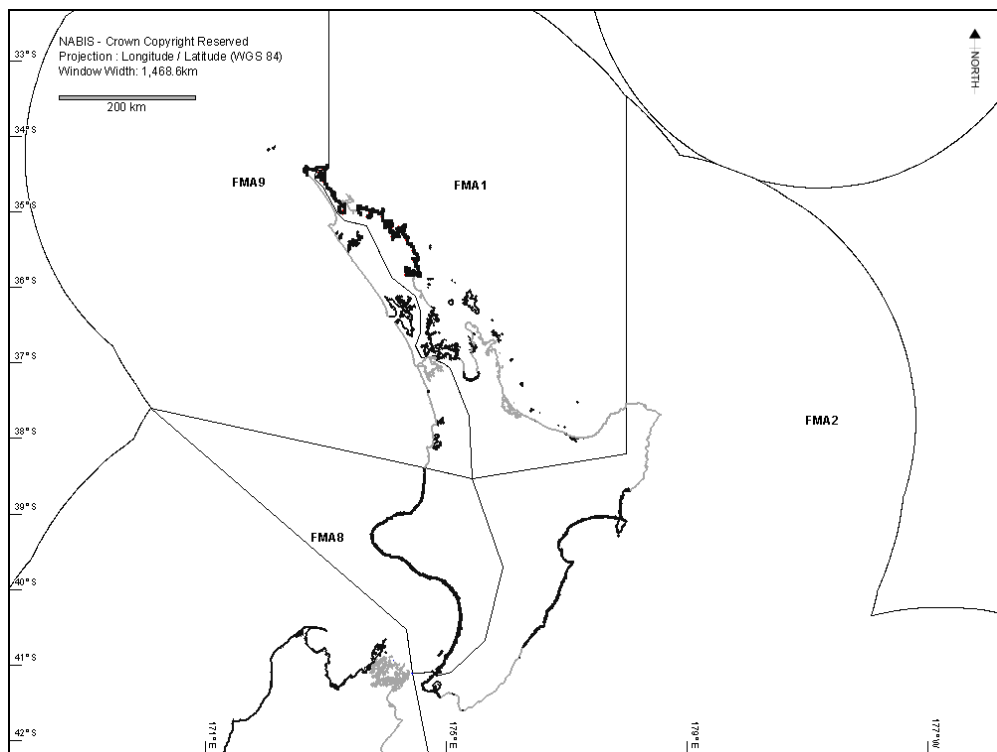


# BEACH CAST SEAWEED HARVESTING AREAS- INITIAL POSITION PAPER



**Figure 1. Location of coastal areas currently closed to commercial harvest of green and brown beach cast seaweeds (denoted by heavy black lines).**

## Executive Summary

- 1 The Ministry of Fisheries (MFish) is considering the following options for expanding North Island areas open to commercial harvesting of brown and green beach cast seaweeds:
  - Option 1: Retain the *status quo*;
  - Option 2: Expand the areas open to commercial harvesting of brown and green beach cast seaweeds to include coastal areas currently of interest to commercial operators (except where prohibited by regulation); and
  - Option 3: Expand the areas open to commercial harvesting of brown and green beach cast seaweeds to include all coastal areas in the North Island (except where prohibited by regulation).
- 2 MFish's initial view is to expand the areas open to commercial harvesting of brown and green beach cast seaweeds to include all coastal areas in the North Island (except where prohibited by regulation) – Option 3. Available information suggests that Option 3 would better provide for utilisation of the resource. Risks to the sustainability of the resource or utilisation by either tangata whenua or recreational stakeholders are considered low given the abundance and renewable nature of the resource in the area and the harvesting practices of commercial operators.

- 3 MFish requests feedback from tangata whenua and stakeholders on the management options. MFish is particularly interested in information on coastal areas that may be considered particularly sensitive to the removal of beach cast seaweed.

## Reason for Reviewing Beach Cast Seaweed Harvesting Areas

- 4 Commercial stakeholders have requested that additional coastal areas in the North Island be open to commercial beach cast seaweed harvest to provide for better utilisation of the resource. Commercial stakeholders consider existing area prohibitions on harvesting brown and green beach cast seaweeds are constraining the ability of industry to maximise value in these fisheries. Having considered current use of areas open to commercial harvesting and commercial harvesting practices, MFish agrees a review of the current prohibitions is warranted.
- 5 The South Island and the Chatham Islands are not considered in this review because no requests were received from commercial operators to expand commercial harvesting.

