



Note 1: Landward movement of the shoreline could be limited by the presence of bedrock.

Note 2: The shoreline could potentially move landward of the hazard lines in the watercourse entrance instability region due to lowering of the beach profile from entrance scouring.

Maloneys Beach

Deterministic erosion/recession hazard lines

- 2017
- 2050
- 2065
- 2100



Watercourse instability region

Figure I.1



Note 1: Landward movement of the shoreline could be limited by the presence of bedrock.

Note 2: The shoreline could potentially move landward of the hazard lines in the watercourse entrance instability region due to lowering of the beach profile from entrance scouring.

Note 3: Areas landward of the bedrock (non-erodible) line could be subject to coastal cliff or slope instability hazards which are beyond the scope of this study.

Note 4: The shape of hazard lines not located at the seawall is hypothetical only and requires further detailed assessment beyond the scope of this study.

Long Beach existing seawall

5% encounter probability

Probabilistic erosion/recession hazard lines

2017

2050

2065

2100



Watercourse instability region



Bedrock (non-erodible)



Seawall

Figure I.2



- Note 1: Landward movement of the shoreline could be limited by the presence of bedrock.
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- Note 3: Areas landward of the bedrock (non-erodible) line could be subject to coastal cliff or slope instability hazards which are beyond the scope of this study.
- Note 4: The shape of hazard lines not located at the seawall is hypothetical only and requires further detailed assessment beyond the scope of this study.

Long Beach existing seawall (east)

5% encounter probability

Probabilistic erosion/recession hazard lines

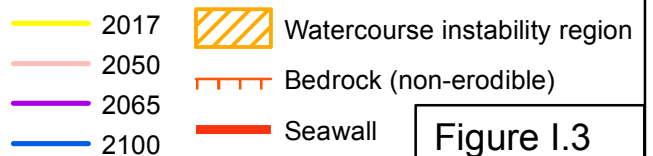


Figure I.3



Note 1: Landward movement of the shoreline could be limited by the presence of bedrock.

Note 2: The shoreline could potentially move landward of the hazard lines in the watercourse entrance instability region due to lowering of the beach profile from entrance scouring.

Long Beach existing seawall (west)

