

RCP – SCHED9 – Coastal marine area[^] activities and water* management

The *coastal marine area*[^] (CMA) is as defined in the RMA. This Schedule comprises:

Part A: CMA Boundaries: Figures 28-29 show a regional overview of the CMA and Figures 30-36 depict the location of the *mouth*[^] and the cross-river CMA boundary of identified *river*s*. These figures also show the Estuary *Water Management Sub-areas** relevant to Part C.

Part B: Zones: Figures 37-40 show the Port and Protection Zones and the part of the General Zone in the vicinity of the Port. Table 49 lists the ecological and other important characteristics in the Protection Zones.

Part C: *Water** Quality Management: *Water Management Area** and *Sub-areas**, Values, management objectives, and *water** quality targets: Tables 50-55. Note that the Estuary *Water Management Sub-areas** are shown in Figures 30-36.

A description of the figures contained in this Schedule is provided below:

Area	Figure	Description of Area
<i>Coastal Marine Area</i> [^]	28	The west coast CMA, beaches and some <i>river</i> s* of the Manawatū-Whanganui Region.
	29	The east coast CMA and some <i>river</i> s* of the Manawatū-Whanganui Region.
<i>Coastal Marine Area</i> [^] - <i>river</i> * <i>mouth</i> s [^] and cross-river CMA boundaries. These figures also show the Estuary <i>Water Management Sub-areas</i> * relevant to Part C.	30	Kai Iwi Stream and Mōwhānau Stream.
	31	Whanganui River and Whangaehu River.
	32	Turakina River and Rangitikei River.
	33	Manawatū River and Hokio Stream.
	34	Ōhau River and Waikawa Stream.
	35	Ākitio River and Owahanga River.
	36	Wainui River.
Zones	37	Port Zone. Protection Zones:
	38	• Whanganui River and Whangaehu River.
	39	• Turakina River and Rangitikei River.
	40	• Manawatū River and Cape Turnagain.

Part A: CMA Boundaries

Figures 28-29 depict the extent of the CMA within the Manawatū-Whanganui Region. On the open coast, the CMA extends from the line of mean high water springs (MHWS) seaward to the 12 nautical mile outer limit of the *territorial sea*[^].

Figures 30-36 depict the *mouth*[^] of identified *river*s* as was agreed between the Minister of Conservation, the *Territorial Authorities** and the Regional Council in 1994 in accordance with s2 RMA. The figures additionally show where the CMA boundary lies up the identified *river*s* (which include streams). That is called the cross-river CMA boundary in this schedule.

For any *river** which is not shown in the figures, the location of the *mouth*[^] was agreed between the Minister of Conservation, the *Territorial Authorities** and the Regional Council in 1994 to be a straight line representing a continuation of the line of MHWS on each side of the *river**. The upstream location of the cross-river CMA boundary on these *river*s* is not mapped, but it is consistent with s2 RMA. It is the lesser of:

1. one kilometre upstream from the *mouth*[^] of the *river*^{*}, or
2. the point upstream that is calculated by multiplying the width of the *river*^{*} *mouth*[^] by five.

The *rules*[^] in RCP-CMA apply to the CMA.

