

# EXPLANATION OF HAZARD DATA

## Riverine Inundation

Areas identified on the Hazard Information Maps as being subject to risk from riverine inundation are divided into three levels:

- Level 1 has a low degree of risk, reflecting flood protection mitigation measures.
- Level 2 has a high degree of risk, and includes those areas where future flood levels can be predicted.
- Level 2A has a high degree of risk in a flood event greater than the design limits of the flood protection system
- Level 3 has a high degree of risk and includes:
  - those areas designed to pond in a flood event; and
  - active floodplains

## Indicative Sea Level Rise /Storm Surge

This information indicates those areas, identified on the Hazard Information Maps, as being subject to risk of sea level rise/storm surge within the New River Estuary. These areas are divided into two levels of risk:

- Low risk, being those areas below 3 metres above mean sea level, where flood protection mitigation measures of an appropriate standard have been undertaken.
- High risk, being those areas below 3 metres above mean sea level, where flood protection mitigation measures of an appropriate standard have not been undertaken.

There is currently not sufficient accurate data available for the remainder of the District.

## Coastal Erosion

This information indicates those areas of the coast that are subject to erosion. For further detail contact the Southland Regional Council.

## Urban Dwellings Still Subject to Stormwater Flooding in a 1984 Flood Event

These are properties in the urban Invercargill where the dwellings are still susceptible to storm water flooding in the event of a flood of the same level as 1984. Further information can be obtained from the Invercargill City Council's Drainage Manager.

## Rural Land Known to be Subject to Storm Water Flooding

This identifies rural properties known to be subject to storm water flooding. For further detail contact the Invercargill City Council's Drainage Manager.

## Filled Land

This is land, which to the best knowledge of the Council has been filled. The fill can range from soil to building rubble. Where it has not been possible to ascertain the extent of the fill the whole site is indicated as being filled.

## Land Subject to Lead Contamination

These are properties that have been subjected to lead contamination, from dismantling of vehicle batteries. Varying degrees of rehabilitation has taken place on these sites. Further information can be sought from the Environmental Health Division of the Invercargill City Council and the Southland Regional Council.

## Wind Zones

The wind zone map produced is based on NZS 3604:1990(amendment 1) Timber Framed Buildings (amendment 1, August 1996)

(Note: NZS 3604:1990 has been superseded by NZS 3604:1999 but there are no changes in relation to wind zones)

## Seismic Hazard Information

The zones give a general indication of the possible earthquake shaking amplification of land in the Southland Region. The information **does not relate to the return time (probability)** of an earthquake. The zones within the Invercargill City Council's District are as follows:

- Zone A - Very low amplification capability high strength basement rock
- Zone C - High amplification capability typically underlain by river terraces and glacial outwash surfaces composed primarily of gravel.
- Zone D - Very High ground shaking capability generally water saturated sediments. Land with a high water table is also the most susceptible to liquefaction.