Coastal Fact sheet

Removing mangrove seedlings

Introduction

This fact sheet provides basic information for anyone wishing to remove mangrove seedlings within the Auckland region.

It explains the Coastal Plan's **permitted activity** rule for mangrove seedling removal, clarifies when a resource consent is required and provides information on how to remove mangrove seedlings responsibly.

Background

Mangroves play an important role in the ecosystems of our estuaries and provide a habitat for a range of animals and other plants. They also help with erosion control and shoreline protection by slowing the flow of water and reducing the impact of waves.

In recent years mangroves have spread rapidly in some areas. This is mainly due to the build-up of sediment being carried into estuaries and harbours from past and present land disturbance activities, particularly from bush or vegetation clearance and earthworks. The spread of mangroves can affect people's access, use and enjoyment of the coast.

In response to these issues the Auckland Regional Council has recently changed the policies and rules of the Auckland Regional Plan: Coastal (Coastal Plan) to provide for the management of mangroves.

The Coastal Plan provides the policy and rule framework for the management of the coast under the Resource Management Act. Chapter 16 of the plan has recently been changed so that it now specifically provides a balanced framework for the management of mangroves. You can access the Coastal Plan text and maps on the Auckland Regional Council website at **www.arc.govt.nz/coastalplan** or at your local library.

A new rule, (Rule 16.5.3) enables people to control the spread of mangroves by allowing the hand removal of mangrove seedlings outside particularly ecologically sensitive areas.

Auckland Regional Council
TE RAUHĪTANGA TAIAO

09 366 2000 www.arc.govt.nz

Mangrove seedling removal that can be undertaken as a permitted activity

A *mangrove seedling* is defined in the Coastal Plan as a mangrove that is no more than 60cm (0.6m) tall, that has a single supple stem, and that shows no reproductive capability i.e. has no propagules (seed pods) or flowers.

Rule 16.5.3 of the Coastal Plan provides for mangrove seedling removal as a permitted activity **subject to compliance with conditions (a) to (i) of the rule** (see over), and which means seedling removal can be undertaken without a resource consent.

Where can mangrove seedling removal be undertaken as a permitted activity?

Mangrove seedling removal (subject to the conditions in Rule 16.5.3) can be undertaken as a permitted activity in any part of Auckland's Coastal Marine Area (the area below Mean High Water Springs), *unless* the area is a **marine reserve or Coastal Protection Area 1 (CPA1).**

Note: **CPA1 areas listed in *Table 16.1* (over) do not have coastal vegetation values and are therefore *exempt*. Also, any CPA1 areas identified on *Map Series 8* as significant wading bird areas that may be compromised by mangrove spread are also *exempt*.**

CPA1 areas are shown in dark green on the Coastal Plan maps which can be viewed online at **www.arc.govt.nz/coastalplan** or at your local library. A special set of maps only showing CPA1 areas and significant wading bird areas is also available on the website. Alternatively you can contact the ARC (or Auckland Council) to confirm that the area where seedling removal is proposed is not within a marine reserve or Coastal Protection Area 1.

What is required if the proposed mangrove seedling removal does not meet the permitted activity rule?

If the proposed mangrove seedling removal does not meet all the conditions (a) to (i) of Rule 16.5.3, including meeting the definition of mangrove seedling, a resource consent is required. Please refer to the further rules in Chapter 16 of the Coastal Plan to clarify which applies to you.

For further information and advice on making a resource consent application, contact the ARC on 09 366 2000, or the Auckland Council.

Advice on responsible mangrove seedling removal

- Seedlings need to be pulled out by hand or cut down by hand-held non-motorised tools, such as garden clippers or shears (Rule 16.5.3 (d)). Mangrove seedlings that are cut off are not mature enough to regrow or sprout from the remaining stem.

- Take care to not cause unnecessary disturbance to the intertidal area when you are undertaking removal work. Do not take vehicles onto the intertidal area or damage areas of salt marsh or seagrass (Rule 16.5.3 (e) and (f)).

- Seedlings that have been cut off or pulled out need to be disposed of away from the coast (Rule 16.5.3 (g)). They can be collected in sacks or in a floating dinghy or barge and disposed of by chipping, mulching or taking to a dump. (Note: mulched mangroves have a high salt content and may not be suitable for use as garden mulch).

- The ARC (or Auckland Council) must be given three days notice if more than 30 square metres of mangrove seedlings are to be removed (Rule 16.5.3 (c)). This provides an opportunity to provide advice, monitor removal activities, and to respond if members of the public call us about the work.

- Most seedlings establish in late summer or early autumn, but winter frosts and storms can kill off young mangrove seedlings, so you may wish to wait until after winter when numbers may have been naturally reduced before starting your removal.

- Mangrove seedlings need the right environmental conditions to establish and thrive. Often seedlings successfully establish where sediment levels have increased, often as a result of nearby land disturbances, such as earthworks and/or a new structure or feature changing tidal currents and altering the areas where sediment accumulates (e.g a bridge, causeway, seawall or reclamation). To manage mangrove seedling spread in the long-term, annual removal of seedlings is likely to be required.