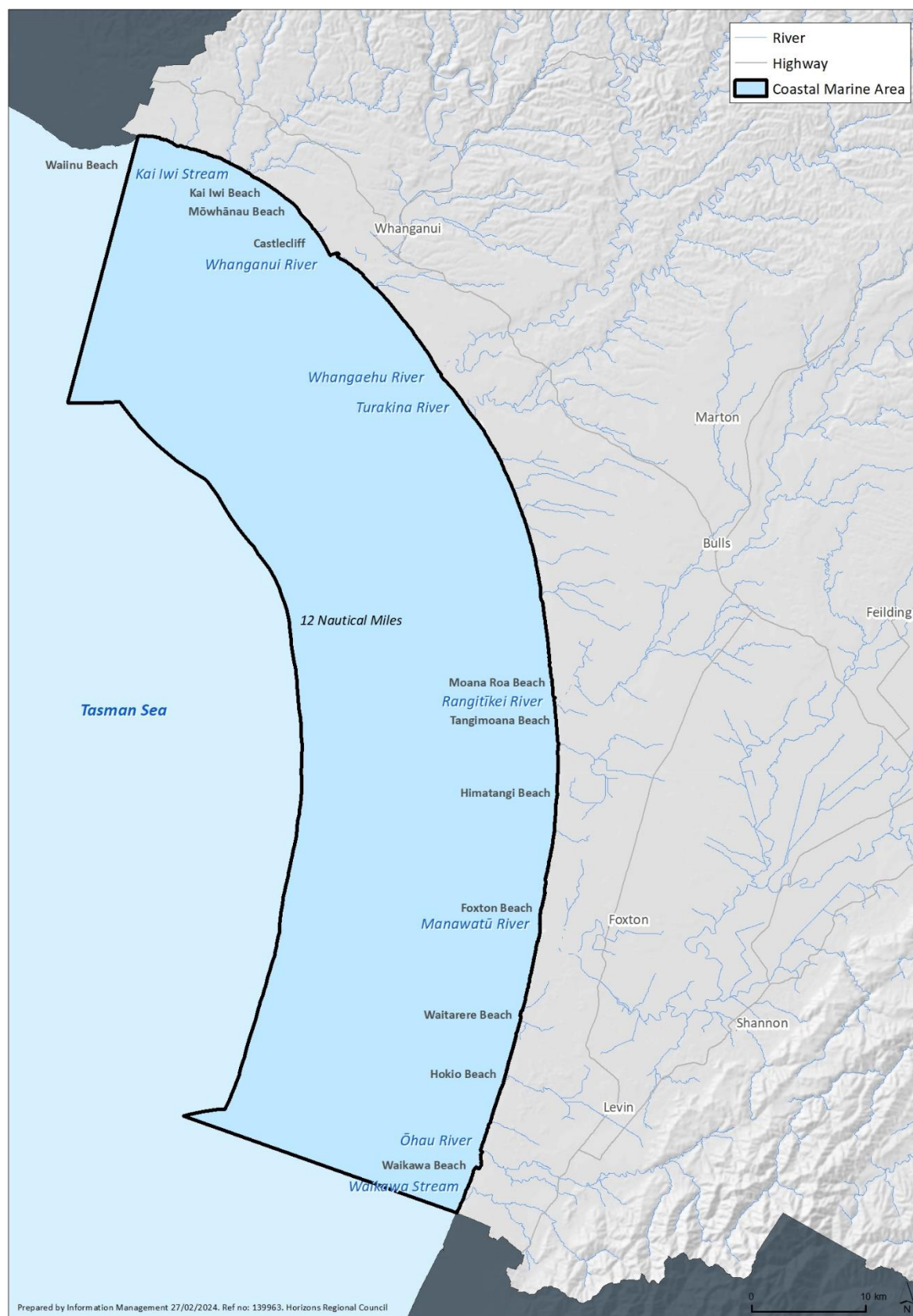


Figure 28 - West Coast CMA and some Rivers* of the Region

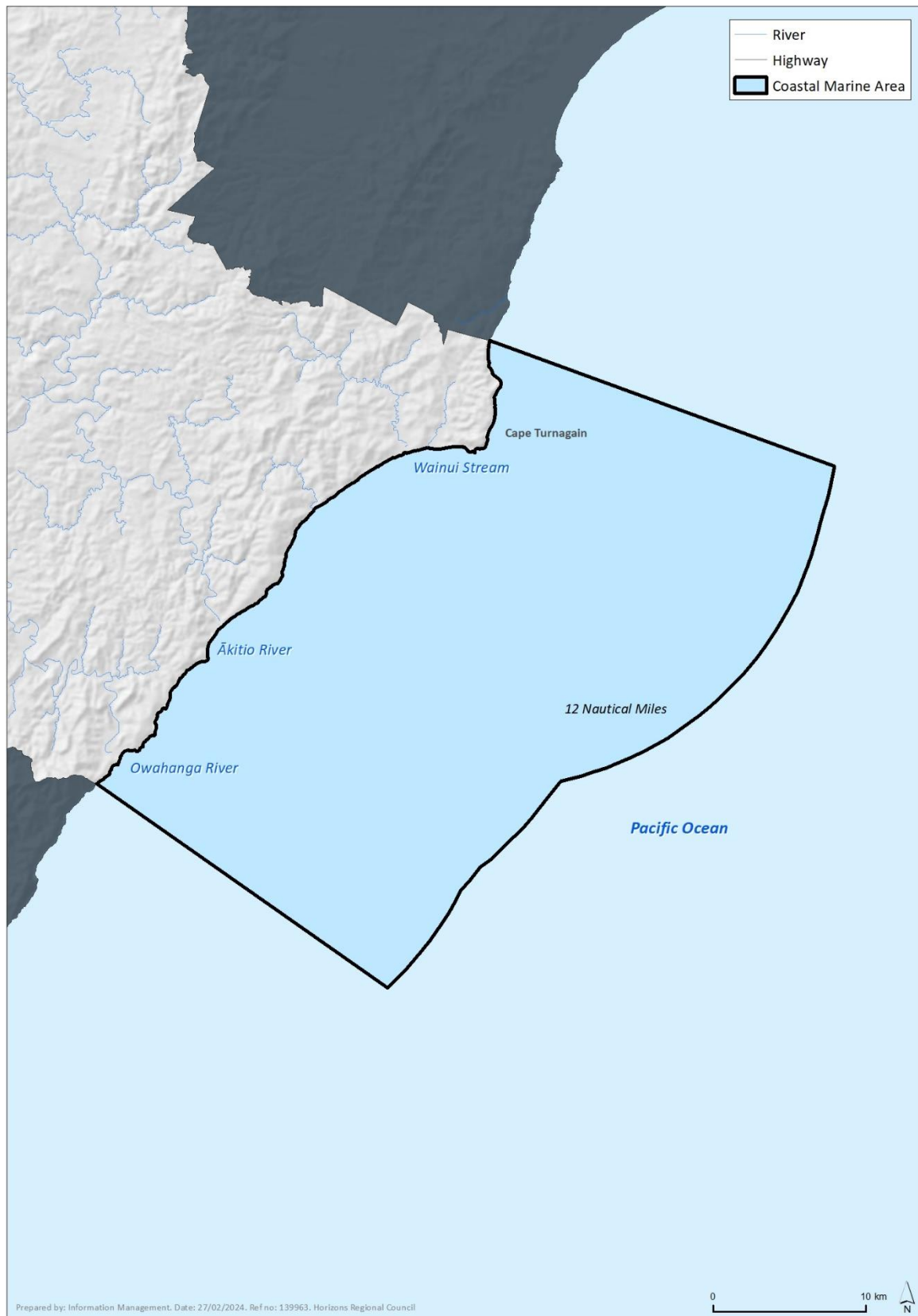


Figure 29 - East Coast CMA and some Rivers* of the Region



Figure 30 - Kai Iwi Stream and Mōwhānau Stream *mouth*[^] locations, cross-river CMA boundaries and extent of the Estuary Water Management Sub-areas*

