Answers for Exercise 2

1) **Which cell/area of the domain contains the highest physical risk to humans? (hazard_people layer)**
Cell in far west of domain north of the river (location 423,118.869 198,180.482 meters) with a H_{people} value of 11.62. Not inhabited. Indicated in Figure 1.

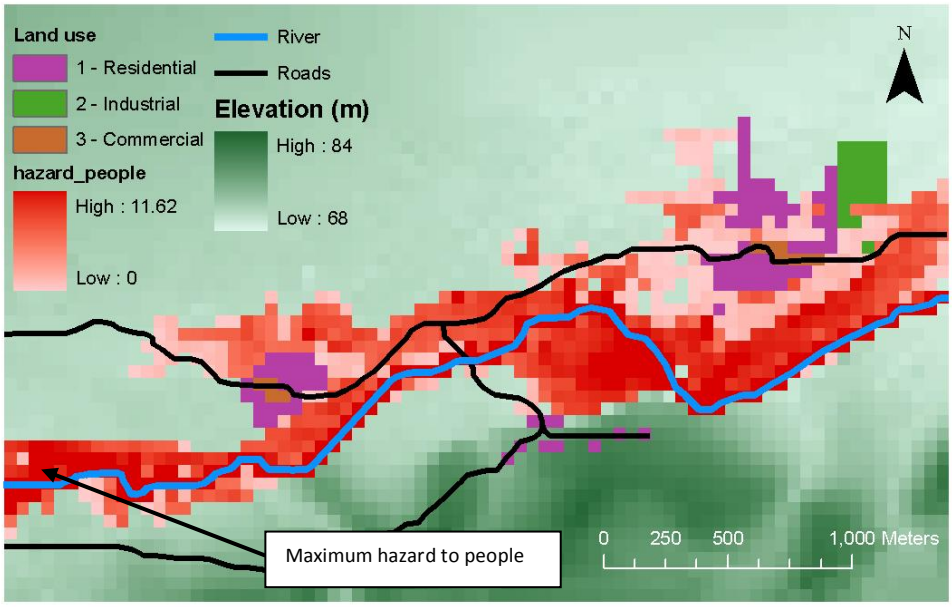


Figure 1 Details of the hazard to people in the Flood River Valley, as calculated using the methodology in exercise X.

2) **Which cell/area of the domain is likely to sustain the most injured people? (r1_people layer)**
Cells on the West side of the Riverton Residential Village, with a maximum value of 31 people (location 425,786.143 198,743.033 Meters). Indicated in Figure 2.

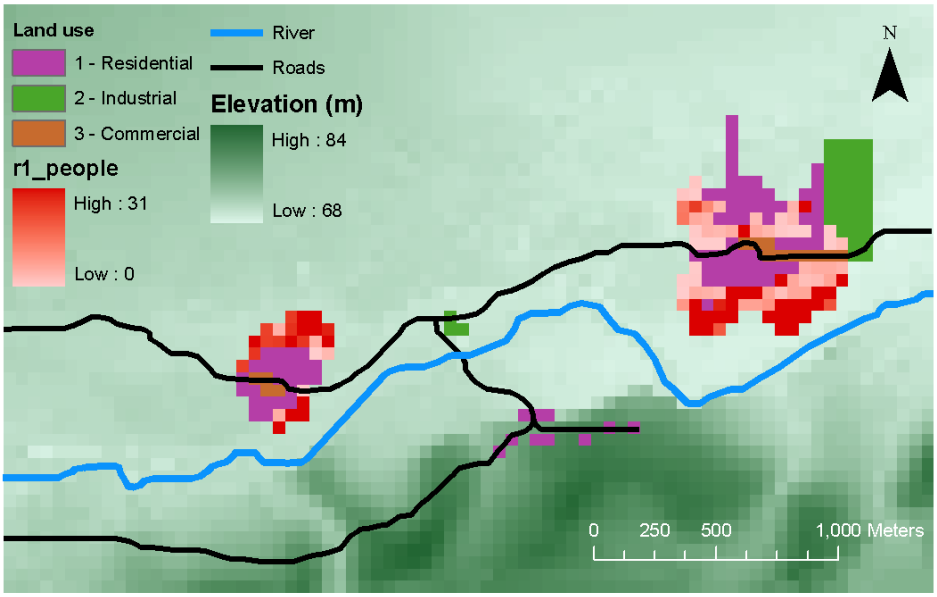


Figure 2 Details of the likely number of injuries sustained in the Flood River Valley in terms of the number of people expected to be injured per cell

3) **Which cell/area of the domain contains the highest physical risk to buildings? (temp4 data layer)**
The highest building-damage risk class is "Partial damage" occurring in two cells to the west of the domain just N of river (Figure 3).

