

CHAPTER 22: AQUACULTURE

22.0 INTRODUCTION

This chapter deals with aquaculture development in the coastal marine area of the District. Aquaculture development is expected to have significant social, cultural and economic benefits for the District. It is also the activity likely to cause the greatest degree of change in the coastal marine area of the District in the immediate future.

The demand for space, and the wide range of competing interests and values, has led to specific sites in the coastal marine area being identified for aquaculture purposes and labelled Aquaculture Management Areas (AMAs). These AMAs, along with the related management provisions of the Plan and the prohibition of aquaculture activities over the remainder of the coastal marine area of the District, are seen as an efficient and effective means of promoting sustainable management of aquaculture and the environment in which it is undertaken.

The space required for aquaculture is subject to a range of competing demands and has particular recognised values. Thus the careful provision for and management of space for aquaculture activities is critical if the sustainable management of the coastal marine resource is to be achieved. Aquaculture has the potential to affect several of the matters of national importance identified in the Act: natural character, landscape, ecological values, public access and iwi values.

The coastal area of Golden Bay/Mohua and Tasman Bay/Te Tai o Aorere has significance to iwi. It is an area that sustained their tupuna. The values held by iwi about specific areas or sites may be diminished or destroyed by activities such as aquaculture. However, iwi also have interests as existing and potential future participants in aquaculture. It is for iwi to integrate their current and future aspirations for aquaculture with their wider values. While the location of the AMAs has been determined after having considered these wider iwi values, the Plan provisions recognise the potential for adverse effects on iwi values in respect of individual applications within AMAs. The Plan provisions which follow ensure that iwi commercial interests are not disadvantaged relative to other commercial interests.

Tangata whenua iwi have a responsibility, derived from their status as kaitiaki, to ensure the maintenance of the mauri (life force) of coastal waters within their rohe (tribal boundary), and have an expectation that their customary access to and use of traditional resources in the coastal marine area will be maintained.

Ngati Tama, Te Atiawa, and Ngati Rarua have been acknowledged and recognised as tangata whenua and kaitiaki in Mohua and Te Tai o Whakatu. As such, these iwi hold mana over the lands (whenua) and coastal waters (moana) within their rohe, exercised in accordance with tikanga. The AMAs have been named by the iwi as: Waikato (AMA 1), Puramakau (AMA 2), and Te Kumara (AMA 3).

Caution is needed in providing for, authorising, and managing the use of the public domain for aquaculture so that sustainable management of the resources of the coastal marine area is achieved. Provision for aquaculture must be accompanied by appropriate mechanisms to ensure that the overall coastal marine ecosystem retains its life-supporting capacity for its natural populations of organisms.

An area of Wainui Bay is separately recognised as an exception to the Aquaculture Exclusion Area. There is a specific policy recognising the favourable characteristics of this area for spat catching and its contribution to the aquaculture industry. Aquaculture rules provide for mussel farming, including mussel spat catching and mussel spat holding in the mapped area of Wainui Bay as a discretionary activity for which resource consent may be sought.

C61 3/16
Op 12/19

Given the competing values associated with the establishment and ongoing operation of aquaculture in the District's coastal marine areas, and the incomplete understanding of its potential effects on the ecology and natural character of Tasman Bay/Te Tai o Aorere and Golden Bay/Mohua, a cautious and adaptive approach has been taken in managing aquaculture. Additionally, in some sites in Tasman Bay, consideration needs to be given to the layout of structures for navigational purposes.

This approach allows the industry to develop, and at the same time ensures that more is learned about the environmental effects associated with aquaculture. It also provides mechanisms to limit and appropriately manage these effects.

In addition to the adaptive management approach, there are also mechanisms that exist in the Act to limit aquaculture development within the AMAs should effects of unforeseen significance occur. These mechanisms include:

- the Section 17 duty to avoid, remedy or mitigate adverse effects;
- the Section 123 provision to limit the duration of a consent;
- the Section 128 opportunity for Council to review conditions of consent;
- the powers under Sections 132 and 314 to cancel a consent;
- the Section 314 power of the Court to issue enforcement orders.