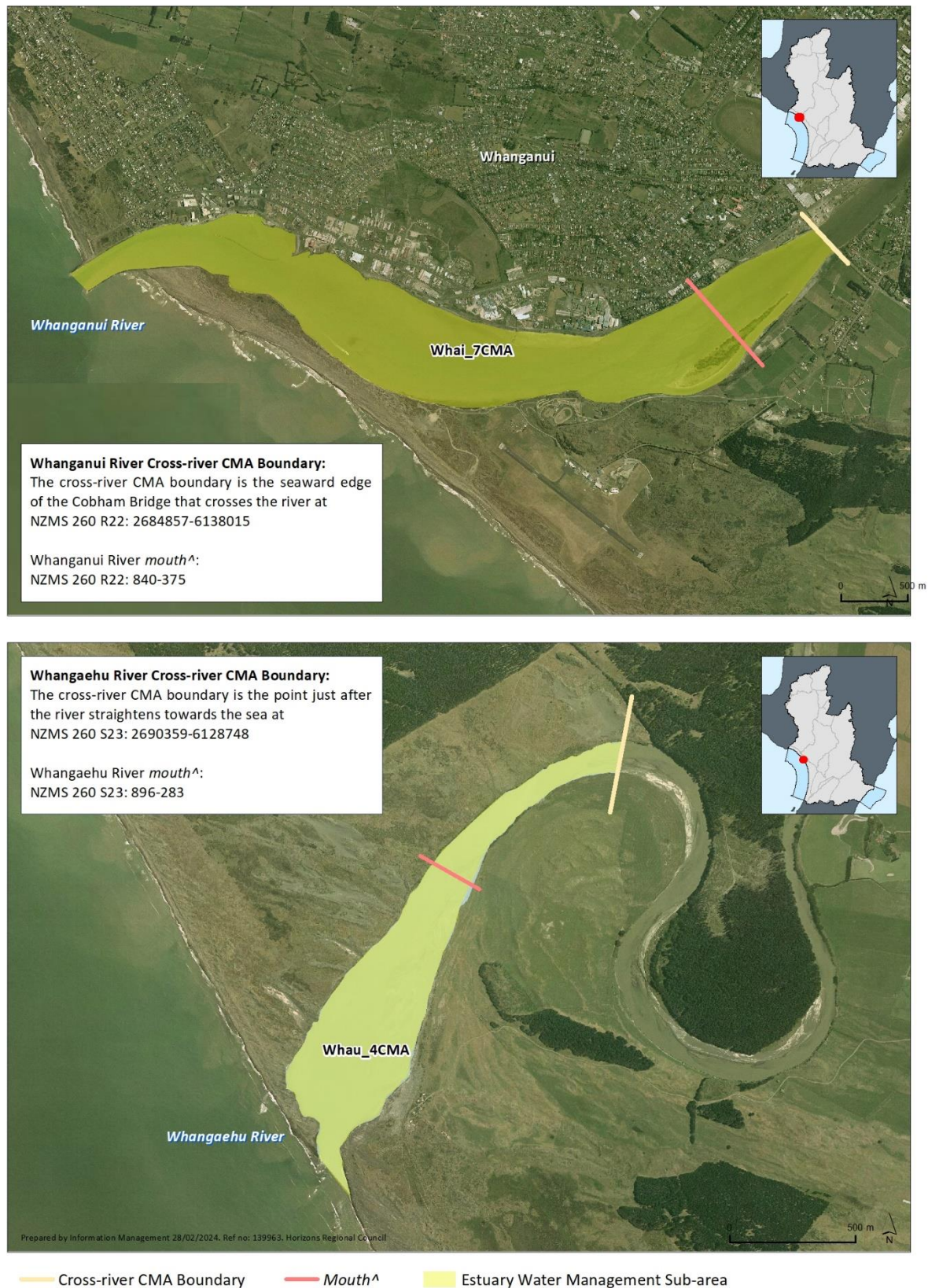


Figure 31 - Whanganui River and Whangaehu River *mouth*^ locations, cross-river CMA boundaries and extent of the Estuary Water Management Sub-areas*

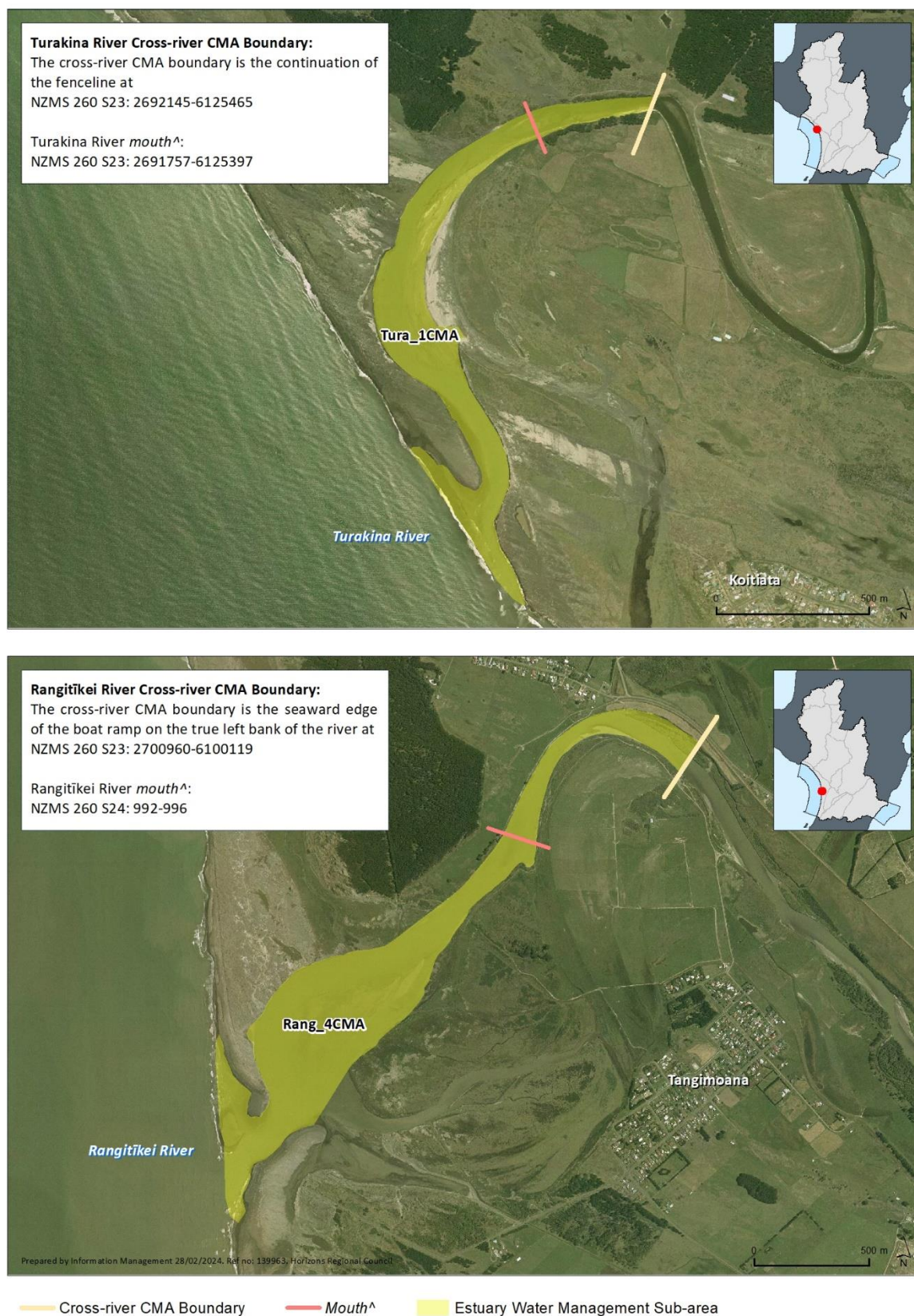


Figure 32 - Turakina River and Rangitikei River *mouth*[^] locations, cross-river CMA boundaries and extent of the Estuary Water Management Sub-areas*