5% encounter probability

Probabilistic erosion/recession hazard lines

2017

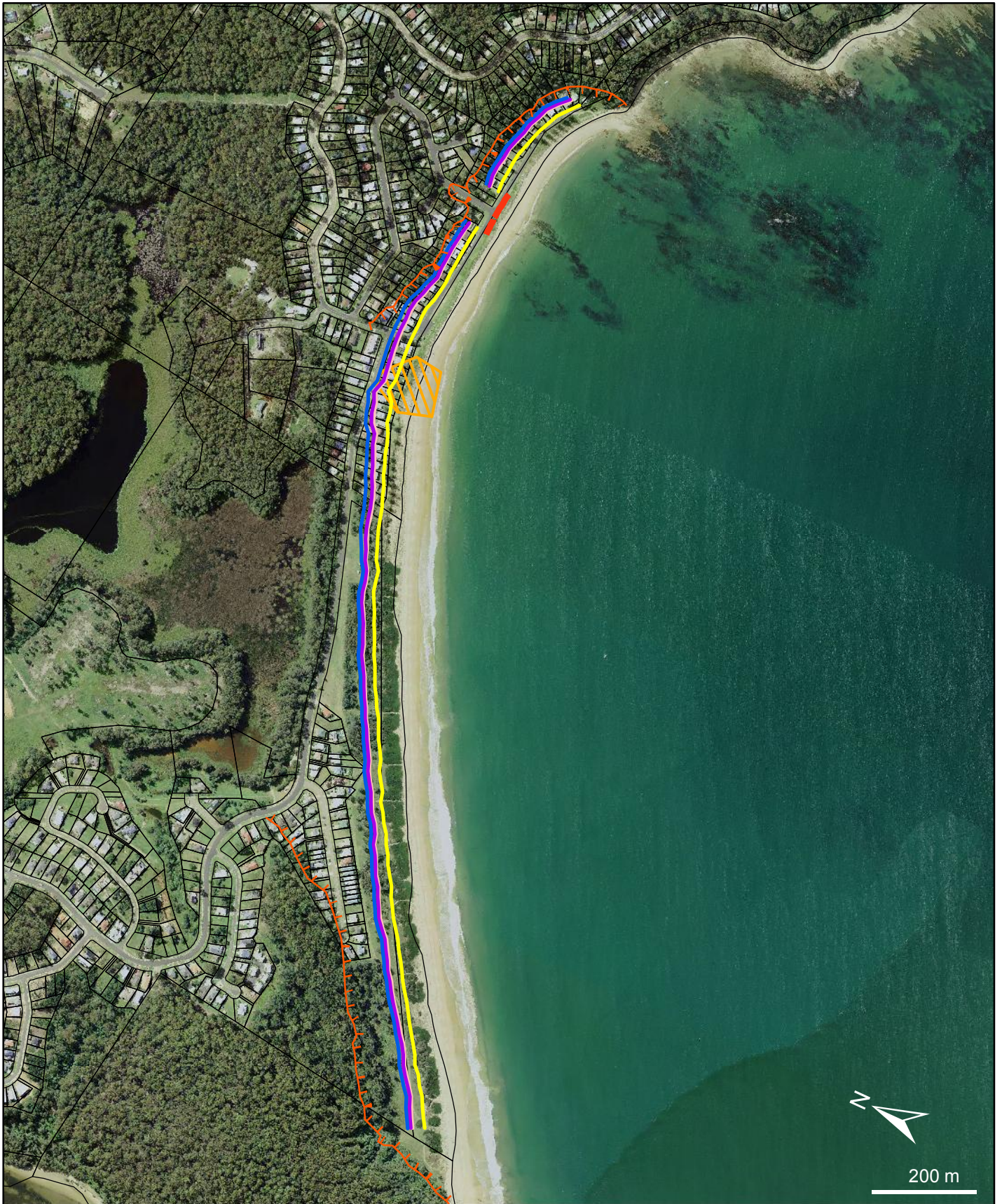
2050

2065

2100

Bedrock (non-erodible)

Figure I.4



Note 1: Landward movement of the shoreline could be limited by the presence of bedrock.

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Note 3: Areas landward of the bedrock (non-erodible) line could be subject to coastal cliff or slope instability hazards which are beyond the scope of this study.

Note 4: The shape of hazard lines not located at the seawall is hypothetical only and requires further detailed assessment beyond the scope of this study.

Long Beach existing seawall

1% encounter probability

Probabilistic erosion/recession hazard lines

2017

2050

2065

2100

Watercourse instability region

Bedrock (non-erodible)

Seawall

Figure I.5



- Note 1: Landward movement of the shoreline could be limited by the presence of bedrock.
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- Note 4: The shape of hazard lines not located at the seawall is hypothetical only and requires further detailed assessment beyond the scope of this study.

Long Beach existing seawall (east)

1% encounter probability

Probabilistic erosion/recession hazard lines

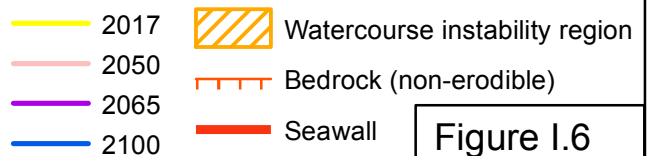


Figure I.6



Note 1: Landward movement of the shoreline could be limited by the presence of bedrock.

Note 2: The shoreline could potentially move landward of the hazard lines in the watercourse entrance instability region due to lowering of the beach profile from entrance scouring.

Long Beach existing seawall (west)

1% encounter probability

Probabilistic erosion/recession hazard lines

2017

2050

2065

2100

Bedrock (non-erodible)

Figure I.7



Note 1: Landward movement of the shoreline could be limited by the presence of bedrock.

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Long Beach no seawall (east)

5% encounter probability


Probabilistic erosion/recession hazard lines

2017

2050

2065

2100

 Watercourse instability region


 Bedrock (non-erodible)

Figure I.8



Note 1: Landward movement of the shoreline could be limited by the presence of bedrock.

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Note 3: Areas landward of the bedrock (non-erodible) line could be subject to coastal cliff or slope instability hazards which are beyond the scope of this study.

Long Beach no seawall (east)

1% encounter probability

Probabilistic erosion/recession hazard lines

2017

2050

2065

2100

Watercourse instability region

Bedrock (non-erodible)

Figure I.9