

Table 1 - Nitrogen loss risk factors		
Discharge Source	Nitrogen loss risk factors	Farm practices and practice changes
Animal	Stock	Stock Numbers <b>Livestock</b> class and weight
	Feed type	Total imported nitrogen Average nitrogen content of imported supplements
	Grazing practices	Grazing density Wintering practices
	Off-paddock feeding	Feed pads and loafing areas Animal housing
<b>Fertiliser</b>	Excessive nutrient levels (beyond plant needs)	<b>Fertiliser</b> type Rate of application Timing of application Load applied Soil test levels
	Direct application to waterways	Method of application/setbacks used
Effluent	Overland flow	Effluent system type Application rates Management of critical source areas
	Application beyond plant requirements	Application rates <b>Fertiliser</b> use on effluent <b>disposal</b> blocks Soil test levels

Table 2 – Phosphorus loss risk factors		
Discharge Source	Phosphorus loss risk factors	Farm practices and practice changes
Erosion/sediment and animal manure	Stock	Stock type, <b>livestock</b> class and weight
	Grazing practices	Grazing density Stock access to stream banks Bare ground with standing <b>livestock</b> Management of critical source areas
Cropping	<b>Cultivation</b>	Time in fallow Area of cultivated ground Timing of <b>cultivation</b> Type of tillage Method of harvest Use of 'catch crops' Management of critical source areas
<b>Fertiliser</b>	Excessive nutrient levels (beyond plant needs)	<b>Fertiliser</b> form/type Rate of application Timing of application Load applied Soil test levels
	Direct application to waterways	Method of application/setbacks used

Effluent	Overland flow	Effluent system type Application rates Management of critical source areas
	Application beyond plant requirements	Application rates <b>Fertiliser</b> use on effluent <b>disposal</b> blocks Soil test levels

<b>Table 3 – Nutrient transport risk</b>	
<b>Nutrient transport risk</b>	<b>Specific risk factor</b>
Climate	Temperature, sunshine hours
Rainfall	Annual average rainfall, summer and winter rainfall
Artificially increased drainage	<b>Irrigation</b> – type of <b>irrigation</b> – including border dyke, rates and timing of application, <b>irrigation</b> efficiency
	Artificial surface and subsurface drainage – including mole and tile drains
Run-off from hard surfaces	Potential for accumulation of animal waste on <b>farm</b> infrastructure such as bridges, races and culverts
Soil water holding capacity	Soils with a high water holding capacity are able to keep nitrogen for longer in the plant root zone. <b>Farms</b> with soils that have a low water holding capacity will benefit from mitigations that disrupt the drainage of nitrogen through the soil profile.
Soil texture – soil type	Soils with a coarse texture (eg sand) will have greater soil drainage than soils that have a fine texture (eg clays) and so greater nitrogen leaching. Where possible effluent systems should be on finer textured soils.
Bypass flows	Water bypassing the soil matrix via preferential flow paths either overland or through the soil (eg stony river terraces)
Topography	Steep areas with northerly aspects are likely to have more runoff than shallow slopes with southerly aspects.
Geology	The hardness and depth of the underlying rocks influences the tendency for erosion and so loss of phosphorus.
Use of structural mitigations	Presence of, for example, riparian fencing, vegetated buffer strips, sediment traps, retention dams, denitrification paths, woodchip bioreactors, phosphate sorption and removal, artificial and enhanced wetlands.

## **D Amendment of a farm environment plan**

1. Unless otherwise required by the Wellington Regional Council in accordance with any conditions of any resource consent held in respect of the **property**, changes can be made to the **farm environment plan** without triggering the need for a consent review or review by a **farm environment plan** certifier provided:
  - (a) the purpose of the **farm environment plan** will continue to be achieved,

- (b) the change to the **farm environment plan** does not contravene any mandatory requirement of any resource consent held in respect of the **property**, or any requirement of the Plan that is not already authorised,
- (c) the nature of the change is documented in writing and made available to the Wellington Regional Council.

# 13 Maps

Maps contents	Map	Page
Outstanding water bodies (Schedules A1, A2, A3)	1	630
Ngā Taonga Nui a Kiwa (Schedule B)	2	631
Sites of significance to Ngā Hapū ō Ōtaki (Schedule C1)	3	632
Sites of significance to Te Ātiawa ki Whakarongotai (Schedule C2)	4	633
Sites of significance to Ngāti Toa Rangatira (Schedule C3)	5	634
Sites of significance to Taranaki Whānui ki Te Upoko o Te Ika (Schedule C4)	6	635
Sites of significance to Ngāti Kahungunu ki Wairarapa and Rangitāne o Wairarapa (Schedule C5)	7	636
Historic heritage structures (Schedule E1)	8	637
Historic heritage structures (Schedule E1) Wellington Harbour	9	638
Historic heritage wharves and boatsheds (Schedule E2)	10	639
Historic heritage navigation aids (Schedule E3)	11	640
Archaeological sites (Schedule E4)	12	641
Archaeological sites – Wellington Harbour (Schedule E4)	13	642
Archaeological sites – Kāpiti Island (Schedule E4)	14	643
Historic heritage freshwater sites (Schedule E5)	15	644
Historic heritage freshwater sites Orongorongo River area (Schedule E5)	16	645
Rivers and lakes with significant indigenous ecosystems: high macroinvertebrate community health (Schedule F1)	17	646
Rivers and lakes with significant indigenous ecosystems: habitat for indigenous threatened/at risk fish species (Schedule F1)	18	647
Rivers and lakes with significant indigenous ecosystems: habitat for six or more migratory indigenous fish species (Schedule F1)	19	648
Known rivers and parts of the coastal marine area with inanga spawning habitat (Schedule F1b)	20	649
Lakes with significant aquatic plant communities (Schedule F1c)	21	650
Significant habitats for indigenous birds in rivers (Schedule F2a)	22	651
Significant habitats for indigenous birds in lakes (Schedule F2b)	23	652
Significant habitats for indigenous birds in the coastal marine area (Schedule F2c)	24	653
Significant habitats for indigenous birds in the coastal marine area – Wellington Harbour (Schedule F2c)	25	654
Identified Natural Wetlands (Schedule F3)	26	655
Sites with significant indigenous biodiversity values in the coastal marine area (Schedule F4)	27	656
Significant primary contact recreation rivers and lakes (Schedule H1)	28	657
Modelled river classes – upper Wairarapa valley catchments (Table 3.4)	29	658
Modelled river classes – middle Wairarapa valley catchments (Table 3.4)	30	659

<b>Maps contents</b>	<b>Map</b>	<b>Page</b>
Modelled river classes – Lake Wairarapa and lower valley catchments (Table 3.4)	31	660
Modelled river classes – Wellington, Hutt Valley, Porirua and Wainuiomata catchments (Table 3.4)	32	661
Modelled river classes – Kāpiti Coast catchments (Table 3.4)	33	662
Important trout fishery rivers (Schedule I – part A)	34	663
Important trout spawning waters (Schedule I – part B)	35	664
Significant geological features in the coastal marine area (Schedule J)	36	665
Identified surf breaks (Schedule K)	37	666
Masterton urban airshed	38	667
Surface water community drinking water supply protection areas (incorporates Schedule M1)	39	668
Groundwater community drinking water supply protection areas – Wairarapa (incorporates Schedule M2)	40	669
Groundwater community drinking water supply protection areas – Hutt Valley (incorporates Schedule M2)	41	670
Groundwater community drinking water supply protection areas – Kāpiti Coast (incorporates Schedule M2)	42	671
Groundwater community drinking water supply protection areas – Kāpiti Coast (incorporates Schedule M2)	43	672
Water races in the Wairarapa	44	673
Lowland areas for Category 2 surface water bodies	45	674
Hutt Valley Aquifer Protection Zone in Wellington Harbour (Port Nicholson)	46	675
Boundary between Hutt Valley Aquifer Protection Zone and Commercial Port Areas in Wellington Harbour (Port Nicholson)	47	676
Hutt Valley Aquifer Protection Zone	48	677
Hutt Valley Aquifer Protection Zone in Hutt Valley	49	678
Boatshed Management Areas	50	679
Commercial Port Area, Lambton Harbour Area and Port noise control line – Lambton Harbour	51	680
Commercial Port Area and Port noise control line – Miramar and Burnham Wharves	52	681
Commercial Port Area – Seaview Wharf	53	682
Titahi Bay fossil forest	54	683
Mooring areas Wellington Harbour (Port Nicholson) – Evans Bay	55	684
Mooring areas Wellington Harbour (Port Nicholson) – Whiorau/Lowry Bay	56	685
Mooring areas Island Bay	57	686
Mooring areas Te Awarua-o-Porirua Harbour – Onepoto	58	687
Mooring areas Te Awarua-o-Porirua Harbour – Mana	59	688
Mooring areas Te Awarua-o-Porirua Harbour – Pauatahanui Arm	60	689
Coastal marine area and river mouth boundaries	61-67	690
Navigation protection areas in Wellington Harbour (Port Nicholson)	68	697

<b>Maps contents</b>	<b>Map</b>	<b>Page</b>
Wellington International Airport height restrictions	69	698
Kāpiti Coast Airport approach gradients	70	699
Cook Strait cable protection zone	71	700
Seabed delineation	72	701
Seabed delineation in Lambton Harbour	73	702
Castlepoint Basin Lagoon Permitted Driving Area	74	703
Whitebait Migration Zone	75	704
Schedule Y: Priority Catchments	76	705