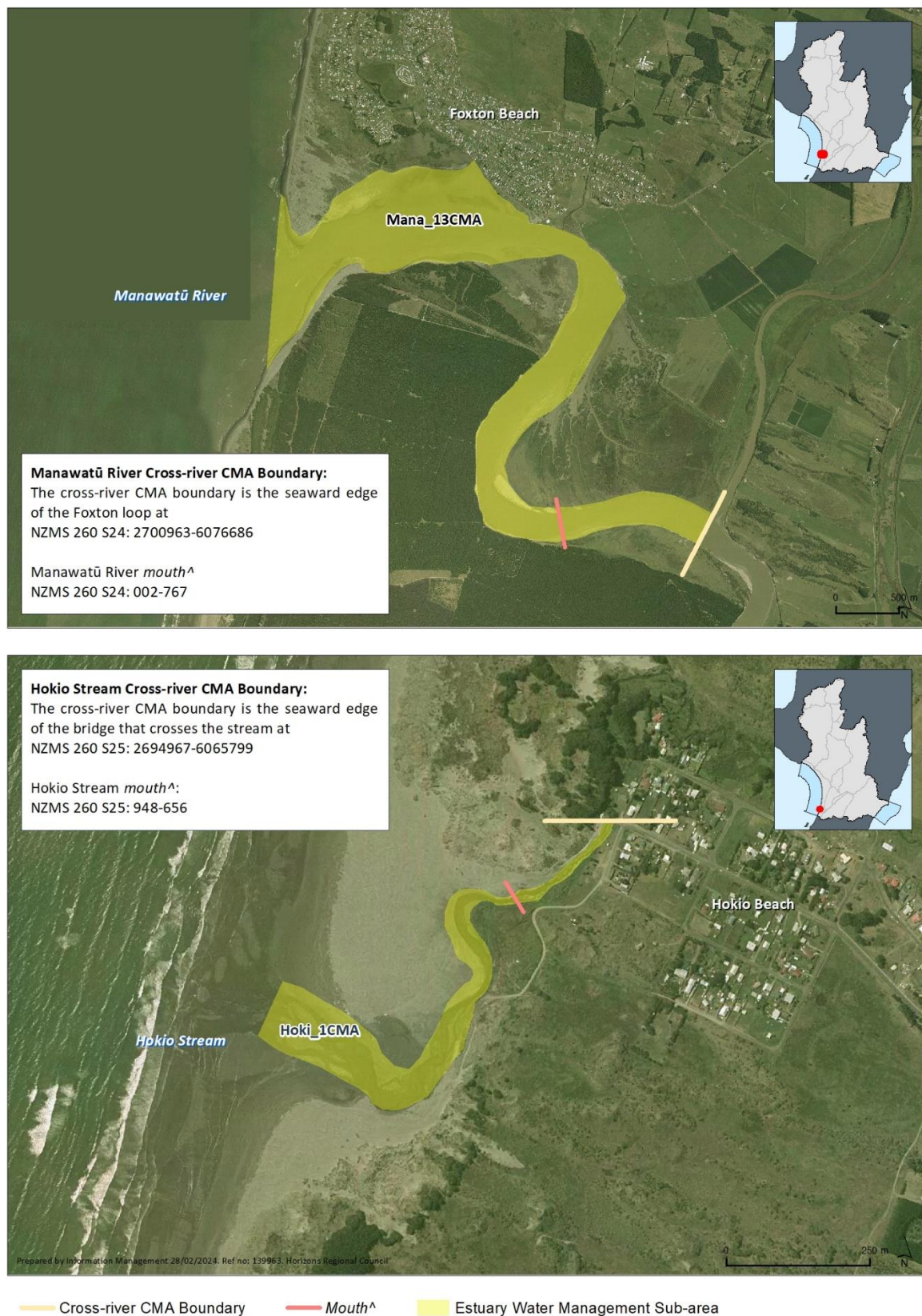


Figure 33 - Manawatū River and Hokio Stream *mouth*^ locations, cross-river CMA boundaries and extent of the Estuary Water Management Sub-areas*

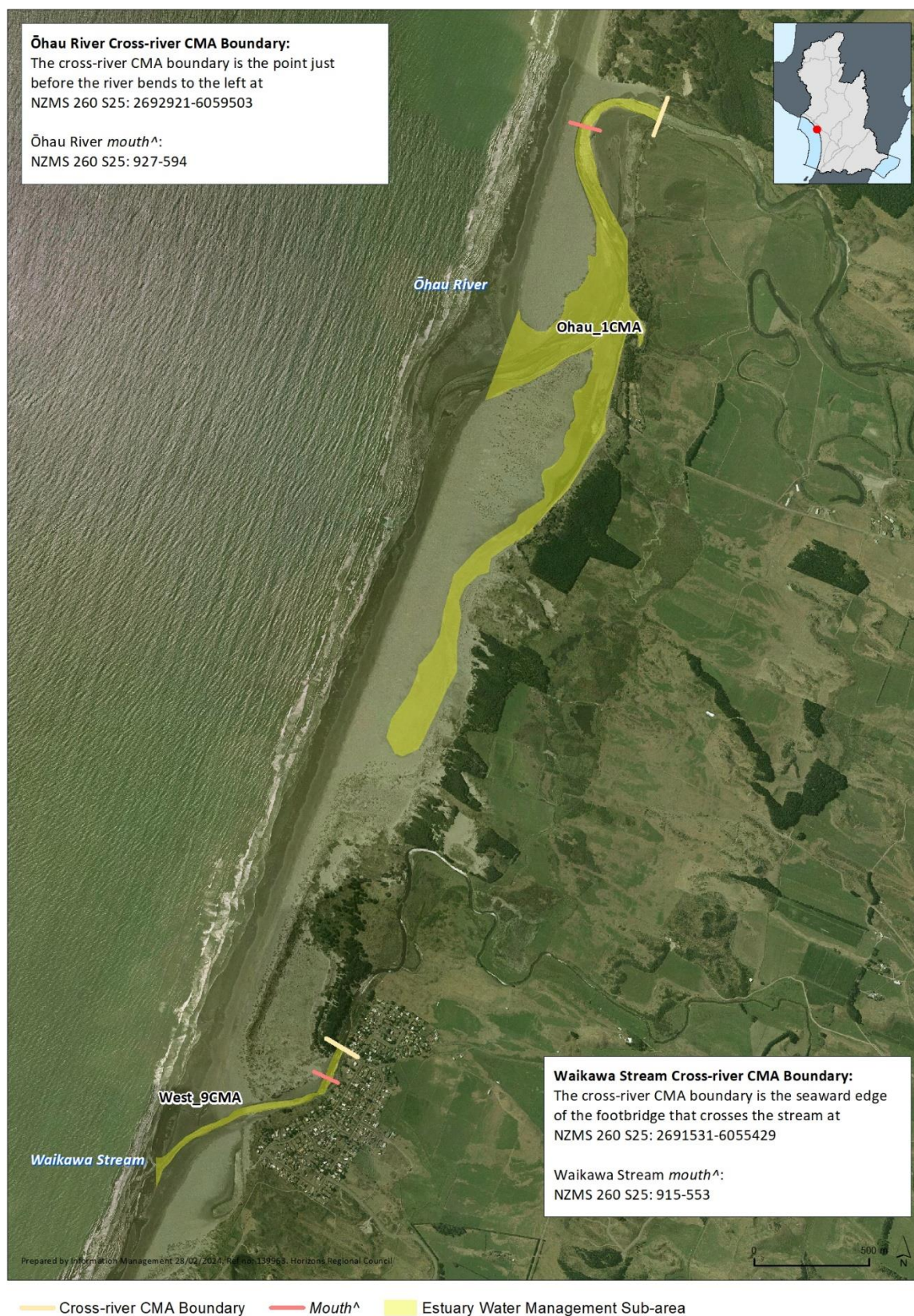


Figure 34 - Ōhau River and Waikawa Stream *mouth*[^] locations, cross-river CMA boundaries and extent of the Estuary Water Management Sub-areas*

