Ministry of Fisheries

Te Rūnanga o NGĀI TAHU

Bluff Oyster Management Company Ltd

Bluff Oysters Foveaux Strait

Southern Marine Recreational Fishers Advisory Group

Foveaux Strait Dredge Oyster Fisheries Plan

DRAFT FOR EVALUATION December 2008

Foveaux Strait Dredge Oyster Fishery Fisheries Plan

Introduction

Our fisheries provide valuable social, cultural and economic benefits for all New Zealanders.

The Ministry of Fisheries works to ensure these valuable natural resources are managed in an environmentally sustainable way. We also aim to have New Zealanders get the best value from these resources.

A key to unlocking 'best value' is to get the New Zealanders who use and value these resources involved in managing them effectively.

To this end, and to make management more transparent and accountable, the Ministry of Fisheries is facilitating the development of Fisheries Plans. Fisheries Plans will make management more transparent and accountable by setting out objectives, describing how these will be achieved, what roles we all have to play, and how levels of achievement will be monitored. This will bring more certainty for everybody involved in fisheries management.

The dredge oyster fishery in Foveaux Strait is one of New Zealand's most iconic fisheries. The fishery was chosen as one of three smaller, single-stock fisheries to work on first as a "proof of concept" Fisheries Plan in 2006. Stakeholders supported this choice, as an opportunity to build on the methods fishers have used over the past 100 years to sustainably manage the fishery, and to ensure we are doing all we can to bring the fishery back to its historic state.

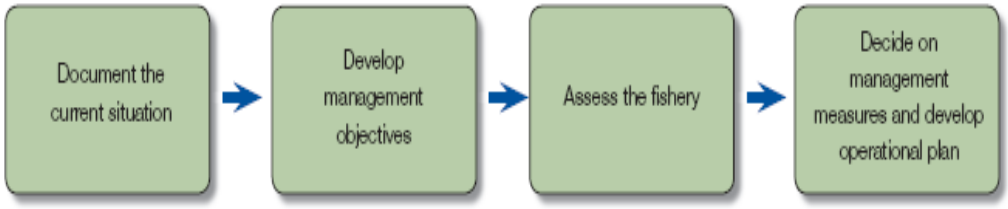
A draft "proof of concept" Fisheries Plan was completed in 2007 and has been the 'operating manual' for managing the fishery since then. Formal approval of the plan by the Minister of Fisheries is now sought.

More Information: The Ministry of Fisheries website (www.fish.govt.nz) provides more information on Fisheries Plans.

The Process to Complete the Plan

In 2006 a group representing tangata whenua, recreational and commercial interests in the fishery, began meeting regularly to develop the Foveaux Strait Dredge Oyster Fishery Plan. The group included the following people: Brian Deans, Hana Morgan, George Ryan, Rose Grindley, Peter Moir, Stefan Leslie, Peter Meulenbroek, Warren Conway, Keith Michael, Peter Todd, Kylie Galbraith, Graeme Wright, Anthony Fowler, Allen Frazer, and William Calder.

The group followed the following stages to develop the plan.



Four main stages in developing a Fisheries Plan

Minutes of the groups meetings and drafts of the plan were posted on the Ministry of Fisheries website and regularly mailed to stakeholders.

Having completed a draft of the plan, the group discussed the plan with tangata whenua, stakeholders and the wider community at hui, workshops and public meetings. Once feedback had been included, the plan became the 'operating manual' for management of the fishery, pending formal approval by the Minister of Fisheries.

Strategies and actions recommended in the plan have been put into effect, according to an operational timetable for the first two years of the plan. This timetable has been reviewed and extended by the group to cover the period 2009 to 2012.

More Information: Minutes of meetings, and opportunities for participation in the plan can be found on the Ministry of Fisheries website (www.fish.govt.nz). Operational timetables developed by the group are attached as Appendix 1.