## Summary of Proposed Management Options

- 6 This Initial Position Paper is not final advice for the Minister. This paper gives tangata whenua and stakeholders an opportunity to comment on management options and provide supplementary information relevant to the discussion presented here.
- 7 MFish is considering the following options for expanding North Island areas open to commercial harvesting of brown and green beach cast seaweeds.

Option	Description
Option 1	<i>Status quo.</i>
Option 2	Expand the areas open to commercial harvesting of brown and green beach cast seaweeds to include coastal areas currently of interest to commercial operators (except where already prohibited by regulation).
Option 3	Expand the areas open to commercial harvesting of brown and green beach cast seaweeds to include all coastal areas in the North Island (except where already prohibited by regulation).

### Option 1 – Status Quo

- 8 Option 1, the *status quo*, would retain current areas open to commercial harvesting of brown and green beach cast seaweeds in the North Island (Figure 1).

### Option 2 – Expansion of Commercial Beach Cast Seaweed Harvesting Areas

- 9 Under Option 2, the Fisheries (Beach Cast Seaweed Area Prohibition) Notice 2002 would be amended to expand the areas open to commercial harvesting of brown and

green beach cast seaweed in the North Island to include areas of interest to commercial stakeholders(refer Figure 2 below). These areas are:

#### **FMA 1**

- The ‘coastal area’ between North Cape (at the FMA 1 and FMA 9 boundary) and Blackney Point, Rangaunu Bay.
- The ‘coastal area’ between the eastern end of Coopers Beach (Doubtless Bay) and Marsden Point (Whangarei).
- The ‘coastal area’ between the Pakiri River and Orere Point (Auckland).
- The ‘coastal area’ surrounding Great Barrier Island (Auckland).

#### **FMA 2**

- The ‘coastal area’ between Mahia and the Mataikona River.

#### **FMA 8**

- The ‘coastal area’ between the Patea River and the Tirua Point (Taranaki).

#### **FMA 9**

- The ‘coastal area’ between the northern end of Ninety-Mile Beach and North Cape.

- 10 The proposed amendments to the Prohibition Notice will not affect the existing prohibitions set by MFish on beach cast seaweed harvesting as contained in the Fisheries (Auckland and Kermadec Areas Commercial Fishing) Regulations 1986 or Fisheries (Central Area Commercial Fishing) Regulations 1986, as well as any other prohibitions or restrictions put in place by other Government agencies (for example, the Department of Conservation). Details on the MFish prohibitions in the Auckland and Kermadec Areas and Central Area are set out in Appendix 1.

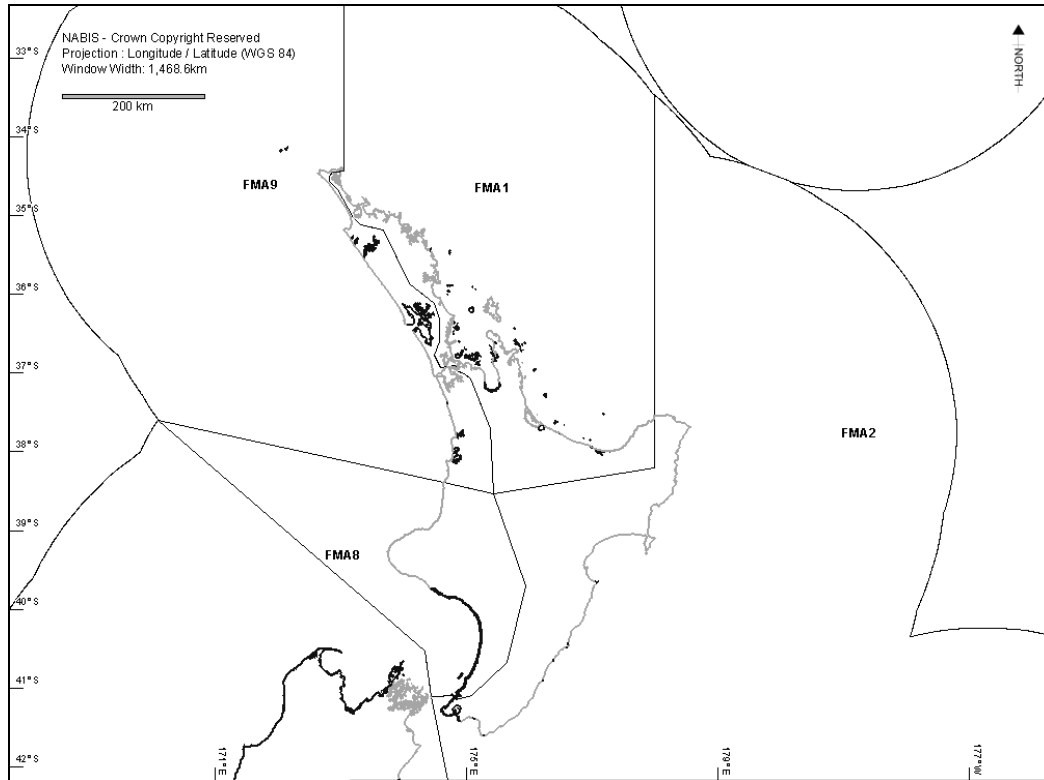
### ***Option 3 – Open Entire North Island to Commercial Beach Cast Seaweed Harvesting***