# Outstanding water bodies (Schedules A1, A2, A3)

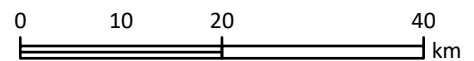


## Map 1



### Outstanding Waterbodies

- Lake
- River
- Wetland
- Region boundary line
- State Highway



1:750,000




This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

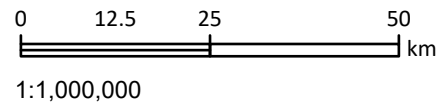
# Ngā Taonga Nui a Kiwa

## Schedule B

### Map 2



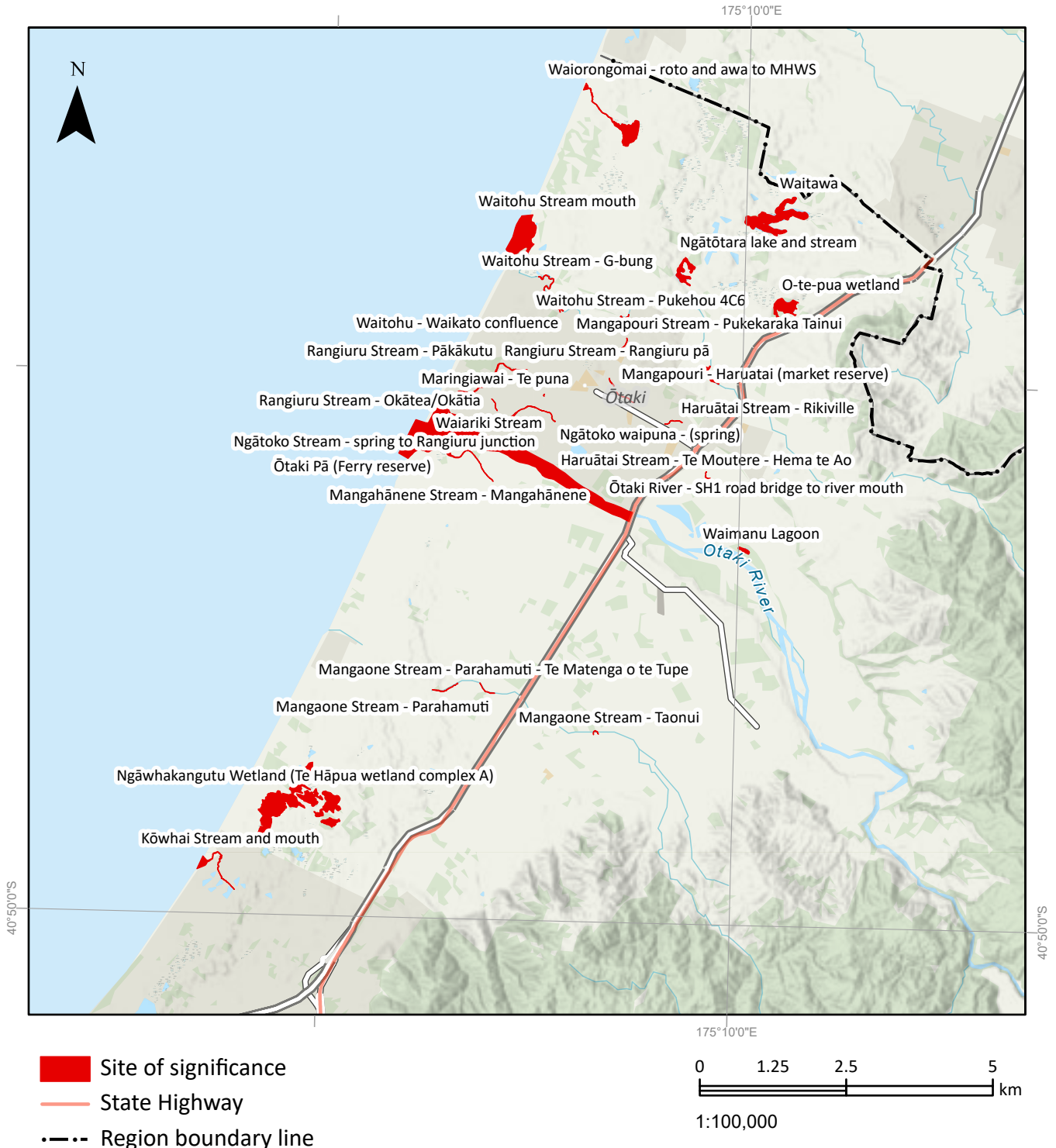
-  Ngā Taonga Nui a Kiwa
-  State Highway
-  Region boundary line



This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Sites of significance to Ngā Hapū o Ōtaki (Schedule C1)

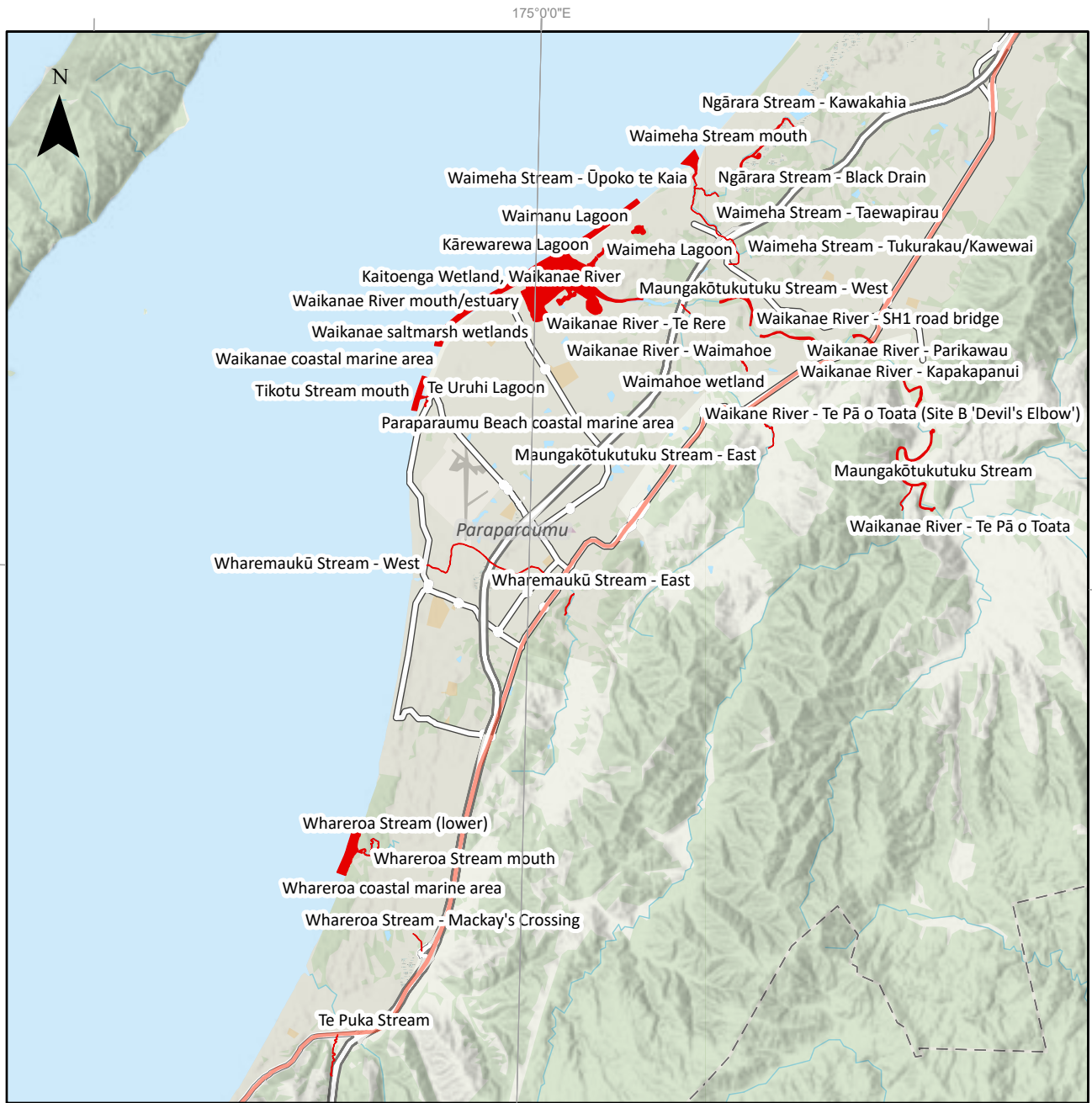
## Map 3






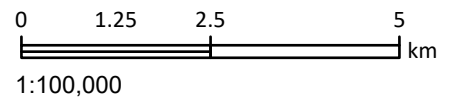
This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Sites of significance to Te Ātiawa ki Whakarongotai (Schedule C2)

## Map 4



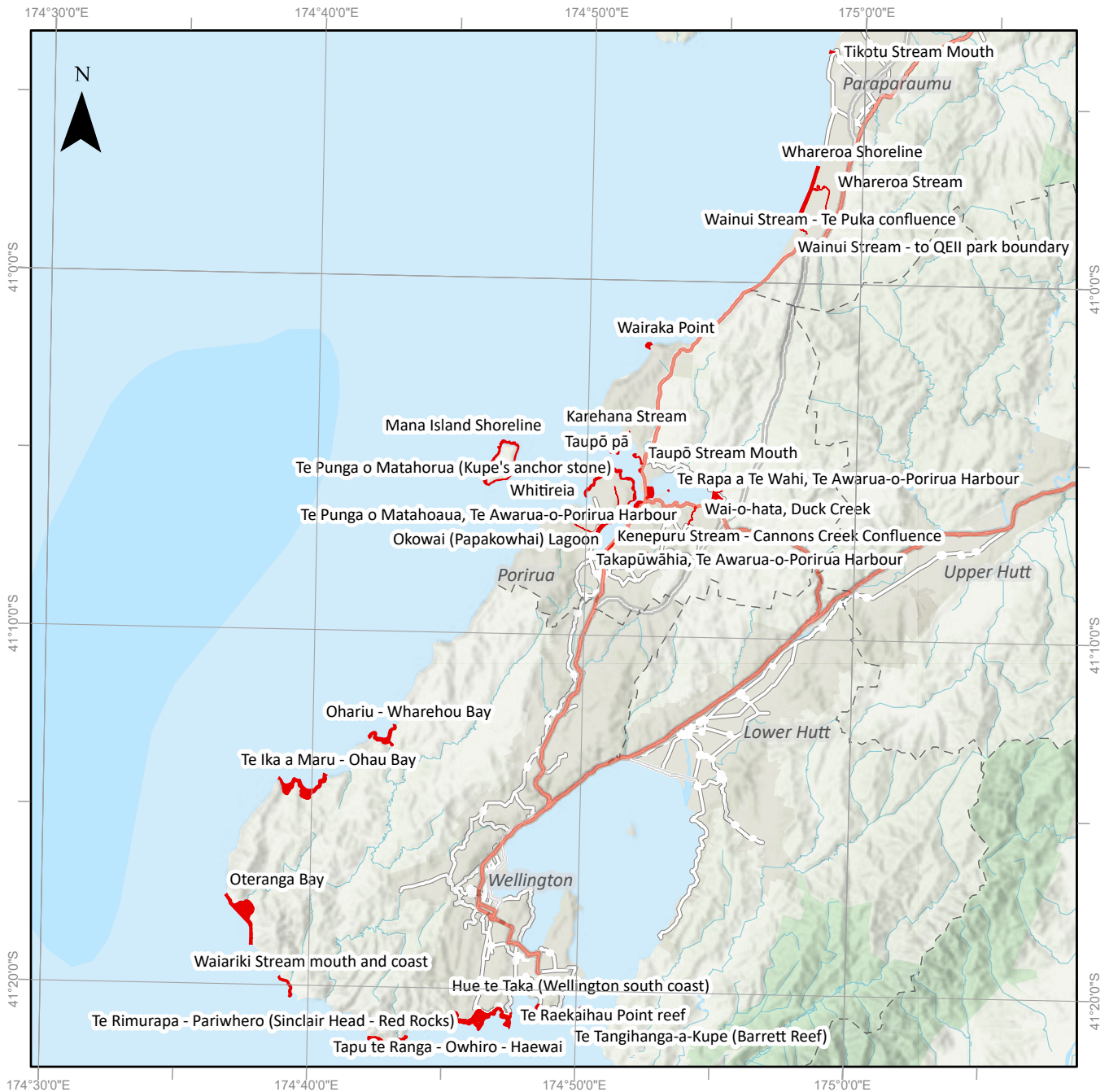
-  Site of significance
-  State Highway
-  Region boundary line






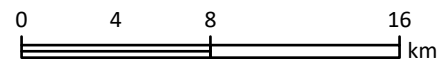
This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Sites of significance to Ngāti Toa Rangatira (Schedule C3)

