

Industrial areas

Stoke / Airport / Annesbrook

About the area

This consultation area includes the Stoke Industrial area, Nelson Airport and surrounds, and the Annesbrook industrial area. It features:

- Nelson Airport.
- The Nelson Golf Course.
- A regionally significant industrial area:
 - Light to medium industry, including processes such as vehicle repairs, timber yards, and processing plants.
 - Waste management facilities.
 - Bulky goods suppliers, such as Bunnings and Mitre10.
 - A small retail area.
 - Construction and maintenance depots and offices.
- Tourist attractions, including the classic car museum and Pic's Peanut Butter World.
- The neighbouring Waimea estuary is a key ecosystem.
- Low number of dwellings.

At present day:

- In the Stoke industrial area, a 1% AEP coastal inundation event will be limited to the area near SH6, with localised impacts on private property.
- A 1% AEP coastal inundation event will affect some industrial properties on Quarantine Road alongside the Arapiki Stream, and the Regional Maintenance facility hangars next to Trent Drive at the Airport.

In future:

- For industrial areas around the Airport and Annesbrook, just 0.5 m of sea level rise will significantly increase the extent of a 1% AEP coastal inundation event.
- At 0.5 m of sea level rise, Quarantine Road will be impacted by 1% AEP coastal inundation events.
- The embankment for SH6 along Whakatu Drive will stay above the level expected from a 1% AEP coastal inundation event even with 1 m of sea level rise.

- This will provide some protection for properties in Stoke that are inland of the highway, however tidal inflows can still occur under bridges and through culverts.
- For sea level rise greater than 1.0 m, industrial areas near Stoke would be harder to protect, and Whakatu Drive would be overtopped in a 1% AEP coastal inundation event.

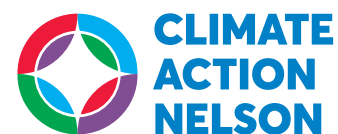
What's happened previously?

- During Cyclone Fehi (February 2018), at least one property on Kotua Place in the Wakatu Industrial estate was impacted by coastal inundation.
- Also during Cyclone Fehi, the combined effect of a storm surge with a king tide left the airport cut off due to flooding on Trent Drive. The Regional Maintenance facility at the airport and industrial properties along low-lying sections of Quarantine Road were also inundated.
- Flooding in April 2013 had the most significant impact in the south area of Stoke, damaging properties and businesses within the Wakatu Industrial estate. This was due to overflows from the Saxton Creek and Orphanage Stream. However, this event was more extreme than a 1% AEP event so is likely to be a very rare occurrence.
- In recent years, the west coast of Nelson Airport has been subject to erosion due to wave action. Coastal retreat has led to the loss of a public footpath.

What's being done?

- Upgrades are being made to Saxton Creek and Orphanage Stream to improve how and where water flows during major weather events. The remaining work on Saxton Creek is due to be completed by mid 2023.
- Nelson City Council is investigating options to protect Trent Drive from Jenkins Creek overflows during 1% AEP coastal inundation events, as well as during stream flooding events.
- Some new commercial and industrial developments are being built up to provide better protection from flooding over the next 100 years.