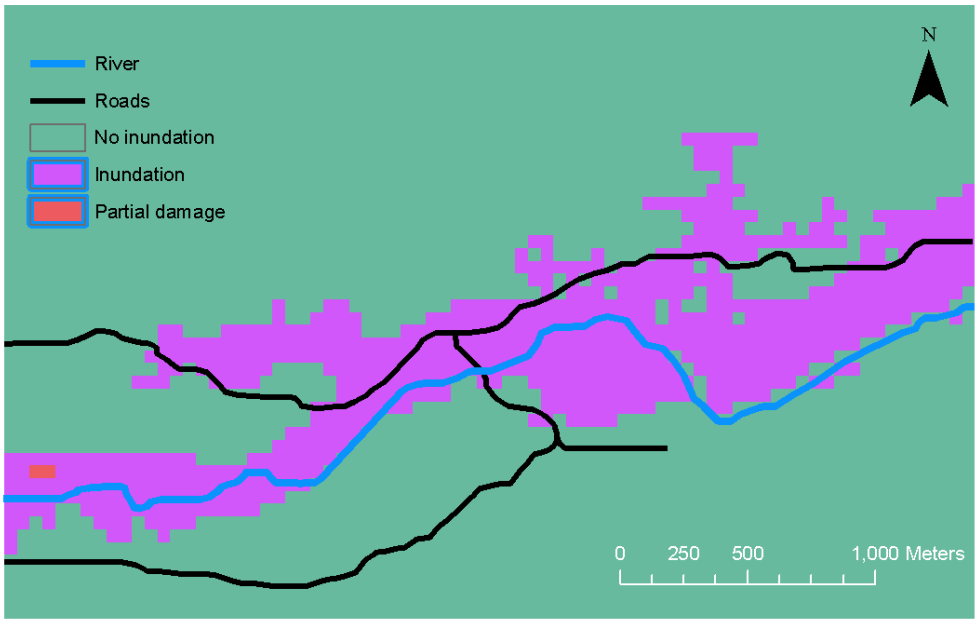
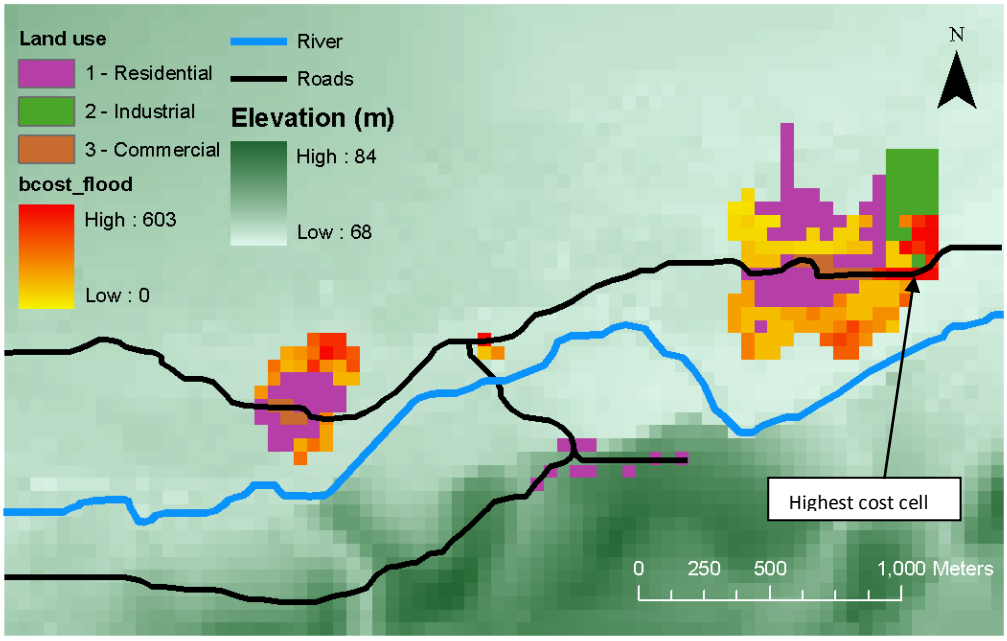


Figure 3 Building risk class for each cell in the domain

4) **Which cell/area of the domain is likely to have the highest economic costs due to building damage if the area were to flood? What is this cost? (bcost_flood layer)**
The Riverton Industrial Estate is the area of potentially the highest cost of flooding to buildings. The cell with the highest potential cost is in the south of the Riverton Industrial Estate with a value of 603, indicated in .



5) What is the total length of road expected to be flooded?

- 2494 m of road 0 and 320 m of road 1 totalling 2814 m. Road 2 is not flooded.