- 11 Under Option 3, the Fisheries (Beach Cast Seaweed Area Prohibition) Notice 2002 would be amended to expand the areas open to commercial harvesting of brown and green beach cast seaweeds to include all coastal areas in the North Island.
- 12 As with Option 2, the amendments proposed under Option 3 would not affect area prohibitions on beach cast seaweed harvesting set out in the Auckland/Kermadec and Central Area commercial regulations or prohibitions or restrictions put in place by other Government agencies.

### **Background to Management Issue**

- 13 Beach cast seaweeds are a renewable resource and replenishment occurs relatively rapidly in coastal areas, particularly after storm events. Long-term intensive harvesting practices could create coastal area habitats similar to beaches with no

beach cast seaweed inputs, but this effect would likely depend more on the quantity of beach cast seaweed removed rather than harvesting location.



**Figure 2. The proposed locations of coastal areas closed to commercial harvest of green and brown beach cast seaweeds (denoted by heavy black lines) if current permitted commercial harvesting areas were expanded as per Option 2.**

- 14 Demand for seaweed is growing in the commercial development of fertiliser, aquaculture, food, medicinal and pharmaceutical products, and agar manufacturing. According to harvesters and suppliers, the rate at which current supply could meet this demand would be improved if more coastal areas were available for harvest.
- 15 The commercial harvest of beach cast seaweed currently occurs outside of the Quota Management System (QMS) and is therefore not subject to the setting of an annual total allowable catch (TAC)<sup>1</sup>.
- 16 Management of the commercial harvest of various types of beach cast seaweed (i.e. red, green, brown) are inconsistent. Under the Fisheries Act 1996<sup>2</sup>, red seaweeds (Class Rhodophyceae) can be harvested for commercial purposes without a fishing permit and are not subject to the Fisheries (Beach Cast Seaweed Area Prohibition) Notice 2002 (the “Prohibition Notice”). This exemption originated during the Second World War when New Zealand was isolated from its regular suppliers of agar (extracted from red seaweeds) and the government promoted the development of this domestic industry. Brown (Class Phaeophyceae) and green (Class Chlorophyceae)

<sup>1</sup> Section 13, Fisheries Act 1996.

<sup>2</sup> Section 89(2)(f) of the Fisheries Act 1996 provides that a current fishing permit is not required for the taking of red seaweed while it is unattached and cast ashore. Restrictions on the commercial harvesting of seaweed under Area Regulations do not apply to red seaweed while it is unattached and cast ashore.

beach cast seaweeds cannot be harvested without a fishing permit and cannot be harvested in areas identified as closed in the Prohibition Notice.

- 17 The Prohibition Notice was created to support the lifting of the fishing permit moratorium on the commercial harvest of brown and green beach cast seaweed (hereafter referred to as beach cast seaweed) in 2001. The Prohibition Notice also addressed stakeholder concerns that the removal of the permit moratorium could result in the commercial harvest of beach cast seaweed beyond ecologically sustainable levels.
- 18 A review of the Prohibition Notice in 2005 resulted in four new areas in FMAs 1, 2, 3 and 7 being opened to commercial harvest. The additional areas were opened to provide for reasonable use of beach cast seaweed while exercising caution regarding any potential impacts on organisms and ecosystems that utilise beach cast seaweed. The increase in the number of harvesters and reported harvest of beach cast seaweed in the North Island since 2005 has been moderate, but overall harvest remains low (Table 1) in comparison with the likely abundance of beach cast seaweed<sup>3</sup>.