shape.nelson.govt.nz/climate-adaptation

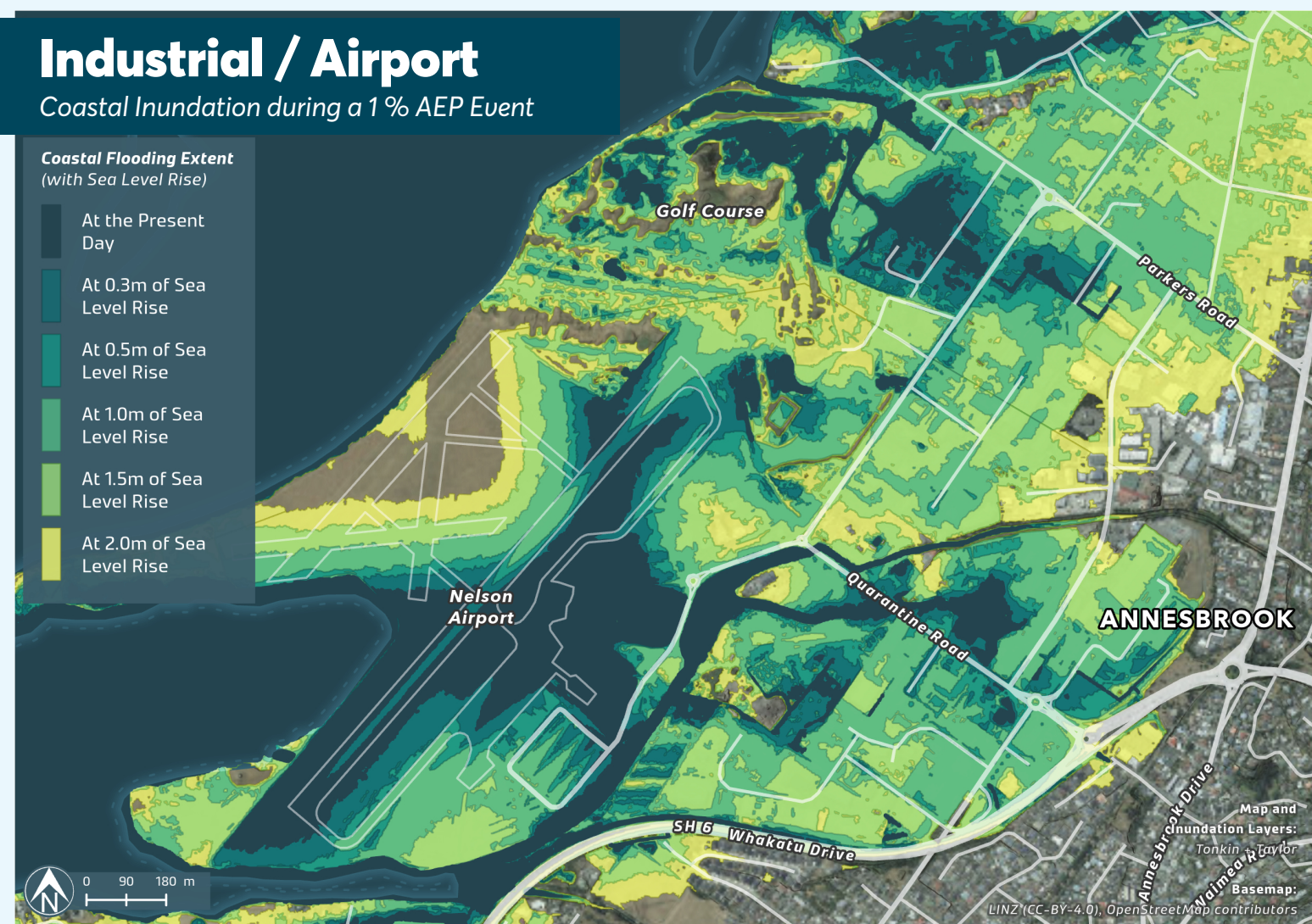


Industrial / Airport

Coastal Inundation during a 1% AEP Event

Coastal Flooding Extent
(with Sea Level Rise)

- At the Present Day
- At 0.3m of Sea Level Rise
- At 0.5m of Sea Level Rise
- At 1.0m of Sea Level Rise
- At 1.5m of Sea Level Rise
- At 2.0m of Sea Level Rise



Industrial / South

Coastal Inundation during a 1% AEP Event

Coastal Flooding Extent
(with Sea Level Rise)

- At the Present Day
- At 0.3m of Sea Level Rise
- At 0.5m of Sea Level Rise
- At 1.0m of Sea Level Rise
- At 1.5m of Sea Level Rise
- At 2.0m of Sea Level Rise

