

Auckland's coastal receiving environments are under continued pressure from both coastal and land-based activities. Low energy inner harbour and estuarine areas where sediments and contaminants accumulate are usually most adversely affected areas. This is particularly the case in Auckland, where the city has historically developed around the Waitemata and Manukau Harbours.

Degradation of coastal receiving environments can have significant adverse effects on recreational, amenity, Mana Whenua and economic values. Livestock in the CMA degrades coastal areas by mobilising muddy sediment, contaminating water with viruses and bacteria and damaging or destroying coastal vegetation and habitat.

Degraded areas have been identified based on water quality, sediment contamination and benthic health. Where an area was identified as degraded for any one of these measures, it has been identified as degraded.

Degraded 1 areas are the areas where monitoring data shows a high level of degradation, or that can be identified with high certainty. Degraded 2 areas are where monitoring data shows a moderate level of degradation, or that can be identified with reasonable certainty. The distinction between degraded 1 and degraded 2 does not imply a ranking of degradation or priority for action. It is important that they are considered together because of the dynamic and interconnected nature of coastal environments and because the divisions may shift over time as more knowledge is gained and as pressure on receiving environments change. There is evidence that even moderate levels of degradation can result in ecosystem level changes, and it is not yet known how reversible these changes might be.

Identifying an area as degraded does not imply that it has no value. Degraded areas may contain valuable habitats, support important species, or form critical connections with other systems. Many are identified as SEAs.