**Table 1. Reported commercial landings of beach cast seaweed (species code SEO) in FMAs 1, 2, 8 and 9 (SEO1, SEO2, SEO8 and SEO9, respectively) since the 2001/02 fishing year.**

Fishing Year	Commercial landings (t) of beach cast seaweed in each Fisheries Management Area			
	SEO1	SEO2	SEO8	SEO9
<b>2001/02</b>	0.05	3.67	0	0
<b>2002/03</b>	1.42	3.29	0	5.24
<b>2003/04</b>	5.68	3.44	0	3.25
<b>2004/05</b>	37.74	2.76	0	92.54
<b>2005/06</b>	51.74	1.87	0	90.17
<b>2006/07</b>	87.64	0.41	0	144.98
<b>2007/08</b>	71.40	3.18	0	133.41

- 19 The observed increase in commercial landings of beach cast seaweed in FMA9 (SEO9) is due to the reporting of harvest associated with green-lipped mussel spat collection rather than interests in beach cast seaweed specifically. Green-lipped mussel spat has been managed within the QMS since 2004.

<sup>3</sup> For example, estimated volumes of seaweed washed up along the Wairarapa coast were ~ 2000 kg/m/yr (Zemke-White, W.L., Speed, S.R., and D.J. McClary. (2005) Beach-cast seaweed: a review. NZ Fisheries Assessment Report 2005/44) and estimated volumes of brown seaweeds deposited along the Canterbury coast were ~14 kg/m/yr (Inglis, G. (1989) The colonisation and degradation of stranded *Macrocystis pyrifera*. Journal of Experimental Marine Biology and Ecology 125: 203 – 218).

## **Rationale for Management Options**

- 20 Since the lifting of the moratorium in 2001, and the review of the Prohibition Notice in 2005, concerns that demand and commercial harvest of beach cast seaweed would exceed beach cast seaweed abundance and negatively affect organisms and ecosystems that utilise beach cast seaweed have not eventuated. Commercial harvesting activity has increased in some areas but harvest is considered to still be low relative to likely abundance of the resource.
- 21 The current harvesting area prohibitions for beach cast seaweed may be overly restrictive given the renewable nature of the resource. Also controlling harvesting locations is not the most effective way to manage potential risks to the organisms and ecosystems that utilise beach cast seaweed. These risks may be better managed through controls such as catch limits, although current harvesting levels and harvest growth rates do not suggest an urgent need to impose catch limits.
- 22 Reviewing the current notice may improve opportunities for commercial harvesters to maximise the utilisation value of the resource. Some commercial operators have stated that they have had to put expansion plans and increased export requests on hold because current access limits their harvesting and processing potential (including type, quantity and quality of products). The extension of commercially available harvesting areas may also reduce costs where productive areas become more readily available to collectors.
- 23 In addition, many communities find the amount of beach cast seaweed washing up on their shores to be significant and detrimental to community values. As a consequence, and despite the current restrictions on commercial beach cast seaweed harvesting, a number of Regional and Territorial Authorities have developed beach cast seaweed removal plans and/or regularly remove seaweed from beaches (eg, in Auckland, Hutt, Manukau, North Shore, Far North, and Gisborne). A review of commercial beach cast seaweed harvesting areas and other removal activities may therefore help to align current rules with common practice.

## **Assessment of Management Options**

- 24 Beach cast seaweed is an important contributor to the health of marine ecosystems but there is still limited information available to adequately describe its role and contribution to the coastal marine environment.
- 25 The sustainability of beach cast seaweed (i.e. the regularity of deposits and abundance of those deposits) is not affected by the areas open to harvesting, but by seasonal mortality or senescence of live attached seaweeds and storm events. However, the amount of beach cast seaweed that remains onshore can be influenced by harvesting in addition to tidal cycles, sea conditions, and removal activities by other organisms.
- 26 Various micro- and macro-fauna (e.g. invertebrates, birds, reptiles) on the beach obtain their food, nutrients, nesting material and/or shelter from beach cast seaweed. If beach cast seaweed washes back into the sea it provides an important habitat for juvenile fishes (e.g. bluenose), is consumed by various herbivores (e.g. pua, urchins), filter feeders, primary producers, and decomposed and consumed by detritivores.

- 27 Beach cast seaweed is particularly important in the early formation of dune habitat. Limiting areas of beach cast seaweed removal may protect dune formation and improve beach stability, but may in turn cause localised dune instability where harvesting occurs.

## **Option 1 – Status Quo**

### ***Sustainability and environment***

- 28 Maintaining the *status quo* may result in increased localised impacts on organisms and ecosystems that utilise beach cast seaweed as seaweed harvesting increases (because it is constrained to) the areas currently open to harvesting. MFish’s initial view is that this impact is likely to be small in the short term, as beach cast seaweed is a renewable resource and harvest is still low compared to the likely abundance of the resource.
- 29 Maintaining the *status quo* may continue to provide protection to currently unidentified, ecologically sensitive, locales inside the areas where beach cast seaweed harvesting is currently prohibited.

