

A coastline of deposition

Just as in many parts of the world coastlines are constantly being eroded, in many other areas the sea continually creates new features.

Coastal deposition in New Zealand

Omara Spit is located on the north-eastern coast of North Island, New Zealand. It is a stable area of land that has developed as a result of marine deposition. Its gentle, low relief has made it an ideal location for the development of a major golf resort and it provides shelter for the harbour of Whangapoua.



Further research

The Ordnance Survey map shows some ways in which this part of North Island, New Zealand is used. Use Google Street View to discover more about people's activities along this coastline.

Topic link

See section 4.1 on page 197 and section 4.4 on pages 220–21 to help you answer these questions.



A Omara Spit, North Island, New Zealand

Now Investigate

- Match each of these grid references to one of the coastal features:
340326 355322 378321
beach island spit
- List as many pieces of map evidence as you can which prove that the feature between 350320 and 390313 has existed for many years.
- Locate grid references 331343 and 358315.
 - For each of these sites, state whether it is likely to be a zone of erosion or deposition.
 - Give reasons to support your answers.
- Suggest reasons why there is a headland at Te Kahuāe Point.
- Draw a sketch map of the depositional feature between grid references 350320 and 390314.
 - Annotate your sketch to show the most likely direction of the prevailing wind and the movement of beach materials due to longshore drift.
 - Add key information about natural vegetation and human activity in the area.
- Use your sketch to help you describe how depositional features such as this are formed.
 - Give reasons why the sheltered area behind the feature is 'swamp' land.
- Produce a short case study of a bar or a tombolo. Include an annotated sketch of its location and its main depositional features.



B Ordnance Survey map extract showing part of North Island, New Zealand, 1:50,000 scale