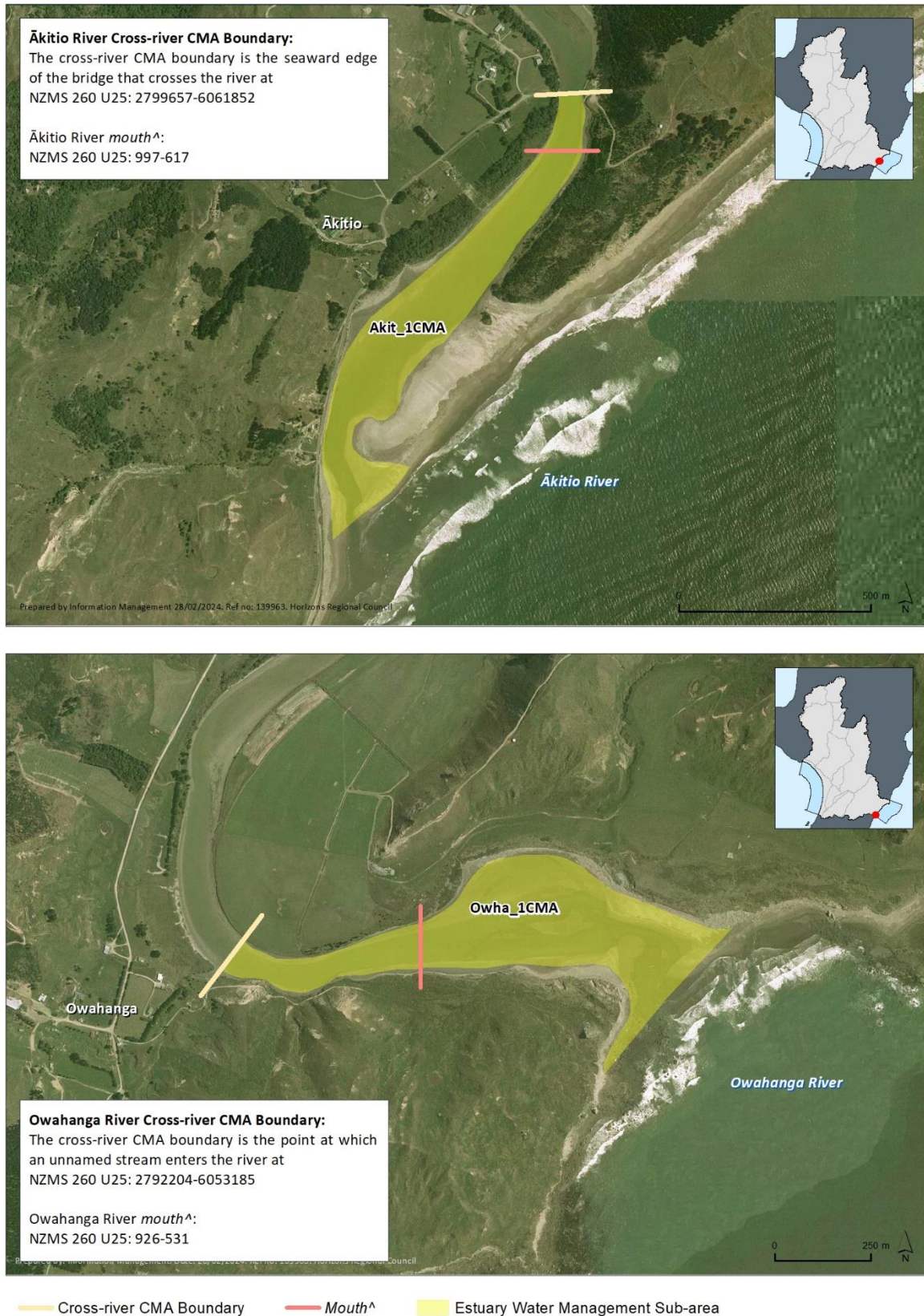


Figure 35 - Ākitio River and Owahanga River *mouth*[^] locations, cross-river CMA boundaries and extent of the Estuary Water Management Sub-areas*



Figure 36 - Wainui River *mouth*^ location, cross-river CMA boundary and extent of the Estuary Water Management Sub-area*

Part B: Zones

This Plan includes three different Zones being the Port, Protection and General Zones. These Zones delineate discrete areas of the CMA within which different presumptions apply regarding the protection, use and development of the *foreshore*[^] and seabed.

The Port Zone is depicted in Figure 37. There are some *rules*[^] in RCP-CZ and RCP-CP which apply specifically to this Zone.

For clarification:

- the **Port Zone** extends 50 m to the outside of the *river*^{*} training wall as shown in Figure 37.
- the identified Dredging and *Disposal grounds* relate to RCP-CMA-MTU-R17 and indicate that these activities are considered under this *rule*[^] (and not under RCP-CZ-GENZ-R3 and RCP-CZ-POTRZ-R9).

The Protection Zones are shown in Figures 38-40.

There are some *rules*[^] in RCP-CMA which apply specifically to these Zones.

For clarification:

- the landward edge of each Protection Zone is the line of MHWS.
- the seaward boundary of the Cape Turnagain Protection Zone extends seaward for a maximum distance of 100 m.
- the characteristics relating to each Protection Zone and as referred to in RPS-CE-CMA-P2 of the Regional Policy Statement are shown in Table 49 below. It is these characteristics that have led to each Zone being identified as a Protection Zone and regard must be had to the characteristics by decision-makers considering use and development proposals in those Zones.

The General Zone is not mapped. It comprises the entire CMA except those parts of the CMA covered by the Port Zone and the various Protection Zones. In the Whanganui River, the General Zone includes part of the CMA comprising a band of 100 m from the line of MHWS of the northern bank of the River, as well as a band of 50 m from the edge of the Port Zone and includes the *river*^{*} entrance between the South Mole and the North Mole and northern *river*^{*} bank as shown in Figure 37.

Table 49 - Protection Zones: ecological and other important characteristics

Protection Zone	Ecological and other important characteristics
Whanganui River	<ul style="list-style-type: none"> • Nationally important as a nursery for <i>freshwater</i>[*] and estuarine species. • Nationally important ecosystem for bird species. • Nationally important strategic <i>site</i>[*] for migratory bird species. • Provides habitat for threatened species. • Important roosting and feeding area for wading birds (especially shellfish beds). • Important feeding and breeding ground for many fish species (especially access ways for <i>whitebait</i>[*] and lamprey). • Corliss Island has a saltmarsh fringe and is important for hawks. • Landguard Bluff comprises a nationally important sequence of Pleistocene sedimentary strata and pecten shells. • Coastal landforms and adjacent dunes are important nesting habitat. • <i>Historic heritage</i>[*].