### ***Utilisation Value***

- 30 Under the *status quo*, access to suitable beach cast seaweed for commercial harvest would continue to be limited by the current Prohibition Notice. Commercial suppliers and processors state they have difficulty sourcing suitable seaweed to meet their current supply demands, and difficulty planning for the future growth of their industry.
- 31 The *status quo* would not provide for some regional and territorial authorities removing beach cast seaweed from beaches for cosmetic purposes the option of recovering some of the costs associated with their beach cast seaweed removal practices.
- 32 The *status quo* would not impact on the utilisation opportunities of either the Maori customary or recreational fishing sectors.

### ***Credibility and acceptance***

- 33 Input controls such as area prohibitions may not be the most effective way to ensure sustainability of the seaweed resource at a general level, and may be better used to protect areas of ecological importance. Monitoring of harvest activity, and the application of harvest strategies and output controls (e.g. catch limits), may better address risks to sustainability when they arise.
- 34 The beach cast seaweed removal practices of some regional and territorial authorities fall within prohibited commercial harvesting areas, which weakens the credibility of the *status quo*. MFish would need to identify a mechanism to allow these practices to continue, where appropriate.

## **Option 2 – Expansion of Commercial Beach Cast Seaweed Harvesting Areas**

### ***Sustainability and environment***

- 35 Opening additional coastal areas to commercial beach cast seaweed harvest may spread harvesting pressure over a wider geographical area and reduce risks of localised depletion. Short-term harvest of beach cast seaweed can change beach species composition and abundance, however, recovery time to pre-harvest conditions has been known to occur in as little as 2 months<sup>4</sup>.
- 36 Best available information suggests that beach cast seaweed is a renewable resource and harvesting practices are low impact on the surrounding environment; therefore potential sustainability concerns relate to volumes of beach cast seaweed harvested, rather than the geographical locations of that harvest. However the timing of harvest and quantity of beach cast seaweed removed may affect some species' abundance and sustainability if it occurs during the nesting and breeding periods of birds or settlement period of juvenile fishes. Ecologically important bird nesting areas occur within the zones currently open to commercial beach cast harvesting. To date there is no information to suggest that removal of beach cast seaweed has caused negative impacts on the sustainability and productivity of the bird population in these areas.
- 37 As noted, ecological risks to species that utilise beach cast seaweeds, and overall ecosystem processes, may not arise so much based on where harvesting occurs, but rather how much seaweed is removed from an area and over what time frame.
- 38 Option 2 addresses access to areas to harvest beach cast seaweed and not quantity of harvest. However, short-medium term risks regarding quantity or harvest are considered small because:
- a) There have been no sustainability issues identified involving the commercial harvest of red beach cast seaweed although its harvest has been completely unconstrained since the Second World War.
  - b) Not all beach cast seaweed is suitable for commercial harvest, nor are all coastal areas easily accessible to commercial harvest. Seaweeds unsuitable or inaccessible for commercial use are left on the beach providing habitat, food and structure to the coastal ecosystem.<sup>5</sup>
  - c) The quantities of beach cast seaweed removed in any coastal area can be monitored through statutory reporting of commercial catch.
  - d) Many areas identified as ecologically important are already protected under Auckland/Kermadec and Central Area commercial regulations and via prohibitions or restrictions put in place by other Government agencies. These prohibitions and restrictions will not be affected by the change to the Prohibition Notice.

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<sup>4</sup> Lavery, S.P., and P.J. Godfrey. (1979) Ecological effects of macroalgal harvesting on beaches in the Peel-Harvey Estuary, Western Australia. *Estuarine, Coastal and Shelf Science* 49: 295-309.

<sup>5</sup> Some areas are physically inaccessible others are not cost-effective to access. Also, harvesting is targeted towards quality product (clean and free of debris); many commercial harvesters also have a standard operating practice of leaving 10% of harvestable seaweed behind (in addition to the poor quality seaweed).



- 39 Longer-term risks should be addressed by the wider review of the management framework for all states of seaweed to be completed in the short-medium term future by MFish.