The Plan incorporates provisions for the ongoing sustainable management of aquaculture, while providing for consent applications to be made for a variety of species. The Plan recognises that the initial development and subsequent expansion of the industry is dependent upon a high level of ecological investigation, ongoing monitoring, and management of expansion. Ecological Advisory Groups will provide technical advice to assist the Council in managing any ecological effects that may arise for different types of aquaculture. Funding for the group(s) will be derived from monitoring charges imposed on relevant aquaculture consent holders.

22.1 PROTECTION OF VALUES

22.1.1 Issue

How to provide opportunity to achieve social and economic benefits from aquaculture, while maintaining, enhancing or protecting natural character, landscape, ecological, public access, recreational and amenity values, and the values important to the tangata whenua iwi, while avoiding, remedying or mitigating adverse effects.

22.1.2 Objective

Aquaculture developed in a manner that maintains, enhances, or protects the natural and physical resources of the coastal environment, including the life-supporting capacity of marine ecosystems and the natural character, landscape, ecological, public access, recreational and amenity values, and the values important to the tangata whenua iwi, while avoiding, remedying or mitigating adverse effects.

22.1.3 Policies

Refer to Policy sets 21.1 – 21.7.

Refer to Rule section 25.1.

AMAs

- 22.1.3.1** To enable the AMAs to be used as discrete locations where aquaculture may occur in a way that adequately manages adverse effects on the natural and physical resources of the coastal environment, and on its life-supporting capacity, natural character, landscape, ecological, public access, recreational and amenity values, and the values important to the tangata whenua iwi.
- 22.1.3.2** To provide for and map a discrete area where a resource consent may be sought for mussel spat catching and spat holding in recognition of the favourable characteristics of this area for spat catching and its contribution to the aquaculture industry.

C61 3/16
Op 12/19

- 22.1.3.3** To prohibit aquaculture activities outside the locations identified in policies 22.1.3.1 and 22.1.3.2.
- 22.1.3.4** To limit aquaculture activities in subzones (a) – (d) of AMA 2 Puramakau and subzones (a) – (d) of AMA 3 Te Kumara to seasonal and rotational catching of scallop spat.
- 22.1.3.5** To limit aquaculture activities in subzones (e) – (k) of AMA 2 Puramakau and subzones (e) – (h) of Te Kumara, to seasonal and rotational catching of mussel spat.
- 22.1.3.6** To provide for the use of subzones (a) – (d) of AMA 1 Waikato, (l) – (q) of AMA 2 Puramakau, and (i) – (l) of AMA 3 Te Kumara for aquaculture that:
- (a) safeguards the life-supporting capacity of the environment;
 - (b) is compatible with and does not adversely affect existing aquaculture activities; and
 - (c) avoids as far as practicable adverse effects on the environment, and where complete avoidance is not practicable, ensures that adverse effects are remedied or mitigated.
- 22.1.3.7** To promote efficient utilisation of the AMAs for aquaculture activities.
- 22.1.3.8** To maintain public access to coastal space and resources (except where access is managed under other statutes).

Tangata Whenua Iwi

- 22.1.3.9** To recognise and provide for the relationship of iwi and their customs and traditions with their ancestral lands, waters, sites, wāhi tapu, and other taonga.
- 22.1.3.10** To protect sites of significance to iwi, including wāhi tapu and wāhi taonga, in providing for aquaculture.
- 22.1.3.11** To provide for continued customary access to traditional coastal resources (except where access is managed under other statutes).

Adaptive Management

- 22.1.3.12** To adopt a cautious and adaptive approach to aquaculture in subzones (a) – (d) of AMA 1 Waikato, (l) – (q) of AMA 2 Puramakau, and (i) – (l) of AMA 3 Te Kumara, limiting the extent of development until the significance of any adverse ecological effects of aquaculture is better known.
- 22.1.3.13** To allow successive stages of mussel farming development when Council is satisfied that the risk of adverse ecological effects is manageable.
- 22.1.3.14** To manage aquaculture involving filter feeding bivalves (excluding mussels) and/or other extractive species in subzones (a) – (d) of AMA 1 Waikato, (l) – (q) of AMA 2 Puramakau, and (i) – (l) of AMA 3 Te Kumara, by requiring that any development be staged through:
- (a) authorising a first stage of development, with requirements to monitor and report on environmental effects resulting from farming the space at the full intensity of development allowed for that stage;
 - (b) allowing successive stages of development under the same consent, when Council is satisfied that the risk of adverse ecological effects is managed in accordance with policy 22.1.3.6.
- 22.1.3.15** To manage the development of aquaculture involving additive species by using tendering to allocate authorisations to apply for coastal permits to occupy space in subzones (a) – (d) of AMA 1 Waikato, (l) – (q) of AMA 2 Puramakau, and (i) – (l) of AMA 3 Te Kumara.