## Map 5



-  Site of significance
-  State Highway
-  Region boundary line



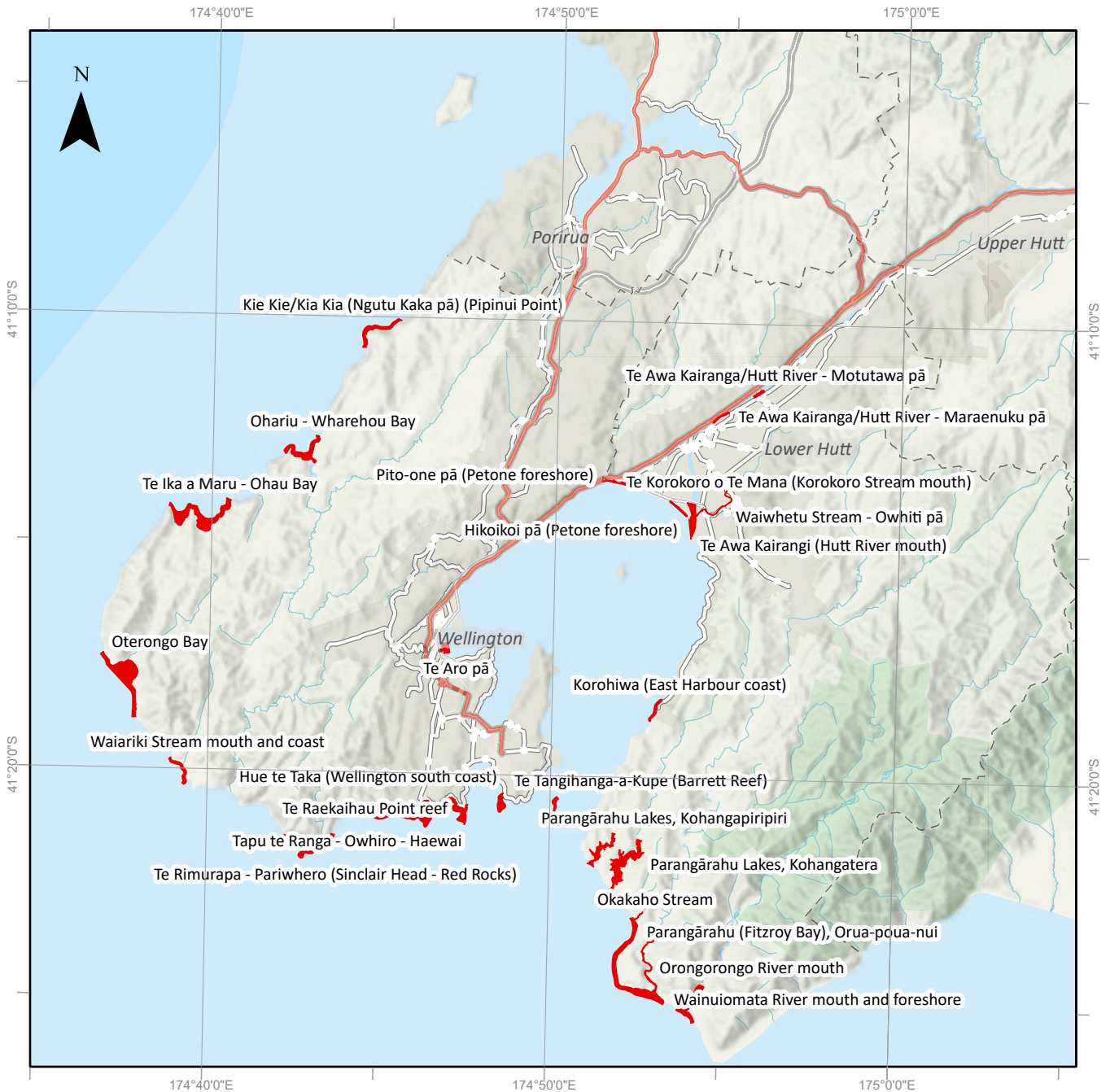
1:320,000

This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

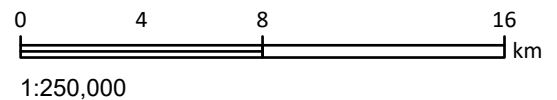
# Sites of significance to Taranaki Whānui ki Te Upoko o Te Ika (Schedule C4)



## Map 6

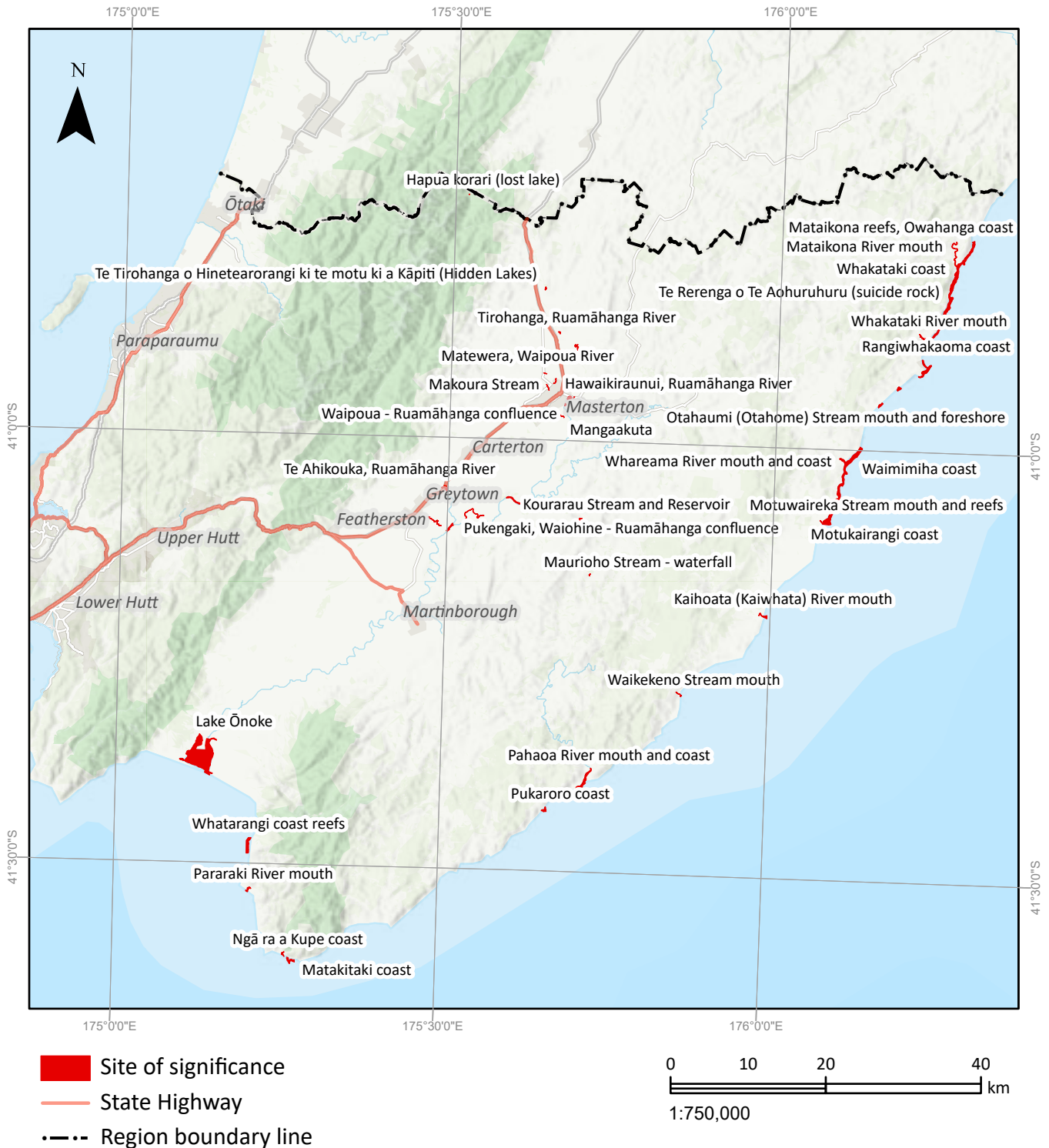


- Site of significance
- State Highway
- Region boundary line



This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

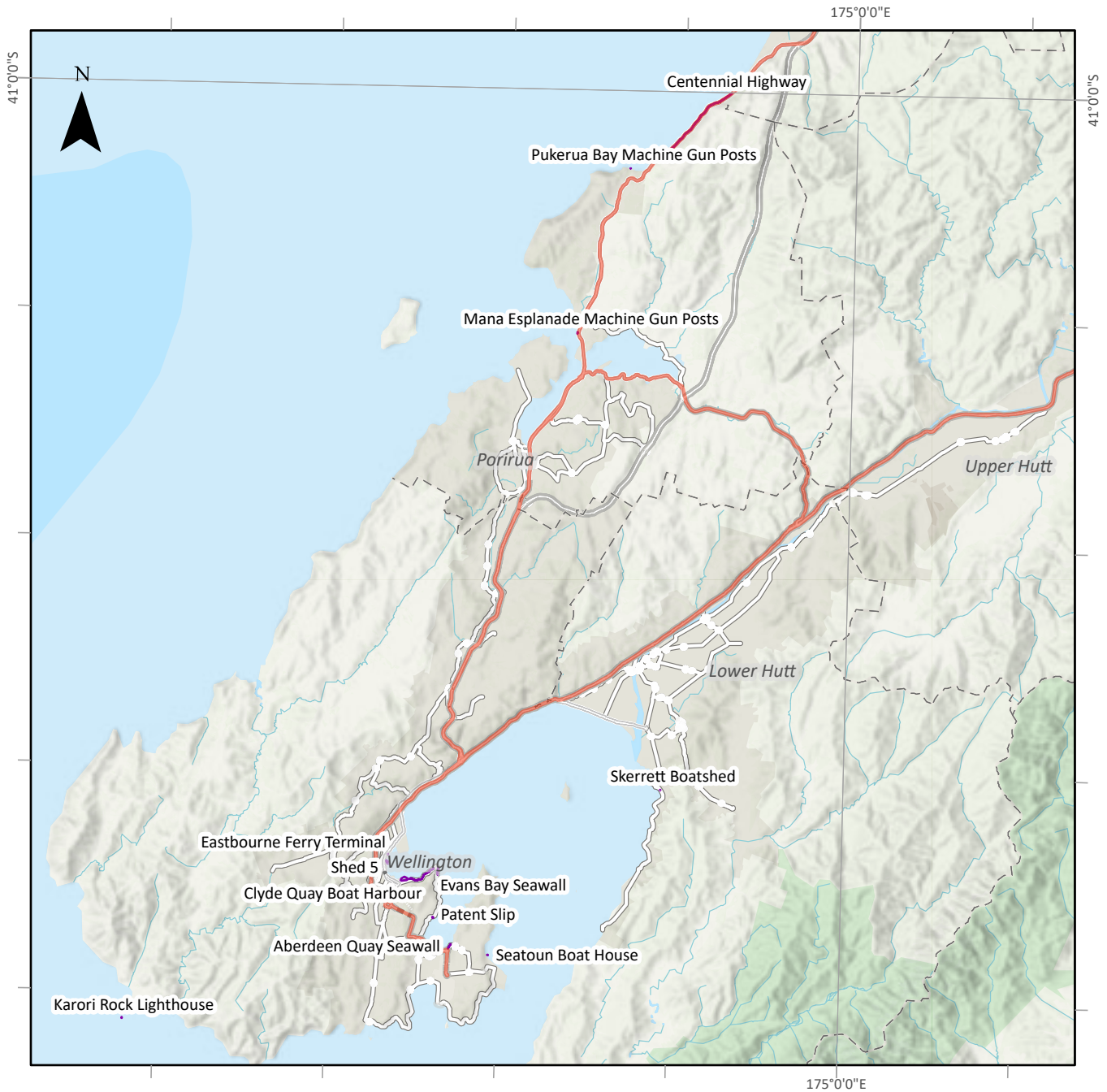
# Sites of significance to Ngāti Kahungunu ki Wairarapa and Rangitāne o Wairarapa (Schedule C5) Map 7






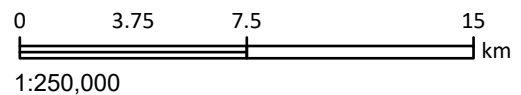
This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Historic heritage structures (Schedule E1)