### *Utilisation Value*

- 40 Opening up more coastal areas to commercial beach cast seaweed harvest would provide harvesters a wider geographical area from which to obtain the resource, and allow them to distribute growth in harvesting so that ease of collection and quality of product, and therefore profit, are maximised. Enabling more areas for commercial harvest may also increase employment opportunities in small North Island communities as processors look to identify local individuals able to monitor, harvest and supply beach cast seaweed harvest from newly opened areas.
- 41 Beach cast seaweed areas of significance to tangata whenua have not been formally assessed. Initial conversations with tangata whenua groups (for example the Te Kupenga Whitureauroa a Maui customary forum) identified that beach cast seaweed is a valuable food, medicinal and fertiliser source for Maori and also provides a valuable commercial crop for some local Maori communities. The opening of more coastal areas may assist iwi, hapu and whanau in further development of commercial interests. However, where significant, ensuring customary harvest can still occur is also important and MFish invites tangata whenua to provide information on areas of particular customary significance for non-commercial beach cast seaweed harvesting.
- 42 MFish has little information on recreational harvesting of beach cast seaweed but understands recreational take it is used primarily as fertiliser. MFish invites recreational stakeholders to provide information on their harvest activities.
- 43 MFish's initial view is that opening additional areas is unlikely to have a significant impact on customary Maori or recreational harvesting interests as commercial harvest is low compared with likely abundance of the resource.

### *Credibility and acceptance*

- 44 Option 2 will contribute to credible fisheries management by increasing commercial harvesters' accessibility to a wider geographical area to harvest beach cast seaweed. Previous concerns over the 'race for catch' after the lifting of the moratorium in 2001 and the expansion of permitted harvesting zones in 2005 have never actualised, and harvesting levels are not expected to increase to unsustainable levels in the medium term.
- 45 Option 2 will allow some regional and territorial authorities practices of removing beach cast seaweed for cosmetic purposes to fall within permitted commercial harvesting areas, and provide them the option of recovering some of the costs associated with their activities.
- 46 Removal of some area prohibitions will provide for some alignment between the harvest of green and brown beach cast seaweeds, and the unconstrained commercial harvest of red beach cast seaweeds.

- 47 Any decisions to expand the areas available to the commercial harvest of beach cast seaweed do not pre-empt decisions that may be made under a future review of the wider seaweed management framework. MFish's intention to complete a wider review of the framework is not a reason to prevent current rules for beach cast seaweed from being amended to reflect current risks, uses and demands.

### ***Option 3 – Open Entire North Island to Commercial Beach Cast Seaweed Harvesting***

#### ***Sustainability and environment***

- 48 The impacts on sustainability and environment are the same as for Option 2 but:
- a) Risks of localised depletion in currently open areas would be less as the area over which future growth in harvest can be spread is greater; and
  - b) Risks to unidentified areas of ecological significance would be more because the area being opened is greater and encompass more ecologically significant areas.
- 49 As with Option 2, the short-medium term risks associated with Option 3 are considered small because:
- a) There have been no sustainability issues identified involving the commercial harvest of red beach cast seaweed although its harvest has been completely unconstrained since the Second World War.
  - b) Not all beach cast seaweed is suitable for commercial harvest, nor are all coastal areas easily accessible to commercial harvest. Seaweeds unsuitable or inaccessible for commercial use are left on the beach providing habitat, food and structure to the coastal ecosystem.
  - c) The quantities of beach cast seaweed removed in any coastal area can be monitored through statutory reporting of commercial catch.
  - d) Many areas identified as ecologically important are already protected under Auckland/Kermadec and Central Area commercial regulations and via prohibitions or restrictions put in place by other Government agencies. These prohibitions and restrictions will not be affected by the change to the Prohibition Notice.

#### ***Utilisation Value***

- 50 The impacts on utilisation under Option 3 are the same as for Option 2 but Option 3 provides the greatest flexibility to commercial harvesters in terms of areas to undertake harvesting activity to maximise commercial value; and
- 51 As with Option 2, MFish's initial view is that opening additional areas is unlikely to have a significant impact on customary Maori or recreational harvesting interests as commercial harvest is low compared with likely abundance of the resource. MFish invites Maori customary and recreational interested parties to provide information on their harvest activities.

## ***Credibility and acceptance***

- 52 Credibility and acceptance under Option 3 are the same as for Option 2 but:
- a) Option 3 would allow all regional and territorial authorities practices of removing beach cast seaweed for cosmetic purposes to fall within permitted commercial harvesting areas, and provide them the option of recovering some of the costs associated with their activities.
  - b) Option 3 provides the greatest alignment between the harvest of green and brown beach cast seaweeds, and the unconstrained commercial harvest of red beach cast seaweeds in the North Island.

## ***Statutory Considerations***

- 53 Statutory considerations relevant to the proposed amendments to the Prohibition Notice are discussed in Appendix 2.