- 22.1.3.16** In accordance with policy 22.1.3.15, to tender a combined total of up to 280 hectares of space, for which consent applications can be made to occupy space for the purpose of aquaculture involving additive species.
- 22.1.3.17** Subject to policy 22.1.3.16, to determine the actual area to be tendered using information from investigations into physical conditions (such as depth and current) for aquaculture activities and any scientific investigations undertaken into environmental limits on aquaculture involving additive species.
- 22.1.3.18** Subject to policies 22.1.3.15 and 22.1.3.16, to:
- (a) limit the extent of development of aquaculture involving additive species to 10 hectares as a first stage of development under any consent until the significance of any adverse ecological effects is better known;
 - (b) allow successive stages of development (up to the total area held under an authorisation issued pursuant to policy 22.1.3.15) under the same consent, when Council is satisfied that the risk of adverse ecological effects is managed in accordance with policy 22.1.3.6.
- 22.1.3.19** To provide for the monitoring of actual and potential effects of aquaculture in subzones (a) – (d) of AMA 1 Waikato, (l) – (q) of AMA 2 Puramakau, and (i) – (l) of AMA 3 Te Kumara, on species, habitats, and ecological processes within Tasman Bay/Te Tai o Aorere and Golden Bay/Mohua so that any individual and cumulative ecological effects are better understood.
- 22.1.3.20** To provide for the integrated management of natural and physical resources within the AMAs by requiring applicants for consent (other than for seasonal spat catching) to provide an ecological management plan over the entire subzone to which the application relates.
- 22.1.3.21** To provide for a formal review mechanism within consents issued for aquaculture in subzones (a) – (d) of AMA 1 Waikato, (l) – (q) of AMA 2 Puramakau, and (i) – (l) of AMA 3 Te Kumara, so that feedback and learning from monitoring can be utilised to review the appropriateness of conditions of consent.
- 22.1.3.22** To ensure the integrated management of ecological effects of aquaculture in subzones (a) – (d) of AMA 1 Waikato, (l) – (q) of AMA 2 Puramakau, and (i) – (l) of AMA 3 Te Kumara.
- 22.1.3.23** To establish Ecological Advisory Group(s) to advise the Council on appropriate staging and development of aquaculture in subzones (a) – (d) of AMA 1 Waikato, (l) – (q) of AMA 2 Puramakau, and (i) – (l) of AMA 3 Te Kumara.
- 22.1.3.24** To fund the activities of Ecological Advisory Group(s) through charges applied to consents for aquaculture in subzones (a) – (d) of AMA 1 Waikato, (l) – (q) of AMA 2 Puramakau, and (i) – (l) of AMA 3 Te Kumara.

Spat Catching

- 22.1.3.25** To provide locations where spat catching can be carried out either seasonally or permanently.
- 22.1.3.26** To maintain a distinct season free from any form of aquaculture structures or occupation, in specific spat catching subzones.
- 22.1.3.27** Where appropriate, to limit the space used for spat catching in any spat catching season, in order to mitigate adverse effects on the natural and physical resources of the coastal environment.

Miscellaneous

- 22.1.3.28** To avoid or mitigate significant adverse effects of mussel farming development in AMA 2 on natural character values in central Golden Bay/Mohua.
- 22.1.3.29** To ensure that navigation risks from aquaculture structures are adequately avoided or mitigated.
- 22.1.3.30** To ensure that aquaculture activities are managed to minimise:
- (a) the risk of incursion, predation and disease transmission;
 - (b) introduction of biosecurity risk organisms;
 - (c) genetic risk to wild stock.