Map 8



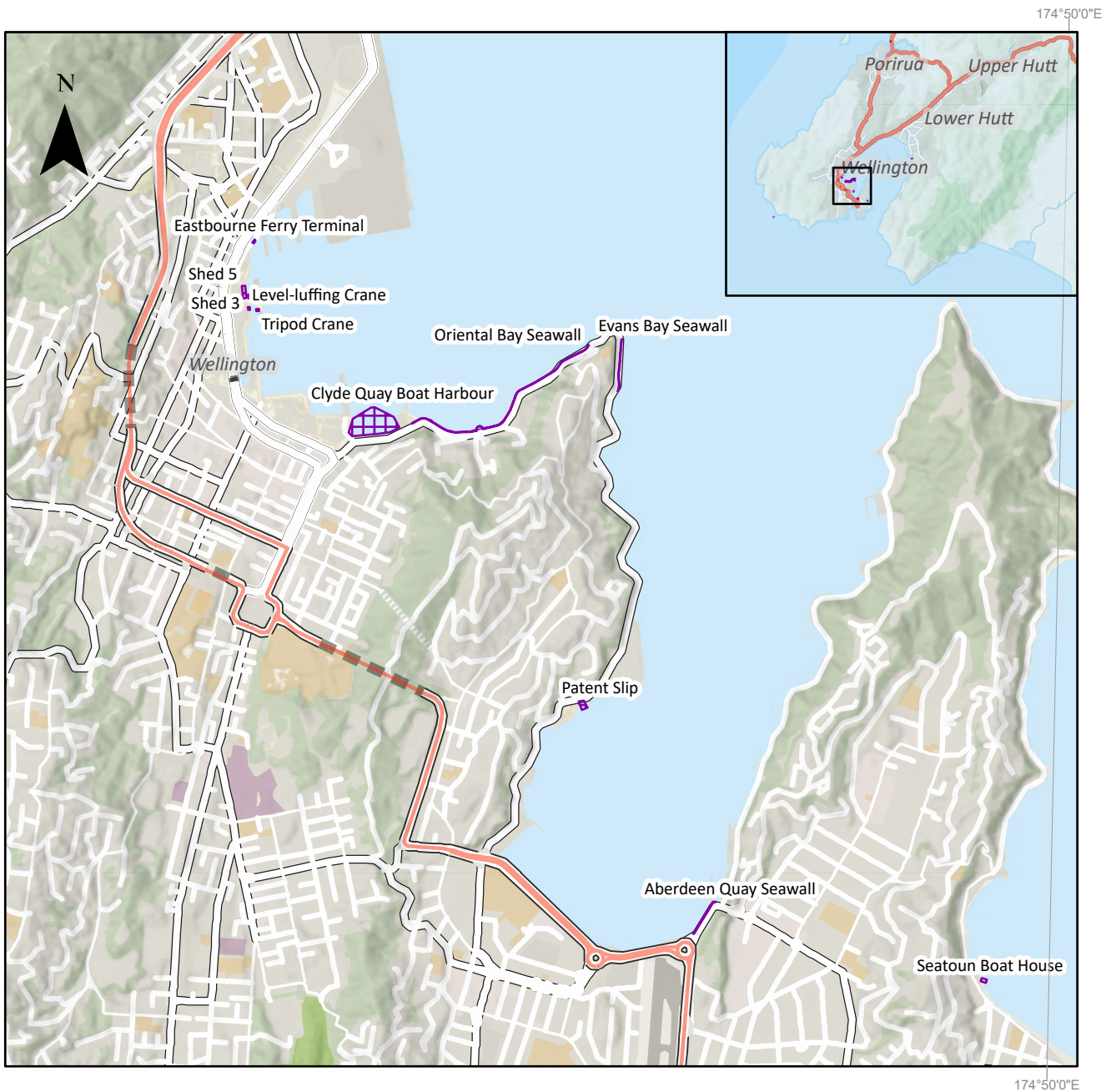
-  Historic structure
-  State Highway
-  Region boundary line






This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Historic heritage structures (Schedule E1) Wellington Harbour

## Map 9



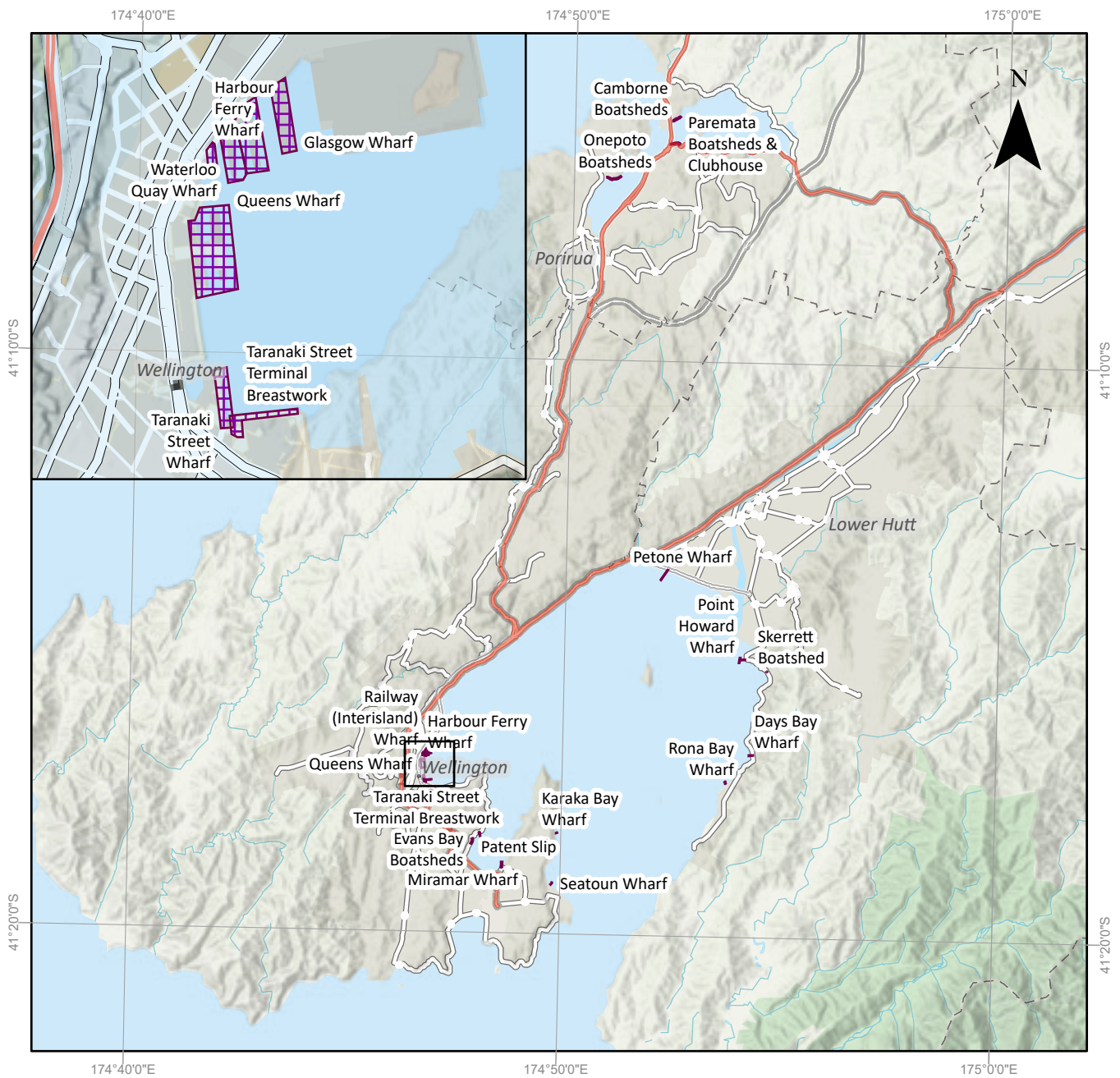
-  Historic structure
-  State Highway
-  Region boundary line




0 500 1,000 2,000  
metres  
1:35,000

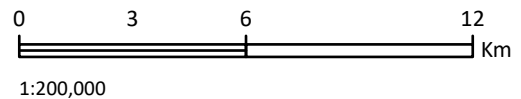
This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Historic heritage wharves and boatsheds (Schedule E2)

## Map 10



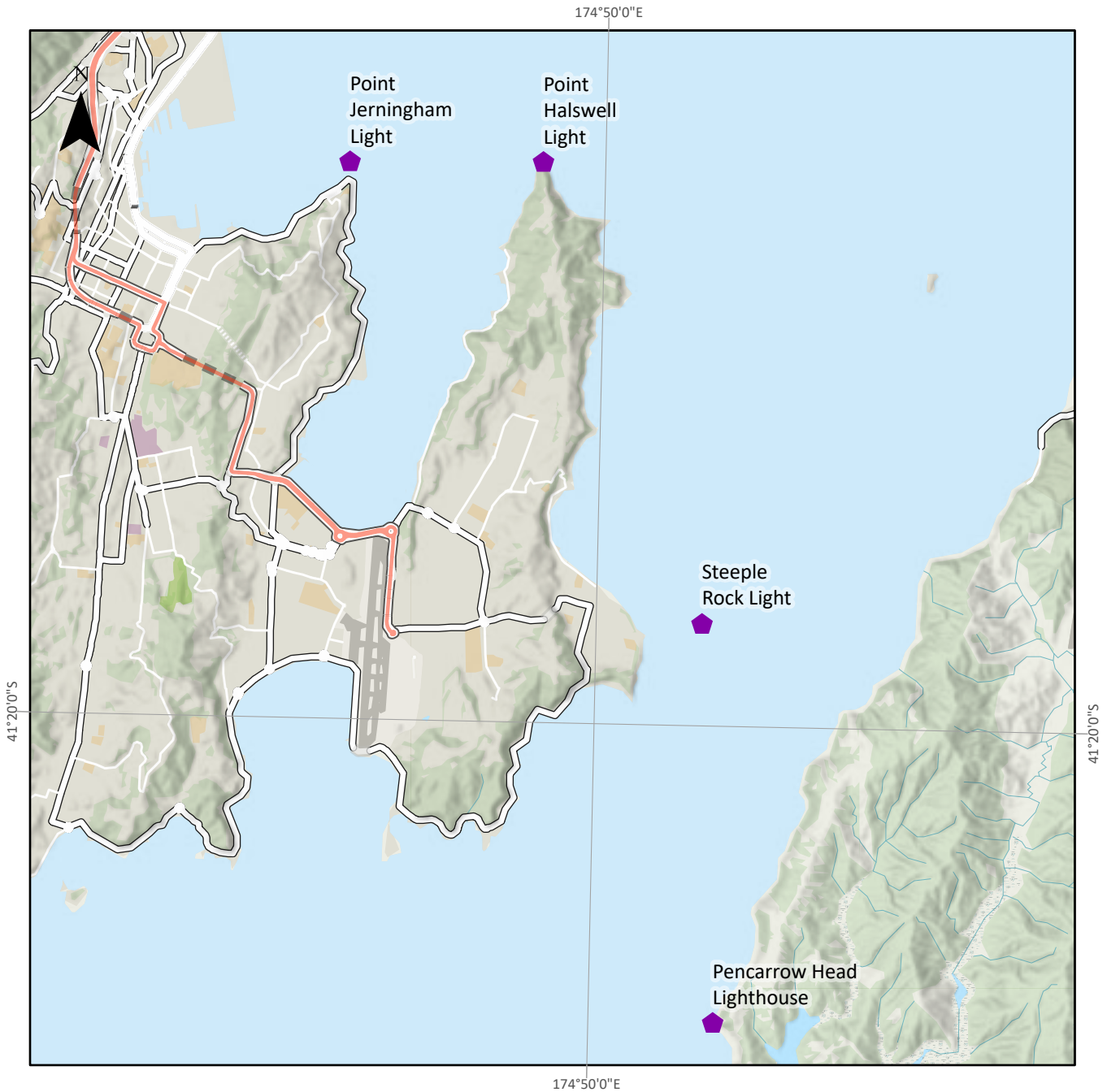
-  Significant structure - wharves and boat sheds
-  State Highway
-  Region boundary line