## ***Conclusion***

- 54 MFish's initial view on amending the Prohibition Notice is to expand the areas open to commercial harvesting of brown and green beach cast seaweeds to include all coastal areas in the North Island (except where prohibited by regulation) – Option 3.

- 55 The best available information at this time suggests:

- Beach cast seaweed is a renewable resource and harvesting practices are low impact on the surrounding environment;
- Current commercial harvest of beach cast seaweed is low compared with the likely abundance of the resource;
- Not all beach cast seaweed is suitable for commercial harvest, nor are all coastal areas easily accessible to commercial harvest;
- Many areas identified as ecologically important are already protected by regulation. Prohibitions on beach cast seaweed harvesting in existing regulations would not be affected by the change to the Prohibition Notice;
- The utilisation opportunities of the commercial sector would be greatly improved without compromising the utilisation values of the other sectors; and
- Beach cast removal practices of territorial and regional authorities would be more credible and the authorities would have the option of selling some of their harvest to recover the cost of their activities.

- 56 MFish invites stakeholders to provide additional information for consideration. In particular, MFish is interested in information on:

- Areas where significant harvesting is undertaken for Maori customary and recreational purposes; and
- Areas of ecological significance, where commercial harvesting of beach cast seaweed may result in a significant impact.

## Appendix 1.

### Existing Prohibitions in the Commercial Area Regulations

57 Regulation 23(1) of the Fisheries (Auckland and Kermadec Areas Commercial Fishing) Regulations 1986 provides that:

No commercial fisher may take fish or seaweed by any fishing method, or be in possession of fish or seaweed taken, from the following waters:

- (a) Tawharanui Peninsula: the waters lying on the northern side of Tawharanui Peninsula inside an area enclosed by—
  - (i) a straight line drawn from a point 36°21.8'S and 174°49.3'E in a northerly direction to a point 36°21.4'S and 174°49.6'E; then
  - (ii) in a generally easterly direction, a line every point of which is one-half nautical mile from the mean high-water mark to a point 36°21.3'S and 174°51.7'E; then
  - (iii) a straight line due South to the point of commencement:
- (b) Mimiwhangata Peninsula: as described in Schedule 3:
- (c) Tauranga Harbour: the waters of Tauranga Harbour, which lie south of the Tauranga-Taneatua railway bridge (at 37°41.33'S and 176°10.23'E to 37°41.22'S and 176°10.5'E).

58 Regulation 13A(1) of the Fisheries (Central Area Commercial Fishing) Regulations 1986 provides that:

No commercial fisher shall take or have in possession any seaweed taken from any of the following areas:

- (a) *Cape Kidnappers*: Within a 1 nautical mile radius of Cape Kidnappers (at 30 degrees 38.6'S and 177 degrees 42.1'E):
- (b) *Porongahau Estuary*: Within a 3 nautical mile radius of Porongahau Estuary (at 40 degrees 15.4'S and 176 degrees 42.1'E):
- (c) *Herbertville Beach*: Within a 2 nautical mile radius of Wainui River Mouth (at 40 degrees 29.8'S and 176 degrees 33.7'E):
- (d) *Owahanga River Mouth and beach*: Within a 2 nautical mile radius of Owahanga River Mouth (at 40 degrees 40.8'S and 176 degrees 21.2'E):
- (e) *Castlepoint*: Within a half nautical mile radius of the Castlepoint basin (at 40 degrees 54.7'S and 176 degrees 13.4'E):
- (f) *Cape Palliser*: Within a 1 nautical mile radius of the Cape Palliser lighthouse (at 41 degrees 36.9'S and 175 degrees 17.3'E).

## Appendix 2.

### Statutory Considerations

- 59 The following statutory considerations have been taken into account when forming the proposed amendments to the Fisheries (Beach Cast Seaweed Area Prohibition) Notice 2002.
- 60 **Section 5** of the Fisheries Act 1996 (“the Act”) requires the Minister to act in a manner consistent with New Zealand’s international obligations and the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992. The proposed regulatory amendments to the Area Prohibition Notice do not have implications for, or effects on, MFish’s ability to meet any specific international obligations and do not affect any obligations related to the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.
- 61 **Section 8** states the purpose of the Act is to provide for the utilisation of fisheries resources while ensuring sustainability, and defines the meanings of “utilisation” and “ensuring sustainability”. The proposed management options to the Area Prohibition Notice seek to ensure that any amendments are both sustainable and provide opportunity for the development and maximisation of utilisation benefits.
- 62 **Section 9** of the Act requires the Minister to take into account the following environmental principles:
- **Section 9(a)** requires associated or dependent species (i.e. those that are not harvested) to be maintained above a level that ensures their long-term viability. Any changes in dependent species abundance of those associated with beach cast seaweed harvest and the geographical locations of harvest are likely to be short-term. Best available information suggests that associated or dependent species abundances return to pre-beach cast seaweed harvest conditions within two months.