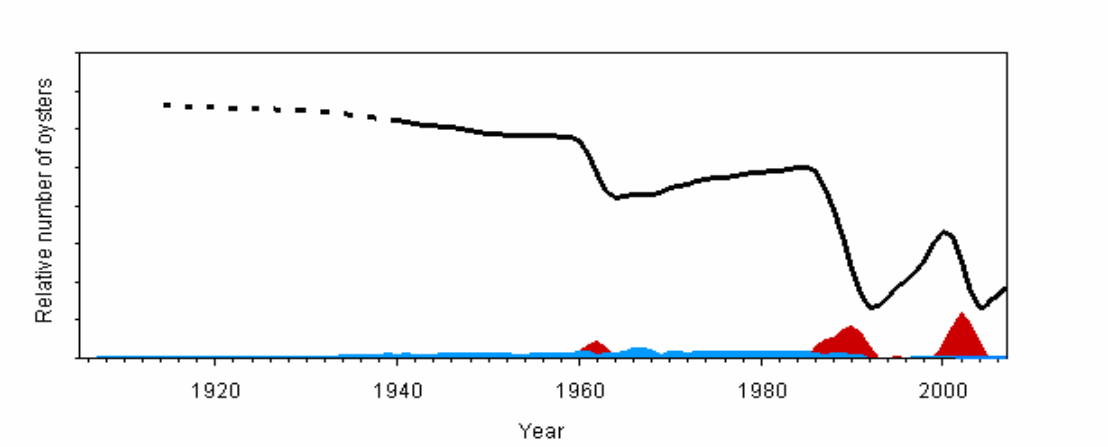
Stage 1 Document the Current Situation

"A fishery in the grip of Bonamia"

The group has reviewed all available information on the fishery including biological, economic and management information and has set this out in an "Information Brief" for the fishery (Appendix 2).

The dredge oyster fishery in Foveaux Strait is a shared fishery, important to customary recreational, and commercial fishers. It is also important to the community.

The key issue affecting the fishery is the parasite Bonamia that kills mature dredge oysters. Most recently, up to two billion oysters were killed by this parasite between 2000 and 2003, with previous outbreaks of the parasite occurring in the 1990s and the 1960s (marked in red in the graph below). As a result, stock size (black line) and catch (marked blue) have both dwindled compared to historic levels, when annual production of 80 million oysters was the norm. The fishery is now in a rebuilding phase, but the extent of recovery will depend on future levels of mortality from Bonamia. Current harvest levels are estimated to have no effect on recovery of the stock.



More Information: The Information Brief (Appendix 2) and the interactive DVD accompanying this plan contain the review of the fishery's current situation.

Stage 2 Develop Management Objectives

"What we want from the Foveaux Strait Dredge Oyster Fishery"

A key outcome common to all New Zealand's fisheries is:

National Fisheries Outcome
"Maximise the value of fisheries by providing for utilisation while ensuring sustainability".

More Information: More information on the National Fisheries Outcome can be found in the Ministry of Fisheries Statement of Intent www.fish.govt.nz).

For the Foveaux Strait Dredge Oyster Fishery the group concluded that this overall outcome could be broken down into four goals and 14 objectives.

Goal	Objective
A fishery for the future – for our Mokopuna	**1.** Catch is sustainable
	2. Production of oysters is maximised
	3. The impact of Bonamia is minimised
	4. The impact of invasive marine organisms is minimised
A fishery that minimises harm and enhances the environment	**5.** Adverse dredging impacts are minimised
	6. Ecologically sensitive and important habitats for other fisheries are maintained/enhanced
A fishery for all sectors – everyone has a fair share of this taonga	**7.** Fishing access for all sectors is protected
	8. Mana of tangata whenua and marae is maintained
	9. The value of the recreational fishery is maximised
	10. The value of the commercial fishery is maximised
	11. Illegal fishing is minimised
A fishery based on the 'right' decisions with all groups sitting around the table together	**12.** Decisions are understood and integrated
	13. Stakeholders participate in decision making
	14. Information is communicated effectively

Stage 3 Assessing the Fishery

"Are we on track to meet these objectives …?"