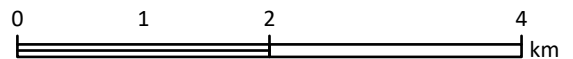
This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Historic heritage navigation aids (Schedule E3)

## Map 11



-  Significant structure - navigation aid
-  State Highway
-  Region boundary line

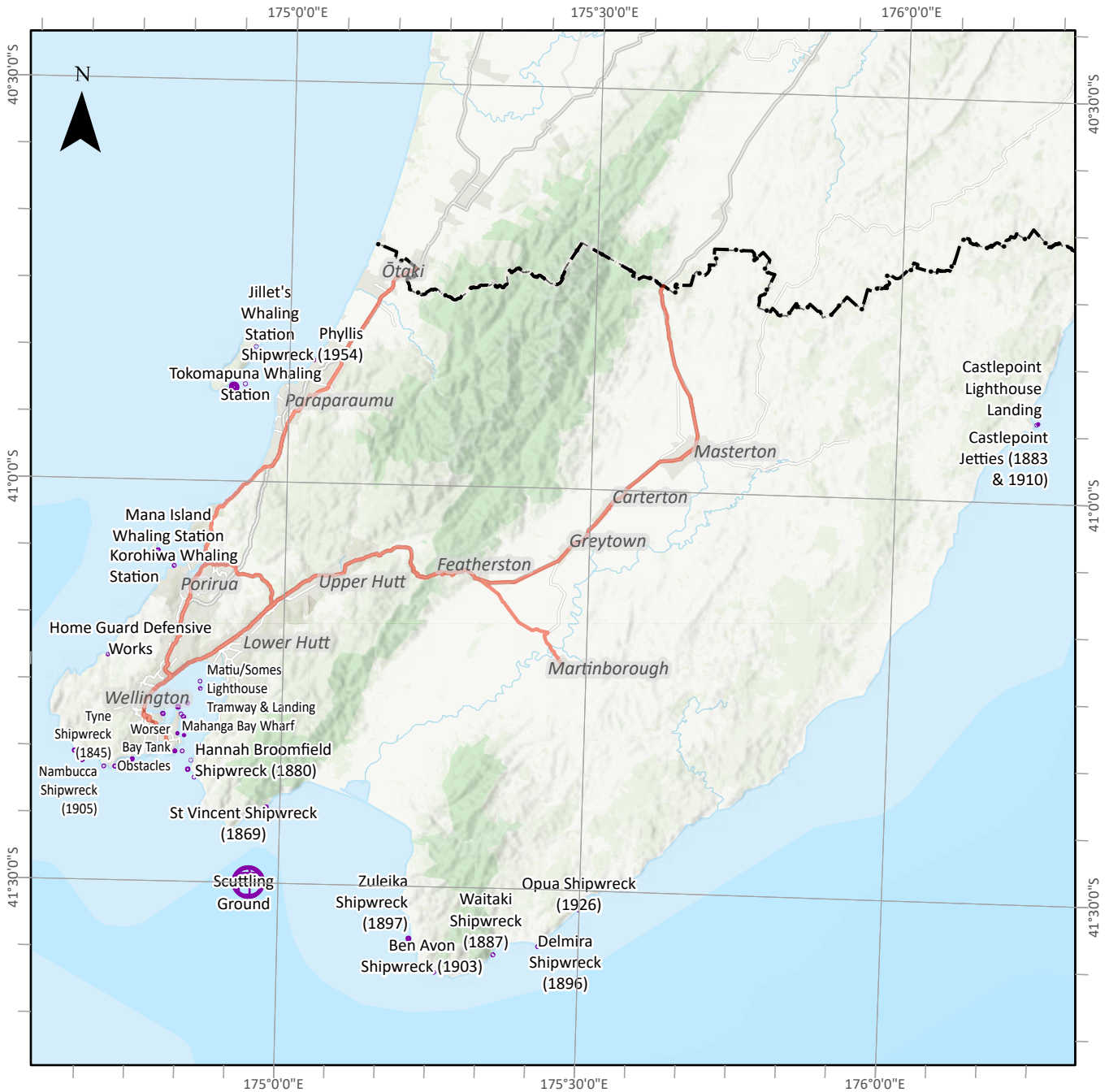





1:60,000

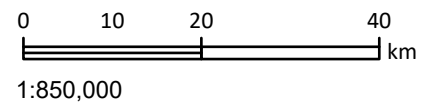
This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Archaeological sites (Schedule E4)

## Map 12



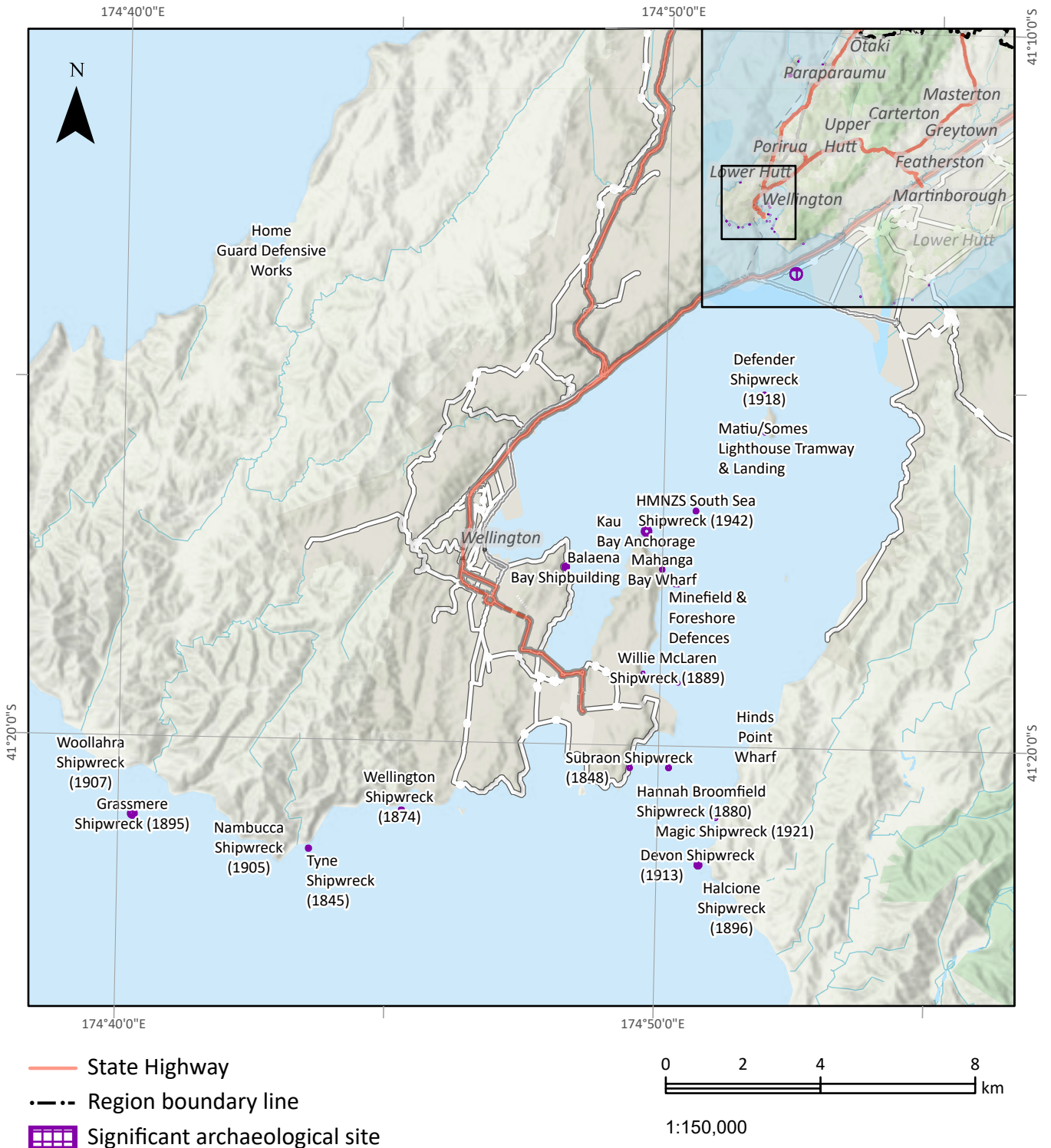
-  Significant archaeological site
-  State Highway
-  Region boundary line



This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Archaeological sites - Wellington Harbour (Schedule E4)

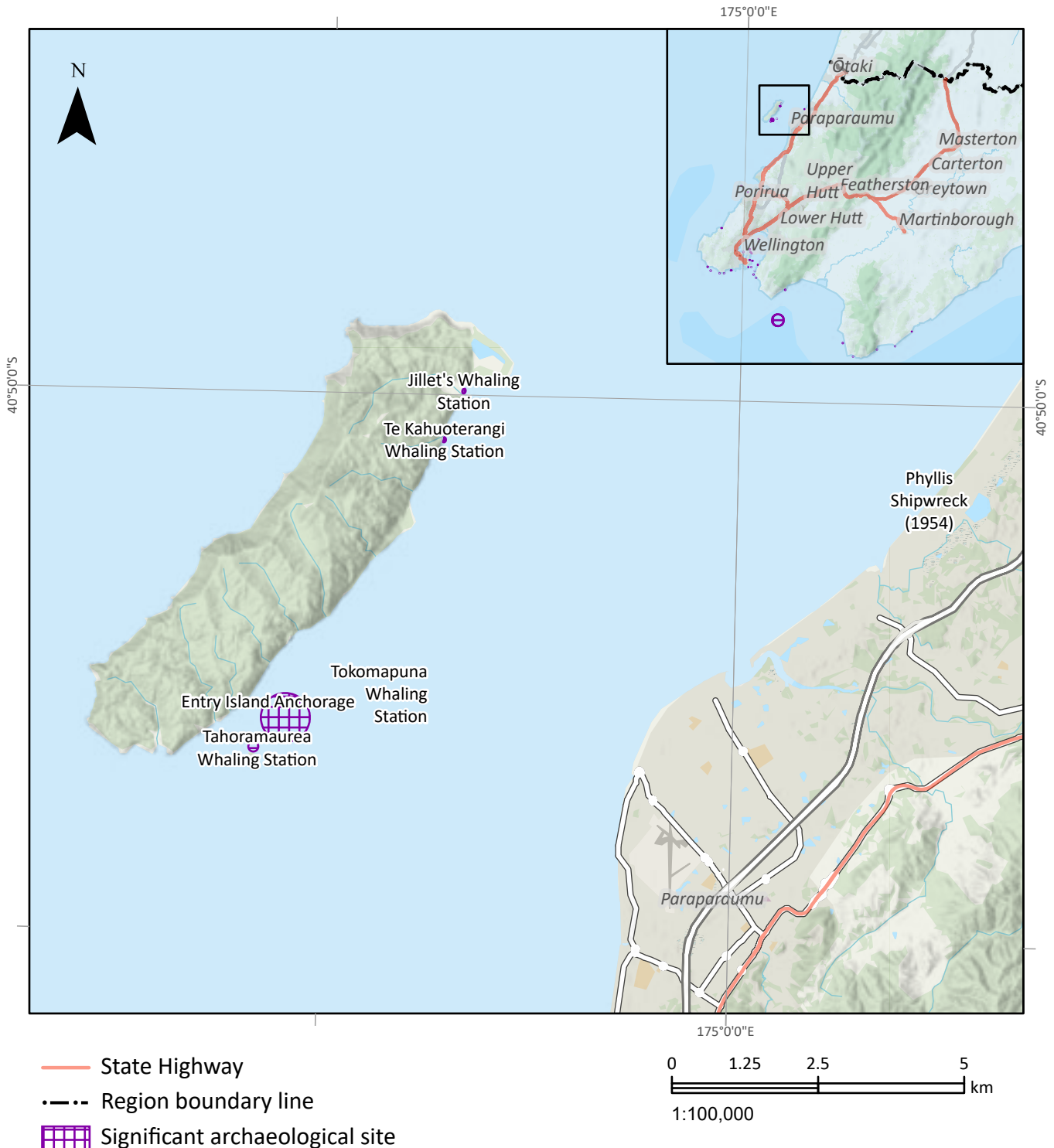
## Map 13



This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Archaeological sites - Kāpiti Island (Schedule E4)