22.1.20 Methods of Implementation

22.1.20.1 Regulatory

- (a) The zoning of areas, as Aquaculture Management Areas, and the prohibition of aquaculture elsewhere except for the Wainui Bay mussel farming sites as shown on the planning maps. C61 3/16
Op 12/19
- (b) Recognition of Treaty Values in the coastal marine area through the zoning of AMAs and the setting aside of the Aquaculture Exclusion Area, and in decisions on consent applications.
- (c) Rules that require consent applications in specified subzones to be supported by comprehensive information on actual and potential effects of the proposed development, including effects on ecosystems and habitat in the vicinity of the application site, and proposals for the management of those effects.
- (d) Consent conditions requiring consent holders to monitor effects of aquaculture, including effects on ecosystems and habitat, to assist better understanding and management of the coastal environment.
- (e) Rules that allow applications for aquaculture involving filter feeding bivalves (including mussels) and other extractive species for whole specified subzones, but which limit initial development, with progression able to proceed if evaluation of monitoring from any stage indicates that the risk of adverse ecological effects is manageable.
- (f) Rules that allow applications for aquaculture involving additive species, but which limit the first stage of development, with progression beyond this if evaluation of monitoring from any stage indicates that the risk of adverse ecological effects is manageable.
- (g) Establishment of Ecological Advisory Group(s) (EAG) comprised of appropriately qualified marine ecologists to advise the Council on ecological effects of aquaculture in specified subzones. The composition of an EAG will be in accordance with the protocol in Schedule 25H.
- (h) Requirements for financial contributions, Section 36 charges, coastal occupation charges, and any other charges to assist in managing effects of aquaculture.

22.1.20.2 Education and Advocacy

- (a) Support for industry self-regulation to manage effects on the environment, such as through national guidelines and codes of practice, in addition to industry meeting conditions established through this Plan or incorporated in resource consents.
- (b) Advocating for the allocation of Public Good Science Fund monies for investigating effects of aquaculture on public resources.
- (c) Public availability of monitoring data and results.

22.1.20.3 Investigations and Monitoring

- (a) Development of a long-term strategy for monitoring the state of the coastal environment in Golden Bay/Mohua and Tasman Bay/Te Tai o Aorere, including monitoring effects from aquaculture activities. The strategy will include monitoring undertaken by the Council or other agencies, as well as monitoring that is required by conditions on coastal permits.
- (b) Evaluating results of monitoring, to determine whether consent conditions should be altered, and to determine the rate or scale of expansion (or contraction) of aquaculture through staging.
- (c) Monitoring compliance with the conditions of individual consents.
- (d) Advocating for and participating in the gathering of information (including scientific investigations) relating to the effects of aquaculture involving additive species in Tasman Bay/Te Tai o Aorere and Golden Bay/Mohua, including to inform decisions about tendering space in marine farming subzones pursuant to policy 22.1.3.15 and decisions on coastal permit applications.

22.1.30 Principal Reasons and Explanation

Aquaculture has the potential to bring economic benefits to the District and the nation. C61 3/16 Op 12/19 |
It also has potential to adversely affect existing attributes of, and activities carried out in, the coastal environment of the District. Some of those attributes have predominantly non-monetary value, yet in combination they also contribute to economic benefits such as through tourism.

The Plan provisions enable opportunity for aquaculture and indicate where it is appropriate and where it is not, in accordance with the Act. The provisions incorporate a cautious approach to aquaculture that takes the form of:

- (a) zoning discrete AMAs for aquaculture and prohibiting it elsewhere;
- (b) requiring baseline assessment of application sites coupled with requirements to monitor the effects of aquaculture activities;
- (c) seasonal use of spat catching sites.
- (d) providing for development of aquaculture (other than spat catching in specified subzones) in stages according to the results of monitoring.
- (da) providing for mussel farming, including mussel spat catching and mussel spat holding in the mapped area of Wainui Bay as a discretionary activity. C61 3/16 Op 12/19 |

The combination of zoning areas for aquaculture and prohibiting it elsewhere addresses the potential impact of aquaculture on natural character, landscape, ecological, public access, recreational, and amenity values, and those values important to tangata whenua iwi. It also has benefits of certainty both for parties wishing to participate in aquaculture, and for parties seeking a level of surety from effects of aquaculture.

The requirements for baseline information and subsequent monitoring of effects of aquaculture need to be supplemented by state-of-the-environment monitoring by Council, to gain a more comprehensive understanding of the coastal environment and the impact that aquaculture activities have on it. This process of increasing the knowledge base will be important for further policy development and decision-making, as well as ensuring the longer term sustainability of the natural resources in Tasman Bay/Te Tai o Aorere and Golden Bay/Mohua and the appropriate management of important coastal values in this area. Information needs to be made readily available so that people in the community can participate effectively in the sustainable management of the coastal environment.

