Prepared under the [Draft LIM Regulations – September 2024]

**Property Information**

Property Address: {propertyAddress} ‘the property’

Legal Description: {legalDescription}

Territorial Authority: {territorialAuthority}

LIM Reference Number: {limReferenceNumber}

This natural hazard information has been provided by theSouthland Regional Council, based on the best available knowledge and data as at {**date**}. The information relates to hazards that may affect the land described above and is provided in accordance with **[Regulation X]** of the **[Draft LIM Regulations]**. Please note that this report has been automatically generated and is only a representation of available data at the time of production. Hazard data in the Southland region is continually being updated and no guarantee is provided as to its completeness. Data contained within this appendix is available information held on public records by Environment Southland and others. This information should provide you with an understanding of the potential hazards such as flood risk and earthquake risk, but it's important to keep in mind that the information may change, so it's always best to verify its accuracy with a professional.

**Summary of Natural Hazards Identified**

Maps showing the delineation of the reported natural hazards can be found at Environment Southland’s Natural Hazard Portal, available here: [Southland's Natural Hazard Portal](https://experience.arcgis.com/experience/9e4fee97e31e47c3a32f6f152be51d34/)

* 1. **Coastal Hazard**

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| --- | --- | --- |
| **Hazard Information** | | **Interpretation** |
| **Coastal Hazard Line** | Property is located **within** the Coastal Hazard Line under the Southland District Plan | *Plain language summary – coastal hazard exists, this may impact the ability to undertake activities. Contact ES?* |

* 1. **Earthquake**

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| **Hazard Information** | | **Interpretation** |
| **Active Fault Database** | Property is **contains** an active fault (or faults). | **Accuracy:** Approximate **Slip Type:** Normal **Subordinate Slip Type:** Unknown **Recurrence Interval Class:** IV (>5,000 to <=10,000 years) **Slip Rate:** Unknown **Single Event Displacement:** Unknown **Last Event:** Unknown  *Plain language summary – earthquake hazard exists, this may impact the ability to undertake activities. Contact ES?* |
| **Southland Ground Shaking Amplification** | Property soils are described as **Deep Soils** | Likely Response compared to a shallow soil site: Moderate increase in shaking during a strong distant earthquake and a moderate increase in shaking during a strong nearby earthquake. |
| **Liquefaction Susceptibility** | Property is described as **Moderate** Susceptibility | The geological evidence suggests the presence of materials considered liable to liquefaction when earthquake shaking intensity reaches MMI8.  Sand Boils and moderate fissuring – more extensive near basin edges and in waterlogged areas: banks of rivers broken up, and embankments slumped. Settlements of up to 0.2 m. Estimate 10-20% total area affected. |

* 1. **Flooding**

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| **Hazard Information** | | **Interpretation** |
| **Southland Significant Floodplains** | {FloodingMessage} | {floodingRegion} Floodplain.  Within the floodplain areas, the likelihood of flooding varies considerably depending on the existence and standard of any flood alleviation works and the height of the particular site. |
| **Flood Control Management Bylaw** | Property is **located within** an area managed by the Flood Control and Management Bylaw. | The bylaw restricts the types of activities that can happen in a floodway or near stop banks including any modification, planting, construction, storage of anything (such as baleage) and earthworks. |

Note: Aerial Photographs from historical floods in the Southland Region are available at Environment Southland’s Natural Hazard Portal

* 1. **Tsunami**

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| **Hazard Information** | | **Interpretation** |
| **Tsunami Evacuation Zone** | **{EvacuationZoneMessage}** | **{ZoneText}** |
| **National Tsunami Hazard Model** | Maximum tsunami level for area is a 9m exceeded 1 in a 2,500 year event at the 84th percentile of confidence. (Power et al.  2022) | *Plain language noting the difference between this and Evac modelling?* |

* 1. **Wind**

*Environment Southland holds no information pertaining to wind hazard in the Southland Region.*

* 1. **Landslide**

*Environment Southland holds no information pertaining to landslide hazard in the Southland Region.*

* 1. **Subsidence**

*Environment Southland holds no information pertaining to subsidence hazard in the Southland Region.*

