

Report No:	REP12-03-07
File No:	C424
Date:	16 March 2012
Decision Required	

REPORT SUMMARY

Report to: Environment & Planning Committee
Meeting Date: Thursday, 29 March 2012
Report Authors Neil Jackson, Policy Planner and Steve Markham, Policy Manager
Subject: **AQUACULTURE - FISH FARMING**

EXECUTIVE SUMMARY

This report advises Council on:

- the provisions for fish farming that were added to the TRMP by the Resource Management Amendment Act (No 2 2011); and
- the results of investigations by NIWA into the suitability of Tasman and Golden bays for fish farming.

RECOMMENDATION

The recommendation is to adopt Option 3 from the report. That option is to release the NIWA reports referred to in this report, with a statement that no provision will be made for tendering until science or technology gives confidence that fin fish farming will have a low risk of adverse environmental consequences.

DRAFT RESOLUTION

THAT the Environment & Planning Committee receives the report Aquaculture - Fish Farming REP12-03-07 and:

- 1. Approves the release of the NiWA reports “Tasman aquaculture: guidance on farming additive species - Stage 1” (Feb 2011) and “Tasman aquaculture: guidance on farming additive species - Stage 2” (May 2011); but**
- 2. Agrees to make no provision under the Tasman Resource Management Plan policy 22 1.3.17 to tender space for application for fish farming until further science or technology gives confidence that fish farming will have a low environmental risk in the Tasman Region.**

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1. Purpose

- 1.1 The purpose of this report is to up-date Council on the TRMP provisions for feed-added aquaculture (fish farming), and to recommend a decision for the Council to make regarding the tendering of space for fish farming. These provisions were added by the Resource Management Amendment Act (No 2) 2011 (RMAA 2011).

2. Background

- 2.1 The need for this report stems from the provisions in RMAA 2011, now incorporated in TRMP, that provision for fish farming is dependent on investigations into physical conditions and possible environmental limits in Tasman Bay and Golden Bay. Investigations have been carried out by NIWA. A working group including MAF and DOC staff has assisted in assessing the NIWA reports and in forming the options and recommendation in this report.

Those people are:

Dan Lees, Michelle Pawson, Michael Nielsen, Richard Ford (MAF)
Sarah Hucker, Andrew Baxter (DOC)
Steve Markham, Neil Jackson (TDC)

- 2.2 The TRMP when first notified in 1996 provided for all forms of aquaculture as a discretionary activity. During the subsequent Environment Court process, the Court was presented with evidence only on mussel farming and its associated spat catching, and on scallop spat catching which was the basis for the scallop enhancement programme. These species are filter feeders. The outcome from the Court inquiry was to limit the TRMP provisions for aquaculture to those three activities.
- 2.3 During 2010 and 2011, central government promoted joint work by the then Ministry of Fisheries, Department of Conservation, and Council, to draft TRMP provisions for a wider range of aquaculture activities than spat catching and mussel farming. These amended provisions were inserted directly into TRMP by the RMAA 2011. That Amendment Act at the same time made the Tasman regional coastal plan sections of TRMP operative, including the aquaculture amendments.

- 2.4 The amendments include policies and rules about fish-farming (referred to as “additive species” because food has to be added to the water at the farm sites for the fish to grow) and to avoid unnecessarily limiting the plan for other potential additive species if farming them becomes viable.
- 2.5 The new policies for fish farming have three main components:
- To provide for fish farming through deciding an amount of space where the right to apply for resource consent would be tendered;
 - To decide the amount of space for tender after considering investigations into physical conditions and environmental limits of fish farming;
 - To limit fish farming under any one consent to an initial 10 hectares, with expansion subject to the results of monitoring effects of the initial operation, as for mussel farming.
- 2.6 Fish farming is confined to the marine farming subzones of the Aquaculture Management Areas (AMAs) shown on the planning maps.

3. Present Situation/Matters to be Considered

- 3.1 For the second policy component, the Aquaculture Unit (within MAF) commissioned NIWA to investigate the suitability of Tasman and Golden bays for fish farming. With this information, Council now needs to decide whether to make any space available for tender, and if so, to develop a tender process.
- 3.2 NIWA produced two reports. “Tasman aquaculture: guidance on farming additive species - Stage 1” (Feb 2011) and “Tasman aquaculture: guidance on farming additive species - Stage 2” (May 2011). These reports are available to the Committee on request, but have not been attached to this report because of their bulk. The NIWA investigations related to farming carnivorous fin fish. If farming of grazing herbivore species is proposed in the future, different effects will need to be investigated.
- 3.3 The carrying capacity of the marine environment and the implications of adding nutrients to it are critical considerations for fish farming. The NIWA reports identified environmental effects that need to be considered, including:
- Pelagic effects (increased nutrients in the water column from fish food not taken by the farmed fish)
 - Benthic effects (deposition of uneaten food and of waste excreted by the fish)
 - Biosecurity (biofouling from organisms settling on the farm structures).
- 3.4 The scale and significance of these effects are related to a number of parameters including water depth, current speed, nutrient content, and oxygen concentration at the site.

