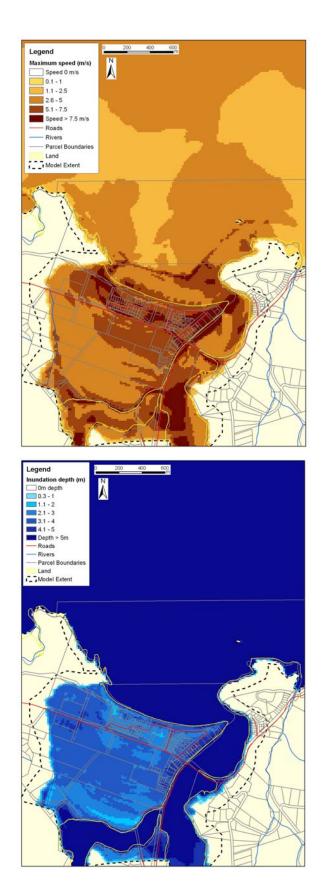


Figure 49: Taipa: Maximum inundation speed (upper) and depth (lower) plots for the M_w9.0 Tonga-Kermadec subduction zone scenario at MHWS (to extent of LIDAR).



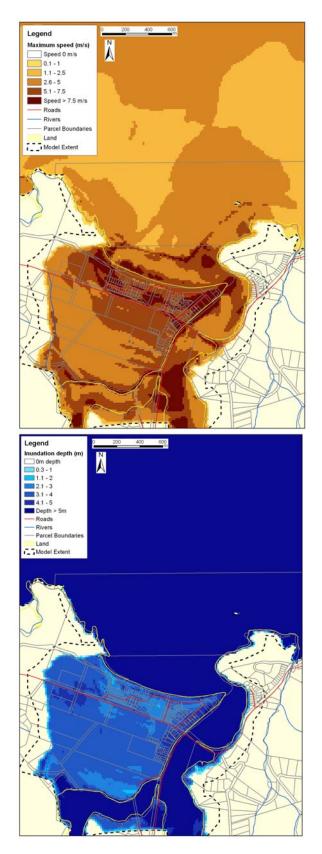


Figure 50: Taipa: Maximum inundation speed (upper) and depth (lower) plots for the $M_w9.0$ Tonga-Kermadec subduction zone scenario at MHWS + 30cm (to extent of LIDAR).



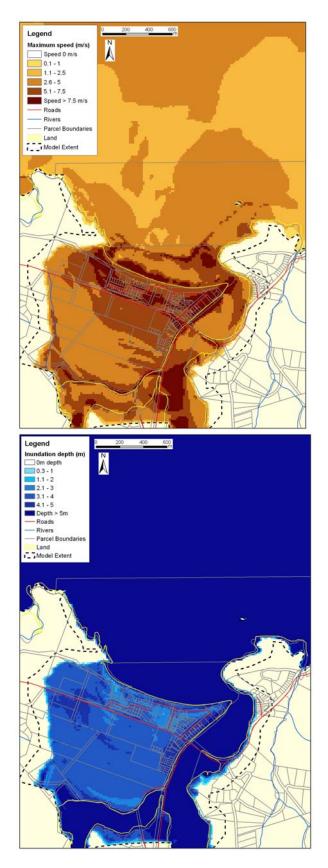


Figure 51: Taipa: Maximum inundation speed (upper) and depth (lower) plots for the $M_w9.0$ Tonga-Kermadec subduction zone scenario at MHWS + 50cm (to extent of LIDAR).