Protection Zone	Ecological and other important characteristics
Whangaehu River	<ul style="list-style-type: none"> Nationally important strategic <i>site</i>* for migratory bird species. Provides habitat for threatened bird species. Important roosting and feeding area for wading birds. Regionally important for its high degree of naturalness. <p>Note:</p> <ul style="list-style-type: none"> The Whitiua Scientific Reserve is located adjacent to the true right bank of the estuary. There is a dense concentration of archaeological sites adjacent to the estuary.
Turakina River	<ul style="list-style-type: none"> Nationally important strategic <i>site</i>* for migratory bird species. Provides habitat for threatened bird species. Important roosting and feeding habitat for wading birds. Regionally distinct vegetation communities. Regionally important for its high degree of naturalness. Locally rich in archaeological sites.
Rangitikei River	<ul style="list-style-type: none"> Contains regionally important plant species. Regionally important for bird species. Regionally important for saltmarsh communities and estuarine native turf species. Provides habitat for rare and threatened bird species. Important roosting and feeding area for wading birds. Important for <i>whitebait</i>* spawning. <i>Historic heritage</i>*.
Manawatū River	<ul style="list-style-type: none"> Nationally important as a nursery for freshwater and estuarine species. Internationally important strategic <i>site</i>* for migratory bird species. Provides habitat for rare and threatened bird species. Important roosting and feeding area for wading birds. Contains regionally important plant species. Internationally recognised as a <i>wetland</i>* of international importance under the RAMSAR Convention. Regionally important for its high degree of naturalness and diversity.
Cape Turnagain	<ul style="list-style-type: none"> Important haul out area for marine mammals. Important feeding, roosting and breeding area for birds (especially blue penguins). <i>Site</i>* of high value to <i>iwi</i>*. <i>Site</i>* of geological importance. <i>Historic heritage</i>*.

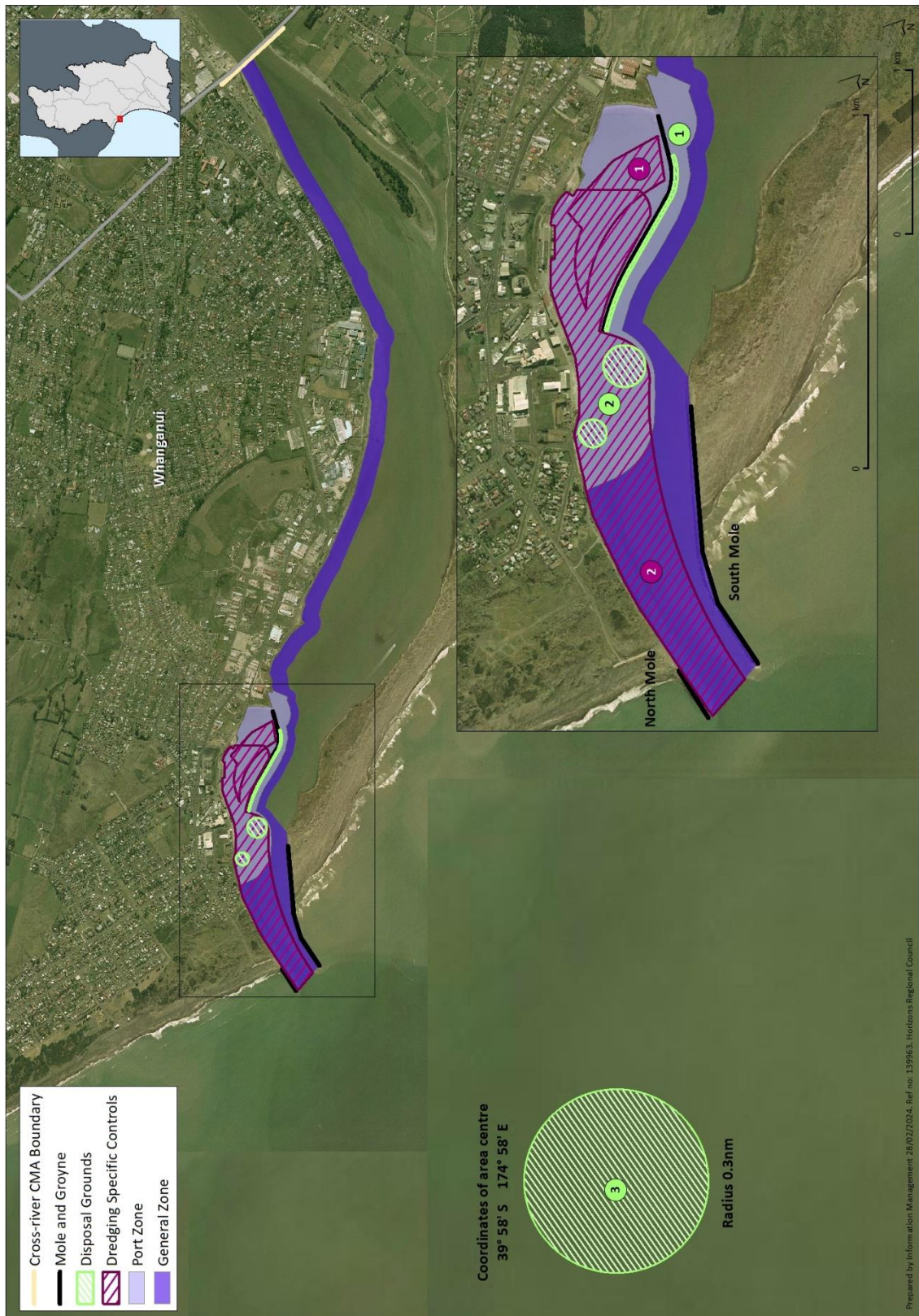


Figure 37 - Port Zone



— Cross-river CMA Boundary ■ Protection Zone

Figure 38 - Protection Zones



Figure 39 - Protection Zones



Figure 40 – Protection Zones

Part C: *Water*^{*} Quality Management

Water Management Areas^{*} and *Sub-areas*^{*}, Values, Management Objectives and *Water*^{*} Quality Targets

For *water*^{*} quality management purposes, the CMA is divided into:

1. one *Seawater Management Area*^{*} which comprises the entire CMA other than the Estuary *Water Management Sub-areas*^{*},
2. 13 Estuary *Water Management Sub-areas*^{*} associated with specified estuary *waters*^{*} as shown on Figures 30 to 36. The term *Sub-area*^{*} is used because the estuary *waters*^{*} are part of a larger *Water Management Area*^{*} for each *river*^{*} (see RP-SCHED1).

List of Tables relating to the *Seawater Management Area*^{*} and Estuary *Sub-areas*^{*}:

Table Number	Description
Table 50	<i>Seawater Management Area</i> [*] and Estuary <i>Water Management Sub-areas</i> [*] : Values and Management Objectives
Table 51	<i>Seawater Management Area</i> [*] and Estuary <i>Water Management Sub-areas</i> [*] : Where the Values apply
Table 52	Estuary <i>Water Management Sub-areas</i> [*] : <i>Water</i> [^] Quality Definitions
Table 53	Estuary <i>Water Management Sub-areas</i> [*] : <i>Water</i> [^] Quality Targets
Table 54	<i>Seawater Management Area</i> [*] : <i>Water</i> [*] Quality Definitions
Table 55	<i>Seawater Management Area</i> [*] : <i>Water</i> [*] Quality Targets

Table 50 - Seawater Management Area* and Estuary Water Management Sub-areas*: Values and Management Objectives

The following Values and Management Objectives apply in the *Seawater Management Area** and *Estuary Water Management Sub-areas** listed in Table 51.