The group felt that we are heading in the right direction, but that there are some shortcomings in the way the fishery is managed. The full risk assessment of how well the current framework and management services are meeting the objectives is set out in Appendix 4.

The focus of this assessment was on fisheries services specific to the Foveaux Strait Dredge Oyster Fishery, however, the plan recognises these occur in the context of a national fisheries framework (refer Appendix 3).

More Information: The Information Brief (Appendix 2) describes fisheries services specific to the Foveaux Strait Dredge Oyster Fishery. Appendix 3 provides examples of generic services provided by the national fisheries framework. The group's risk assessment is summarised in the proposed management strategies and is set out in full in Appendix 4.

Stage 4. Deciding on Management Strategies

"…if not, what do we need to do?"

The group looked for the most effective and efficient management strategies to address the shortcomings identified in the assessment stage. The full analysis of options is in Appendix 5.

The summarised assessment and management options together form the management strategies for the fishery, and are set out in the following pages. Only solutions accorded high or medium priority are included in the strategies. The numbers following each option in the strategy link to the full analysis of options in Appendix 5.

Strategies are also summarised in the operational timetables (Appendix 2).

More Information: The full assessment of options (including an assessment of the benefit/cost of each option) is in Appendix 5. The operational timetables are attached as Appendix 2.

Proposed Management Strategies

Strategy to Ensure Sustainability (Objective 1)

Assessment

This objective is likely to be met. The dredge oyster stock is believed to be low, but rebuilding. The fishery has not yet been assessed against new MFish Harvest Strategy Standards, but current catch and catch limits are unlikely to significantly affect future stock levels as these depend on the level of mortality from Bonamia. Recreational catch is poorly estimated, but is believed to be relatively low. Reported customary catch is < 0.25 million oysters (tio). Neither recreational nor customary catch are likely to significantly affect stock levels.

Monitor

- *Stock size*
- *Predicted influence of fishing on future stock size.*

Other Actions

- Continue stock size surveys 1a(i).
- New decision rule for monitoring 1a(ii).
- Assess fishery against Harvest Strategy Standard 1a(iii).

Strategy to maximise oyster production (Objective 2)

Assessment

This objective is partially met. Fishing patterns are currently driven by oyster quality and catch rate. As key fishery areas for oyster production and spat settlement are identified, managing fishing patterns around fine-scale information and a spatially-explicit simulation model, may increase production from the fishery and help rebuild the fishery to historic production levels. There is currently insufficient fine-scale information to achieve this objective. Most shell is now returned as a trial to enhance oyster beds. Other enhancement techniques could further increase production by increasing oyster recruitment; however, constraints caused by the regulatory (RMA) framework for enhancement may need to be resolved.

Monitor

- *Quality, continuity of fine-scale logbook information*
- *Production from the fishery (catch, catch rate)*
- *Extent of managed fishing*
- *Extent of shell return and other fishery-scale enhancement.*

Other Actions

- Further develop spatially explicit stock model 2a(i)
- Obtain fine scale data for the spatially explicit stock model using BOMC logbook 2a(ii)
- Hold a workshop to decide on optimal fishing strategies to maximise oyster production 2a(iii)
- Develop Strategic Research plan to review and support these actions 2a(iv)
- Continue shell return and monitoring programme 2b(i)
- Continue spat collection, reseeding and translocation trials 2b(ii), 2b(iii)
- Develop governance arrangements to allow managed fishing and enhancement 2a(iv), 2b(iv).

Strategy to minimise the impact of Bonamia (Objective 3)

Assessment

This objective has not been met to date. Bonamia is currently the key determinant of stock size and has killed up to 2 billion oysters over the last five years. There has recently been considerable research on Bonamia and we now have a better understanding of environmental and fishing-related factors likely to trigger the parasite. It is important to build on this to implement fishing and other strategies that will minimise the impact of the disease and allow the fishery to rebuild to historic levels.