* 1. **Volcanic and geothermal hazard**

*Environment Southland holds no information pertaining to volcanic and geothermal hazard in the Southland Region.*

* 1. **Any other natural hazard**

*Environment Southland holds no information pertaining to other hazard in the Southland Region.*

1. **Other Information and links**

* **BRANZ Maps** – information relating to earthquake zones, corrosion zones, wind regions, wind zones, climate zones, rainfall intensity: <https://experience.arcgis.com/experience/6e83b0bb19d14a0db411aebdc301cf49>
* **Natural Hazard’s Portal (Natural Hazard’s Commission)** – information pertaining to previous settled NHC (formerly EQC) claims on the property <https://www.naturalhazardsportal.govt.nz/s/>
* **Emergency Management Southland** - Your go-to resource for disaster preparedness, response, and recovery for the Southland region <https://www.cdsouthland.nz/>

**3.0 Contact**

For further information on natural hazards in your area, you contact Environment Southland, phone: (03) 211 5115 / 0800 76 88 45, email: service@es.govt.nz

**Information Sourced**

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| Basis | Report | Purpose and Scope | Organisation | Link | Date | Author |
| Coastal Hazard Line | Southland Coastal Hazard Assessment | The assessment covers the mainland Southland open coast from the western end of Te Waewae Bay to the Otago/Southland boundary at Waiparau Head. The assessment does not cover Stewart Island and only touches lightly on harbours and estuaries, the reason being that within the developed parts of Stewart Island (parts of Paterson Inlet, Halfmoon and Horseshoe Bays) and in mainland estuaries and harbours, there are numerous areas subject to coastal hazards, principally coastal erosion. As such, it is recommended that any development adjacent to the shores of any estuary or harbour is subject to a site specific natural hazard investigation. | Environment Southland | https://ref.coastalrestorationtrust.org.nz/site/assets/files/5362/southland\_coastal\_hazard\_assessment.pdf | Sept 2009 | Dallas Bradley (Environment Southland) |
| Active Fault Database | NZ Active Faults Database | To provide a comprehensive and accessible national dataset of New Zealand’s onshore active faults, supporting research, land-use planning, and hazard assessment by mapping faults that have ruptured the ground surface within the last 125,000 years (25,000 years in the Taupō Rift). | GNS Science | [New Zealand Active Faults Database - GNS Science | Te Pῡ Ao](https://www.gns.cri.nz/data-and-resources/new-zealand-active-faults-database/) | Nov 2024 | GNS Science |
| Southland Ground Shaking Amplification | Geological hazards – Southland District Council Lifelines Study - July 2006 | Covers Southland region at a scale of 1:250,000, identifying areas—particularly floodplains—where seismic shaking may be amplified. Based on geological hazard studies by GNS Science, with data derived from pre-2012 methodologies that may not fully reflect insights from the Christchurch earthquakes. | GNS Science | TBC | July 2006 | Glassey (GNS Science) |
| Liquefaction Susceptibility |
| Southland Significant Floodplains | TBC | Actual and potential floodplains in the Southland region. Within the floodplain areas, the likelihood of flooding varies considerably depending on the existence and standard of any flood alleviation works and the height of the particular site. | Environment Southland | <https://data-esgis.opendata.arcgis.com/datasets/esgis::southland-significant-floodplains/about> | 2020 | TBC |
| Tsunami Evacuation Zone | TBC | This dataset shows an indication of populated areas along the Southland coastline that should be evacuated in a tsunami. The dataset shows areas of populated places along the Southland coastline that should be evacuated when there is a tsunami up to 1 metre (red zone) or between 1 and 3 metres (orange zone). | GNS Science | TBC | TBC | TBC |
| National Tsunami Hazard Model | National Tsunami Hazard Model (2021) | This is the 2021 version of the National Tsunami Hazard Model, which covers the entire coast of New Zealand. It provides estimates of the maximum tsunami height at the coast to be expected within specified time periods and confidence levels. | GNS Science | <https://www.gns.cri.nz/data-and-resources/2021-national-tsunami-hazard-model/> | 2021 | Power, Burbidge and Gusman |