

Rural Horoirangi / Wakapuaka Flats / Cable Bay

About the area

This consultation area includes Glenduan, Wakapuaka, Delaware Bay, Cable Bay, and Pepin Island. It features:

- Predominantly rural spaces.
- Lower-density residential areas.
- Parks and open spaces for recreation.
- Conservation spaces, with multiple areas containing key ecosystems.
- The North Nelson wastewater treatment plant (NNWTP).
- State Highway 6 runs through the area and is the primary access road.

What's at risk?

At present day:

- Lower-lying areas are within the present day 1% AEP coastal inundation extent. These include properties on Seafield Terrace, the Wakapuaka Flats, near Todd Valley Stream, and near the Hillwood Stream.
- These areas could potentially be affected by a king tide event if stormwater assets fail.
- Assuming stormwater assets keep working, tidal inflows to Wakapuaka Flats would be limited to overtopping or infiltration through the Boulder Bank and Boulder Bank Drive.
- Cable Bay properties are generally elevated above 1% AEP coastal inundation levels. Stormwater from the slopes above Cable Bay has been more of an issue, including in December 2011 when access was cut off for an extended period due to slips.

In future:

- Half a metre and one metre of sea level rise will incrementally increase the extent of the coastal inundation areas listed above.

What's happened previously?

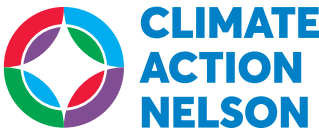
- During Cyclone Fehi (February 2018), storm surge combined with a king tide caused wave overtopping of the boulder bank at the Nelson Wastewater Treatment Plant, Glenduan and at Cable Bay / Delaware Bay.
- In Delaware Bay 'long waves' were witnessed along the width of the bay, damaging jetties and a number of retaining walls. The Cable Bay campground was also flooded.

What's being done?

- Significant works were undertaken along Cable Bay Road following the December 2011 flood, to reinstate access and manage stormwater flows.
- Council is working with landowners in the Wakapuaka Flats area to maintain the stream channels and remove accumulated sediment.
- At Glenduan, Council installed a low barrier adjacent to Seafield Terrace to reduce wave over topping.



shape.nelson.govt.nz/climate-adaptation

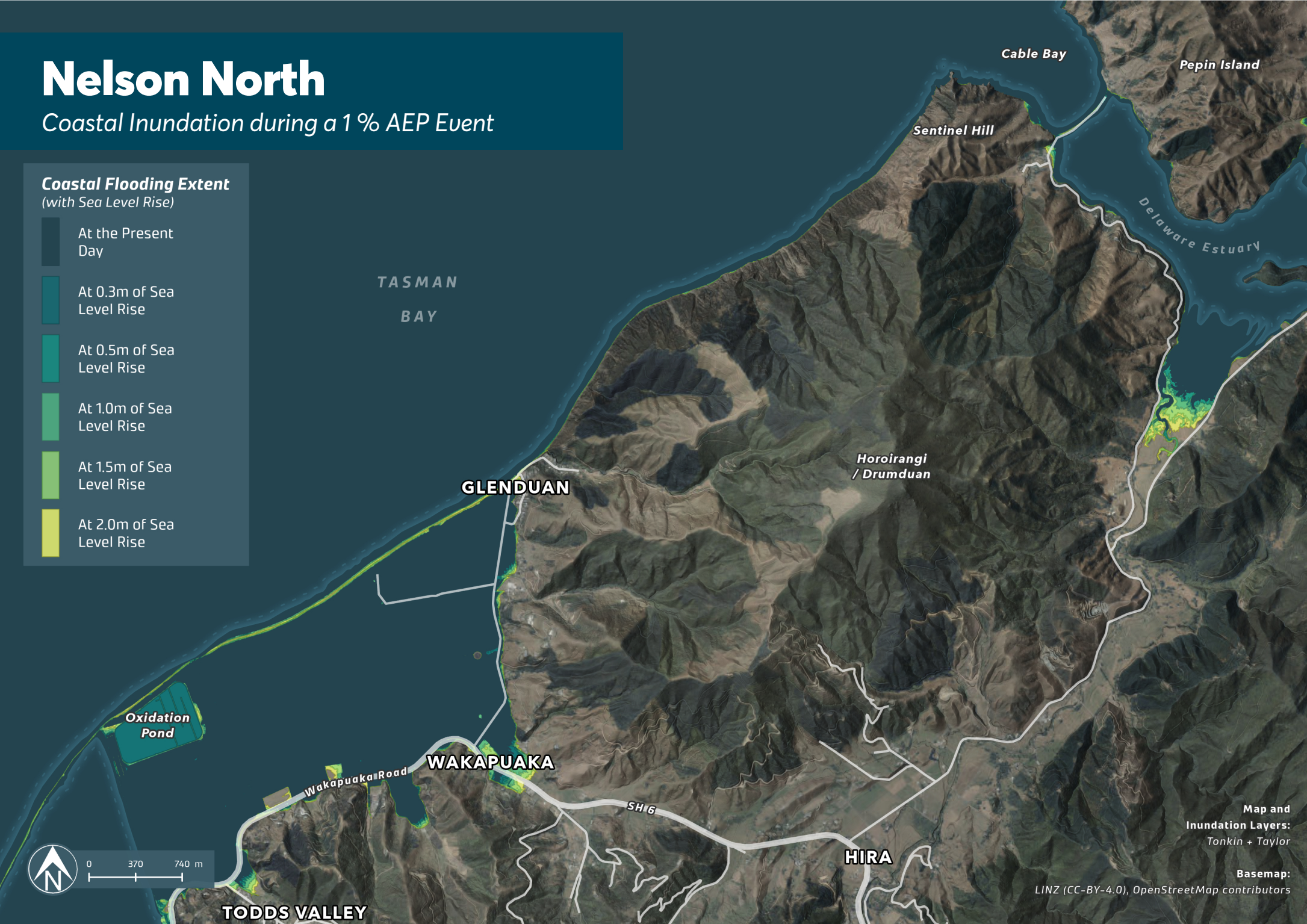


Nelson North

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



Map and
Inundation Layers:
Tonkin + Taylor

Basemap:
LINZ (CC-BY-4.0), OpenStreetMap contributors