Monitor

- *Understanding of Bonamia*
- *Level of mortality from Bonamia*
- *Extent of managed fishing.*

Other Actions

- Further develop Bonamia epidemiological model 3a(i)
- Obtain data for the Bonamia model from logbooks, surveys and other studies 3a(ii)
- Hold workshops to determine strategies to minimise the impact of Bonamia, including, where possible, reference points and triggers 3a(iii).
- Develop Strategic Research plan to review and support these actions 3a(iv)

Biosecurity Strategy (Objective 4)

Assessment

Invasive marine organisms and diseases, such as the Japanese Sea Star or other strains of Bonamia, have the potential to decimate the oyster fishery. The impacts of such species on the oyster fishery are not adequately recognised, and no specific plan is in place to deal with such an eventuality.

Monitor

- *Extent of recognition in biosecurity strategies.*
- *Action plan in place for invasive organisms.*

Other Actions

- Advocate/input into biosecurity and ballast water strategies and ensure this fisheries plan is recognised under the RMA 4a(i)
- Develop an action plan for high-risk invasive species with guidance from Biosecurity NZ 4a(ii).

Strategy to Minimise Harm and Enhance the Environment (Objectives 5 and 6)

Assessment

Dredges and towing methods have been developed over the long history of the fishery and are adapted to cope with the tough conditions in Foveaux Strait. The footprint of the fishery is small (<10% of the quota management area has historically been fished) and fishers tend to avoid ecologically valuable areas due to poor catch rates. However, further research and fine-scale information is required to confirm this assessment. This information is now being gathered. In addition, attempts will be made to improve the efficiency of dredges, as technology improves, while also reducing adverse impacts.

Monitor

- *Fine-scale data research and reports.*

Other Actions

- Identify ecologically sensitive areas and important habitats for other fisheries 5a(i)
- Environmental audit of the fishery and monitoring 5a(ii)
- Strategies to ensure the structure and function of the Foveaux Strait ecosystem is maintained and meets National Environmental Standards 5a(iii)
- Evaluate dredge designs and methods 6a(i).

Strategy to Protect Fishing Access (Objective 7)

Assessment

Reasonable and fair access to the fishery is provided under the current framework. There are currently no proposals to curtail fishing access.

Monitor

- *Level of access (spatial/ other).*

Strategy to Maintain Mana of Tangata Whenua and Marae (Objective 8)

Assessment

Mana is maintained under the current customary framework. Tangata tiaki are appointed under the South Island Customary Fishing Regulations and issue authorisations according to policies that are based on the sustainable use of tio. Availability of oysters is currently the key impediment to maximising the value of the customary fishery

Monitor

- *Customary fishers are able to take authorised catch.*

Strategy to Maximise the value of the Recreational Fishery (Objective 9)

Assessment

Recreational interest is increasing. Current bag limits and methods allow recreational fishers reasonable access to oysters, and fishers enjoy the oystering experience. As a result of Bonamia, depletion in the easily-accessible, recreational-only area between Saddle Point and Mamaku Point is of concern. The use of large dredges in this area was of concern and has been addressed under the plan by a new regulation. Recreational catch is poorly estimated for the fishery, and little is known about stock levels in the recreational-only area. The current framework for recreational fishing provides little opportunity for self-management by fishers. This may be partially resolved by the initiatives in this plan. Availability of oysters is currently the key impediment to maximising the value of the recreational fishery

Monitor

- *Feedback from recreational. representatives and public*
- *Data on recreational catch/ stocks in recreational area*
- *Number and size of dredges in recreational area.*

Other Actions

- Obtain accurate information on catch coming from recreational-only area (and wider fishery). Options include a voluntary recreational reporting form, regulated reporting form or rec surveys 9a(i)
- Obtain information on stock levels in recreational-only area. Options include sampling during the commercial surveys or rec. diver surveys. 9a(ii)
- Reseeding and enhancement of recreational-only area between Saddle Point and Mamaku Point 9a(iii)
- Limit the recreational dredge size that can be used in the recreational-only area 9b(i) (completed)
- Review use of recreational gear across the fishery 9b(ii).