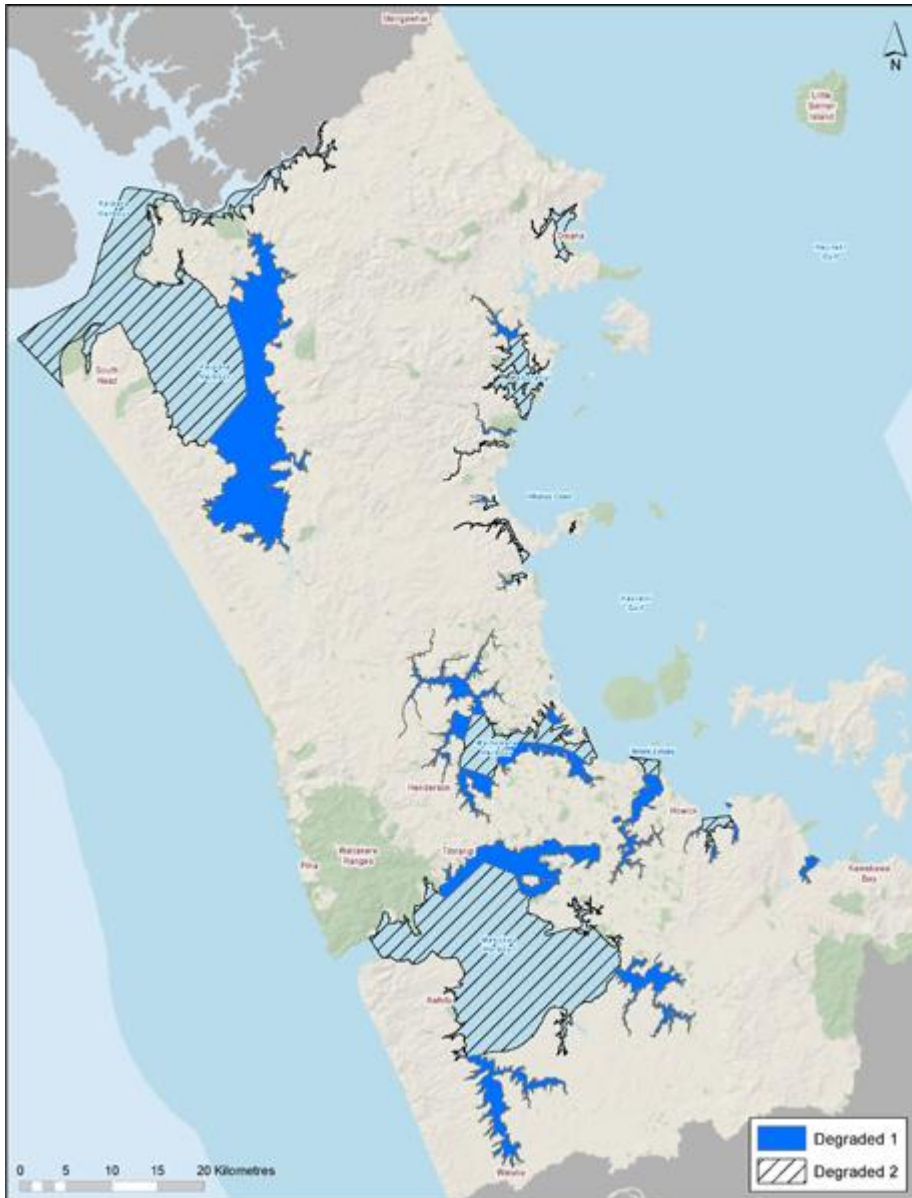
#### Objectives

1. There is no further decline in the water quality and ecological integrity of degraded areas.
2. The ecosystem functioning and water quality of degraded areas is improved over time and can support a range of recreational, cultural and other activities.
3. The water quality of areas of special value to Mana Whenua is such that it provides for the traditional and cultural use and values of the CMA.

#### Policies

1. Require discharges from catchments that are affecting the water quality of degraded areas to be managed to avoid further degradation of water quality and loss of ecosystem function.
2. Prioritise catchment management and restoration initiatives by:
  - a. identifying the key contributors and sources that are adversely impacting on the water quality of degraded areas
  - b. determining the restoration objective(s) by considering the current and future use and value of an area
  - c. consulting with Mana Whenua to identify areas they have a particular interest in.
3. Promote the restoration of the water quality and ecosystem function of degraded areas through:
  - a. requiring stock to be excluded from the CMA within a prescribed timeframe, with priority being given to exclusion from Significant Ecological Areas – Marine 1 and 2
  - b. targeted catchment management programmes
  - c. managing discharges to meet identified outcomes, having regard to the matters in policy 2.

Figure 2: Degraded marine areas



## Methods

### Regulatory

#### Unitary Plan:

- Auckland-wide objectives, policies and rules for lakes, rivers and wetlands, earthworks, on-site wastewater, other discharges of contaminants, rural production discharges, stormwater management, vegetation management, wastewater network management
- General Coastal Marine zone objectives, policies and rules for discharges and disturbance, including rules for stock access to CMA.

### Introduction

Auckland's indigenous biodiversity is unique with a diverse range of ecosystems reflecting the complex physical environment of the region. Natural ecosystems and indigenous biological diversity contribute to the character and identity of Auckland and distinguish it from other regions of New Zealand. Auckland contributes significantly to New Zealand's biodiversity with a high diversity of habitats for its size. The special landscape and sense of place that is Auckland is determined in part by the health, variability, extent, and range of terrestrial, freshwater, coastal, and marine ecosystems. Healthy and functioning ecosystems also contribute to improved water quality, soil conservation and carbon sinks, as well as providing opportunities for our recreation, economic, and cultural use.

However, development has impacted on Auckland's natural heritage resulting in loss of habitats and a reduction of biodiversity. Auckland also has significant animal and plant pests that have naturalised and threaten the viability of indigenous ecosystems and species. Urban expansion and development, changes in coastal and rural land uses, and the ongoing degradation from pest species continue threaten the maintenance of our indigenous biodiversity on land.

Coastal and marine ecosystems are subject to change, damage or destruction from inappropriate subdivision, use and development, as well as natural processes. The quality of the coastal environment is fundamentally determined by the presence of a diversity of ecosystems and by their ability to function as biological systems. This underlies the life-supporting capacity of the CMA.

Parts of the CMA have natural and physical values of regional, national and international significance. These areas are vulnerable to the adverse effects of inappropriate subdivision, use and development and require a greater level of protection than the coastal environment generally. Areas of high ecological value have been identified as Significant Ecological Areas (SEAs). The SEAs have been identified using the significance criteria listed below. Sites are significant if they meet one or more of these criteria. The SEAs in the marine environment have been identified as two types of areas (Marine 1 and 2) reflecting the different size and vulnerability of these areas.