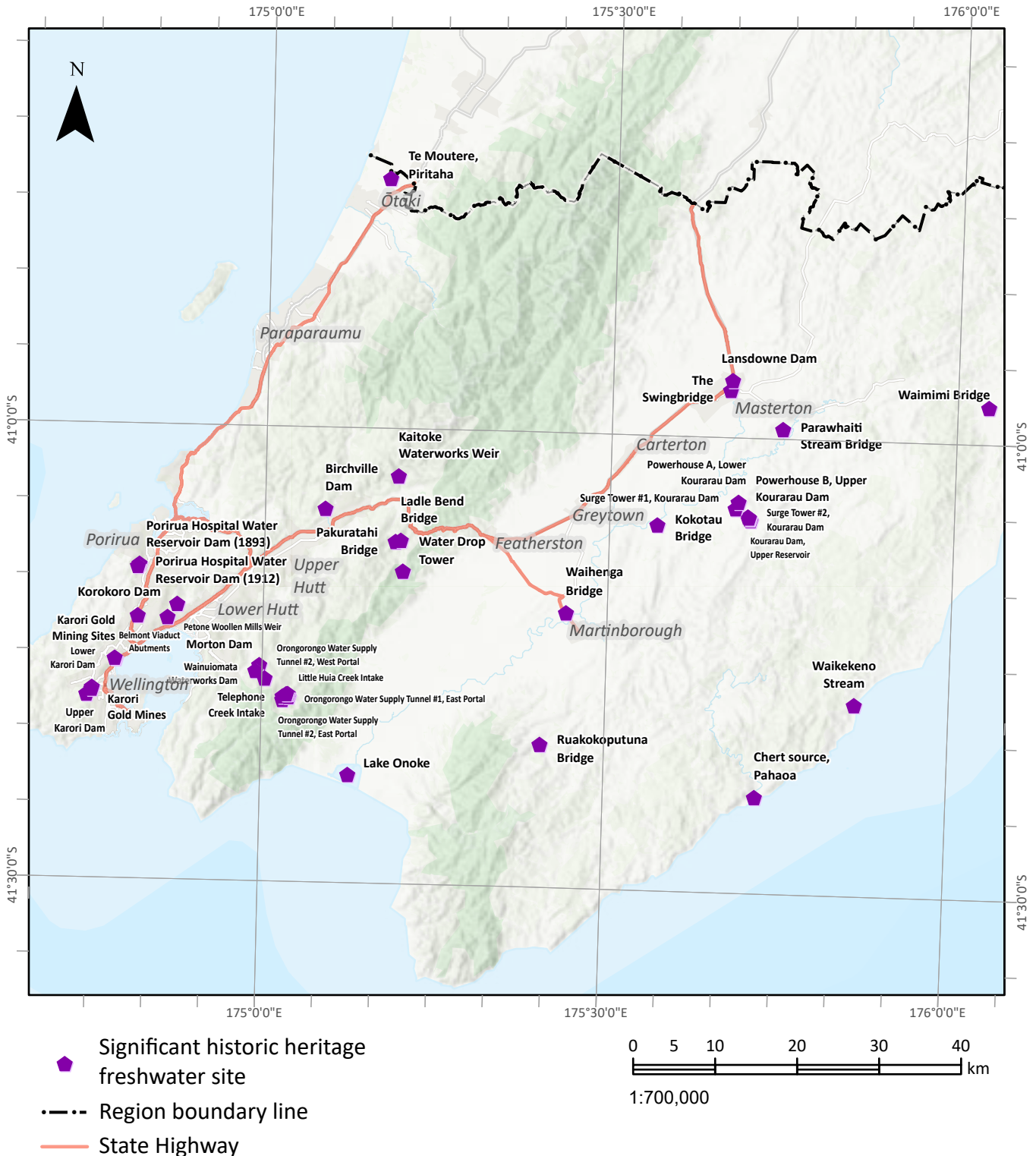
Map 14



This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Historic heritage freshwater sites (Schedule E5)

## Map 15



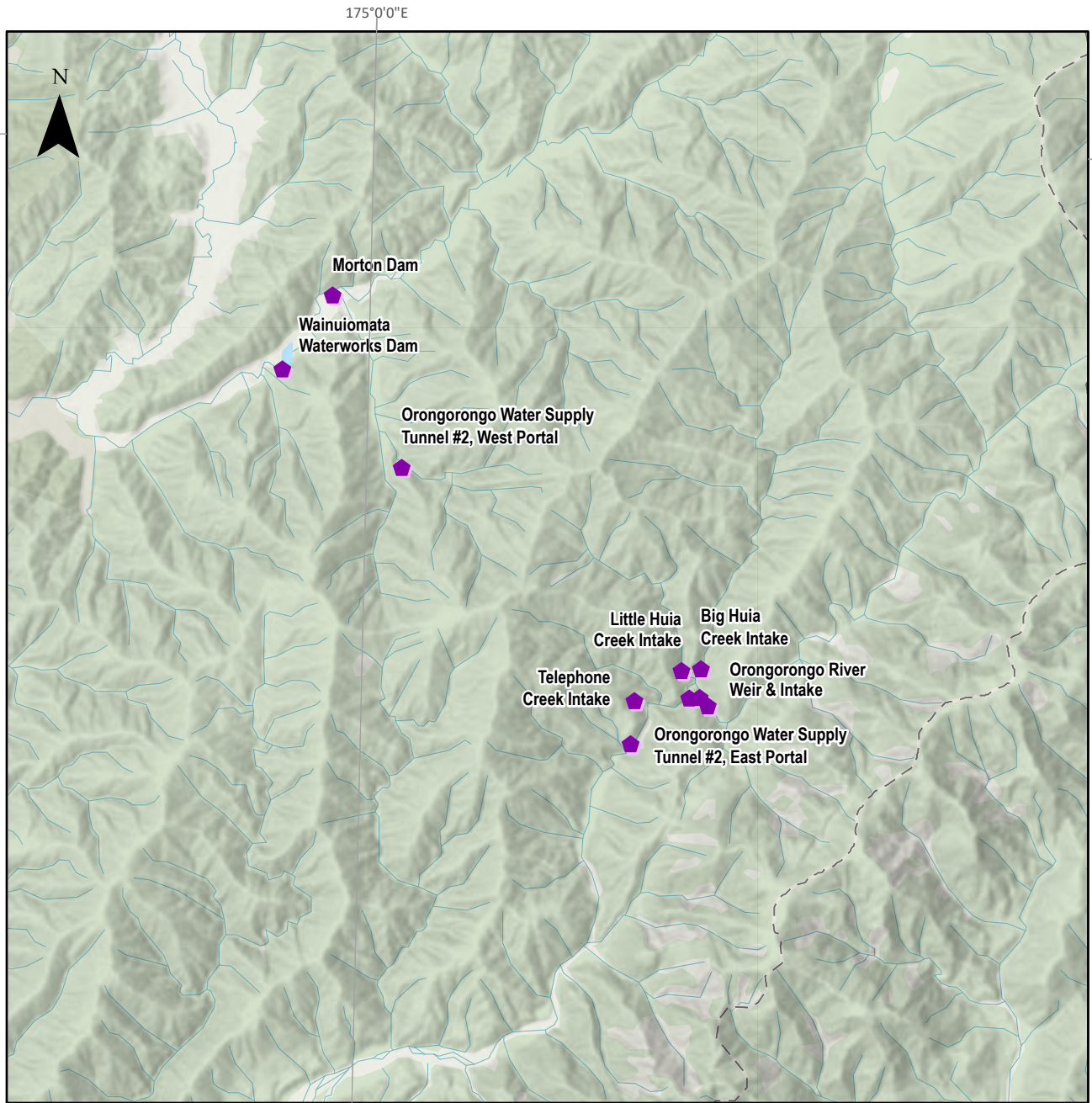
This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.




# Historic heritage freshwater sites

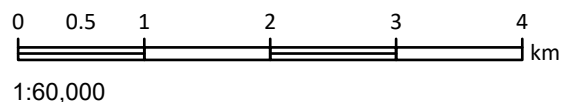
## Orongorongo River area

### (Schedule E5)

Map 16



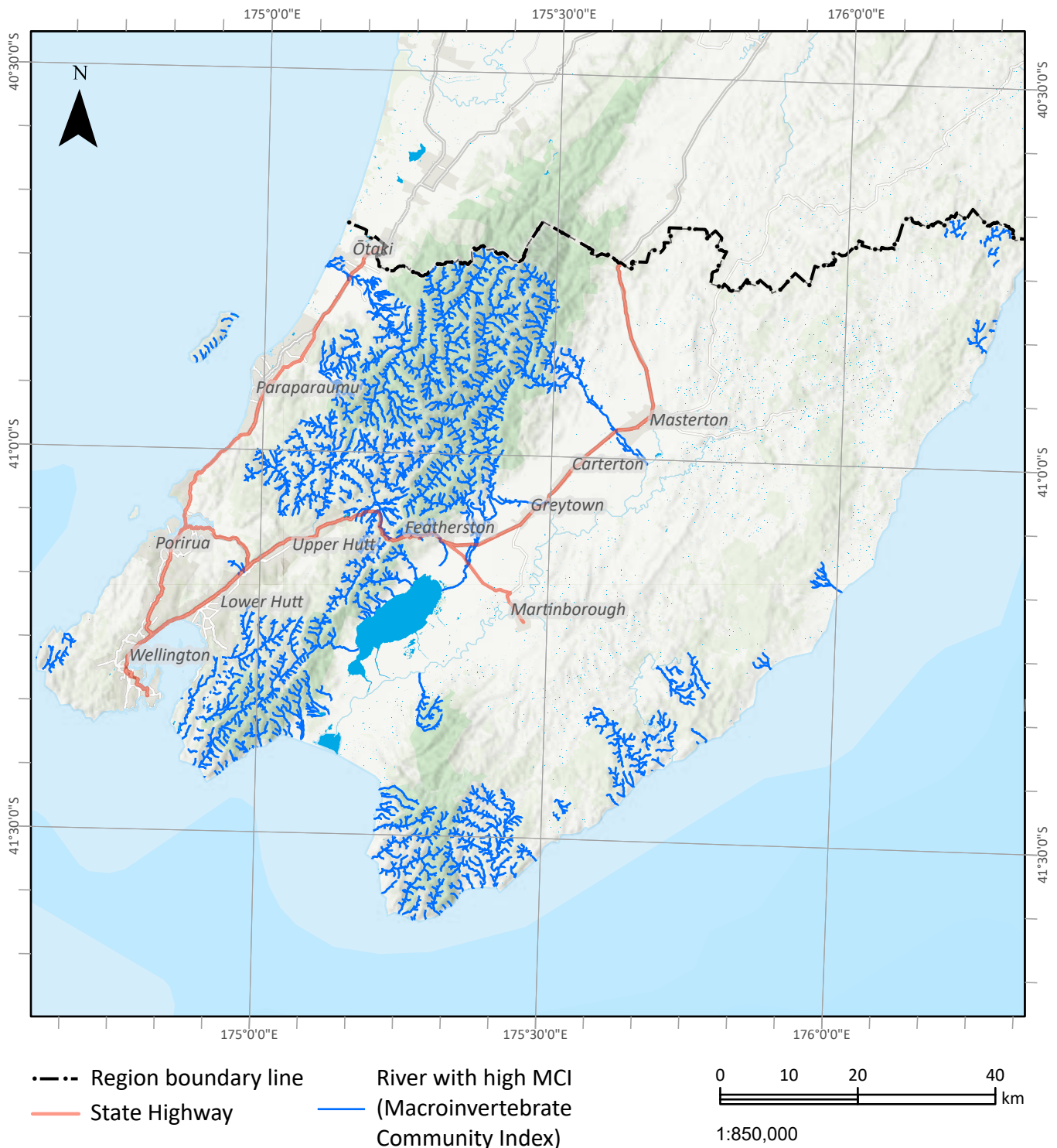
-  Significant historic heritage freshwater site
-  Region boundary line
-  State Highway