Strategy to Maximise the Value of the Commercial Fishery (Objective 10)

Assessment

Secure rights under the quota management system already provide incentives to increase fishery value. In the medium-term it may be feasible to increase efficiency (and reduce costs) by ensuring management/ research services are achieving maximum benefit. The current mis-alignment of the commercial season start date with the recreational start date (and customary harvest policies) creates an equity issue and limits commercial value. Access to high quality oysters and the level of production are key factors in maximising the value of the commercial fishery.

Monitor

- *Value of quota*
- *Discount rate.*

Other Actions

- Audit efficiency of research, management and compliance services 10a(ii)
- Re-align commercial season start date with recreational start date 10a(iii) (completed).

Strategy to minimise illegal fishing (Objective 11)

Assessment

Compliance with closed area, gear and other restrictions is considered to be high, and the current framework generally meets this objective. Main offences are; taking less than legal size oysters (all sectors) taking in excess of the bag limit and outside the open season (recreational sector) and illegal sale (all sectors). Minimum legal size/spat issues may require review to ensure enhancement can take place.

Monitor

- *Estimated illegal take*
- *Number of breaches.*

Other Actions

- Develop a compliance strategy for the fishery by holding a workshop between sectors and MFish. Issues to include minimum legal size and redundant rules 12a(i).

Communication/Integration Strategy (Objectives 12-14)

Assessment

The rationale for management decisions are not always clearly understood by stakeholders and can appear ad-hoc. A plan (such as this) that clearly sets out the reasons for decisions and integrates fishing, research and management decisions would promote stewardship and help ensure that the 'right' decisions are made. Stakeholder representatives sometimes participate in MFish assessment or decision-making processes. However, the inherently short time between surveys and start of the season leaves little time for participation. More participation would promote stewardship and yield more effective management outcomes. Agencies and stakeholders individually communicate information to their members and to the public. A strategy to integrate communication across these groups would promote stewardship and a better understanding of the fishery.

Monitor

- *Progress on implementing plan*
- *Feedback from stakeholders/ public*
- *Stakeholder participation levels*
- *Stakeholder working group in place*
- *Number meetings, newsletters.*

Other Actions

- Implement this plan 12a(i)
- Adopt a new decision cycle allowing stakeholder input prior and post season 13a(i)
- Make research and working groups more accessible to stakeholders by convening locally as well as in Wellington 13a(ii)
- Retain the current stakeholder working group to meet three times a year, as set out in decision cycle 13a(iii)
- Publish a newsletter three times a year (to coincide with stakeholder working group meetings) 14a(i).

Implementation and Monitoring of the Fisheries Plan

Overall responsibility for implementing the plan, rests with the Ministry of Fisheries. However, the lead party identified for each action is responsible for implementing that component of the plan. It is accepted that these parties (including the Ministry) have limitations in terms of resources that mean, despite best efforts, implementation of some parts of the plan may be delayed. In addition, many of the actions proposed in the plan involve collaborative problem-solving workshops. Therefore, the plan proposes that implementation be overseen by the collaborative group responsible for developing the plan. It is proposed that the group will meet three times a year to monitor the plan's progress, oversee organisation of workshops, offer advice where implementation targets are not met, and consider alternative solutions to meet the plan's objectives. The group will invite others with an interest in the fishery to become involved in these meetings.

It is proposed the Ministry commence a full review of the plan in 2012. In addition, services for the fishery after 2010 are not clearly specified in the plan, therefore a partial review of the plan will be initiated in 2010, or at the discretion of the Minister.