Uncertainty about possible adverse effects warrants limited areas initially being made available for aquaculture involving extractive or additive species until effects are better understood. The same uncertainty warrants consents being subject to conditions requiring monitoring of effects. A sharing of knowledge from different agencies and operators will be needed for further policy development relating to aquaculture, particularly in relation to cumulative effects and the long-term sustainability of the marine environment.

Aquaculture Involving Filter Feeding Bivalves and/or Other Extractive Species

Controlled activity status enables an initial stage of mussel or filter feeding bivalve farming to begin with minimal administrative processes, and restricted discretionary status is applied to larger scale proposals. Aquaculture involving other extractive species is subject to a discretionary resource consent process irrespective of the size of the proposal, in recognition of the limited information that is available on the farming of species other than filter feeding bivalves in the District. Ecological monitoring conditions are imposed to improve the information base for decisions about subsequent stages of mussel, filter feeding bivalve and other extractive species farming. Provision is made for review of consent conditions, providing opportunity to curb the activity or allow its expansion, depending on the results of monitoring.

Seasonal use of spat catching sites allows spat catching to occur in locations where permanent farming operations would have unacceptable effects on natural character and amenity values, navigation or public access opportunities. A distinct season without spat catching structures in place is necessary to achieve that intent.

Encouraging and involving the industry, the community, environmental groups and iwi in developing the Council's monitoring programme should help ensure its success. In addition, industry initiatives for promoting and implementing alternative methods of managing effects are encouraged. These methods include ecological management plans and codes of practice, which will assist in the sharing of knowledge and provide for a greater understanding of the issues by all the parties that have a stake in the coastal marine area.

Aquaculture Involving Additive Species

Aquaculture involving additive species has not previously occurred in Tasman and its effects on the Tasman marine environment are largely unknown. A more cautious approach has therefore been adopted to applications for this type of aquaculture.

A limited amount of space will be available to be used for aquaculture involving additive species, with a maximum of 280 hectares within subzones (a) – (d) of AMA 1 Waikato, (l) – (q) of AMA 2 Puramakau, and (i) – (l) of AMA 3 Te Kumara. The actual area that will be made available will reflect the results of investigations into physical conditions (such as depth and current) and any scientific investigations undertaken into environmental limits on aquaculture involving additive species.

As there is limited space, tendering will be used to offer the opportunity to convert existing farms or establish new farms for additive species. However, space in subzones (b) – (d) of AMA 1 Waikato, (l) – (o) of AMA 2 Puramakau, and (l) of AMA 3 Te Kumara, will not be tendered until these subzones have become gazetted aquaculture areas. There will therefore be more than one round of tendering. Furthermore, the Council may choose to tender smaller areas of space in several rounds of tendering.

Tendering will provide industry with the flexibility to determine where they would like to farm additive species and the extent to which they would like to develop such farms. While the 280 hectare maximum space is based on an average of 20 hectares in each subzone (excluding the spat catching subzones), tendering will enable industry to develop more space in one subzone and less in another.

Successful tenderers will have to apply for resource consent to develop the allocated space. This will be subject to a discretionary resource consent process, which will be informed by available scientific research and include the requirement to develop ecological monitoring programmes to comprehensively assess both the individual effects of each proposal and cumulative effects in combination with other aquaculture activities in the same and neighbouring subzones. It will also be a requirement that the development be staged, with no more than 10 hectares developed initially under any consent. Further expansion would be dependent on the results of monitoring. A successful tender is no guarantee of obtaining resource consent.

22.1.40 Performance Monitoring Indicators

- 22.1.40.1 Increased level of knowledge by Council, consent applicants and holders, and the community, about the marine environment.
- 22.1.40.2 The nature of monitoring required by consent conditions.
- 22.1.40.3 The nature and incidence of adverse effects of aquaculture development, including changes to habitat conditions and ecosystems, and navigation incidents involving aquaculture structures.

22.1.50 ENVIRONMENTAL RESULTS ANTICIPATED

- 22.1.50.1 Development of aquaculture with limited adverse effects on the coastal environment overall.
- 22.1.50.2 Social, cultural and economic benefits are gained from aquaculture, without unacceptable environmental costs.