- The most effective long-term method of reducing mangrove spread is to minimise the amount of sediment entering the coast. This requires long-term comprehensive measures, such as investigation and management of land use activities (e.g controlling earthworks and land disturbance activities) and riparian restoration planting to reduce sediment entering waterways and the coast.

Permitted Activity Rule 16.5.3 (ARP:C)

16.5.3 The removal of mangrove seedlings, subject to the following conditions:

a the removal does not take place in a Coastal Protection Area 1 other than those identified as significant wading bird areas, or that do not have values associated with mangroves and that are identified in Table 16.1 or on Map Series 8 Sheets 1 to 5, except where the area lies within a marine reserve; and

b the removal does not take place under areas of mature mangrove vegetation; and

c the ARC is notified of the proposed time and extent of removal where more than 30 square metres of clearance is proposed, at least three working days prior to the work being undertaken; and

d that seedlings are removed by hand or by hand-held non-motorised tools; and

e the removal and disposal activities do not involve motor vehicles being taken onto the intertidal area for transporting mangroves or debris; and

f the removal will not disturb or damage areas of salt marsh and/or seagrass; and

g all cleared vegetation shall be disposed of outside of the coastal marine area; and

h the removal shall not involve the discharge of chemical herbicides into the coastal marine area; and

i the removal does not occur in areas where mangroves are serving to mitigate coastal erosion from wave action.

Coastal Protection Area 1 Areas – Table 16.1

This table shows Coastal Protection Area 1 areas that do not have ecological values associated with mangroves and where mangrove seedling removal can be undertaken without a resource consent. Please refer to the Coastal Plan maps for CPA1 numbers.

Table 16.1:
Coastal protection area 1 areas that do not have values associated with mangroves

CPA1 No:	Name (Schedule 3 & ARP:C map reference)	Feature/Value:
10 b – c	South Kaipara Head (Map 1 Sheet 3)	Papakanui Dune Field, Kaipara South Head (Kaipara Sand Dunes, Northern Unconsolidated Dune Area, and Papakanui Spit)
11	Oaia Island (Map 1 Sheet 8)	Oaia Island
13 b	West Coast (Muriwai to Karekare) (Map 1 Sheet 8)	Muriwai Miocene Fauna, Maori Bay
13 c – f	West Coast (Muriwai to Karekare) (Map 1 Sheet 8)	Muriwai Pillow Lavas, Maori Bay
13 g	West Coast (Muriwai to Karekare) (Map 1 Sheet 8)	Muriwai, Powell Bay Miocene Fauna
13 h	West Coast (Muriwai to Karekare) (Map 1 Sheet 8)	O'Neill Bay Crater
13 j	West Coast (Muriwai to Karekare) (Map 1 Sheet 8)	South Te Henga Pillows and Hyaloclastites
13 k	West Coast (Muriwai to Karekare) (Map 1 Sheet 9)	The Gap and Taitomo Cave, Piha & The Gap Volcaniclastic Conglomerate, South Piha
13 l	West Coast (Muriwai to Karekare) (Map 1 Sheet 9)	Mercer Bay Chimney
15 a	Omanawanui (Map 1 Sheet 9)	Marine fauna
15 b	Omanawanui (Map 1 Sheet 9)	Paratutae Wave-Cut Notch
23 b	Ambury (Map 1 Sheet 12)	Kiwi Esplanade Pahoehoe Lava Flow
26 b	Ihumatao (Map 1 Sheets 11, 12)	Ihumatao Pleistocene Buried Fossil Forest
27 b	Puhinui (Map 1 Sheets 12, 13)	Wairoa Island bird roost
28	Takanini Pumicite (Map 1 Sheet 14)	Takanini Pumicite
30 b	Clarkes Beach to Karaka Point (Map 1 Sheet 13)	Shellbanks (bird roost and wading bird feeding ground)
32 b	Waipipi (Map 1 Sheet 16)	Shellbanks (bird roost and wading bird feeding ground)
33	Te Toro Quaternary Sands (Map 1 Sheet 16)	Te Toro Quaternary Sands
34 b	Pollok Spit (Map 1 Sheet 16)	Sand spit (high tide roost)
38 b	Karioitahi (Map 1 Sheet 18)	Karioitahi Quaternary Sands
39 b	Firth of Thames (Map 1 Sheet 19)	Original vegetation grading to kowhai forest fragment
40 h, j	Kawakawa to Matingarahi (Map 1 Sheet 20)	Kawakawa Bay Deformed Chert Beds
43 b	Turanga Creek Estuary (Map 1 Sheet 23)	Shellbanks (bird roost)
43 f	Turanga Creek Estuary (Map 1 Sheet 23)	Shellbanks (bird roost)
49 b	Tamaki Estuary West (Map 1 Sheet 25)	Point England Accretionary Lapilli (Chalazoidites)
49 c	Tamaki Estuary West (Map 1 Sheet 25)	Sand-shell spit (high tide roost)
50 b	Musick Point (Map 1 Sheet 25)	Musick Point Overthrust
50 c	Musick Point (Map 1 Sheet 25)	Eastern Beach Anticline
51 d	Hobson Bay – Orakei Basin (Map 1 Sheet 30)	Orakei Greensand Miocene Fossil Locality
61 b	North Head to Takapuna (Map 1 Sheet 30)	Narrow Neck Structural Discordance

