

The New Zealand King Salmon Company Ltd

**Ngamahau, Richmond and Waitata
Marine Farms**

Solid Waste Management Plan

8 July 2014

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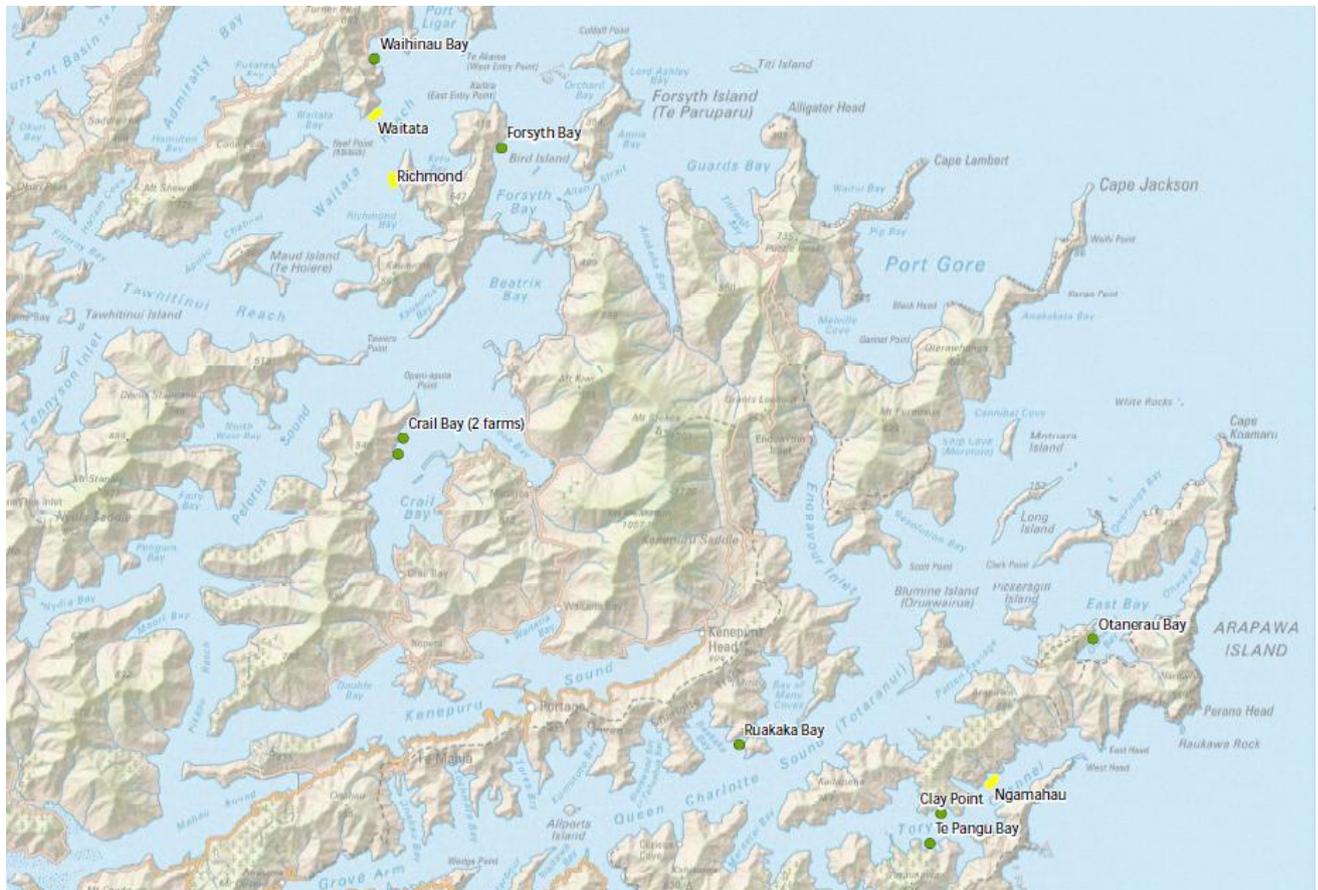
NZ King Salmon

Contents

1	Introduction	3
2	Statutory	3
3	Objectives.....	4
4	Potential Concerns.....	4
5	General Protocol	4
6	Waste Containment	4
7	Recycling	4
8	Waste Disposal Plan.....	5
9	Beach Clean-ups.....	5
10	Seabed Solid Waste.....	5
11	Audit Requirements	5
	Appendix 1 - (Beach Debris Report Form)	6

1 Introduction

New Zealand King Salmon (NZKS) currently has five salmon farms (eight sites) in the Marlborough Sounds; located at Ruakaka, Forsyth, Waihinau, Otanerau, Te Pangu, Clay Point, and two farms at Crail Bay. Resource consents for three new farms have recently been granted and the following farms will be established in due course: Waitata, Richmond and Ngamahau.



During the recent Board of Inquiry process a number of concerns were raised regarding the reduction of amenity values as a result of waste accumulating on the foreshore adjacent to the marine farm. This Management Plan has been developed to minimise the risk of accumulation of farm waste on the foreshore and seabed.