Value group	Values		Management Objective
Ecosystem Values	LSC	Life-supporting Capacity	The CMA supports healthy aquatic life / ecosystems.
	SOS-A	Sites of Significance - Aquatic	Sites of significance for indigenous aquatic biodiversity within the CMA are maintained or enhanced.
	SOS-R	Sites of Significance - Riparian	Sites of significance for indigenous riparian biodiversity within the CMA are maintained or enhanced.
	IS	Inanga Spawning	The CMA sustains healthy inanga spawning and egg development.
	WM	<i>Whitebait*</i> Migration	The CMA is maintained or enhanced to provide safe passage of inwardly migrating juvenile native fish known collectively as <i>whitebait*</i> .
Recreational and Cultural Values	CR	Contact Recreation	The CMA is suitable for contact recreation.
	Am	Amenity	The amenity values of the CMA are maintained or enhanced.
	Mau	<i>Mauri*</i>	The <i>mauri*</i> of the CMA is maintained or enhanced.
	SG	Shellfish Gathering	The CMA is suitable for shellfish harvesting.
	SOS-C	Sites of Significance - Cultural	Sites of significance for cultural values are maintained.
<i>Water*</i> Use	IA	Industrial Abstraction	The CMA is suitable as a <i>water*</i> source for industrial abstraction or use.
Social and Economic Values	CAP	Capacity to Assimilate Pollution	The capacity of the CMA to assimilate pollution is not exceeded.
	EI	Existing <i>Infrastructure</i> [^]	The integrity of existing <i>infrastructure</i> [^] is not compromised.

Table 51 - Seawater Management Area* and Estuary Water Management Sub-areas*: Where the Values apply**Legend:**

Table Headings: **LSC**: Life-supporting Capacity; **SOS-A**: Sites of Significance - Aquatic; **SOS-R**: Sites of Significance - Riparian; **IS**: Inanga Spawning; **WM**: *Whitebait** Migration; **CR**: Contact Recreation; **Am**: Amenity; **Mau**: *Mau**; **SG**: Shellfish Gathering; **SOS-C**: Sites of Significance - Cultural; **IA**: Industrial Abstraction; **CAP**: Capacity to Assimilate Pollution; **EI**: Existing *Infrastructure**.

Key for LSC Classes: **M**: Marine; **LM**: Lowland Mixed; **HSS**: Hill Soft Sedimentary; **HM**: Hill Mixed; **LS**: Lowland Sand.

The LSC Classes are listed as the geology of the catchment influences *water** quality and life-supporting capacity.

Water Management Area*	Estuary Water Management Sub-area*	Area-wide Values												
		LSC	SOS-A	SOS-R	IS	WM	CR	Am	Mau	SG	SOS-C	IA	CAP	EI
Seawater Management Area* (entire CMA excluding Estuary Water Management Sub-areas*)	N/A	M			✓	✓	✓	✓	✓	✓		✓	✓	✓
Coastal Manawatū (Mana_13)	Manawatū Estuary (Mana_13CMA) See Figure 33	LM		✓ ^{1,2}	✓	✓	✓	✓	✓		✓ ⁴	✓	✓	✓
Coastal Rangitīkei (Rang_4)	Rangitīkei Estuary (Rang_4CMA) See Figure 32	LM		✓ ¹	✓	✓	✓	✓	✓			✓	✓	✓
Lower Whanganui (Whai_7)	Whanganui Estuary (Whai_7CMA) See Figure 31	LM		✓ ^{1,2}	✓	✓	✓	✓	✓			✓	✓	✓
Coastal Whangāehu (Whau_4)	Whangāehu Estuary (Whau_4CMA) See Figure 31	HSS		✓ ^{1,2}	✓	✓	✓	✓	✓			✓	✓	✓
Turakina (Tura_1)	Turakina Estuary (Tura_1CMA) See Figure 32	HSS		✓ ^{1,2}	✓	✓	✓	✓	✓			✓	✓	✓

1 Gravel and sand (dotterel).

2 Mud / silt habitat and estuarine roosts (waders).

3 Shortjaw kōkopu and redfin bully.

4 Density of cultural and historical *sites** of significance including *wāhi tapu** and *taonga**. Details of the particular location of these *sites** are available from Rangitaane o Manawatū.

Water Management Area*	Estuary Water Management Sub-area*	Area-wide Values												
		LSC	SOS-A	SOS-R	IS	WM	CR	Am	Mau	SG	SOS-C	IA	CAP	EI
Ōhau (Ohau_1)	Ōhau Estuary (Ohau_1CMA) See Figure 34	HM		✓ ^{1,2}	✓	✓	✓	✓	✓			✓	✓	✓
Lake Horowhenua (Hoki_1)	Hokio Estuary (Hoki_1CMA) See Figure 33	LS			✓	✓	✓	✓	✓			✓	✓	✓
Owahanga (Owha_1)	Owahanga Estuary (Owha_1CMA) See Figure 35	HSS					✓	✓	✓			✓	✓	✓
East Coast (East_1)	Wainui Estuary (East_1CMA) See Figure 36	HSS		✓ ²			✓	✓	✓			✓	✓	✓
Ākitio (Akit_1)	Ākitio Estuary (Akit_1CMA) See Figure 35	HSS			✓	✓	✓	✓	✓			✓	✓	✓
Kai Iwi (West_2)	Kai Iwi Estuary (West_2CMA) See Figure 30	HSS			✓	✓	✓	✓	✓			✓	✓	✓
Mōwhānau (West_3)	Mowhanau Estuary (West_3CMA) See Figure 30	LM			✓	✓	✓	✓	✓			✓	✓	✓
Waikawa (West_9)	Waikawa Estuary (West_9CMA) See Figure 34	HM	✓ ³	✓ ^{1,2}		✓	✓	✓	✓			✓	✓	✓

1 Gravel and sand (dotterel).

2 Mud / silt habitat and estuarine roosts (waders).

3 Shortjaw kōkopu and redfin bully.

Table 52 - Estuary Water Management Sub-areas*: Water* Quality Definitions

The *water** quality targets for the Estuary *Water Management Sub-areas**, as defined in **Table 53** must read as follows (the numerical values in Table 53 are indicated by [...]):