CPA1 No:	Name (Schedule 3 & ARP:C map reference)	Feature/Value:
61 c	North Head to Takapuna (Map 1 Sheet 30)	Belmont Cliffs Fault
61 d	North Head to Takapuna (Map 1 Sheet 30)	Takapuna Chabazite
62 a	Takapuna & Thorne Bay Fossil Forests (Map 1 Sheet 31)	Takapuna Reef Fossil Forest
63	Torbay Stack (Map 1 Sheet 31)	Torbay Stack
65 b	Weiti Estuary (Map 1 Sheet 34)	Weiti River Shell Spits
66 a	Hobbs Bay (Map 1 Sheet 33)	Shore Platform
67 c	Whangaparaoa Peninsula (Map 1 Sheet 33)	Whangaparaoa Head vertically tilted strata
67 d	Whangaparaoa Peninsula (Map 1 Sheet 33)	Point East of Army Bay displaced basalt
68	Whangaparaoa Peninsula Waitemata Group Deformation I (Map 1 Sheet 34)	Miocene Waitemata Group rocks deformation
69	Whangaparaoa Peninsula Waitemata Group Deformation II (Map 1 Sheet 34)	Miocene Waitemata Group rocks deformation
70	Red Beach Miocene Flysch (Map 1 Sheet 34)	Waitemata Group rocks deformation
71	Whangaparaoa Peninsula Waitemata Group Deformation III (Map 1 Sheet 34)	Whangaparaoa Peninsula Waitemata Group deformation
74 a	Waiwera Parnell Grit (Map 1 Sheet 35)	Waiwera Parnell Grit
75 b	Waiwera, Wenderholm & Puhoi (Map 1 Sheet 35)	Intertidal substrates and wave-cut platforms (array of habitats)
76 o	Mahurangi Harbour (Map 1 Sheet 37)	Grants Island Old Hat
79	Algies Beach Melange (Map 1 Sheet 37)	Exposure of Northland Allocthon and Miocene Waitemata Group rocks
82 c	Tawharanui Peninsula (Map 1 Sheet 36)	Tawharanui Fossiliferous Jurassic rocks
83 b	Whangateau Harbour (Map 1 Sheet 38)	Sandspit (high tide roost & breeding ground for NZ Dotterel)
84 b	Mathesons Bay (Map 1 Sheet 38)	Miocene Reef Corals
88	Slater Point Fossil Sea Stack (Map 1 Sheet 36)	Slater Point Fossil Sea Stack, Kawau Island
89	Kawau Island Pillow Lavas (Map 1 Sheet 36)	Pillow lava tubes
90	Dispute Cove Channelled Flysch (Map 1 Sheet 36)	Dispute Cove Channelled Flysch
91	Beehive Island, Kawau (Map 1 Sheet 36)	Beehive Island, Kawau
92 a – b	Motuketekete island Waitemata Group Miocene Basal Limestone (Map 1 Sheet 36)	Motuketekete Island Waitemata Group Miocene Basal Limestone
97 a	Motuihe Island (Map 1 Sheet 40)	Limestone Point Basal Waitemata Group Sediments
99	Motukaha Island and Fossil Bay (Map 1 Sheet 41)	Fossil Bay Miocene transgressive sequence
100	Blackpool Spilite (Map 1 Sheet 41)	Spilitic pillow lava
109	Horuhoru Island (Map 1 Sheet 42)	Gannet breeding site
112	Onetangi Beach (Map 1 Sheet 41)	Small section of pingao
113	Waiheke island Miocene Macrofauna, Double 'U' Bay (Map 1 Sheet 41)	Miocene macrofauna
117 b, c	Northern Great Barrier island (Map 1 Sheet 45)	Rakitu Island Obsidian Breccia
133 a	The Noises (Map 1 Sheet 32)	Coastal birds
134	Mawhitipana Headland and Foredune (Map 1 Sheet 41)	Pingao

Contact us

Contact us for information and advice on:

- The suitability of your plans for the location.
- Which resource consents you require and the supporting information and consultation you'll need to include with your application.

Auckland Regional Council
21 Pitt Street
Private Bag 92 012
Auckland
Ph: 09 366 2000 or
toll free 0800 80 60 40
(ask for coastal consents & compliance team)
Email: info@arc.govt.nz
Website: www.arc.govt.nz or after 1 November 2010 contact the **Auckland Council**.

The ARC also has a range of fact sheets relating to the use of the region's coastline. These are available online at wwwarc.govt.nz or upon request.

Topics include:

- Our coast and sea, who do I contact?
- So you want to carry out works in the coastal marine area?
- What to include in an assessment of environmental effects for a Coastal Permit
- Jetties, ramps and other structures
- Public access to Auckland's coast
- Managing coastal erosion

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