There are a number of coastal areas around the North Island where significant bird colonies are established. Many of these bird species use seaweed in either their feeding or nesting behaviours. These areas include, but are not limited to: FMA1 - Tauranga Harbour, Maketu Estuary and Kaituna River mouth, Waihi Estuary and Pukehina Spit, Ohiwa Harbour (Ohope Spit/Ohiwa Spit), Firth of Thames, Mangawhai Sandspit to Te Arai Point; FMA 2 – Cape Kidnappers; FMA 9 – Kaipara Harbour, Manukau Harbour. Some of these areas are currently open to commercial beach cast seaweed harvest, others are not. Although these colonies require access to and use of beach cast seaweed, there is no evidence to suggest that in areas of commercial harvest, removal of beach cast seaweed has caused any significant impact on their long-term viability. Commercial harvest does not involve the complete removal of all available beach cast seaweed on shore, and the resource is regularly replenished after storm or high wind events. Some coastal areas do (and will) remain untouched by commercial harvesters to provide habitat for bird colonies because not all areas are easily accessible or desirable.

- **Section 9 (b)** requires biological diversity of the aquatic environment to be maintained. The decision to expand the geographical areas of beach cast seaweed harvest is unlikely to directly impact on the long term viability and biological diversity within the aquatic environment.
- **Section 9(c)** requires habitat of particular significance for fisheries management to be protected. MFish is not aware of any such habitats that would be affected by any of the proposed management options, but welcomes submissions that highlight areas of ecological significance that may need to be protected from commercial harvest of beach cast seaweed.

63 **Section 10** of the Act sets out information principles, which require that decisions be based on the best available information, taking into account any uncertainty in that information, and applying caution when information is uncertain, unreliable, or inadequate. Available information has been reviewed and the best available information has been used to evaluate the management options presented. Uncertainties in information make it difficult to accurately quantify costs and benefits to access to the fishery and stakeholder value; these uncertainties are identified and discussed. MFish has included matters relating to uncertain information to provide opportunities for discussion with fishery stakeholders and receive additional information and supporting evidence where available.

64 **Section 11** of the Act sets out matters the Minister must take into account when modifying the areas from which any fish, aquatic life, or seaweed of any stock may be taken.

- **Section 11(1)(a)** requires the Minister to take into account any effects of fishing on any stock and the aquatic environment. MFish considers the options presented in this paper will not contribute or detract from the sustainability of beach cast seaweed stocks. The potential environmental impacts of beach cast seaweed harvest on the aquatic environment are considered.
- **Section 11(1)(b)** requires the Minister to take into account any existing controls under the Act that apply to the stock or area concerned. All matters relating to existing controls for the harvest of beach cast seaweed in the North Island are considered and discussed in the paper.
- **Section 11(1)(c)** requires the Minister to take into account the natural viability of the stock concerned. The options presented in this paper will not contribute or detract from the sustainability of beach cast seaweed. The natural variability of beach cast seaweed is considered in the paper.
- **Section 11(2)(a)** requires the Minister to have regard to regional policy statement, regional plan, or proposed regional plan under the Resource Management Act 1991. There are no provisions applicable to the coastal marine area known to exist in any policy statement or plan under the Resource Management Act 1991.
- **Section 11(2)(b)** requires the Minister to have regard to any management strategy or management plan under the Conservation Act 1987. There are no management strategies or plans under the Conservation Act 1987 that are relevant to the management options proposed.
- **Section 11(2)(c)** requires the Minister to have regard to sections 7 and 8 of the

Hauraki Gulf Marine Park Act 2000. The options consider the potential effects on the natural and physical resources of the environment, on tangata whenua (for the entire North Island, which would include the Hauraki Gulf), and the potential economic opportunities.

- **Sections 11(2A)(a) and (c)** require the Minister to take into account any conservation services or fisheries services, and any decisions not to require conservation services or fisheries services. The management options proposed in this paper will not be affected by, or require conservation or fisheries services.
- **Section 11(4)(b)(i)** of the Act allows the Minister, by notice in the *Gazette*, to implement or vary any sustainability measure – including the Prohibition Notice – as set or varied under s 11(4).