Abbreviations used in Table 53		Full wording of the target
Header	Sub-header	
Temp (°C)	<	The temperature of the <i>water*</i> must not exceed [...] degrees Celsius.
DO (%SAT)	>	The concentration of dissolved oxygen must exceed [...] % of saturation.
Algal biomass Chl a (mg/m ³)	<	The annual average algal biomass must not exceed [...] milligrams of chlorophyll a per cubic metre.
Macro-algae (% cover)	<	The maximum cover of visible shore surface by macro-algae must not exceed [...] %.
DRP (g/m ³)	<	The annual average concentration of dissolved reactive phosphorus (DRP) when the <i>river*</i> flow is at or below the 20 th <i>flow exceedance percentile*</i> must not exceed [...] grams per cubic metre.
SIN (g/m ³)	<	The annual average concentration of soluble inorganic nitrogen (SIN) ¹ when the <i>river*</i> flow is at or below the 20 th <i>flow exceedance percentile*</i> must not exceed [...] grams per cubic metre.
Ammoniacal nitrogen ² (g/m ³)	<	The average concentration of ammoniacal nitrogen must not exceed [...] grams per cubic metre.
Tox.	%	For toxicants not otherwise defined in these targets, the concentration of toxicants in the <i>water*</i> must not exceed the trigger values for coastal waters defined in the 2000 ANZECC guidelines Table 3.4.1 as the level of protection for [...] % of species. For metals the trigger value must be adjusted for hardness and apply to the dissolved fraction as directed in the table.
<i>E.coli</i> / 100 ml	< 50 th %ile	The concentration of <i>Escherichia coli</i> must not exceed [...] per 100 millilitres 1 November - 30 April (inclusive) when the <i>river*</i> flow is at or below the 50 th <i>flow exceedance percentile*</i> .
	< 20 th %ile	The concentration of <i>Escherichia coli</i> must not exceed [...] per 100 millilitres year round when the <i>river*</i> flow is at or below the 20 th <i>flow exceedance percentile*</i> .
Euphotic depth	%Δ	The euphotic depth must not be reduced by more than [...] %.
Visual clarity (m)	%Δ	The visual clarity of the <i>water*</i> measured as the horizontal sighting range of a black disc must not be reduced by more than [...] %.
	>	The visual clarity of the <i>water*</i> measured as the horizontal sighting range of a black disc must equal or exceed [...] metres when the <i>river*</i> is at or below the 50 th <i>flow exceedance percentile*</i> .

¹ Soluble Inorganic Nitrogen (SIN) concentration is measured as the sum of nitrate nitrogen, nitrite nitrogen and ammoniacal nitrogen or the sum of total oxidised nitrogen and ammoniacal nitrogen.

² Ammoniacal nitrogen is a component of SIN. SIN standards should also be considered when assessing ammoniacal nitrogen concentrations against the standards.

Table 53 - Estuary Water Management Sub-areas*: Water* Quality Targets

The following *water** quality targets apply to the Estuary Water Management Sub-areas*:

Water Management Area*	Estuary Sub-area*	Temp (°C)	DO (%SAT)	Algal Biomass	Macro-algae	DRP (g/m ³)	SIN (g/m ³)	Ammoniacal Nitrogen (g/m ³)	Tox.	E.coli / 100 ml		Euphotic Depth	Visual Clarity (m)	Visual Clarity (m)
		<	>	Chl a (mg/m ³)	% cover	<	<	<	%	<50 th %ile	<20 th %ile	%Δ	>	%Δ
Coastal Manawātū (Mana_13)	Manawātū Estuary (Mana_13CMA)	24	70	4	5	0.015	0.444	0.400	95	260	550	10	1.2	20
Coastal Rangitikei (Rang_4)	Rangitikei Estuary (Rang_4CMA)	24	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Lower Whanganui (Whai_7)	Whanganui Estuary (Whai_7CMA)	24	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Coastal Whangāehu (Whau_4)	Whangāehu Estuary (Whau_4CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Turakina (Tura_1)	Turakina Estuary (Tura_1CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Ōhau (Ohau_1)	Ōhau Estuary (Ohau_1CMA)	22	70	4	5	0.010	0.110	0.400	95	260	550	10	1.2	20
Lake Horowhenua (Hoki_1)	Hokio Estuary (Hoki_1CMA)	24	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Owahanga (Owha_1)	Owahanga Estuary (Owha_1CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
East Coast (East_1)	Wainui Estuary (East_1CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Ākitio (Akit_1)	Ākitio Estuary (Akit_1CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Kai Iwi (West_2)	Kai Iwi Estuary (West_2CMA)	22	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Mōwhānau (West_3)	Mōwhānau Estuary (West_3CMA)	24	70	4	5	0.015	0.167	0.400	95	260	550	10	1.2	20
Waikawa (West_9)	Waikawa Estuary (West_9CMA)	22	70	4	5	0.010	0.167	0.400	95	260	550	10	1.2	20

Table 54 - Seawater Management Area*: Water* Quality Definitions

The *water** quality targets for the *Seawater Management Area**, as defined in **Table 55**, must read as follows (the numerical values in Table 55 are indicated by [...]):

Abbreviations used in Table 55		Full wording of the target
Header	Sub-header	
DO (%SAT)	>	The concentration of dissolved oxygen must exceed [...] % of saturation.
Algal biomass Chl <i>a</i> (mg/m ³)	<	The annual average algal biomass must not exceed [...] milligrams of chlorophyll <i>a</i> per cubic metre.
TP (g/m ³)	<	The annual average concentration of total phosphorus must not exceed [...] grams per cubic metre.
TN (g/m ³)	<	The annual average concentration of total nitrogen must not exceed [...] grams per cubic metre.
Ammoniacal nitrogen (g/m ³)	<	The average concentration of ammoniacal nitrogen must not exceed [...] grams per cubic metre.
Tox.	%	For toxicants not otherwise defined in these targets, the concentration of toxicants in the <i>water*</i> must not exceed the trigger values for coastal waters defined in the 2000 ANZECC guidelines Table 3.4.1 for the level of protection of [...] % of species. For metals the trigger value must be adjusted for hardness and apply to the dissolved fraction as directed in the table.
Visual clarity (m)	%Δ	The visual clarity of the <i>water*</i> measured as the horizontal sighting range of a black disc must not be reduced by more than [...] %.
	>	The visual clarity of the <i>water*</i> measured as the horizontal sighting range of a black disc must equal or exceed [...] metres.
Enterococci	1 November - 30 April (inclusive)	The concentration of enterococci must not exceed [...] per 100 millilitres 1 November - 30 April (inclusive).
	1 May - 31 October (inclusive)	The concentration of enterococci must not exceed [...] per 100 millilitres 1 May - 31 October (inclusive).
Faecal coliforms	<	The median concentration of faecal coliforms must not exceed [...] per 100 millilitres.
	90 th %ile	The 90 th percentile concentration of faecal coliforms must not exceed [...] per 100 millilitres.

Table 55 - Seawater Management Area*: Water* Quality Targets

The following *water** quality targets apply to the *Seawater Management Area**:

Management Area	DO (%SAT)	Algal Biomass	TP (g/m ³)	TN (g/m ³)	Ammoniacal Nitrogen (g/m ³)	Tox.	Visual Clarity (m)		Enterococci		Faecal Coliforms	
	>	Chl a (mg/m ³)	<	<	<	(%)	>	%Δ	1 Nov - 30 April	1 May - 31 Oct	<	90 th ile
<i>Seawater Management Area*</i>	90	3	0.010	0.060	0.060	99	1.6	20	140	280	14	43