## **Objectives**

### **[rps/rp/rcp]**

1. Areas of significant indigenous biodiversity in terrestrial, freshwater, and coastal environments are protected from the adverse effects of subdivision use and development.
2. Indigenous biodiversity is maintained through protection and restoration in areas where ecological values are degraded, or where development is occurring.
3. The protection and restoration of natural heritage features of the Waitākere Ranges Heritage Area and the Hauraki Gulf/Te Moana-nui o Toi/Tīkapa Moana is promoted.
4. Coastal ecosystems and their life supporting capacity are protected, and where possible, enhanced.
5. The relationship of Mana Whenua and their customs and traditions with Auckland's and its biodiversity is acknowledged.

## **Policies**

Protecting significant indigenous biodiversity in marine areas

14. Avoid use and development within the CMA where it will result in any or all of the following:

- a. any regular or sustained disturbance of migratory bird roosting, nesting and feeding areas that noticeably reduces the level of use of an area for these purposes, or results in permanent abandonment of an area
- b. the destruction or loss of any regionally or nationally rare, threatened or endangered plant community or indigenous marine or terrestrial fauna, including as a result of any disturbance of the foreshore and seabed
- c. increased risk to threatened and at risk marine species including Maui's and Hector's dolphins and Bryde's whales
- d. more than a minor adverse effect on the value identified for an affected SEA-Marine
- e. the permanent use or occupation of the foreshore and seabed to the extent that the value, function or processes associated with any SEA-Marine are significantly reduced
- f. any change to physical processes that would destroy, modify, or damage any natural feature or value identified for a SEA-Marine in more than a minor way
- g. a reduction in water quality which would adversely affect the natural ecological functioning of the area
- h. the deposition of material at levels which would adversely affect the natural ecological functioning of the area
- i. greater risk of access and establishment of pest species
- j. fragmentation of the values of the area to the extent that its physical integrity is lost.

15. Avoid cumulative adverse effects of use and development on the values of the SEA-Marine 1 and 2, taking into account all of the following:

a.the extent to which existing use and development already, and in combination with any proposal, impacts on the habitat, or impedes the operation of ecological and physical processes

b.the extent to which there are similar habitat types within other SEA-Marine in the same harbour or estuary or, where the SEA-Marine is located on open coast, within the same vicinity

c.whether the viability of habitats of regionally or nationally threatened plants or animals is adversely affected, including the impact on the species population and location.

16.Avoid structures in any SEA-Marine 1 except for any of the following:

a.scientific and research purposes or for public education and will enhance the understanding and long term protection of the SEA-Marine

b.navigation and safety

c.habitat maintenance and enhancement

d.where they are of benefit to the regional and national community, including significant infrastructure, and there is no reasonable or practicable alternative location on land or elsewhere in the CMA.

17.Avoid the extension to, or alteration of, any existing lawful structure in SEA-Marine 1 unless it can be demonstrated that all of the following apply:

a.the existing structure has no significant adverse effect on the values and ecological and physical processes operating in the SEA-Marine

b.the extension or alteration does not involve significant disturbance of foreshore or seabed, clearance of indigenous vegetation, or significantly increase the need to dredge in order to obtain access to the structure from the CMA.

c.the purpose of the extension cannot practicably be met by a land based alternative.

18.Avoid the following activities:

a.disturbance of the foreshore and seabed and damage to vegetation and habitat from livestock in the CMA.

b.underwater explosives training exercises.

## Background

Activities and works, including drilling, piling, tunnelling, or the construction, maintenance or removal of structures, and livestock in the CMA, can have adverse effects on the foreshore and seabed, including:

- compaction or 'cutting-up' of the foreshore or seabed
- sediment discharges and impacts on water quality, habitat, flora and fauna
- loss of vegetation
- displaced material from excavation and piling
- equipment and material being deposited in the CMA
- disturbance, destruction or demolition of historic heritage
- the mauri of the coast.

Visual, natural character and amenity values can also be adversely affected by significant disturbance of the foreshore. The extent of effects will often vary, depending on the nature of the foreshore and seabed. Soft muddy shores are more likely to be significantly impacted by disturbance of the foreshore than sandy or harder substrate areas. The extent of vegetation and the ecological values of an area will also influence the significance of effects from disturbance.

A number of activities, including recreation and general use of the CMA, result in some minor and short term disturbance of the foreshore and seabed that can usually be restored through natural tide and wave action. Construction or installation works associated with structures may also only result in a minor level of disturbance to the foreshore and seabed that will result in only short-term effects.