2 Statutory

Discharge of any waste is prohibited under the Resource Management Act 1991 (RMA).

3 Objectives

The objective of this Management Plan is to minimise the risk of reductions in neighbouring amenity values caused by the accumulation of solid waste debris along the shoreline and seabed resulting from the marine farm.

This Management Plan will ensure the accidental disposal of waste to the environment surrounding the marine farm is minimised and that all solid waste is collected on the farm and disposed of appropriately so as to avoid the accumulation of waste on the foreshore and seabed.

The Plan also addresses routine clean-ups of solid waste (from all sources) on the foreshore by NZKS staff, and associated reporting requirements.

4 Potential Concerns

Potential concerns exist in relation to the amount of waste that may be inadvertently discharged from a marine farm. This waste may be plastic bulk feed bags, pieces of netting and rope, plastic bags, bottles, paper and equipment. The marine farms are situated in an environment where weather conditions can be extreme with severe wind gusts being relatively common. These winds have the potential to uplift and discharge waste to sea.

5 General Protocol

It is company policy that all NZKS staff must comply with this Residential Amenity Management Plan.

6 Waste Containment

All waste must be stored in secure containment prior to collection and disposal in onshore public refuse systems. Kitchen rubbish is to be placed directly to a bin within the kitchen area, subsequently it may be placed into a used bulk feed bag and securely tied prior to sending to shore for disposal. All other waste such as small pieces of netting and rope is similarly contained.

Care shall be taken to ensure pieces of rope, twine and netting and other miscellaneous pieces of waste cannot fall in to the water. In particular windy days increase the risk of waste discharge to sea and particular care must be taken at such times.

All of the marine farms are surrounded by a predator net that extends above the height of the walkways, this assists in retaining loose rubbish within the confines of the farm.

7 Recycling

A waste recycling process is incorporated where possible. Waste feed bags are unable to be recycled back to the feed manufacturer because of biosecurity issues. However, they are sometimes sought after by other parties and all efforts should be made to recycle these.

8 Waste Disposal Plan

(Excerpt from Section 15.3 of the Seapen Manual dated 31/10/2012)

“There are a number of systems involved in the disposal of wastes from the seapen sites which endeavour to ensure complete containment of all sources of waste.

Household Rubbish – All household refuse from the sea-farms should be contained in a plastic rubbish bag inside a flameproof rubbish bin. When full, the bag is tied up and placed in the bulk bag of farm rubbish which is stored inside the feed shed until the next feed run (within two weeks maximum). Before the bulk bag of rubbish is dispatched on the feed barge it must be checked that it is tied securely to avoid any wind dispersal of the contents. The bulk bags are removed from the jetty to the Marlborough Waste Refuse Centre (Community Dump).

Where possible recyclable waste is separated from the refuse and taken to the recycling centre. All bulk feed bags which are not otherwise re-used should be emptied, rolled up and stowed in a separate bulk bag which is also removed by the feed barge and recycled. “

Mortalities are dived or airlifted from pens regularly and immediately placed in sealed aluminium containers. These sealed containers are stored adjacent to the farm on the license until collected and the dead fish are sent for rendering.

9 Beach Clean-ups

Each marine farm will carry out and record routine beach clean-ups, and additionally the company is party to an industry coordinated Sounds-wide beach clean-up programme. The results of these clean-ups are recorded onto a 'Beach Debris Report Form' (Appendix 1) and submitted to the Marine Farming Association.

10 Seabed Solid Waste

Occasional dives and video of the seabed may show debris that has accidentally fallen from the net pens such as net weights, tools and rope. The depth profile is such that diving beneath most farms is beyond the depth dived by general farm divers. Suitably qualified and experienced divers are used to recover the equipment back to the farm compliant with the 'International Diving Code of Practice (AS/NZS 2299.1:2007)'.

11 Audit Requirements

Each marine farm is annually audited for waste management by NZKS Environmental Dept, and an external audit by Best Aquaculture Practices (BAP) independent auditor.

Appendix 1 - (Beach Debris Report Form)



Area: _____

Date: _____

Number of people: _____ Number of hours (on beach): _____ = Total hours _____ (personnel)

Vessel Time: _____ (Vessel steaming and down time)

Marine Farming Debris	Other (non marine farming) Debris
Estimated Percentage _____/100%	Estimated Percentage _____/100%
Estimated total Kg _____Kg	Estimated total Kg _____Kg
Details of debris	Details of debris
Ropes/Ties/Lashings _____Kg (1 supermarket bag = 1.5kg)	Plastic bags/bottles _____Kg
Mussel Floats _____(number & ID)	Other (note details below)
Other (note details below)	
_____	_____
_____	_____

Most interesting Find??

Please send in any photos of debris above, or your most interesting find for the MFA records and for use in upcoming newsletters.

This form completed and submitted by

Name: _____

Company: _____

Contact Phone: _____

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