This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Rivers and lakes with significant indigenous ecosystems: high macroinvertebrate community health (Schedule F1)

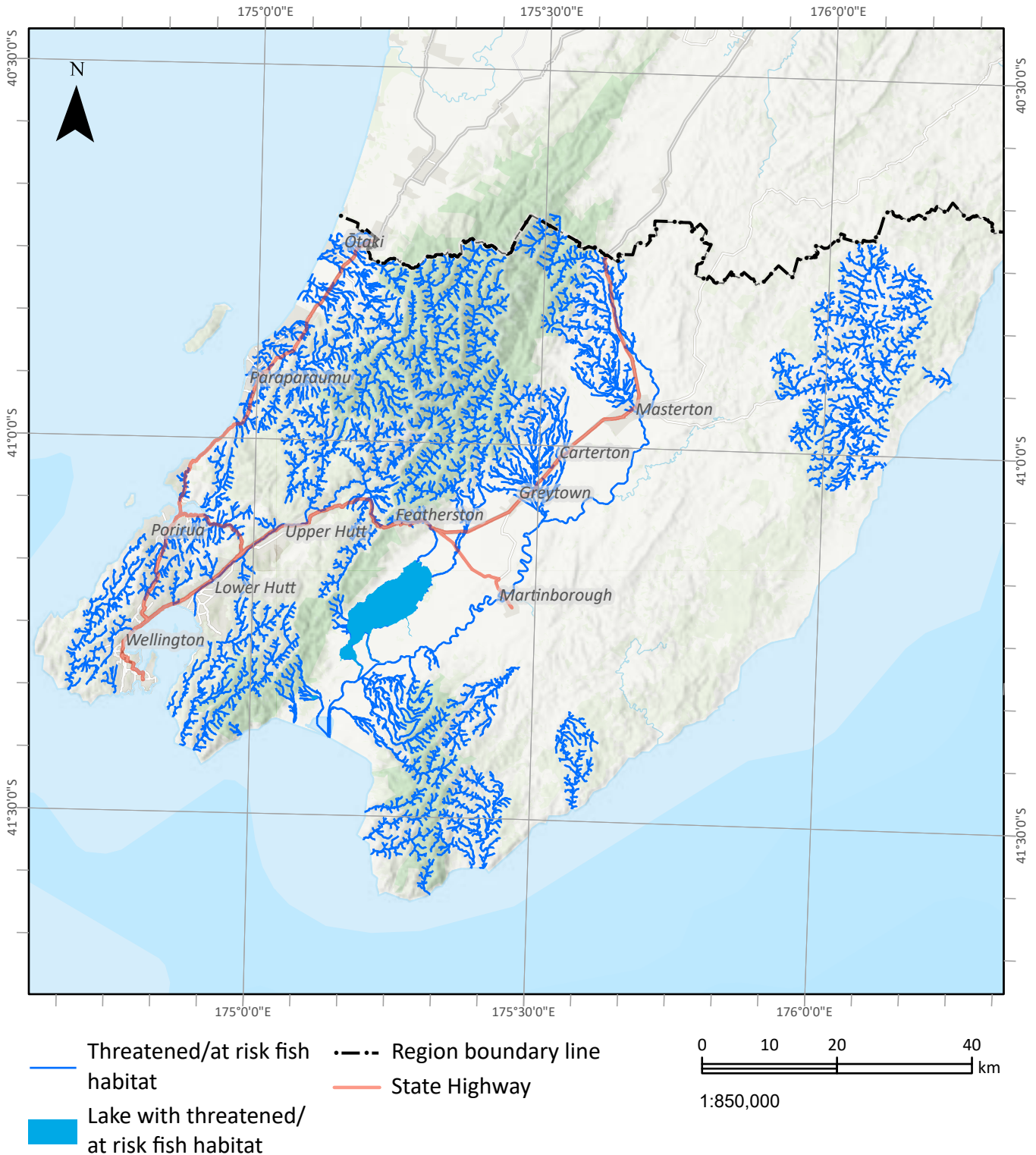
Map 17



This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Rivers and lakes with significant indigenous ecosystems: habitat for indigenous threatened/ at risk fish species (Schedule F1)

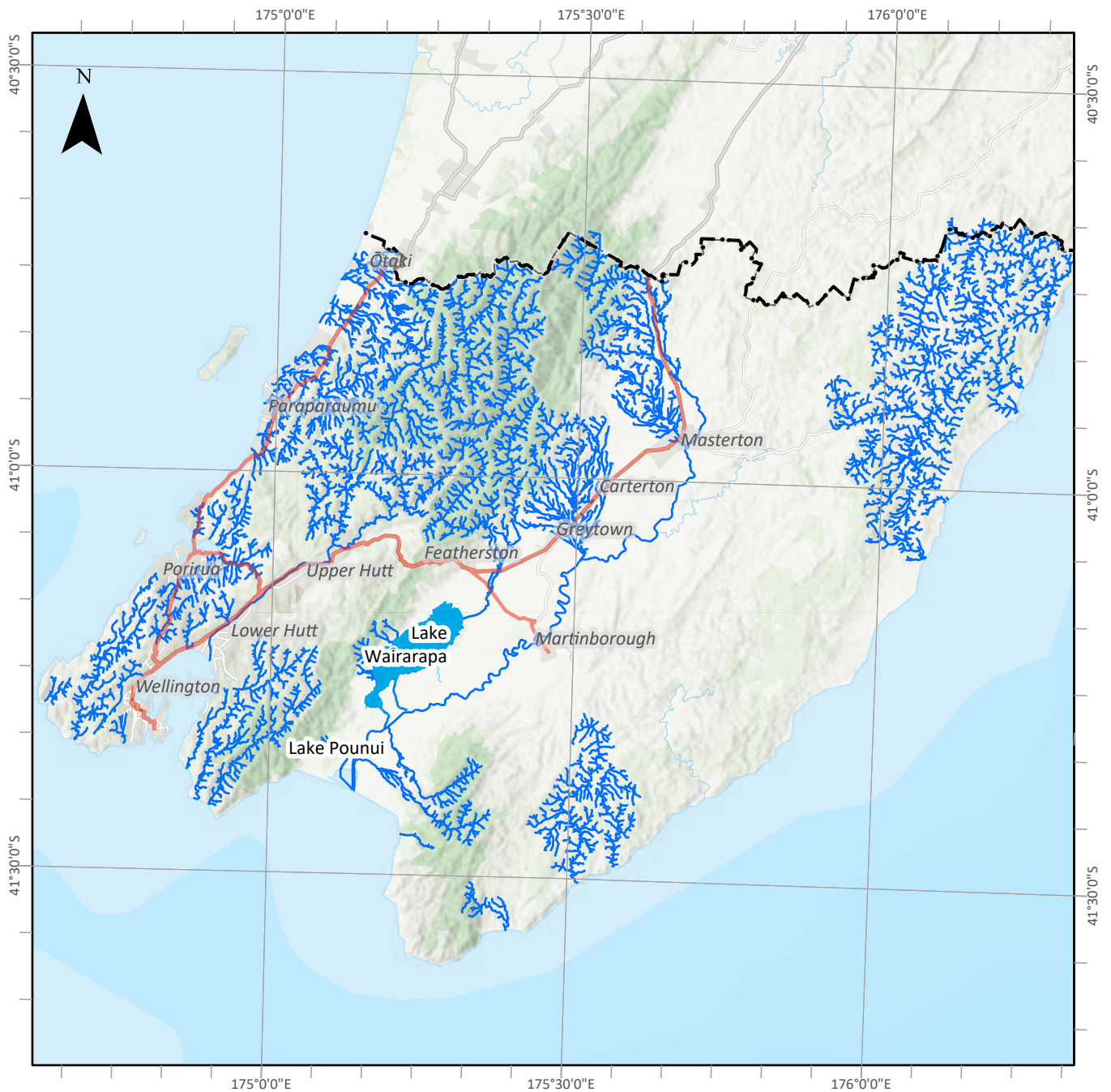
Map 18



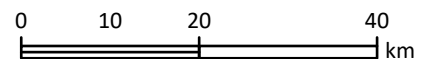
This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Rivers and lakes with significant indigenous ecosystems: habitat for six or more migratory indigenous fish species (Schedule F1)