## Objectives

### **[rcp]**

1. Use and development in the CMA that has only short-term and minor impacts on the foreshore and seabed is enabled.
2. Activities that involve more than a minor level of disturbance to the foreshore and seabed are managed to avoid, remedy or mitigate adverse effects on natural character, ecological values, coastal processes, historic heritage and Mana Whenua values.

## Policies

### **[rcp]**

1. Enable recreational use and development in the CMA that results in a minor level of disturbance to the foreshore and seabed, or that can be remedied by wave and tidal processes.

2. Provide for the disturbance of the foreshore and seabed, outside areas identified as having significant values, where there is no practicable alternative, and the disturbance is necessary to provide for:
  - a. infrastructure or drainage systems in appropriate locations
  - b. the operation, maintenance and use of existing lawful structures, or infrastructure
  - c. the safe and efficient functioning of drainage systems
  - d. public health and safety.
3. Provide for the disturbance of the foreshore or seabed that is necessary to protect, maintain or enhance historic heritage or Mana Whenua values, geological, ecological or habitat values, or for public access or research, where this is consistent with maintaining the values of the area.
4. Require use and development to limit the area of foreshore and seabed disturbance to the extent practicable, and for the works to be done at a time of day or year that will minimise effects on:
  - a. the feeding, spawning and migratory patterns of marine and coastal fauna, including bird roosting, nesting and feeding
  - b. stability of coastal features such as dunes and coastal vegetation
  - c. public access and recreational use of the CMA
  - d. other established activities
  - e. traditional gathering, collection or harvest of kaimoana by Mana Whenua
  - f. historic heritage and Mana Wheunua values.
5. Require activities or works to be done by methods and at times and in conditions that will minimise the release of sediment and contaminants into coastal water.
6. Avoid disturbance of the foreshore and seabed that will result in significant changes to natural coastal processes that will have adverse effects on significant surf breaks identified in [Appendix 6.3](#), or cause or exacerbate coastal erosion.
7. Avoid livestock damaging and disturbing the foreshore and coastal vegetation, degrading coastal water quality and detracting from use and amenity values.
7. Avoid significant adverse effects on the CMA from the location, or method of disposal, of any displaced material.
8. Require the foreshore or seabed to be reinstated upon completion of works, where practicable, to be in keeping with the natural character and visual amenity of the area.



[rcp]

Activity table – General Coastal Marine zone, SEA-M, ONC, HNC, ONL, ONF and SHHP overlays						
	General Coastal Marine Zone	SEA-M1, ONC	SEA-M2, HNC, ONL	ONF -Type A1 and A	ONF - Type V1, V2, B, C, D, E, F	SHHP
CMA disturbance related to scientific or engineering investigations, including taking samples	P	NC	P	D	NC	D
Mineral prospecting, mineral exploration	P	Pr	NC	Pr	Pr	Pr
CMCA mineral extraction	D	Pr	NC	Pr	Pr	Pr
CMA disturbance that is: - not otherwise provided for and meets the land and water use controls, or - associated with removal of litter or marine debris, or - associated with removal of sediment, vegetation and encrusting organisms from any existing lawful CMA structures, or - associated with the burial of dead marine mammals, or - associated with control or eradication of any exotic or introduced plant or animal species	P	P	P	P	P	P
CMA disturbance that is associated with movement of up to 1000m <sup>3</sup> of sediment per calendar year within the same coastal cell	P	D	D	D	NC	D

Activity table – General Coastal Marine zone, SEA-M, ONC, HNC, ONL, ONF and SHHP overlays						
	General Coastal Marine Zone	SEA-M1, ONC	SEA-M2, HNC, ONL	ONF -Type A1 and A	ONF - Type V1, V2, B, C, D, E, F	SHHP
CMA disturbance that is associated with movement of between 1000m <sup>3</sup> and 10,000m <sup>3</sup> of sediment per calendar year within the same coastal cell	RD	NC	D	D	NC	NC
CMA disturbance that is not otherwise provided for	D	NC	NC	NC	NC	NC
Livestock access in the CMA not otherwise provided for	P	Pr	P	P	Pr	Pr
Livestock access in the CMA (other than for droving and horse riding) seven years after the date of plan notification for the General Coastal Marine zone and five years after plan notification for SEA-M2 and ONF-A1 and A)	Pr	Pr	Pr	Pr	Pr	Pr
Pacific oyster shell removal other than as part of:						