3.5 The first report analysed existing data on the physical environment of the Tasman AMAs, and commented on their significance for fish farming. The findings and recommendations of that report were:

- Sites have relatively shallow water depth which may have implications for the dispersal of wastes from fish farms
- Low current speed has implications for dispersal of contaminants, both in the water column and on the seabed
- Seasonal variation in oxygen saturation levels may reduce the capacity to absorb waste
- Tasman sites are shallower, and have weaker currents, than existing fish farm sites in the Marlborough Sounds and the proposed fish farm site in Coromandel.

3.6 The second report addressed nutrient inputs and cycling in the Bays to assess their carrying capacity with fish feed added. It also addressed monitoring requirements and additional investigations needed to assess environmental limits. The findings and recommendations of that report were:

- Cumulative phytoplankton modelling for the AMAs may be possible, but not for individual farm sites
- Fish-farm induced changes to phytoplankton and chlorophyll at higher farm production levels may become ecologically significant and affect ecosystem carrying capacity
- Sea-floor deposition rates approach levels that may lead to anoxic sedimentary conditions
- There is potential for adverse biogeochemical and faunal effects immediately below farms
- There is potential for adverse effects from copper and zinc. These predictions are based on inputs for five years, permits could be up to 35 years. Monitoring the accumulation of these metals in sediment beneath farms is needed.
- There is potential for chronic enrichment of the water column, to the point of eutrophic conditions
- Benthic consequences of this enrichment have not been examined
- Further work is required to develop indicators, trigger levels, and management responses, for limits of acceptable change

- Muddy substrate, shallow depth, slow current, and relatively low
- concentrations of dissolved oxygen at the base of the water column, combine to make fish farming marginal in Golden Bay and Tasman Bay.

3.7 The two reports were considered by the working group on 25 October and 17 November 2011. Three conclusions were reached:

- The Ministry would provide a preamble which would be both a summary of the main points of the reports and an explanation of some of the graphics in the reports.
- The reports would be presented to Council with a joint recommendation from staff of MAF, DOC, and TDC, against nominating an amount of space where the right to apply for consent for fish farming would be tendered.
- Council's decision on whether or not to nominate an amount of space where the right to apply for consent for fish farming would be tendered, would need to be publicly notified.

4. Financial/Budgetary Considerations

4.1 If Council decided to implement the fish farming policies through a regime of tender followed by resource consent application then that would require development of an appropriate tender process. This has not been specifically budgeted for. Work on tendering by Waikato Regional Council is likely to assist.

Note: The plan confines fish farming to marine farming subzones in the AMAs. A prerequisite for a successful tender would need to be that the tenderer has the approval of an existing marine farming consent holder to utilise the proposed site.

5. Options

5.1 The working group consideration of the NIWA reports proposed three options for the Council to consider:

5.2 Option 1:

Release the reports, with a statement that the bays are not suitable for feed-added fin fish farming, and that no space will be offered for tender.

Option 2:

Release the reports, with a statement that the bays are marginally suitable for fin fish farming, and identify an amount of space to tender. This should be small, with a caveat that any subsequent consent will be dependent on Council's confidence in the operator's ability to manage environmental effects of fish farming.

Option 3:

Release the reports, with a statement that no provision will be made for tendering until science or technology gives confidence that fin fish farming will have a low risk of adverse environmental consequences.

- 5.3 The implication of Option 3 is that industry would need to demonstrate how the concerns expressed in the NIWA reports can be overcome.

6. Evaluation of Options

6.1 The reports do not explicitly support or oppose fish farming in Tasman and Golden bays. Adverse effects are prefaced with “may” and “potential”. The reports do not categorically state that unacceptable adverse effects are inevitable and fish farming should not be allowed. Option 1 is not directly supported by the reports.

6.2 The same equivocal language of the reports means Council cannot be confident that any of the area of Tasman Bay or Golden Bay is unconditionally suitable for fish farming. The staff view is against investing effort in creating a tender process for applying for consent for fin fish farming. This carries an expectation that consent will be granted, but the information in the reports does not give confidence that consent should be granted.

6.3 Option three leaves an opportunity for the marine farming industry to demonstrate its level of interest in fish farming in the District, and an obligation to demonstrate how it can operate without adverse effects, without imposing those costs on Council.

7. Significance

7.1 This is not a significant decision according to the Council’s Significance Policy because it implements a process set out in the TRMP, which has been settled by due process.

7.2 Despite implementing a TRMP process, this is not a decision made under a statutory RMA process. There is no provision for an appeal to the Environment Court.

8. Recommendation/s

8.1 The recommendation is for the Council to adopt Option 3. This recommendation was developed by, and is supported by, the working group.

9. Timeline/Next Steps

9.1 The next step would be for the Council to give public notice of its decision.

10. Draft Resolution

THAT the Environment & Planning Committee receives the report Aquaculture - Fish Farming REP12-03-07 and:

- 1. Approves the release of the NiWA reports “Tasman aquaculture: guidance on farming additive species - Stage 1” (Feb 2011) and “Tasman aquaculture: guidance on farming additive species - Stage 2” (May 2011); but**
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