Map 19



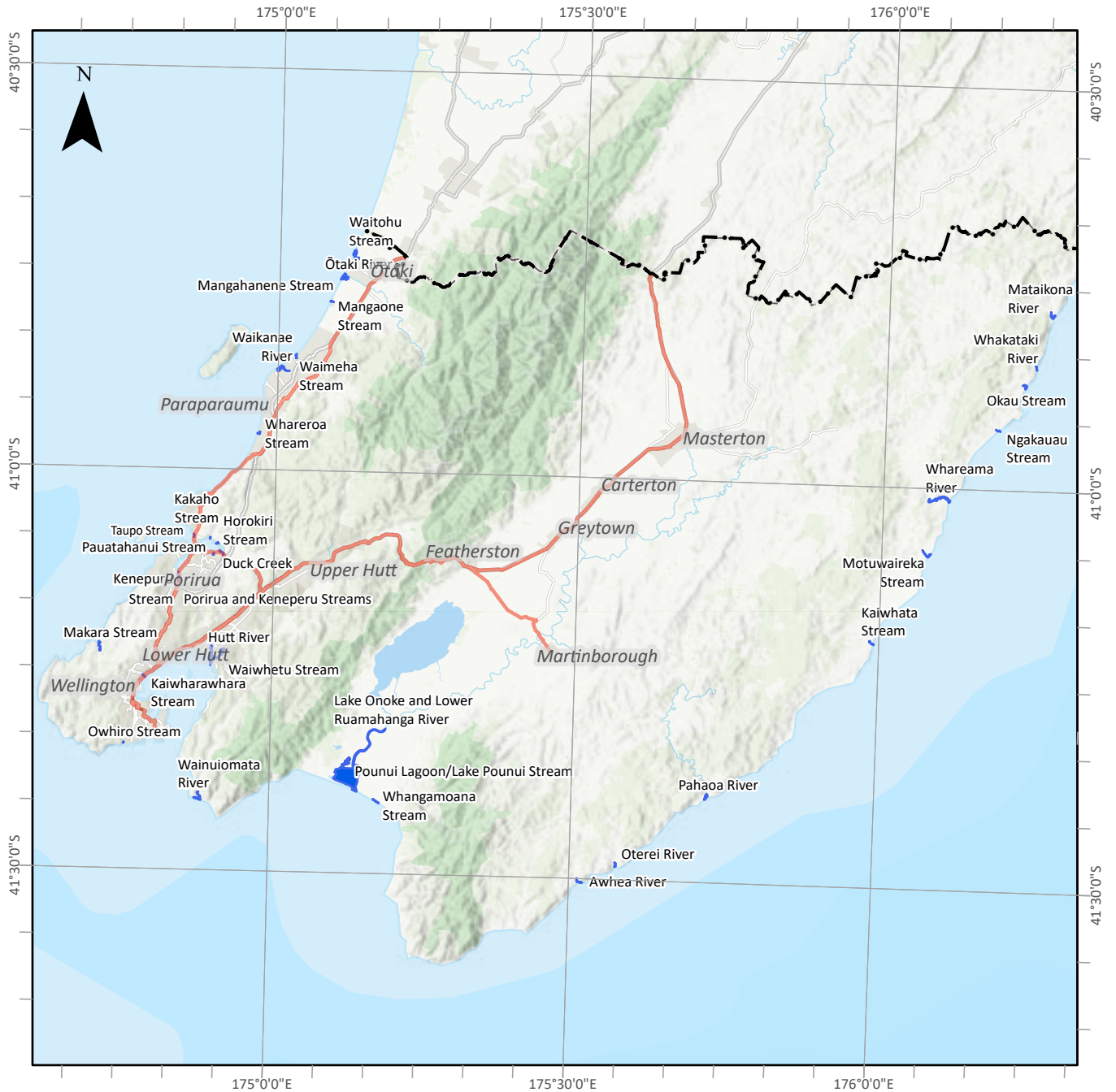
- Habitat of 6 or more migratory fish species
- Lake with habitat of 6 or more migratory fish species
- Region boundary line
- State Highway






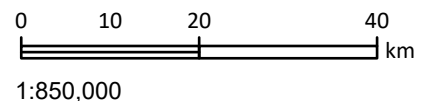
1:850,000

This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Known rivers and parts of the coastal marine area with inanga spawning habitat (Schedule F1b) Map 20



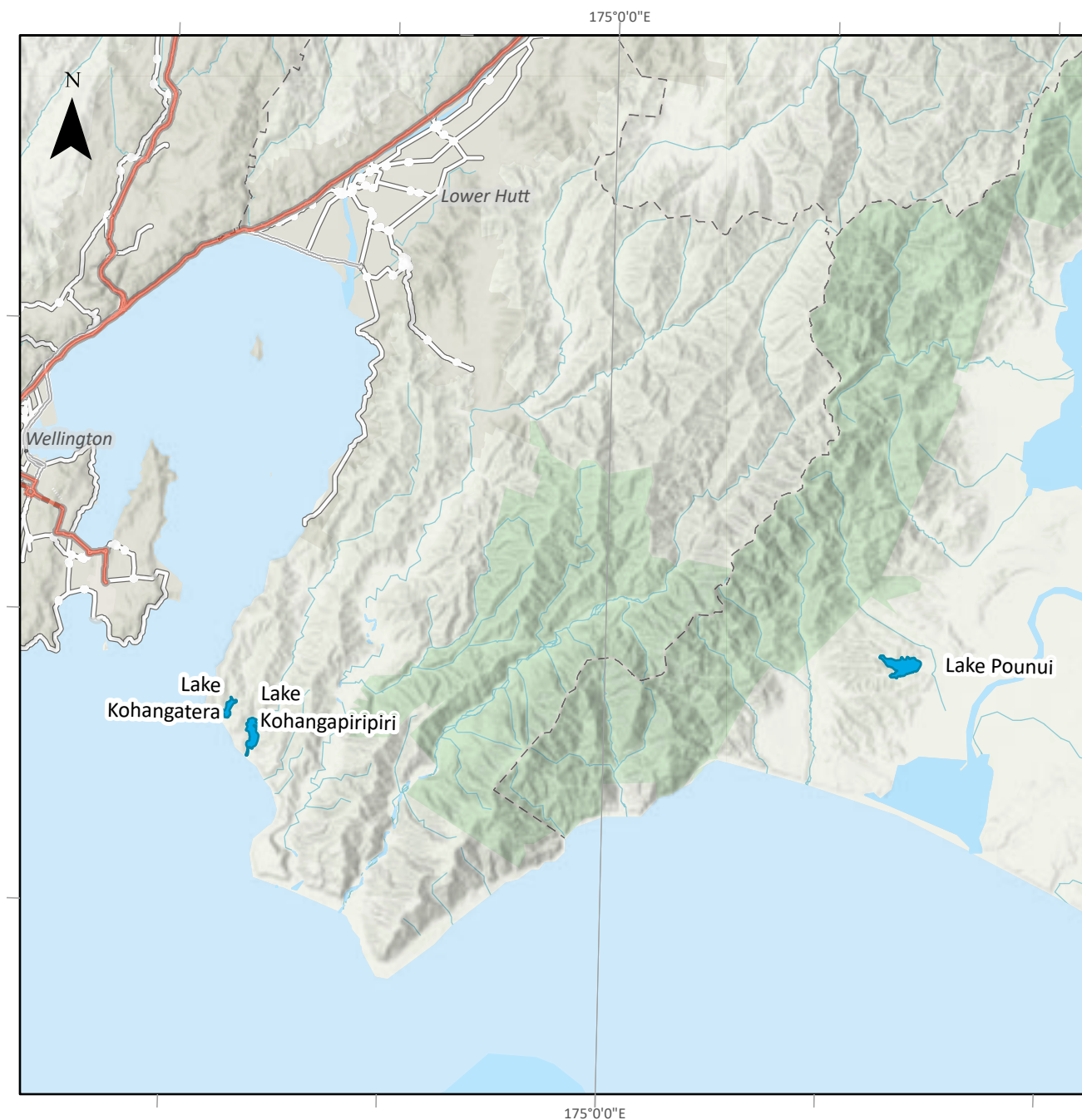
-  Inanga spawning site
-  Region boundary line
-  State Highway






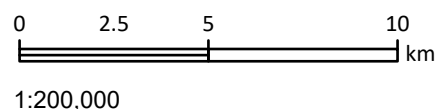
This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Lakes with significant aquatic plant communities (Schedule F1c)

## Map 21



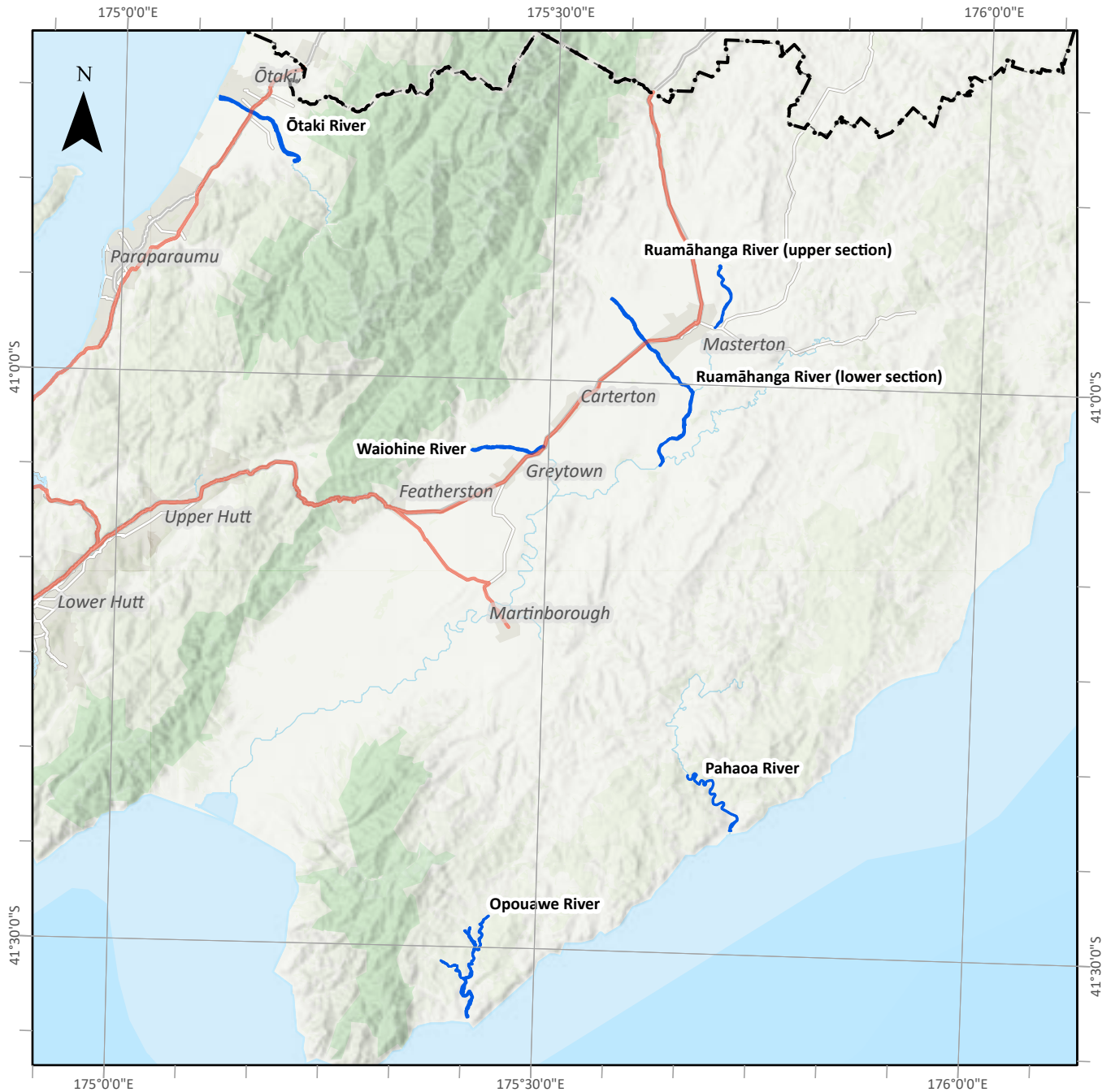
-  Lakes with significant aquatic plant communities
-  Region boundary line
-  State Highway



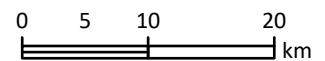
This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.

# Significant habitats for indigenous birds in rivers (Schedule F2a)

## Map 22



- Significant river habitat for indigenous birds
- Region boundary line
- State Highway



1:600,000

This version of the map is not complete. The version of this map available online through the online web map viewer shows the complete, detailed information on a GIS overlay that is not shown on this hard copy. The online version is available on the Council's website at <https://mapping.gw.govt.nz/gwrc/> (select theme Natural Resources Plan) and can be accessed from the Council offices or public library.